Massachusetts Hospital Profiles: Data Through Fiscal Year 2013

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### AMC
- Beth Israel Deaconess Medical Center C1
- Boston Medical Center C2
- Brigham and Women's Hospital C3
- Massachusetts General Hospital C4
- Tufts Medical Center C5
- UMass Memorial Medical Center C6

### Teaching
- Baystate Medical Center C7
- Berkshire Medical Center C8
- Brigham and Women's Faulkner Hospital C9
- Cambridge Health Alliance C10
- Lahey Hospital & Medical Center C11
- Mount Auburn Hospital C12
- Saint Vincent Hospital C13
- Steward Carney Hospital C14
- Steward St. Elizabeth's Medical Center C15
<table>
<thead>
<tr>
<th>Community</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anna Jaques Hospital</td>
<td>C16</td>
</tr>
<tr>
<td>Baystate Mary Lane Hospital</td>
<td>C17</td>
</tr>
<tr>
<td>Beth Israel Deaconess Hospital - Milton</td>
<td>C18</td>
</tr>
<tr>
<td>Beth Israel Deaconess Hospital - Needham</td>
<td>C19</td>
</tr>
<tr>
<td>Beth Israel Deaconess Hospital - Plymouth</td>
<td>C20</td>
</tr>
<tr>
<td>Cooley Dickinson Hospital</td>
<td>C21</td>
</tr>
<tr>
<td>Emerson Hospital</td>
<td>C22</td>
</tr>
<tr>
<td>Hallmark Health</td>
<td>C23</td>
</tr>
<tr>
<td>Lowell General Hospital</td>
<td>C24</td>
</tr>
<tr>
<td>MetroWest Medical Center</td>
<td>C25</td>
</tr>
<tr>
<td>Milford Regional Medical Center</td>
<td>C26</td>
</tr>
<tr>
<td>Nantucket Cottage Hospital</td>
<td>C27</td>
</tr>
<tr>
<td>Nashoba Valley Medical Center</td>
<td>C28</td>
</tr>
<tr>
<td>Newton-Wellesley Hospital</td>
<td>C29</td>
</tr>
<tr>
<td>Northeast Hospital</td>
<td>C30</td>
</tr>
<tr>
<td>South Shore Hospital</td>
<td>C31</td>
</tr>
<tr>
<td>Steward Norwood Hospital</td>
<td>C32</td>
</tr>
<tr>
<td>Winchester Hospital</td>
<td>C33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community-DSH</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Athol Hospital</td>
<td>C34</td>
</tr>
<tr>
<td>Baystate Franklin Medical Center</td>
<td>C35</td>
</tr>
<tr>
<td>Cape Cod Hospital</td>
<td>C36</td>
</tr>
<tr>
<td>Clinton Hospital</td>
<td>C37</td>
</tr>
<tr>
<td>Fairview Hospital</td>
<td>C38</td>
</tr>
<tr>
<td>Falmouth Hospital</td>
<td>C39</td>
</tr>
<tr>
<td>Harrington Memorial Hospital</td>
<td>C40</td>
</tr>
<tr>
<td>HealthAlliance Hospital</td>
<td>C41</td>
</tr>
<tr>
<td>Heywood Hospital</td>
<td>C42</td>
</tr>
<tr>
<td>Holyoke Medical Center</td>
<td>C43</td>
</tr>
<tr>
<td>Lawrence General Hospital</td>
<td>C44</td>
</tr>
<tr>
<td>Marlborough Hospital</td>
<td>C45</td>
</tr>
<tr>
<td>Martha’s Vineyard Hospital</td>
<td>C46</td>
</tr>
<tr>
<td>Mercy Medical Center</td>
<td>C47</td>
</tr>
<tr>
<td>Merrimack Valley Hospital</td>
<td>C48</td>
</tr>
<tr>
<td>Morton Hospital</td>
<td>C49</td>
</tr>
<tr>
<td>Noble Hospital</td>
<td>C50</td>
</tr>
<tr>
<td>North Shore Medical Center</td>
<td>C51</td>
</tr>
<tr>
<td>Quincy Medical Center</td>
<td>C52</td>
</tr>
<tr>
<td>Signature Healthcare Brockton Hospital</td>
<td>C53</td>
</tr>
<tr>
<td>Southcoast Hospitals Group</td>
<td>C54</td>
</tr>
<tr>
<td>Steward Good Samaritan Medical Center</td>
<td>C55</td>
</tr>
<tr>
<td>Steward Holy Family Hospital</td>
<td>C56</td>
</tr>
<tr>
<td>Steward Saint Anne’s Hospital</td>
<td>C57</td>
</tr>
<tr>
<td>Sturdy Memorial Hospital</td>
<td>C58</td>
</tr>
<tr>
<td>Wing Memorial Hospital</td>
<td>C59</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialty</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston Children’s Hospital</td>
<td>C60</td>
</tr>
<tr>
<td>Dana-Farber Cancer Institute</td>
<td>C61</td>
</tr>
<tr>
<td>Kindred Hospital - Boston</td>
<td>C62</td>
</tr>
<tr>
<td>Kindred Hospital - Boston North Shore</td>
<td>C63</td>
</tr>
<tr>
<td>Massachusetts Eye and Ear Infirmary</td>
<td>C64</td>
</tr>
<tr>
<td>New England Baptist Hospital</td>
<td>C65</td>
</tr>
</tbody>
</table>
Introduction to Non-Acute Hospital Profiles

How-to-Read Non-Acute Hospital Profiles Guide

Changes from FY12 Non-Acute Hospital Profiles

Non-Acute Hospitals - by Cohort

Psychiatric
- Arbour Hospital
- Arbour-Fuller Memorial
- Arbour-HRI Hospital
- Baldpate Hospital
- Bournewood Hospital
- McLean Hospital
- Walden Behavioral Care
- Westwood Pembroke Hospital
- Whittier Pavilion

Rehabilitation
- Braintree Rehabilitation Hospital
- HealthSouth Fairlawn Rehabilitation Hospital
- HealthSouth Rehabilitation Hospital of Western Massachusetts
- New Bedford Rehabilitation Hospital
- New England Rehabilitation Hospital
- Spaulding Rehabilitation Hospital
- Spaulding Rehabilitation Hospital of Cape Cod
- Whittier Rehabilitation Hospital Bradford
- Whittier Rehabilitation Hospital Westborough

Chronic Care
- Kindred Hospital Northeast
- New England Sinai Hospital
- Radius Specialty Hospital
- Spaulding Hospital Cambridge
- Spaulding North Shore
- Vibra Hospital of Western Massachusetts

Specialty
- AdCare Hospital of Worcester
- Franciscan Hospital for Children
- Hebrew Rehabilitation Hospital

Technical Appendix
MASSACHUSETTS HOSPITAL PROFILES

INDUSTRY OVERVIEW

DATA THROUGH FISCAL YEAR 2013

JANUARY 2015
ABOUT THIS BRIEF

This brief provides an overview of the Massachusetts hospital industry in fiscal year (FY) 2013 and includes statewide comparative data on Massachusetts hospitals. This brief and accompanying individual hospital profiles, databook, and chartbook update CHIA's March 2014 publication of Massachusetts Hospital Profiles: Data through Fiscal Year 2012. In addition to updated financial information for each of the acute and privately-operated non-acute hospitals in the Commonwealth, clinical quality information is included for the first time in the individual acute hospital profiles, as is a section that reports on multi-acute hospital systems.  

For detailed descriptions of the metrics mentioned in this brief, please see the Technical Appendix.

Overview of the Massachusetts Hospital Industry

In 2013, there were 95 hospitals in Massachusetts: 68 acute facilities and 27 non-acute facilities. Two-thirds of the hospitals (62 hospitals) in the Commonwealth are affiliated with a multi-hospital system and owned by a parent organization. Sixty-three percent of Massachusetts hospitals (61 hospitals) are non-profit organizations, and there is one municipally-owned acute hospital (Cambridge Health Alliance).

For this publication, CHIA assigned each acute hospital to a cohort of similar hospitals: academic medical centers (AMCs), teaching hospitals, community hospitals, and community-Disproportionate Share Hospitals (DSH). For non-acute hospitals, the cohorts are defined by services provided, and include: psychiatric, rehabilitation, and chronic care. Specialty acute and non-acute hospitals are not identified with a distinct cohort. While CHIA has included profiles for both acute and non-acute hospitals, the remainder of this brief will focus primarily on acute hospitals.

Hospital Utilization

Massachusetts hospitals continue to experience a decline in per capita inpatient discharges. Between FY2009 and FY2013, inpatient discharges dropped 6%, with a decline between FY2012 and FY2013 of 3%, the steepest decline in this five-year period. Among the cohorts, community hospitals experienced the largest decline in total discharges, of 7%, between FY2009 and FY2013. In FY2013, AMCs and teaching hospitals, which are also among the largest hospitals in Massachusetts, accounted for 45% of total statewide discharges, consistent with FY2012.

Hospital occupancy rate measures the percent of a hospital’s inpatient staffed beds that have been occupied over the course of a year. Between FY2012 and FY2013, the median statewide occupancy rate increased slightly from 65% to 66%. AMCs had the highest median occupancy rate at 84% in FY2013, while community and community-DSH hospitals had the lowest at 64%.

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1 This brief and the profiles do not include data for state-operated non-acute hospitals, as data for these hospitals were not available at the time of publication. Shriners Hospitals for Children were also not included in these analyses.

2 Subsequent to the FY2013 reporting period, North Adams Regional Hospital and Quincy Medical Center closed.

3 A Disproportionate Share Hospital (DSH) is defined in M.G.L. c. 6D, Section 1 as a hospital with a minimum of 63% of patient charges attributed to Medicare, Medicaid, and other government payers, including Commonwealth Care and the Health Safety Net.

4 For definitions of each cohort and hospitals assigned to each cohort, see the Technical Appendix. Note that comparisons of cohort performance between fiscal years reflect FY2013 cohort assignments.
Between FY2009 and FY2013, median growth in acute hospital outpatient visits remained relatively flat, increasing by only 0.6%. Growth rates varied by cohort, however, with AMCs experiencing the highest increase at 4.7%, followed by community hospitals at 3.6%, and teaching hospitals at 2.2%. The community-DSH hospital cohort was the only cohort to experience a decrease in outpatient visits during this period, a 3.1% decline. This decrease, along with the decrease in inpatient volume at community-DSH hospitals between FY2009 and FY2013, indicates that patient volume from these hospitals may be shifting to other hospitals.

**Hospital Payer Mix and Relative Prices**

Public payers remain the largest source of revenue for Massachusetts hospitals. Statewide, in FY2013, federal and state payers, including Medicare, Medicaid, and Commonwealth Care, comprised 63% of hospital gross revenue, while commercial and other payers accounted for the remaining 37%. Community-DSH hospitals, as the cohort category indicates, are most reliant on public payers, which on average accounted for 68% of their gross revenues. Community hospitals had the lowest average public payer mix among the cohorts at 55%, followed by AMCs at 60%.

AMCs continue to be paid substantially higher prices by commercial payers relative to the teaching and community hospital cohorts even when comparing similar services. Community-DSH hospitals, which have the highest public payer mix among the cohorts, have the lowest average composite relative price percentile, at the 43rd percentile of the cohorts in 2013. In comparison, AMCs were at the 75th percentile.

**Hospital Costs & Revenue**

Between FY2009 and FY2013, the statewide average inpatient revenue per discharge increased by 8.4%, while the statewide average inpatient cost per discharge increased by 3.3%.

AMCs had the highest average cost and revenue per discharge among the cohorts every year between FY2009 and FY2013. AMC cost per discharge was approximately 10.7% higher than the statewide average in FY2012 and increased to 14% higher in FY2013. AMC revenue per discharge remained approximately 20% higher than the statewide average in FY2012 and FY2013.

Statewide, hospital outpatient revenue increased in the aggregate by 6.2% between FY2009 and FY2013. All of the hospital cohorts experienced an increase during this period; AMCs had the largest growth at 9.7%, and teaching hospitals had the smallest growth at 4.3%.

**Hospital Financial Performance**

Hospital financial performance generally improved between FY2012 and FY2013. The median statewide acute hospital total margin, which measures a hospital's overall profitability, increased from 3.4% in FY2012 to 4.1% in FY2013. Teaching hospitals had the highest median total margin in FY2013 at 7.6%, while community hospitals had the lowest at 2.4%. The median statewide acute hospital operating margin, a more focused measure that reflects only the hospital's profit or loss from patient care activities, remained relatively constant between FY2012 and FY2013, at 2.2% and 2.1%, respectively. Again, teaching hospitals had the highest median operating margin in FY2013 at 3.6%, while community hospitals had the lowest at 1.6%.

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5 Discharges represent case mix-adjusted discharges (CMADs). To enable a more standardized comparison among hospitals, the average cost per CMAD was adjusted to exclude direct medical education costs and physician compensation costs that may be incurred at some hospitals. Statewide figures exclude specialty hospitals.

6 Ibid.
Multi-Acute Hospital System Financial Performance

Data from the most recent fiscal year available to CHIA shows that the nine multi-acute hospital systems profiled in this publication generated over $21 billion in operating revenue, and all but one generated a profit. While acute hospitals accounted for a sizeable portion of revenue within each system, each system contained a variety of other organizations. Some included non-acute hospitals, physician organizations, and health plans, among other types of entities. The specific types of organizations within each system are displayed on the individual system profiles included in this publication.

Quality of Care

The quality measures included in the individual acute hospital profiles are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group. These measures present hospital performance in four areas: patient safety, patient experience, care practices, and obstetric care.

The Patient Safety Composite (PSI 90) is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures. In 2011, 2012, and 2013, Massachusetts acute hospitals have performed better than (i.e. below) the national average score of 1.0. Statewide, the average complication rate declined between 2011 and 2013 from 0.92 to 0.74.

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey measures patient perspectives on key aspects of their care. Overall, patients’ ratings of their experience in Massachusetts acute hospitals were in line with the national average in 2011 and 2012. A notable exception is the measure of hospital noise levels, which was eight and nine points below (i.e. worse than) the national averages in 2011 and 2012, respectively.

The percentage of Medicare Fee-For-Service (ages 65+) admissions to Massachusetts acute hospitals that resulted in an unplanned readmission for any cause within 30 days of discharge ranged from 13% at the highest performing hospital to 19% at the lowest performing hospital in 2012, while the national average was 16%. Twenty-three of the 63 Massachusetts hospitals included in this analysis had rates that were better than (i.e. at or below) the national average in 2012.

Early elective deliveries are non-medically necessary cesarean or induced deliveries prior to 39 weeks gestation. Over a three-year period, the range of early elective deliveries between Massachusetts’ highest and lowest performing acute hospitals decreased substantially, from 38 percentage points in 2011-2012 to five percentage points in 2012-2013. The number of acute hospitals in Massachusetts with no early elective deliveries increased from 6 to 20, and the Massachusetts median of 0.9% was better than the national median of 2.5% in 2012-2013. Hospitals in many states have improved performance on this measure, but The Leapfrog Group has identified Massachusetts as a standout performer.

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7 This refers to the Medicare reporting period, July 2011-June 2012.
8 CMS Hospital Compare, July 2011-June 2012. Rates are risk-adjusted and include only unplanned readmissions.
Number of Massachusetts Hospitals by System Affiliation and Profit Status

- 66% of hospitals are in multi-hospital systems.
- 36% of hospitals are for-profit hospitals.

<table>
<thead>
<tr>
<th>Category</th>
<th>Acute Non-Profit or Public</th>
<th>Acute For-Profit</th>
<th>Non-Acute Non-Profit</th>
<th>Non-Acute For-Profit</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Hospital System</td>
<td>31</td>
<td>14</td>
<td>5</td>
<td>12</td>
<td>63</td>
</tr>
<tr>
<td>Individual Hospitals</td>
<td>23</td>
<td>0</td>
<td>2</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>TOTAL</td>
<td>54</td>
<td>14</td>
<td>7</td>
<td>20</td>
<td>95</td>
</tr>
</tbody>
</table>
**Top Discharges Statewide (by Diagnostic Group)**

Maternity and delivery cases were the most common reasons for inpatient admissions in FY2013.

<table>
<thead>
<tr>
<th>Rank</th>
<th>DRG</th>
<th>Description</th>
<th>Discharges*</th>
<th>% Total Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>540, 560 and 640</td>
<td>Delivery DRG</td>
<td>132,468</td>
<td>16%</td>
</tr>
<tr>
<td>2</td>
<td>720</td>
<td>Septicemia &amp; Disseminated Infections</td>
<td>22,074</td>
<td>3%</td>
</tr>
<tr>
<td>3</td>
<td>194</td>
<td>Heart Failure</td>
<td>21,207</td>
<td>3%</td>
</tr>
<tr>
<td>4</td>
<td>139</td>
<td>Other Pneumonia</td>
<td>20,688</td>
<td>3%</td>
</tr>
<tr>
<td>5</td>
<td>140</td>
<td>Chronic Obstructive Pulmonary Disease</td>
<td>18,222</td>
<td>2%</td>
</tr>
<tr>
<td>6</td>
<td>302</td>
<td>Knee Joint Replacement</td>
<td>15,768</td>
<td>2%</td>
</tr>
<tr>
<td>7</td>
<td>383</td>
<td>Cellulitis &amp; Other Bacterial Skin Infections</td>
<td>14,246</td>
<td>2%</td>
</tr>
<tr>
<td>8</td>
<td>201</td>
<td>Cardiac Arrhythmia &amp; Conduction Disorders</td>
<td>14,104</td>
<td>2%</td>
</tr>
<tr>
<td>9</td>
<td>753</td>
<td>Bipolar Disorders</td>
<td>12,881</td>
<td>2%</td>
</tr>
<tr>
<td>10</td>
<td>463</td>
<td>Kidney &amp; Urinary Tract Infections</td>
<td>12,519</td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>All other cases</td>
<td></td>
<td>521,367</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL DISCHARGES</strong></td>
<td></td>
<td><strong>805,544</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Data Source:** Hospital Discharge Database (HDD)

**Note:** Total discharges reported by hospitals in the HDD may vary from total discharges reported by hospitals in the Hospital 403 Cost Reports. See Technical Appendix for more information.

* Discharge data does not include the acute care Kindred Hospitals as HDD data was not available for these hospitals. Shriners Hospitals for Children were also not included.
# Median Occupancy Rates by Cohort

Median occupancy rates increased for all cohorts from FY2012 to FY2013.

<table>
<thead>
<tr>
<th>Cohort</th>
<th>FY2012 Occupancy Rate</th>
<th>FY2013 Occupancy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Medical Center</td>
<td>83%</td>
<td>84%</td>
</tr>
<tr>
<td>Teaching</td>
<td>68%</td>
<td>71%</td>
</tr>
<tr>
<td>Community</td>
<td>63%</td>
<td>64%</td>
</tr>
<tr>
<td>Community-DSH</td>
<td>63%</td>
<td>64%</td>
</tr>
<tr>
<td>Specialty*</td>
<td>67%</td>
<td>69%</td>
</tr>
</tbody>
</table>

**Data Source:** Hospital 403 Cost Reports  
* Shriners Hospitals for Children were not included in this analysis.
Discharges by Cohort

- Total hospital discharges declined nearly 6% from FY2009 to FY2013.
- Discharges declined in every cohort from FY2009 to FY2013.

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Number of Hospitals</th>
<th>FY2009 Discharges</th>
<th>FY2012 Discharges</th>
<th>FY2013 Discharges</th>
<th>Percent of Statewide Discharges</th>
<th>% Change FY2009 to FY2013</th>
<th>% Change FY2012 to FY2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Medical Centers</td>
<td>6</td>
<td>240,813</td>
<td>231,506</td>
<td>224,757</td>
<td>28%</td>
<td>-6.7%</td>
<td>-2.9%</td>
</tr>
<tr>
<td>Teaching</td>
<td>9</td>
<td>149,383</td>
<td>146,702</td>
<td>144,473</td>
<td>18%</td>
<td>-3.3%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Community</td>
<td>18</td>
<td>206,289</td>
<td>200,629</td>
<td>191,842</td>
<td>24%</td>
<td>-7.0%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Community-DSH</td>
<td>27</td>
<td>237,159</td>
<td>232,932</td>
<td>225,433</td>
<td>28%</td>
<td>-4.9%</td>
<td>-3.2%</td>
</tr>
<tr>
<td>Specialty*</td>
<td>6</td>
<td>28,579</td>
<td>26,888</td>
<td>26,405</td>
<td>3%</td>
<td>-7.6%</td>
<td>-1.8%</td>
</tr>
<tr>
<td>TOTAL STATEWIDE</td>
<td>66**</td>
<td>862,223</td>
<td>838,657</td>
<td>812,910</td>
<td>100%</td>
<td>-5.7%</td>
<td>-3.1%</td>
</tr>
</tbody>
</table>

Data Source: Hospital 403 Cost Reports

Note: Total discharges reported by hospitals in the Hospital 403 Cost Reports may vary from total discharges reported by hospitals in the Hospital Discharge Database (HDD). See Technical Appendix for more information.

* Shriners Hospitals for Children were not included in this analysis.

** In FY2013, there were 66 hospitals included. In FY2009, there were 67 hospitals (Saints Medical Center was a separate hospital in FY2009, but merged with Lowell General Hospital in FY2012).
### Change in Outpatient Visits, by Cohort

Outpatient visits increased in all cohorts except Community-DSH from FY2009 to FY2013.

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Median Change in Outpatient Visits – Cumulative From FY2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Medical Center</td>
<td>1.4%</td>
</tr>
<tr>
<td>Teaching</td>
<td>-3.4%</td>
</tr>
<tr>
<td>Community</td>
<td>0.8%</td>
</tr>
<tr>
<td>Community-DSH</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Speciality*</td>
<td>1.9%</td>
</tr>
<tr>
<td>TOTAL STATEWIDE</td>
<td><strong>0.6%</strong></td>
</tr>
</tbody>
</table>

**Data Source:** Hospital 403 Cost Reports

* Shriners Hospitals for Children were not included in this analysis.
FY2013 Payer Mix

Community-DSH and teaching hospitals have the highest share of public payer mix.

Data Source: Hospital 403 Cost Reports

* Hospitals have DSH status if they have 63% or more of gross revenues (GPR) attributable to Medicare, Medicaid, and other government payers, including Commonwealth Care and the Health Safety Net.

** Statewide excludes Specialty hospitals.
Acute Hospital Blended Composite Relative Price Percentile, by Hospital Cohort, CY2013

Academic medical centers, on average, had prices well above the median in CY2013.

Data Source: Payer data reported in accordance with 957 CMR 2.00

Note: Commercial payer relative price levels represent the range and average of the cohort hospitals’ blended composite relative price levels, expressed as percentiles, for all Massachusetts payers in Calendar Year 2013.

* The Community-DSH cohort includes Saints Medical Center, which merged with Lowell General Hospital in 2012; some commercial payers continued to report price data for Saints Medical Center separately in 2013.
Growth in Inpatient Revenue per CMAD, FY2009 - FY2013

Community hospitals had the highest growth in inpatient revenue per case mix-adjusted discharge (CMAD) from FY2009 to FY2013 of 14.5%, while teaching hospitals experienced a decline of nearly 3%.

Data Source: Hospital 403 Cost Reports
Growth in Inpatient Adjusted Cost per CMAD, FY2009 - FY2013

Community-DSH hospitals had the highest growth in inpatient adjusted cost per case mix-adjusted discharge (CMAD) from FY2009 to FY2013 of 5.8%, while teaching hospitals experienced a decline of 3.5%.

Data Source: Cost and discharge data were sourced from the Hospital 403 Cost Reports. Case mix data was sourced from the Hospital Discharge Database.
Among non-specialty cohorts, academic medical centers had the highest average adjusted* cost per case mix-adjusted discharge (CMAD), 13% higher than the statewide average.

Many rural hospitals had higher adjusted costs per CMAD, primarily due to their low patient volume and remote locations.

Data Source: Cost and discharge data were sourced from the Hospital 403 Cost Reports. Case mix data was sourced from the Hospital Discharge Database.

Note: The acute care Kindred Hospitals were not included in this analysis, as case mix data was not available for these hospitals. Shriners Hospitals for Children were also not included.

* Costs were adjusted to exclude direct medical education costs and physician compensation costs. Inpatient costs can vary among hospitals depending on a number of factors, including these cost categories. Adjusting for these cost categories facilitates better comparison between hospitals that have these costs and those that do not. For more information on these cost categories, see Databook.
### FY2013 Full Cost per CMAD

<table>
<thead>
<tr>
<th>Hospital Name</th>
<th>FY2013 Full Inpatient Cost per CMAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts General Hospital</td>
<td>$22,739</td>
</tr>
<tr>
<td>Massachusetts Eye and Ear Infirmary</td>
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<tr>
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<td>Mercy Medical Center</td>
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<td>Lawrence General Hospital</td>
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<td>Steward Good Samaritan Medical Center</td>
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<td>Falmouth Hospital</td>
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<td>Cape Cod Hospital</td>
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<td>Fairview Hospital</td>
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<td>Nantucket Cottage Hospital</td>
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</tr>
</tbody>
</table>

**Note:** The acute care Kindrined Hospitals were not included in this analysis, as case mix data was not available for these hospitals. Shriners Hospitals for Children were also not included.
Growth in Outpatient Revenue, FY2009 - FY2013

AMCs had the highest growth in outpatient revenue from FY2009 to FY2013.

Data Source: Hospital 403 Cost Reports
Proportion of Inpatient and Outpatient Costs by Cohort, FY2013

In FY2013, academic medical centers had a greater share of their total costs attributable to inpatient care.

Data Source: Hospital 403 Cost Reports
* Statewide excludes Specialty Hospitals

Massachusetts Hospital Profiles - Data through Fiscal Year 2013
Surplus by Cohort

AMCs collectively had the largest surplus in absolute dollars every year from FY2009 to FY2013.

Data Source: Hospital Standardized Financial Statements
Growth in Median Operating Margin, FY2009-FY2013

All cohorts have had positive median operating margins since FY2009. Teaching hospitals tended to have the highest median operating margin over this period, including a 3.6% margin in FY2013.

Data Source: Hospital Standardized Financial Statements
Growth in Median Total Margin

Teaching hospitals had the highest total margin in FY2013, at 7.6%.

Data Source: Hospital Standardized Financial Statements
INTRODUCTION TO MULTI-ACUTE HOSPITAL SYSTEM PROFILES

This section provides an overview of multi-acute hospital systems in Massachusetts ("system profiles"). Multi-acute hospital systems play a central role in the Massachusetts health care environment, accounting for the majority of acute hospitals statewide. In 2013, there were nine¹ multi-acute hospital systems that encompassed 39 of the state’s 68 acute hospitals.²

The information presented in the system profiles is based primarily on financial data. Each profile includes measures that highlight financial performance, organizational structure, and relative size of each component entity within the system.

See below for an index of the systems as well as their acute and non-acute hospitals.

¹ Kindred Healthcare, Inc. and Tenet Healthcare Corporation are publicly traded, multistate health systems. Each owns two acute hospitals in Massachusetts (Kindred owns Kindred Hospital – Boston and Kindred Hospital – Boston North Shore; Tenet owns MetroWest Medical Center and Saint Vincent Hospital). Due to their broad presence outside of Massachusetts, CHIA did not include Kindred or Tenet in the system profiles chapter.

² Refer to the “Subsequent Events” section (Exhibit A) of the Technical Appendix for additional information on the number of hospitals in Massachusetts, as there have been several changes during 2014.
<table>
<thead>
<tr>
<th>Baystate Health ........................................ page A6</th>
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<th>Cape Cod Healthcare ........................................ page A8</th>
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<tr>
<td>Heywood Hospital ................................................. C42</td>
</tr>
<tr>
<td>Athol Hospital ..................................................... C34</td>
</tr>
</tbody>
</table>
Partners HealthCare System, Inc. (Partners) is an integrated organization that provides health care services throughout Massachusetts. Some figures from its most recent audited financial statements (FY13):

- **Total Profit/Loss**: $600M
- **Total Margin**: 5.6%
- **Employees (Approximately)**: 64K
- **Annual Research Revenue**: $1.4B
- **Acute Hospitals**: 8
- **Non-Acute Hospitals**: 5

In Fiscal Year 2013:

- **Operating Revenue**: $10.3 Billion
- **Net Assets**: $7.0 Billion

Financial Indicators of System Affiliate:
- Operating Revenue and Net Assets of the entity within the system.

Measuring Year:
The system’s fiscal year for the data on this page.

Size of System:
Operating Revenue is a financial measure of an organization’s size.

System’s Financial Stability:
Net Assets is a measure of an organization’s financial stability.

Share of Patient Discharges and Revenue:
Bars show the system’s proportion of total acute hospital inpatient discharges, inpatient revenue, and outpatient revenue in Massachusetts. Note that outpatient visits are not represented in this chart. See the Technical Appendix for more information.

Consolidating Eliminations:
Intercompany transactions that are eliminated during the financial consolidation process.

Proportion of Operating Revenue:
Circle size and the color of the band are based on the entity’s proportion of the system’s total operating revenue.

This sheet provides a brief introduction to the metrics on the multi-acute hospital system profiles. Definitions and notes on all metrics are available in the Technical Appendix.
Multi-Acute Hospital System Profiles: Comparative Overview

Circle areas are scaled based on system operating revenue
Partners HealthCare System is an integrated organization that provides health care services throughout Massachusetts. Some figures from its most recent audited financial statements (FY13):

- **Total Profit/Loss**: $600M (5.6%)
- **Total Margin**: 64K
- **Employees (Approximately)**: 64K
- **Annual Research Revenue**: $1.4B

### Acute Hospitals
- **Mass. General Hosp.**
  - Operating Revenue: $3.2B
  - Net Assets: $1.7B
- **Brigham & Women’s**
  - Operating Revenue: $2.5B
  - Net Assets: $376M
- **North Shore**
  - Operating Revenue: $414M
  - Net Assets: $90M
- **Newton-Wellesley**
  - Operating Revenue: $410M
  - Net Assets: $124M
- **B&W – Faulkner**
  - Operating Revenue: $191M
  - Net Assets: $51M
- **Martha’s Vineyard**
  - Operating Revenue: $172M
  - Net Assets: $98M
- **Cooley Dickinson**
  - Operating Revenue: $136M
  - Net Assets: $96M
- **Nantucket Cottage**
  - Operating Revenue: $132M
  - Net Assets: $51M
- **McLean Hospital**
  - Operating Revenue: $143M
  - Net Assets: $110M

### Non-Acute Hospitals
- **North Shore**
  - Operating Revenue: $46M
  - Net Assets: $5M
- **Spaulding Cambridge**
  - Operating Revenue: $47M
  - Net Assets: $29M
- **Spaulding North Shore**
  - Operating Revenue: $49M
  - Net Assets: $30M
- **Spaulding Cape Cod**
  - Operating Revenue: $31M
  - Net Assets: $10M

### Physician Organizations
- **Mass. General Phys. Org.**
  - Operating Revenue: $873M
  - Net Assets: $470M
- **B & W Phys. Org.**
  - Operating Revenue: $656M
  - Net Assets: $302M
- **North Shore Phys. Group**
  - Operating Revenue: $123M
  - Net Assets: $4M
- **Newton-Wellesley PHO**
  - Operating Revenue: $125M
  - Net Assets: $4M
- **Newton-Wellesley**
  - Operating Revenue: $57M
  - Net Assets: $4M

### Health Plans
- **Neighborhood Health Plan**
  - Operating Revenue: $1.4B
  - Net Assets: $180M

### Other Health Care Providers
- **Not applicable**

### Other Organizations
- **See Technical Appendix for details**

### Consolidating Eliminations
- **($901M)**
- **($754M)**

### At a Glance
- **Acute Hospitals**: 8
- **Non-Acute Hospitals**: 5
- **Employees (Approximately)**: 64K
- **Annual Research Revenue**: $1.4B

### System’s Percentage of total Massachusetts Acute Hospital...
- Inpatient Discharges: 19%
- Inpatient Revenue: 28%
- Outpatient Revenue: 22%
CareGroup, Inc. is a non-profit entity that oversees several regional teaching and community hospitals and physician groups. Some figures from its most recent audited financial statements (FY13):

- **Total Profit/Loss**: $137M
- **Total Margin**: 5.4%
- **Acute Hospitals**: 5
- **Employees (Approximately)**: 12K

### System’s Percentage of total Massachusetts Acute Hospital...

- **Inpatient Discharges**: 8%
- **Inpatient Revenue**: 9%
- **Outpatient Revenue**: 7%

### At a Glance

- **Beth Israel Deaconess Med. Center (BIDMC)**: $1.4B, $880M
- **Mt. Auburn Hospital**: $306M, $246M
- **Mt. Auburn Professional Services**: $60M, $10M
- **NE Baptist Hospital**: $223M, $119M
- **BID – Milton**: $87M, $73M
- **BID – Needham**: $64M, $35M
- **NE Baptist Med. Associates**: $11M, $1M
- **GBMC Real Estate Corp.**: $0, $7M

### Not applicable

- **Harvard Med. Faculty Physicians**: $446M, $165M
- **Other Health Care Providers**: Not applicable
- **Other Organizations**: See Technical Appendix for details

### % of System’s Operating Revenue:

- **< 10%**
- **10-20%**
- **> 20%**
UMass Memorial Health Care, Inc. is an integrated organization that provides health care services throughout Massachusetts. Some figures from its most recent audited financial statements (FY13):

### At a Glance
- **$75M** Total Profit/Loss
- **3.4%** Total Margin
- **5** Acute Hospitals
- **12K** Employees (Approximately)
- **7%** Inpatient Discharges
- **7%** Inpatient Revenue
- **7%** Outpatient Revenue

#### System’s Percentage of total Massachusetts Acute Hospital...
Steward Health Care System, LLC is an integrated organization that provides health care services throughout Massachusetts. Some figures from its most recent audited financial statements (FY12):

- Steward's FY12 consolidated financial statements, the most recent on record with CHIA, only provide a financial breakout for the system’s hospital organizations. The other organizations presented on this profile are mentioned in the financial statements, but CHIA does not have their financial information.

Inpatient Revenue:
- $33M Total Profit/Loss
- -1.7% Total Margin

Outpatient Revenue:
- 10 Acute Hospitals
- 1 Chronic Care Hospital
- 17K Employees (Approximately)

System’s Percentage of total Massachusetts Acute Hospital...
Baystate Health, Inc. (Baystate) is an organization that provides health care services throughout Western Massachusetts. Some figures from its most recent audited financial statements (FY13):

- **Total Profit/Loss**: $71M
- **Total Margin**: 4.1%
- **Acute Hospitals**: 3
- **Employees (Approximately)**: 10K

### Inpatient Revenue
- 5%

### Outpatient Revenue
- 5%
- 4%

### System’s Percentage of total Massachusetts Acute Hospital:
- 5%
- 5%
- 4%

---

**At a Glance**

**Baystate Medical Center**
- $1.0B
- $646M

**Baystate Franklin**
- $78M
- $43M

**Baystate Mary Lane**
- $26M
- $19M

**Baystate Medical Practices**
- $220M
- ($35M)

**Baystate Medical Center**
- $220M
- ($35M)

**Baystate Health Ambulance**
- $7M
- $1M

**Baystate Medical Ambulance**
- $7M
- $1M

**Nurses Assoc. & Hospice**
- $23M
- $2M

**Baystate Health Ambulance**
- $7M
- $1M

**Admin. & Other**
- $128M
- $196M

**Nurses Assoc. & Hospice**
- $23M
- $2M

---

**Consolidating Eliminations**
- ($310M)
- ($76M)
Lahey Health System, Inc. is an integrated health care system acting as the parent organization of Lahey Clinic Foundation, Inc.; Lahey Affiliates; Northeast Health System, Inc.; and Northeast Affiliates. Some figures from its most recent audited financial statements (FY13):

- **Total Profit/Loss**: $83M, 5.4%
- **Total Margin**: $16M
- **Employees (Approximately)**: 11K
- **Acute Hospitals**: 2

At a Glance:

<table>
<thead>
<tr>
<th>Inpatient Discharges</th>
<th>Inpatient Revenue</th>
<th>Outpatient Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
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</table>

System’s Percentage of total Massachusetts Acute Hospital...

The graphic represents the revenue distribution across different health care providers and organizations within the Lahey Health System. The key figures highlight the system’s financial performance and organizational structure for the fiscal year 2013.
Cape Cod Healthcare, Inc. provides health care services in Cape Cod, Massachusetts. Some figures from its most recent audited financial statements (FY13):

- **Total Profit/Loss**: $37M, 5.5% total margin
- **Employees (Approximately)**: 5K
- **Acute Hospitals**: 2

System’s Percentage of total Massachusetts Acute Hospital...

% of System’s Operating Revenue: < 10% 10-20% > 20%
Berkshire Health Systems, Inc. (Berkshire) is a not-for-profit organization that provides health care services to Western Massachusetts. Some figures from its most recent audited financial statements (FY13):

- **Total Profit/Loss**: $26M (5.9%)
- **Total Margin**: 3K
- **Employees (Approximately)**: 2
- **Acute Hospitals**: 2

### System’s Percentage of total Massachusetts Acute Hospital...

- **Inpatient Revenue**
- **Outpatient Revenue**
- **Not applicable**

### At a Glance

- **Berkshire Health Systems, Inc. (Berkshire)** provides health care services to Western Massachusetts.
- **Fiscal Year 2013**:
  - **Operating Revenue**: $429 Million
  - **Net Assets**: $302 Million

### Other Organizations

- **Berkshire Medical Center**
  - **Operating Revenue**: $351M
  - **Net Assets**: $277M

- **Fairview Hospital**
  - **Operating Revenue**: $45M
  - **Net Assets**: $19M

- **Berkshire Faculty Services**
  - **Operating Revenue**: $18M
  - **Net Assets**: $16M

- **WMA**
  - **Operating Revenue**: $4M
  - **Net Assets**: $0.2M

- **Indemnity & Management Co.**
  - **Operating Revenue**: $52M
  - **Net Assets**: $6M

- **Other Health Care Providers**
  - **Operating Revenue**: Not applicable
  - **Net Assets**: Not applicable

- **Other Organizations**
  - **Operating Revenue**: See Technical Appendix for details
  - **Net Assets**: See Technical Appendix for details

### Consolidating Eliminations:

- **($42M)**
- **($0.1K)**

### Percent of System’s Operating Revenue:

- < 10%
- 10-20%
- > 20%

[CHIA]

[CHIA]

[CHIA]
Heywood Healthcare, Inc., operates two not-for-profit acute care hospitals in central Massachusetts. Some figures from its most recent audited financial statements (FY13):

- **Total Profit/Loss**: $3M (2.1%)
- **Total Margin**: 1K
- **Employees (Approximately)**: 2
- **Acute Hospitals**: 2

### At a Glance

**Heywood Healthcare**

- **Fiscal Year 2013**: $129 Million Operating Revenue, $54 Million Net Assets

**Other Hospitals**

- **Athol Hospital**
  - Operating Revenue: $19M
  - Net Assets: $2M

**Other Organizations**

- **See Technical Appendix for details**

**Health Plans**

- **Not applicable**

**Physician Organizations**

- **Not applicable**

**Other Health Care Providers**

- **Not applicable**

**Consolidating Eliminations**

- **($2M)**
- **$0.5K**

**System’s Percentage of total Massachusetts Acute Hospital**

- **Inpatient Discharges**: 0.8%
- **Inpatient Revenue**: 0.4%
- **Outpatient Revenue**: 0.7%
INTRODUCTION TO ACUTE HOSPITAL COHORT PROFILES

Acute hospitals were grouped into cohorts of similar hospitals as follows:

**Academic Medical Centers (AMCs)** are a subset of teaching hospitals. AMCs are characterized by (1) extensive research and teaching programs and (2) extensive resources for tertiary and quaternary care, and are (3) principal teaching hospitals for their respective medical schools and (4) full service hospitals with case mix intensity greater than 5% above the statewide average.

<table>
<thead>
<tr>
<th>AMC Cohort</th>
<th>Massachusetts General Hospital</th>
<th>Tufts Medical Center</th>
<th>UMass Memorial Medical Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beth Israel Deaconess Medical Center</td>
<td>Boston Medical Center</td>
<td>Brigham and Women’s Hospital</td>
<td></td>
</tr>
</tbody>
</table>

**Teaching hospitals** are those hospitals that report at least 25 full-time equivalent medical school residents per one hundred inpatient beds in accordance with Medicare Payment Advisory Commission (MedPAC) and are not classified as AMCs.

<table>
<thead>
<tr>
<th>Teaching Hospital Cohort</th>
<th>Mount Auburn Hospital</th>
<th>Saint Vincent Hospital</th>
<th>Steward Carney Hospital</th>
<th>Steward St. Elizabeth’s Medical Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baystate Medical Center</td>
<td>Berkshire Medical Center</td>
<td>Brigham and Women’s Faulkner Hospital</td>
<td>Cambridge Health Alliance</td>
<td>Lahey Hospital &amp; Medical Center</td>
</tr>
</tbody>
</table>

**Community hospitals** are hospitals that are not teaching hospitals and have a public payer mix of less than 63%.

<table>
<thead>
<tr>
<th>Community Hospital Cohort</th>
<th>MetroWest Medical Center</th>
<th>Milford Regional Medical Center</th>
<th>Nantucket Cottage Hospital</th>
<th>Nashoba Valley Medical Center</th>
<th>Newton-Wellesley Hospital</th>
<th>Northeast Hospital</th>
<th>South Shore Hospital</th>
<th>Steward Norwood Hospital</th>
<th>Winchester Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anna Jaques Hospital</td>
<td>Baystate Mary Lane Hospital</td>
<td>Beth Israel Deaconess Hospital - Milton</td>
<td>Beth Israel Deaconess Hospital - Needham</td>
<td>Beth Israel Deaconess Hospital - Plymouth</td>
<td>Cooley Dickinson Hospital</td>
<td>Emerson Hospital</td>
<td>Hallmark Health</td>
<td>Lowell General Hospital</td>
<td></td>
</tr>
</tbody>
</table>
Community-Disproportionate Share Hospitals (DSH) are community hospitals that are disproportionately reliant on public revenues by virtue of a public payer mix of 63% or greater. Public payers include Medicare, MassHealth and other government payers, including Commonwealth Care and the Health Safety Net.

Community-DSH Hospital Cohort

| Athol Hospital                      | Mercy Medical Center                  |
| Baystate Franklin Medical Center   | Merrimack Valley Hospital             |
| Cape Cod Hospital                  | Morton Hospital                       |
| Clinton Hospital                   | Noble Hospital                        |
| Fairview Hospital                  | North Shore Medical Center            |
| Falmouth Hospital                  | Quincy Medical Center                 |
| Harrington Memorial Hospital       | Signature Healthcare Brockton Hospital|
| HealthAlliance Hospital            | Southcoast Hospitals Group            |
| Heywood Hospital                   | Steward Good Samaritan Medical Center |
| Holyoke Medical Center             | Steward Holy Family Hospital          |
| Lawrence General Hospital          | Steward Saint Anne's Hospital         |
| Marlborough Hospital               | Sturdy Memorial Hospital              |
| Martha's Vineyard Hospital         | Wing Memorial Hospital                |

Specialty hospitals were not included in any cohort comparison analysis due to the unique patient populations they serve and/or the unique sets of services they provide. Specialty hospitals are included in some statewide analyses. Individual profiles for these hospitals can be found in Section C.

Specialty Hospitals

| Boston Children's Hospital         | Kindred Hospital - Boston North Shore |
| Dana-Farber Cancer Institute      | Massachusetts Eye and Ear Infirmary  |
| Kindred Hospital - Boston         | New England Baptist Hospital          |

For detailed descriptions of the data sources and metrics used in the acute hospital cohort profiles, please see the Technical Appendix.
How to Read Acute Hospital Cohort Profiles – FY13

This section shows one-year growth rates (FY2012 – FY2013) of utilization and revenue trend metrics.

Inpatient Severity Distribution
The severity distribution of all inpatient cases treated at cohort hospitals is shown in the green stacked column. The blue stacked column allows comparison to all other acute hospitals, excluding Specialty hospitals.

Relative Price (RP)
Compares different provider prices within a payer’s network relative to the network’s average price level. The cohort’s green square allows a price comparison to all other hospitals’ (excluding Specialty hospitals) orange dash.

The dashed line shows the payer’s network median relative price.

Types of Inpatient Cases
The cohort’s most frequent cases are listed, with the number of discharges in each group and a bar representing the cohort’s share of statewide cases.

Payer Mix
This cohort’s average hospital’s share of business from federal and state programs and commercial payers is shown in the green column. The blue column allows comparison to the average non-cohort, non-Specialty acute hospital in Massachusetts.

The dashed line indicates whether the average hospital in the cohort receives 63% or more of its business from government programs (the bottom two sections of each column). This is the ‘DSH Threshold’.

Massachusetts Hospital Profiles - Data through Fiscal Year 2013
Each of the first four graphs compares trends at the featured cohort (in green) to the trend among all other acute hospitals, excluding Specialty hospitals (in orange). Both trends are anchored at 100 to emphasize recent changes. The labeled points are cumulative over the time period.

Absolute differences between the cohort and other hospitals cannot be read off these graphs, but are available in the data supplement to these reports.

---

**Hospital Cohort Profile:** ACADEMIC MEDICAL CENTERS

**Utilization Trends**
- As a group, how has the volume of the cohort’s total inpatient discharges changed compared to FY09, and how does this compare to the volume of other acute hospitals? (FY09=100)

**Patient Revenue Trends**
- As a group, what was the cohort’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this compare to other acute hospitals?

**Financial Performance**
- As a group, how have the cohort hospitals’ aggregate revenues and costs changed between FY09 and FY13?

**Total and operating margin history**
- What was the cohort’s median total margin and operating margin between FY09 and FY13? How do these compare to the medians of other acute hospitals?

---

**Change in volume of outpatient visits**
**Change in volume of inpatient discharges**

**Inpatient severity-adjusted revenue per case, from FY2009 to FY2013** (i.e. per capita)

**Change in total outpatient revenue**
(note: **not** per unit. This metric is influenced both by unit price and by volume changes.)

---

**Annual financial information**

---

**Massachusetts Hospital Profiles - Data through Fiscal Year 2013**
Changes from FY12 Acute Hospital Cohort Profiles

**What changed** from Acute Hospital Cohort Profiles – Data through Fiscal Year 2012

### New Revenue Trends Metrics
Replace cost trends metrics on Data through FY12 Profile.

### Financial Performance Metrics
Now include operating and non-operating revenue, and operating margin.

### FY13 Values
Are noted on all trend measures.

### New At a Glance Measures
Include Emergency Department Visits and Adjusted Cost per Case Mix Adjusted Discharge (CMAD).

### New Growth Measures
Section shows 1-year growth rates (FY12-FY13) of revenue and utilization trend metrics. Cohort growth measures are compared to all other hospitals.

---

1 Payer mix comparison (average) and cohort financial performance (median) calculations did not change from Data through FY12 Profile.
2013 Hospital Cohort Profile:

ACADEMIC MEDICAL CENTERS

Academic Medical Centers (AMCs) are training institutions for medical school residents, like teaching hospitals. AMCs are characterized by more extensive research and teaching programs than teaching hospitals, as well as significant capacity for highly specialized and complex care (i.e., tertiary and quaternary). AMCs are also large in size; in 2013, the six AMCs in Massachusetts represented more than a quarter of all staffed hospital beds statewide. In FY13, AMCs accounted for 41% of total acute hospital revenue statewide; total AMC revenue was $10.4 billion. AMCs tend to have a greater proportion of commercial business than other hospitals, although 60% of their business is from Medicaid, Medicare, and other government programs. AMCs collectively earned a surplus each year from FY09 to FY13, with an aggregate surplus of $488 million in FY13.

2013 Hospital Cohort Profile:

What were the inpatient severity distribution in this cohort? How does this compare to the inpatient severity distribution of other hospitals?

What were the most common inpatient cases (DRGs) treated at the cohort hospitals? What proportion of statewide DRGs did this cohort treat for each service?

As a group, what was the cohort's average CY13 payer-specific relative price levels for the top three commercial payers in Massachusetts? How do these compare to the average relative price levels of other acute hospitals?

AT A GLANCE

GROWTH MEASURES

What were the FY12 to FY13 growth rates for this cohort for the following measures, and how do these compare to the growth rates of all other hospitals in the state?

SERVICES

What were the most common inpatient cases (DRGs) treated at the cohort hospitals? What proportion of statewide DRGs did this cohort treat for each service?

PAYER MIX

What was the average cohort hospital's payer mix (gross charges) in FY13, and how does this compare to the average of other acute hospitals' payer mix?

As a group, what was the cohort's average CY13 payer-specific relative price levels for the top three commercial payers in Massachusetts? How do these compare to the average relative price levels of other acute hospitals?
As a group, how has the cohort's total outpatient revenue changed compared to FY09, and how does this compare to the total outpatient revenue of other acute hospitals? (FY09=100)

As a group, what was the cohort's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this compare to other acute hospitals?

How has the median volume of the cohort's outpatient visits changed compared to FY09, and how does this compare to the median change of other hospitals? (FY09=100)

As a group, how has the volume of the cohort's total inpatient discharges changed compared to FY09, and how does this compare to the volume of other acute hospitals? (FY09=100)

As a group, how have the cohort hospitals' aggregate revenues and costs changed between FY09 and FY13?

What was the cohort's median total margin and operating margin between FY09 and FY13? How do these compare to the medians of other acute hospitals?

For descriptions of the metrics, please see Technical Appendix.

Massachusetts AMCs include six hospitals: Beth Israel Deaconess Medical Center, Boston Medical Center, Brigham and Women's Hospital, Massachusetts General Hospital, Tufts Medical Center, and UMass Memorial Medical Center.

Other hospitals comparative does not include Specialty hospitals.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Deliver DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.

January 2015
2013 Hospital Cohort Profile:

TEACHING HOSPITALS

Teaching hospitals are training institutions with at least 25 full-time equivalent medical school residents per one hundred inpatient beds that are not considered academic medical centers (AMCs). The nine teaching hospitals in Massachusetts tend to be larger hospitals, collectively representing nearly one-fifth of all staffed hospital beds statewide in 2013. In FY13, teaching hospitals accounted for 16% of total acute hospital revenue statewide; total teaching hospital revenue was $4.0 billion. Teaching hospitals tend to have a greater proportion of business from Medicaid, Medicare, and other government programs than other hospitals, with 64% of their business from these public payers in FY13. Teaching hospitals collectively earned a surplus each year from FY09 to FY13, with an aggregate surplus of $258 million in FY13.

AT A GLANCE

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL STAFFED BEDS</td>
<td>2,502 in cohort, 17% of Statewide</td>
</tr>
<tr>
<td>MEDIAN % OCCUPANCY</td>
<td>71%</td>
</tr>
<tr>
<td>MEDIAN CASE MIX INDEX in FY13</td>
<td>0.94, greater than CMI of other hospitals* (0.84)</td>
</tr>
<tr>
<td>TOTAL DISCHARGES</td>
<td>144,473 in cohort, 18% of Statewide</td>
</tr>
<tr>
<td>EMERGENCY DEPT. VISITS in FY13</td>
<td>488,524, 16% of Statewide</td>
</tr>
<tr>
<td>AVERAGE CY13 COMMERCIAL PAYER PRICE LEVEL</td>
<td>56th Percentile</td>
</tr>
<tr>
<td>AVERAGE PUBLIC PAYER MIX</td>
<td>64%</td>
</tr>
<tr>
<td>TOTAL REVENUE in FY13</td>
<td>$4,004 million, 16% of Statewide</td>
</tr>
<tr>
<td>INPATIENT: OUTPATIENT REVENUE in FY13</td>
<td>35.65%</td>
</tr>
<tr>
<td>ADJUSTED² COST PER DISCHARGE</td>
<td>$9,788, &lt; statewide median ($9,970)</td>
</tr>
</tbody>
</table>

GROWTH MEASURES

What were the FY12 to FY13 growth rates for this cohort for the following measures, and how do these compare to the growth rates of all other hospitals in the state?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cohort</th>
<th>Other Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>Decrease -1.7%</td>
<td>Increase -1.5%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>Decrease -3.1%</td>
<td>Increase -1.5%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>Decrease -1.7%</td>
<td>Increase -1.1%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>Decrease -1.1%</td>
<td>Increase -1%</td>
</tr>
</tbody>
</table>

SERVICES

What were the most common inpatient cases (DRGs) treated at the cohort hospitals? What proportion of statewide DRGs did this cohort treat for each service?

<table>
<thead>
<tr>
<th>DRG</th>
<th>Cohort</th>
<th>Other Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs (21,049)</td>
<td>16%</td>
<td>11%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (4,560)</td>
<td>21%</td>
<td>18%</td>
</tr>
<tr>
<td>Heart Failure (4,117)</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>Other Pneumonia (3,281)</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Knee Joint Replacement (2,615)</td>
<td>17%</td>
<td>18%</td>
</tr>
<tr>
<td>Bipolar Disorders (2,544)</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>Card Arrth &amp; Cond Dis (2,525)</td>
<td>18%</td>
<td>24%</td>
</tr>
<tr>
<td>COPD (2,515)</td>
<td>14%</td>
<td>24%</td>
</tr>
<tr>
<td>Maj Dep &amp; Oth Unsp Psychoses (2,384)</td>
<td>21%</td>
<td>42%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skin Inf (2,379)</td>
<td>17%</td>
<td>45%</td>
</tr>
</tbody>
</table>

What was the inpatient severity distribution in this cohort? How does this compare to the inpatient severity distribution of other hospitals?

Percentage calculations may not sum to 100% due to rounding.

PAYER MIX

What was the average cohort hospital's payer mix (gross charges) in FY13, and how does this compare to the average of other acute hospitals’ payer mix?

<table>
<thead>
<tr>
<th>Payer Mix</th>
<th>Cohort</th>
<th>Other Hospitals*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>36%</td>
<td>38%</td>
</tr>
<tr>
<td>State Programs</td>
<td>21%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>43%</td>
<td>44%</td>
</tr>
<tr>
<td>DSH Threshold</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As a group, what were the cohort’s average CY13 payer-specific relative price levels for the top three commercial payers in Massachusetts? How do these compare to the average relative price levels of other acute hospitals?

Percentage calculations may not sum to 100% due to rounding.

For descriptions of the metrics, please see Technical Appendix.
**Hospital Cohort Profile:** **TEACHING HOSPITALS**

### UTILIZATION TRENDS

As a group, how has the volume of the cohort's total inpatient discharges changed compared to FY09, and how does this compare to the volume of other acute hospitals? (FY09=100)

How has the median volume of the cohort's outpatient visits changed compared to FY09, and how does this compare to the median change of other hospitals? (FY09=100)

### PATIENT REVENUE TRENDS

As a group, what was the cohort's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this compare to other acute hospitals?

As a group, how has the cohort's total outpatient revenue changed compared to FY09, and how does this compare to the total outpatient revenue of other acute hospitals? (FY09=100)

### FINANCIAL PERFORMANCE

As a group, how have the cohort hospitals' aggregate revenues and costs changed between FY09 and FY13?

What was the cohort's median total margin and operating margin between FY09 and FY13? How do these compare to the medians of other acute hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Other hospitals comparative does not include Specialty hospitals.

Costs were adjusted to exclude direct medical education costs and physician compensation.

* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
Community hospitals are hospitals that are not characterized as specialty, teaching, or academic medical centers. These hospitals also do not meet the criteria for Disproportionate Share Hospital (DSH) status. There are 18 community hospitals in Massachusetts that range in size from 19 to 406 staffed beds. Collectively, in 2013, community hospitals represented roughly one quarter of all staffed hospital beds statewide. In FY13, community hospitals accounted for 15% of total acute hospital revenue statewide; total community hospital revenue was $3.7 billion. Community hospitals tend to have a greater proportion of commercial business than other hospitals, although 55% of their business comes from Medicaid, Medicare, and other government programs. Community hospitals collectively earned a surplus each year from FY09 to FY13, with an aggregate surplus of $139 million in FY13.

**2013 Hospital Cohort Profile:**

**COMMUNITY HOSPITALS**

Community hospitals

| TOTAL STAFFED BEDS | 3,306 in cohort, 23% of Statewide |
| MEDIAN % OCCUPANCY | 64% |
| MEDIAN CASE MIX INDEX in FY13 | 0.78, less than CMI of other hospitals* (0.87) |
| TOTAL DISCHARGES | 191,842 in cohort, 23% of Statewide |
| EMERGENCY DEPT. VISITS in FY13 | 796,542, 26% of Statewide |

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates for this cohort for the following measures, and how do these compare to the growth rates of all other hospitals in the state?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-4.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-1.1%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.1%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

1 hospital < 20%
1 hospital > 20%

Cohort
Statewide
Other Cohorts

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the cohort hospitals? What proportion of statewide DRGs did this cohort treat for each service?

<table>
<thead>
<tr>
<th>DRG</th>
<th>Cohort</th>
<th>Other Hospitals*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs* (38,211)</td>
<td>29%</td>
<td>7%</td>
</tr>
<tr>
<td>Other Pneumonia (5,701)</td>
<td>28%</td>
<td>18%</td>
</tr>
<tr>
<td>Heart Failure (5,390)</td>
<td>25%</td>
<td>22%</td>
</tr>
<tr>
<td>COPD (5,211)</td>
<td>22%</td>
<td>23%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (4,969)</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Bipolar Disorders (4,263)</td>
<td>33%</td>
<td>23%</td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis (4,066)</td>
<td>29%</td>
<td>52%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skn Inf (3,564)</td>
<td>25%</td>
<td>43%</td>
</tr>
<tr>
<td>Knee Joint Replacement (3,503)</td>
<td>22%</td>
<td>25%</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (3,418)</td>
<td>27%</td>
<td>25%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the inpatient severity distribution in this cohort? How does this compare to the inpatient severity distribution of other hospitals?

<table>
<thead>
<tr>
<th>DRG</th>
<th>Cohort</th>
<th>Other Hospitals*</th>
</tr>
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<td>27%</td>
<td>25%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payer</th>
<th>Cohort</th>
<th>Other Hospitals*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Cross Blue Shield of Massachusetts</td>
<td>45%</td>
<td>34%</td>
</tr>
<tr>
<td>Harvard Pilgrim Health Care</td>
<td>13%</td>
<td>22%</td>
</tr>
<tr>
<td>Tufts Health Plan</td>
<td>42%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**AT A GLANCE**

- AVERAGE CY13 COMMERCIAL PAYER PRICE LEVEL: 47th Percentile
- AVERAGE PUBLIC PAYER MIX: 55%
- TOTAL REVENUE in FY13: $3.721 million, 15% of Statewide
- INPATIENT: OUTPATIENT REVENUE in FY13: 31%:69%
- ADJUSTED* COST PER DISCHARGE: $9,838, < statewide median ($9,970)

**MEDIAN CASE MIX INDEX in FY13**

- 0.78, less than CMI of other hospitals* (0.87)

**INPATIENT: OUTPATIENT REVENUE in FY13**

- 31%:69%

**INPATIENT NET REVENUE per CMAD**

- -4.4% - 1.5%

**INPATIENT DISCHARGES**

- -3.3% - 1.5%

**OUTPATIENT REVENUE**

- -1.1% - 1.5%

**OUTPATIENT VISITS**

- -1.1% - 1.5%

**EMERGENCY DEPT. VISITS in FY13**

- 796,542, 26% of Statewide

**INPATIENT SEVERITY DISTRIBUTION in this cohort**

- 29% of statewide discharges were treated at these hospitals in FY13

**INPATIENT SEVERITY DISTRIBUTION in other hospitals**

- 7% of cases were of the highest severity in FY13

**OUTPATIENT SEVERITY DISTRIBUTION in this cohort**

- 52% of cases were of the lowest severity in FY13

**OUTPATIENT SEVERITY DISTRIBUTION in other hospitals**

- 43% of cases were of the lowest severity in FY13

**STATEWIDE DISCHARGES TREATED**

- 23% of statewide discharges were treated at these hospitals in FY13

**STATEWIDE REVENUE in FY13**

- $3.721 million, 15% of Statewide

**STATEWIDE DISCHARGES**

- 191,842 in cohort, 23% of Statewide

**STATEWIDE REVENUE in FY13**

- $3,721 million, 15% of Statewide

**STATEWIDE DISCHARGES**

- 191,842 in cohort, 23% of Statewide

**STATEWIDE REVENUE in FY13**

- $3.721 million, 15% of Statewide

For descriptions of the metrics, please see Technical Appendix.
As a group, how has the cohort's total outpatient revenue changed compared to FY09, and how does this compare to the total outpatient revenue of other acute hospitals? (FY09=100)

As a group, what was the cohort's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this compare to other acute hospitals?

How has the median volume of the cohort's outpatient visits changed compared to FY09, and how does this compare to the median change of other hospitals? (FY09=100)

As a group, how has the cohort's aggregate revenues and costs changed between FY09 and FY13?

What was the cohort's median total margin and operating margin between FY09 and FY13? How do these compare to the medians of other acute hospitals?

<table>
<thead>
<tr>
<th>Revenue, Cost &amp; Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>2010</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>2012</td>
</tr>
<tr>
<td>2013</td>
</tr>
</tbody>
</table>

January 2015
Community-Dischproportionate Share Hospitals (DSH) are a subset of community hospitals that receive 63% or more of their business from Medicare, Medicaid, and other government programs. There were 27 community-DSH hospitals in Massachusetts in FY13, compared to 24 in FY12, ranging in size from 15 to 556 staffed beds. Collectively, in FY13, community-DSH hospitals represented nearly 30% of all staffed hospital beds statewide. In FY13, community-DSH hospitals accounted for 17% of total acute hospital revenue statewide; total community-DSH revenue was $4.4 billion. Community-DSH hospitals by definition have the greatest proportion of business from public payers, relative to other hospitals, with 68% of their business in FY13 from Medicaid, Medicare, and other government programs. Community-DSH hospitals collectively earned a surplus each year from FY09 to FY13, with an aggregate surplus of $127 million in FY13.

### 2013 Hospital Cohort Profile:

**COMMUNITY-DISPROPORTIONATE SHARE HOSPITALS**

#### TOTAL STAFFED BEDS:
- 4,212 in cohort, 29% of Statewide

#### MEDIAN % OCCUPANCY:
- 64%

#### MEDIAN CASE MIX INDEX in FY13:
- 0.85, greater than CMI of other hospitals (0.83)

#### TOTAL DISCHARGES:
- 225,433 in cohort, 28% of Statewide

#### EMERGENCY DEPT. VISITS in FY13:
- 1,190,675, 39% of Statewide

#### AVERAGE CY13 COMMERCIAL PAYER PRICE LEVEL:
- 43rd Percentile

#### AVERAGE PUBLIC PAYER MIX:
- 68%

#### TOTAL REVENUE in FY13:
- $4,353 million, 17% of Statewide

#### INPATIENT: OUTPATIENT REVENUE in FY13:
- 31%:69%

#### ADJUSTED COST PER DISCHARGE:
- $9,902, < statewide median ($9,970)

### GROWTH MEASURES

What were the FY12 to FY13 growth rates for this cohort for the following measures, and how do these compare to the growth rates of all other hospitals in the state?

#### AT A GLANCE

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-4.1%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.2%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-1.1%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.1%</td>
<td></td>
</tr>
</tbody>
</table>

#### SERVICES

What were the most common inpatient cases (DRGs) treated at the cohort hospitals? What proportion of statewide DRGs did this cohort treat for each service?

<table>
<thead>
<tr>
<th>Service</th>
<th>Cohort</th>
<th>Statewide</th>
<th>Other Cohorts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maj Dep &amp; Oth/Unsp Psychoses (4,255)</td>
<td>38%</td>
<td>37%</td>
<td>38%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bac Skin Inf (5,429)</td>
<td>38%</td>
<td>37%</td>
<td>38%</td>
</tr>
<tr>
<td>Heart Failure (7,774)</td>
<td>35%</td>
<td>37%</td>
<td>38%</td>
</tr>
<tr>
<td>Card Amr &amp; Cond Dis (4,955)</td>
<td>37%</td>
<td>37%</td>
<td>38%</td>
</tr>
<tr>
<td>Bipolar Disorders (4,792)</td>
<td>37%</td>
<td>37%</td>
<td>38%</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (4,786)</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>COPD (8,144)</td>
<td>45%</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (8,432)</td>
<td>38%</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>Delivery DRGs* (30,189)</td>
<td>23%</td>
<td>23%</td>
<td>23%</td>
</tr>
</tbody>
</table>

#### PAYER MIX

What was the average cohort hospital’s payer mix (gross charges) in FY13, and how does this compare to the average of other acute hospitals’ payer mix?

<table>
<thead>
<tr>
<th>Payer Mix</th>
<th>Cohort</th>
<th>Other Hospitals*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>42%</td>
<td>41%</td>
</tr>
<tr>
<td>State Programs</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>41%</td>
<td></td>
</tr>
</tbody>
</table>

**For descriptions of the metrics, please see Technical Appendix.**
As a group, how has the volume of the cohort's total inpatient discharges changed compared to FY09, and how does this compare to the volume of other acute hospitals? (FY09=100)

As a group, how have the cohort hospitals' aggregate revenues and costs changed between FY09 and FY13?

Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$4,044</td>
<td>$4,043</td>
<td>$1</td>
<td>$3,935</td>
<td>$109</td>
</tr>
<tr>
<td>2010</td>
<td>$4,170</td>
<td>$4,143</td>
<td>$27</td>
<td>$4,041</td>
<td>$129</td>
</tr>
<tr>
<td>2011</td>
<td>$4,219</td>
<td>$4,187</td>
<td>$32</td>
<td>$4,102</td>
<td>$117</td>
</tr>
<tr>
<td>2012</td>
<td>$4,584</td>
<td>$4,541</td>
<td>$42</td>
<td>$4,365</td>
<td>$219</td>
</tr>
<tr>
<td>2013</td>
<td>$4,353</td>
<td>$4,296</td>
<td>$57</td>
<td>$4,226</td>
<td>$127</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

° Costs were adjusted to exclude direct medical education costs and physician compensation.

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

* Other hospitals comparative does not include Specialty hospitals.

° Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
INTRODUCTION TO ACUTE HOSPITAL PROFILES

An acute hospital is a hospital that is licensed by the Massachusetts Department of Public Health and contains a majority of medical-surgical, pediatric, obstetric, and maternity beds.

Each hospital is assigned to a cohort of similar hospitals: academic medical centers (AMCs), teaching hospitals, community hospitals, and community-Disproportionate Share Hospitals (DSH). When presenting trends for utilization, costs, financial performance, and quality, baseline data for each hospital's cohort provides a point of comparison. Specialty hospitals may be included in statewide analyses, but are not identified with a distinct cohort.

For detailed descriptions of the data sources and metrics used in the acute hospital profiles, please see the Technical Appendix.

When presenting hospital service data, CHIA assigned acute hospitals to eight geographic regions. These regions are based on the sixteen geographic regions defined by the Massachusetts Health Policy Commission, which were created by consolidating the 66 Dartmouth Atlas Hospital Services Areas.

To view a list of the hospitals within each region, please see Technical Appendix or refer to www.chiamass.gov/massachusetts-acute-hospital-profiles/.

Massachusetts Hospital Profiles - Data through Fiscal Year 2013
The hospital profiles are organized by cohort (see p. Bi for a listing). An alphabetical index of acute hospitals is provided below.

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anna Jaques Hospital</td>
<td>C16</td>
</tr>
<tr>
<td>Athol Hospital</td>
<td>C34</td>
</tr>
<tr>
<td>Baystate Franklin Medical Center</td>
<td>C35</td>
</tr>
<tr>
<td>Baystate Mary Lane Hospital</td>
<td>C17</td>
</tr>
<tr>
<td>Baystate Medical Center</td>
<td>C7</td>
</tr>
<tr>
<td>Berkshire Medical Center</td>
<td>C8</td>
</tr>
<tr>
<td>Beth Israel Deaconess Hospital - Milton</td>
<td>C18</td>
</tr>
<tr>
<td>Beth Israel Deaconess Hospital - Needham</td>
<td>C19</td>
</tr>
<tr>
<td>Beth Israel Deaconess Hospital - Plymouth</td>
<td>C20</td>
</tr>
<tr>
<td>Beth Israel Deaconess Medical Center</td>
<td>C1</td>
</tr>
<tr>
<td>Boston Children’s Hospital</td>
<td>C60</td>
</tr>
<tr>
<td>Boston Medical Center</td>
<td>C2</td>
</tr>
<tr>
<td>Brigham and Women’s Faulkner Hospital</td>
<td>C9</td>
</tr>
<tr>
<td>Brigham and Women’s Hospital</td>
<td>C3</td>
</tr>
<tr>
<td>Cambridge Health Alliance</td>
<td>C10</td>
</tr>
<tr>
<td>Cape Cod Hospital</td>
<td>C36</td>
</tr>
<tr>
<td>Clinton Hospital</td>
<td>C37</td>
</tr>
<tr>
<td>Cooley Dickinson Hospital</td>
<td>C21</td>
</tr>
<tr>
<td>Dana-Farber Cancer Institute</td>
<td>C61</td>
</tr>
<tr>
<td>Emerson Hospital</td>
<td>C22</td>
</tr>
<tr>
<td>Fairview Hospital</td>
<td>C38</td>
</tr>
<tr>
<td>Falmouth Hospital</td>
<td>C39</td>
</tr>
<tr>
<td>Hallmark Health</td>
<td>C23</td>
</tr>
<tr>
<td>Harrington Memorial Hospital</td>
<td>C40</td>
</tr>
<tr>
<td>HealthAlliance Hospital</td>
<td>C41</td>
</tr>
<tr>
<td>Heywood Hospital</td>
<td>C42</td>
</tr>
<tr>
<td>Holyoke Medical Center</td>
<td>C43</td>
</tr>
<tr>
<td>Kindred Hospital - Boston</td>
<td>C62</td>
</tr>
<tr>
<td>Kindred Hospital - Boston North Shore</td>
<td>C63</td>
</tr>
<tr>
<td>Lahey Hospital &amp; Medical Center</td>
<td>C11</td>
</tr>
<tr>
<td>Lawrence General Hospital</td>
<td>C44</td>
</tr>
<tr>
<td>Lowell General Hospital</td>
<td>C24</td>
</tr>
<tr>
<td>Marlborough Hospital</td>
<td>C45</td>
</tr>
<tr>
<td>Martha’s Vineyard Hospital</td>
<td>C46</td>
</tr>
<tr>
<td>Massachusetts Eye and Ear Infirmary</td>
<td>C64</td>
</tr>
<tr>
<td>Massachusetts General Hospital</td>
<td>C4</td>
</tr>
<tr>
<td>Mercy Medical Center</td>
<td>C47</td>
</tr>
<tr>
<td>Merrimack Valley Hospital</td>
<td>C48</td>
</tr>
<tr>
<td>MetroWest Medical Center</td>
<td>C25</td>
</tr>
<tr>
<td>Milford Regional Medical Center</td>
<td>C26</td>
</tr>
<tr>
<td>Morton Hospital</td>
<td>C49</td>
</tr>
<tr>
<td>Mount Auburn Hospital</td>
<td>C12</td>
</tr>
<tr>
<td>Nantucket Cottage Hospital</td>
<td>C27</td>
</tr>
<tr>
<td>Nashoba Valley Medical Center</td>
<td>C28</td>
</tr>
<tr>
<td>New England Baptist Hospital</td>
<td>C65</td>
</tr>
<tr>
<td>Newton-Wellesley Hospital</td>
<td>C29</td>
</tr>
<tr>
<td>Noble Hospital</td>
<td>C50</td>
</tr>
<tr>
<td>North Shore Medical Center</td>
<td>C51</td>
</tr>
<tr>
<td>Northeast Hospital</td>
<td>C30</td>
</tr>
<tr>
<td>Quincy Medical Center</td>
<td>C52</td>
</tr>
<tr>
<td>Saint Vincent Hospital</td>
<td>C13</td>
</tr>
<tr>
<td>Signature Healthcare Brockton Hospital</td>
<td>C53</td>
</tr>
<tr>
<td>South Shore Hospital</td>
<td>C31</td>
</tr>
<tr>
<td>Southcoast Hospitals Group</td>
<td>C54</td>
</tr>
<tr>
<td>Steward Carney Hospital</td>
<td>C14</td>
</tr>
<tr>
<td>Steward Good Samaritan Medical Center</td>
<td>C55</td>
</tr>
<tr>
<td>Steward Holy Family Hospital</td>
<td>C56</td>
</tr>
<tr>
<td>Steward Norwood Hospital</td>
<td>C32</td>
</tr>
<tr>
<td>Steward Saint Anne’s Hospital</td>
<td>C57</td>
</tr>
<tr>
<td>Steward St. Elizabeth’s Medical Center</td>
<td>C15</td>
</tr>
<tr>
<td>Sturdy Memorial Hospital</td>
<td>C58</td>
</tr>
<tr>
<td>Tufts Medical Center</td>
<td>C5</td>
</tr>
<tr>
<td>UMass Memorial Medical Center</td>
<td>C6</td>
</tr>
<tr>
<td>Winchester Hospital</td>
<td>C33</td>
</tr>
<tr>
<td>Wing Memorial Hospital</td>
<td>C59</td>
</tr>
</tbody>
</table>
How to Read Acute Hospital Profiles – FY13

This sheet provides a brief introduction to the metrics on the hospital profiles. Definitions and notes on all metrics are available in the Technical Appendix.

2013 Hospital Profile:
BETH ISRAEL DEACONESS HOSPITAL - PLYMOUTH (Jordan Hospital)

Beth Israel Deaconess Hospital – Plymouth (BID-Plymouth) is a mid-size, non-profit community hospital located in the Metro South region. Formerly Jordan Hospital, it became a member of the CareGroup health care system effective January 1, 2014, and its new name became Beth Israel Deaconess Hospital – Plymouth. BID-Plymouth was profitable each year from FY10 to FY13, and its operating and total margins were similar to the median in its cohort each year. BID-Plymouth earned a profit each year in that period, with a 1.4% total margin in FY13, compared to a peer cohort median of 2.4%.

Hospital name change (if applicable)

Multi-hospital system affiliation (if applicable)

Campus location(s)

Hospital’s cohort

Regional Utilization

The communities where the hospital’s inpatients reside are listed, with the number of each hospital’s discharges from each community and a bar representing the share this hospital provides for each community among Massachusetts hospitals.

Relative Price (RP)

Compares different provider prices within a payer’s network relative to the network’s average price level. The hospital’s green square allows a price comparison to the peer cohort average hospital’s orange dash.

Types of Inpatient Cases

This hospital’s most frequent inpatient cases are listed, with the number of discharges in each group and a bar representing the proportion of regional cases performed by this hospital.

Payer Mix

This hospital’s share of business from federal and state programs and commercial payers is shown in the green column. The blue column allows comparison to the average acute hospital. The dashed line indicates whether the hospital receives 63% or more of its business from government programs (the bottom two sections of each column). This is the ‘DSH Threshold’.

Growth Measures

This section shows one-year growth rates (FY2012 – FY2013) of utilization and revenue trend metrics.

Massachusetts Hospital Profiles - Data through Fiscal Year 2013
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

For descriptions of the metrics, please see Technical Appendix.

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

How have the hospital's total revenue and costs changed between FY09 and FY13?

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How have the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

Annual financial information

Total and operating margin history
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

For descriptions of the metrics, please see Technical Appendix.

---

**Patient Safety**

This section displays the hospital’s PSI-90 Composite score (in green), a measure of complications during procedures. It is risk-adjusted, and calculated such that the national average is always 1.0. The peer cohort median is displayed (orange line), as well as individual peer cohort hospitals (open circles) for comparison to the hospital. **Lower scores are better.**

**Patient Experience**

Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, which measures patient perspectives on various aspects of their care. **Higher scores are better.**
### Obstetric Care

Deliveries before 39 weeks gestation are associated with higher risks for the newborn and greater cost. This measure looks at what proportion of deliveries were completed prior to 39 weeks without medical necessity. The hospital’s early elective delivery rate is compared to the peer cohort median and national average. **A lower score is better.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Data Period</th>
<th>Population</th>
<th>Source</th>
<th>Score: Lower is better</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinically Unnecessary Elective Deliveries</strong></td>
<td>Deliveries before 39 weeks of gestation, without medical necessity.</td>
<td>2011-2012 and 2012-2013</td>
<td>Hospitals</td>
<td>The Leapfrog Group Hospital Survey</td>
<td>A higher quartile is better.</td>
</tr>
<tr>
<td><strong>Number of eligible patients</strong></td>
<td>Number of cohort patients for whom this measure is applicable.</td>
<td>2011-2012 and 2012-2013</td>
<td>Number of cohort patients aged ≥18</td>
<td>The Leapfrog Group Hospital Survey</td>
<td>2011-2012 and 2012-2013</td>
</tr>
<tr>
<td><strong>Number of cohort patients</strong></td>
<td>Number of cohort patients for whom this measure is applicable.</td>
<td>2011-2012 and 2012-2013</td>
<td>Number of cohort patients aged ≥18</td>
<td>CMS Hospital Compare</td>
<td>2011-2012</td>
</tr>
</tbody>
</table>

### Obstetric Care Complications

This measure assesses adverse obstetric events at the hospital, and is expressed as the number of adverse events out of every 1,000 births. The first score (left) measures injury to the baby, while the second two scores measure trauma to the mother. The hospital’s score is compared to the peer cohort median. **Lower scores are better.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Data Period</th>
<th>Population</th>
<th>Source</th>
<th>Score: Lower is better</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Injury to Neonates</strong></td>
<td>Hospitalized neonates within 24 hours of birth with a condition linked to obstetric care.</td>
<td>2011-2012</td>
<td>42 hospitals</td>
<td>HDD; CHIA-calculated</td>
<td>A lower score is better.</td>
</tr>
<tr>
<td><strong>Obstetric Trauma: Delivery without Instrument</strong></td>
<td>Obstetric trauma events during birth, both the mother and infant.</td>
<td>2011-2012 and 2012-2013</td>
<td>41 hospitals that fell in each category are depicted within the boxes.</td>
<td>The Leapfrog Group Hospital Survey</td>
<td>2011-2012 and 2012-2013</td>
</tr>
</tbody>
</table>

### Readmissions

This measure is designed to follow patients for 30 days from discharge and determine if they are admitted to a hospital during this period. The measure is risk-standardized based on the clinical comorbidities of each patient. The hospital’s readmission rate in 2011-2012 and 2012-2013 is compared to the peer cohort median and national average. **A lower score is better.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Data Period</th>
<th>Population</th>
<th>Source</th>
<th>Score: Lower is better</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital-Wide All-Cause 30-Day Readmissions</strong></td>
<td>Any hospital readmission for any unplanned reason.</td>
<td>2011-2012</td>
<td>Medicare Fee For Service (FFS) patients age 65+</td>
<td>CMS Hospital Compare</td>
<td>2011-2012</td>
</tr>
<tr>
<td><strong>Hospital-Wide All-Cause 30-Day Readmissions</strong></td>
<td>Any hospital readmission for any unplanned reason.</td>
<td>2012-2013</td>
<td>Medicare Fee For Service (FFS) patients age 65+</td>
<td>CMS Hospital Compare</td>
<td>2012-2013</td>
</tr>
</tbody>
</table>

### Care Practices

This measure assesses the proportion of a hospital’s total medical orders that were entered via an electronic Computerized Physician Order Entry (CPOE) system that included error checking. Scores are measured in quartiles based on the percentage of orders that were entered using an electronic system. If applicable, the hospital’s score is circled in green, while the number of cohort hospitals that fell in each category are depicted within the boxes. **A higher quartile is better.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Data Period</th>
<th>Population</th>
<th>Source</th>
<th>Score: Lower is better</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Percentage of Orders</strong></td>
<td>Percentage of medical orders that were entered using an electronic system.</td>
<td>2011-2012</td>
<td>38 hospitals that fell in each category are depicted within the boxes.</td>
<td>The Leapfrog Group Hospital Survey</td>
<td>2011-2012</td>
</tr>
<tr>
<td><strong>Percentage of Orders</strong></td>
<td>Percentage of medical orders that were entered using an electronic system.</td>
<td>2012-2013</td>
<td>38 hospitals that fell in each category are depicted within the boxes.</td>
<td>The Leapfrog Group Hospital Survey</td>
<td>2012-2013</td>
</tr>
</tbody>
</table>

---

**Note:** For descriptions of the metrics, please see Technical Appendix. **Data Period:** Data through Fiscal Year 2013.
Changes from FY12 Acute Hospital Profiles

What changed from Acute Hospital Profiles – Data through Fiscal Year 2012

- **Hospital Name** reflects current hospital name as of January 2015. Name in parenthesis (if applicable) indicates hospital name as of FY13.
- **Regions** are rolled up into 8 larger regions from 16 regions in the Data through FY12 Profiles.

**New At a Glance Measures** include Inpatient Discharges in FY13 and Change in Ownership (FY09-FY13).

**Disproportionate Share Hospital (DSH) status** was updated for FY13 qualifications, resulting in a cohort designation change for some hospitals.

**New Growth Measures** section shows 1-year growth rates (FY12-FY13) of revenue and utilization trend metrics. Hospital growth measures are compared to cohort.

**FY13 Values** are noted on all trend measures.

**New Revenue Trends Metrics** replace cost trends metrics on Data through FY12 Profile.

**Financial Performance Metrics** now include operating and non-operating revenue, and operating margin.

**Methodology:**
- Cohort and ‘all other hospital’ comparisons use medians (instead of means) of growth rates for utilization, revenue, and financial performance.¹
**2013 Hospital Profile:**

**Beth Israel Deaconess Medical Center**

Beth Israel Deaconess Medical Center (BIDMC) is a large, non-profit academic medical center (AMC) located in the Metro Boston region. It is one of eight organ transplant centers in Massachusetts, and is a member of the CareGroup health care system. Though it only accounted for 12% of the region’s discharges in FY13, it treated 20% of inpatient chemotherapy cases. It earned a profit each year from FY09 to FY13, with a 7.1% total margin in FY13, while the median total margin in its peer cohort was 4.6% in FY13.

**AT A GLANCE**

<table>
<thead>
<tr>
<th>TOTAL STAFFED BEDS:</th>
<th>511, 6th largest acute hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>% OCCUPANCY:</td>
<td>100%, highest in cohort (avg. 85%)</td>
</tr>
<tr>
<td>CASE MIX INDEX in FY13:</td>
<td>1.24, &lt; cohort avg. (1.32), &gt; statewide (0.89)</td>
</tr>
<tr>
<td>INPATIENT DISCHARGES in FY13:</td>
<td>35,522</td>
</tr>
<tr>
<td>TRAUMA CENTER DESIGNATION:</td>
<td>Adult: Level 1</td>
</tr>
<tr>
<td>EMERGENCY DEPT VISITS in FY13:</td>
<td>44,345</td>
</tr>
<tr>
<td>PUBLIC MIX:</td>
<td>56% (Non-DSH* Hospital)</td>
</tr>
<tr>
<td>SPECIAL PUBLIC FUNDING:</td>
<td>ICB®</td>
</tr>
<tr>
<td>CY13 COMMERCIAL PAYER PRICE LEVEL:</td>
<td>72nd Percentile</td>
</tr>
<tr>
<td>ADJUSTED² COST PER DISCHARGE:</td>
<td>$9,965</td>
</tr>
<tr>
<td>INPATIENT:OUTPATIENT REVENUE in FY13:</td>
<td>42%;58%</td>
</tr>
<tr>
<td>CHANGE IN OWNERSHIP (FY09-FY13):</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-1.6% -1.5%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-4.5% -3.6%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-1.5% 1.6%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.0% -1.8%</td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of each community’s discharges were treated at this hospital in FY13?

**Discharges by DRG**

- Delivery DRGs: 16% of regional discharges were treated at this hospital in FY13
- Sepsis & Dissem Inf: 13%
- Chemotherapy: 20%
- Heart Failure: 11%
- Maj Sml & Lrg bowel Proc: 16%
- Other Pneumonia: 6%
- Knee Joint Replacement: 6%
- Percut Card proc w/o AMI: 14%
- Renal Failure: 13%
- Cellutitis, Oth Bact Skin Inf: 11%

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>44%</td>
</tr>
<tr>
<td>State Programs</td>
<td>17%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>39%</td>
</tr>
<tr>
<td>Commercial &amp; Other</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>44%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: BETH ISRAEL DEACONESS MEDICAL CENTER
Cohort: Academic Medical Center

**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$1,257</td>
<td>$1,237</td>
<td>$20</td>
<td>$1,231</td>
<td>$26.1</td>
</tr>
<tr>
<td>2010</td>
<td>$1,346</td>
<td>$1,318</td>
<td>$28</td>
<td>$1,262</td>
<td>$84.2</td>
</tr>
<tr>
<td>2011</td>
<td>$1,382</td>
<td>$1,368</td>
<td>$14</td>
<td>$1,320</td>
<td>$62.3</td>
</tr>
<tr>
<td>2012</td>
<td>$1,410</td>
<td>$1,380</td>
<td>$29</td>
<td>$1,336</td>
<td>$74.0</td>
</tr>
<tr>
<td>2013</td>
<td>$1,410</td>
<td>$1,360</td>
<td>$49</td>
<td>$1,309</td>
<td>$100.2</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.73</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>1.07</td>
<td>1.21</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>1.25</td>
<td>1.35</td>
<td></td>
</tr>
</tbody>
</table>

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**

<table>
<thead>
<tr>
<th>Rating</th>
<th>National Average</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients gave hospital a rating of 9 or 10</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Patients would definitely recommend the hospital</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Communication**

<table>
<thead>
<tr>
<th>Communication</th>
<th>National Average</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses always communicated well</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Doctors always communicated well</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Care Coordination**

<table>
<thead>
<tr>
<th>Care Coordination</th>
<th>National Average</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff always explained medications</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Recovery information was provided</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Comfort**

<table>
<thead>
<tr>
<th>Comfort</th>
<th>National Average</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always received help as soon as they wanted</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Pain was always well controlled</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Room and bathroom were always clean</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Room was always quiet at night</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: **BETH ISRAEL DEACONESS MEDICAL CENTER**

**Cohort:** Academic Medical Center

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

#### Computerized Physician Order Entry (CPOE)

- **Percentage of Orders**
  - 0-24%
  - 25-49%
  - 50-74%
  - 75-100%

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td></td>
<td>17.0%</td>
<td></td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td>17.2%</td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 cohort hospital reported not having a CPOE system.

### READEXMIONS

What percentage of Medicare patients who were discharged from this hospital were **readmitted to any hospital within 30 days**? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital-Wide All-Cause 30-Day Readmissions**
  - **Percentage:** 17.0%
  - **Score:** Lower is better
  - **Population:** Medicare Fee For Service (FFS) patients age 65+
  - **Source:** CMS Hospital Compare
  - **Data Period:** 2011-2012

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were **clinically unnecessary inductions before the recommended 39 weeks of gestation**? How does this compare to the median hospital in its peer cohort, and the national median?

- **Clinically Unnecessary Elective Deliveries before 39 weeks of gestation**
  - **Percentage:** 2.8%
  - **Score:** Lower is better
  - **Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
  - **Source:** The Leapfrog Group Hospital Survey^*^
  - **Data Period:** 2011-2012 and 2012-2013

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **Percentage:** 2.4%
  - **Score:** Lower is better
  - **Population:** 42 hospitals are included in this analysis
  - **Source:** HDD; CHIA-calculated indicator, not risk adjusted
  - **Data Period:** 2012-2013

- **Obstetric Trauma: Delivery with Instrument**
  - **Percentage:** 161.3
  - **Score:** Higher is better
  - **Population:** 6 of 6 cohort hospitals responded to this survey
  - **Source:** The Leapfrog Group Hospital Survey^*^
  - **Data Period:** 2012-2013

- **Obstetric Trauma: Delivery without Instrument**
  - **Percentage:** 17.4
  - **Score:** Lower is better
  - **Population:** Not all hospitals report this data.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Boston Medical Center (BMC) is a large non-profit academic medical center (AMC) located in the Metro Boston region. It is the only AMC that also has a Disproportionate Share Hospital (DSH). BMC is a teaching hospital of Boston University School of Medicine. It is the state’s seventh largest hospital, and one of eight organ transplant centers in Massachusetts. BMC treated 41% of all Sickle Cell Anemia cases in Metro Boston, though it was responsible for only 9% of total regional discharges. BMC was profitable in FY12 and FY13, though its total margin and operating margins were consistently lower than the median performance of its peer cohort.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-4.7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.6%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>1.6%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.8%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG Description</th>
<th>Percentage of Regional Cases</th>
<th>Percentage of Cases Treated at BMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery/OB (4,570)</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Heart Failure (649)</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (641)</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>COPD (525)</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>Other Pneumonia (468)</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>Asthma (464)</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skn Inf (436)</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Sickle Cell Anemia Crisis (344)</td>
<td>41%</td>
<td>39%</td>
</tr>
<tr>
<td>Renal Failure (329)</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Procedures for Obesity (326)</td>
<td>16%</td>
<td>15%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>23%</td>
</tr>
<tr>
<td>State Programs</td>
<td>49%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>27%</td>
</tr>
<tr>
<td><strong>Average Hospital</strong></td>
<td>37%</td>
</tr>
<tr>
<td><strong>DSH Threshold</strong></td>
<td>19%</td>
</tr>
<tr>
<td><strong>Hospital</strong></td>
<td>44%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 26,007

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 1,524,500

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $13,865

Full Cost per CMAD = $16,080

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $624 M

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$1,005</td>
<td>$991</td>
<td>$14</td>
<td>$1,016</td>
<td>($11.3)</td>
</tr>
<tr>
<td>2010</td>
<td>$1,017</td>
<td>$1,006</td>
<td>$11</td>
<td>$1,043</td>
<td>($25.7)</td>
</tr>
<tr>
<td>2011</td>
<td>$985</td>
<td>$980</td>
<td>$5</td>
<td>$1,010</td>
<td>($25.1)</td>
</tr>
<tr>
<td>2012</td>
<td>$1,017</td>
<td>$1,011</td>
<td>$6</td>
<td>$1,008</td>
<td>$8.8</td>
</tr>
<tr>
<td>2013</td>
<td>$1,029</td>
<td>$1,016</td>
<td>$13</td>
<td>$1,009</td>
<td>$20.0</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

† For more information on Delivery System Transformation Initiative (DSTI) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

ᶲ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.

† Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**QUALITY OVERVIEW**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

**PATIENT SAFETY**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: BOSTON MEDICAL CENTER**

**Cohort:** Academic Medical Center

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

- **Percentage of Orders**
  - 0-24%: 1 cohort hospital reported not having a CPOE system
  - 25-49%: 1
  - 50-74%: 4

- **Number of cohort hospitals in this category of CPOE usage**
  - 0-24%: 1
  - 25-49%: 0
  - 50-74%: 4

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national median?

- **Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**
  - Population: Medicare Fee For Service (FFS) patients age 65+
  - Score: Lower is better
  - Source: CMS Hospital Compare
  - Data Period*: 2011-2012

- **Percentage of Orders**
  - 17.6% Hospital
  - 17.2% Peer Cohort
  - 16.0% National Average

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2012 - 2013**
  - 1.3% Hospital
  - 2.0% Peer Cohort
  - 2.5% National Median

- **2011 - 2012**
  - 5.3% Hospital
  - 5.3% Peer Cohort
  - 5.0% National Median

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - 3.2 Hospital
  - 3.5 Peer Cohort

- **Obstetric Trauma: Delivery with Instrument**
  - 185.6 Hospital
  - 146.2 Peer Cohort

- **Obstetric Trauma: Delivery without Instrument**
  - 29.8 Hospital
  - 17.5 Peer Cohort

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Brigham and Women’s Hospital is a non-profit academic medical center (AMC) located in the Metro Boston region. Within Massachusetts, it is the second largest hospital, has the highest number of births at any hospital, and is designated as one of eight organ transplant centers in the state. It is a member of Partners HealthCare System. Its operating and total margins remained fairly steady from FY09 to FY13, with a 5.5% total margin in FY13, slightly higher than its peer cohort median total margin of 4.6% in FY13.

**2013 Hospital Profile:**

**BRIGHAM AND WOMEN’S HOSPITAL**

**2013 Hospital Profile:**

**Partners HealthCare System**

**Boston, MA**

**Academic Medical Center**

**Metro Boston**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-1.6%</td>
<td>+2.8%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.6%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-1.6%</td>
<td>+1.6%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.8%</td>
<td>-1.8%</td>
</tr>
</tbody>
</table>

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

<table>
<thead>
<tr>
<th>Community</th>
<th>Discharges (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge MA</td>
<td>24%</td>
</tr>
<tr>
<td>Roxbury MA</td>
<td>12%</td>
</tr>
<tr>
<td>Quincy MA</td>
<td>9%</td>
</tr>
<tr>
<td>Jamaica Plain MA</td>
<td>34%</td>
</tr>
<tr>
<td>Dorchester MA</td>
<td>18%</td>
</tr>
<tr>
<td>Brookline MA</td>
<td>32%</td>
</tr>
<tr>
<td>Dorchester Center MA</td>
<td>18%</td>
</tr>
<tr>
<td>Cambridge MA</td>
<td>10%</td>
</tr>
<tr>
<td>Adult: Level 1</td>
<td>51%</td>
</tr>
</tbody>
</table>

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Payer</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvard Pilgrim Health Care of Massachusetts</td>
<td>62%</td>
</tr>
<tr>
<td>Blue Cross Blue Shield of Massachusetts</td>
<td>18%</td>
</tr>
<tr>
<td>Tufts Health Plan</td>
<td>8%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 647,761

How have the hospital's total revenue and costs changed between FY09 and FY13?

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $16,762

Full Cost per CMAD = $15,309

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $592 M

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

For descriptions of the metrics, please see Technical Appendix.
### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
</tr>
<tr>
<td>25-49%</td>
</tr>
<tr>
<td>50-74%</td>
</tr>
<tr>
<td>75-100%</td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 1 hospital reported not having a CPOE system.

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.2%</td>
<td>17.2%</td>
<td>16.0%</td>
<td></td>
</tr>
</tbody>
</table>

Lower is better.

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 - 2012</td>
<td>18.0%</td>
<td>5.3%</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.5%</td>
<td></td>
</tr>
</tbody>
</table>

Lower is better.

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Complication</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>5.4%</td>
<td>3.5%</td>
<td></td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>107.4</td>
<td>146.2</td>
<td></td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>15.2</td>
<td>17.5</td>
<td></td>
</tr>
</tbody>
</table>

Lower is better.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Massachusetts General Hospital (MGH) is a non-profit academic medical center (AMC) located in the Metro Boston region. MGH is the largest hospital in Massachusetts, with 1,021 staffed beds; it is also the oldest hospital in Massachusetts. It is a teaching hospital of Harvard Medical School, and a member of Partners HealthCare System. MGH is one of eight organ transplant centers in Massachusetts. MGH earned a profit each year from FY09 to FY13, with a 4.6% total margin in FY13, consistent with the median financial performance of its peer cohort.

**AT A GLANCE**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL STAFFED BEDS</td>
<td>1,021, largest acute hospital</td>
</tr>
<tr>
<td>% OCCUPANCY</td>
<td>82%, &lt; cohort avg. (85%)</td>
</tr>
<tr>
<td>CASE MIX INDEX in FY13</td>
<td>1.43, &gt; cohort avg. (1.32); &gt; statewide (0.89)</td>
</tr>
<tr>
<td>INPATIENT DISCHARGES in FY13</td>
<td>52,186</td>
</tr>
<tr>
<td>TRAUMA CENTER DESIGNATION</td>
<td>Adult: Level 1, Pedi: Level 1</td>
</tr>
<tr>
<td>EMERGENCY DEPT VISITS in FY13</td>
<td>100,519</td>
</tr>
<tr>
<td>PUBLIC MIX</td>
<td>56% (Non-DSH* Hospital)</td>
</tr>
<tr>
<td>SPECIAL PUBLIC FUNDING</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>CY13 COMMERCIAL PAYER PRICE LEVEL</td>
<td>94th Percentile</td>
</tr>
<tr>
<td>ADJUSTED* COST PER DISCHARGE</td>
<td>$13,542</td>
</tr>
<tr>
<td>INPATIENT:OUTPATIENT REVENUE in FY13</td>
<td>51%;49%</td>
</tr>
<tr>
<td>CHANGE IN OWNERSHIP (FY09-FY13)</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>decrease</th>
<th>0%</th>
<th>increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-1.7%</td>
<td>-1.6%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-3.6%</td>
<td>1.6%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-2.7%</td>
<td>1.6%</td>
<td></td>
</tr>
<tr>
<td>-20%</td>
<td>-15%</td>
<td>-10%</td>
<td>-5%</td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

![Diagram showing discharges by DRG]

<table>
<thead>
<tr>
<th>DRG</th>
<th>Percentage</th>
<th>Regional Discharges Treated</th>
<th>Community Discharges Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRG* (6,695)</td>
<td>12%</td>
<td>of regional discharges were treated at this hospital in FY13</td>
<td>of community discharges were treated at this hospital in FY13</td>
</tr>
<tr>
<td>CranioHem: Excl. Trauma (1,045)</td>
<td>40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemotherapy (933)</td>
<td>32%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hip Joint Replacement (915)</td>
<td>18%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Failure (891)</td>
<td>16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee Joint Replacement (845)</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percut Card proc w/o AMI (779)</td>
<td>27%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (765)</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Pneumonia (748)</td>
<td>14%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis (736)</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

![Diagram showing payer mix]

<table>
<thead>
<tr>
<th>Payer</th>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>44%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>14%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>42%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**Change in Ownership (FY09-FY13)**

<table>
<thead>
<tr>
<th>Change in Ownership</th>
<th>Hospital</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY09-FY13</td>
<td>-2%</td>
<td>-15%</td>
</tr>
<tr>
<td>FY12-FY13</td>
<td>15%</td>
<td>26%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 52,186

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 965,163

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $16,219 | Full Cost per CMAD = $14,817

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Total Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$2,655</td>
<td>$2,655</td>
<td>$(0)</td>
<td>$2,523</td>
<td>$131.9</td>
</tr>
<tr>
<td>2010</td>
<td>$2,865</td>
<td>$2,859</td>
<td>$6</td>
<td>$2,683</td>
<td>$181.3</td>
</tr>
<tr>
<td>2011</td>
<td>$3,033</td>
<td>$3,021</td>
<td>$13</td>
<td>$2,810</td>
<td>$223.9</td>
</tr>
<tr>
<td>2012</td>
<td>$3,260</td>
<td>$3,255</td>
<td>$6</td>
<td>$2,987</td>
<td>$273.6</td>
</tr>
<tr>
<td>2013</td>
<td>$3,272</td>
<td>$3,271</td>
<td>$1</td>
<td>$3,123</td>
<td>$149.2</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.59</td>
<td>0.92</td>
<td>0.89</td>
</tr>
<tr>
<td>2012</td>
<td>0.89</td>
<td>1.07</td>
<td>1.02</td>
</tr>
<tr>
<td>2011</td>
<td>1.02</td>
<td>1.25</td>
<td>1.25</td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**

- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**

- Staff always explained medications
- Recovery information was provided

**Comfort**

- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

The HCAHPS survey measures patient perspectives on key aspects of their care.

- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS)
- Hospital Compare
- Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

Percentage of Orders

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 cohort hospital reported not having a CPOE system

Number of cohort hospitals in this category of CPOE usage

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 6 of 6 cohort hospitals responded to this survey

Score: Higher is better

Source: The Leapfrog Group Hospital Survey

Data Period*: 2012-2013

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+

Score: Lower is better

Source: CMS Hospital Compare

Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.

Score: Lower is better

Source: The Leapfrog Group Hospital Survey

Data Period*: 2011-2012 and 2012-2013

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 hospitals are included in this analysis

Score: Lower is better

Source: HDD; CHIA-calculated indicator, not risk adjusted

Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Tufts Medical Center is a large, non-profit academic medical center (AMC) located in the Metro Boston region. Tufts Medical Center is a teaching hospital of Tufts University School of Medicine and includes the Floating Hospital for Children, which is located within the Tufts Medical Center complex. Tufts Medical Center is one of eight organ transplant centers in Massachusetts. In FY2013, it had the highest case mix index (indicating severity of cases) among AMCs. Tufts Medical Center was profitable from FY10 to FY13, with a total margin of 1.6% in FY13, compared to a median total margin of 4.6% among AMCs.

**2013 Hospital Profile:**

**TUFTS MEDICAL CENTER**

Boston, MA

Academic Medical Center

Metro Boston

What were the most common inpatient cases (DRGs) treated at the hospital?

What proportion of the region's cases did this hospital treat for each service?

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

**TOTAL STAFFED BEDS:** 293, among the larger acute hospitals

**% OCCUPANCY:** 93%, > cohort avg. (85%)

**CASE MIX INDEX in FY13:** 1.48, highest in cohort (avg. 1.32); > statewide (0.89)

**INPATIENT DISCHARGES in FY13:** 19,914

**TRAUMA CENTER DESIGNATION:** Adult: Level 1, Pedi: Level 1

**EMERGENCY DEPT VISITS in FY13:** 41,065

**PUBLIC PAYER MIX:** 59% (Non-DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** Not Applicable

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 62nd Percentile

**ADJUSTED\(^2\) COST PER DISCHARGE:** $10,344

**INPATIENT:OUTPATIENT REVENUE in FY13:** 55%:45%

**CHANGE IN OWNERSHIP (FY09-FY13):** Not Applicable

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-1.6%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-4.6%</td>
<td>-3.6%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>1.6%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.8%</td>
<td>-0.7%</td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG</th>
<th>% of Regional Discharges</th>
<th>% of Hospital Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs* (1,802)</td>
<td>3%</td>
<td>17%</td>
</tr>
<tr>
<td>Percut Card proc w/o AMI (502)</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>Other Pneumonia (346)</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Seizure (302)</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skn Inf (278)</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Card Arrh &amp; Cond Dis (272)</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (254)</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Heart Failure (237)</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Craniorhony: exc Trauma (236)</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>CC w Circ Disord exc IH (232)</td>
<td>14%</td>
<td>15%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer</th>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>41%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>37%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**For descriptions of the metrics, please see Technical Appendix.**
2013 Hospital Profile: TUFTS MEDICAL CENTER
Cohort: Academic Medical Center

UTILIZATION TRENDS

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

PATIENT REVENUE TRENDS

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FINANCIAL PERFORMANCE

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$607</td>
<td>$614</td>
<td>($7)</td>
<td>$620</td>
<td>($13.3)</td>
</tr>
<tr>
<td>2010</td>
<td>$643</td>
<td>$638</td>
<td>$5</td>
<td>$638</td>
<td>$5.3</td>
</tr>
<tr>
<td>2011</td>
<td>$672</td>
<td>$675</td>
<td>($3)</td>
<td>$665</td>
<td>$7.3</td>
</tr>
<tr>
<td>2012</td>
<td>$673</td>
<td>$667</td>
<td>$6</td>
<td>$663</td>
<td>$10.0</td>
</tr>
<tr>
<td>2013</td>
<td>$661</td>
<td>$656</td>
<td>$5</td>
<td>$651</td>
<td>$10.2</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1.25</td>
<td>1.46</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>1.07</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>0.92</td>
<td>1.12</td>
<td></td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

Global Ratings

- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

Communication

- Nurses always communicated well
- Doctors always communicated well

Care Coordination

- Staff always explained medications
- Recovery information was provided

Comfort

- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

For descriptions of the metrics, please see Technical Appendix.
Cohort: Academic Medical Center

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 cohort hospital reported not having a CPOE system

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 6 of 6 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey^
Data Period*: 2012-2013

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

| | 2013 Hospital Profile: TUFTS MEDICAL CENTER |
|-----------------------------|
| Percentage of Orders        | 17.8% | 17.2% Peer Cohort | 16.0% National Average |

Lower is better

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage of Orders</th>
<th>2012 - 2013</th>
<th>2011 - 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 - 2013</td>
<td>1.9%</td>
<td>2.0% Peer Cohort</td>
<td>2.5% National Median</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>20.0%</td>
<td>5.3% Peer Cohort</td>
<td>5.0% National Median</td>
</tr>
</tbody>
</table>

Lower is better

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey^
Data Period*: 2011-2012 and 2012-2013

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th></th>
<th>2013 Hospital Profile: TUFTS MEDICAL CENTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>4.1</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>120.7</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Lower is better

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 41,968

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 990,237

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $11,495

Full Cost per CMAD = $10,793

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $582 M

What have been the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Total Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$1,330</td>
<td>$1,325</td>
<td>$5</td>
<td>$1,259</td>
<td>$70.6</td>
</tr>
<tr>
<td>2010</td>
<td>$1,400</td>
<td>$1,391</td>
<td>$9</td>
<td>$1,343</td>
<td>$57.2</td>
</tr>
<tr>
<td>2011</td>
<td>$1,373</td>
<td>$1,375</td>
<td>($2)</td>
<td>$1,330</td>
<td>$42.9</td>
</tr>
<tr>
<td>2012</td>
<td>$1,396</td>
<td>$1,380</td>
<td>$17</td>
<td>$1,368</td>
<td>$27.8</td>
</tr>
<tr>
<td>2013</td>
<td>$1,512</td>
<td>$1,408</td>
<td>$104</td>
<td>$1,443</td>
<td>$68.9</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.

January 2015
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.92</td>
<td>1.07</td>
<td>1.25</td>
</tr>
<tr>
<td>2012</td>
<td>0.93</td>
<td>1.07</td>
<td>1.25</td>
</tr>
<tr>
<td>2011</td>
<td>0.96</td>
<td>1.25</td>
<td>1.75</td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

- **Global Ratings**
  - Patients gave hospital a rating of 9 or 10
  - Patients would definitely recommend the hospital

- **Communication**
  - Nurses always communicated well
  - Doctors always communicated well

- **Care Coordination**
  - Staff always explained medications
  - Recovery information was provided

- **Comfort**
  - Always received help as soon as they wanted
  - Pain was always well controlled
  - Room and bathroom were always clean
  - Room was always quiet at night

For descriptions of the metrics, please see Technical Appendix.
CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td></td>
<td>17.2%</td>
<td>16.0%</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 1

This hospital reported not having a CPOE system.

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Hospital Readmission Rate</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.2%</td>
<td></td>
<td>17.2%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

Lower is better

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Complication</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>3.8</td>
<td>3.5</td>
<td>17.5</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>178.8</td>
<td>146.2</td>
<td>146.2</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>24.0</td>
<td>17.5</td>
<td>17.5</td>
</tr>
</tbody>
</table>

Lower is better

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Baystate Medical Center is a non-profit teaching hospital located in the Western Massachusetts region. It is the third largest acute hospital in Massachusetts, with 734 staffed beds. It is a member of the Baystate Health system, and qualifies as a Disproportionate Share Hospital (DSH). It is the only Level 1 Trauma Center in its region, the only Level 2 Pediatric Trauma Center in its region, and one of eight organ transplant centers in Massachusetts. Baystate Medical Center was profitable each year from FY09 to FY13, with a 10.1% total margin in FY13, higher than the median performance of cohort hospitals (7.6%).

### 2013 Hospital Profile:
**BAYSTATE MEDICAL CENTER**

Springfield, MA
Teaching Hospital
Western Massachusetts

For descriptions of the metrics, please see Technical Appendix.

**What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?**

**2013 Hospital Profile:**
Baystate Medical Center

- **TOTAL STAFFED BEDS:** 734, 3rd largest acute hospital
- **% OCCUPANCY:** 70%, < cohort avg. (75%)
- **CASE MIX INDEX in FY13:** 1.12, > cohort avg. (0.99); > statewide (0.89)
- **INPATIENT DISCHARGES in FY13:** 38,900
- **TRAUMA CENTER DESIGNATION:** Adult: Level 1, Pedi: Level 2
- **EMERGENCY DEPT VISITS in FY13:** 100,299

**AT A GLANCE**

<table>
<thead>
<tr>
<th>Total Staffed Beds</th>
<th>734</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Occupancy</td>
<td>70%</td>
</tr>
<tr>
<td>Case Mix Index in FY13</td>
<td>1.12</td>
</tr>
<tr>
<td>Inpatient Discharges in FY13</td>
<td>38,900</td>
</tr>
<tr>
<td>Trauma Center Designation</td>
<td>Adult: Level 1, Pedi: Level 2</td>
</tr>
<tr>
<td>Emergency Dept Visits in FY13</td>
<td>100,299</td>
</tr>
</tbody>
</table>

**PUBLIC PAYER MIX:** 68% (DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** ICB

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 60th Percentile

**ADJUSTED‡ COST PER DISCHARGE:** $8,829

**INPATIENT:OUTPATIENT REVENUE in FY13:** 47%;53%

**CHANGE IN OWNERSHIP (FY09-FY13):** Not Applicable

**GROWTH MEASURES**

- What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

**SERVICES**

- What were the most common inpatient cases (DRGs) treated at the hospital?
- What proportion of the region's cases did this hospital treat for each service?

**PAYER MIX**

- What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?
- What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: BAYSTATE MEDICAL CENTER
Cohort: Teaching Hospital

**UTLILIZATION TRENDS**

How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FY13 Inpatient Discharges = 38,900

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FY13 Outpatient Visits = 446,368

**PATIENT REVENUE TRENDS**

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FY13 Inpatient Revenue per CMAD = $12,004  Full Cost per CMAD = $9,607

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FY13 Outpatient Revenue = $379 M

**FINANCIAL PERFORMANCE**

How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$868</td>
<td>$870</td>
<td>($3)</td>
<td>$808</td>
<td>$59.6</td>
</tr>
<tr>
<td>2010</td>
<td>$897</td>
<td>$879</td>
<td>$17</td>
<td>$823</td>
<td>$73.8</td>
</tr>
<tr>
<td>2011</td>
<td>$877</td>
<td>$878</td>
<td>($2)</td>
<td>$846</td>
<td>$30.5</td>
</tr>
<tr>
<td>2012</td>
<td>$982</td>
<td>$940</td>
<td>$42</td>
<td>$884</td>
<td>$97.6</td>
</tr>
<tr>
<td>2013</td>
<td>$1,032</td>
<td>$996</td>
<td>$36</td>
<td>$927</td>
<td>$104.7</td>
</tr>
</tbody>
</table>

What were the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Margin</th>
<th>Total Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>4.6%</td>
<td>7.2%</td>
</tr>
<tr>
<td>2010</td>
<td>6.9%</td>
<td>10.1%</td>
</tr>
<tr>
<td>2011</td>
<td>5.6%</td>
<td>6.6%</td>
</tr>
<tr>
<td>2012</td>
<td>7.6%</td>
<td>10.1%</td>
</tr>
<tr>
<td>2013</td>
<td>5.6%</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

† Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.

º Regional percentages are based on the individual DRG codes reported by this hospital.

‡ Average Hospital does not include Specialty hospitals.
QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

- **Percentage of Orders**
  - 0-24%
  - 25-49%
  - 50-74%
  - 75-100%

- **Number of cohort hospitals in this category of CPOE usage**
  - 1 cohort hospital reported not having a CPOE system

- **8**

**Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.

- **Population:** 9 of 9 cohort hospitals responded to this survey
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2012-2013

---

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **15.1%**
- **16.8%** Peer Cohort
- **16.0%** National Average

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period:** 2011-2012

---

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2012 - 2013**
  - **2.6%**
  - **1.0%** Peer Cohort
  - **2.5%** National Median

- **2011 - 2012**
  - **2.3%**
  - **1.5%** Peer Cohort
  - **5.0%** National Median

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

- **Population:** Non-clinically complicated births, 41 hospitals reported data for this measure.
- **Score:** Lower is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2011-2012 and 2012-2013

---

**OBSTETRIC CARE: COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **0.8**
  - **0.3** Peer Cohort

- **Obstetric Trauma: Delivery with Instrument**
  - **84.0**
  - **118.3** Peer Cohort

- **Obstetric Trauma: Delivery without Instrument**
  - **7.8**
  - **13.2** Peer Cohort

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile: **BERKSHIRE MEDICAL CENTER**

Berkshire Medical Center is a mid-size, non-profit teaching hospital located in the Western Massachusetts region. It is a member of Berkshire Health Systems, and qualifies as a Disproportionate Share Hospital (DSH). It has operated the Berkshire North Satellite Emergency Facility at the former North Adams Regional Hospital building since May 2014. Between FY09 and FY13, there was a 22.6% increase in outpatient visits at Berkshire Medical Center, compared to a median increase of 2.2% among cohort hospitals. It earned a profit from FY10 to FY13, with a total margin of 8.8% in FY13, higher than the median performance of cohort hospitals of 7.6%.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital Growth Rate</th>
<th>Peer Cohort Growth Rate</th>
<th>Other Cohort Hospitals Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-0.3%</td>
<td>-2.7%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.2%</td>
<td>-0.1%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-5.2%</td>
<td>-0.3%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.1%</td>
<td>2.2%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG Category</th>
<th>Hospital Cases</th>
<th>Hospital Cases as % of Community Cases</th>
<th>Hospital Cases as % of Total Regional Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs* (1,149)</td>
<td>8%</td>
<td>55%</td>
<td>14%</td>
</tr>
<tr>
<td>Alc &amp; Drg Ox-Rehab w/o Detox (842)</td>
<td>35%</td>
<td>47%</td>
<td>35%</td>
</tr>
<tr>
<td>Drug/Alcohol Abuse, LAMA (688)</td>
<td>50%</td>
<td>60%</td>
<td>45%</td>
</tr>
<tr>
<td>Bipolar Disorders (546)</td>
<td>23%</td>
<td>23%</td>
<td>17%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (489)</td>
<td>17%</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>Heart Failure (346)</td>
<td>11%</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Rehabilitation (302)</td>
<td>26%</td>
<td>26%</td>
<td>20%</td>
</tr>
<tr>
<td>Other Pneumonia (295)</td>
<td>12%</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Maj Dep/Oth/Unsp Psychoses (288)</td>
<td>13%</td>
<td>13%</td>
<td>9%</td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis (206)</td>
<td>14%</td>
<td>14%</td>
<td>11%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital Share</th>
<th>Average Hospital Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>31%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>48%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**AT A GLANCE**

- **TOTAL STAFFED BEDS:** 210, mid-size acute hospital
- **% OCCUPANCY:** 78%, > cohort avg. (75%)
- **CASE MIX INDEX in FY13:** 0.94, < cohort avg. (0.99); > statewide (0.89)
- **INPATIENT DISCHARGES in FY13:** 13,429
- **TRAUMA CENTER DESIGNATION:** Adult: Level 3
- **EMERGENCY DEPT VISITS in FY13:** 47,442

**PUBLIC PAYER MIX:** 69% (DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** ICB

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 84th Percentile

**ADJUSTED COST PER DISCHARGE:** $11,195

**INPATIENT:OUTPATIENT REVENUE in FY13:** 38%:62%

**CHANGE IN OWNERSHIP (FY09-FY13):** Not Applicable

---

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 13,429

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 233,146

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $12,257

Full Cost per CMAD = $12,768

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $180 M

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

† Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Quality Overview**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**Patient Safety**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.51</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>0.69</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0.73</td>
<td>0.93</td>
<td></td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

**Patient Experience**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**

- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**

- Staff always explained medications
- Recovery information was provided

**Comfort**

- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures. Population: All patients, Score: Lower is better, Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted, Data Period*: 10/1-9/30

The HCAHPS survey measures patient perspectives on key aspects of their care. Population: All patients, Score: Higher is better, Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare, Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

**Percentage of Orders**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td>16.8%</td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td>16.0%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td>0.0%</td>
<td></td>
</tr>
</tbody>
</table>

1 cohort hospital reported not having a CPOE system

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 9 of 9 cohort hospitals responded to this survey

Score: Higher is better

Source: The Leapfrog Group Hospital Survey^  
Data Period*: 2012-2013

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

**Readmissions**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Population: Medicare Fee For Service (FFS) patients age 65+

Score: Lower is better

Source: CMS Hospital Compare

Data Period*: 2011-2012

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>0.0%</td>
<td>1.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2011-2012</td>
<td>0.0%</td>
<td>1.5%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.

Score: Lower is better

Source: The Leapfrog Group Hospital Survey^  
Data Period*: 2011-2012 and 2012-2013

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

**Complications and adverse events during birth can harm both the mother and infant.**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>0.0</td>
<td>0.3</td>
<td>118.3</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>128.2</td>
<td>118.3</td>
<td>13.2</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

Population: 42 hospitals are included in this analysis

Score: Lower is better

Source: HDD; CHIA-calculated indicator, not risk adjusted

Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile:
BRIGHAM AND WOMEN'S FAULKNER HOSPITAL

Brigham and Women's Faulkner Hospital is a non-profit teaching hospital located in the Metro Boston region. It is among the smaller acute hospitals in Massachusetts and a member of Partners HealthCare System. Though it only accounted for 2% of total regional discharges in FY13, the hospital treated 23% of Alcohol Abuse and Dependence cases, 29% of Opioid Abuse and Dependence cases, and 22% of Mastectomy Procedure cases in Metro Boston. Outpatient visits at the hospital decreased by 12.4% between FY09 and FY13, while there was a median increase of 2.2% in its peer cohort during that period. The hospital earned a profit in FY09, FY10, and FY12. Its total margin in FY13 was 0.0%.

AT A GLANCE

TOTAL STAFFED BEDS: 92, among the smaller acute hospitals
% OCCUPANCY: 96%, highest in cohort (avg. 75%)
CASE MIX INDEX in FY13: 0.83, < cohort avg. (0.99); < statewide (0.89)
INPATIENT DISCHARGES in FY13: 7,212
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: 26,142

PUBLIC PAYER MIX: 52% (Non-DSH* Hospital)
SPECIAL PUBLIC FUNDING: Not Applicable
CY13 COMMERCIAL PAYER PRICE LEVEL: 78th Percentile
ADJUSTED† COST PER DISCHARGE: $13,609
INPATIENT:OUTPATIENT REVENUE in FY13: 30.70%
CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-12.6%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-12.6%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-5.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.1%</td>
<td>-0.7%</td>
</tr>
</tbody>
</table>

SERVICES

Where did most of the hospital’s inpatients reside? What proportion of each community’s total discharges were attributed to this hospital?

Discharges by Community
- West Roxbury MA (876)
- Roslindale MA (703)
- Hyde Park MA (682)
- Dedham MA (488)
- Jamaica Plain MA (450)
- Boston MA (208)
- Dorchester MA (183)
- Dorchester Center MA (178)
- Norwood MA (142)
- Mattapan MA (142)

PAYER MIX

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

| Payer Type | Hospital | Average Hospital*
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>48%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>13%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>39%</td>
<td>44%</td>
</tr>
</tbody>
</table>

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

| Payer | Hospital RP Percentile | Peer Cohort RP Percentile | Matched Public Payer Mix % of Hospital’s Commercial Payments
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Cross Blue Shield of Massachusetts</td>
<td>44.0%</td>
<td>29.8%</td>
<td>44.0%</td>
</tr>
<tr>
<td>Harvard Pilgrim Health Care</td>
<td>29.8%</td>
<td>29.8%</td>
<td>59.0%</td>
</tr>
<tr>
<td>Tufts Health Plan</td>
<td>10.8%</td>
<td>10.8%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 7,212

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 48,727

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $11,662

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $112 M

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$180</td>
<td>$180</td>
<td>$0</td>
<td>$177</td>
<td>$3.2</td>
</tr>
<tr>
<td>2010</td>
<td>$183</td>
<td>$184</td>
<td>($1)</td>
<td>$181</td>
<td>$1.9</td>
</tr>
<tr>
<td>2011</td>
<td>$181</td>
<td>$181</td>
<td>($0)</td>
<td>$186</td>
<td>($4.1)</td>
</tr>
<tr>
<td>2012</td>
<td>$198</td>
<td>$198</td>
<td>$0</td>
<td>$194</td>
<td>$4.4</td>
</tr>
<tr>
<td>2013</td>
<td>$193</td>
<td>$193</td>
<td>$0</td>
<td>$193</td>
<td>($0.0)</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Average Hospital does not include Specialty hospitals.

January 2015
QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>18.0%</td>
<td>16.8%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 8

1 cohort hospital reported not having a CPOE system

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18.0%</td>
<td>16.8%</td>
</tr>
</tbody>
</table>

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile:
CAMBRIDGE HEALTH ALLIANCE

Cambridge Health Alliance (CHA) is a mid-size, municipal teaching hospital located in the Metro Boston region. It is the only municipal (public, non-state-owned) hospital in Massachusetts. CHA includes Cambridge Hospital, Somerville Hospital, and Whidden Memorial Hospital campuses. It qualifies as a Disproportionate Share Hospital (DSH) and has the highest public payer mix (74% in FY13) among all teaching hospitals. It operated at a loss each year from FY09 to FY13, with a -3.7% total margin in FY13. In comparison, the median performance of peer hospitals was profitable, with a 7.6% median total margin in FY13.

GROWTH MEASURES
What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

SERVICES
What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

PAYER MIX
What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?
How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 12,934

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 652,137

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $12,833 | Full Cost per CMAD = $15,576

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $346 M

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

ᶲ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRGs.

† Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national benchmark?

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: CAMBRIDGE HEALTH ALLIANCE

Cohort: Teaching Hospital

CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

Percentage of Orders

<table>
<thead>
<tr>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1</td>
<td></td>
<td></td>
<td>8/1</td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage

1 cohort hospital reported not having a CPOE system

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **16.1%** Hospital
- **16.8%** Peer Cohort
- **16.0%** National Average

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **0.0%** Hospital (2012-2013)
- **1.0%** Peer Cohort
- **2.5%** National Median

- **1.4%** Hospital (2011-2012)
- **1.5%** Peer Cohort
- **5.0%** National Median

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **0.0%** Injury to Neonates
- **140.0** Obstetric Trauma: Delivery with Instrument
- **26.6** Obstetric Trauma: Delivery without Instrument

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Lahey Hospital & Medical Center is a non-profit teaching hospital located in the Northeastern Massachusetts region. It is among the larger acute hospitals in Massachusetts and one of eight transplant centers in Massachusetts. Lahey Hospital & Medical Center and Northeast Hospital formed Lahey Health System in 2012, which then joined with Winchester Hospital in 2014. Lahey Hospital & Medical Center earned a profit each year from FY09 to FY13, with a total margin of 7.6% in FY13, similar to the median performance of peer cohort hospitals.

**2013 Hospital Profile:**

**LAHEY HOSPITAL & MEDICAL CENTER (Lahey Clinic)**

**Burlington, MA & Peabody, MA**

Lahey Health System
Teaching Hospital
Northeastern Massachusetts

For descriptions of the metrics, please see Technical Appendix.

**AT A GLANCE**

- **TOTAL STAFFED BEDS:** 341, among the larger acute hospitals
- **% OCCUPANCY:** 82%, > cohort avg. (75%)
- **CASE MIX INDEX in FY13:** 1.42, highest in cohort (avg. 0.99); > statewide (0.89)
- **INPATIENT DISCHARGES in FY13:** 20,925
- **TRAUMA CENTER DESIGNATION:** Adult Level 2
- **EMERGENCY DEPT VISITS in FY13:** 55,128

**PUBLIC PAYER MIX:** 57% (Non-DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** Not Applicable

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 59th Percentile

**ADJUSTED COST PER DISCHARGE:** $8,702

**INPATIENT:OUTPATIENT REVENUE in FY13:** 32%,68%

**CHANGE IN OWNERSHIP (FY09-FY13):** Lahey Health System - 2012

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-5.8%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-4.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-5.2%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.1%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percentage of Community Discharges Treated at Hospital in FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sepsis &amp; Dissem Infl (889)</td>
<td>23%</td>
</tr>
<tr>
<td>Heart Failure (721)</td>
<td>12%</td>
</tr>
<tr>
<td>Other Pneumonia (529)</td>
<td>16%</td>
</tr>
<tr>
<td>Major Smll &amp; Lrg BWl Proc (521)</td>
<td>12%</td>
</tr>
<tr>
<td>Knee Joint Replacement (460)</td>
<td>35%</td>
</tr>
<tr>
<td>Hip Joint Replacement (447)</td>
<td>21%</td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis (431)</td>
<td>14%</td>
</tr>
<tr>
<td>Renal Failure (416)</td>
<td>18%</td>
</tr>
<tr>
<td>CVA Occlusion w/ Infant (405)</td>
<td>24%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skin Infl (334)</td>
<td>11%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer</th>
<th>Percentage</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>43%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>7%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>50%</td>
<td>44%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 20,925

-5.5%

2009 2010 2011 2012 2013

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 925,235

+15.7% +2.2%

2009 2010 2011 2012 2013

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $11,985

Full Cost per CMAD = $8,844

2009 2010 2011 2012 2013

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $418 M

+20.6% +8.0%

2009 2010 2011 2012 2013

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
‡ Costs were adjusted to exclude direct medical education costs and physician compensation.
† Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

C11
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>16.8%</td>
<td>16.0%</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This hospital reported not having a CPOE system

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- Hospital: 17.5%
- Peer Cohort: 16.8%
- National Average: 16.0%

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because this hospital did not report the data or does not provide obstetric services.

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

- Population: Non-clinically complicated births, 41 hospitals reported data for this measure.
- Score: Lower is better
- Source: The Leapfrog Group Hospital Survey
- Data Period*: 2011-2012 and 2012-2013

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because this hospital did not report the data or does not provide obstetric services.

Complications and adverse events during birth can harm both the mother and infant.

- Population: 42 hospitals are included in this analysis
- Score: Lower is better
- Source: HDD; CHIA-calculated indicator, not risk adjusted
- Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Mount Auburn Hospital is a mid-size, non-profit teaching hospital located in the Metro Boston region. It is a member of the CareGroup health care system. Between FY09 and FY13, there were 7.5% fewer inpatient discharges at Mount Auburn Hospital, compared with a median decrease of 5.5% among cohort hospitals. During that same period, outpatient visits decreased by 10.8% at Mount Auburn Hospital, compared to a median increase of 2.2% in its peer cohort. Mount Auburn Hospital was profitable each year from FY09 to FY13, and in FY13 earned a total margin of 9.4%, higher than the median of its peer cohort of 7.6%.

### 2013 Hospital Profile:

**Mount Auburn Hospital**

Mount Auburn Hospital is a mid-size, non-profit teaching hospital located in the Metro Boston region. It is a member of the CareGroup health care system. Between FY09 and FY13, there were 7.5% fewer inpatient discharges at Mount Auburn Hospital, compared with a median decrease of 5.5% among cohort hospitals. During that same period, outpatient visits decreased by 10.8% at Mount Auburn Hospital, compared to a median increase of 2.2% in its peer cohort. Mount Auburn Hospital was profitable each year from FY09 to FY13, and in FY13 earned a total margin of 9.4%, higher than the median of its peer cohort of 7.6%.

### AT A GLANCE

- **Total Staffed Beds**: 220, mid-size acute hospital
- **% Occupancy**: 68%, < cohort avg. (75%)
- **Case Mix Index in FY13**: 0.81, < cohort avg. (0.99); < statewide (0.89)
- **Inpatient Discharges in FY13**: 13,312
- **Trauma Center Designation**: Not Applicable
- **Emergency Dept Visits in FY13**: 35,762
- **Public Payer Mix**: 54% (Non-DSH* Hospital)
- **Special Public Funding**: Not Applicable
- **CY13 Commercial Payer Price Level**: 57th Percentile
- **Adjusted^ Cost Per Discharge**: $9,539
- **Inpatient-Outpatient Revenue in FY13**: Not Applicable
- **Change in Ownership (FY09-FY13)**: Not Applicable

### Growth Measures

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- **Inpatient Net Revenue per CMAD**: Decrease of 3.2%, < cohort avg. (3.0%)
- **Inpatient Discharges**: Decrease of 3.2%, < cohort avg. (3.0%)
- **Outpatient Revenue**: Decrease of 5.2%, < cohort avg. (5.0%)
- **Outpatient Visits**: Decrease of 1.3%, < cohort avg. (1.3%)

### Services

- **What were the most common inpatient cases (DRGs) treated at the hospital?**
- **What proportion of the region's cases did this hospital treat for each service?**

<table>
<thead>
<tr>
<th>Discharge by DRG</th>
<th>Percentage of Regional Discharges Treated at this Hospital in FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRG# (4,911)</td>
<td>9%</td>
</tr>
<tr>
<td>Other Pneumonia (432)</td>
<td>8%</td>
</tr>
<tr>
<td>Heart Failure (312)</td>
<td>6%</td>
</tr>
<tr>
<td>Card Arrh &amp; Cond Dis (236)</td>
<td>6%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (220)</td>
<td>4%</td>
</tr>
<tr>
<td>Knee Joint Replacement (203)</td>
<td>3%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skn Inf (172)</td>
<td>5%</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (166)</td>
<td>5%</td>
</tr>
<tr>
<td>CVA Occlusion w/ Infarct (166)</td>
<td>6%</td>
</tr>
<tr>
<td>Percut Card proc w/o AMI (165)</td>
<td>6%</td>
</tr>
</tbody>
</table>

### Payer Mix

- **What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?**
- **What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?**

<table>
<thead>
<tr>
<th>Payer</th>
<th>Commercial &amp; Other</th>
<th>State Programs</th>
<th>Medicare and Other Federal Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>46%</td>
<td>11%</td>
<td>43%</td>
</tr>
<tr>
<td>Average Hospital</td>
<td>37%</td>
<td>19%</td>
<td>44%</td>
</tr>
</tbody>
</table>

### For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How have the hospital's total revenue and costs changed between FY09 and FY13?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS), and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national benchmark?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: MOUNT AUBURN HOSPITAL

Cohort: Teaching Hospital

CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>1 cohort hospital reported not having a CPOE system</td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Computerized Physician Order Entry is believed to increase efficiency and reduce transcription errors.

Population: 9 of 9 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey^*  
Data Period*: 2012-2013

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>15.4%</th>
<th>16.8% Peer Cohort</th>
<th>16.0% National Average</th>
</tr>
</thead>
</table>

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>1.0%</th>
<th>1.0% Peer Cohort</th>
<th>2.5% National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 - 2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.7%</td>
<td>1.5% Peer Cohort</td>
<td>5.0% National Median</td>
<td></td>
</tr>
<tr>
<td>2011 - 2012</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

Population: Non-clinically complicated births, 41 Hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey^*  
Data Period*: 2011-2012 and 2012-2013

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Event</th>
<th>2012 - 2013</th>
<th>2011 - 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>118.9</td>
<td>118.3</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>18.5</td>
<td>13.2</td>
</tr>
</tbody>
</table>

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 Hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Saint Vincent Hospital is a for-profit teaching hospital located in the Central Massachusetts region. It is among the larger acute hospitals in Massachusetts. It also qualifies as a Disproportionate Share Hospital (DSH). Along with MetroWest Medical Center, Saint Vincent Hospital was bought by Tenet Healthcare Corporation in 2013. Saint Vincent Hospital earned a profit each year from FY09 to FY13, with a 14.0% operating margin and a 14.0% total margin in FY13, while the median total and operating margins for teaching hospitals were 7.6% and 3.6%, respectively.

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- - -

Central Massachusetts
SAINT VINCENT HOSPITAL
Teaching Hospital
Saint Vincent Hospital is a for-profit teaching hospital located in the Central Massachusetts region. It is among the larger acute hospitals in Massachusetts. It also qualifies as a Disproportionate Share Hospital (DSH). Along with MetroWest Medical Center, Saint Vincent Hospital was bought by Tenet Healthcare Corporation in 2013. Saint Vincent Hospital earned a profit each year from FY09 to FY13, with a 14.0% operating margin and a 14.0% total margin in FY13, while the median total and operating margins for teaching hospitals were 7.6% and 3.6%, respectively.

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

- - -

PAYER MIX
What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

What was the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?
**Utilization Trends**

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Inpatient Discharges = 19,521

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Outpatient Visits = 118,844

**Patient Revenue Trends**

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- FY13 Inpatient Revenue per CMAD = $12,462
- Full Cost per CMAD = $9,489

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Outpatient Revenue = $126 M

**Financial Performance**

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Total Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$319</td>
<td>$319</td>
<td>$(0)</td>
<td>$292</td>
<td>$26.8</td>
</tr>
<tr>
<td>2010</td>
<td>$338</td>
<td>$338</td>
<td>$(0)</td>
<td>$307</td>
<td>$30.4</td>
</tr>
<tr>
<td>2011</td>
<td>$328</td>
<td>$328</td>
<td>$(0)</td>
<td>$306</td>
<td>$22.7</td>
</tr>
<tr>
<td>2012</td>
<td>$351</td>
<td>$351</td>
<td>$(0)</td>
<td>$316</td>
<td>$34.7</td>
</tr>
<tr>
<td>2013</td>
<td>$359</td>
<td>$359</td>
<td>$(0)</td>
<td>$309</td>
<td>$50.3</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

- Total Margin: FY09 = 14.0%, FY13 = 3.6%
- Operating Margin: FY09 = 8.4%, FY13 = 5.6%

**For descriptions of the metrics, please see Technical Appendix.**

- * Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
- ‡ Costs were adjusted to exclude direct medical education costs and physician compensation.
- † Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
- ‡ Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital's profile are derived from the Commonwealth's Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

### PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the **PSI-90 Composite**, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.71</td>
<td>0.75</td>
<td>0.92</td>
</tr>
<tr>
<td>2012</td>
<td>0.92</td>
<td>1.04</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0.93</td>
<td>1.75</td>
<td></td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

The **PSI-90** is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period**: 10/1-9/30

### PATIENT EXPERIENCE

How well did the hospital fulfill the following **key expectations for patient experience**, based on patient surveys? How does this compare to the national average?

#### Global Ratings

<table>
<thead>
<tr>
<th>Category</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients gave hospital a rating of 9 or 10</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
</tr>
<tr>
<td>Patients would definitely recommend the hospital</td>
<td>80%</td>
<td>90%</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Communication

<table>
<thead>
<tr>
<th>Category</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses always communicated well</td>
<td>90%</td>
<td>80%</td>
<td>100%</td>
</tr>
<tr>
<td>Doctors always communicated well</td>
<td>90%</td>
<td>80%</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Care Coordination

<table>
<thead>
<tr>
<th>Category</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff always explained medications</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>Recovery information was provided</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
</tr>
</tbody>
</table>

#### Comfort

<table>
<thead>
<tr>
<th>Category</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always received help as soon as they wanted</td>
<td>70%</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Pain was always well controlled</td>
<td>80%</td>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>Room and bathroom were always clean</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>Room was always quiet at night</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>8</td>
<td>16.8%</td>
<td>16%</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 cohort hospital reported not having a CPOE system

Number of cohort hospitals in this category of CPOE usage

**Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.

**Population:** 9 of 9 cohort hospitals responded to this survey

**Score:** Higher is better

**Source:** The Leapfrog Group Hospital Survey

**Data Period:** 2012-2013

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Hospital Readmission Rate</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.9%</td>
<td>16.8%</td>
<td>16%</td>
</tr>
</tbody>
</table>

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

**Population:** Medicare Fee For Service (FFS) patients age 65+

**Score:** Lower is better

**Source:** CMS Hospital Compare

**Data Period:** 2011-2012

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>1.5%</td>
<td>1.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2011-2012</td>
<td>1.6%</td>
<td>1.5%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

**Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.

**Score:** Lower is better

**Source:** The Leapfrog Group Hospital Survey

**Data Period:** 2011-2012 and 2012-2013

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Complication</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>0.5</td>
<td>0.3</td>
<td>13.2</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>117.6</td>
<td>118.3</td>
<td>25.0</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>25.0</td>
<td>13.2</td>
<td></td>
</tr>
</tbody>
</table>

### For Descriptions of the Metrics, Please See Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile:
STEWARD CARNEY HOSPITAL

Steward Carney Hospital is a for-profit teaching hospital located in the Metro Boston region. Steward Carney is a member of Steward Health Care System. It is among the smaller acute hospitals in Massachusetts and qualifies as a Disproportionate Share Hospital (DSH). Steward Carney had 19.4% fewer inpatient discharges in FY13 than in FY09, compared to a cohort median decrease of 5.5%. Outpatient visits increased 3.7% in that period, compared to a median increase of 2.2% in its peer cohort. Steward Carney reported a loss from FY11 to FY13, with a total margin of -8.9% in FY13, compared with a median total margin of 7.6% in its cohort.

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

AT A GLANCE

TOTAL STAFFED BEDS: 86, among the smaller acute hospitals
% OCCUPANCY: 81%, > cohort avg. (75%)
CASE MIX INDEX in FY13: 0.91, < cohort avg. (0.99); > statewide (0.89)
INPATIENT DISCHARGES in FY13: 5,183
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: 30,620

PUBLIC PAYER MIX: 73% (DSH* Hospital)
SPECIAL PUBLIC FUNDING: DSTI
CY13 COMMERCIAL PAYER PRICE LEVEL: 36th Percentile
ADJUSTED² COST PER DISCHARGE: $10,588
INPATIENT:OUTPATIENT REVENUE in FY13: 35:65%
CHANGE IN OWNERSHIP (FY09-FY13): Steward Health Care - 2010

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Growth Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-5.2%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-4.1%</td>
<td>-3.2%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-18.8%</td>
<td>-5.2%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-2.6%</td>
<td>-1.1%</td>
</tr>
</tbody>
</table>

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG Description</th>
<th>% Regional Discharges</th>
<th>% Hospital Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maj Dep Oth/Unsp Psychoses (405)</td>
<td>14%</td>
<td>4%</td>
</tr>
<tr>
<td>Bipolar Disorders (362)</td>
<td>12%</td>
<td>5%</td>
</tr>
<tr>
<td>Schizophrenia (289)</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (211)</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>COPD (175)</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skn Inf (130)</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Heart Failure (119)</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Dep exc Maj Dep (110)</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>Other Pneumonia (94)</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Renal Failure (90)</td>
<td>3%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

<table>
<thead>
<tr>
<th>Community</th>
<th>% Hospital Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dorchester Center MA (1,247)</td>
<td>18%</td>
</tr>
<tr>
<td>Dorchester MA (974)</td>
<td>9%</td>
</tr>
<tr>
<td>Quincy MA (509)</td>
<td>4%</td>
</tr>
<tr>
<td>Mattapan MA (487)</td>
<td>15%</td>
</tr>
<tr>
<td>Boston MA (225)</td>
<td>1%</td>
</tr>
<tr>
<td>Hyde Park MA (197)</td>
<td>5%</td>
</tr>
<tr>
<td>Milton MA (140)</td>
<td>5%</td>
</tr>
<tr>
<td>Braintree MA (112)</td>
<td>3%</td>
</tr>
<tr>
<td>Randolph MA (109)</td>
<td>2%</td>
</tr>
<tr>
<td>Roxbury MA (83)</td>
<td>2%</td>
</tr>
</tbody>
</table>

PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>% Hospital Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>27%</td>
</tr>
<tr>
<td>State Programs</td>
<td>31%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>42%</td>
</tr>
</tbody>
</table>

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>RP Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Cross Blue Shield of Massachusetts</td>
<td>37.8%</td>
</tr>
<tr>
<td>Tufts Health Plan</td>
<td>24.8%</td>
</tr>
<tr>
<td>Harvard Pilgrim Health Care</td>
<td>23.1%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: STEWARD CARNEY HOSPITAL  
Cohort: Teaching Hospital

### UTILIZATION TRENDS

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

### PATIENT REVENUE TRENDS

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 5,163
FY13 Outpatient Visits = 94,087

FY13 Inpatient Revenue per CMAD = $10,728  
| Full Cost per CMAD = $12,317 |

### FINANCIAL PERFORMANCE

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$120</td>
<td>$120</td>
<td>$1</td>
<td>$114</td>
<td>$5.7</td>
</tr>
<tr>
<td>2010</td>
<td>$119</td>
<td>$119</td>
<td>$0</td>
<td>$116</td>
<td>$2.6</td>
</tr>
<tr>
<td>2011</td>
<td>$111</td>
<td>$111</td>
<td>$0</td>
<td>$112</td>
<td>$(1.3)</td>
</tr>
<tr>
<td>2012</td>
<td>$110</td>
<td>$110</td>
<td>$0</td>
<td>$120</td>
<td>$(10.0)</td>
</tr>
<tr>
<td>2013</td>
<td>$101</td>
<td>$101</td>
<td>$0</td>
<td>$110</td>
<td>$(9.0)</td>
</tr>
</tbody>
</table>

### Notes

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Delivery System Transformation Initiative (DSTI) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: STEWARD CARNEY HOSPITAL**

**Cohort: Teaching Hospital**

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>25-49%</td>
<td>1.0%</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>0.3%</td>
<td>1.5%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

1 cohort hospital reported not having a CPOE system

**Number of cohort hospitals in this category of CPOE usage:**

8

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **16.8%**
- **16.8% Peer Cohort**
- **16.0% National Average**

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

**Population:** Medicare Fee For Service (FFS) patients age 65+

**Score:** Lower is better

**Source:** CMS Hospital Compare

**Data Period:** 2011-2012

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

**For descriptions of the metrics, please see Technical Appendix.**

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
For descriptions of the metrics, please see Technical Appendix.
### UTILIZATION TRENDS

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital Inpatient Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>140</td>
</tr>
<tr>
<td>2010</td>
<td>130</td>
</tr>
<tr>
<td>2011</td>
<td>120</td>
</tr>
<tr>
<td>2012</td>
<td>110</td>
</tr>
<tr>
<td>2013</td>
<td>100</td>
</tr>
</tbody>
</table>

FY13 Inpatient Discharges = 13,057

-3.2%

### PATIENT REVENUE TRENDS

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital Inpatient Revenue per CMAD</th>
<th>Peer Cohort Inpatient Revenue per CMAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$12,762</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FY13 Inpatient Revenue per CMAD = $12,762

### FINANCIAL PERFORMANCE

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$382</td>
<td>$383</td>
<td>($1)</td>
<td>$360</td>
<td>$22.3</td>
</tr>
<tr>
<td>2010</td>
<td>$415</td>
<td>$413</td>
<td>$2</td>
<td>$390</td>
<td>$24.8</td>
</tr>
<tr>
<td>2011</td>
<td>$264</td>
<td>$264</td>
<td>$0</td>
<td>$285</td>
<td>($20.9)</td>
</tr>
<tr>
<td>2012</td>
<td>$306</td>
<td>$311</td>
<td>($5)</td>
<td>$307</td>
<td>($1.3)</td>
</tr>
<tr>
<td>2013</td>
<td>$313</td>
<td>$313</td>
<td>$0</td>
<td>$303</td>
<td>$9.8</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

- Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
- For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
- Costs were adjusted to exclude direct medical education costs and physician compensation.
- Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
- Average Hospital does not include Specialty hospitals.

January 2015
QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth's Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: STEWARD ST. ELIZABETH’S MEDICAL CENTER**

**Cohort:** Teaching Hospital

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 8

1 cohort hospital reported not having a CPOE system

**Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.

- **Population:** 9 of 9 cohort hospitals responded to this survey
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2012-2013

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **2013 Hospital Profile:** STEWARD ST. ELIZABETH’S MEDICAL CENTER

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.8%</td>
<td>Peer Cohort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.0%</td>
<td>National Average</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period:** 2011-2012

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

2012 - 2013:

- **1.0%**
  - **Hospital:**
  - **Peer Cohort:** 1.0%
  - **National Median:** 2.5%

2011 - 2012:

- **2.6%**
  - **Hospital:**
  - **Peer Cohort:** 1.5%
  - **National Median:** 5.0%

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

- **Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
- **Score:** Lower is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2011-2012 and 2012-2013

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **Hospital:** 0.0
  - **Peer Cohort:** 0.3

- **Obstetric Trauma: Delivery with Instrument**
  - **Hospital:** 61.2
  - **Peer Cohort:** 118.3

- **Obstetric Trauma: Delivery without Instrument**
  - **Hospital:** 5.4
  - **Peer Cohort:** 13.2

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Anna Jaques Hospital is a mid-size, non-profit community hospital located in the Northeastern Massachusetts region. It has been clinically affiliated with Beth Israel Deaconess Medical Center since 2010. From FY09 to FY13, outpatient visits decreased 3.2% at the hospital, compared to a median increase of 4.0% in its peer cohort. Anna Jaques was profitable four of the five years between FY09 and FY13, with a 2.8% total margin in FY13. Its operating margin was similar to the median of its peer cohort each year from FY09 to FY13.

**2013 Hospital Profile:**

**ANNA JAQUES HOSPITAL**

**Newburyport, MA**

Community Hospital

Northeastern Massachusetts

What were the most common inpatient cases (DRGs) treated at the hospital?

What proportion of the region’s cases did this hospital treat for each service?

Where did most of the hospital’s inpatients reside? What proportion of each community’s total discharges were attributed to this hospital?

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

---

**AT A GLANCE**

**TOTAL STAFFED BEDS:** 140, mid-size acute hospital

**% OCCUPANCY:** 63%, > cohort avg. (62%)

**CASE MIX INDEX in FY13:** 0.73, < cohort avg. (0.79); < statewide (0.89)

**INPATIENT DISCHARGES in FY13:** 7,638

**TRAUMA CENTER DESIGNATION:** Adult: Level 3

**EMERGENCY DEPT VISITS in FY13:** 31,627

**PUBLIC PAYOR MIX:** 58% (Non-DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** CHART^, ICBθ

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 24th Percentile

**ADJUSTED‡ COST PER DISCHARGE:** $8,787

**INPATIENT:OUTPATIENT REVENUE in FY13:** Not Applicable

**CHANGE IN OWNERSHIP (FY09-FY13):** Not Applicable

---

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

---

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital?

What proportion of the region’s cases did this hospital treat for each service?

---

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

---

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 7,638

FY13 Outpatient Visits = 55,316

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $8,476

FY13 Outpatient Revenue = $60 M

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What were the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

![PSI-90 Composite Chart]

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

![Patient Experience Charts]

The HCAHPS survey measures patient perspectives on key aspects of their care.

- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: ANNA JAQUES HOSPITAL

Cohort: Community Hospital

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
<td>0</td>
<td>16.0%</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 18

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 18 of 19 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey^* Data Period*: 2012-2013

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.7%</td>
<td></td>
<td>16.3%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Lower is better</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3%</td>
<td></td>
<td>0.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Lower is better</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.1%</td>
<td></td>
<td>2.9%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey^* Data Period*: 2011-2012 and 2012-2013

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>3.5</td>
<td>0.7</td>
<td>18.3</td>
</tr>
<tr>
<td>Obstetric Trauma:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery with Instrument</td>
<td></td>
<td>168.6</td>
<td></td>
</tr>
<tr>
<td>Number of eligible patients did not meet the threshold for this calculation</td>
<td></td>
<td>19.7</td>
<td></td>
</tr>
</tbody>
</table>

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile:
BAYSTATE MARY LANE HOSPITAL

Baystate Mary Lane Hospital is a small, non-profit community hospital located in the Western Massachusetts region. It is a member of the Baystate Health system. Between FY09 and FY13, inpatient discharges declined by 34.9%, while the median decrease for similar hospitals was 7.9%. Outpatient visits also decreased for the hospital by 15.6% between FY09 and FY13, while median outpatient visits increased by 4.0% for the similar cohort hospital. Baystate Mary Lane Hospital earned a positive total margin in FY09 and FY12, but had a -2.2% total margin in FY13, compared with a 2.4% cohort median total margin.

AT A GLANCE

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL STAFFED BEDS</td>
<td>25</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>% OCCUPANCY</td>
<td>35% &lt; cohort avg. (62%)</td>
<td>38% &lt; cohort avg. (64%)</td>
<td>40% &lt; statewide (66%)</td>
</tr>
<tr>
<td>CASE MIX INDEX in FY13</td>
<td>0.72 &lt; cohort avg. (0.79); &lt; statewide (0.89)</td>
<td>0.67 &lt; cohort avg. (0.75); &lt; statewide (0.8)</td>
<td>0.7 &lt; cohort avg. (0.75); &lt; statewide (0.8)</td>
</tr>
<tr>
<td>INPATIENT DISCHARGES in FY13</td>
<td>1,097</td>
<td>3,119</td>
<td>6,601</td>
</tr>
<tr>
<td>TRAUMA CENTER DESIGNATION</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>EMERGENCY DEPT VISITS in FY13</td>
<td>15,837</td>
<td>47,255</td>
<td>100,000</td>
</tr>
</tbody>
</table>

PUBLIC PAYER MIX: 61% (Non-DSH* Hospital)

CASE MIX INDEX in FY13:
- Other Pneumonia (104) 4%
- COPD (80) 63%
- Cellulitis, Oth Bact Skin Inf (72) 16%
- Card Arrth & Cond Dis (53) 33%
- Heart Failure (51) 5%
- Kidney & UT Infections (31) 2%
- Oth Anemia & Blood Dis (26) 6%

DRGs with fewer than 26 discharges have been suppressed

- Hospital (1,097) = 1% of total regional discharges

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

- Decrease: Inpatient Net Revenue per CMAD -8.2%
- Increase: Outpatient Revenue 1.0%

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

Discharges by DRG

- Other Pneumonia (104) 4%
- COPD (80) 63%
- Cellulitis, Oth Bact Skin Inf (72) 16%
- Card Arrth & Cond Dis (53) 33%
- Heart Failure (51) 5%
- Kidney & UT Infections (31) 2%
- Oth Anemia & Blood Dis (26) 6%

DRGs with fewer than 26 discharges have been suppressed

- Hospital (1,097) = 1% of total regional discharges

PAYER MIX

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

- Hospital
  - Commercial & Other 39%
  - State Programs 19%
  - Medicare and Other Federal Programs 42%
- Average Hospital*
  - Commercial & Other 37%
  - State Programs 19%
  - Medicare and Other Federal Programs 44%

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: BAYSTATE MARY LANE HOSPITAL
Cohort: Community Hospital

**Utilization Trends**

- How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

**Patient Revenue Trends**

- What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

**Financial Performance**

- How have the hospital's total revenue and costs changed between FY09 and FY13?

- What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>Revenue, Cost &amp; Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>2010</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>2012</td>
</tr>
<tr>
<td>2013</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Average Hospital does not include Specialty hospitals.
Here is the text from the image:

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital's profile are derived from the Commonwealth's Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: BAYSTATE MARY LANE HOSPITAL  
Cohort: Community Hospital

CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
<td>16.3%</td>
<td>16.3%</td>
</tr>
<tr>
<td>25-49%</td>
<td>3</td>
<td>16.0%</td>
<td>16.0%</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Readmission Rate</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower is better</td>
<td>16.3%</td>
<td>16.0%</td>
<td>16.3%</td>
</tr>
</tbody>
</table>

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

http://chiamass.gov/hospital-profiles

January 2015
2013 Hospital Profile:
BETH ISRAEL DEACONESS HOSPITAL - MILTON

Beth Israel Deaconess Hospital – Milton (BID-Milton) is a non-profit community hospital located in the Metro Boston region. It is among the smaller acute hospitals in Massachusetts. It was purchased by Beth Israel Deaconess Medical Center in 2012 and at that time became a member of the CareGroup health care system.

Between FY09 and FY13, there was a 21.1% increase in outpatient visits at the hospital, compared to a median increase of 4.0% in its peer cohort. In that same period, outpatient revenue at the hospital only increased by 0.2%. In FY13, it earned its highest total margin in the five year period of 9.5%, higher than the median performance of peer cohort hospitals of 2.4%.

### AT A GLANCE

- **TOTAL STAFFED BEDS**: 83, among the smaller acute hospitals
- **% OCCUPANCY**: 65%, > cohort avg. (62%)
- **CASE MIX INDEX in FY13**: 0.82, > cohort avg. (0.79); < statewide (0.89)
- **INPATIENT DISCHARGES in FY13**: 5,240
- **TRAUMA CENTER DESIGNATION**: Not Applicable
- **EMERGENCY DEPT VISITS in FY13**: 26,190

### GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>FY12 Growth Rate</th>
<th>FY13 Growth Rate</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-3.5%</td>
<td>1.7%</td>
<td>Increase</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-15.1%</td>
<td>4.3%</td>
<td>Increase</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

#### Discharges by DRG

- **Sepsis & Dissem Inf (309)**: 5% of regional discharges were treated at this hospital in FY13
- **Other Pneumonia (237)**: 4%
- **COPD (226)**: 6%
- **Heart Failure (218)**: 4%
- **Kidney & UT Infections (168)**: 5%
- **Cellulitis, Oth Bact Sk Infections (168)**: 4%
- **Renal Failure (164)**: 5%
- **Knee Joint Replacement (145)**: 2%
- **Card Arrh & Cond Dis (145)**: 4%
- **Syncope & Collapse (116)**: 8%

### PAYER MIX

#### Hospital

- **Commercial & Other**: 41%
- **State Programs**: 11%
- **Medicare and Other Federal Programs**: 48%

#### Average Hospital

- **Commercial & Other**: 37%
- **State Programs**: 19%
- **Medicare and Other Federal Programs**: 44%

### Change in Ownership (FY09-FY13): CareGroup - 2012
How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 5,240

+15.5%

-7.9%

2009 2010 2011 2012 2013

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 35,651

+21.1%

+4.0%

2009 2010 2011 2012 2013

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $9,807

Full Cost per CMAD = $8,980

What has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $36 M

+1.2%

+0.2%

2009 2010 2011 2012 2013

How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$65</td>
<td>$67</td>
<td>($1)</td>
<td>$67</td>
<td>($1.5)</td>
</tr>
<tr>
<td>2010</td>
<td>$67</td>
<td>$67</td>
<td>$0</td>
<td>$67</td>
<td>$0.8</td>
</tr>
<tr>
<td>2011</td>
<td>$68</td>
<td>$68</td>
<td>$1</td>
<td>$68</td>
<td>$0.2</td>
</tr>
<tr>
<td>2012</td>
<td>$75</td>
<td>$75</td>
<td>$0</td>
<td>$74</td>
<td>$1.2</td>
</tr>
<tr>
<td>2013</td>
<td>$86</td>
<td>$84</td>
<td>$2</td>
<td>$78</td>
<td>$8.1</td>
</tr>
</tbody>
</table>

What were the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Average Hospital does not include Specialty hospitals.
QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
<td>16.3%</td>
<td>16.0%</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage:
- 1 hospital in 0-24% category
- 3 hospitals in 50-74% category
- 14 hospitals in 75-100% category

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- 18.5% Hospital
- 16.3% Peer Cohort
- 16.0% National Average

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.
2013 Hospital Profile:
BETH ISRAEL DEACONESS HOSPITAL - NEEDHAM

Beth Israel Deaconess Hospital – Needham (BID-Needham) is a non-profit community hospital located in the Metro Boston region. It is among the smaller acute hospitals in Massachusetts, and is a member of the CareGroup health care system. It experienced a 19.8% increase in outpatient visits between FY09 and FY13, compared to a median increase of 4.0% for cohort hospitals. Following a similar trend, outpatient revenue increased by 39.5% compared with a median increase of 1.2% for cohort hospitals. BID-Needham’s total margin was positive each year except in FY11, and it had a 2.1% total margin in FY13. The median total margin in its peer cohort was positive each year from FY09 to FY13.

AT A GLANCE

GROWTH MEASURES

Such were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

PAYER MIX

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?
How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

1 For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

† Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**
- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**
- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**
- Staff always explained medications
- Recovery information was provided

**Comfort**
- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

The HCAHPS survey measures patient perspectives on key aspects of their care.
- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: BETH ISRAEL DEACONESS HOSPITAL - NEEDHAM**

**Cohort:** Community Hospital

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
</tr>
<tr>
<td>25-49%</td>
<td>3</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
</tr>
</tbody>
</table>

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

**Population:** 18 of 19 cohort hospitals responded to this survey.
**Score:** Higher is better
**Source:** The Leapfrog Group Hospital Survey
**Data Period:** 2012-2013

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital:** 15.7%
- **Peer Cohort:** 16.3%
- **National Average:** 16.0%

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

**Population:** Medicare Fee For Service (FFS) patients age 65+
**Score:** Lower is better
**Source:** CMS Hospital Compare
**Data Period:** 2011-2012

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

**Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
**Score:** Lower is better
**Source:** The Leapfrog Group Hospital Survey
**Data Period:** 2011-2012 and 2012-2013

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Complications and adverse events during birth can harm both the mother and infant.

**Population:** 42 hospitals are included in this analysis
**Score:** Lower is better
**Source:** HDD; CHIA-calculated indicator, not risk adjusted
**Data Period:** 2012-2013

---

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile:
BETH ISRAEL DEACONESS HOSPITAL - PLYMOUTH (Jordan Hospital)

Beth Israel Deaconess Hospital – Plymouth (BID-Plymouth) is a mid-size, non-profit community hospital located in the Metro South region. Formerly Jordan Hospital, it became a member of the CareGroup health care system effective January 1, 2014, and its new name became Beth Israel Deaconess Hospital – Plymouth. BID-Plymouth was profitable each year from FY09 to FY13, and its operating and total margins were similar to the medians in its cohort each year. BID-Plymouth earned a profit each year in that period, with a 1.4% total margin in FY13, compared to a peer cohort median of 2.4%.

AT A GLANCE

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL STAFFED BEDS</td>
<td>172, mid-size acute hospital</td>
</tr>
<tr>
<td>% OCCUPANCY</td>
<td>64%, &gt; cohort avg. (62%)</td>
</tr>
<tr>
<td>CASE MIX INDEX in FY13</td>
<td>0.93, highest in cohort (avg. 0.79); &gt; statewide (0.89)</td>
</tr>
<tr>
<td>INPATIENT DISCHARGES in FY13</td>
<td>8,626</td>
</tr>
<tr>
<td>TRAUMA CENTER DESIGNATION</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>EMERGENCY DEPT VISITS in FY13</td>
<td>50,549</td>
</tr>
<tr>
<td>TOTAL STAFFED BEDS</td>
<td>172, mid-size acute hospital</td>
</tr>
<tr>
<td>% OCCUPANCY</td>
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<td>8,626</td>
</tr>
<tr>
<td>TRAUMA CENTER DESIGNATION</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>EMERGENCY DEPT VISITS in FY13</td>
<td>50,549</td>
</tr>
</tbody>
</table>

PUBLIC PAYER MIX: 61% (Non-DSH* Hospital)

SPECIAL PUBLIC FUNDING: CHART^, ICB^6

CY13 COMMERCIAL PAYER PRICE LEVEL: 51st Percentile

ADJUSTED^ COST PER DISCHARGE: $10,581

INPATIENT:OUTPATIENT REVENUE in FY13: >20%

CHANGE IN OWNERSHIP (FY09-FY13): CareGroup - 2014

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

### Services

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

#### Discharges by DRG

- Delivery DRGs (1,201) 10% of regional discharges were treated at this hospital in FY13
- Knee Joint Replacement (345) 25% of regional discharges were treated at this hospital in FY13
- COPD (329) 14% of regional discharges were treated at this hospital in FY13
- Other Pneumonia (324) 16% of regional discharges were treated at this hospital in FY13
- Degen Nrvs Syst exc MS (318) 36% of regional discharges were treated at this hospital in FY13
- Heart Failure (273) 12% of regional discharges were treated at this hospital in FY13
- Sepsis & Dissem Inf (206) 8% of regional discharges were treated at this hospital in FY13
- Card Arrth & Cond Dis (202) 13% of regional discharges were treated at this hospital in FY13
- Renal Failure (183) 13% of regional discharges were treated at this hospital in FY13
- Acute Myocardial Infarct. (162) 21% of regional discharges were treated at this hospital in FY13

#### Discharges by Community

- Plymouth MA (3,431) 55% of community discharges were treated at this hospital in FY13
- Kingston MA (663) 47% of community discharges were treated at this hospital in FY13
- Carver MA (641) 46% of community discharges were treated at this hospital in FY13
- Duxbury MA (453) 35% of community discharges were treated at this hospital in FY13
- Middleboro MA (409) 14% of community discharges were treated at this hospital in FY13
- Marshfield MA (329) 14% of community discharges were treated at this hospital in FY13
- Pembroke MA (219) 13% of community discharges were treated at this hospital in FY13
- Buzzards Bay MA (162) 10% of community discharges were treated at this hospital in FY13
- Halifax MA (146) 18% of community discharges were treated at this hospital in FY13
- Sandwich MA (133) 12% of community discharges were treated at this hospital in FY13

### Payer Mix

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

#### Hospital

- Commercial & Other 39%
- State Programs 12%
- Medicare and Other Federal Programs 48%

#### Average Hospital^*

- Commercial & Other 37%
- State Programs 19%
- Medicare and Other Federal Programs 44%

Percentage calculations may not sum to 100% due to rounding

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 8,626

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 112,753

Patient Revenue Trends

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $11,260

Full Cost per CMAD = $10,852

Financial Performance

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$188</td>
<td>$187</td>
<td>$1</td>
<td>$185</td>
<td>$2.7</td>
</tr>
<tr>
<td>2010</td>
<td>$197</td>
<td>$197</td>
<td>$1</td>
<td>$191</td>
<td>$6.3</td>
</tr>
<tr>
<td>2011</td>
<td>$201</td>
<td>$200</td>
<td>$1</td>
<td>$197</td>
<td>$4.1</td>
</tr>
<tr>
<td>2012</td>
<td>$206</td>
<td>$205</td>
<td>$1</td>
<td>$200</td>
<td>$6.1</td>
</tr>
<tr>
<td>2013</td>
<td>$199</td>
<td>$196</td>
<td>$3</td>
<td>$196</td>
<td>$2.8</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).

* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

* Costs were adjusted to exclude direct medical education costs and physician compensation.

* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.

* Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the **PSI-90 Composite**, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.82</td>
<td>1.03</td>
<td>0.82</td>
<td>1.01</td>
</tr>
<tr>
<td>2012</td>
<td>0.82</td>
<td>1.01</td>
<td>0.81</td>
<td>1.00</td>
</tr>
<tr>
<td>2011</td>
<td>0.81</td>
<td>0.81</td>
<td>0.81</td>
<td>1.00</td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following **key expectations for patient experience**, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- **Patients gave hospital a rating of 9 or 10**
- **Patients would definitely recommend the hospital**

**Communication**

- **Nurses always communicated well**
- **Doctors always communicated well**

**Care Coordination**

- **Staff always explained medications**
- **Recovery information was provided**

**Comfort**

- **Always received help as soon as they wanted**
- **Pain was always well controlled**
- **Room and bathroom were always clean**
- **Room was always quiet at night**

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

The HCAHPS survey measures patient perspectives on key aspects of their care.

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: BETH ISRAEL DEACONESS HOSPITAL - PLYMOUTH (Jordan Hospital)

CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

Percentage of Orders

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Number of Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
</tr>
<tr>
<td>25-49%</td>
<td>3</td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 18 of 19 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey^ Data Period*: 2012-2013

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Readmission Rate</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.9%</td>
<td>Lower is better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.3%</td>
<td>Peer Cohort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.0%</td>
<td>National Average</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Induction Rate</th>
<th>2012 - 2013</th>
<th>2011 - 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0%</td>
<td>0.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>2.5% National Median</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.0%</td>
<td>Peer Cohort</td>
<td>5.0%</td>
</tr>
<tr>
<td>2.9% Peer Cohort</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.0% National Median</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey^ Data Period*: 2011-2012 and 2012-2013

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Complication</th>
<th>Population</th>
<th>Score</th>
<th>Source</th>
<th>Data Period*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>42 hospitals</td>
<td>Lower is better</td>
<td>HDD; CHIA</td>
<td>2012-2013</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>Number of eligible patients did not meet the threshold for this calculation</td>
<td>168.6</td>
<td>Peer Cohort</td>
<td>2012-2013</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>17.0</td>
<td>Peer Cohort</td>
<td>2012-2013</td>
<td></td>
</tr>
</tbody>
</table>

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Cooley Dickinson Hospital is a community hospital located in the Western Massachusetts region. It is among the smaller acute hospitals in Massachusetts and a member of Partners HealthCare System. Between FY09 and FY13, inpatient discharges at the hospital fell 9.8%, compared with a median decrease of 7.9% among cohort hospitals. Between FY09 and FY13, outpatient visits at Cooley Dickinson decreased 28.2% compared to a median increase of 4.0% among cohort hospitals. Cooley Dickinson had an operating margin of 8.3% in FY13, higher than the median operating margin of cohort hospitals of 1.6%. Between FY12 and FY13, Cooley Dickinson’s total margin fell from 10.8% (its highest in the five year period) to 0.6% (its lowest in the five year period). The median total margin of its peer cohort in FY13 was 2.4%.

**What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-4.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-5.2%</td>
<td>-3.5%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-4.3%</td>
<td>-3.6%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-2.2%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

*Hospital >20% in green, <20% in red.*

**Where did most of the hospital’s inpatients reside?**

- Southampton MA (195)
- South Hadley MA (200)
- Holyoke MA (210)
- Belchertown MA (254)
- Leeds MA (217)
- Hadley MA (400)
- Florence MA (645)
- Northampton MA (1,096)
- South Hadley MA (200)
- Amherst MA (1,134)
- Easthampton MA (1,188)

- Hospital (8,136) = 8% of total regional discharges

**What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers?**

- Blue Cross Blue Shield of Massachusetts: 30.7%
- Health New England, Inc.: 20.4%
- Harvard Pilgrim Health Care: 15.1%

*Hospital >20% in green, <20% in red.*

---

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: COOLEY DICKINSON HOSPITAL
Cohort: Community Hospital

**UTILIZATION TRENDS**

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>FY13 Inpatient Discharges = 8,136</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>FY13 Outpatient Visits = 53,409</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PATIENT REVENUE TRENDS**

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $9,625 
Full Cost per CMAD = $11,033

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>FY13 Outpatient Revenue = $95 M</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FINANCIAL PERFORMANCE**

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$168</td>
<td>$167</td>
<td>$1</td>
<td>$159</td>
<td>$8.5</td>
</tr>
<tr>
<td>2010</td>
<td>$168</td>
<td>$167</td>
<td>$1</td>
<td>$162</td>
<td>$5.7</td>
</tr>
<tr>
<td>2011</td>
<td>$161</td>
<td>$161</td>
<td>($9)</td>
<td>$152</td>
<td>$8.5</td>
</tr>
<tr>
<td>2012</td>
<td>$169</td>
<td>$168</td>
<td>$2</td>
<td>$151</td>
<td>$18.3</td>
</tr>
<tr>
<td>2013</td>
<td>$150</td>
<td>$161</td>
<td>($12)</td>
<td>$149</td>
<td>$0.8</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

- Total Margin: 8.3%
- Operating Margin: 4.7%

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

### PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the **PSI-90 Composite**, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

![Graph showing PSI-90 Composite scores over years](image)

2013 Statewide Average = 0.74

**The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.**

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

### PATIENT EXPERIENCE

How well did the hospital fulfill the following **key expectations for patient experience**, based on patient surveys? How does this compare to the national average?

![Graph showing patient experience ratings](image)

**The HCAHPS survey measures patient perspectives on key aspects of their care.**

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>1</td>
<td>3</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

- **Population:** 18 of 19 cohort hospitals responded to this survey.
- **Score:** Higher is better.
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2012-2013

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2011 Hospital</strong></td>
<td>16.0%</td>
<td>16.3%</td>
</tr>
<tr>
<td><strong>2012 Hospital</strong></td>
<td>16.0%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

- **Population:** Medicare Fee For Service (FFS) patients age 65+.
- **Score:** Lower is better.
- **Source:** CMS Hospital Compare
- **Data Period:** 2011-2012

### OBSTETRICAL CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

#### 2012 - 2013

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OBSTETRICAL CARE</strong></td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>2011 - 2012</strong></td>
<td>2.2%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

- **Population:** Non-clinically complicated births. 41 Hospitals reported data for this measure.
- **Score:** Lower is better.
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2011-2012 and 2012-2013

### OBSTETRICAL CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Injury to Neonates</strong></td>
<td>1.2</td>
<td>18 of 19</td>
</tr>
<tr>
<td><strong>Obstetric Trauma:</strong> Delivery with Instrument</td>
<td>0.7</td>
<td>19.7</td>
</tr>
<tr>
<td>Number of eligible patients did not meet the threshold for this calculation</td>
<td>168.6</td>
<td>19.7</td>
</tr>
<tr>
<td><strong>Obstetric Trauma:</strong> Delivery without Instrument</td>
<td>5.1</td>
<td>18 of 19</td>
</tr>
</tbody>
</table>

Complications and adverse events during birth can harm both the mother and infant.

- **Population:** 42 Hospitals are included in this analysis.
- **Score:** Lower is better.
- **Source:** HDD; CHIA-calculated indicator, not risk adjusted.
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Emerson Hospital is a mid-size, non-profit community hospital located in the Northeastern Massachusetts region. Inpatient discharges declined 7.5% at the hospital between FY09 and FY13, compared with a median decrease of 7.9% in its peer cohort. Outpatient visits decreased 1.9% at the hospitals over that period, compared to the cohort’s median increase of 4.0%. From FY09 to FY13, it earned a profit each year except in FY10; it had a total margin of 0.6% in FY13, compared with its peer cohort’s median of 2.4%.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Decrease</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Discharges</td>
<td>10%</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>2%</td>
<td>1.5%</td>
<td>1%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>0.7%</td>
<td>1.2%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>Discharge by DRG</th>
<th>Percentage of Regional Discharges</th>
<th>Hospital 9,069</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs* (2,181)</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Alcohol Abuse &amp; Dependence (412)</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Opioid Abuse &amp; Dependence (232)</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Other Pneumonia (218)</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (198)</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Knee Joint Replacement (192)</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Maj Dep &amp; Oth/Unap Psychoses (191)</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis (186)</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Heart Failure (182)</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Bipolar Disorders (169)</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

- Commercial & Other: 56% vs. 37%
- State Programs: 6% vs. 13%
- Medicare and Other Federal Programs: 38% vs. 44%
- DSH Threshold: Not Applicable

For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: EMERSON HOSPITAL**

**Cohort: Community Hospital**

### Utilization Trends

- **Inpatient Discharges:**
  - FY13 Inpatient Discharges = 9,069
  - How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- **Outpatient Visits:**
  - FY13 Outpatient Visits = 94,624
  - How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

### Patient Revenue Trends

- **Net Inpatient Service Revenue per Case Mix Adjusted Discharge:**
  - FY13 Inpatient Revenue per CMAD = $10,352
  - How was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- **Total Outpatient Revenue:**
  - FY13 Outpatient Revenue = $117 M
  - How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

### Financial Performance

- **Revenue, Cost & Profit/Loss (in millions):**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$178</td>
<td>$179</td>
<td>($0)</td>
<td>$178</td>
<td>$0.5</td>
</tr>
<tr>
<td>2010</td>
<td>$184</td>
<td>$183</td>
<td>$1</td>
<td>$184</td>
<td>($0.6)</td>
</tr>
<tr>
<td>2011</td>
<td>$180</td>
<td>$179</td>
<td>$1</td>
<td>$177</td>
<td>$3.3</td>
</tr>
<tr>
<td>2012</td>
<td>$190</td>
<td>$189</td>
<td>$1</td>
<td>$185</td>
<td>$4.5</td>
</tr>
<tr>
<td>2013</td>
<td>$190</td>
<td>$190</td>
<td>($0)</td>
<td>$188</td>
<td>$1.1</td>
</tr>
</tbody>
</table>

- **Margins:**
  - Operating Margin: 1.6%
  - Total Margin: 0.6%

### Notes

- Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
- For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
- Costs were adjusted to exclude direct medical education costs and physician compensation.
- Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
- Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.78</td>
<td>0.82</td>
<td>0.82</td>
</tr>
<tr>
<td>2012</td>
<td>0.77</td>
<td>0.82</td>
<td>0.81</td>
</tr>
<tr>
<td>2011</td>
<td>0.81</td>
<td>0.84</td>
<td>0.75</td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

<table>
<thead>
<tr>
<th>Global Ratings</th>
<th>Communication</th>
<th>Care Coordination</th>
<th>Comfort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients gave hospital a rating of 9 or 10</td>
<td>Nurses always communicated well</td>
<td>Staff always explained medications</td>
<td>Always received help as soon as they wanted</td>
</tr>
<tr>
<td>Patients would definitely recommend the hospital</td>
<td>Doctors always communicated well</td>
<td>Recovery information was provided</td>
<td>Pain was always well controlled</td>
</tr>
<tr>
<td>National Average</td>
<td></td>
<td></td>
<td>Room and bathroom were always clean</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Room was always quiet at night</td>
</tr>
</tbody>
</table>

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

The HCAHPS survey measures patient perspectives on key aspects of their care.

Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: **EMERSON HOSPITAL**

**Cohort:** Community Hospital

---

**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

- **Percentage of Orders**
  - 0-24%
  - 25-49%
  - 50-74%
  - 75-100%

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>25-49%</td>
<td>14</td>
<td>3</td>
<td>18</td>
</tr>
</tbody>
</table>

**Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.

- **Population:** 18 of 19 cohort hospitals responded to this survey
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period**: 2012-2013

---

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.1%</td>
<td></td>
<td>16.3%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

**Scores:** Lower is better

**Source:** CMS Hospital Compare

**Data Period**: 2011-2012

---

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>0.0%</td>
<td>2.9%</td>
<td>5.0%</td>
</tr>
<tr>
<td>2012-2013</td>
<td>0.0%</td>
<td>2.5%</td>
<td></td>
</tr>
</tbody>
</table>

**Scores:** Lower is better

**Source:** The Leapfrog Group Hospital Survey

**Data Period**: 2011-2012 and 2012-2013

---

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Complications and adverse events during birth can harm both the mother and infant.**

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>0.9</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>32.3</td>
<td>168.6</td>
<td></td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>4.1</td>
<td>19.7</td>
<td></td>
</tr>
</tbody>
</table>

**Scores:** Lower is better

**Source:** HDD; CHIA-calculated indicator, not risk adjusted

**Data Period**: 2012-2013

---

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Hallmark Health System (HHS), which includes Lawrence Memorial Hospital and Melrose-Wakefield Hospital campuses, is a mid-size, non-profit community hospital system located in the Metro Boston region. Between FY09 and FY13, inpatient discharges decreased 24.0% at HHS, compared to a median decrease of 7.9% among cohort hospitals. Similarly, outpatient visits at HHS decreased by 14.3% from FY09 to FY13, compared with a median increase of 4.0% at peer cohort hospitals. It earned a surplus each year from FY09 to FY13, and had a 4.7% total margin in FY13, compared with a median total margin of 2.4% in FY13 among cohort hospitals.

AT A GLANCE

PUBLIC PAYER MIX: 61% (Non-DSH* Hospital)
SPECIAL PUBLIC FUNDING: CHART^ 
CY13 COMMERCIAL PAYER PRICE LEVEL: 49th Percentile 
ADJUSTED® COST PER DISCHARGE: $10,174 
INPATIENT:OUTPATIENT REVENUE in FY13: 28%;72% 
CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: HALLMARK HEALTH
Cohort: Community Hospital

**UTILIZATION TRENDS**

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Inpatient Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>109,200</td>
</tr>
<tr>
<td>2010</td>
<td>107,600</td>
</tr>
<tr>
<td>2011</td>
<td>105,900</td>
</tr>
<tr>
<td>2012</td>
<td>104,200</td>
</tr>
<tr>
<td>2013</td>
<td>102,500</td>
</tr>
</tbody>
</table>

FY13 Inpatient Discharges = 12,460

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Outpatient Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>75,300</td>
</tr>
<tr>
<td>2010</td>
<td>74,700</td>
</tr>
<tr>
<td>2011</td>
<td>74,100</td>
</tr>
<tr>
<td>2012</td>
<td>73,500</td>
</tr>
<tr>
<td>2013</td>
<td>72,900</td>
</tr>
</tbody>
</table>

FY13 Outpatient Visits = 533,892

**PATIENT REVENUE TRENDS**

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Inpatient Revenue per CMAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$8,700</td>
</tr>
<tr>
<td>2010</td>
<td>$8,100</td>
</tr>
<tr>
<td>2011</td>
<td>$7,500</td>
</tr>
<tr>
<td>2012</td>
<td>$7,000</td>
</tr>
<tr>
<td>2013</td>
<td>$6,500</td>
</tr>
</tbody>
</table>

FY13 Inpatient Revenue per CMAD = $10,364

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Outpatient Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$115 M</td>
</tr>
<tr>
<td>2010</td>
<td>$120 M</td>
</tr>
<tr>
<td>2011</td>
<td>$125 M</td>
</tr>
<tr>
<td>2012</td>
<td>$130 M</td>
</tr>
<tr>
<td>2013</td>
<td>$135 M</td>
</tr>
</tbody>
</table>

FY13 Outpatient Revenue = $147 M

**FINANCIAL PERFORMANCE**

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>Year</th>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2009</td>
<td>$283</td>
<td>$273</td>
<td>$4</td>
<td>$260</td>
<td>$17.2</td>
</tr>
<tr>
<td>2010</td>
<td>2010</td>
<td>$283</td>
<td>$278</td>
<td>$5</td>
<td>$263</td>
<td>$19.8</td>
</tr>
<tr>
<td>2011</td>
<td>2011</td>
<td>$286</td>
<td>$278</td>
<td>$5</td>
<td>$267</td>
<td>$20.1</td>
</tr>
<tr>
<td>2012</td>
<td>2012</td>
<td>$296</td>
<td>$283</td>
<td>$4</td>
<td>$274</td>
<td>$22.5</td>
</tr>
<tr>
<td>2013</td>
<td>2013</td>
<td>$272</td>
<td>$264</td>
<td>$8</td>
<td>$259</td>
<td>$12.8</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>Year</th>
<th>FY</th>
<th>Operating Margin</th>
<th>Total Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2009</td>
<td>1.6%</td>
<td>4.8%</td>
</tr>
<tr>
<td>2010</td>
<td>2010</td>
<td>2.2%</td>
<td>6.2%</td>
</tr>
<tr>
<td>2011</td>
<td>2011</td>
<td>1.8%</td>
<td>4.7%</td>
</tr>
<tr>
<td>2012</td>
<td>2012</td>
<td>1.6%</td>
<td>2.4%</td>
</tr>
<tr>
<td>2013</td>
<td>2013</td>
<td>2.4%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRGs.
* Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures. Population: All patients. Score: Lower is better. Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted. Data Period*: 10/1-9/30.

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?


For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: HALLMARK HEALTH**

**Cohort:** Community Hospital

---

### CARE PRACTICES

**What percentage of medication orders were entered by a physician using an electronic system that included error checking?**

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of Cohort Hospitals in this Category of CPOE Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
</tr>
<tr>
<td>25-49%</td>
<td>3</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
</tr>
</tbody>
</table>

**Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.**

- **Population:** 18 of 19 cohort hospitals responded to this survey.
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period**: 2012-2013

---

### READMISSIONS

**What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days?**

- **Hospital:** 16.6%
- **Peer Cohort:** 16.3%
- **National Average:** 16.0%

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period**: 2011-2012

---

### OBSTETRIC CARE

**What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation?**

- **2012 - 2013**
  - **Hospital:** 0.0%
  - **Peer Cohort:** 0.0%
  - **National Median:** 2.5%

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

- **Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
- **Score:** Lower is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period**: 2011-2012 and 2012-2013

---

**What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation?**

- **2011 - 2012**
  - **Hospital:** 0.0%
  - **Peer Cohort:** 2.9%
  - **National Median:** 5.0%

---

### OBSTETRIC CARE COMPLICATIONS

**Out of every 1,000 births, how many patients experienced an adverse event?**

- **Injury to Neonates**
  - **Hospital:** 2.1%
  - **Peer Cohort:** 0.7%

- **Obstetric Trauma: Delivery without Instrument**
  - **Hospital:** 30.8%
  - **Peer Cohort:** 19.7%
  - **Number of Eligible Patients Did Not Meet the Threshold for this Calculation:** 168.6

**Complications and adverse events during birth can harm both the mother and infant.**

- **Population:** 42 hospitals are included in this analysis
- **Score:** Lower is better
- **Source:** HDD; CHIA-calculated indicator, not risk adjusted
- **Data Period**: 2012-2013

---

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

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http://chiamass.gov/hospital-profiles

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January 2015
Lowell General Hospital is a non-profit community hospital located in the Northeastern Massachusetts region. It is among the larger acute hospitals in Massachusetts, and is owned by Circle Health. Lowell General merged with Saints Medical Center in 2012. All of the information in this FY13 hospital profile includes the Saints Medical Center data that was reported for FY13. Lowell General Hospital was profitable each year from FY09 to FY13, with a total margin of 5.7% in FY13, compared to a median total margin of 2.4% in its peer cohort.

GROWTH MEASURES
What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Revenue per CMAD</td>
<td>-9.2%</td>
<td>-0.5%</td>
<td>1 hospital &gt;20%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.5%</td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-4.3%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-7.5%</td>
<td>1.5%</td>
<td></td>
</tr>
</tbody>
</table>

SERVICES
What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

Discharges by DRG
- Delivery DRGs* (4,265) 19% of regional discharges were treated at this hospital in FY13
- Heart Failure (764) 17%
- Sepsis & Dissem Inf (727) 19%
- Other Pneumonia (668) 15%
- COPD (642) 16%
- Knee Joint Replacement (506) 19%
- Renal Failure (464) 20%
- Cellulitis, Oth Bact Skin Inf (457) 16%
- Procedures for Obesity (427) 43%
- Card Arrth & Cond Dis (424) 14%

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

Discharges by Community
- Lowell MA (11,394) 77% of community discharges were treated at this hospital
- Dracut MA (2,668) 73% in FY13
- Chelmsford MA (1,649) 58%
- Tewksbury MA (1,536) 42%
- North Chelmsford MA (766) 66%
- Tyngsboro MA (655) 63%
- Billerica MA (623) 18%
- Westford MA (433) 26%
- North Billerica MA (424) 36%
- Pelham NH (381) 46%

PAYER MIX
What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital</th>
<th>Average Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>41%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Payer Name</th>
<th>Median RP Percentile</th>
<th>Cohort RP Percentile</th>
<th>Hospital RP Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Cross Blue Shield of Massachusetts</td>
<td>49.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvard Pilgrim Health Care</td>
<td>21.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tufts Health Plan</td>
<td>14.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2013 Hospital Profile: LOWELL GENERAL HOSPITAL

Cohort: Community Hospital

### Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$215</td>
<td>$217</td>
<td>($2)</td>
<td>$211</td>
<td>$3.5</td>
</tr>
<tr>
<td>2010</td>
<td>$238</td>
<td>$236</td>
<td>$2</td>
<td>$226</td>
<td>$11.6</td>
</tr>
<tr>
<td>2011</td>
<td>$258</td>
<td>$255</td>
<td>$3</td>
<td>$244</td>
<td>$13.6</td>
</tr>
<tr>
<td>2012</td>
<td>$333</td>
<td>$317</td>
<td>$16</td>
<td>$304</td>
<td>$28.7</td>
</tr>
<tr>
<td>2013</td>
<td>$427</td>
<td>$405</td>
<td>$22</td>
<td>$402</td>
<td>$24.3</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.

January 2015
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: **LOWELL GENERAL HOSPITAL**

**Cohort:** Community Hospital

## CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
</tr>
<tr>
<td>25-49%</td>
<td>3</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
</tr>
</tbody>
</table>

**Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.**

- **Population:** 18 of 19 cohort hospitals responded to this survey
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey®
- **Data Period**: 2012-2013

## READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **LOWELL GENERAL HOSPITAL**
  - **2013 Hospital Profile:** LOWELL GENERAL HOSPITAL
  - **WHAT PERCENTAGE OF MEDICARE PATIENTS WHO WERE DISCHARGED FROM THIS HOSPITAL WERE READMITTED TO ANY HOSPITAL WITHIN 30 DAYS?**
  - **How does this compare to the median hospital in its peer cohort, and the national average?**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days?</td>
<td>17.9%</td>
<td>16.3%</td>
<td>16.0%</td>
</tr>
<tr>
<td>How does this compare to the median hospital in its peer cohort, and the national average?</td>
<td>Lower is better</td>
<td>Lower is better</td>
<td>Lower is better</td>
</tr>
</tbody>
</table>

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period**: 2011-2012

## OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Metric</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation?</td>
<td>3.8%</td>
<td>0.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>How does this compare to the median hospital in its peer cohort, and the national median?</td>
<td>Lower is better</td>
<td>Lower is better</td>
<td>Lower is better</td>
</tr>
</tbody>
</table>

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

- **Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
- **Score:** Lower is better
- **Source:** The Leapfrog Group Hospital Survey®
- **Data Period**: 2011-2012 and 2012-2013

## OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Metric</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>2.8</td>
<td>0.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>230.8</td>
<td>168.6</td>
<td>19.7</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>25.0</td>
<td>19.7</td>
<td></td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
MetroWest Medical Center is a for-profit community hospital located in the Metro West region. It is among the larger acute hospitals in Massachusetts. Along with Saint Vincent Hospital, MetroWest Medical Center was bought by Tenet Healthcare Corporation in 2013. Between FY09 and FY13, MetroWest Medical Center’s inpatient discharges decreased by 17.4%, compared with a median decrease of 7.9% among cohort hospitals. Outpatient visits increased by 12.8% during that period, compared with a median increase of 4.0% in its peer cohort. MetroWest operated at a loss each year from FY09 to FY13, and had a total margin of -0.5% in FY13, compared with a median total margin of 2.4% in its cohort.

**2013 Hospital Profile:**

**METROWEST MEDICAL CENTER**

AT A GLANCE

- **TOTAL Staffed Beds:** 284, among the larger acute hospitals
- **% Occupancy:** 53%, < cohort avg. (62%)
- **Case Mix Index in FY13:** 0.92, < cohort avg. (0.79); > statewide (0.89)
- **Inpatient Discharges in FY13:** 12,853
- **Trauma Center Designation:** Not Applicable
- **Emergency Dept Visits in FY13:** 61,747

PUBLIC PAYER MIX: 58% (Non-DSH* Hospital)

SPECIAL PUBLIC FUNDING: Not Applicable

**Cy13 Commercial Payer Price Level:** 44th Percentile

Adjusted® Cost Per Discharge: $9,482

**Inpatient:Outpatient Revenue in FY13:** 32.68%

**Change in Ownership (FY09-FY13):** Tenet Healthcare - 2013

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- Inpatient Net Revenue per CMAD: Decrease -6.8%, Increase 1.0%
- Inpatient Discharges: Decrease -5.7%, Increase 0.5%
- Outpatient Revenue: Decrease -4.3%, Increase 1.5%
- Outpatient Visits: Decrease -3.5%, Increase 4.4%

SERVICES

- What were the most common inpatient cases (DRGs) treated at the hospital?
- What proportion of the region's cases did this hospital treat for each service?

Discharges by DRG

- Delivery DRGs (1,691)
- Bipolar Disorders (709)
- Major Dep & Oth Limp Psychoses (458)
- Sepsis & Dissem Inf (457)
- Heart Failure (416)
- Other Pneumonia (325)
- Card Arth & Cond Dis (314)
- Renal Failure (287)
- COPD (241)
- Pulm Edema & Resp Failure (227)

- 30% of regional discharges were treated at this hospital in FY13
- 45%
- 29%
- 36%
- 36%
- 36%
- 36%
- 36%
- 36%
- 36%
- 36%

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

- Discharges by Community

- Framingham MA (5,004)
- Natick MA (1,549)
- Ashland MA (843)
- Marlborough MA (551)
- Holliston MA (480)
- Hopkinton MA (315)
- Wayland MA (263)
- Sudbury MA (257)
- Medway MA (234)
- Westborough MA (212)

- 60% of community discharges were treated at this hospital in FY13
- 44%
- 50%
- 13%
- 13%
- 13%
- 13%
- 13%
- 13%
- 13%

PAYER MIX

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

- Hospital: 42% Commercial & Other, 16% State Programs, 42% Medicare and Other Federal Programs
- Average Hospital*: 37% Commercial & Other, 13% State Programs, 44% Medicare and Other Federal Programs

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

- Blue Cross Blue Shield of Massachusetts: 46.4%
- Harvard Pilgrim Health Care: 25.8%
- Tufts Health Plan: 12.5%

- Percentage calculations may not sum to 100% due to rounding

For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: METROWEST MEDICAL CENTER**

**Cohort:** Community Hospital

### UTILIZATION TRENDS

- How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

### PATIENT REVENUE TRENDS

- What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

### FINANCIAL PERFORMANCE

- How have the hospital's total revenue and costs changed between FY09 and FY13?

- What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

### Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$248</td>
<td>$247</td>
<td>$0</td>
<td>$257</td>
<td>($9.6)</td>
</tr>
<tr>
<td>2010</td>
<td>$258</td>
<td>$258</td>
<td>$0</td>
<td>$269</td>
<td>($10.6)</td>
</tr>
<tr>
<td>2011</td>
<td>$256</td>
<td>$256</td>
<td>$0</td>
<td>$268</td>
<td>($11.4)</td>
</tr>
<tr>
<td>2012</td>
<td>$259</td>
<td>$259</td>
<td>$0</td>
<td>$266</td>
<td>($6.3)</td>
</tr>
<tr>
<td>2013</td>
<td>$256</td>
<td>$256</td>
<td>$0</td>
<td>$257</td>
<td>($1.4)</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

1. Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
2. Costs were adjusted to exclude direct medical education costs and physician compensation.
3. Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
4. Average Hospital does not include Specialty hospitals.

January 2015
2013 Hospital Profile: METROWEST MEDICAL CENTER
Cohort: Community Hospital

QUALITY OVERVIEW
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY
How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

PATIENT EXPERIENCE
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

![Percentage of Orders](image)

Number of cohort hospitals in this category of CPOE usage

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

![Readmissions](image)

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

![Obstetric Care](image)

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

![Obstetric Care Complications](image)

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile:
MILFORD REGIONAL MEDICAL CENTER

Milford Regional Medical Center is a mid-size, non-profit community hospital located in the Metro West region. Inpatient discharges decreased 3.2% at Milford Regional Hospital from FY09 to FY13, compared with a median 7.9% decrease among peer cohort hospitals. Outpatient visits decreased 39.9% at the hospital from FY09 to FY13, compared with a median increase of 4.0% at cohort hospitals. Milford Regional Hospital earned a profit each year in the five-year period, with a total margin of 4.8% in FY13, higher than the median of its peer cohort of 2.4%.

AT A GLANCE

TOTAL STAFFED BEDS: 136, mid-size acute hospital
% OCCUPANCY: 63%, > cohort avg. (62%)
CASE MIX INDEX in FY13: 0.77, < cohort avg. (0.79); < statewide (0.89)
INPATIENT DISCHARGES in FY13: 8,673
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: 55,289

PUBLIC PAYER MIX: 51% (Non-DSH* Hospital)
SPECIAL PUBLIC FUNDING: CHART³, ICB⁶
CY13 COMMERCIAL PAYER PRICE LEVEL: 46th Percentile
ADJUSTED‡ COST PER DISCHARGE: $9,097
INPATIENT:OUTPATIENT REVENUE in FY13: 27.73%
CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- Inpatient Net Revenue per CMAD
- Inpatient Discharges
- Outpatient Revenue
- Outpatient Visits

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

Discharges by DRG

Delivery DRGs (1,686)
Other Pneumonia (229)
COPD (317)
Heart Failure (302)
Card Arth & Cond Dis (238)
Kidney & UT Infections (202)
Sepsis & Dissem Inf (183)
Syncope & Collapse (134)
Maj Resp Infect & Inflam (131)
Knee Joint Replacement (124)

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

Discharges by Community

Milford MA (1,998) 60%
Franklin MA (925) 34%
Bellingham MA (713) 47%
Uxbridge MA (672) 55%
Whitinsville MA (399) 47%
Hopedale MA (368) 64%
Blackstone MA (358) 56%
Medway MA (349) 31%
Northbridge MA (295) 45%
Mendon MA (265) 53%

PAYER MIX

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Commercial &amp; Other</th>
<th>State Programs</th>
<th>Medicare &amp; Other Federal Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>49%</td>
<td>12%</td>
<td>38%</td>
<td></td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 8,673

-3.2%

-7.9%

2009 2010 2011 2012 2013

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 109,689

+4.0%

-39.9%

2009 2010 2011 2012 2013

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $8,547

Full Cost per CMAD = $9,265

2009 2010 2011 2012 2013

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $124 M

+1.2%

-9.0%

2009 2010 2011 2012 2013

How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$187</td>
<td>$187</td>
<td>$0</td>
<td>$178</td>
<td>$9.6</td>
</tr>
<tr>
<td>2010</td>
<td>$190</td>
<td>$189</td>
<td>$1</td>
<td>$183</td>
<td>$6.2</td>
</tr>
<tr>
<td>2011</td>
<td>$195</td>
<td>$195</td>
<td>$0</td>
<td>$184</td>
<td>$11.6</td>
</tr>
<tr>
<td>2012</td>
<td>$198</td>
<td>$196</td>
<td>$2</td>
<td>$181</td>
<td>$17.2</td>
</tr>
<tr>
<td>2013</td>
<td>$185</td>
<td>$183</td>
<td>$1</td>
<td>$176</td>
<td>$8.8</td>
</tr>
</tbody>
</table>

What were the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>FY</th>
<th>Operating Margin</th>
<th>Total Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2.2%</td>
<td>4.9%</td>
</tr>
<tr>
<td>2010</td>
<td>1.6%</td>
<td>4.0%</td>
</tr>
<tr>
<td>2011</td>
<td>1.6%</td>
<td>4.8%</td>
</tr>
<tr>
<td>2012</td>
<td>2.4%</td>
<td>1.6%</td>
</tr>
<tr>
<td>2013</td>
<td>-10%</td>
<td>-10%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Patient Experience**

The HCAHPS survey measures patient perspectives on key aspects of their care.

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

<table>
<thead>
<tr>
<th>Global Ratings</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients gave hospital a rating of 9 or 10</td>
<td>Nurses always communicated well</td>
</tr>
<tr>
<td>Patients would definitely recommend the hospital</td>
<td>Doctors always communicated well</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Care Coordination</th>
<th>Comfort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff always explained medications</td>
<td>Always received help as soon as they wanted</td>
</tr>
<tr>
<td>Recovery information was provided</td>
<td>Pain was always well controlled</td>
</tr>
<tr>
<td>Room and bathroom were always clean</td>
<td>Room was always quiet at night</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
</tr>
<tr>
<td>25-49%</td>
<td>3</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
</tr>
</tbody>
</table>

**Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.

Population: 18 of 19 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey*
Data Period*: 2012-2013

---

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Hospital Profile</td>
<td>MILFORD REGIONAL MEDICAL CENTER</td>
<td><strong>18.3%</strong></td>
</tr>
</tbody>
</table>

Lower is better

**Hospital-Wide All-Cause 30-Day Readmissions** follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

---

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation** are associated with higher risks for newborns.

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey*
Data Period*: 2011-2012 and 2012-2013

---

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Injury to Neonates</th>
<th>Obstetric Trauma: Delivery with Instrument</th>
<th>Obstetric Trauma: Delivery without Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4</td>
<td>187.5</td>
<td>27.8</td>
</tr>
<tr>
<td>0.7</td>
<td>168.6</td>
<td>19.7</td>
</tr>
</tbody>
</table>

Lower is better

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

---

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Nantucket Cottage Hospital is a non-profit community hospital located in the Cape and Islands region. Nantucket Cottage is the second smallest hospital in Massachusetts, with 19 staffed beds. It is a member of Partners HealthCare System. Outpatient visits decreased 37.8% from FY09 to FY13, compared to a median increase of 4.0% among cohort hospitals. While Nantucket Cottage Hospital reported a loss from FY09 to FY11, it earned a profit in FY12 and FY13, with a total margin of 1.4% in FY13. The median total margin in its peer cohort in FY13 was 2.4%.

**2013 Hospital Profile:**

**NANTUCKET COTTAGE HOSPITAL**

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-7.0%</td>
<td></td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td></td>
<td>-0.5%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td></td>
<td>8.0%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>Service</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs† (244)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation (68)</td>
<td>9%</td>
<td>94%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>51%</td>
</tr>
<tr>
<td>State Programs</td>
<td>17%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>32%</td>
</tr>
</tbody>
</table>

**PUBLIC MIX:** 49% (Non-DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** Not Applicable

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 91st Percentile

**ADJUSTED² COST PER DISCHARGE:** $21,902

**INPATIENT:OUTPATIENT REVENUE in FY13:** 10%:90%

**CHANGE IN OWNERSHIP (FY09-FY13):** Not Applicable

For descriptions of the metrics, please see Technical Appendix.
**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$33</td>
<td>$32</td>
<td>$1</td>
<td>$38</td>
<td>($5.0)</td>
</tr>
<tr>
<td>2010</td>
<td>$30</td>
<td>$27</td>
<td>$2</td>
<td>$36</td>
<td>($6.7)</td>
</tr>
<tr>
<td>2011</td>
<td>$27</td>
<td>$26</td>
<td>$1</td>
<td>$32</td>
<td>($5.4)</td>
</tr>
<tr>
<td>2012</td>
<td>$37</td>
<td>$33</td>
<td>$3</td>
<td>$33</td>
<td>$3.2</td>
</tr>
<tr>
<td>2013</td>
<td>$35</td>
<td>$32</td>
<td>$3</td>
<td>$35</td>
<td>$0.5</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures. Population: All patients Score: Lower is better Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted Data Period*: 10/1-9/30

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

*For descriptions of the metrics, please see Technical Appendix.*
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

**Percentage of Orders**

<table>
<thead>
<tr>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

number of cohort hospitals in this category of CPOE usage

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

- **Population:** 18 of 19 cohort hospitals responded to this survey
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey^4
- **Data Period:** 2012-2013

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Readmission Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital</strong></td>
</tr>
<tr>
<td>15.5%</td>
</tr>
</tbody>
</table>

Lower is better

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period:** 2011-2012

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Induction Rate 2012-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital</strong></td>
</tr>
<tr>
<td>0.0%</td>
</tr>
</tbody>
</table>

Lower is better

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

- **Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
- **Score:** Lower is better
- **Source:** The Leapfrog Group Hospital Survey^4
- **Data Period:** 2011-2012 and 2012-2013

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Adverse Event</th>
<th><strong>Hospital</strong></th>
<th><strong>Peer Cohort</strong></th>
<th><strong>National Median</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>0.0</td>
<td>0.7</td>
<td>18.6</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>22.7</td>
<td>19.7</td>
<td>168.6</td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lower is better

Complications and adverse events during birth can harm both the mother and infant.

- **Population:** 42 hospitals are included in this analysis
- **Score:** Lower is better
- **Source:** HDD; CHIA-calculated indicator, not risk adjusted
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.

- **Data Periods** vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.
- **Hospital** did not submit an assessment of the CPOE system’s error-checking capabilities.
- **Measures** from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Nashoba Valley Medical Center is a small, for-profit community hospital located in the Northeastern Massachusetts region. It is a member of Steward Health Care System. Inpatient discharges at the hospital increased 2.2% from FY09 to FY13, compared to a median decrease of 7.9% among peer cohort hospitals. Nashoba Valley Medical Center had 62.8% fewer outpatient visits in FY13 than in FY09, compared to a median increase of 4.0% in its peer cohort. The hospital earned a profit in FY09 and FY13 during the five-year period, with a 0.3% total margin in FY13, lower than the median performance of cohort hospitals of 2.4%.

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- Inpatient Net Revenue per CMAD
- Inpatient Discharges
- Outpatient Revenue
- Outpatient Visits

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

Percentage calculations may not sum to 100% due to rounding.

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 1,829

+2.2%

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 45,507

+4.0%

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $8,430

Full Cost per CMAD = $7,764

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$45</td>
<td>$45</td>
<td>$0</td>
<td>$44</td>
<td>$0.6</td>
</tr>
<tr>
<td>2010</td>
<td>$45</td>
<td>$45</td>
<td>$0</td>
<td>$46</td>
<td>$(0.8)</td>
</tr>
<tr>
<td>2011</td>
<td>$17</td>
<td>$17</td>
<td>$0</td>
<td>$17</td>
<td>$(0.2)</td>
</tr>
<tr>
<td>2012</td>
<td>$44</td>
<td>$44</td>
<td>$0</td>
<td>$46</td>
<td>$(1.6)</td>
</tr>
<tr>
<td>2013</td>
<td>$40</td>
<td>$40</td>
<td>$0</td>
<td>$40</td>
<td>$0.1</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

### PATIENT EXPERIENCE

<table>
<thead>
<tr>
<th>Global Ratings</th>
<th>Communication</th>
<th>Comfort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients gave hospital a rating of 9 or 10</td>
<td>Nurses always communicated well</td>
<td>Always received help as soon as they wanted</td>
</tr>
<tr>
<td>Patients would definitely recommend the hospital</td>
<td>Doctors always communicated well</td>
<td>Pain was always well controlled</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Room and bathroom were always clean</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Room was always quiet at night</td>
</tr>
</tbody>
</table>

**Global Ratings**
- Staff always explained medications
- Recovery information was provided

**Communication**
- National Average

**Comfort**
- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

The HCAHPS survey measures patient perspectives on key aspects of their care.

Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>1</td>
<td>3</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital**: 15.6%
- **Peer Cohort**: 16.3%
- **National Average**: 16.0%

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

What percentage of obstetric care complications were Injury to Neonates? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Newton-Wellesley Hospital is a non-profit community hospital located in the Metro Boston region. It is among the larger acute hospitals in Massachusetts and a member of Partners HealthCare System. Inpatient discharges at Newton-Wellesley increased 6.1% from FY09 to FY13, compared to a median decrease of 7.9% in its peer cohort. Newton-Wellesley's outpatient visits increased 14.3% between FY09 and FY13, higher than the median increase of 4.0% among cohort hospitals.

Newton-Wellesley was profitable each year in the five-year period, with its operating and total margins higher than the median performance in its peer cohort.

### What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>Decrease</td>
<td>-0.5%</td>
<td>Increase 0.7%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>Decrease</td>
<td>-4.0%</td>
<td>Increase -1.5%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>Decrease</td>
<td>-4.3%</td>
<td>Increase -3.0%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>Decrease</td>
<td>-4.0%</td>
<td>Increase 1.5%</td>
</tr>
</tbody>
</table>

### Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

- Discharges by Community:
  - Waltham MA (2,523) 40%
  - Framingham MA (874) 11%
  - Natick MA (804) 23%
  - Wellesley Hills MA (554) 48%
  - West Newton MA (502) 45%
  - Newton MA (429) 32%
  - Weston MA (427) 47%
  - Watertown MA (426) 12%
  - Needham MA (406) 22%
  - Newton Center MA (404) 30%

### What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

- Hospital:
  - Commercial & Other: 62%
  - State Programs: 7%
  - Medicare and Other Federal Programs: 31%

- Average Hospital:
  - Commercial & Other: 37%

- DSH Threshold: 19%

- Medicare and Other Federal Programs: 44%

### What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

- Blue Cross Blue Shield of Massachusetts:
  - 48.0% of Hospital’s Commercial Payments

- Harvard Pilgrim Health Care:
  - 23.6%

- Tufts Health Plan:
  - 13.3%

### For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 19,524

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 127,064

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $12,902  
Full Cost per CMAD = $12,345

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $215 M

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

| Revenue, Cost & Profit/Loss (in millions) |
|------------------|------------------|------------------|------------------|------------------|
| FY    | Total Revenue | Operating Revenue | Non-Operating Revenue | Total Costs | Total Profit/Loss |
| 2009  | $360         | $360              | $0                   | $346        | $14.1            |
| 2010  | $385         | $384              | $0                   | $365        | $19.3            |
| 2011  | $397         | $398              | ($1)                | $377        | $19.6            |
| 2012  | $429         | $426              | $4                   | $398        | $31.2            |
| 2013  | $417         | $416              | $1                   | $398        | $18.8            |

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the **PSI-90 Composite**, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The **PSI-90** is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

**2013 Statewide Average = 0.74**

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The **HCAHPS survey** measures patient perspectives on key aspects of their care.

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
</tr>
<tr>
<td>25-49%</td>
<td>1</td>
</tr>
<tr>
<td>50-74%</td>
<td>3</td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
</tr>
</tbody>
</table>

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital**: 15.8%
- **Peer Cohort**: 16.3%
- **National Average**: 16.0%

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2011 - 2012**: 0.2%
- **2012 - 2013**: 0.1%

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**: 0.2%
- **Obstetric Trauma: Delivery with Instrument**: 168.6
- **Obstetric Trauma: Delivery without Instrument**: 28.5

For descriptions of the metrics, please see Technical Appendix.

- * Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.
- ^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile: 
NORTHEAST HOSPITAL

Northeast Hospital, which includes Addison Gilbert Hospital and Beverly Hospital campuses, is a non-profit community hospital located in the Northeastern Massachusetts region. It is among the larger acute hospitals in Massachusetts. Northeast Hospital and Lahey Clinic formed Lahey Health System in 2012, which then joined with Winchester Hospital in 2014. Northeast Hospital earned a profit each year from FY09 to FY13, with a total margin of 5.8%, higher than the 2.4% median total margin among cohort hospitals.

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-0.5%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-12.0%</td>
<td>-4.3%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>1.5%</td>
<td>9.6%</td>
</tr>
</tbody>
</table>

Where did most of the hospital’s inpatients reside? What proportion of each community’s total discharges were attributed to this hospital?

- Beverly MA (3,997) = 15% of total regional discharges were treated at this hospital
- Gloucester MA (3,163)
- Danvers MA (2,090)
- Peabody MA (1,759)
- Lynn MA (1,447)
- Salem MA (1,041)
- Ipswich MA (826)
- Rockport MA (582)
- Middleton MA (408)
- South Hamilton MA (386)

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

- Delivery DRGs* (4,075) = 18% of regional discharges were treated at this hospital in FY13
- Bipolar Disorders (1,324) = 43%
- Other Pneumonia (657) = 15%
- COPO (618) = 16%
- Maj Dep& Oth Unip Psychoses (566) = 26%
- Schizophrenia (491) = 45%
- Card Arth & Cond Dis (481) = 15%
- Heart Failure (476) = 11%
- Alcohol Abuse & Dependence (464) = 33%
- Cellulitis, Oth Bact Skn Inf (447) = 15%

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>40%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>44%</td>
<td>44%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How have the hospital's total revenue and costs changed between FY09 and FY13?

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.60</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>0.82</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0.81</td>
<td>0.87</td>
<td></td>
</tr>
</tbody>
</table>

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- **Patients gave hospital a rating of 9 or 10:**
  - Hospital: 60%
  - Peer Cohort: 0%
  - National Average: 80%
- **Patients would definitely recommend the hospital:**
  - Hospital: 60%
  - Peer Cohort: 0%
  - National Average: 80%

**Communication**

- **Nurses always communicated well:**
  - Hospital: 80%
  - Peer Cohort: 60%
  - National Average: 80%
- **Doctors always communicated well:**
  - Hospital: 80%
  - Peer Cohort: 60%
  - National Average: 80%

**Care Coordination**

- **Staff always explained medications:**
  - Hospital: 60%
  - Peer Cohort: 40%
  - National Average: 80%
- **Recovery information was provided:**
  - Hospital: 60%
  - Peer Cohort: 40%
  - National Average: 80%

**Comfort**

- **Always received help as soon as they wanted:**
  - Hospital: 80%
  - Peer Cohort: 60%
  - National Average: 80%
- **Pain was always well controlled:**
  - Hospital: 80%
  - Peer Cohort: 60%
  - National Average: 80%
- **Room and bathroom were always clean:**
  - Hospital: 80%
  - Peer Cohort: 60%
  - National Average: 80%
- **Room was always quiet at night:**
  - Hospital: 80%
  - Peer Cohort: 60%
  - National Average: 80%

For descriptions of the metrics, please see Technical Appendix.
### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>1</td>
</tr>
<tr>
<td>25-49%</td>
<td>3</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>14</td>
</tr>
</tbody>
</table>

#### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **2011 - 2012**
  - **Hospital:** NORTHEAST HOSPITAL
  - **Peer Cohort:** 16.1%
  - **National Average:** 16.0%

- **2012 - 2013**
  - **Hospital:** NORTHEAST HOSPITAL
  - **Peer Cohort:** 16.3%
  - **National Average:** 16.0%

#### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2011 - 2012**
  - **Hospital:** NORTHEAST HOSPITAL
  - **Peer Cohort:** 2.9%
  - **National Median:** 5.0%

- **2012 - 2013**
  - **Hospital:** NORTHEAST HOSPITAL
  - **Peer Cohort:** 0.0%
  - **National Median:** 2.5%

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Injury to Neonates</th>
<th>Obstetric Trauma: Delivery with Instrument</th>
<th>Obstetric Trauma: Delivery without Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.5</td>
<td>169.8</td>
</tr>
<tr>
<td>Peer Cohort</td>
<td>0.7</td>
<td>168.6</td>
</tr>
<tr>
<td>Lower is better</td>
<td></td>
<td>19.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peer Cohort</td>
</tr>
</tbody>
</table>

*For descriptions of the metrics, please see Technical Appendix.*

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
South Shore Hospital is a large, non-profit community hospital located in the Metro South region. Inpatient discharges decreased 3.7% at South Shore Hospital from FY09 to FY13, compared to a median decrease of 7.9% in its peer cohort. Outpatient visits increased at the hospital by 13.0% in that period, compared to a median 4.0% increase among peer cohort hospitals. South Shore Hospital was profitable from FY10 to FY13, with a total margin of 4.5% in FY13, higher than the median of its cohort of 2.4%.

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

- Inpatient Net Revenue per CMAD: Decrease 3.5% vs. hospital >20%
- Inpatient Discharges: Decrease 3.5% vs. hospital >20%
- Outpatient Revenue: Decrease 4.3% vs. hospital <20%
- Outpatient Visits: Increase 1.5% vs. hospital <20%
- Commercial Payer Price Level: Adjusted Cost Per Discharge: 5.0% vs. hospital >20%
- DSH Threshold: Hospital >20%
- Public Payer Mix: 56% (Non-DSH* Hospital)
- Special Public Funding: Not Applicable
- CY13 Commercial Payer Price Level: 69th Percentile
- Inpatient:Outpatient Revenue in FY13: 45%:55%
- Change in Ownership (FY09-FY13): Not Applicable

Where did most of the hospital’s inpatients reside? What proportion of each community’s total discharges were attributed to this hospital?

<table>
<thead>
<tr>
<th>Community</th>
<th>Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braintree MA (2,149)</td>
<td>45% of community discharges were treated at this hospital in FY13</td>
</tr>
<tr>
<td>Quincy MA (1,599)</td>
<td>45% of community discharges were treated at this hospital in FY13</td>
</tr>
<tr>
<td>Hingham MA (1,434)</td>
<td>59%</td>
</tr>
<tr>
<td>Rockland MA (1,364)</td>
<td>55%</td>
</tr>
<tr>
<td>South Weymouth MA (1,353)</td>
<td>65%</td>
</tr>
<tr>
<td>East Weymouth MA (1,321)</td>
<td>61%</td>
</tr>
<tr>
<td>Marshfield MA (1,234)</td>
<td>51%</td>
</tr>
<tr>
<td>Weymouth MA (1,230)</td>
<td>53%</td>
</tr>
<tr>
<td>Scituate MA (1,088)</td>
<td>60%</td>
</tr>
<tr>
<td>Abington MA (848)</td>
<td>41%</td>
</tr>
<tr>
<td>Total (24,955)</td>
<td>33% of total regional discharges</td>
</tr>
</tbody>
</table>

What were the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital</th>
<th>Average Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>44%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>13%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>43%</td>
<td>44%</td>
</tr>
</tbody>
</table>

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

- Blue Cross Blue Shield of Massachusetts: 41.4% of hospital’s Commercial Payments
- Harvard Pilgrim Health Care: 35.4%
- Tufts Health Plan: 11.1%

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$385</td>
<td>$402</td>
<td>($17)</td>
<td>$391</td>
<td>($5.5)</td>
</tr>
<tr>
<td>2010</td>
<td>$421</td>
<td>$421</td>
<td>$0</td>
<td>$411</td>
<td>$9.6</td>
</tr>
<tr>
<td>2011</td>
<td>$436</td>
<td>$436</td>
<td>$(0)</td>
<td>$427</td>
<td>$9.1</td>
</tr>
<tr>
<td>2012</td>
<td>$455</td>
<td>$459</td>
<td>$(4)</td>
<td>$451</td>
<td>$4.2</td>
</tr>
<tr>
<td>2013</td>
<td>$479</td>
<td>$472</td>
<td>$7</td>
<td>$457</td>
<td>$21.7</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.
2013 Hospital Profile: SOUTH SHORE HOSPITAL
Cohort: Community Hospital

QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>1</td>
<td>3</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 18 of 19 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2012-2013

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Percentage of Readmissions</th>
<th>16.5%</th>
<th>16.3% Peer Cohort</th>
<th>16.0% National Average</th>
</tr>
</thead>
</table>

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Percentage of Clinically Unnecessary Inductions</th>
<th>0.0%</th>
<th>0.0% Peer Cohort</th>
<th>2.5% National Median</th>
</tr>
</thead>
</table>

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2011-2012 and 2012-2013

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Adverse Event</th>
<th>Injury to Neonates</th>
<th>Obstetric Trauma: Delivery with Instrument</th>
<th>Obstetric Trauma: Delivery without Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>1.2</td>
<td>126.3</td>
<td>14.8</td>
</tr>
<tr>
<td>Source</td>
<td>0.7 Peer Cohort</td>
<td>168.6 Peer Cohort</td>
<td>19.7 Peer Cohort</td>
</tr>
</tbody>
</table>

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Steward Norwood Hospital is a mid-size, for-profit community hospital located in the Metro West region. Norwood Hospital is a member of Steward Health Care System. The hospital had 8.3% fewer inpatient discharges in FY13 than in FY09, similar to the median trend among peer hospitals. It had 20.7% more outpatient visits in FY13 than in FY09, compared with a median increase of 4.0% among peer cohort hospitals. Norwood Hospital was profitable three of the five years in the FY09 to FY13 period, with a 0.1% total margin in FY13, lower than the median performance of its cohort of 2.4%.

**AT A GLANCE**

**TOTAL STAFFED BEDS:** 176, mid-size acute hospital  
**% OCCUPANCY:** 85%, > cohort avg. (62%)  
**CASE MIX INDEX in FY13:** 0.89, > cohort avg. (0.79); = statewide (0.89)  
**INPATIENT DISCHARGES in FY13:** 11,744  
**TRAUMA CENTER DESIGNATION:** Not Applicable  
**EMERGENCY DEPT VISITS in FY13:** 43,305  
**PUBLIC PAYER MIX:** 59% (Non-DSH* Hospital)  
**SPECIAL PUBLIC FUNDING:** ICB  
**CY13 COMMERCIAL PAYER PRICE LEVEL:** 41st Percentile  
**ADJUSTED COST PER DISCHARGE:** $9,060  
**INPATIENT:OUTPATIENT REVENUE in FY13:** Steward Health Care - 2010

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- Inpatient Net Revenue per CMAD
- Inpatient Discharges
- Outpatient Revenue
- Outpatient Visits

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital?  
What proportion of the region's cases did this hospital treat for each service?

**Deliver DRG**

<table>
<thead>
<tr>
<th>DRG Description</th>
<th>Percentage of Inpatients Treated</th>
<th>Regional Discharges</th>
<th>Hospital Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs* (828)</td>
<td><strong>15%</strong> of regional discharges were treated at this hospital in FY13</td>
<td>11,744</td>
<td>474</td>
</tr>
<tr>
<td>Maj Dep &amp; Oth/Unsp Psychoses (811)</td>
<td><strong>50%</strong></td>
<td>474</td>
<td>11,744</td>
</tr>
<tr>
<td>Bipolar Disorders (477)</td>
<td>26%</td>
<td>11,744</td>
<td>474</td>
</tr>
<tr>
<td>COPD (378)</td>
<td>26%</td>
<td>11,744</td>
<td>474</td>
</tr>
<tr>
<td>Org Mental Hlth Disturb (368)</td>
<td>24%</td>
<td>11,744</td>
<td>474</td>
</tr>
<tr>
<td>Heart Failure (354)</td>
<td>21%</td>
<td>11,744</td>
<td>474</td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis (291)</td>
<td>20%</td>
<td>11,744</td>
<td>474</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skin Inf (267)</td>
<td>20%</td>
<td>11,744</td>
<td>474</td>
</tr>
<tr>
<td>Other Pneumonia (253)</td>
<td>19%</td>
<td>11,744</td>
<td>474</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (225)</td>
<td>26%</td>
<td>11,744</td>
<td>474</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

- Hospital: 41% Commercial & Other, 12% State Programs, 47% Medicare and Other Federal Programs  
- Average Hospital*: 37% Commercial & Other, 19% State Programs, 44% Medicare and Other Federal Programs

**WHAT WERE THE HOSPITAL'S CY13 PAYER-SPECIFIC RELATIVE PRICE LEVELS FOR ITS TOP THREE COMMERCIAL PAYERS?**

- Blue Cross Blue Shield of Massachusetts: 47.4% of Hospital's Commercial Payments  
- Harvard Pilgrim Health Care: 20.0%  
- Tufts Health Plan: 18.7%

**FOR DESCRIPTIONS OF THE METRICS, PLEASE SEE TECHNICAL APPENDIX.**
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$160</td>
<td>$160</td>
<td>$0</td>
<td>$156</td>
<td>$3.9</td>
</tr>
<tr>
<td>2010</td>
<td>$169</td>
<td>$168</td>
<td>$1</td>
<td>$166</td>
<td>$3.4</td>
</tr>
<tr>
<td>2011</td>
<td>$156</td>
<td>$156</td>
<td>$0</td>
<td>$160</td>
<td>($4.3)</td>
</tr>
<tr>
<td>2012</td>
<td>$181</td>
<td>$181</td>
<td>$0</td>
<td>$189</td>
<td>($8.5)</td>
</tr>
<tr>
<td>2013</td>
<td>$170</td>
<td>$169</td>
<td>$2</td>
<td>$170</td>
<td>$0.2</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

† Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

![ PSI-90 Composite Chart ]

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

![ Global Ratings Diagram ]

The HCAHPS survey measures patient perspectives on key aspects of their care.

- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: STEWARD NORWOOD HOSPITAL
Cohort: Community Hospital

CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>1</td>
<td>3</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 18 of 19 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2012-2013

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Treatment Category</th>
<th>15.8%</th>
<th>16.3% Peer Cohort</th>
<th>16.0% National Average</th>
</tr>
</thead>
</table>

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Treatment Category</th>
<th>2012 - 2013</th>
<th>2.3%</th>
<th>0.0% Peer Cohort</th>
<th>2.5% National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011 - 2012</td>
<td>2.9%</td>
<td>2.9% Peer Cohort</td>
<td>5.0% National Median</td>
</tr>
</tbody>
</table>

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2011-2012 and 2012-2013

OBSTETRIC CARE COMPlications

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Treatment Category</th>
<th>Injury to Neonates</th>
<th>Obstetric Trauma: Delivery with Instrument</th>
<th>Obstetric Trauma: Delivery without Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0</td>
<td>168.6 Peer Cohort</td>
<td>19.7 Peer Cohort</td>
</tr>
<tr>
<td></td>
<td>0.7 Peer Cohort</td>
<td>Number of eligible patients did not meet the threshold for this calculation</td>
<td>11.1</td>
</tr>
</tbody>
</table>

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Winchester Hospital is a mid-size, non-profit community hospital located in the Northeastern Massachusetts region. Winchester Hospital had 9.1% fewer inpatient discharges in FY13 than in FY09, compared to a median decrease of 7.9% in its peer cohort. Outpatient visits at Winchester Hospital increased 3.6% over the period, compared with a median 4.0% increase among peer cohort hospitals. Winchester Hospital earned a profit each year from FY09 to FY13, with a 5.9% total margin in FY13, higher than the median performance of peer cohort hospitals of 2.4%.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital Growth Rate</th>
<th>Peer Cohort Growth Rate</th>
<th>Other Cohort Hospitals Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-7.0%</td>
<td>-3.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-4.7%</td>
<td>-4.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-15%</td>
<td>-7.0%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td></td>
<td>1 hospital &lt;20%</td>
<td></td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>Discharge by DRG</th>
<th>Frequency</th>
<th>Proportion of Community Discharges</th>
<th>Proportion of Hospital's Commercial Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs</td>
<td>(3,637)</td>
<td>16%</td>
<td>11%</td>
</tr>
<tr>
<td>Other Pneumonia</td>
<td>(501)</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>COPD</td>
<td>(384)</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>(377)</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skn Inf</td>
<td>(334)</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Knee Joint Replacement</td>
<td>(290)</td>
<td>11%</td>
<td>7%</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections</td>
<td>(261)</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis</td>
<td>(256)</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Sepsis &amp; Diem Inf</td>
<td>(214)</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>NBact Gastro, Naus, Vom</td>
<td>(208)</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital Payer Mix</th>
<th>Average Hospital Payer Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>58%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>7%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>35%</td>
<td>44%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: WINCHESTER HOSPITAL  
Cohort: Community Hospital

**UTILIZATION TRENDS**

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>13,328</td>
</tr>
<tr>
<td>2010</td>
<td>12,290</td>
</tr>
<tr>
<td>2011</td>
<td>11,430</td>
</tr>
<tr>
<td>2012</td>
<td>10,964</td>
</tr>
<tr>
<td>2013</td>
<td>10,820</td>
</tr>
</tbody>
</table>

FY13 Inpatient Discharges = 13,328

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>227,360</td>
</tr>
<tr>
<td>2010</td>
<td>250,100</td>
</tr>
<tr>
<td>2011</td>
<td>250,000</td>
</tr>
<tr>
<td>2012</td>
<td>260,000</td>
</tr>
<tr>
<td>2013</td>
<td>277,360</td>
</tr>
</tbody>
</table>

FY13 Outpatient Visits = 227,360

**PATIENT REVENUE TRENDS**

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- **FY13 Inpatient Revenue per CMAD:** $12,064  
- **Full Cost per CMAD:** $11,060

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$283,000</td>
</tr>
<tr>
<td>2010</td>
<td>$273,000</td>
</tr>
<tr>
<td>2011</td>
<td>$273,000</td>
</tr>
<tr>
<td>2012</td>
<td>$260,000</td>
</tr>
<tr>
<td>2013</td>
<td>$268,000</td>
</tr>
</tbody>
</table>

FY13 Outpatient Revenue = $143 M

**FINANCIAL PERFORMANCE**

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Total Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$255</td>
<td>$255</td>
<td>$(0)</td>
<td>$245</td>
<td>$10.0</td>
</tr>
<tr>
<td>2010</td>
<td>$267</td>
<td>$266</td>
<td>$0</td>
<td>$258</td>
<td>$8.3</td>
</tr>
<tr>
<td>2011</td>
<td>$271</td>
<td>$268</td>
<td>$2</td>
<td>$260</td>
<td>$10.6</td>
</tr>
<tr>
<td>2012</td>
<td>$294</td>
<td>$282</td>
<td>$12</td>
<td>$273</td>
<td>$21.1</td>
</tr>
<tr>
<td>2013</td>
<td>$283</td>
<td>$273</td>
<td>$11</td>
<td>$266</td>
<td>$16.8</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

- **Operating Margin:** 4.0%  
- **Total Margin:** 2.2%

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures. Population: All patients Score: Lower is better Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted Data Period*: 10/1-9/30

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care. Population: All patients Score: Higher is better Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

![Percentage of Orders](chart)

- **0-24%**: 1 hospital
- **25-49%**: 3 hospitals
- **50-74%**: 14 hospitals

**Number of cohort hospitals in this category of CPOE usage**

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

- **Population**: 18 of 19 cohort hospitals responded to this survey
- **Score**: Higher is better
- **Source**: The Leapfrog Group Hospital Survey
- **Data Period**: 2012-2013

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

![Readmission Rates](chart)

- **National Median**: 16.3%
- **National Average**: 16.0%
- **Peer Cohort**: 16.7%

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

- **Population**: Medicare Fee For Service (FFS) patients age 65+
- **Score**: Lower is better
- **Source**: CMS Hospital Compare
- **Data Period**: 2011-2012

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

![Obstetric Inductions](chart)

- **2012 - 2013**: 0.0%
- **2011 - 2012**: 0.6%
- **Peer Cohort**: 0.0% 2.9%
- **National Median**: 2.5% 5.0%

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

- **Population**: Non-clinically complicated births; 41 hospitals reported data for this measure.
- **Score**: Lower is better
- **Source**: The Leapfrog Group Hospital Survey
- **Data Period**: 2011-2012 and 2012-2013

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**: 0.0%
- **Obstetric Trauma: Delivery with Instrument**: 131.1
- **Obstetric Trauma: Delivery without Instrument**: 21.1

Complications and adverse events during birth can harm both the mother and infant.

- **Population**: 42 hospitals are included in this analysis
- **Score**: Lower is better
- **Source**: HDD; CHIA-calculated indicator, not risk adjusted
- **Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Athol Hospital is a non-profit community-Disproportionate Share Hospital (DSH) located in the Central Massachusetts region. It is the smallest acute hospital in Massachusetts, with 15 staffed beds. It is a member of the Heywood Healthcare system, and is designated by the Centers for Medicare & Medicaid Services (CMS) as one of three Critical Access Hospitals (CAH) in Massachusetts. Athol Hospital reported losses from FY09 through FY12, though it earned a positive total margin of 0.3% in FY13, compared with a median total margin of 4.1% in its peer cohort.

**AT A GLANCE**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL STAFFED BEDS:</strong></td>
<td>15, among the smallest acute hospitals</td>
</tr>
<tr>
<td><strong>% OCCUPANCY:</strong></td>
<td>&lt; cohort avg. (62%)</td>
</tr>
<tr>
<td><strong>CASE MIX INDEX in FY13:</strong></td>
<td>0.72, &lt; cohort avg. (0.84); &lt; statewide (0.89)</td>
</tr>
<tr>
<td><strong>INPATIENT DISCHARGES in FY13:</strong></td>
<td>576</td>
</tr>
<tr>
<td><strong>TRAUMA CENTER DESIGNATION:</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>PUBLIC PAYER MIX:</strong></td>
<td>72% (DSH* Hospital)</td>
</tr>
<tr>
<td><strong>SPECIAL PUBLIC FUNDING:</strong></td>
<td>CHART*, ICB*</td>
</tr>
<tr>
<td><strong>CY13 COMMERCIAL PAYER PRICE LEVEL:</strong></td>
<td>16th Percentile</td>
</tr>
<tr>
<td><strong>ADJUSTED\ COST PER DISCHARGE:</strong></td>
<td>$13,245</td>
</tr>
<tr>
<td><strong>INPATIENT:OUTPATIENT REVENUE in FY13:</strong></td>
<td>13%:87%</td>
</tr>
<tr>
<td><strong>CHANGE IN OWNERSHIP (FY09-FY13):</strong></td>
<td>Heywood Healthcare - 2012</td>
</tr>
</tbody>
</table>

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- Decrease
- Increase

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

- COPD (114) - 6%
- Other Pneumonia (46) - 2%
- Rehabilitation* (41) - 100%
- Heart Failure (31) - 1%
- Kidney & UT Infections (30) - 3%

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

- Athol MA (346) - 20%
- Orange MA (167) - 17%

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

- Hospital: 28%
- Commercial & Other: 37%
- State Programs: 19%
- Medicare and Other Federal Programs: 44%
- Average Hospital: 19%

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

- Blue Cross Blue Shield of Massachusetts 53.5% of Hospital's Commercial Payments
- UniCare Life and Health Insurance Company 9.3%
- Health New England, Inc. 9.1%

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: **ATHOL HOSPITAL**

**Cohort:** Community, Disproportionate Share Hospital

### UTILIZATION TRENDS

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- **FY13 Inpatient Discharges = 576**

- **2009:** 137
- **2010:** 125
- **2011:** 115
- **2012:** 118
- **2013:** 122

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- **FY13 Outpatient Visits = 41,177**

- **2009:** 38,250
- **2010:** 39,800
- **2011:** 40,300
- **2012:** 40,800
- **2013:** 41,300

### PATIENT REVENUE TRENDS

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- **FY13 Inpatient Revenue per CMAD = $12,972**
- **Full Cost per CMAD = $13,887**

### FINANCIAL PERFORMANCE

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>Revenue, Cost &amp; Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FY</strong></td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>2010</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>2012</td>
</tr>
<tr>
<td>2013</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

- **Operating Margin: 2009 = 1.5%, 2010 = -6.0%, 2011 = -22.4%, 2012 = -11.6%, 2013 = 2.5%**
- **Operating Margin: 2009 = 0.1%, 2010 = -4.1%, 2011 = -4.1%, 2012 = 0.3%, 2013 = -0.3%**

For descriptions of the metrics, please see Technical Appendix.

- Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
- For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
- For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
- Costs were adjusted to exclude direct medical education costs and physician compensation.
- Regional percentages are based on the individual DRG codes reported by this hospital.
- Average Hospital does not include Specialty hospitals.

January 2015
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 5

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

| 16.4% | 16.2% Peer Cohort | 16.0% National Average |

Lower is better

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because this hospital did not report the data or does not provide obstetric services.

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because this hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

**Hospital did not submit an assessment of the CPOE system’s error-checking capabilities.

* Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
2013 Hospital Profile:
BAYSTATE FRANKLIN MEDICAL CENTER

Baystate Franklin Medical Center is a mid-size, non-profit community-Disproportionate Share Hospital (DSH) located in the Western Massachusetts region. It is a member of the Baystate Health system. Between FY09 and FY13, the volume of inpatient discharges at the hospital decreased slightly, consistent with other cohort hospitals. Outpatient visits decreased 23.6% for the hospital between FY09 and FY13, compared to a median decrease of 3.1% in outpatient visits for peer hospitals. Baystate Franklin Medical Center earned a slight positive margin only in FY09 and FY12. In FY13, it had a total margin of -1.2%, compared to a median 4.1% total margin in its cohort.

AT A GLANCE

TOTAL STAFFED BEDS: 110, mid-size acute hospital
% OCCUPANCY: 41%, < cohort avg. (62%)
CASE MIX INDEX in FY13: 0.77, < cohort avg. (0.84); < statewide (0.89)
INPATIENT DISCHARGES in FY13: 4,330
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: 27,072

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- Inpatient Net Revenue per CMAD
- Inpatient Discharges
- Outpatient Revenue
- Outpatient Visits

SERVICES

Discharges by DRG

Delivery DRG*(878) 6% of regional discharges were treated at this hospital in FY13
Sepsis & Dissem Inf (187) 9%
Maj Dep& Oth/Unsp Psychoses (176) 7%
Heart Failure (158) 6%
Other Pneumonia (140) 5%
COPD (133) 5%
Bipolar Disorders (128) 5%
Schizophrenia (120) 3%
Adj Dis/Neur exc Dep (107) 2%
Card Arth & Cond Dis (93) 1%

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

Discharges by Community

Greenfield MA (1,582) 64% of community discharges were treated at this hospital in FY13
Turners Falls MA (496) 64%
Shelburne Falls MA (215) 59%
Bernardston MA (158) 61%
Northfield MA (152) 60%
Orange MA (145) 15%
South Deerfield MA (132) 32%
Colrain MA (104) 54%
Montague MA (88) 51%
Springfield MA (84) 0%

PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

Hospital
32% Commercial & Other
22% State Programs
46% Medicare and Other Federal Programs
Average Hospital*
37% DSH Threshold
19% Medicare and Other Federal Programs
44% State Programs

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures. Population: All patients Score: Lower is better Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care. Population: All patients Score: Higher is better Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: BAYSTATE FRANKLIN MEDICAL CENTER

Cohort: Community, Disproportionate Share Hospital

**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system.

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **2013 Hospital Profile:** BAYSTATE FRANKLIN MEDICAL CENTER

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>15.8%</td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2012 - 2013**
  - **Hospital:** 0.0%
  - **Peer Cohort:** 0.0%
  - **National Median:** 2.5%

- **2011 - 2012**
  - **Hospital:** 2.8%
  - **Peer Cohort:** 3.0%
  - **National Median:** 5.0%

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **2013 Hospital Profile:** BAYSTATE FRANKLIN MEDICAL CENTER
  - **Hospital:** 2.2%
  - **Peer Cohort:** 2.2%

- **Obstetric Trauma: Delivery with Instrument**
  - **Hospital:** Number of eligible patients did not meet the threshold for this calculation
  - **Peer Cohort:** 140.0

- **Obstetric Trauma: Delivery without Instrument**
  - **Hospital:** 3.0
  - **Peer Cohort:** 18.0

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Cape Cod Hospital is a non-profit community-Disproportionate Share Hospital (DSH) located in the Cape and Islands region. It is among the larger acute hospitals in Massachusetts and is a member of the Cape Cod Healthcare system. Cape Cod Hospital treated 66% of all discharges in the region in FY13. Inpatient discharges at Cape Cod Hospital decreased 5.4% from FY09 to FY13, consistent with the median performance of cohort hospitals. Outpatient visits decreased by 4.1% over that period, slightly more than the median of its peer cohort (-3.1%). Cape Cod Hospital earned a profit each year from FY09 to FY13, with a total margin of 6.1% in FY13, compared to a median total margin of 4.1% in its cohort.

### AT A GLANCE

**TOTAL STAFFED BEDS:** 269, among the larger acute hospitals  
**% OCCUPANCY:** 69%, > cohort avg. (62%)  
**CASE MIX INDEX in FY13:** 0.98, highest in cohort (avg. 0.84); > statewide (0.89)  
**INPATIENT DISCHARGES in FY13:** 16,274  
**TRAUMA CENTER DESIGNATION:** Not Applicable  
**EMERGENCY DEPT VISITS in FY13:** 86,424

**PUBLIC PAYER MIX:** 71% (DSH* Hospital)  
**SPECIAL PUBLIC FUNDING:** Not Applicable  
**CY13 COMMERCIAL PAYER PRICE LEVEL:** 81st Percentile  
**ADJUSTED* COST PER DISCHARGE:** $11,051  
**INPATIENT:OUTPATIENT REVENUE in FY13:** Not Applicable  
**CHANGE IN OWNERSHIP (FY09-FY13):** Not Applicable

### GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-13.7%</td>
<td>3 hospitals &gt;20%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.2%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>0.4%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.2%</td>
<td>-1.5%</td>
</tr>
</tbody>
</table>

[Graph showing growth rates for various measures]

### SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

- **Discharges by DRG**
  - Delivery DRG# (1,148) 52% of regional discharges were treated at this hospital in FY13
  - Sepsis & Dissem Inf (715) 55%
  - Heart Failure (576) 65%
  - Other Pneumonia (487) 61%
  - Kidney & UT Infections (332) 60%
  - Bipolar Disorders (326) 99%
  - Card Arth & Cond Dis (313) 73%
  - Renal Failure (312) 66%
  - COPD (310) 55%
  - CVA Occlusion w/ Infarct (308) 71%

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

- **Discharges by Community**
  - Hyannis MA (1,724) 78% of community discharges were treated at this hospital in FY13
  - South Yarmouth MA (1,129) 79%
  - Centerville MA (1,029) 74%
  - West Yarmouth MA (881) 79%
  - Harwich MA (849) 76%
  - Brewster MA (752) 77%
  - Yarmouth Port MA (655) 76%
  - South Dennis MA (616) 80%
  - Orleans MA (536) 82%
  - Marstons Mills MA (456) 67%

### PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

- **Hospital**
  - Commercial & Other: 29%  
  - State Programs: 16%  
  - Medicare and Other Federal Programs: 56%

- **Average Hospital**
  - Commercial & Other: 37%  
  - State Programs: 13%  
  - Medicare and Other Federal Programs: 44%

**DSH Threshold:**

[Graph showing payer mix]

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

- **Blue Cross Blue Shield of Massachusetts**
  - 49.3% of Hospital’s Commercial Payments
- **Harvard Pilgrim Health Care**
  - 24.8%
- **Tufts Health Plan**
  - 8.7%

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How have the hospital’s total revenue and costs changed between FY09 and FY13?

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

What were the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>Revenue, Cost &amp; Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>2010</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>2012</td>
</tr>
<tr>
<td>2013</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
‡ Costs were adjusted to exclude direct medical education costs and physician compensation.
ᶲ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**QUALITY OVERVIEW**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

```
<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.44</td>
<td>0.70</td>
<td>0.50</td>
</tr>
<tr>
<td>2012</td>
<td>0.70</td>
<td>0.86</td>
<td>0.75</td>
</tr>
<tr>
<td>2011</td>
<td>0.75</td>
<td>0.84</td>
<td>1.00</td>
</tr>
</tbody>
</table>
```

2013 Statewide Average = 0.74

**PATIENT SAFETY**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**

- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**

- Staff always explained medications
- Recovery information was provided

**Comfort**

- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: CAPE COD HOSPITAL
Cohort: Community, Disproportionate Share Hospital

CARE PRACTICES
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals, including this hospital, reported not having a CPOE system

READMISSIONS
What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital** 14.7%
- **Peer Cohort** 16.2%
- **National Average** 16.0%

Lower is better

OBSTETRIC CARE
What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2011 - 2012**
  - **Hospital** 2.8%
  - **Peer Cohort** 3.0%
  - **National Median** 5.0%

- **2012 - 2013**
  - **Hospital** 1.2%
  - **Peer Cohort** 0.0%
  - **National Median** 2.5%

Lower is better

OBSTETRIC CARE COMPLICATIONS
Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **Hospital** 0.0%
  - **Peer Cohort** 2.2%

Lower is better

- **Obstetric Trauma: Delivery with Instrument**
  - **Number of eligible patients did not meet the threshold for this calculation** 140.0
  - **Hospital** 16.0
  - **Peer Cohort** 18.0

Complications and adverse events during birth can harm both the mother and infant.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Clinton Hospital is a non-profit community-Disproportionate Share Hospital (DSH) located in the Central Massachusetts region. It is among the smallest acute hospitals in Massachusetts and is a member of the UMass Memorial Health Care system. Between FY09 and FY13, inpatient discharges decreased 15.3%, while there was a 5.4% median decrease in its peer cohort. Outpatient visits increased 6.6% at Clinton Hospital, compared with a 3.1% median decrease among peer cohort hospitals. Clinton Hospital earned a profit from FY09 to FY11, but had a negative total margin in FY12 and FY13. Its total margin in FY13 was -1.3%, compared with a median of 4.1% among similar hospitals.

### AT A GLANCE

<table>
<thead>
<tr>
<th>Metric</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL STAFFED BEDS: 41, among the smallest acute hospitals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% OCCUPANCY: 60%, &lt; cohort avg. (62%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CASE MIX INDEX in FY13: 0.88, &gt; cohort avg. (0.84); = statewide (0.89)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INPATIENT DISCHARGES in FY13: 1,117</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRAUMA CENTER DESIGNATION: Not Applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMERGENCY DEPT VISITS in FY13: 13,237</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUBLIC PAYER MIX: 67% (DSH* Hospital)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPECIAL PUBLIC FUNDING: Not Applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CY13 COMMERCIAL PAYER PRICE LEVEL: 41st Percentile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJUSTED² COST PER DISCHARGE: $11,065</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INPATIENT:OUTPATIENT REVENUE in FY13: 31.69%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>-20%</td>
<td></td>
<td></td>
<td>1 hospital &gt;20%</td>
</tr>
<tr>
<td>-15%</td>
<td>7.1%</td>
<td>0%</td>
<td>2 hospitals &gt;20%</td>
</tr>
<tr>
<td>-10%</td>
<td>-2.7%</td>
<td>-15%</td>
<td>3 hospitals &gt;20%</td>
</tr>
<tr>
<td>-5%</td>
<td>-12.7%</td>
<td>-20%</td>
<td>4 hospitals &gt;20%</td>
</tr>
<tr>
<td>0%</td>
<td>-3.2%</td>
<td>-25%</td>
<td>5 hospitals &gt;20%</td>
</tr>
<tr>
<td>5%</td>
<td>0.0%</td>
<td>-30%</td>
<td>6 hospitals &gt;20%</td>
</tr>
<tr>
<td>10%</td>
<td>10.8%</td>
<td>-35%</td>
<td>7 hospitals &gt;20%</td>
</tr>
<tr>
<td>15%</td>
<td></td>
<td>3 hospitals &gt;20%</td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td>4 hospitals &gt;20%</td>
<td></td>
</tr>
</tbody>
</table>

### SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG Group</th>
<th>Number of Cases</th>
<th>Hospital Discharges</th>
<th>Region Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Org Mental Hlt Disturb (175)</td>
<td>50%</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Degen Nvrs Syst exc MS (118)</td>
<td>43%</td>
<td>43%</td>
<td>100%</td>
</tr>
<tr>
<td>Other Pneumonia (77)</td>
<td>3%</td>
<td>3%</td>
<td>100%</td>
</tr>
<tr>
<td>Maj Dep&amp;Oth/Ulm Psychos (70)</td>
<td>6%</td>
<td>6%</td>
<td>100%</td>
</tr>
<tr>
<td>COPD (64)</td>
<td>3%</td>
<td>3%</td>
<td>100%</td>
</tr>
<tr>
<td>Heart Failure (42)</td>
<td>2%</td>
<td>2%</td>
<td>100%</td>
</tr>
<tr>
<td>Schizophrenia (41)</td>
<td>5%</td>
<td>5%</td>
<td>100%</td>
</tr>
<tr>
<td>Bipolar Disorders (39)</td>
<td>3%</td>
<td>3%</td>
<td>100%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (36)</td>
<td>1%</td>
<td>1%</td>
<td>100%</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (33)</td>
<td>3%</td>
<td>3%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### PAYER MIX

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Payer</th>
<th>Hospital</th>
<th>Average Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>33%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>17%</td>
<td>13%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>50%</td>
<td>44%</td>
</tr>
</tbody>
</table>

### For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: CLINTON HOSPITAL**

**Cohort:** Community, Disproportionate Share Hospital

### UTILIZATION TRENDS

How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Inpatient Discharges = 1,117
- **2009:** 140%
- **2011:** 125%
- **2013:** 100%

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Outpatient Visits = 17,935
- **2009:** 140%
- **2011:** 125%
- **2013:** 100%

### PATIENT REVENUE TRENDS

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- FY13 Inpatient Revenue per CMAD = $7,356
- Full Cost per CMAD = $11,592
- **2009:** 140%
- **2011:** 125%
- **2013:** 100%

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Outpatient Revenue = $14 M
- **2009:** 140%
- **2011:** 125%
- **2013:** 100%

### FINANCIAL PERFORMANCE

How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Total Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$26</td>
<td>$26</td>
<td>$0</td>
<td>$26</td>
<td>$0.7</td>
</tr>
<tr>
<td>2010</td>
<td>$26</td>
<td>$26</td>
<td>$0</td>
<td>$25</td>
<td>$0.7</td>
</tr>
<tr>
<td>2011</td>
<td>$26</td>
<td>$26</td>
<td>$0</td>
<td>$25</td>
<td>$0.9</td>
</tr>
<tr>
<td>2012</td>
<td>$26</td>
<td>$25</td>
<td>$0</td>
<td>$26</td>
<td>($0.0)</td>
</tr>
<tr>
<td>2013</td>
<td>$24</td>
<td>$24</td>
<td>$0</td>
<td>$24</td>
<td>($0.3)</td>
</tr>
</tbody>
</table>

What were the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

- **Total Margin:**
  - FY09: 1.5%
  - FY13: 2.5%
- **Operating Margin:**
  - FY09: -3.0%
  - FY13: -1.3%

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Average Hospital does not include Specialty hospitals.

January 2015
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid (CMS) Hospital Compare
- Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: CLINTON HOSPITAL
Cohort: Community, Disproportionate Share Hospital

CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system
This hospital did not report data for this measure

Computerized Physician Order Entry is believed to increase efficiency and reduce transcription errors.
Population: 25 of 27 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey^ Data Period*: 2012-2013

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

16.9%

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.
Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.
Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey^ Data Period*: 2011-2012 and 2012-2013

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
2013 Hospital Profile:
FAIRVIEW HOSPITAL

Fairview Hospital is a small, non-profit community-Disproportionate Share Hospital (DSH) located in the Western Massachusetts region. It is a member of Berkshire Health Systems. Fairview Hospital is designated by the Centers for Medicare & Medicaid Services (CMS) as one of three Critical Access Hospitals (CAH) in Massachusetts. Between FY09 and FY13, its outpatient visits increased 73.1%, compared with a 3.1% decline for the median peer cohort hospital. It earned a profit each year from FY09 to FY13, with a total margin of 10.1% in FY13, compared with a median total margin of 4.1% in its peer cohort.

AT A GLANCE

TOTAL STAFFED BEDS: 28, among the smallest acute hospitals
% OCCUPANCY: 40%, < cohort avg. (62%)
CASE MIX INDEX in FY13: 0.63, < cohort avg. (0.84); < statewide (0.89)
INPATIENT DISCHARGES in FY13: 1,166
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: 12,672

PUBLIC PAYER MIX: 66% (DSH* Hospital)
SPECIAL PUBLIC FUNDING: ICB
CY13 COMMERCIAL PAYER PRICE LEVEL: 63rd Percentile
ADJUSTED COST PER DISCHARGE: $19,710
INPATIENT:OUTPATIENT REVENUE in FY13: 19.81%
CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

Inpatient Net Revenue per CMAD
- Decrease: -3.2% - 3 hospitals >20%
- Increase: -2.7% - 1 hospital >20%

Inpatient Discharges
- Decrease: -2.7%
- Increase: 0.2%

Outpatient Revenue
- Decrease: -2.7%
- Increase: 1.8%

Outpatient Visits
- Decrease: 3.2%
- Increase: 17.4%

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

Discharges by DRG
- Delivery DRGs (287) 2% of regional discharges were treated at this hospital in FY13
- Other Pneumonia (77) 3%
- Sepsis & Dissem Inf (52) 2%
- Heart Failure (40) 1%
- COPD (37) 2%
- Kidney & UT Infections (35) 3%
- Card Arth & Cond Dis (33) 2%
- Intestinal Obstruction (31) 4%

- DRGs with fewer than 26 discharges have been suppressed

Where did most of the hospital’s inpatients reside? What proportion of each community’s total discharges were attributed to this hospital?

Discharges by Community
- Great Barrington MA (394) 42% of community discharges were treated at this hospital in FY13
- Sheffield MA (99) 46%
- Lee MA (67) 9%
- Housatonic MA (62) 36%
- Pittsfield MA (60) 1%
- Canaan CT (47) 77%
- Hillsdale NY (38) 56%
- Otis MA (29) 31%
- Lenox MA (29) 4%
- Sandisfield MA (28) 25%

- - - Hospital (1,166) = 1% of total regional discharges

PAYER MIX

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

Hospital 34% 18% 48%
Commercial & Other State Programs Medicare and Other Federal Programs
Average Hospital* 37% 19% 44%

DSH Threshold

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Payer Mix</th>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Cross Blue Shield of Massachusetts</td>
<td>53.3%</td>
<td>53.3%</td>
</tr>
<tr>
<td>Health New England, Inc.</td>
<td>16.9%</td>
<td>16.9%</td>
</tr>
<tr>
<td>Aetna Health Inc. (PA) - Aetna Life Ins. Co. (ALIC)</td>
<td>9.9%</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Inpatient Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>100</td>
</tr>
<tr>
<td>2010</td>
<td>108</td>
</tr>
<tr>
<td>2011</td>
<td>116</td>
</tr>
<tr>
<td>2012</td>
<td>124</td>
</tr>
<tr>
<td>2013</td>
<td>132</td>
</tr>
</tbody>
</table>

For the hospital's outpatient visits, the changes are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Outpatient Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>40</td>
</tr>
<tr>
<td>2011</td>
<td>46</td>
</tr>
<tr>
<td>2012</td>
<td>65</td>
</tr>
<tr>
<td>2013</td>
<td>70</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Margin</th>
<th>Operating Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>2010</td>
<td>$2,000</td>
<td>1.5%</td>
</tr>
<tr>
<td>2011</td>
<td>$6,000</td>
<td>1.7%</td>
</tr>
<tr>
<td>2012</td>
<td>$10,000</td>
<td>2.5%</td>
</tr>
<tr>
<td>2013</td>
<td>$14,000</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

1. Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
2. For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
3. Costs were adjusted to exclude direct medical education costs and physician compensation.
4. Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
5. Average Hospital does not include Specialty hospitals.
QUALITY OVERVIEW

The selected quality measures displayed in this hospital's profile are derived from the Commonwealth's Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS)
Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 25 of 27 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2012-2013

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **16.2%**
  - Lower is better
- 16.2% Peer Cohort
- 16.0% National Average

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **7.3**
  - Lower is better
- 2.2 Peer Cohort

- **140.0**
  - Peer Cohort

- **18.0**
  - Peer Cohort

Complications and adverse events during birth can harm both the mother and infant.

Population: 42 hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Falmouth Hospital is a mid-size, non-profit community-Disproportionate Share Hospital (DSH) located in the Cape and Islands region. It is a member of the Cape Cod Healthcare system. Between FY09 and FY13, its inpatient discharges decreased 2.7%, compared with a median decrease of 5.4% among cohort hospitals. Outpatient visits decreased 3.1% in that same period, while there was a median decrease of 4.7% in its cohort. Falmouth Hospital earned a profit each year from FY09 to FY13, and earned an 11.4% total margin in FY13, compared to a cohort median total margin of 4.1%.

### AT A GLANCE

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Staffed Beds:</strong></td>
<td>103, mid-size acute hospital</td>
</tr>
<tr>
<td><strong>% Occupancy:</strong></td>
<td>66%, &gt; cohort avg. (62%)</td>
</tr>
<tr>
<td><strong>Case Mix Index in FY13:</strong></td>
<td>0.94, &gt; cohort avg. (0.84); &gt; statewide (0.89)</td>
</tr>
<tr>
<td><strong>Inpatient Discharges in FY13:</strong></td>
<td>6,542</td>
</tr>
<tr>
<td><strong>Emergency Dept Visits in FY13:</strong></td>
<td>36,750</td>
</tr>
<tr>
<td><strong>Public Pay Mix:</strong></td>
<td>68% (DSH)</td>
</tr>
<tr>
<td><strong>Special Public Funding:</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Cy13 Commercial Payer Price Level:</strong></td>
<td>72nd Percentile</td>
</tr>
<tr>
<td><strong>Adjusted Cost Per Discharge:</strong></td>
<td>$10,353</td>
</tr>
<tr>
<td><strong>Inpatient:Outpatient Revenue in FY13:</strong></td>
<td>Not Applicable</td>
</tr>
<tr>
<td><strong>Change in Ownership (FY09-FY13):</strong></td>
<td>31%:69%</td>
</tr>
</tbody>
</table>

### Growth Measures

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inpatient Net Revenue per CMAD</strong></td>
<td>-10.2%</td>
<td>3 hospitals &gt;20%</td>
<td></td>
</tr>
<tr>
<td><strong>Inpatient Discharges</strong></td>
<td>-3.2%</td>
<td>1 hospital &gt;20%</td>
<td></td>
</tr>
<tr>
<td><strong>Outpatient Revenue</strong></td>
<td>-1.5%-1.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outpatient Visits</strong></td>
<td>-3.2%-2.9%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Services

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG</th>
<th>Days%</th>
<th>Days% of Regional Discharges Were Treated at This Hospital in FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs* (848)</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (556)</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Knee Joint Replacement (310)</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>Heart Failure (263)</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>COPD (215)</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Other Pneumonia (213)</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Hip Joint Replacement (183)</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (182)</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skin Inf (149)</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Renal Failure (144)</td>
<td>31%</td>
<td></td>
</tr>
</tbody>
</table>

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer</th>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>32%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>16%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>53%</td>
<td>44%</td>
</tr>
</tbody>
</table>

### Payer Mix

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

- Blue Cross Blue Shield of Massachusetts: 55.4% of Hospital's Commercial Payments
- Harvard Pilgrim Health Care: 22.8%
- Tufts Health Plan: 7.9%

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 6,542

-2.7%

-5.4%

2009 2010 2011 2012 2013

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 47,914

-3.1%

-4.7%

2009 2010 2011 2012 2013

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $9,068

Full Cost per CMAD = $10,353

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $87 M

+7.3%

+1.2%

2009 2010 2011 2012 2013

How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$142</td>
<td>$141</td>
<td>$1</td>
<td>$132</td>
<td>$9.6</td>
</tr>
<tr>
<td>2010</td>
<td>$134</td>
<td>$134</td>
<td>$0</td>
<td>$131</td>
<td>$2.7</td>
</tr>
<tr>
<td>2011</td>
<td>$149</td>
<td>$147</td>
<td>$2</td>
<td>$135</td>
<td>$13.7</td>
</tr>
<tr>
<td>2012</td>
<td>$159</td>
<td>$156</td>
<td>$3</td>
<td>$143</td>
<td>$16.2</td>
</tr>
<tr>
<td>2013</td>
<td>$154</td>
<td>$150</td>
<td>$3</td>
<td>$136</td>
<td>$17.6</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
† Average Hospital does not include Specialty hospitals.
QUALITY OVERVIEW

The selected quality measures displayed in this hospital's profile are derived from the Commonwealth's Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals, including this hospital, reported not having a CPOE system.

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **14.6%** Falmouth Hospital
- **16.2%** Peer Cohort
- **16.0%** National Average

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 - 2013</td>
<td>1.3%</td>
<td>0.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>0.0%</td>
<td>3.0%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - Falmouth Hospital: 2.3
  - Peer Cohort: 2.2
- **Obstetric Trauma: Delivery with Instrument**
  - Falmouth Hospital: 11.6
  - Peer Cohort: 18.0
- **Obstetric Trauma: Delivery without Instrument**
  - Falmouth Hospital: 140.0
  - Peer Cohort: 140.0

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Harrington Memorial Hospital is a mid-size, non-profit community-Disproportionate Share Hospital (DSH) located in the Central Massachusetts region. In FY12, Harrington was a member of the community hospital cohort, as its public payer mix did not exceed the DSH threshold. Outpatient visits at Harrington increased 39.1% between FY09 and FY13; outpatient visits increased most rapidly between FY09 and FY11, by 54.0%. The hospital earned a profit each year during the FY09 to FY13 period except in FY12. Its total margin in FY13 was 4.1%, similar to the median of its peer cohort hospitals.

### GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-3.4%</td>
<td>-3.2%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-2.7%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-4.7%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-5.0%</td>
<td>-3.2%</td>
</tr>
</tbody>
</table>

#### AT A GLANCE

- **TOTAL STAFFED BEDS**: 126, mid-size acute hospital
- **% OCCUPANCY**: 38%, < cohort avg. (62%)
- **CASE MIX INDEX in FY13**: 0.76, < cohort avg. (0.84); < statewide (0.89)
- **INPATIENT DISCHARGES in FY13**: 4,392
- **TRAUMA CENTER DESIGNATION**: Not Applicable
- **EMERGENCY DEPT VISITS in FY13**: 38,636

### PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>35%</td>
</tr>
<tr>
<td>State Programs</td>
<td>24%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>40%</td>
</tr>
<tr>
<td>Average Hospital*</td>
<td>37%</td>
</tr>
</tbody>
</table>

#### PAYER MIX

- **Hospital**: 65% (DSH* Hospital)
- **SPECIAL PUBLIC FUNDING**: CHART^*
- **CY13 COMMERCIAL PAYER PRICE LEVEL**: 44th Percentile
- **ADJUSTED\(^{+}\) COST PER DISCHARGE**: $9,382
- **INPATIENT:OUTPATIENT REVENUE in FY13**: 20%:80%
- **CHANGE IN OWNERSHIP (FY09-FY13)**: Not Applicable

### SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

- **Delivery DRG** (564): 4% of regional discharges were treated at this hospital in FY13
- **COPD** (245): 12%
- **Bipolar Disorders** (222): 11%
- **Other Pneumonia** (214): 9%
- **Heart Failure** (199): 9%
- **Maj Dep & Oth/Unsp Psychoses** (120): 11%
- **Renal Failure** (116): 10%
- **Cellulitis, Oth Bact Skin Inf** (112): 8%
- **Kidney & UT Infections** (108): 10%
- **Schizophrenia** (98): 13%

#### PAYER MIX

What was the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

- **Blue Cross Blue Shield of Massachusetts**: 55.3% of Hospital's Commercial Payments
- **Harvard Pilgrim Health Care**: 16.7%
- **Tufts Health Plan**: 8.9%
**2013 Hospital Profile: HARRINGTON MEMORIAL HOSPITAL**

**Cohort:** Community, Disproportionate Share Hospital

### Utilization Trends

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

**Graph:**

- FY13 Inpatient Discharges = 4,392
- +17.6%

**Comparison:**
- 2009: 100
- 2010: 105
- 2011: 102
- 2012: 87
- 2013: 102

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

**Graph:**

- FY13 Outpatient Visits = 67,803
- -3.1%

**Comparison:**
- 2009: 100
- 2010: 102
- 2011: 102
- 2012: 106
- 2013: 107

### Patient Revenue Trends

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

**Graph:**

- FY13 Inpatient Revenue per CMAD = $7,019
- Full Cost per CMAD = $9,570

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

**Graph:**

- FY13 Outpatient Revenue = $75 M
- +24.9%
- +7.3%

### Financial Performance

How have the hospital's total revenue and costs changed between FY09 and FY13?

**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$87</td>
<td>$87</td>
<td>($0)</td>
<td>$84</td>
<td>$2.6</td>
</tr>
<tr>
<td>2010</td>
<td>$106</td>
<td>$105</td>
<td>$1</td>
<td>$102</td>
<td>$3.7</td>
</tr>
<tr>
<td>2011</td>
<td>$118</td>
<td>$115</td>
<td>$4</td>
<td>$110</td>
<td>$8.5</td>
</tr>
<tr>
<td>2012</td>
<td>$117</td>
<td>$115</td>
<td>$2</td>
<td>$118</td>
<td>($1.1)</td>
</tr>
<tr>
<td>2013</td>
<td>$112</td>
<td>$110</td>
<td>$2</td>
<td>$107</td>
<td>$4.6</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

**Graph:**

- For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.

January 2015
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**
How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

**Percentage of Orders**

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **16.5%**
  - Lower is better

- **16.2%** Peer Cohort
- **16.0%** National Average

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **0.0**
  - Lower is better

- **2.2** Peer Cohort

- **36.5**
  - **140.0** Peer Cohort
  - **18.0** Peer Cohort

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measured by CHIA, not risk adjusted.
HealthAlliance Hospital is a non-profit community-Disproportionate Share Hospital (DSH) located in the Central Massachusetts region. It is among the smaller acute hospitals in Massachusetts and a member of the UMass Memorial Health Care system. From FY09 to FY13, inpatient discharges decreased by 14.5% at HealthAlliance, while there was a median decrease of 5.4% in its peer cohort. During that same period, outpatient visits at the hospital increased by 3.4% compared with a median decrease of 3.1% decrease in its peer cohort. HealthAlliance earned a profit each year in the five year period, with a 4.1% total margin in FY13, consistent with the median of its cohort.

AT A GLANCE

TOTAL STAFFED BEDS: 89, among the smaller hospitals
% OCCUPANCY: 93%, > cohort avg. (62%)
CASE MIX INDEX in FY13: 0.83, < cohort avg. (0.84); < statewide (0.89)
INPATIENT DISCHARGES in FY13: 7,567
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: 61,389

PUBLIC MIX: 65% (DSH* Hospital)
SPECIAL PUBLIC FUNDING: CHART^
CY13 COMMERCIAL PAYER PRICE LEVEL: 46th Percentile
ADJUSTED^ COST PER DISCHARGE: $8,776
INPATIENT:OUTPATIENT REVENUE in FY13: 31%:69%
CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital 2012-2013 Growth Rate</th>
<th>Peer Cohort Growth Rate</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Discharges</td>
<td>-15.0%</td>
<td>-2.7%</td>
<td>3 hospitals &gt;20%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-3.2%</td>
<td>-1.5%</td>
<td>1 hospital &gt;20%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.2%</td>
<td>-0.6%</td>
<td>2 hospitals &lt;20%</td>
</tr>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-1.5%</td>
<td>-0.9%</td>
<td></td>
</tr>
<tr>
<td>(increased)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG Description</th>
<th>Percentage</th>
<th>Regional Percentage</th>
<th>Discharges Treated at This Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs (1,884)</td>
<td>13%</td>
<td>89%</td>
<td>33% of regional discharges were treated at this hospital in FY13</td>
</tr>
<tr>
<td>COPD (351)</td>
<td>17%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (203)</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Failure (286)</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Pneumonia (280)</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis (220)</td>
<td>16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cellulitis, Oth Bck Skin Inf (157)</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulm Edema &amp; Resp Failure (157)</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knee Joint Replacement (140)</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (124)</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer</th>
<th>Hospital FY13</th>
<th>Average Hospital FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal</td>
<td>46%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 7,567

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 104,105

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $7,766 | Full Cost per CMAD = $9,448

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $87 M

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

1 Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

2 For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).

3 Costs were adjusted to exclude direct medical education costs and physician compensation.

4 Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.

5 Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital's profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

![PSI-90 Composite Graph](image)

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

![HCAHPS Survey Graph](image)

For descriptions of the metrics, please see Technical Appendix.
### CARE PRACTICES

**What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?**

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td></td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system.

This hospital did not report data for this metric.

**Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.**

**Population:** 25 of 27 cohort hospitals responded to this survey.
**Score:** Higher is better
**Source:** The Leapfrog Group Hospital Survey^1
**Data Period**: 2012-2013

### READMISSIONS

**What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?**

<table>
<thead>
<tr>
<th>Hospital Readmitted Rate</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.6%</td>
<td></td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

**Population:** Medicare Fee For Service (FFS) patients age 65+.
**Score:** Lower is better
**Source:** CMS Hospital Compare
**Data Period**: 2011-2012

### OBSTETRIC CARE

**What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?**

<table>
<thead>
<tr>
<th>Birth Week</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2011-2012</td>
<td>0.0%</td>
<td>3.0%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

**Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
**Score:** Lower is better
**Source:** The Leapfrog Group Hospital Survey^1
**Data Period**: 2011-2012 and 2012-2013

### OBSTETRIC CARE COMPLICATIONS

**Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?**

<table>
<thead>
<tr>
<th>Inpatient Injury</th>
<th>Obstetric Trauma: Delivery with Instrument</th>
<th>Obstetric Trauma: Delivery without Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital</td>
<td>Peer Cohort</td>
</tr>
<tr>
<td>Injury to Neonates</td>
<td>1.0</td>
<td>2.2</td>
</tr>
</tbody>
</table>

**Complications and adverse events during birth can harm both the mother and infant.**

**Population:** 42 hospitals are included in this analysis.
**Score:** Lower is better
**Source:** HDD; CHIA-calculated indicator, not risk adjusted
**Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

^ Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Heywood Hospital is a mid-size, non-profit community-Disproportionate Share Hospital (DSH) located in the Central Massachusetts region. It is a member of the Heywood Healthcare system. Between FY09 and FY13, inpatient discharges at the hospital decreased by 5.1%, similar to the median of its cohort. During that period, outpatient visits decreased by 7.1% at Heywood Hospital, compared to a median decrease of 3.1% among peer cohort hospitals. Heywood Hospital earned a profit each year in the five-year period, except in FY11. Its total margin in FY13 was 5.1%, compared to 4.1%, the median of its peer cohort.

### AT A GLANCE

**TOTAL STAFFED BEDS:** 129, mid-size acute hospital

**% OCCUPANCY:** 65%, > cohort avg. (62%)

**CASE MIX INDEX in FY13:** 0.84, < cohort avg. (0.84); < statewide (0.89)

**INPATIENT DISCHARGES in FY13:** 5,669

**TRAUMA CENTER DESIGNATION:** Not Applicable

**EMERGENCY DEPT VISITS in FY13:** 25,806

**PUBLIC PAYER MIX:** 64% (DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** CHART^, ICB⁹

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 17th Percentile

**ADJUSTED‡ COST PER DISCHARGE:** $7,935

**INPATIENT:OUTPATIENT REVENUE in FY13:** 27.7:3.7

**CHANGE IN OWNERSHIP (FY09-FY13):** Heywood Healthcare - 2012

### GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Revenue per CMAD</td>
<td>-3.2%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-2.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-1.5%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.2%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

### SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of each community's total discharges were attributed to this hospital?

<table>
<thead>
<tr>
<th>DRG</th>
<th>Percentage of Regional Discharges</th>
<th>Percentage of Community Discharges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRG (864)</td>
<td>6%</td>
<td>62%</td>
</tr>
<tr>
<td>Maj Dep &amp; Oth Unsp Psychoses (351)</td>
<td>31%</td>
<td>50%</td>
</tr>
<tr>
<td>Bipolar Disorders (277)</td>
<td>21%</td>
<td>34%</td>
</tr>
<tr>
<td>Other Pneumonia (264)</td>
<td>12%</td>
<td>63%</td>
</tr>
<tr>
<td>Schizophrenia (195)</td>
<td>26%</td>
<td>50%</td>
</tr>
<tr>
<td>Heart Failure (179)</td>
<td>18%</td>
<td>23%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (168)</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>COPD (166)</td>
<td>8%</td>
<td>63%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skn Inf (117)</td>
<td>8%</td>
<td>50%</td>
</tr>
<tr>
<td>Knee Joint Replacement (106)</td>
<td>10%</td>
<td>23%</td>
</tr>
</tbody>
</table>

### PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Category</th>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>36%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>45%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**DSH Threshold**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSH Threshold</td>
<td>51.1%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: **HEYWOOD HOSPITAL**  
**Cohort:** Community, Disproportionate Share Hospital

### UTILIZATION TRENDS

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 5,669

-5.1%

<table>
<thead>
<tr>
<th>Year</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>94.9</td>
<td>94.7</td>
<td>94.2</td>
<td>93.6</td>
</tr>
</tbody>
</table>

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 76,623

-3.1%

<table>
<thead>
<tr>
<th>Year</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>96.9</td>
<td>96.6</td>
<td>96.2</td>
<td>95.6</td>
</tr>
</tbody>
</table>

### PATIENT REVENUE TRENDS

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $7,968  
Full Cost per CMAD = $8,307

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $66 M

+16.6%

<table>
<thead>
<tr>
<th>Year</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>116.6</td>
<td>123.3</td>
<td>130.6</td>
<td>137.3</td>
</tr>
</tbody>
</table>

### FINANCIAL PERFORMANCE

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$91</td>
<td>$91</td>
<td>($1)</td>
<td>$90</td>
<td>$0.4</td>
</tr>
<tr>
<td>2010</td>
<td>$96</td>
<td>$95</td>
<td>$1</td>
<td>$92</td>
<td>$3.6</td>
</tr>
<tr>
<td>2011</td>
<td>$97</td>
<td>$97</td>
<td>($0)</td>
<td>$99</td>
<td>($1.3)</td>
</tr>
<tr>
<td>2012</td>
<td>$103</td>
<td>$101</td>
<td>$2</td>
<td>$99</td>
<td>$4.0</td>
</tr>
<tr>
<td>2013</td>
<td>$105</td>
<td>$102</td>
<td>$3</td>
<td>$100</td>
<td>$5.4</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Margin</th>
<th>Operating Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1.5%</td>
<td>1.1%</td>
</tr>
<tr>
<td>2010</td>
<td>2.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>2011</td>
<td>3.0%</td>
<td>2.8%</td>
</tr>
<tr>
<td>2012</td>
<td>3.5%</td>
<td>3.2%</td>
</tr>
<tr>
<td>2013</td>
<td>4.0%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.

January 2015
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: HEYWOOD HOSPITAL  
**Cohort:** Community, Disproportionate Share Hospital

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

**Percentage of Orders**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of orders</td>
<td>3</td>
<td>2</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **16.2%**  
- **16.0%** National Average

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **1.0%**  
- **2.5%** National Median  
- **38.3%**  
- **5.0%** National Median

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **2.2%** Peer Cohort
- **Obstetric Trauma: Delivery with Instrument**
  - **14.0%** Peer Cohort
- **Obstetric Trauma: Delivery without Instrument**
  - **9.1%** Peer Cohort

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
HOLYOKE MEDICAL CENTER

Holyoke Medical Center is a mid-size, non-profit community-Disproportionate Share Hospital (DSH) located in the Western Massachusetts region. Between FY09 and FY13, Holyoke Medical Center had a 16.9% decrease in inpatient discharges, compared to a median decrease of 5.4% in its peer cohort. During that same period, Holyoke Medical Center had a 4.9% increase in outpatient visits, compared with a median decrease of 3.1% in its cohort. Holyoke Medical Center earned a profit each year in the period, with a 3.7% total margin in FY13, compared to a 4.1% median total margin in its peer cohort.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>FY12 Growth Rate</th>
<th>FY13 Growth Rate</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-13.3%</td>
<td>-3.2%</td>
<td>3 hospitals &gt;20%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.7%</td>
<td>-2.7%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-1.5%</td>
<td>4.7%</td>
<td>1 hospital &gt;20%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-8.1%</td>
<td>-3.2%</td>
<td></td>
</tr>
<tr>
<td>-20%</td>
<td>-15%</td>
<td>2 hospitals &lt;20%</td>
<td></td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG</th>
<th>Percentage of Regional Discharges Treated</th>
<th>Hospital Discharges</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRG (808)</td>
<td>5%</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>COPD (293)</td>
<td>13%</td>
<td>South Hadley MA (577)</td>
<td>32%</td>
</tr>
<tr>
<td>Heart Failure (247)</td>
<td>8%</td>
<td>Springfield MA (235)</td>
<td>1%</td>
</tr>
<tr>
<td>Maj Dep &amp; Oth Unsp Psychoses (244)</td>
<td>11%</td>
<td>Granby MA (140)</td>
<td>4%</td>
</tr>
<tr>
<td>Other Pneumonia (232)</td>
<td>9%</td>
<td>West Springfield MA (153)</td>
<td>4%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skn Inf (194)</td>
<td>11%</td>
<td>Westfield MA (128)</td>
<td>3%</td>
</tr>
<tr>
<td>Bipolar Disorders (188)</td>
<td>8%</td>
<td>Easthampton MA (85)</td>
<td>4%</td>
</tr>
<tr>
<td>Renal Failure (156)</td>
<td>10%</td>
<td>Southampton MA (46)</td>
<td>9%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf (145)</td>
<td>5%</td>
<td>Belchertown MA (34)</td>
<td>3%</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (132)</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital Payer Mix</th>
<th>Average Hospital Payer Mix</th>
<th>DSH Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>24%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>State Programs</td>
<td>32%</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>44%</td>
<td>44%</td>
<td></td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 5,930

-5.4%

-16.9%

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 85,648

+4.9%

-3.1%

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $9,827

Full Cost per CMAD = $9,849

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $59 M

+12.3%

+7.3%

How have the hospital's total revenue and costs changed between FY09 and FY13?

Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$118</td>
<td>$117</td>
<td>$0</td>
<td>$117</td>
<td>$0.7</td>
</tr>
<tr>
<td>2010</td>
<td>$116</td>
<td>$116</td>
<td>$0</td>
<td>$116</td>
<td>$0.2</td>
</tr>
<tr>
<td>2011</td>
<td>$122</td>
<td>$122</td>
<td>$0</td>
<td>$119</td>
<td>$3.5</td>
</tr>
<tr>
<td>2012</td>
<td>$130</td>
<td>$129</td>
<td>$1</td>
<td>$122</td>
<td>$8.0</td>
</tr>
<tr>
<td>2013</td>
<td>$122</td>
<td>$121</td>
<td>$0</td>
<td>$117</td>
<td>$4.5</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital's profile are derived from the Commonwealth's Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

### PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital 2013</th>
<th>Peer Cohort 2013</th>
<th>Other Cohort Hospitals 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.77</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>0.86</td>
<td>0.89</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0.84</td>
<td>0.89</td>
<td></td>
</tr>
</tbody>
</table>

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures. 

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

2013 Statewide Average = 0.74

### PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**

- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**

- Staff always explained medications
- Recovery information was provided

**Comfort**

- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

The HCAHPS survey measures patient perspectives on key aspects of their care.

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: HOLYOKE MEDICAL CENTER**

**Cohort:** Community, Disproportionate Share Hospital

---

### CARE PRACTICES

**What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?**

- **Percentage of Orders**
  - 0-24%
  - 25-49%
  - 50-74%
  - 75-100%

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td>15</td>
</tr>
</tbody>
</table>

- **Number of cohort hospitals in this category of CPOE usage:**
  - 5 cohort hospitals reported not having a CPOE system

**Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.**

- **Population:** 25 of 27 cohort hospitals responded to this survey
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2012-2013

---

### READMISSIONS

**What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?**

- **Percentage of Patients Readmitted**
  - **Hospital:** 15.5%
  - **Peer Cohort:** 16.2%
  - **National Average:** 16.0%

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period:** 2011-2012

---

### OBSTETRIC CARE

**What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?**

- **Percentage of Clinically Unnecessary Inductions**
  - **2012 - 2013**
    - **Hospital:** 0.0%
    - **Peer Cohort:** 0.0%
    - **National Median:** 2.5%
  - **2011 - 2012**
    - **Hospital:** 8.5%
    - **Peer Cohort:** 3.0%
    - **National Median:** 5.0%

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

- **Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
- **Score:** Lower is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2011-2012 and 2012-2013

---

### OBSTETRIC CARE COMPLICATIONS

**Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?**

- **Complications**
  - **Injury to Neonates**
    - **Hospital:** 2.3
    - **Peer Cohort:** 2.2
  - **Obstetric Trauma: Delivery with Instrument**
    - **Number of eligible patients did not meet the threshold for this calculation:** 140.0
    - **Hospital:** 12.7
    - **Peer Cohort:** 18.0

**Complications and adverse events during birth can harm both the mother and infant.**

- **Population:** 42 hospitals are included in this analysis
- **Score:** Lower is better
- **Source:** HDD; CHIA-calculated indicator, not risk adjusted
- **Data Period:** 2012-2013

---

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

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January 2015
Lawrence General Hospital is a mid-size, non-profit community-Disproportionate Share Hospital (DSH) located in the Northeastern Massachusetts region. Outpatient visits at Lawrence General Hospital increased 8.1% between FY09 and FY13, compared with a median decrease of 3.1% among community-DSH hospitals. Outpatient revenue increased by 43.2% in that period, compared to a median of 7.3% among cohort hospitals. Lawrence General Hospital earned a profit each year in the five-year period, with a total margin of 4.5% in FY13, similar to the median financial performance of its peer cohort.

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?
**2013 Hospital Profile: LAWRENCE GENERAL HOSPITAL**

**Cohort:** Community, Disproportionate Share Hospital

### UTILIZATION TRENDS

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$172</td>
<td>$172</td>
<td>$0</td>
<td>$169</td>
<td>$2.3</td>
</tr>
<tr>
<td>2010</td>
<td>$179</td>
<td>$178</td>
<td>$1</td>
<td>$176</td>
<td>$3.3</td>
</tr>
<tr>
<td>2011</td>
<td>$190</td>
<td>$190</td>
<td>$0</td>
<td>$185</td>
<td>$4.4</td>
</tr>
<tr>
<td>2012</td>
<td>$220</td>
<td>$217</td>
<td>$2</td>
<td>$207</td>
<td>$12.4</td>
</tr>
<tr>
<td>2013</td>
<td>$220</td>
<td>$217</td>
<td>$2</td>
<td>$210</td>
<td>$9.9</td>
</tr>
</tbody>
</table>

FY13 Inpatient Discharges = 12,868

### PATIENT REVENUE TRENDS

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$172</td>
<td>$172</td>
<td>$0</td>
<td>$169</td>
<td>$2.3</td>
</tr>
<tr>
<td>2010</td>
<td>$179</td>
<td>$178</td>
<td>$1</td>
<td>$176</td>
<td>$3.3</td>
</tr>
<tr>
<td>2011</td>
<td>$190</td>
<td>$190</td>
<td>$0</td>
<td>$185</td>
<td>$4.4</td>
</tr>
<tr>
<td>2012</td>
<td>$220</td>
<td>$217</td>
<td>$2</td>
<td>$207</td>
<td>$12.4</td>
</tr>
<tr>
<td>2013</td>
<td>$220</td>
<td>$217</td>
<td>$2</td>
<td>$210</td>
<td>$9.9</td>
</tr>
</tbody>
</table>

FY13 Inpatient Revenue per CMAD = $9,381

### FINANCIAL PERFORMANCE

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* For more information on Delivery System Transformation Initiative (DSTI) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system.

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

- **Population:** 25 of 27 cohort hospitals responded to this survey.
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey^\(^\)
- **Data Period**: 2012-2013

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **2011 - 2012**
  - **Hospital:** 16.1% Peer Cohort
  - **National:** 16.0% National Average

- **2012 - 2013**
  - **Hospital:** 16.2% Peer Cohort
  - **National:** 16.0% National Average

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period**: 2011-2012

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2011 - 2012**
  - **Hospital:** 4.8% Peer Cohort
  - **National:** 2.5% National Median

- **2012 - 2013**
  - **Hospital:** 12.0% Peer Cohort
  - **National:** 5.0% National Median

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

- **Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
- **Score:** Lower is better
- **Source:** The Leapfrog Group Hospital Survey^\(^\)
- **Data Period**: 2011-2012 and 2012-2013

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **Hospital:** 4.8 Peer Cohort
  - **National:** 2.2 Peer Cohort

- **Obstetric Trauma: Delivery with Instrument**
  - **Hospital:** 216.2 Peer Cohort
  - **National:** 140.0 Peer Cohort

- **Obstetric Trauma: Delivery without Instrument**
  - **Hospital:** 34.1 Peer Cohort
  - **National:** 18.0 Peer Cohort

Complications and adverse events during birth can harm both the mother and infant.

- **Population:** 42 hospitals are included in this analysis
- **Score:** Lower is better
- **Source:** HDD; CHIA-calculated indicator, not risk adjusted
- **Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Marlborough Hospital is a non-profit community-Disproportionate Share Hospital (DSH) located in the Metro West region. It is among the smaller acute hospitals in Massachusetts and a member of the UMass Memorial Health Care system. In FY12, Marlborough Hospital was a member of the community hospital cohort; however, in FY13, it qualified as a DSH hospital, as more than 63% of its gross patient service revenue was derived from government programs. Marlborough Hospital was profitable each year from FY09 to FY13, with a total margin of 3.0% in FY13, compared to a median total margin of 4.1% for peer hospitals.

What were the hospital's FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- - - - - -

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 3,825

-5.4%

-9.1%

2009 2010 2011 2012 2013

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 74,713

-3.1%

-11.1%

2009 2010 2011 2012 2013

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $6,441

Full Cost per CMAD = $7,844

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $46 M

+12.8%

+7.3%

2009 2010 2011 2012 2013

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$67</td>
<td>$67</td>
<td>$1</td>
<td>$66</td>
<td>$1.6</td>
</tr>
<tr>
<td>2010</td>
<td>$73</td>
<td>$71</td>
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<tr>
<td>2011</td>
<td>$76</td>
<td>$76</td>
<td>$1</td>
<td>$75</td>
<td>$1.3</td>
</tr>
<tr>
<td>2012</td>
<td>$79</td>
<td>$77</td>
<td>$2</td>
<td>$78</td>
<td>$1.0</td>
</tr>
<tr>
<td>2013</td>
<td>$81</td>
<td>$79</td>
<td>$2</td>
<td>$78</td>
<td>$2.4</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
‡ Costs were adjusted to exclude direct medical education costs and physician compensation.
† Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**
- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**
- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**
- Staff always explained medications
- Recovery information was provided

**Comfort**
- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

The HCAHPS survey measures patient perspectives on key aspects of their care.
- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**Peer Cohort**

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Cohort: Community, Disproportionate Share Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>15</td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 5

<table>
<thead>
<tr>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.0%</td>
</tr>
</tbody>
</table>

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>National Average</th>
<th>Peer Cohort</th>
<th>2013 Hospital Profile: MARLBOROUGH HOSPITAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower is better</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Average</th>
<th>Peer Cohort</th>
<th>2013 Hospital Profile: MARLBOROUGH HOSPITAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.3%</td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile:
MARTHA'S VINEYARD HOSPITAL

Martha's Vineyard Hospital is a small, non-profit community-Disproportionate Share Hospital (DSH) located in the Cape and Islands region. It is a member of Partners HealthCare System. Martha's Vineyard Hospital is designated by the Centers for Medicare & Medicaid Services (CMS) as one of three Critical Access Hospitals (CAH) in Massachusetts. In FY12, Martha's Vineyard Hospital was a member of the community hospital cohort; however, in FY13, it qualified as a DSH hospital, as more than 63% of its gross patient service revenue was derived from government programs. Martha's Vineyard Hospital was profitable each year from FY09 to FY13, with a total margin of 6.6% in FY13, compared to a median total margin of 4.1% among peer cohort hospitals.

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- Inpatient Net Revenue per CMAD
- Inpatient Discharges
- Outpatient Revenue
- Outpatient Visits

GROWTH MEASURES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

Discharges by DRG

- Delivery DRGs (270)
- Other Pneumonia (80)
- COPD (38)
- Heart Failure (37)
- Kidney & UT Infections (34)
- Oth Bck & Nck, Fx and Inj Dx (31)
- Cellulitis, Oth Bact Skin Inf (30)
- Oth Muscskel & ConnTis Dx (29)

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

PAYER MIX

For descriptions of the metrics, please see Technical Appendix.
What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$49</td>
<td>$48</td>
<td>$1</td>
<td>$48</td>
<td>$1.5</td>
</tr>
<tr>
<td>2010</td>
<td>$55</td>
<td>$51</td>
<td>$4</td>
<td>$51</td>
<td>$3.9</td>
</tr>
<tr>
<td>2011</td>
<td>$58</td>
<td>$56</td>
<td>$2</td>
<td>$56</td>
<td>$2.4</td>
</tr>
<tr>
<td>2012</td>
<td>$60</td>
<td>$59</td>
<td>$1</td>
<td>$60</td>
<td>$0.1</td>
</tr>
<tr>
<td>2013</td>
<td>$65</td>
<td>$62</td>
<td>$3</td>
<td>$61</td>
<td>$4.3</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

### PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

The 2013 Statewide Average = 0.74

### PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system
This hospital did not report data for this measure

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital**: 16.3%
- **Peer Cohort**: 16.2%
- **National Average**: 16.0%

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

| Number of cohort hospitals in this category of CPOE usage | 5 cohort hospitals reported not having a CPOE system | This hospital did not report data for this measure |

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

- **Population**: 25 of 27 cohort hospitals responded to this survey
- **Score**: Higher is better
- **Source**: The Leapfrog Group Hospital Survey
- **Data Period**: 2012-2013

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.

- **Population**: Non-clinically complicated births. 41 hospitals reported data for this measure.
- **Score**: Lower is better
- **Source**: The Leapfrog Group Hospital Survey
- **Data Period**: 2011-2012

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Injury to Neonates</th>
<th>Obstetric Trauma: Delivery with Instrument</th>
<th>Obstetric Trauma: Delivery without Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5</td>
<td>Number of eligible patients did not meet the threshold for this calculation</td>
<td>63.8</td>
</tr>
<tr>
<td>2.2</td>
<td>140.0 Peer Cohort</td>
<td>18.0 Peer Cohort</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Mercy Medical Center is a large, non-profit community-Disproportionate Share Hospital (DSH) located in the Western Massachusetts region. Mercy Medical Center had 6.8% fewer inpatient discharges in FY13 than in FY09, compared with a median decrease of 5.4% in its peer cohort. Outpatient visits likewise declined at Mercy Medical Center, by 2.9%, compared with a median decline of 3.1% in its peer cohort. The hospital earned a profit each year from FY09 to FY13, with a 7.6% total margin in FY13, compared to a median total margin of 4.1% among similar hospitals.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

For descriptions of the metrics, please see Technical Appendix.
What were the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

Total Revenue
- FY09: $25.2
- FY12: $219
- FY13: $223

Operating Revenue
- FY09: $11.0
- FY12: $207
- FY13: $211

Non-Operating Revenue
- FY09: $9.9
- FY12: $0
- FY13: $1

Total Costs
- FY09: $232
- FY12: $209
- FY13: $120

Total Profit/Loss
- FY09: $(1)
- FY12: $11.0
- FY13: $25.2

For descriptions of the metrics, please see Technical Appendix.

2013 Hospital Profile: MERCY MEDICAL CENTER
Cohort: Community, Disproportionate Share Hospital

UTILIZATION TRENDS

How has the volume of the hospital’s inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 15,879

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 191,397

PATIENT REVENUE TRENDS

What was the hospital’s net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $9,618

Full Cost per CMAD = $10,017

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $91 M

FINANCIAL PERFORMANCE

How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$232</td>
<td>$217</td>
<td>$15</td>
<td>$211</td>
<td>$20.7</td>
</tr>
<tr>
<td>2010</td>
<td>$216</td>
<td>$217</td>
<td>$(1)</td>
<td>$209</td>
<td>$7.2</td>
</tr>
<tr>
<td>2011</td>
<td>$218</td>
<td>$218</td>
<td>$0</td>
<td>$207</td>
<td>$11.0</td>
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<tr>
<td>2012</td>
<td>$244</td>
<td>$242</td>
<td>$1</td>
<td>$219</td>
<td>$25.2</td>
</tr>
<tr>
<td>2013¹</td>
<td>$130</td>
<td>$129</td>
<td>$1</td>
<td>$120</td>
<td>$9.9</td>
</tr>
</tbody>
</table>

What were the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

Operating
- FY09: 1.5%
- FY12: 10.4%
- FY13: 7.1%

Total
- FY09: 1.7%
- FY12: 7.6%
- FY13: 4.1%

¹ Costs were adjusted to exclude direct medical education costs and physician compensation.
² Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
³ Average Hospital does not include Specialty hospitals.
⁴ Reflects six months of data.

For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).

For more information on Delivery System Transformation Initiative (DSTI) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

¹ Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
² For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
³ For more information on Delivery System Transformation Initiative (DSTI) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
⁴ Costs were adjusted to exclude direct medical education costs and physician compensation.
⁵ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
⁶ Average Hospital does not include Specialty hospitals.
⁷ Reflects six months of data.

January 2015
2013 Hospital Profile:  MERCY MEDICAL CENTER
Cohort:  Community, Disproportionate Share Hospital

QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

![Graph showing PSI-90 Composite scores for 2011, 2012, and 2013]

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

![Graph showing patient experience ratings for 2011, 2012, and 2013]

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>25-49%</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 5

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital**: 15.4%
- **Peer Cohort**: 16.2%
- **National Average**: 16.0%

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2011 - 2012**: 12.3%
- **Peer Cohort**: 3.0%
- **National Median**: 5.0%

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **Hospital**: 3.3
  - **Peer Cohort**: 2.2

- **Obstetric Trauma: Delivery with Instrument**
  - **Hospital**: 325.0
  - **Peer Cohort**: 140.0

- **Obstetric Trauma: Delivery without Instrument**
  - **Hospital**: 27.3
  - **Peer Cohort**: 18.0

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
In FY2013, Merrimack Valley Hospital was a for-profit, community-Disproportionate Share Hospital (DSH) located in the Northeastern Massachusetts region. Merrimack Valley Hospital and Steward Holy Family Hospital merged in 2014 within Steward Health Care System, and Merrimack Valley Hospital is now a campus of Holy Family Hospital. Its new name is Holy Family Hospital at Merrimack Valley. It was among the smaller acute hospitals in Massachusetts in FY13. Merrimack Valley Hospital was unprofitable each year from FY09 to FY13, with a total margin of -22.1% in FY13, compared with a median total margin of 4.1% in its peer cohort.

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-11.0%</td>
<td></td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-9.7%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-11.2%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.2%</td>
<td>-3.1%</td>
</tr>
</tbody>
</table>

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

- Hospital (3,182) = 2% of total regional discharges
- Newton NH (67) = 49% of regional discharges were treated at this hospital in FY13
- Methuen MA (38) = 3% of community discharges were treated at this hospital in FY13

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Payer</th>
<th>RP Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Cross Blue Shield of Mass.</td>
<td>58.2%</td>
</tr>
<tr>
<td>Tufts Health Plan</td>
<td>14.4%</td>
</tr>
<tr>
<td>Harvard Pilgrim Health Care</td>
<td>11.7%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
January 2015

2013 Hospital Profile: MERRIMACK VALLEY HOSPITAL
Cohort: Community, Disproportionate Share Hospital

Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$56</td>
<td>$56</td>
<td>$0</td>
<td>$57</td>
<td>($1.3)</td>
</tr>
<tr>
<td>2010</td>
<td>$55</td>
<td>$55</td>
<td>$0</td>
<td>$59</td>
<td>($4.1)</td>
</tr>
<tr>
<td>2011</td>
<td>$23</td>
<td>$23</td>
<td>$0</td>
<td>$24</td>
<td>($1.2)</td>
</tr>
<tr>
<td>2012</td>
<td>$56</td>
<td>$56</td>
<td>($0)</td>
<td>$62</td>
<td>($5.8)</td>
</tr>
<tr>
<td>2013</td>
<td>$48</td>
<td>$48</td>
<td>($0)</td>
<td>$59</td>
<td>($10.7)</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
‡ Costs were adjusted to exclude direct medical education costs and physician compensation.
§ Average Hospital does not include Specialty hospitals.

For more information, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

Cohort:

- Patient Revenue Trends
- Utilization Trends
- Financial Performance
- Operating Margin

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- Inpatient Revenue per CMAD = $9,192
- Full Cost per CMAD = $10,256

- Operating Margin
- Total Margin

Operating Revenue: $21 M

For more information, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth's Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

![Graph showing PSI-90 Composite for 2011, 2012, and 2013]

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

![Graph showing patient experience ratings for 2013]

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: MERRIMACK VALLEY HOSPITAL
Cohort: Community, Disproportionate Share Hospital

CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

Population: 25 of 27 cohort hospitals responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2012-2013

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

|    | 15.3% | 16.2% Peer Cohort | 16.0% National Average |

Lower is better

Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.
Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.
Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2011-2012 and 2012-2013

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Complications and adverse events during birth can harm both the mother and infant.
Population: 42 hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Morton Hospital is a mid-size, for-profit community-Dishonorary Share Hospital (DSH) located in the Metro South region. Morton Hospital is a member of Steward Health Care System. Inpatient discharges at Morton Hospital decreased by 19.0% from FY09 to FY13, while the median peer cohort hospital had 5.4% fewer inpatient discharges in that period. Outpatient visits declined sharply (- 46.3%) between FY09 and FY13 at Morton Hospital, while its cohort's median outpatient visits declined only 3.1% during that period. Morton Hospital posted a loss from FY11 to FY13, with a total margin of -8.6% in FY13, compared to a median 4.1% margin in its peer cohort.

**AT A GLANCE**

- **TOTAL STAFFED BEDS:** 107, mid-size acute hospital
- **% OCCUPANCY:** 71%, > cohort avg. (62%)
- **CASE MIX INDEX in FY13:** 0.88, > cohort avg. (0.84); = statewide (0.89)
- **INPATIENT DISCHARGES in FY13:** 6,611
- **TRAUMA CENTER DESIGNATION:** Not Applicable
- **EMERGENCY DEPT VISITS in FY13:** 52,636
- **PUBLIC PAYER MIX:** 66% (DSH* Hospital)
- **SPECIAL PUBLIC FUNDING:** IC9
- **CY13 COMMERCIAL PAYER PRICE LEVEL:** 19th Percentile
- **ADJUSTED** COST PER DISCHARGE: $7,081
- **INPATIENT:OUTPATIENT REVENUE in FY13:** 24%:76%
- **CHANGE IN OWNERSHIP (FY09-FY13):** Steward Health Care - 2011

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- **Inpatient Net Revenue per CMAD**
  - Decrease: -10.2%
  - Increase: 3 hospitals >20%
- **Inpatient Discharges**
  - Decrease: -11.7%
  - Increase: 1 hospital >20%
- **Outpatient Revenue**
  - Decrease: -6.6%
  - Increase: 1 hospital >20%
- **Outpatient Visits**
  - Decrease: -29.6%
  - 1 hospital <20%

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

- **Discharges by DRG**
  - Delivery DRGs* (744): 6% of regional discharges were treated at this hospital in FY13
  - Sepsis & Dissem Inf (289): 12%
  - Heart Failure (266): 12%
  - Other Pneumonia (227): 11%
  - COPD (221): 9%
  - Renal Failure (207): 15%
  - Card Arth & Cond Dis (196): 13%
  - Cellulitis, Oth Bact Skn Inf (183): 11%
  - Degen Nns Syst exc MS (178): 20%
  - Pulm Edema & Resp Failure (174): 18%

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

- **Hospital**
  - Commercial & Other: 34%
  - State Programs: 21%
  - Medicare and Other Federal Programs: 45%
- **Average Hospital**
  - Commercial & Other: 37%
  - State Programs: 19%
  - Medicare and Other Federal Programs: 44%

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: Morton Hospital

Cohort: Community, Disproportionate Share Hospital

**Utilization Trends**

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharges</td>
<td>6,611</td>
<td>6,311</td>
<td>6,001</td>
<td>5,701</td>
<td>5,401</td>
</tr>
</tbody>
</table>

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits</td>
<td>67,505</td>
<td>65,005</td>
<td>62,505</td>
<td>60,005</td>
<td>57,505</td>
</tr>
</tbody>
</table>

**Patient Revenue Trends**

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $8,577

Full Cost per CMAD = $7,924

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $61 M

**Financial Performance**

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$131</td>
<td>$131</td>
<td>$0</td>
<td>$126</td>
<td>$5.5</td>
</tr>
<tr>
<td>2010</td>
<td>$133</td>
<td>$131</td>
<td>$2</td>
<td>$130</td>
<td>$3.1</td>
</tr>
<tr>
<td>2011</td>
<td>$126</td>
<td>$124</td>
<td>$1</td>
<td>$129</td>
<td>($3.1)</td>
</tr>
<tr>
<td>2012</td>
<td>$125</td>
<td>$125</td>
<td>$0</td>
<td>$129</td>
<td>($3.7)</td>
</tr>
<tr>
<td>2013</td>
<td>$113</td>
<td>$113</td>
<td>$0</td>
<td>$122</td>
<td>($9.7)</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

**Operating Margin**

FY09: 3.9%

FY13: 2.5%

**Total Margin**

FY09: 7.3%

FY13: 14.4%

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

* Costs were adjusted to exclude direct medical education costs and physician compensation.

* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.

* Average Hospital does not include Specialty hospitals.

January 2015
2013 Hospital Profile: MORTON HOSPITAL
Cohort: Community, Disproportionate Share Hospital

QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

For descriptions of the metrics, please see Technical Appendix.
### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of Orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

Number of cohort hospitals in this category of CPOE usage

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Readmission Rate</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 - 2012</td>
<td>17.6%</td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lower is better

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Induction Rate</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 - 2012</td>
<td>0.6%</td>
<td>3.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>2012 - 2013</td>
<td>2.0%</td>
<td>0.0%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Lower is better

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Event Type</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>2.2</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Obstetric Trauma:</td>
<td>140.0</td>
<td>16.3</td>
<td></td>
</tr>
<tr>
<td>Delivery with Instrument</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery without Instrument</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lower is better

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Noble Hospital is a non-profit community-Disproportionate Share Hospital (DSH) located in the Western Massachusetts region. It is among the smaller acute hospitals in Massachusetts. There was a 1.1% increase in outpatient visits at Noble Hospital from FY09 to FY13, compared to a median decrease of 3.1% among peer cohort hospitals. During that same period, Noble Hospital’s outpatient revenue decreased by 13.5%, compared to a median increase of 7.3% in its cohort. The hospital reported a loss from FY09 to FY11, but earned a profit in FY12 and FY13. Its total margin in FY13 was 0.4%, lower than the median performance in its cohort of 4.1%.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Revenue per CMAD</td>
<td></td>
<td>23.2%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.2%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-5.1%</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-16.8%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Inpatient:Outpatient Revenue in FY13</td>
<td>-3.2%</td>
<td>-1.0%</td>
</tr>
</tbody>
</table>

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG Description</th>
<th>Percentage of Regional Discharges Treated</th>
<th>Percentage of Hospital’s Inpatient Cases Treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rehabilitation (318)</td>
<td>26%</td>
<td>33%</td>
</tr>
<tr>
<td>Maj Dep &amp; Oth/Unsp Psychoses (239)</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>COPD (162)</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Other Pneumonia (161)</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Heart Failure (141)</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Bipolar Disorders (134)</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections (113)</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Renal Failure (107)</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Schizophrenia (99)</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Dep exc Maj Dep (65)</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>34%</td>
</tr>
<tr>
<td>Commercial &amp; Other</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>17%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>48%</td>
</tr>
<tr>
<td>Average Hospital*</td>
<td>DSH Threshold</td>
</tr>
<tr>
<td>Commercial &amp; Other</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>44%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: NOBLE HOSPITAL
Cohort: Community, Disproportionate Share Hospital


text content
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

### PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>hospital</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.77</td>
<td>1.02</td>
</tr>
<tr>
<td>2012</td>
<td>0.83</td>
<td>0.86</td>
</tr>
<tr>
<td>2011</td>
<td>0.84</td>
<td>1.04</td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

**Population:** All patients  
**Score:** Lower is better  
**Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted  
**Data Period:** 10/1-9/30

### PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**

- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**

- Staff always explained medications
- Recovery information was provided

**Comfort**

- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

The HCAHPS survey measures patient perspectives on key aspects of their care.

**Population:** All patients  
**Score:** Higher is better  
**Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare  
**Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Cohort</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Number of cohort hospitals in this category of CPOE usage: 5 cohort hospitals reported not having a CPOE system.

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>READMISSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.0%</td>
</tr>
<tr>
<td>16.2% Peer Cohort</td>
</tr>
<tr>
<td>16.0% National Average</td>
</tr>
</tbody>
</table>

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.
North Shore Medical Center is a large, non-profit community-Disproportionate Share Hospital (DSH) located in the Northeastern Massachusetts region. It is a member of Partners HealthCare System. North Shore Medical Center had 7.2% fewer inpatient discharges in FY13 than in FY09, compared to a median decrease of 5.4% among cohort hospitals. During that period, outpatient visits decreased by 13.7% at the hospital, a steeper decrease than its peer cohort median (-3.1%). During the five-year period, the hospital was only profitable in FY09, and had a total margin of -4.9% in FY13, while the median total margin among cohort hospitals was 4.1%.

### 2013 Hospital Profile:
**NORTH SHORE MEDICAL CENTER**

NORTH SHORE MEDICAL CENTER is a large, non-profit community-Disproportionate Share Hospital (DSH) located in the Northeastern Massachusetts region. It is a member of Partners HealthCare System. North Shore Medical Center had 7.2% fewer inpatient discharges in FY13 than in FY09, compared to a median decrease of 5.4% among cohort hospitals. During that period, outpatient visits decreased by 13.7% at the hospital, a steeper decrease than its peer cohort median (-3.1%). During the five-year period, the hospital was only profitable in FY09, and had a total margin of -4.9% in FY13, while the median total margin among cohort hospitals was 4.1%.

### AT A GLANCE

**TOTAL STAFFED BEDS:** 436, 8th largest acute hospital

**% OCCUPANCY:** 61%, < cohort avg. (62%)

**CASE MIX INDEX in FY13:** 0.90, > cohort avg. (0.84); > statewide (0.89)

**INPATIENT DISCHARGES in FY13:** 19,860

**TRAUMA CENTER DESIGNATION:** Adult: Level 3

**EMERGENCY DEPT VISITS in FY13:** 76,997

**PUBLIC PAYER MIX:** 71% (DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** Not Applicable

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 75th Percentile

**ADJUSTED COST PER DISCHARGE:** $12,278

**INPATIENT:OUTPATIENT REVENUE in FY13:** 40:60%

**CHANGE IN OWNERSHIP (FY09-FY13):** Not Applicable

### GROWTH MEASURES

**What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Discharges</td>
<td>-3.2%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-11.9%</td>
<td>-1.5%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.2%</td>
<td>-1.6%</td>
</tr>
</tbody>
</table>

### SERVICES

**What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?**

<table>
<thead>
<tr>
<th>DRG Description</th>
<th>% of Regional Discharges Treated</th>
<th>% of Hospital’s Commercial Payments</th>
<th>% of Hospital’s Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs*</td>
<td>11%</td>
<td>11.9%</td>
<td>0%</td>
</tr>
<tr>
<td>Sepsis &amp; Dissem Inf</td>
<td>10%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>Other Pneumonia</td>
<td>10%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>Heart Failure</td>
<td>15%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>COPD</td>
<td>10%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>Kidney &amp; UT Infections</td>
<td>15%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Bipolar Disorders</td>
<td>15%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Cellulitis, Oth Bact Skin Inf</td>
<td>15%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Card Arrh &amp; Cond Dis</td>
<td>15%</td>
<td>15%</td>
<td>0%</td>
</tr>
<tr>
<td>Knee Joint Replacement</td>
<td>17%</td>
<td>17%</td>
<td>0%</td>
</tr>
</tbody>
</table>

### PAYER MIX

**What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?**

<table>
<thead>
<tr>
<th>Payer Source</th>
<th>Hospital</th>
<th>Average Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>29%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>48%</td>
<td>44%</td>
</tr>
</tbody>
</table>

### For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: NORTH SHORE MEDICAL CENTER
Cohort: Community, Disproportionate Share Hospital

**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$447</td>
<td>$439</td>
<td>$1</td>
<td>$433</td>
<td>$6.6</td>
</tr>
<tr>
<td>2010</td>
<td>$427</td>
<td>$426</td>
<td>$1</td>
<td>$432</td>
<td>($5.2)</td>
</tr>
<tr>
<td>2011</td>
<td>$423</td>
<td>$423</td>
<td>$0</td>
<td>$438</td>
<td>($14.1)</td>
</tr>
<tr>
<td>2012</td>
<td>$447</td>
<td>$447</td>
<td>$0</td>
<td>$455</td>
<td>($8.0)</td>
</tr>
<tr>
<td>2013</td>
<td>$417</td>
<td>$417</td>
<td>$0</td>
<td>$437</td>
<td>($20.3)</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
ᶲ Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
‡ Average Hospital does not include Specialty hospitals.

**January 2015**
QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-49%</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

- **Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.
  - *Population:* 25 of 27 cohort hospitals responded to this survey
  - *Score:* Higher is better
  - *Source:* The Leapfrog Group Hospital Survey
  - *Data Period:* 2012-2013

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**
  - *Population:* Medicare Fee For Service (FFS) patients age 65+
  - *Score:* Lower is better
  - *Source:* CMS Hospital Compare
  - *Data Period:* 2011-2012

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>14.3%</td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**
  - *Population:* Non-clinically complicated births. 41 hospitals reported data for this measure.
  - *Score:* Lower is better
  - *Source:* The Leapfrog Group Hospital Survey
  - *Data Period:* 2011-2012 and 2012-2013

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 - 2013</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2011 - 2012</td>
<td>0.7%</td>
<td>3.0%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Complications and adverse events during birth can harm both the mother and infant.**
  - *Population:* 42 hospitals are included in this analysis
  - *Score:* Lower is better
  - *Source:* HDD; CHIA-calculated indicator, not risk adjusted
  - *Data Period:* 2012-2013

<table>
<thead>
<tr>
<th>Complication</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury to Neonates</td>
<td>0.0</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery with Instrument</td>
<td>89.3</td>
<td>140.0</td>
<td></td>
</tr>
<tr>
<td>Obstetric Trauma: Delivery without Instrument</td>
<td>15.3</td>
<td>18.0</td>
<td></td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
In FY13, Quincy Medical Center, a member of Steward Health Care System, was a for-profit community-Disproportionate Share Hospital (DSH) located in the Metro South region. It was among the smaller acute hospitals in Massachusetts. On November 6th, 2014, Steward announced an imminent closure of Quincy Medical Center, which occurred on December 26, 2014. The hospital building is now operating as a satellite emergency department for Steward Carney Hospital. The Outpatient visits decreased by 13.2% between FY09 and FY13, a steeper decrease than the median of its peer cohort during that time (-3.1%). Quincy Medical Center reported a loss each year in the five-year period, with a -25.1% total margin in FY13, while the median total margin in its peer cohort was 4.1%.

For descriptions of the metrics, please see Technical Appendix.
What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

$104 Total Revenue
($5.4)
($19.7)

For descriptions of the metrics, please see Technical Appendix.

January 2015
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the **PSI-90 Composite**, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.73</td>
<td>0.77</td>
<td>0.74</td>
</tr>
<tr>
<td>2012</td>
<td>0.78</td>
<td>0.86</td>
<td>0.75</td>
</tr>
<tr>
<td>2011</td>
<td>0.70</td>
<td>0.84</td>
<td>0.75</td>
</tr>
</tbody>
</table>

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following **key expectations for patient experience**, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**

- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**

- Staff always explained medications
- Recovery information was provided

**Comfort**

- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

**The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.**

- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

**The HCAHPS survey measures patient perspectives on key aspects of their care.**

- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
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</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system.

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **2013 Hospital Profile:** Quincy Medical Center
- **Cohort:** Community, Disproportionate Share Hospital

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>17.5%</td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Signature Healthcare Brockton Hospital is a non-profit community-Disproportionate Share Hospital (DSH) located in the Metro South region. It is among the larger acute hospitals in Massachusetts. The hospital experienced a 14.3% decrease in inpatient discharges from FY09 to FY13, compared to a median decrease of 5.4% among peer cohort hospitals. Outpatient visits at the hospital decreased by 3.1% over that period, consistent with the median performance among peer hospitals.

Signature Healthcare Brockton Hospital was profitable each year from FY09 to FY13, with a total margin of 8.7% in FY13, higher than the median total margin of its peer cohort of 4.1%.

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

**PAYER MIX**

What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?

**SERVICES**

Where did most of the hospital’s inpatients reside? What proportion of each community’s total discharges were attributed to this hospital?

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

**AT A GLANCE**

TOTAL STAFFED BEDS: 245, among the larger acute hospitals
% OCCUPANCY: 64%, > cohort avg. (62%)
CASE MIX INDEX in FY13: 0.82, < cohort avg. (0.84); < statewide (0.89)
INPATIENT DISCHARGES in FY13: 12,989
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: 60,192

PUBLIC PAYER MIX: 69% (DSH* Hospital)
SPECIAL PUBLIC FUNDING: CHART*, DSTI*
CY13 COMMERCIAL PAYER PRICE LEVEL: 29th Percentile
ADJUSTED COST PER DISCHARGE: $8,731
INPATIENT:OUTPATIENT REVENUE in FY13: 38:62%
CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable

**WHAT WERE THE FY12 TO FY13 GROWTH RATES AT THIS HOSPITAL FOR THE FOLLOWING MEASURES, AND HOW DO THESE COMPARRE TO THE GROWTH RATES OF THE HOSPITAL'S PEER COHORT?**

**WHAT WERE THE MOST COMMON INPATIENT CASES (DRGs) TREATED AT THE HOSPITAL? WHAT PROPORTION OF THE REGION’S CASES DID THIS HOSPITAL TREAT FOR EACH SERVICE?**

**WHAT WERE THE HOSPITAL’S CY13 PAYER-SPECIFIC RELATIVE PRICE LEVELS FOR ITS TOP THREE COMMERCIAL PAYERS? HOW DOES THIS HOSPITAL COMPARE TO THE AVERAGE HOSPITAL IN ITS PEOH COHORT?**

**WHAT WERE THE HOSPITAL’S FY12 TO FY13 GROWTH RATES AT THIS HOSPITAL FOR THE FOLLOWING MEASURES, AND HOW DO THESE COMPARE TO THE GROWTH RATES OF THE HOSPITAL’S PEER COHORT?**

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: SIGNATURE HEALTHCARE BROCKTON HOSPITAL
Cohort: Community, Disproportionate Share Hospital

Utilization Trends

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 12,989

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 98,995

Patient Revenue Trends

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $10,697

Full Cost per CMAD = $9,518

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $100 M

Financial Performance

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$202</td>
<td>$204</td>
<td>($2)</td>
<td>$200</td>
<td>$2.2</td>
</tr>
<tr>
<td>2010</td>
<td>$219</td>
<td>$218</td>
<td>$1</td>
<td>$200</td>
<td>$19.7</td>
</tr>
<tr>
<td>2011</td>
<td>$220</td>
<td>$218</td>
<td>$2</td>
<td>$204</td>
<td>$16.1</td>
</tr>
<tr>
<td>2012</td>
<td>$240</td>
<td>$238</td>
<td>$2</td>
<td>$214</td>
<td>$25.6</td>
</tr>
<tr>
<td>2013</td>
<td>$227</td>
<td>$224</td>
<td>$3</td>
<td>$207</td>
<td>$19.6</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

January 2015
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.75</td>
<td>0.77</td>
<td>0.86</td>
</tr>
<tr>
<td>2012</td>
<td>0.86</td>
<td>0.88</td>
<td>0.87</td>
</tr>
<tr>
<td>2011</td>
<td>0.84</td>
<td>0.87</td>
<td></td>
</tr>
</tbody>
</table>

**2013 Statewide Average = 0.74**

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**Global Ratings**

- Patients gave hospital a rating of 9 or 10
- Patients would definitely recommend the hospital

**Communication**

- Nurses always communicated well
- Doctors always communicated well

**Care Coordination**

- Staff always explained medications
- Recovery information was provided

**Comfort**

- Always received help as soon as they wanted
- Pain was always well controlled
- Room and bathroom were always clean
- Room was always quiet at night

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system.

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **16.7%**
  - Lower is better
  - Peer Cohort: 16.2%
  - National Average: 16.0%

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

- **2012 - 2013**
  - 0.0%
    - Lower is better
    - Peer Cohort: 0.0%
    - National Median: 2.5%

- **2011 - 2012**
  - 0.8%
    - Lower is better
    - Peer Cohort: 3.0%
    - National Median: 5.0%

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - 0.0%
    - Lower is better
    - Peer Cohort: 2.2%

- **Obstetric Trauma: Delivery with Instrument**
  - 200.0
    - Peer Cohort: 140.0

- **Obstetric Trauma: Delivery without Instrument**
  - 13.1
    - Peer Cohort: 18.0

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

* Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Southcoast Hospitals Group is a large, non-profit community-Disproportionate Share Hospital (DSH) group located in the Southcoast region. Southcoast Hospitals Group has three campuses across Southeastern Massachusetts: Charlton Memorial Hospital, St. Luke's Hospital, and Tobey Hospital campuses. Southcoast Hospitals Group formed an affiliation with Boston Children’s Hospital starting in 2012. Southcoast Hospitals Group was profitable each year from FY09 to FY13, with a total margin of 3.1% in FY13, compared to the median 4.1% increase in its peer cohort.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

- **Hospital**: 82%
- **Peers**: 65% to 77%
- **Statewide**: 68%

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

- **Hospital**: 91%
- **Peers**: 82% to 85%

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

- **Hospital**: 29% Commercial & Other, 23% State Programs, 49% Medicare and Other Federal Programs
- **Average Hospital**: 37% Commercial & Other, 13% State Programs, 44% Medicare and Other Federal Programs

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Inpatient Discharges = 40,303

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Visits = 895,041

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

FY13 Inpatient Revenue per CMAD = $10,500  Full Cost per CMAD = $10,384

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

FY13 Outpatient Revenue = $328 M

What are the hospital’s total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$616</td>
<td>$622</td>
<td>($6)</td>
<td>$604</td>
<td>$12.3</td>
</tr>
<tr>
<td>2010</td>
<td>$649</td>
<td>$643</td>
<td>$6</td>
<td>$624</td>
<td>$25.0</td>
</tr>
<tr>
<td>2011</td>
<td>$682</td>
<td>$672</td>
<td>$11</td>
<td>$648</td>
<td>$34.0</td>
</tr>
<tr>
<td>2012</td>
<td>$710</td>
<td>$703</td>
<td>$7</td>
<td>$664</td>
<td>$45.7</td>
</tr>
<tr>
<td>2013</td>
<td>$726</td>
<td>$712</td>
<td>$14</td>
<td>$704</td>
<td>$22.4</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.

January 2015
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

### Global Ratings
- **Patients gave hospital a rating of 9 or 10**
- **Patients would definitely recommend the hospital**

### Communication
- **Nurses always communicated well**
- **Doctors always communicated well**

### Care Coordination
- **Staff always explained medications**
- **Recovery information was provided**

### Comfort
- **Always received help as soon as they wanted**
- **Pain was always well controlled**
- **Room and bathroom were always clean**
- **Room was always quiet at night**

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

The HCAHPS survey measures patient perspectives on key aspects of their care.
- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
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</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.

- **Population:** 25 of 27 cohort hospitals responded to this survey
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2012-2013

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**
- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period:** 2011-2012

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

- **Injury to Neonates**
  - **Hospital:** 1.2
  - **Peer Cohort:** 2.2
  - **Score:** Lower is better

- **Obstetric Trauma: Delivery with Instrument**
  - **Hospital:** 152.9
  - **Peer Cohort:** 140.0
  - **Score:** Lower is better

- **Obstetric Trauma: Delivery without Instrument**
  - **Hospital:** 18.9
  - **Peer Cohort:** 18.0
  - **Score:** Lower is better

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Steward Good Samaritan Medical Center is a mid-size, for-profit community-Disproportionate Share Hospital (DSH) located in the Metro South region. It is a member of Steward Health Care System. Good Samaritan had 25.6% more outpatient visits in FY13 than in FY09, compared with a median decrease of 3.1% among peer cohort hospitals. Good Samaritan earned a profit each year in the five-year period except in FY12. It had a total margin of 1.8% in FY13, lower than the median total margin in its cohort of 4.1%.

### 2013 Hospital Profile:
**STEWARD GOOD SAMARITAN MEDICAL CENTER**

**Brockton, MA**

**Community, Disproportionate Share Hospital**

**Metro South**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Revenue per CMAD</td>
<td>-2.1%</td>
<td>0.1%</td>
<td></td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-3.2%</td>
<td>0.1%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-8.3%</td>
<td>5.3%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.2%</td>
<td>0.1%</td>
<td></td>
</tr>
</tbody>
</table>

3 hospitals >20%

2 hospitals <-20%

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

**Discharges by Community**

- **Brookton MA (5,785)** 35% of community discharges were treated at this hospital in FY13
- **Stoughton MA (1,811)** 44% of community discharges were treated at this hospital in FY13
- **Bridgewater MA (686)** 27% of community discharges were treated at this hospital in FY13
- **North Easton MA (556)** 42% of community discharges were treated at this hospital in FY13
- **Taunton MA (519)** 8% of community discharges were treated at this hospital in FY13
- **Randolph MA (502)** 12% of community discharges were treated at this hospital in FY13
- **West Bridgewater MA (433)** 40% of community discharges were treated at this hospital in FY13
- **South Easton MA (413)** 37% of community discharges were treated at this hospital in FY13
- **East Bridgewater MA (368)** 22% of community discharges were treated at this hospital in FY13
- **Middleboro MA (341)** 12% of community discharges were treated at this hospital in FY13

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

**PAYER MIX**

<table>
<thead>
<tr>
<th>Payer Mix</th>
<th>Hospital</th>
<th>Average Hospital*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>33%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>45%</td>
<td>44%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Inpatient Discharges = 16,538
- 0.0% change

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Outpatient Visits = 66,913
- 43.6% increase
- 25.6% increase

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- FY13 Inpatient Revenue per CMAD = $9,810
- Full Cost per CMAD = $10,151

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Outpatient Revenue = $86 M
- 15.8% increase
- 7.3% increase

How have the hospital's total revenue and costs changed between FY09 and FY13?

- | FY   | Total Revenue (in millions) | Operating Revenue | Non-Operating Revenue | Total Costs | Total Profit/Loss |
- |------|-----------------------------|-------------------|----------------------|------------|------------------|
- | 2009 | $197                        | $197              | $0                   | $184       | $13.0            |
- | 2010 | $199                        | $196              | $2                   | $186       | $12.7            |
- | 2011 | $183                        | $183              | $0                   | $183       | $0.1             |
- | 2012 | $225                        | $225              | $0                   | $229       | ($4.0)           |
- | 2013 | $234                        | $234              | $0                   | $230       | $4.2             |

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

- Operating Margin: 1.7%, 1.8%
- Total Margin: 6.6%, 4.1%
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

### PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures. Population: All patients Score: Lower is better Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

### PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care. Population: All patients Score: Higher is better Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: STEWARD GOOD SAMARITAN MEDICAL CENTER**

**Cohort:** Community, Disproportionate Share Hospital

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>25-49%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-74%</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>75-100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **2013 Hospital Profile:** STEWARD GOOD SAMARITAN MEDICAL CENTER

<table>
<thead>
<tr>
<th>What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days?</th>
</tr>
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<tbody>
<tr>
<td><strong>What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days?</strong></td>
</tr>
<tr>
<td><strong>2013 Hospital Profile:</strong> STEWARD GOOD SAMARITAN MEDICAL CENTER</td>
</tr>
</tbody>
</table>

- **Hospital:** STEWARD GOOD SAMARITAN MEDICAL CENTER
- **Peer Cohort:** 16.2%
- **National Average:** 16.0%

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

Population: Non-clinically complicated births. 41 hospitals reported data for this measure.

- **2011 - 2012**
  - **Hospital:** 0.0%
  - **Peer Cohort:** 3.0%
  - **National Median:** 5.0%

- **2012 - 2013**
  - **Hospital:** 0.0%
  - **Peer Cohort:** 2.5%
  - **National Median:** 2.5%

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Injury to Neonates</th>
<th>Obstetric Trauma: Delivery with Instrument</th>
<th>Obstetric Trauma: Delivery without Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital:</strong></td>
<td><strong>2.0</strong></td>
<td><strong>16.3</strong></td>
</tr>
<tr>
<td><strong>Peer Cohort:</strong></td>
<td><strong>2.2</strong></td>
<td><strong>18.0</strong></td>
</tr>
<tr>
<td><strong>Population:</strong></td>
<td><strong>42 hospitals</strong></td>
<td><strong>2012-2013</strong></td>
</tr>
</tbody>
</table>

Complications and adverse events during birth can harm both the mother and infant.

- **Population:** 42 hospitals are included in this analysis
- **Score:** Lower is better
- **Source:** HDD; CHIA-calculated indicator, not risk adjusted
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.

- Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.
- Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

**January 2015**

**Computerized Physician Order Entry (CPOE) is believed to increase efficiency and reduce transcription errors.**

Population: 25 of 27 cohort hospitals responded to this survey

- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey
- **Data Period:** 2012-2013

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

Population: Medicare Fee For Service (FFS) patients age 65+

- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period:** 2011-2012
Steward Holy Family Hospital is a mid-size, for-profit community-Disproportionate Share Hospital (DSH) located in the Northeastern Massachusetts region. Holy Family is a member of Steward Health Care System. Outpatient visits increased 14.3% between FY09 and FY13 at Holy Family, compared to a median decrease of 3.1% in its peer cohort. Over that same period, outpatient revenue at the hospital increased by 18.6%, compared to a median increase of 7.3% among peer cohort hospitals. Holy Family was profitable three of the five years, and had a total margin of 4.2% in FY13, similar to the median performance of cohort hospitals.

**What were the most common inpatient cases (DRGs) treated at the hospital?**

**What proportion of the region's cases did this hospital treat for each service?**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hospitals &gt;20%</td>
<td></td>
</tr>
<tr>
<td>2 hospitals &lt;-20%</td>
<td></td>
</tr>
</tbody>
</table>

**Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?**

**What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?**

**2013 Hospital Profile:**

**STEWARD HOLY FAMILY HOSPITAL**

Steward Holy Family Hospital is a mid-size, for-profit community-Disproportionate Share Hospital (DSH) located in the Northeastern Massachusetts region. Holy Family is a member of Steward Health Care System. Outpatient visits increased 14.3% between FY09 and FY13 at Holy Family, compared to a median decrease of 3.1% in its peer cohort. Over that same period, outpatient revenue at the hospital increased by 18.6%, compared to a median increase of 7.3% among peer cohort hospitals. Holy Family was profitable three of the five years, and had a total margin of 4.2% in FY13, similar to the median performance of cohort hospitals.

**Total Staffed Beds:** 195, mid-size acute hospital

**% Occupancy:** 67%, > cohort avg. (62%)

**Case Mix Index in FY13:** 0.86, > cohort avg. (0.84); < statewide (0.89)

**Inpatient Discharges in FY13:** 10,910

**Trauma Center Designation:** Not Applicable

**Emergency Dept Visits in FY13:** 41,513

**Public Payer Mix:** 65% (DSH* Hospital)

**Special Public Funding:** ICB

**CY13 Commercial Payer Price Level:** 36th Percentile

**Adjusted Cost Per Discharge:** $9,226

**Inpatient:Outpatient Revenue in FY13:** 40%;60%

**Change in Ownership (FY09-FY13):** Steward Health Care - 2010

**Growth Measures**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-10.9%</td>
<td>3 hospitals &gt;20%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-6.1%</td>
<td>1 hospital &gt;20%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-3.2%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Other Cohort Hospitals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Services**

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>DRG</th>
<th>HCF Percent</th>
<th>Other Cohort Hospitals Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery DRGs† (1,856)</td>
<td>8%</td>
<td>Regional discharges were treated at this hospital in FY13</td>
</tr>
<tr>
<td>Main Dep &amp; Other Psychoses (610)</td>
<td>28%</td>
<td></td>
</tr>
<tr>
<td>Bipolar Disorders (602)</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Septis &amp; Dissem Inf (319)</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Schizophrenia (298)</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Heart Failure (288)</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Other Pneumonia (277)</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>COPD (223)</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Knee Joint Replacement (213)</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Card Arth &amp; Cond Dis (204)</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

**Payer Mix**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Source</th>
<th>HCF Percent</th>
<th>Other Cohort Hospitals Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>35%</td>
<td></td>
</tr>
<tr>
<td>State Programs</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Average Hospital*</td>
<td>37%</td>
<td>DSH Threshold</td>
</tr>
</tbody>
</table>

**Methuen MA (2,761) 143% of community discharges were treated at this hospital in FY13**

**Northeastern MA**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dracut MA (89)</td>
<td>7%</td>
</tr>
<tr>
<td>Derry NH (102)</td>
<td>17%</td>
</tr>
<tr>
<td>Lowell MA (318)</td>
<td>2%</td>
</tr>
<tr>
<td>Saalem NH (1117)</td>
<td>50%</td>
</tr>
<tr>
<td>Andover MA (438)</td>
<td>15%</td>
</tr>
<tr>
<td>North Andover MA (344)</td>
<td>12%</td>
</tr>
<tr>
<td>Plaistow NH (1114)</td>
<td>20%</td>
</tr>
<tr>
<td>Haverhill MA (1,330)</td>
<td>16%</td>
</tr>
<tr>
<td>Lawrence MA (2,694)</td>
<td>24%</td>
</tr>
<tr>
<td>Methuen MA (2,761)</td>
<td>43%</td>
</tr>
</tbody>
</table>

**Other Cohort Hospitals**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dracut MA (89)</td>
<td>2%</td>
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<tr>
<td>Derry NH (102)</td>
<td>17%</td>
</tr>
<tr>
<td>Lowell MA (318)</td>
<td>2%</td>
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<tr>
<td>Plaistow NH (1114)</td>
<td>20%</td>
</tr>
<tr>
<td>Saalem NH (1117)</td>
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<tr>
<td>North Andover MA (438)</td>
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</tr>
<tr>
<td>Andover MA (344)</td>
<td>12%</td>
</tr>
<tr>
<td>Lawrence MA (2,694)</td>
<td>24%</td>
</tr>
<tr>
<td>Methuen MA (2,761)</td>
<td>43%</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.
* Average Hospital does not include Specialty hospitals.

January 2015
QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: STEWARD HOLY FAMILY HOSPITAL
Cohort: Community, Disproportionate Share Hospital

CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>Number of cohort hospitals in this category of CPOE usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24%</td>
<td>3</td>
</tr>
<tr>
<td>25-49%</td>
<td>2</td>
</tr>
<tr>
<td>50-74%</td>
<td>15</td>
</tr>
</tbody>
</table>

5 cohort hospitals reported not having a CPOE system

READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

<table>
<thead>
<tr>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.0%</td>
<td>16.2%</td>
</tr>
<tr>
<td>16.0%</td>
<td></td>
</tr>
</tbody>
</table>

OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

<table>
<thead>
<tr>
<th>Peer Cohort</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.9%</td>
<td>2.5%</td>
</tr>
<tr>
<td>1.9%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Injury to Neonates</th>
<th>Obstetric Trauma: Delivery with Instrument</th>
<th>Obstetric Trauma: Delivery without Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2</td>
<td>Number of eligible patients did not meet the threshold for this calculation</td>
<td>22.8</td>
</tr>
<tr>
<td>2.2</td>
<td>140.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Peer Cohort</td>
<td>Peer Cohort</td>
<td>Peer Cohort</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
For descriptions of the metrics, please see Technical Appendix.
**2013 Hospital Profile: STEWARD SAINT ANNE’S HOSPITAL**

**Cohort:** Community, Disproportionate Share Hospital

### Utilization Trends

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

**FY13 Inpatient Discharges = 7,098**

- **2009:** 100
- **2010:** 104
- **2011:** 108
- **2012:** 112
- **2013:** 116

**Change:** +20.7%

### Patient Revenue Trends

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- **FY13 Inpatient Revenue per CMAD = $10,804**
- **Full Cost per CMAD = $11,243**

- **2009:** 65
- **2010:** 70
- **2011:** 75
- **2012:** 80
- **2013:** 85

**Change:** +47.3%

### Financial Performance

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$145</td>
<td>$143</td>
<td>$1</td>
<td>$134</td>
<td>$10.6</td>
</tr>
<tr>
<td>2010</td>
<td>$153</td>
<td>$151</td>
<td>$2</td>
<td>$140</td>
<td>$13.2</td>
</tr>
<tr>
<td>2011</td>
<td>$164</td>
<td>$164</td>
<td>$0</td>
<td>$151</td>
<td>$12.7</td>
</tr>
<tr>
<td>2012</td>
<td>$202</td>
<td>$202</td>
<td>$0</td>
<td>$177</td>
<td>$25.4</td>
</tr>
<tr>
<td>2013</td>
<td>$208</td>
<td>$208</td>
<td>$0</td>
<td>$195</td>
<td>$13.2</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).
* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Average Hospital does not include Specialty hospitals.
2013 Hospital Profile: STEWARDE S ANNE’S HOSPITAL
Cohort: Community, Disproportionate Share Hospital

QUALITY OVERVIEW

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.
Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.
Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period**: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

![Percentage of Orders](chart)

**Number of cohort hospitals in this category of CPOE usage**

- 0-24%: 3 hospitals
- 25-49%: 2 hospitals
- 50-74%: 15 hospitals

5 cohort hospitals reported not having a CPOE system

**Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.

- Population: 25 of 27 cohort hospitals responded to this survey
- Score: Higher is better
- Source: The Leapfrog Group Hospital Survey^  
- Data Period*: 2012-2013

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

- **National Average**: 16.3%
- **Peer Cohort**: 16.2%
- **Hospital**: 16.0%

**Hospital-Wide All-Cause 30-Day Readmissions** follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

- Population: Medicare Fee For Service (FFS) patients age 65+
- Score: Lower is better
- Source: CMS Hospital Compare
- Data Period*: 2011-2012

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

- Population: Non-clinically complicated births. 41 hospitals reported data for this measure.
- Score: Lower is better
- Source: The Leapfrog Group Hospital Survey^  
- Data Period*: 2011-2012 and 2012-2013

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

**Complications and adverse events during birth can harm both the mother and infant.**

- Population: 42 hospitals are included in this analysis
- Score: Lower is better
- Source: HDD; CHIA-calculated indicator, not risk adjusted
- Data Period*: 2012-2013

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Sturdy Memorial Hospital is a mid-size, non-profit community-Disproportionate Share Hospital (DSH) located in the Metro West region. In FY12, Sturdy was a member of the community hospital cohort; however, in FY13, it qualified as a DSH hospital, as more than 63% of its gross patient service revenue was derived from government programs. Sturdy was profitable from FY09 to FY13, and had a total margin of 11.9% in FY13, compared with a median total margin of 4.1% in its peer cohort.

AT A GLANCE

TOTAL STAFFED BEDS: 149, mid-size acute hospital
% OCCUPANCY: 52%, < cohort avg. (62%)
CASE MIX INDEX in FY13: 0.83, < cohort avg. (0.84); < statewide (0.89)
INPATIENT DISCHARGES in FY13: 6,693
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: 51,325

PUBLIC MIX: 63% (DSH† Hospital)
SPECIAL PUBLIC FUNDING: ICB§
CY13 COMMERCIAL PAYER PRICE LEVEL: 60th Percentile
ADJUSTED COST PER DISCHARGE: $10,045
INPATIENT:OUTPATIENT REVENUE in FY13: 30%.70%
CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

Discharges by DRG

- Delivery DRGs (1,410): 25% of regional discharges were treated at this hospital in FY13
- COPD (381): 26%
- Other Pneumonia (267): 20%
- Sepsis & Dissem Inf (265): 21%
- Heart Failure (228): 16%
- Knee Joint Replacement (210): 29%
- Cellulitis, Oth Bact Skin Inf (176): 21%
- Kidney & UT Infections (145): 17%
- Card Arrh & Cond Dis (141): 13%
- Renal Failure (116): 14%

- - Hospital (6,693) = 15% of total regional discharges

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

Discharges by Community

- North Attleboro MA (1,117): 52% of community discharges were treated at this hospital in FY13
- Norton MA (595): 36%
- Mansfield MA (400): 20%
- Plainville MA (299): 35%
- Rehoboth MA (215): 41%
- Wrentham MA (187): 16%
- Seekonk MA (172): 47%
- Foxboro MA (136): 8%
- Pawtucket RI (111): 30%

PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

Hospital

- Commercial & Other: 37%
- State Programs: 18%
- Medicare and Other Federal Programs: 45%

Average Hospital†

- Commercial & Other: 37%
- State Programs: 19%
- Medicare and Other Federal Programs: 44%

DSH Threshold

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: STURDY MEMORIAL HOSPITAL  
Cohort: Community, Disproportionate Share Hospital

### UTILIZATION TRENDS

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Inpatient Discharges = 6,693
- FY09 Inpatient Discharges = 6,693
- FY11 Inpatient Discharges = 6,838
- FY12 Inpatient Discharges = 6,771
- FY13 Inpatient Discharges = 6,701

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Outpatient Visits = 115,335
- FY09 Outpatient Visits = 115,335
- FY11 Outpatient Visits = 115,335
- FY12 Outpatient Visits = 115,335
- FY13 Outpatient Visits = 115,335

### PATIENT REVENUE TRENDS

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

- FY13 Inpatient Revenue per CMAD = $8,619  
  Full Cost per CMAD = $10,142

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

- FY13 Outpatient Revenue = $106 M
  
### FINANCIAL PERFORMANCE

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Total Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$144</td>
<td>$156</td>
<td>($12)</td>
<td>$144</td>
<td>$0.1</td>
</tr>
<tr>
<td>2010</td>
<td>$167</td>
<td>$160</td>
<td>$7</td>
<td>$148</td>
<td>$18.3</td>
</tr>
<tr>
<td>2011</td>
<td>$164</td>
<td>$157</td>
<td>$7</td>
<td>$148</td>
<td>$15.9</td>
</tr>
<tr>
<td>2012</td>
<td>$174</td>
<td>$166</td>
<td>$7</td>
<td>$153</td>
<td>$20.5</td>
</tr>
<tr>
<td>2013</td>
<td>$170</td>
<td>$162</td>
<td>$9</td>
<td>$150</td>
<td>$20.2</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

* Costs were adjusted to exclude direct medical education costs and physician compensation.

* Delivery DRG includes Cesarean and Vaginal Deliveries, and Neonate DRG.

† Average Hospital does not include Specialty hospitals.

January 2015
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

![Graph showing PSI-90 Composite scores over years with 2013 Statewide Average = 0.74]

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- Population: All patients
- Score: Lower is better
- Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- Data Period*: 10/1-9/30

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

![Graph showing Global Ratings and Communication scores with notes]

The HCAHPS survey measures patient perspectives on key aspects of their care.

- Population: All patients
- Score: Higher is better
- Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: STURDY MEMORIAL HOSPITAL
Cohort: Community, Disproportionate Share Hospital

<table>
<thead>
<tr>
<th>CARE PRACTICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?</td>
</tr>
<tr>
<td><strong>Percentage of Orders</strong></td>
</tr>
<tr>
<td>0-24%</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>5 cohort hospitals reported not having a CPOE system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>READMISSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?</td>
</tr>
<tr>
<td><strong>Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.</strong></td>
</tr>
<tr>
<td><strong>Population:</strong> Medicare Fee For Service (FFS) patients age 65+</td>
</tr>
<tr>
<td><strong>Score:</strong> Lower is better</td>
</tr>
<tr>
<td><strong>Source:</strong> CMS Hospital Compare</td>
</tr>
<tr>
<td><strong>Data Period:</strong> 2011-2012</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OBSTETRIC CARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?</td>
</tr>
<tr>
<td><strong>Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.</strong></td>
</tr>
<tr>
<td><strong>Population:</strong> Non-clinically complicated births. 41 hospitals reported data for this measure.</td>
</tr>
<tr>
<td><strong>Score:</strong> Lower is better</td>
</tr>
<tr>
<td><strong>Source:</strong> The Leapfrog Group Hospital Survey^</td>
</tr>
<tr>
<td><strong>Data Period:</strong> 2011-2012 and 2012-2013</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OBSTETRIC CARE COMPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?</td>
</tr>
<tr>
<td><strong>Complications and adverse events during birth can harm both the mother and infant.</strong></td>
</tr>
<tr>
<td><strong>Population:</strong> 42 hospitals are included in this analysis</td>
</tr>
<tr>
<td><strong>Score:</strong> Lower is better</td>
</tr>
<tr>
<td><strong>Source:</strong> HDD; CHIA-calculated indicator, not risk adjusted</td>
</tr>
<tr>
<td><strong>Data Period:</strong> 2012-2013</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Wing Memorial Hospital is a non-profit community-Disproportionate Share Hospital (DSH) located in the Western Massachusetts region. It is among the smaller acute hospitals in Massachusetts and a member of the UMass Memorial Health Care system. Wing Memorial filed a determination of need (DON) application on June 3, 2014 to transfer ownership of the hospital from UMass Memorial Health Care system to Baystate Health system. Wing Memorial Hospital earned a profit each year from FY09 to FY13, with a 3.0% total margin in FY13, lower than the median performance of peer cohort hospitals of 4.1%.

**2013 Hospital Profile:**

**WING MEMORIAL HOSPITAL**

**Community, Disproportionate Share Hospital**

Western Massachusetts

**What were the most common inpatient cases (DRGs) treated at the hospital?**

- Seizures, Other Neurological Disturbances (254)
- Hip Fracture (101)
- Kidney & UT Infections (101)
- Card Arrth & Cond Dis (108)
- Other Pneumonia (210)
- Maj Dep& Oth/Unsp Psychoses (214)
- Pediatric Birth (217)
- Other Pneumonia (210)
- COPD (156)
- Card Arth & Cond Dis (108)
- Schizophrenia (190)
- Other Pneumonia (210)
- Cellulitis, Oth Bact Skn Inf (96)

**What proportion of the region's cases did this hospital treat for each service?**

- 3 hospitals >20%
- 2 hospitals <-20%

**Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?**

- Hospital (3,134) = 3% of total regional discharges

**What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?**

- Blue Cross Blue Shield of Massachusetts: 48.2% of Hospital's Commercial Payments
- Health New England, Inc.: 18.1%
- UniCare Life and Health Insurance Company: 9.7%

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

**SERVICES**

What were the most common inpatient cases (DRGs) treated at the hospital?

What proportion of the region's cases did this hospital treat for each service?

- Discharges by DRG
- Bipolar Disorders (254): 11% of regional discharges were treated at this hospital in FY13
- Maj Dep & Oth/Unsp Psychoses (214): 8%
- Other Pneumonia (210): 8%
- Org Mental Hlth Disturb (190): 8%
- COPD (156): 6%
- Heart Failure (131): 4%
- Card Arth & Cond Dis (108): 6%
- Kidney & UT Infections (101): 7%
- Schizophrenia (190): 6%
- Cellulitis, Oth Bact Skn Inf (96): 5%

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital</th>
<th>Average Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>29%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>53%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers? How does this hospital compare to the average hospital in its peer cohort?**

**For descriptions of the metrics, please see Technical Appendix.**
What were the hospital's total margin and operating margin between FY09 and FY13, and how do these compare to the median of its peer cohort hospitals?

How has the volume of the hospital's inpatient discharges changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How have the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to the median hospital in its peer cohort? (FY09=100)

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13, and how does this hospital compare to the median hospital in its peer cohort?

How has the hospital's total revenue and costs changed between FY09 and FY13?

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

* For more information on Community Hospital Acceleration, Revitalization and Transformation (CHART) special funding, please contact the Health Policy Commission (HPC).

* For more information on Infrastructure and Capacity Building (ICB) special funding, please contact the Massachusetts Executive Office of Health and Human Services (EOHHS).

* Costs were adjusted to exclude direct medical education costs and physician compensation.

* Average Hospital does not include Specialty hospitals.
How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

**QUALITY OVERVIEW**

The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? How does this compare to the median of its peer cohort?

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

2013 Statewide Average = 0.74

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
2013 Hospital Profile: **WING MEMORIAL HOSPITAL**

**Cohort:** Community, Disproportionate Share Hospital

### CARE PRACTICES

What percentage of medication orders were entered by a physician using an electronic system that included error checking? How does this hospital compare to the median hospital in its peer cohort?

<table>
<thead>
<tr>
<th>Percentage of Orders</th>
<th>0-24%</th>
<th>25-49%</th>
<th>50-74%</th>
<th>75-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cohort hospitals in this category of CPOE usage</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

5 cohort hospitals, including this hospital, reported not having a CPOE system.

**Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.

- **Population:** 25 of 27 cohort hospitals responded to this survey.
- **Score:** Higher is better
- **Source:** The Leapfrog Group Hospital Survey®
- **Data Period*: 2012-2013

### READMISSIONS

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the median hospital in its peer cohort, and the national average?

**Hospital-Wide All-Cause 30-Day Readmissions follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.**

- **Population:** Medicare Fee For Service (FFS) patients age 65+
- **Score:** Lower is better
- **Source:** CMS Hospital Compare
- **Data Period*: 2011-2012

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.1%</td>
<td></td>
<td>16.2%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

### OBSTETRIC CARE

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation? How does this compare to the median hospital in its peer cohort, and the national median?

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation are associated with higher risks for newborns.**

- **Population:** Non-clinically complicated births. 41 hospitals reported data for this measure.
- **Score:** Lower is better
- **Source:** The Leapfrog Group Hospital Survey®
- **Data Period*: 2011-2012 and 2012-2013

### OBSTETRIC CARE COMPLICATIONS

Out of every 1,000 births, how many patients experienced an adverse event? How does this compare to the median hospital in its peer cohort?

**Complications and adverse events during birth can harm both the mother and infant.**

- **Population:** 42 hospitals are included in this analysis
- **Score:** Lower is better
- **Source:** HDD; CHIA-calculated indicator, not risk adjusted
- **Data Period*: 2012-2013

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

---

For descriptions of the metrics, please see Technical Appendix.

- * Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.
- ^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.

January 2015
Boston Children’s Hospital is a large, non-profit specialty hospital dedicated to pediatric health care. It is located in the Metro Boston region. It is a teaching hospital for Harvard Medical School, and has research partnerships with numerous institutions in Massachusetts and elsewhere. It is one of eight organ transplant centers in Massachusetts. Boston Children’s reports that the average age of patients admitted to the hospital is approximately 8 years, and that 88.5% of discharges from the hospital in FY13 were for patients under 18 years of age. It earned a surplus each year from FY09 to FY13, with its greatest surplus of $157.7M in FY13.

2013 Hospital Profile:
BOSTON CHILDREN’S HOSPITAL

\[ \text{AT A GLANCE} \]

<table>
<thead>
<tr>
<th>TOTAL STAFFED BEDS: 371</th>
<th>PUBLIC PAYER MIX: 35% (Non-DSH* Hospital)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% OCCUPANCY: 76%</td>
<td>SPECIAL PUBLIC FUNDING: Not Applicable</td>
</tr>
<tr>
<td>CASE MIX INDEX in FY13: 1.760</td>
<td>CY13 COMMERCIAL PAYER PRICE LEVEL: 93rd Percentile</td>
</tr>
<tr>
<td>INPATIENT DISCHARGES in FY13: 15,180</td>
<td>ADJUSTED(^\text{2}) COST PER DISCHARGE: $16,467</td>
</tr>
<tr>
<td>TRAUMA CENTER DESIGNATION: Pedi: Level 1</td>
<td>INPATIENT:OUTPATIENT REVENUE in FY13: 53%-47%</td>
</tr>
<tr>
<td>EMERGENCY DEPT VISITS in FY13: 58,588</td>
<td>CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable</td>
</tr>
</tbody>
</table>

\[ \text{GROWTH MEASURES} \]

What were the FY12 to FY13 growth rates at this hospital for the following measures?

- Inpatient Net Revenue per CMAD: -0.5\%
- Inpatient Discharges: -3.7\%
- Outpatient Revenue: 2.4\%
- Outpatient Visits: -2.4\%

\[ \text{SERVICES} \]

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region’s cases did this hospital treat for each service?

- Discharges by DRG:
  - Seizure (705): 24\%
  - Asthma (962): 29\%
  - Other Digestive System Dx (394): 16\%
  - Bronchiolitis & RSV Pneum (394): 50\%
  - Other Pneumonia (346): 6\%
  - Infects- Upper Resp Tract (346): 26\%
  - NBact Gastro, Naus, Vom (321): 14\%
  - Hip & Fem; N-TrauExc Jt Rep (311): 42\%
  - Chemotherapy (300): 10\%
  - Major HEM / IG Dx Ex SCD (284): 21\%

- Hospital (15,180) = 5\% of total regional discharges

\[ \text{PAYER MIX} \]

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

- Hospital: 65\%
  - Commercial & Other: 37\%
  - State Programs: 19\%
  - Medicare and Other Federal Programs: 44\%
- Average Hospital:\(^*\):
  - Commercial & Other: 37\%
  - State Programs: 13\%
  - Medicare and Other Federal Programs: 44\%

For descriptions of the metrics, please see Technical Appendix.
**How has the volume of the hospital's inpatient discharges changed compared to FY09? (FY09=100)**

- **FY13 Inpatient Discharges = 15,180**
- **-16.8%**

**How has the volume of the hospital's outpatient visits changed compared to FY09? (FY09=100)**

- **FY13 Outpatient Visits = 256,747**
- **-13.2%**

**What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13?**

- **FY13 Inpatient Revenue per CMAD = $18,933**
- **Full Cost per CMAD = $17,379**

**How has the hospital's total outpatient revenue changed compared to FY09? (FY09=100)**

- **FY13 Outpatient Revenue = $450 M**
- **-7.4%**

**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$1,304</td>
<td>$1,289</td>
<td>$16</td>
<td>$1,216</td>
<td>$88.4</td>
</tr>
<tr>
<td>2010</td>
<td>$1,322</td>
<td>$1,306</td>
<td>$16</td>
<td>$1,248</td>
<td>$74.1</td>
</tr>
<tr>
<td>2011</td>
<td>$1,349</td>
<td>$1,326</td>
<td>$23</td>
<td>$1,267</td>
<td>$82.1</td>
</tr>
<tr>
<td>2012</td>
<td>$1,318</td>
<td>$1,296</td>
<td>$22</td>
<td>$1,259</td>
<td>$58.4</td>
</tr>
<tr>
<td>2013</td>
<td>$1,418</td>
<td>$1,322</td>
<td>$97</td>
<td>$1,260</td>
<td>$157.7</td>
</tr>
</tbody>
</table>

**For descriptions of the metrics, please see Technical Appendix.**

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
† Costs were adjusted to exclude direct medical education costs and physician compensation.
‡ Average Hospital does not include Specialty hospitals.
2013 Hospital Profile:  BOSTON CHILDREN'S HOSPITAL
Cohort:  N/A - Specialty Hospital

QUALITY OVERVIEW
The selected quality measures displayed in this hospital's profile are derived from the Commonwealth's Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

Specially hospitals were not included in any cohort comparison analysis due to unique patient populations they serve and/or the unique sets of services they provide.

PATIENT SAFETY
How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00? Note this measure applies to adult inpatients only, which represent 11.5% of this hospital’s discharges.

PATIENT EXPERIENCE and READMISSIONS
These CMS compare measures are not applicable to the patient population treated at this specialty hospital.

CARE PRACTICES
What percentage of medication orders were entered by a physician using an electronic system that included error checking?

OBSTETRIC CARE and OBSTETRIC CARE COMPLICATIONS
These measures are not applicable to the patient population treated at this specialty hospital.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

* Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
2013 Hospital Profile:
DANA-FARBER CANCER INSTITUTE

Dana-Farber Cancer Institute (Dana-Farber) is a non-profit specialty hospital dedicated to pediatric and adult cancer treatment and research, primarily in an outpatient setting, located in the Metro Boston region. It is a teaching affiliate of Harvard Medical School and collaborates with a variety of hospitals and research institutions, including the Dana-Farber/Brigham and Women’s Cancer Center, Dana-Farber/Boston Children’s Cancer and Blood Disorders Center, Dana-Farber/Partners Cancer Center, and Dana-Farber/Harvard Cancer Center. It is one of 41 Comprehensive Cancer Centers in the US, designated by the National Cancer Institute. 31% of its operating expenses in FY14 were research-related. It earned a 5.2% total margin in FY13, though its operating margin was -4.4%.

At a Glance

- TOTAL STAFFED BEDS: 30
- % OCCUPANCY: 79%
- CASE MIX INDEX in FY13: 2.23
- INPATIENT DISCHARGES in FY13: 990
- TRAUMA CENTER DESIGNATION: Not Applicable
- EMERGENCY DEPT VISITS in FY13: Not Applicable

Growth Measures

What were the FY12 to FY13 growth rates at this hospital for the following measures?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-12.7%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-20%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-15%</td>
<td></td>
</tr>
<tr>
<td>-20% to 10%</td>
<td>Hospital</td>
<td></td>
</tr>
</tbody>
</table>

Services

- What were the most common inpatient cases (DRGs) treated at the hospital?
- What proportion of the region’s cases did this hospital treat for each service?
- Where did most of the hospital’s inpatients reside? What proportion of each community’s total discharges were attributed to this hospital?

This graph has been suppressed, as the hospital provides the vast majority of its services on an outpatient basis. In FY14, this hospital reported over 380,000 adult and pediatric outpatient clinic visits and infusions.

Payer Mix

- What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?
- What were the hospital’s CY13 payer-specific relative price levels for its top three commercial payers?

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09? (FY09=100)

FY13 Inpatient Discharges = 990

How has the volume of the hospital's outpatient visits changed compared to FY09? (FY09=100)

FY13 Outpatient Visits = 234,793

What were the hospital's total margin and operating margin between FY09 and FY13?

How have the hospital's total revenue and costs changed between FY09 and FY13?

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13?

FY13 Inpatient Revenue per CMAD = $16,055

Full Cost per CMAD = $15,331

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

† Average Hospital does not include Specialty hospitals.
For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
Kindred Hospital-Boston is a for-profit specialty hospital that specializes in providing long-term acute care services. It is located in the Metro Boston region, and is among the smaller acute hospitals in Massachusetts. Kindred Hospital-Boston provides acute cardiac and pulmonary medicine, dialysis, wound care, infectious disease, and rehabilitation services following long-term illness. Inpatient days at Kindred Hospital-Boston increased 22.7% from FY09 to FY13. Total revenue also increased during period, from $14 million in FY09 to $19 million in FY13.

**AT A GLANCE**

<table>
<thead>
<tr>
<th>TOTAL BEDS: 59</th>
<th>% OCCUPANCY: 61%</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPATIENT DISCHARGES in FY13: 523</td>
<td></td>
</tr>
<tr>
<td>PUBLIC PAYER MIX: 76% (Non-DSH* Hospital)</td>
<td></td>
</tr>
<tr>
<td>TOTAL REVENUE in FY13: $19 million; 1% of statewide</td>
<td></td>
</tr>
<tr>
<td>TAX STATUS: For profit</td>
<td></td>
</tr>
<tr>
<td>INPATIENT-OUTPATIENT REVENUE in FY13: 100%;0%</td>
<td></td>
</tr>
<tr>
<td>ADJUSTED[^{2}] COST PER DAY: $1,441</td>
<td></td>
</tr>
<tr>
<td>CHANGE in OWNERSHIP (FY09-FY13): Not Applicable</td>
<td></td>
</tr>
</tbody>
</table>

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Hospital[^{1}]</th>
</tr>
</thead>
<tbody>
<tr>
<td>24%</td>
<td>37%</td>
</tr>
<tr>
<td>3%</td>
<td>19%</td>
</tr>
<tr>
<td>73%</td>
<td>44%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DSH Threshold</th>
<th>Medicare and Other Federal Programs</th>
<th>State Programs</th>
<th>Commercial &amp; Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>73%</td>
<td>44%</td>
<td>19%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures?

- Inpatient Net Revenue per Day: Release
- Inpatient Days: -2.1%
- Outpatient Revenue: Increase
- Outpatient Visits: 19.4%
- Hospital did not provide outpatient services from FY09 to FY13.

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13?

- Discharges by bed type for this hospital in FY13 were:
  - Med/Surg: 523

  As a provider of specialty services, this hospital does not have a comparative group.

**FY13 Average Length of Stay**

- FY13 Average Length of Stay = 25.15 days
- Decrease = -8.5%

For descriptions of the metrics, please see Technical Appendix.
Hospital Profile: KINDRED HOSPITAL - BOSTON
Cohort: N/A - Specialty Hospital

UTILITY TRENDS

How has the volume of the hospital’s inpatient days changed compared to FY09? (FY09=100)

How has the volume of the hospital’s outpatient visits changed compared to FY09? (FY09=100)

This hospital did not provide outpatient services from FY09 to FY13.

PATIENT REVENUE TRENDS

What was the hospital’s net inpatient service revenue per inpatient day between FY09 and FY13?

How has the hospital’s total outpatient revenue changed compared to FY09? (FY09=100)

This hospital did not provide outpatient services from FY09 to FY13.

FINANCIAL PERFORMANCE

How have the hospital’s total revenue and costs changed between FY09 and FY13?

What were the hospital’s operating and total margins between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$14</td>
<td>$14</td>
<td>$0</td>
<td>$16</td>
<td>($1.9)</td>
</tr>
<tr>
<td>2010</td>
<td>$16</td>
<td>$16</td>
<td>$0</td>
<td>$17</td>
<td>($1.5)</td>
</tr>
<tr>
<td>2011</td>
<td>$16</td>
<td>$16</td>
<td>$0</td>
<td>$17</td>
<td>($0.5)</td>
</tr>
<tr>
<td>2012</td>
<td>$17</td>
<td>$17</td>
<td>$0</td>
<td>$17</td>
<td>($0.3)</td>
</tr>
<tr>
<td>2013</td>
<td>$19</td>
<td>$19</td>
<td>$0</td>
<td>$19</td>
<td>($0.0)</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

1 Costs were adjusted to exclude direct medical education costs and physician compensation.
2 Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
3 Average Hospital does not include Specialty hospitals.
Kindred Hospital-Boston North Shore is a for-profit acute hospital that specializes in providing long-term acute care services. It is located in the Northeastern Massachusetts region, and is among the smaller acute hospitals in Massachusetts. Kindred Hospital-Boston North Shore provides acute cardiac and pulmonary medicine, dialysis, wound care, infectious disease, and rehabilitation services following long-term illness. Inpatient days decreased 15.4% between FY09 and FY13 at the hospital. It reported a loss each year from FY09 to FY13, with a -9.4% total margin in FY13.

**AT A GLANCE**

- **TOTAL BEDS:** 50
- **% OCCUPANCY:** 65%
- **INPATIENT DISCHARGES in FY13:** 457
- **PUBLIC PAYER MIX:** 76% (Non-DSH* Hospital)
- **TOTAL REVENUE in FY13:** $17 million; 1% of statewide
- **TAX STATUS:** For profit
- **INPATIENT-OUTPATIENT REVENUE in FY13:** 100:0%
- **ADJUSTED‡ COST PER DAY:** $1,491
- **CHANGE in OWNERSHIP (FY09-FY13):** Not Applicable

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Commercial &amp; Other</th>
<th>Medicare and Other Federal Programs</th>
<th>State Programs</th>
<th>DSH Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>24%</td>
<td>2%</td>
<td>73%</td>
<td></td>
<td>37%</td>
</tr>
<tr>
<td>2%</td>
<td>37%</td>
<td>19%</td>
<td></td>
<td>44%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures?

- **Hospital**
  - **Inpatient Net Revenue per Day:** -1.7%
  - **Inpatient Days:** 1.1%
  - **Outpatient Revenue:**
    - Hospital did not provide outpatient services from FY09 to FY13.
  - **Outpatient Visits:**

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13?

- **Discharges by bed type for this hospital in FY13 were:**
  - Med/Surg: 457

As a provider of specialty services, this hospital does not have a comparative group.

How has the hospital’s average length of stay changed compared to FY09? (FY09=100)

- **FY13 Average Length of Stay = 25.77 days**
- **-9.5%**

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

How has the volume of the hospital’s inpatient days changed compared to FY09? (FY09=100)

How has the volume of the hospital’s outpatient visits changed compared to FY09? (FY09=100)

This hospital did not provide outpatient services from FY09 to FY13.

What was the hospital’s net inpatient service revenue per inpatient day between FY09 and FY13?

How has the hospital’s total outpatient revenue changed compared to FY09? (FY09=100)

This hospital did not provide outpatient services from FY09 to FY13.

How have the hospital’s total revenue and costs changed between FY09 and FY13?

What were the hospital’s operating and total margins between FY09 and FY13?

For descriptions of the metrics, please see Technical Appendix.

* Costs were adjusted to exclude direct medical education costs and physician compensation.
* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
* Average Hospital does not include Specialty hospitals.

January 2015
2013 Hospital Profile:
MASSACHUSETTS EYE AND EAR INFIRMARY

Massachusetts Eye and Ear Infirmary is a small, non-profit specialty hospital located in the Metro Boston region. Mass Eye and Ear provides specialized services for disorders of the eye, ear, nose, and throat, including a 24-hour emergency department for these conditions. Mass Eye and Ear is a teaching hospital of Harvard Medical School. It had a negative operating margin each year from FY09 to FY13, but a positive total margin each year except FY10 in the five-year period.

AT A GLANCE

- **TOTAL STAFFED BEDS:** 41
- **% OCCUPANCY:** 40%
- **CASE MIX INDEX IN FY13:** 1.17
- **INPATIENT DISCHARGES in FY13:** 1,512
- **TRAUMA CENTER DESIGNATION:** Not Applicable
- **EMERGENCY DEPT VISITS in FY13:** 18,506

**PUBLIC PAYER MIX:** 44% (Non-DSH* Hospital)

**SPECIAL PUBLIC FUNDING:** Not Applicable

**CY13 COMMERCIAL PAYER PRICE LEVEL:** 43rd Percentile

**ADJUSTED\(^1\) COST PER DISCHARGE:** $11,024

**INPATIENT:OUTPATIENT REVENUE in FY13:** 12%-88%

**CHANGE IN OWNERSHIP (FY09-FY13):** Not Applicable

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures?

- **Inpatient Net Revenue per CMAD**
- **Inpatient Discharges**
- **Outpatient Revenue**
- **Outpatient Visits**

SERVICES

- **What were the most common inpatient cases (DRGs) treated at the hospital?**
- **What proportion of the region's cases did this hospital treat for each service?**

Discharges by DRG

- **Eye Procs except Orbit (154)**
- **Thyroid & Thyroglos Procs (137)**
- **Other ENT Procedures (133)**
- **Other ENT & Cranial Dxs (65)**
- **Oth Maj Head/Neck proc (81)**
- **Oth OR Procs for Lymph/HEM (71)**
- **Maj Cranial/Fac Bone Proc (70)**
- **Ps-Op, Pat Trau Oth Device Inf (62)**
- **Othr Maj Head/Neck proc (60)**
- **OR Proc - Oth Tx Comp (56)**

**WHERE DID MOST OF THE HOSPITAL'S INPATIENTS RESIDE?**

- **What proportion of each community's total discharges were attributed to this hospital?**

This graph has been suppressed as no single community accounted for more than 4% of the hospital’s total discharges.

PAYER MIX

- **What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?**

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital</th>
<th>Average Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm &amp; Other</td>
<td>56%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>11%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare &amp; Other Federal Programs</td>
<td>32%</td>
<td>44%</td>
</tr>
</tbody>
</table>

**WHAT WERE THE HOSPITAL'S CY13 PAYER-SPECIFIC RELATIVE PRICE LEVELS FOR ITS TOP THREE COMMERCIAL PAYERS?**

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient discharges changed compared to FY09? (FY09=100)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$222</td>
<td>$214</td>
<td>$8</td>
<td>$215</td>
<td>$6.6</td>
</tr>
<tr>
<td>2010</td>
<td>$193</td>
<td>$190</td>
<td>$3</td>
<td>$195</td>
<td>$(2.1)</td>
</tr>
<tr>
<td>2011</td>
<td>$217</td>
<td>$193</td>
<td>$25</td>
<td>$202</td>
<td>$15.8</td>
</tr>
<tr>
<td>2012</td>
<td>$234</td>
<td>$202</td>
<td>$33</td>
<td>$202</td>
<td>$31.8</td>
</tr>
<tr>
<td>2013</td>
<td>$224</td>
<td>$219</td>
<td>$4</td>
<td>$224</td>
<td>$0.1</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13?

- Total Margin: 3.0%
- Operating Margin: -0.5%
- 2009: -1.8%
- 2010: 3.6%
- 2011: 13.6%
- 2012: 0.0%
- 2013: 0.0%

For descriptions of the metrics, please see Technical Appendix.

* Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
‡ Costs were adjusted to exclude direct medical education costs and physician compensation.
† Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

Specialty hospitals were not included in any cohort comparison analysis due to the unique patient populations they serve and/or the unique sets of services they provide.

### PATIENT SAFETY

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00?

<table>
<thead>
<tr>
<th>Year</th>
<th>PSI-90 Composite</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>0.90</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>0.92</td>
<td></td>
</tr>
</tbody>
</table>

Lower is better

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

Population: All patients
Score: Lower is better
Source: Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
Data Period*: 10/1-9/30

### PATIENT EXPERIENCE

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

The HCAHPS survey measures patient perspectives on key aspects of their care.

Population: All patients
Score: Higher is better
Source: Centers for Medicare and Medicaid Services (CMS) Hospital Compare
Data Period*: 2012-2013

For descriptions of the metrics, please see Technical Appendix.
What percentage of medication orders were entered by a physician using an electronic system that included error checking?

**Percentage of Orders**

- 0-24%
- 25-49%
- 50-74%
- 75-100%

**Computerized Physician Order Entry (CPOE)** is believed to increase efficiency and reduce transcription errors.

Population: This hospital responded to this survey
Score: Higher is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2012-2013

What percentage of Medicare patients who were discharged from this hospital were **readmitted to any hospital within 30 days**? How does this compare to the national average?

**Hospital-Wide All-Cause 30-Day Readmissions** follows patients for 30 days from discharge and determines if they are readmitted to any hospital for any unplanned reason.

Population: Medicare Fee For Service (FFS) patients age 65+
Score: Lower is better
Source: CMS Hospital Compare
Data Period*: 2011-2012

What percentage of all newborn deliveries at this hospital were **clinically unnecessary inductions before the recommended 39 weeks of gestation**?

**Clinically Unnecessary Elective Deliveries before 39 weeks of gestation** are associated with higher risks for newborns.

Population: Non-clinically complicated births. 41 Hospitals reported data for this measure.
Score: Lower is better
Source: The Leapfrog Group Hospital Survey
Data Period*: 2011-2012 and 2012-2013

Out of every 1,000 births, how many patients experienced an adverse event?

**Complications and adverse events during birth can harm both the mother and infant.**

Population: 42 Hospitals are included in this analysis
Score: Lower is better
Source: HDD; CHIA-calculated indicator, not risk adjusted
Data Period*: 2012-2013

---

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
New England Baptist Hospital is a non-profit specialty hospital located in the Metro Boston region. New England Baptist focuses exclusively on orthopedic and musculoskeletal conditions. It is among the smaller acute hospitals in Massachusetts and a member of the CareGroup health care system. New England Baptist Hospital is a teaching affiliate of Tufts University School of Medicine, and conducts teaching programs in collaboration with the Harvard School of Public Health and the Harvard School of Medicine. New England Baptist Hospital earned a profit each year from FY09 to FY13, with a total margin of 4.9% and an operating margin of 2.7% in FY13.

2013 Hospital Profile:
NEW ENGLAND BAPTIST HOSPITAL

AT A GLANCE

TOTAL STAFFED BEDS: 95
% OCCUPANCY: 73%
CASE MIX INDEX in FY13: 1.36
INPATIENT DISCHARGES in FY13: 7,743
TRAUMA CENTER DESIGNATION: Not Applicable
EMERGENCY DEPT VISITS in FY13: N/A

PUBLIC MIX: 44% (Non-DSH* Hospital)
SPECIAL PUBLIC FUNDING: Not Applicable
CY13 COMMERCIAL PAYER PRICE LEVEL: 51st Percentile
ADJUSTED$ COST PER DISCHARGE: $10,763
INPATIENT:OUTPATIENT REVENUE in FY13: 59%.41%
CHANGE IN OWNERSHIP (FY09-FY13): Not Applicable

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>0%</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per CMAD</td>
<td>-2.5%</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>Inpatient Discharges</td>
<td>-4.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-8.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SERVICES

What were the most common inpatient cases (DRGs) treated at the hospital? What proportion of the region's cases did this hospital treat for each service?

<table>
<thead>
<tr>
<th>Service</th>
<th>Discharges by DRG</th>
<th>Of Regional Discharges Treated at This Hospital in FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knee Joint Replacement (2,918)</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Hip Joint Replacement (2,515)</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>Dors&amp;Lum Fus exc Curv (680)</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>Shldr &amp; Upp/ForeArm Proc (288)</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>C. Spinal Fusion &amp; Oth Proc (265)</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>Intervent Disc Exc&amp;Dmp (190)</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Kne &amp; LowLeg Exc Foot (118)</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Oth Musc&amp;Neu &amp; ConnTis Proc (78)</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Dors &amp; Lum Fusc-Curv (47)</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Heart Failure (30)</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

Where did most of the hospital's inpatients reside? What proportion of each community's total discharges were attributed to this hospital?

Graph has been suppressed as no single community accounted for more than 4% of the hospital's total discharges.

PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Source</th>
<th>Hospital</th>
<th>Average Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>56%</td>
<td>37%</td>
</tr>
<tr>
<td>State Programs</td>
<td>2%</td>
<td>19%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>42%</td>
<td>44%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

What were the hospital's CY13 payer-specific relative price levels for its top three commercial payers?

C65
How has the volume of the hospital's inpatient discharges changed compared to FY09? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Inpatient Discharges</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>7,743</td>
<td>+9.7%</td>
</tr>
</tbody>
</table>

How has the volume of the hospital's outpatient visits changed compared to FY09? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Outpatient Visits</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>133,140</td>
<td>+10.2%</td>
</tr>
</tbody>
</table>

What was the hospital's net inpatient service revenue per case mix adjusted discharge between FY09 and FY13?

- FY13 Inpatient Revenue per CMAD = $14,488
- Full Cost per CMAD = $11,081

How has the hospital's total outpatient revenue changed compared to FY09? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Outpatient Revenue</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$55 M</td>
<td>+6.2%</td>
</tr>
</tbody>
</table>

How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$187</td>
<td>$183</td>
<td>$5</td>
<td>$181</td>
<td>$6.0</td>
</tr>
<tr>
<td>2010</td>
<td>$198</td>
<td>$194</td>
<td>$4</td>
<td>$190</td>
<td>$8.2</td>
</tr>
<tr>
<td>2011</td>
<td>$203</td>
<td>$200</td>
<td>$3</td>
<td>$194</td>
<td>$8.7</td>
</tr>
<tr>
<td>2012</td>
<td>$219</td>
<td>$215</td>
<td>$4</td>
<td>$207</td>
<td>$11.7</td>
</tr>
<tr>
<td>2013</td>
<td>$225</td>
<td>$220</td>
<td>$5</td>
<td>$214</td>
<td>$10.9</td>
</tr>
</tbody>
</table>

What were the hospital's total margin and operating margin between FY09 and FY13?

- Operating Margin: 0.6% - 2.7%
- Total Margin: 3.2% - 4.9%

For descriptions of the metrics, please see Technical Appendix.

- * Disproportionate Share Hospitals (DSH) receive a minimum of 63% of gross patient service revenue from public payers.
- † Costs were adjusted to exclude direct medical education costs and physician compensation.
- ‡ Average Hospital does not include Specialty hospitals.
The selected quality measures displayed in this hospital’s profile are derived from the Commonwealth’s Standard Quality Measure Set (SQMS). CHIA is required to uniformly report hospital performance on SQMS measures. SQMS measures are used by health plans for tiering providers for certain insurance products. They may also be used to inform consumers about the quality and safety of their care providers. The selected indicators are hospital-specific measures based on information that hospitals self-report to CHIA and other entities, including the federal Centers for Medicare and Medicaid Services (CMS) and The Leapfrog Group.

Specialty hospitals were not included in any cohort comparison analysis due the unique patient populations they serve and/or the unique sets of services they provide.

**PATIENT SAFETY**

How many complications or adverse events were reported at this hospital for conditions included in the PSI-90 Composite, relative to the annual national average of 1.00?

- **2013:** Hospital = 0.71, National Average = 0.92
- **2012:** Hospital = 0.59, National Average = 0.71
- **2011:** Hospital = 0.65, National Average = 0.75

The PSI-90 is a summary of 11 Patient Safety Indicators (PSIs) that measure adverse events for various procedures.

- **Population:** All patients
- **Score:** Lower is better
- **Source:** Hospital Discharge Data (HDD); CHIA-calculated indicator, risk adjusted
- **Data Period:** 10/1-9/30

**PATIENT EXPERIENCE**

How well did the hospital fulfill the following key expectations for patient experience, based on patient surveys? How does this compare to the national average?

- **Patients gave hospital a rating of 9 or 10:** Hospital = 71%, National Average = 87%
- **Patients would definitely recommend the hospital:** Hospital = 71%, National Average = 87%
- **Nurses always communicated well:** Hospital = 71%, National Average = 87%
- **Doctors always communicated well:** Hospital = 71%, National Average = 87%
- **Staff always explained medications:** Hospital = 71%, National Average = 87%
- **Recovery information was provided:** Hospital = 71%, National Average = 87%
- **Always received help as soon as they wanted:** Hospital = 71%, National Average = 87%
- **Pain was always well controlled:** Hospital = 71%, National Average = 87%
- **Room and bathroom were always clean:** Hospital = 71%, National Average = 87%
- **Room was always quiet at night:** Hospital = 71%, National Average = 87%

The HCAHPS survey measures patient perspectives on key aspects of their care.

- **Population:** All patients
- **Score:** Higher is better
- **Source:** Centers for Medicare and Medicaid Services (CMS) Hospital Compare
- **Data Period:** 2012-2013

For descriptions of the metrics, please see Technical Appendix.
**CARE PRACTICES**

What percentage of medication orders were entered by a physician using an electronic system that included error checking?

This hospital reported not having a CPOE system. As it is a specialty hospital, there is no cohort comparative.

**READMISSIONS**

What percentage of Medicare patients who were discharged from this hospital were readmitted to any hospital within 30 days? How does this compare to the national average?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>No Peer Cohort</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.7%</td>
<td>16.0%</td>
<td></td>
</tr>
</tbody>
</table>

Lower is better

**OBSTETRIC CARE**

What percentage of all newborn deliveries at this hospital were clinically unnecessary inductions before the recommended 39 weeks of gestation?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

**OBSTETRIC CARE COMPLICATIONS**

Out of every 1,000 births, how many patients experienced an adverse event?

Data for this quality measure is not available, either because the hospital did not report the data or does not provide obstetric services.

For descriptions of the metrics, please see Technical Appendix.

* Data Periods vary by measure based on data source. Please see Technical Appendix for measure-specific reporting periods.

^ Measures from The Leapfrog Survey are voluntarily reported by hospitals. Not all hospitals report this data.
INTRODUCTION TO NON-ACUTE HOSPITAL PROFILES

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Psychiatric hospitals are licensed by DMH for psychiatric services and by DPH for substance abuse services.

Rehabilitation hospitals provide intensive post-acute rehabilitation services, such as physical, occupational, and speech therapy services. For Medicare payment purposes, the federal government classifies hospitals as rehabilitation hospitals if they provide more than 60% of their inpatient services to patients with one or more of 13 diagnoses listed in federal regulations.

Chronic care hospitals are hospitals with an average length of patient stay greater than 25 days. These hospitals typically provide longer-term care, such as ventilator dependent care. Medicare classifies chronic hospitals as Long-Term Care Hospitals, using the same 25-day threshold.

When presenting trends for utilization, costs, and financial performance, CHIA has provided baseline data for each hospital's cohort as a point of comparison. Specialty non-acute hospitals are not identified with a distinct cohort; however, individual specialty non-acute hospital profiles are available.

For detailed descriptions of the data sources and metrics used in the non-acute hospital profiles, please see the Technical Appendix.

<table>
<thead>
<tr>
<th>Psychiatric Hospital Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arbour Hospital</td>
</tr>
<tr>
<td>Arbour-Fuller Memorial</td>
</tr>
<tr>
<td>Arbour-HRI Hospital</td>
</tr>
<tr>
<td>Baldpate Hospital</td>
</tr>
<tr>
<td>Bournewood Hospital</td>
</tr>
<tr>
<td>McLean Hospital</td>
</tr>
<tr>
<td>Walden Behavioral Care</td>
</tr>
<tr>
<td>Westwood Pembroke Hospital</td>
</tr>
<tr>
<td>Whittier Pavilion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rehabilitation Hospital Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Braintree Rehabilitation Hospital</td>
</tr>
<tr>
<td>HealthSouth Fairlawn Rehabilitation Hospital</td>
</tr>
<tr>
<td>HealthSouth Rehabilitation Hospital of</td>
</tr>
<tr>
<td>Western Massachusetts</td>
</tr>
<tr>
<td>New Bedford Rehabilitation Hospital</td>
</tr>
<tr>
<td>New England Rehabilitation Hospital</td>
</tr>
<tr>
<td>Spaulding Rehabilitation Hospital of Cape Cod</td>
</tr>
<tr>
<td>Spaulding Rehabilitation Hospital</td>
</tr>
<tr>
<td>Whittier Rehabilitation Hospital Bradford</td>
</tr>
<tr>
<td>Whittier Rehabilitation Hospital Westborough</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chronic Care Hospital Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindred Hospital Northeast</td>
</tr>
<tr>
<td>New England Sinai Hospital</td>
</tr>
<tr>
<td>Radius Specialty Hospital</td>
</tr>
<tr>
<td>Spaulding Hospital Cambridge</td>
</tr>
<tr>
<td>Spaulding North Shore</td>
</tr>
<tr>
<td>Vibra Hospital of Western Massachusetts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialty Non-Acute Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>AdCare Hospital of Worcester</td>
</tr>
<tr>
<td>Franciscan Hospital for Children</td>
</tr>
<tr>
<td>Hebrew Rehabilitation Hospital</td>
</tr>
</tbody>
</table>
### Non-Acute Hospital

<table>
<thead>
<tr>
<th>Name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>AdCare Hospital of Worcester</td>
<td>D25</td>
</tr>
<tr>
<td>Arbour Hospital</td>
<td>D1</td>
</tr>
<tr>
<td>Arbour-Fuller Memorial</td>
<td>D2</td>
</tr>
<tr>
<td>Arbour-HRI Hospital</td>
<td>D3</td>
</tr>
<tr>
<td>Baldpate Hospital</td>
<td>D4</td>
</tr>
<tr>
<td>Bournewood Hospital</td>
<td>D5</td>
</tr>
<tr>
<td>Braintree Rehabilitation Hospital</td>
<td>D10</td>
</tr>
<tr>
<td>Franciscan Hospital for Children</td>
<td>D26</td>
</tr>
<tr>
<td>HealthSouth Fairlawn Rehabilitation Hospital</td>
<td>D11</td>
</tr>
<tr>
<td>HealthSouth Rehabilitation Hospital of Western Massachusetts</td>
<td>D12</td>
</tr>
<tr>
<td>Hebrew Rehabilitation Hospital</td>
<td>D27</td>
</tr>
<tr>
<td>Kindred Hospital Northeast</td>
<td>D19</td>
</tr>
<tr>
<td>McLean Hospital</td>
<td>D6</td>
</tr>
<tr>
<td>New Bedford Rehabilitation Hospital</td>
<td>D13</td>
</tr>
<tr>
<td>New England Rehabilitation Hospital</td>
<td>D14</td>
</tr>
<tr>
<td>New England Sinai Hospital</td>
<td>D20</td>
</tr>
<tr>
<td>Radius Specialty Hospital</td>
<td>D21</td>
</tr>
<tr>
<td>Spaulding Hospital Cambridge</td>
<td>D22</td>
</tr>
<tr>
<td>Spaulding North Shore</td>
<td>D23</td>
</tr>
<tr>
<td>Spaulding Rehabilitation Hospital</td>
<td>D15</td>
</tr>
<tr>
<td>Spaulding Rehabilitation Hospital of Cape Cod</td>
<td>D16</td>
</tr>
<tr>
<td>Vibra Hospital of Western Massachusetts</td>
<td>D24</td>
</tr>
<tr>
<td>Walden Behavioral Care</td>
<td>D7</td>
</tr>
<tr>
<td>Westwood Pembroke Hospital</td>
<td>D8</td>
</tr>
<tr>
<td>Whittier Pavilion</td>
<td>D9</td>
</tr>
<tr>
<td>Whittier Rehabilitation Hospital Bradford</td>
<td>D17</td>
</tr>
<tr>
<td>Whittier Rehabilitation Hospital Westborough</td>
<td>D18</td>
</tr>
</tbody>
</table>
Arbour Hospital is a for-profit psychiatric hospital located in Jamaica Plain. It is a member of the Arbour Health System, which is the largest private mental health system in Massachusetts. Arbour Hospital provides inpatient, outpatient, and partial hospitalization services. It serves both adult and adolescent patients. Between FY09 and FY13, inpatient days increased 10.0% at the hospital, compared with the median increase of 7.2% in its peer cohort. Outpatient visits increased 46.7% over that period, consistent with the median of its peer cohort, while outpatient revenue increased 78.1%, significantly higher than the median 38.0% increase in its peer cohort. Arbour Hospital earned a profit each year in the five-year period, with a total margin of 20.7% in FY13, compared with the median of 9.5% in its peer cohort.

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- Inpatient Net Revenue per Day
- Inpatient Days
- Outpatient Revenue
- Outpatient Visits

GROWTH MEASURES

Percentage calculations may not sum to 100% due to rounding.

How to Read Non-Acute Hospital Profiles – FY13

This sheet provides a brief introduction to the metrics on the hospital profiles. Definitions and notes on all metrics are available in the Technical Appendix.
Each of the first four graphs compares trends at the featured hospital (in green) to the trend among the peer cohort hospitals (in orange). The labeled points are cumulative over the time period.

Absolute differences between the hospital and the cohort cannot be read off these graphs, but are available in the data supplement to these reports.
What changed from Non-Acute Hospital Profiles – Data through Fiscal Year 2012

**2013 Hospital Profile: ARBOUR HOSPITAL**

Arbour Hospital is a non-profit psychiatric hospital located in Jamaica Plain. It is a member of the Arbour Health System, which is the largest private mental health system in New England. Arbour Hospital provides inpatient, partial hospitalization, and partial hospitalization services. It serves both adult and adolescent patients. Between FY09 and FY13, inpatient days increased 10.0% to the hospital, compared with the median increase of 7.2% to its peer cohort. Outpatient visits increased 46.7%, compared with the median of 38.0% in its peer cohort. Arbour Hospital earned a profit each year in the five-year period, with a total margin of 20.6% in FY13, compared with the median of 9.5% in its peer cohort.

### Financial Performance Metrics

Changes from FY12 Non-Acute Hospital Profiles

**PUBLIC PAYER MIX:**

**ADJUSTED INPATIENT:OUTPATIENT REVENUE in FY13:**

% OCCUPANCY:

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- **Change in Ownership (FY09-FY13):**
  - Arbour Hospital's operating margin improved significantly to 20.6% in FY13, compared with the median of 9.5% in its peer cohort.

### New Growth Measures

The “New At a Glance Measures” section shows 1-year growth rates (FY12-FY13) of revenue and utilization trend metrics. Hospital growth measures are compared to cohort.

### FY13 Values

The “FY13 Values” section are noted on all trend measures.

### New Revenue Trends Metrics

The “New Revenue Trends Metrics” section replaces cost trends metrics on Data through FY12 Profile.

### Methodology:

- Cohort and ‘all other hospital’ comparisons use medians (instead of means) of growth rates for utilization, revenue, and financial performance.
Arbour Hospital is a for-profit psychiatric hospital located in Jamaica Plain. It is a member of the Arbour Health System, which is the largest private mental health system in Massachusetts. Arbour Hospital provides inpatient, outpatient, and partial hospitalization services. It serves both adult and adolescent patients. Between FY09 and FY13, inpatient days increased 10.0% at the hospital, compared with the median increase of 7.2% in its peer cohort. Outpatient visits increased 46.7% over that period, consistent with the median of its peer cohort, while outpatient revenue increased 78.1%, significantly higher than the median 38.0% increase in its peer cohort. Arbour Hospital earned a profit each year in the five-year period, with a total margin of 20.7% in FY13, compared with the median of 9.5% in its peer cohort.

**AT A GLANCE**

- **TOTAL BEDS:** 136; 14% of cohort beds
- **% OCCUPANCY:** 90%; > cohort avg. (82%)
- **INPATIENT DISCHARGES in FY13:** 4,025
- **PUBLIC PAYER MIX:** 69%; > avg. cohort hospital (66%)
- **TOTAL REVENUE in FY13:** $39 million; 3% of statewide
- **TAX STATUS:** For-profit
- **INPATIENT-OUTPATIENT REVENUE in FY13:** 81%;19%
- **ADJUSTED COST PER INPATIENT DAY:** $461
- **CHANGE in OWNERSHIP (FY09-FY13):** Not Applicable

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Type</th>
<th>Hospital</th>
<th>Average Non-Acute Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Programs</td>
<td>31%</td>
<td>29%</td>
</tr>
<tr>
<td>State Programs</td>
<td>47%</td>
<td>22%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>22%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Cohort Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per Day</td>
<td>-1.8%</td>
<td>3.1%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>0.8%</td>
<td>9.6%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-2.1%</td>
<td>2.1%</td>
<td>30.4%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>2.1%</td>
<td>37.6%</td>
<td>1 hospital &gt;35%</td>
</tr>
</tbody>
</table>

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

13% (4,025) of the non-acute cohort's discharges were treated at this hospital.

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix. 

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

† Average Hospital does not include Specialty hospitals.
Arbour-Fuller Memorial is a for-profit psychiatric hospital located in South Attleboro. It is a member of Arbour Health System, the largest private mental health system in Massachusetts. Arbour-Fuller Memorial provides inpatient services for adult and adolescent patients, and partial hospitalization services for adult patients. Between FY09 and FY13, inpatient days increased 2.3% at Arbour-Fuller Memorial, compared with a median increase of 7.2% in its peer cohort. During that period, outpatient visits increased significantly, by 115.0% compared with a median increase of 46.7% in its peer cohort. Arbour-Fuller Memorial earned a profit each year from FY09 to FY13, with a 19.0% total margin in FY13, compared with the median of 9.5% in its peer cohort.

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

How has the volume of the hospital’s inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

FY13 Inpatient Days = 32,149

How has the volume of the hospital’s outpatient visits changed compared to FY09? (FY09=100)

FY13 Outpatient Visits = 17,405

What was the hospital’s net inpatient service revenue per inpatient day between FY09 and FY13, and how does this hospital compare to its peer cohort median?

FY13 Net Inpatient Revenue per Day = $627

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

FY13 Outpatient Revenue = $4 M

How have the hospital’s total revenue and costs changed between FY09 and FY13?

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

 Costs were adjusted to exclude direct medical education costs and physician compensation.

 Average Hospital does not include Specialty hospitals.
Arbour-HRI Hospital is a for-profit psychiatric hospital located in Brookline. It is a member of Arbour Health System, the largest private mental health system in Massachusetts. Arbour-HRI Hospital provides inpatient and partial hospitalization services for both adult and adolescent patients. Inpatient days increased 3.9% at Arbour-HRI Hospital from FY09 to FY13, compared with a median 7.2% increase in its peer cohort. Over that period, outpatient visits increased at Arbour-HRI by 14.2%, compared with a median 46.7% increase in its peer cohort. Arbour-HRI earned a profit each year from FY09 to FY13, with a total margin of 28.2% in FY13, compared to the median of 9.5% in its peer cohort.

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

How has the hospital’s average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

For descriptions of the metrics, please see Technical Appendix.
**Hospital Profile: ARBOUR-HRI HOSPITAL**

**Cohort:** Psychiatric Hospital

### UTILIZATION TRENDS

How has the volume of the hospital’s inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Inpatient Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>135</td>
</tr>
<tr>
<td>2010</td>
<td>100</td>
</tr>
<tr>
<td>2011</td>
<td>100</td>
</tr>
<tr>
<td>2012</td>
<td>100</td>
</tr>
<tr>
<td>2013</td>
<td>100</td>
</tr>
</tbody>
</table>

**Change:** +7.2% to +3.9%

### PATIENT REVENUE TRENDS

What was the hospital’s net inpatient service revenue per inpatient day between FY09 and FY13, and how does this hospital compare to its peer cohort median?

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Net Inpatient Revenue per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$727</td>
</tr>
<tr>
<td>2010</td>
<td>$727</td>
</tr>
<tr>
<td>2011</td>
<td>$727</td>
</tr>
<tr>
<td>2012</td>
<td>$727</td>
</tr>
<tr>
<td>2013</td>
<td>$727</td>
</tr>
</tbody>
</table>

**Change:** +3.9%

### FINANCIAL PERFORMANCE

How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$18</td>
<td>$18</td>
<td>$0</td>
<td>$13</td>
<td>$4.5</td>
</tr>
<tr>
<td>2010</td>
<td>$19</td>
<td>$19</td>
<td>$0</td>
<td>$14</td>
<td>$5.3</td>
</tr>
<tr>
<td>2011</td>
<td>$22</td>
<td>$22</td>
<td>$0</td>
<td>$16</td>
<td>$6.4</td>
</tr>
<tr>
<td>2012</td>
<td>$22</td>
<td>$22</td>
<td>$0</td>
<td>$15</td>
<td>$6.9</td>
</tr>
<tr>
<td>2013</td>
<td>$21</td>
<td>$21</td>
<td>$0</td>
<td>$15</td>
<td>$5.9</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

1. Costs were adjusted to exclude direct medical education costs and physician compensation.
2. Average Hospital does not include Specialty hospitals.
Baldpate Hospital is a for-profit psychiatric hospital located in Georgetown. Baldpate treats substance abuse disorders and provides mental health services in an inpatient setting. Between FY09 and FY13, inpatient days at Baldpate decreased significantly, by -47.1% compared with a 7.2% median increase in its peer cohort. Baldpate Hospital posted a loss each year in the five-year period, except for FY10. It had a -6.7% total margin in FY13, compared to the median of 9.5% in its peer cohort.

**AT A GLANCE**

- **TOTAL BEDS:** 59; 6% of cohort beds
- **% OCCUPANCY:** 39%; < cohort avg. (82%)
- **INPATIENT DISCHARGES in FY13:** 1,518
- **PUBLIC PAYER MIX:** 51%; < avg. cohort hospital (66%)
- **TOTAL REVENUE in FY13:** $5 million; 0.4% of statewide
- **TAX STATUS:** For-profit
- **INPATIENT:OUTPATIENT REVENUE in FY13:** 100:0%
- **ADJUSTED COST PER INPATIENT DAY:** $612
- **CHANGE in OWNERSHIP (FY09-FY13):** Not Applicable

**PAYER MIX**

<table>
<thead>
<tr>
<th></th>
<th>Hospital</th>
<th>Average Non-Acute Hospital†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>49%</td>
<td>29%</td>
</tr>
<tr>
<td>State Programs</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>29%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- **Inpatient Net Revenue per Day:** Decrease -31.5%
- **Inpatient Days:** Decrease -3.1%
- **Outpatient Revenue:** Decrease -0.8%
- **Outpatient Visits:** Decrease -14.9%

This hospital did not provide outpatient services from FY09 to FY13.

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

- **Discharges by Category**
  - **Psychiatric (1,518):** 5%

5% (1,518) of the non-acute cohort's discharges were treated at this hospital.

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

- **FY13 Average Length of Stay = 5.5 days**
  - **Hospital:** 5.5 days
  - **Peer Cohort:** 5.5 days

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

How has the volume of the hospital's outpatient visits changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

How has the hospital's inpatient days volume changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

How has the hospital's outpatient visits volume changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

What was the hospital's net inpatient service revenue per inpatient day between FY09 and FY13, and how does this hospital compare to its peer cohort median?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital’s operating and total margins between FY09 and FY13, and how do these compare to the medians of its peer cohort hospitals?

**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$7</td>
<td>$7</td>
<td>$0</td>
<td>$8</td>
<td>($0.3)</td>
</tr>
<tr>
<td>2010</td>
<td>$8</td>
<td>$8</td>
<td>$0</td>
<td>$8</td>
<td>$0.4</td>
</tr>
<tr>
<td>2011</td>
<td>$8</td>
<td>$8</td>
<td>$0</td>
<td>$9</td>
<td>$0.9</td>
</tr>
<tr>
<td>2012</td>
<td>$7</td>
<td>$7</td>
<td>$0</td>
<td>$7</td>
<td>($0.7)</td>
</tr>
<tr>
<td>2013</td>
<td>$5</td>
<td>$5</td>
<td>$0</td>
<td>$6</td>
<td>($0.4)</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.

http://chiamass.gov/hospital-profiles

January 2015
Bournewood Hospital is a for-profit psychiatric hospital located in Brookline. It provides inpatient, outpatient, and partial hospitalization services for both adult and adolescent patients. Between FY09 and FY13, inpatient days at Bournewood increased 7.2%, equal to the median increase of 7.2% in its peer cohort. The hospital earned a profit from FY10 through FY13, with a 9.5% total margin and 9.4% operating margin in FY13, consistent with the medians of its peer cohort.

**AT A GLANCE**

- **TOTAL BEDS:** 90; 9% of cohort beds
- **% OCCUPANCY:** 85%; > cohort avg. (82%)
- **INPATIENT DISCHARGES in FY13:** 3,465
- **PUBLIC PAYER MIX:** 76%; > avg. cohort hospital (66%)
- **TOTAL REVENUE in FY13:** $23 million; 2% of statewide
- **TAX STATUS:** For-profit
- **INPATIENT:OUTPATIENT REVENUE in FY13:** 86:14%
- **ADJUSTED\(^1\) COST PER INPATIENT DAY:** $704
- **CHANGE in OWNERSHIP (FY09-FY13):** Not Applicable

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

- **Inpatient Net Revenue per Day:** Decrease of 3.1% to 3.8%
- **Inpatient Days:** Increase of 0.8%
- **Outpatient Revenue:** Increase of 10.1% to 12.6%
- **Outpatient Visits:** Increase of 2.1%

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Non-Acute Hospital(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>24%</td>
</tr>
<tr>
<td>State Programs</td>
<td>52%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>24%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

- **Discharges by Category**
  - 11% (Psychiatric, 3,465)

11% (3,465) of the non-acute cohort’s discharges were treated at this hospital.

How has the hospital’s average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

**FY13 Average Length of Stay = 8.1 days**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>8.6 days</td>
<td>8.6 days</td>
</tr>
<tr>
<td>2010</td>
<td>8.6 days</td>
<td>8.6 days</td>
</tr>
<tr>
<td>2011</td>
<td>8.6 days</td>
<td>8.6 days</td>
</tr>
<tr>
<td>2012</td>
<td>8.6 days</td>
<td>8.6 days</td>
</tr>
<tr>
<td>2013</td>
<td>8.6 days</td>
<td>8.6 days</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$19</td>
<td>$19</td>
<td>$(0)</td>
<td>$19</td>
<td>$(0.0)</td>
</tr>
<tr>
<td>2010</td>
<td>$20</td>
<td>$19</td>
<td>$0</td>
<td>$19</td>
<td>$0.8</td>
</tr>
<tr>
<td>2011</td>
<td>$21</td>
<td>$21</td>
<td>$0</td>
<td>$20</td>
<td>$0.7</td>
</tr>
<tr>
<td>2012</td>
<td>$22</td>
<td>$22</td>
<td>$0</td>
<td>$20</td>
<td>$1.5</td>
</tr>
<tr>
<td>2013</td>
<td>$23</td>
<td>$23</td>
<td>$0</td>
<td>$21</td>
<td>$2.1</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.
McLean Hospital is a non-profit psychiatric hospital located in Belmont. It provides inpatient, outpatient, partial hospitalization, and residential care services. Its programs include mental health services and substance use disorder treatments, and it services adult, children and adolescent, and geriatric patients. It is a member of Partners HealthCare System. From FY09 to FY13, inpatient days remained constant, compared to a median increase of 7.2% in its peer cohort. Outpatient visits increased 16.2% for the hospital, compared to a cohort median increase of 46.7%. McLean Hospital earned a profit each year from FY09 to FY13. Its total margin in FY13 was 1.9%, compared to the median of 9.5% in its peer cohort.

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

How has the hospital’s median length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)
**Hospital Profile:** MCLEAN HOSPITAL  
**Cohort:** Psychiatric Hospital

**For descriptions of the metrics, please see Technical Appendix.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$157</td>
<td>$158</td>
<td>($0)</td>
<td>$153</td>
<td>$4.3</td>
</tr>
<tr>
<td>2010</td>
<td>$163</td>
<td>$162</td>
<td>$0</td>
<td>$159</td>
<td>$3.7</td>
</tr>
<tr>
<td>2011</td>
<td>$173</td>
<td>$174</td>
<td>($1)</td>
<td>$166</td>
<td>$6.9</td>
</tr>
<tr>
<td>2012</td>
<td>$177</td>
<td>$177</td>
<td>$0</td>
<td>$171</td>
<td>$6.3</td>
</tr>
<tr>
<td>2013</td>
<td>$183</td>
<td>$183</td>
<td>$0</td>
<td>$180</td>
<td>$3.4</td>
</tr>
</tbody>
</table>

**Utilization Trends**

How has the volume of the hospital’s inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

**Patient Revenue Trends**

What was the hospital’s net inpatient service revenue per inpatient day between FY09 and FY13, and how does this hospital compare to its peer cohort median?

How has the hospital’s total outpatient revenue changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

**Financial Performance**

How have the hospital’s total revenue and costs changed between FY09 and FY13?

What were the hospital’s operating and total margins between FY09 and FY13, and how do these compare to the medians of its peer cohort hospitals?

**Note:** Costs were adjusted to exclude direct medical education costs and physician compensation.

‡ Average Hospital does not include Specialty hospitals.

http://chiamass.gov/hospital-profiles

January 2015
Walden Behavioral Care is a for-profit psychiatric hospital located in Waltham. Walden Behavioral Care offers inpatient, outpatient, residential, and partial hospitalization services. It had the lowest public payer mix of all hospitals in its cohort; sixty-eight percent of its gross patient service revenue was derived from commercial and other non-government payers. Walden Behavioral Care primarily focuses on treatment of eating disorders and other psychiatric care. Between FY09 and FY13, inpatient days increased 20.1% at Walden Behavioral Care, compared to a median increase of 7.2% in its cohort. Walden Behavioral Care earned a profit each year from FY09 to FY13, with a total margin of 7.5% in FY13, compared to a median total margin of 9.5% among cohort hospitals.

**2013 Hospital Profile:**

**WALDEN BEHAVIORAL CARE**

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

1 Costs were adjusted to exclude direct medical education costs and physician compensation.

2 Average Hospital does not include Specialty hospitals.
Westwood Pembroke Hospital, which includes Westwood Lodge and Pembroke campuses, is a for-profit psychiatric hospital located in Westwood and Pembroke. The Westwood Lodge campus provides inpatient and partial hospitalization psychiatric services for adults, adolescents, and children. The Pembroke campus provides inpatient psychiatric services for adults, adolescents, and older adults, and partial hospitalization programs for adults and adolescents. The hospital is a member of Arbour Health System, the largest private mental health system in Massachusetts. Between FY09 and FY13, inpatient days increased 11.1% at Westwood Pembroke Hospital, compared to its cohort's median increase of 7.2%. Outpatient visits decreased 24.6% at the hospital in that period, compared to a median 46.7% increase in its cohort. Westwood Pembroke Hospital was profitable each year from FY09 to FY13, with a 25.0% total margin in FY13, compared to a median total margin of 9.5% in its peer cohort.

**AT A GLANCE**

TOTAL BEDS: 245; 25% of cohort beds  
% OCCUPANCY: 90%; > cohort avg. (82%)

INPATIENT DISCHARGES in FY13: 7,114  
PUBLIC PAYER MIX: 78%; > avg. cohort hospital (66%)

TOTAL REVENUE in FY13: $65 million; 5% of statewide

TAX STATUS: For-profit  
INPATIENT:OUTPATIENT REVENUE in FY13: 89%:11%

ADJUSTED\(^1\) COST PER INPATIENT DAY: $475

CHANGE in OWNERSHIP (FY09-FY13): Not Applicable

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

<table>
<thead>
<tr>
<th>PAYMENT TYPE</th>
<th>Hospital</th>
<th>Average Non-Acute Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>22%</td>
<td>29%</td>
</tr>
<tr>
<td>State Programs</td>
<td>59%</td>
<td>22%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>19%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>Hospital</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Revenue</td>
<td>2.8%</td>
<td>3.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>-0.4%</td>
<td>10.1%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-10.0%</td>
<td>2.1%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Cohort Hospitals & Peer Cohort

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FY12 Growth Rate</th>
<th>FY13 Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric (7,114)</td>
<td>-10.0%</td>
<td>+2.1%</td>
</tr>
</tbody>
</table>

23% (7,114) of the non-acute cohort's discharges were treated at this hospital

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

- **Psychiatric (7,114)**

23% (7,114) of the non-acute cohort's discharges were treated at this hospital

How has the hospital's median length of stay changed compared to FY09, and how does this hospital compare to the median length of stay in its peer cohort? (FY09=100)

FY13 Median Length of Stay = 11.4 days

- Hospital: +0.6%  
- Peer Cohort: -1.9%

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

1 Costs were adjusted to exclude direct medical education costs and physician compensation.

2 Average Hospital does not include Specialty hospitals.
Whittier Pavilion is a for-profit psychiatric hospital located in Haverhill. It is a member of Whittier Health Network. It provides inpatient psychiatric care for adult and geriatric patients, and outpatient services through an outpatient clinic. Since opening in 2009, Whittier Pavilion has increased its capacity for providing outpatient services, becoming fully operational in 2014. Inpatient days increased 25.7% at Whittier Pavilion between FY10 and FY13, compared to a median increase of 7.2% among cohort hospitals. In the FY10 to FY13 period, Whittier Pavilion only earned a profit in FY12, and had a total margin of -12.5% in FY13, while the median total margin in its peer cohort was 9.5% in FY13.

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

How has the hospital’s average length of stay changed compared to FY10, and how does this hospital compare to its peer cohort median? (FY10=100)
Hospital Profile: WHITTIER PAVILION
Psychiatric Hospital

**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>$14</td>
<td>$14</td>
<td>$0</td>
<td>$15</td>
<td>($0.9)</td>
</tr>
<tr>
<td>2011</td>
<td>$16</td>
<td>$16</td>
<td>$0</td>
<td>$18</td>
<td>($1.9)</td>
</tr>
<tr>
<td>2012</td>
<td>$21</td>
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<td>$0</td>
<td>$19</td>
<td>$1.2</td>
</tr>
<tr>
<td>2013</td>
<td>$17</td>
<td>$17</td>
<td>$0</td>
<td>$19</td>
<td>($2.1)</td>
</tr>
</tbody>
</table>

How have the hospital's total revenue and costs changed between FY10 and FY13?

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

† Costs were adjusted to exclude direct medical education costs and physician compensation.

‡ Average Hospital does not include Specialty hospitals.

January 2015
Braintree Rehabilitation Hospital is a for-profit rehabilitation hospital located in Braintree. Along with New England Rehabilitation Hospital, Braintree Rehabilitation was acquired by Reliant Hospital Partners in 2013. Braintree Rehabilitation Hospital provides inpatient and outpatient rehabilitation services. Between FY09 and FY13, inpatient days increased 6.6% at Braintree Rehabilitation, compared with a median 3.2% increase in its peer cohort. In that period, outpatient visits decreased 11.1% at the hospital, while median visits increased 2.4% in its peer cohort. Braintree Rehabilitation Hospital earned a profit in FY11 and FY13, with a 3.3% total margin in FY13, consistent with its peer cohort median.

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the median non-acute hospital's payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.
Fairlawn Rehabilitation Hospital is a for-profit rehabilitation hospital located in Worcester. It provides inpatient and outpatient rehabilitation services. In FY13, the ownership of Fairlawn Rehabilitation was evenly shared by HealthSouth Corporation and UMass Memorial Health Care system. As of 2014, HealthSouth Corporation owns 80% of Fairlawn Rehabilitation, while UMass Memorial Health Care owns 20%. Fairlawn Rehabilitation Hospital was profitable from FY09 to FY13, earning a 20.4% total margin and 20.2% operating margin in FY13, significantly more than the median 3.3% total and operating margins in its peer cohort.

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

For descriptions of the metrics, please see Technical Appendix.
Hospital Profile: FAIRLAWN REHABILITATION HOSPITAL
Cohort: Rehabilitation Hospital

**FINANCIAL PERFORMANCE**

How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$36</td>
<td>$36</td>
<td>$0</td>
<td>$29</td>
<td>$6.8</td>
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<tr>
<td>2010</td>
<td>$35</td>
<td>$35</td>
<td>$0</td>
<td>$30</td>
<td>$5.4</td>
</tr>
<tr>
<td>2011</td>
<td>$38</td>
<td>$38</td>
<td>$0</td>
<td>$31</td>
<td>$6.8</td>
</tr>
<tr>
<td>2012</td>
<td>$42</td>
<td>$42</td>
<td>($0)</td>
<td>$34</td>
<td>$7.9</td>
</tr>
<tr>
<td>2013</td>
<td>$45</td>
<td>$45</td>
<td>$0</td>
<td>$36</td>
<td>$9.2</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.

January 2015

**UTILIZATION TRENDS**

How has the volume of the hospital’s inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

FY13 Inpatient Days = 33,059

FY13 Net Inpatient Revenue per Day = $1,340

Full Cost per Day = $895

**PATIENT REVENUE TRENDS**

What was the hospital’s net inpatient service revenue per inpatient day between FY09 and FY13, and how does this hospital compare to its peer cohort median? (FY09=100)

How has the hospital’s total outpatient visits changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

FY13 Outpatient Visits = 10,809

FY13 Outpatient Revenue = $1 M
HealthSouth Rehabilitation Hospital of Western Massachusetts is a for-profit rehabilitation hospital located in Ludlow. The hospital provides inpatient and outpatient rehabilitation services. It is a member of HealthSouth Corporation. Inpatient days increased 3.2% between FY09 and FY13, consistent with the median increase in its peer cohort. Outpatient visits, on the other hand, decreased significantly, by 59.7% in that period compared with a median increase of 2.4% in its peer cohort. HealthSouth Rehabilitation Hospital of Western Massachusetts earned a profit each year from FY09 to FY13, with a total margin of 20.3% in FY13, compared to the median of 3.3% in its peer cohort.

**AT A GLANCE**

- **Total Beds**: 53; 5% of cohort beds
- **% Occupancy**: 87%; > cohort avg. (71%)
- **Inpatient Discharges in FY13**: 1,243
- **Public Payer Mix**: 84%; > avg. cohort hospital (70%)
- **Total Revenue in FY13**: $24 million; 2% of statewide
- **TAX STATUS**: For-profit
- **Inpatient:Outpatient Revenue in FY13**: 91:9%
- **Adjusted\(^1\) Cost per Inpatient Day**: $865
- **Change in Ownership (FY09-FY13)**: Not Applicable

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Payer Mix</th>
<th>Hospital</th>
<th>Average Non-Acute Hospital(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>State Programs</td>
<td></td>
<td>29%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>80%</td>
<td>22%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>49%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per Day</td>
<td>-35%</td>
<td>-25%</td>
<td>0%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>-30%</td>
<td>-20%</td>
<td>-3%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-11.6%</td>
<td>1.9%</td>
<td></td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-10%</td>
<td>-8%</td>
<td></td>
</tr>
</tbody>
</table>

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

<table>
<thead>
<tr>
<th>Discharges by Category</th>
<th>Chronic &amp; Rehab (1,243)</th>
<th>9%</th>
</tr>
</thead>
</table>

9% (1,243) of the non-acute cohort's discharges were treated at this hospital.

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

† Average Hospital does not include Specialty hospitals.

January 2015
New Bedford Rehabilitation Hospital is a for-profit rehabilitation hospital located in New Bedford. It provides long-term acute care and rehabilitation services. From FY09 to FY13, inpatient days at New Bedford Rehabilitation increased 9.0%, compared to a median increase of 3.2% in its peer cohort. Public payers represent 84% of New Bedford Rehabilitation Hospital's gross service charges, which is more than the average non-acute hospital (70%).

**AT A GLANCE**

**TOTAL BEDS:** 90; 9% of cohort beds  
**% OCCUPANCY:** 85%; > cohort avg. (71%)  
**INPATIENT DISCHARGES in FY13:** 640  
**PUBLIC PAYER MIX:** 84%; > avg. cohort hospital (70%)  
**TOTAL REVENUE in FY13:** $24 million; 2% of statewide  
**TAX STATUS:** For-profit  
**INPATIENT:OUTPATIENT REVENUE in FY13:** 99.1%  
**ADJUSTED† COST PER INPATIENT DAY:** $1,002  
**CHANGE in OWNERSHIP (FY09-FY13):** Not Applicable

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Non-Acute Hospital†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>40%</td>
</tr>
<tr>
<td>State Programs</td>
<td>44%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>16%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

- **Inpatient Net Revenue per Day:** 3.4%  
- **Inpatient Days:** 0.6%  
- **Outpatient Revenue:** 0.7%  
- **Outpatient Visits:**

This hospital did not provide outpatient services from FY09 to FY13.

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

- **Discharges by Category:**
  - **Chronic & Rehab (640):** 5%

5% (640) of the non-acute cohort's discharges were treated at this hospital.

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

**FY13 Average Length of Stay = 43.4 days**

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

1 Costs were adjusted to exclude direct medical education costs and physician compensation.

2 Average Hospital does not include Specialty hospitals.
New England Rehabilitation Hospital is a for-profit rehabilitation hospital located in Woburn. Along with Braintree Rehabilitation Hospital, New England Rehabilitation was acquired by Reliant Medical Group in 2013. New England Rehabilitation Hospital provides inpatient and outpatient rehabilitation services. From FY09 to FY13, inpatient days decreased by 4.3% at the hospital, while median days increased 3.2% in its peer cohort. Over that period, outpatient visits also decreased, by 9.5% at the hospital, while median visits increased 2.4% in its peer cohort. In the five-year period, New England Rehabilitation posted a loss each year. It had a -0.8% total margin in FY13, compared to the 3.3% median total margin in its peer cohort.

**AT A GLANCE**

- **TOTAL BEDS:** 210; 21% of cohort beds
- **% OCCUPANCY:** 46%; < cohort avg. (71%)
- **INPATIENT DISCHARGES in FY13:** 2,490
- **PUBLIC PAYER MIX:** 73%; > avg. cohort hospital (70%)
- **TOTAL REVENUE in FY13:** $50 million; 4% of statewide
- **TAX STATUS:** For-profit
- **INPATIENT:OUTPATIENT REVENUE in FY13:** 89%:11%
- **ADJUSTED COST PER INPATIENT DAY:** $1,259
- **CHANGE in OWNERSHIP (FY09-FY13):** Reliant Hospital Partners - 2013

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per Day</td>
<td>-0.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>-0.7%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-0.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-2.5%</td>
<td>-1.8%</td>
</tr>
</tbody>
</table>

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

- **Discharges by Category**
  - Chronic & Rehab (2,490)
  - 18% (2,490) of the non-acute cohort's discharges were treated at this hospital

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

**FY13 Average Length of Stay = 14.3 days**

- **Hospital:**
  - 2009: 120
  - 2013: 100

- **Peer Cohort:**
  - 2009: 100
  - 2013: 100

For descriptions of the metrics, please see Technical Appendix.
How have the hospital’s total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$47</td>
<td>$47</td>
<td>$0</td>
<td>$49</td>
<td>$(2.6)</td>
</tr>
<tr>
<td>2010</td>
<td>$45</td>
<td>$45</td>
<td>$0</td>
<td>$47</td>
<td>$(1.4)</td>
</tr>
<tr>
<td>2011</td>
<td>$47</td>
<td>$47</td>
<td>$0</td>
<td>$49</td>
<td>$(1.7)</td>
</tr>
<tr>
<td>2012</td>
<td>$49</td>
<td>$49</td>
<td>$0</td>
<td>$50</td>
<td>$(0.7)</td>
</tr>
<tr>
<td>2013</td>
<td>$50</td>
<td>$50</td>
<td>$0</td>
<td>$50</td>
<td>$(0.4)</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

 Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.
Spaulding Rehabilitation Hospital is a non-profit rehabilitation hospital located in Charlestown. It provides inpatient and outpatient rehabilitation services. It is a member of Partners HealthCare System. From FY09 to FY13, inpatient days at Spaulding Rehabilitation Hospital decreased 9.1%, while there was a median increase of 3.2% in its peer cohort. Outpatient visits increased 10.6% at the hospital, more than the median 2.4% increase in its cohort. Spaulding Rehabilitation Hospital reported a loss in FY12 and FY13, with a total margin of -8.1% in FY13, compared to a median total margin of 3.3% in its cohort.

**AT A GLANCE**

- **TOTAL BEDS:** 164; 16% of cohort beds
- **% OCCUPANCY:** 82%; > cohort avg. (71%)
- **INPATIENT DISCHARGES in FY13:** 2,264
- **PUBLIC PAYER MIX:** 45%; < avg. cohort hospital (70%)
- **TOTAL REVENUE in FY13:** $111 million; 9% of statewide
- **TAX STATUS:** Non-profit
- **INPATIENT:OUTPATIENT REVENUE in FY13:** 68%;32%
- **ADJUSTED COST PER INPATIENT DAY:** $1,524
- **CHANGE in OWNERSHIP (FY09-FY13):** Not Applicable

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

- **Hospital:** 55%
- **Commercial & Other:** 29%
- **State Programs:** 22%
- **Medicare and Other Federal Programs:** 49%

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per Day</td>
<td>-5.8%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>0.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>1.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.8%</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

- **Discharges by Category**
  - Chronic & Rehab (2,264): 16%

16% (2,264) of the non-acute cohort’s discharges were treated at this hospital.

How has the hospital’s average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

**FY13 Average Length of Stay = 21.7 days**

For descriptions of the metrics, please see Technical Appendix.
How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue (in millions)</th>
<th>Non-Operating Revenue (in millions)</th>
<th>Costs (in millions)</th>
<th>Total Profit/Loss (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$97</td>
<td>$96</td>
<td>$0</td>
<td>$96</td>
<td>$0.2</td>
</tr>
<tr>
<td>2010</td>
<td>$101</td>
<td>$101</td>
<td>($0)</td>
<td>$101</td>
<td>$0.4</td>
</tr>
<tr>
<td>2011</td>
<td>$107</td>
<td>$107</td>
<td>$0</td>
<td>$104</td>
<td>$3.0</td>
</tr>
<tr>
<td>2012</td>
<td>$111</td>
<td>$111</td>
<td>$0</td>
<td>$111</td>
<td>($0.2)</td>
</tr>
<tr>
<td>2013</td>
<td>$111</td>
<td>$111</td>
<td>$0</td>
<td>$120</td>
<td>($9.0)</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.

January 2015
Spaulding Rehabilitation Hospital of Cape Cod is a non-profit rehabilitation hospital located in East Sandwich. It provides adult and pediatric inpatient and outpatient rehabilitation services. It is a member of Partners HealthCare System. From FY09 to FY13, inpatient days at the hospital increased 1.4%, while there was a median increase of 3.2% in its cohort. In that period, outpatient visits increased 20.8%, compared with a median 2.4% among peer cohort hospitals. Spaulding Rehabilitation Hospital of Cape Cod earned a profit in FY10, FY12, and FY13 within the five-year period. Its total margin in FY13 was 4.6%, higher than the 3.3% median total margin in its cohort.

**AT A GLANCE**

**TOTAL BEDS:** 60; 6% of cohort beds  
**% OCCUPANCY:** 68%; < cohort avg. (71%)  
**INPATIENT DISCHARGES in FY13:** 1,099  
**PUBLIC PAYER MIX:** 70%; = avg. cohort hospital (70%)  
**TOTAL REVENUE in FY13:** $36 million; 3% of statewide  
**TAX STATUS:** Non-profit  
**INPATIENT:OUTPATIENT REVENUE in FY13:** 55.45%  
**ADJUSTED\(^1\) COST PER INPATIENT DAY:** $1,439  
**CHANGE in OWNERSHIP (FY09-FY13):** Partners HealthCare - 2010

**PAYER MIX**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Non-Acute Hospital(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>49%</td>
</tr>
<tr>
<td>State Programs</td>
<td>22%</td>
</tr>
<tr>
<td>Commercial &amp; Other</td>
<td>29%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per Day</td>
<td>-3.4%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>-0.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-1.9%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.8%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

2 hospital >35%

For Other Cohort Hospitals

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

Chronic & Rehab (1,099)

8% (1,099) of the non-acute cohort’s discharges were treated at this hospital

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.
Whittier Rehabilitation Hospital-Bradford is a for-profit rehabilitation hospital located in Bradford. It provides inpatient and outpatient rehabilitation services. It is a member of the Whittier Health Network. From FY09 to FY13, inpatient days increased 3.2% at the hospital, the same as the median increase in its peer cohort. Outpatient visits increased more sharply in this period, by 24.1%, compared to a median increase of 2.4% among cohort hospitals. Whittier Rehabilitation Hospital-Bradford earned a profit in three of the five years. It had a total margin of -2.3% in FY13, lower than the median total margin in its cohort of 3.3%.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Hospital</th>
<th>Peer Cohort</th>
<th>Other Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per Day</td>
<td>0.0%</td>
<td>3.4%</td>
<td>-5.6%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>-5.6%</td>
<td>-3.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>-3.2%</td>
<td>-1.8%</td>
<td>-1.0%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-1.8%</td>
<td>-0.7%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

- Chronic & Rehab: 734 cases, 5% of total cases

5% (734) of the non-acute cohort's discharges were treated at this hospital.

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital’s inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

How has the volume of the hospital’s outpatient visits changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

Hospital Profile:
WHITTIER REHABILITATION HOSPITAL - BRADFORD

Cohort:
Rehabilitation Hospital

What was the hospital's net inpatient service revenue per inpatient day between FY09 and FY13, and how does this hospital compare to its peer cohort median?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital’s operating and total margins between FY09 and FY13, and how do these compare to the medians of its peer cohort hospitals?

Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$25</td>
<td>$25</td>
<td>$0</td>
<td>$23</td>
<td>$2.0</td>
</tr>
<tr>
<td>2010</td>
<td>$25</td>
<td>$25</td>
<td>$0</td>
<td>$25</td>
<td>$0.9</td>
</tr>
<tr>
<td>2011</td>
<td>$26</td>
<td>$26</td>
<td>$0</td>
<td>$29</td>
<td>$(2.9)</td>
</tr>
<tr>
<td>2012</td>
<td>$26</td>
<td>$26</td>
<td>$0</td>
<td>$26</td>
<td>$0.3</td>
</tr>
<tr>
<td>2013</td>
<td>$26</td>
<td>$26</td>
<td>$0</td>
<td>$27</td>
<td>$(0.6)</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.
Whittier Rehabilitation Hospital-Westborough is a for-profit rehabilitation hospital located in Westborough. It is a member of Whittier Health Network, and provides inpatient and outpatient rehabilitation services. Between FY09 and FY13, inpatient days remained fairly steady, only increasing 0.7%, compared with a median increase of 3.2% in its peer cohort. Outpatient visits increased 17.1% in that period, compared with a median increase of 2.4% in its cohort. Whittier Rehabilitation Hospital-Westborough earned a profit each year from FY09 to FY13, with a total margin of 6.1% in FY13, higher than the median total margin in its cohort of 3.3%.

**AT A GLANCE**

- **TOTAL BEDS:** 88; 9% of cohort beds
- **% OCCUPANCY:** 55%; < cohort avg. (71%)
- **INPATIENT DISCHARGES in FY13:** 789
- **PUBLIC PAYER MIX:** 64%; < avg. cohort hospital (70%)
- **TOTAL REVENUE in FY13:** $23 million; 2% of statewide
- **TAX STATUS:** For-profit
- **INPATIENT:OUTPATIENT REVENUE in FY13:** 95.5%
- **ADJUSTED^ COST PER INPATIENT DAY:** $1,094
- **CHANGE in OWNERSHIP (FY09-FY13):** Not Applicable

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Non-Acute Hospital^</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital</strong></td>
<td><strong>Commercial &amp; Other</strong></td>
</tr>
<tr>
<td>36%</td>
<td>29%</td>
</tr>
<tr>
<td>0%</td>
<td>64%</td>
</tr>
<tr>
<td>64%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

<table>
<thead>
<tr>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inpatient Net Revenue per Day</strong></td>
<td>-0.6%</td>
</tr>
<tr>
<td><strong>Inpatient Days</strong></td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Outpatient Revenue</strong></td>
<td>1.9%</td>
</tr>
<tr>
<td><strong>Outpatient Visits</strong></td>
<td>-2.4%</td>
</tr>
</tbody>
</table>

Other Cohort Hospitals

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

- **Discharges by Category**
  - Chronic & Rehab (789)
  - 6% of the non-acute cohort’s discharges were treated at this hospital

How has the hospital’s average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>FY13 Average Length of Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>95.7 days</td>
</tr>
<tr>
<td>2010</td>
<td>95.5 days</td>
</tr>
<tr>
<td>2011</td>
<td>95.3 days</td>
</tr>
<tr>
<td>2012</td>
<td>95.1 days</td>
</tr>
<tr>
<td>2013</td>
<td>94.9 days</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.
How have the hospital's total revenue and costs changed between FY09 and FY13?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue (in millions)</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$23</td>
<td>$23</td>
<td>$0</td>
<td>$0.3</td>
</tr>
<tr>
<td>2010</td>
<td>$22</td>
<td>$22</td>
<td>$0</td>
<td>$0.4</td>
</tr>
<tr>
<td>2011</td>
<td>$23</td>
<td>$23</td>
<td>$0</td>
<td>$1.3</td>
</tr>
<tr>
<td>2012</td>
<td>$23</td>
<td>$23</td>
<td>$0</td>
<td>$1.2</td>
</tr>
<tr>
<td>2013</td>
<td>$23</td>
<td>$23</td>
<td>$0</td>
<td>$1.4</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

 Costs were adjusted to exclude direct medical education costs and physician compensation.

 Average Hospital does not include Specialty hospitals.
Kindred Hospital Northeast is a for-profit chronic care hospital with campuses in Stoughton and Natick. In 2013, Kindred Hospital Northeast closed its Waltham campus. It is a member of the Kindred Health Care system. Kindred Hospital Northeast is a transitional care hospital that specializes in long-term acute care, including complex wound care, short term rehabilitation, and pulmonary care. In FY13, it had a public payer mix higher than the average of its cohort; 81% of its gross patient service revenue was derived from government programs. Between FY09 and FY13, inpatient days decreased by 33.8%, compared with a median 15.0% decrease in its peer cohort. During the FY09 to FY13 period, it earned a profit in FY11 and FY13. It had a total margin of 5.5% in FY13, compared to the median of -2.4% in its peer cohort.

**AT A GLANCE**

**TOTAL BEDS:** 111; 10% of cohort beds  
**% OCCUPANCY:** 85%; > cohort avg. (67%)  
**INPATIENT DISCHARGES in FY13:** 632  
**PUBLIC PAYER MIX:** 81%; > avg. cohort hospital (79%)  
**TOTAL REVENUE in FY13:** $36 million; 3% of statewide  
**TAX STATUS:** For-profit  
**INPATIENT:OUTPATIENT REVENUE in FY13:** 100%.0%  
**ADJUSTED1 COST PER INPATIENT DAY:** $921  
**CHANGE in OWNERSHIP (FY09-FY13):** Not Applicable

**PAYER MIX**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Non-Acute Hospital†</th>
</tr>
</thead>
<tbody>
<tr>
<td>19%</td>
<td>29%</td>
</tr>
<tr>
<td>33%</td>
<td>22%</td>
</tr>
<tr>
<td>48%</td>
<td>49%</td>
</tr>
</tbody>
</table>

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

**GROWTH MEASURES**

<table>
<thead>
<tr>
<th>GROWTH MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease</td>
</tr>
<tr>
<td>Increase</td>
</tr>
<tr>
<td>Inpatient Net Revenue per Day</td>
</tr>
<tr>
<td>Inpatient Days</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
</tr>
<tr>
<td>Outpatient Visits</td>
</tr>
</tbody>
</table>

This hospital did not provide outpatient services from FY09 to FY13.

**SERVICES**

<table>
<thead>
<tr>
<th>SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?</td>
</tr>
</tbody>
</table>

8% (632) of the non-acute cohort's discharges were treated at this hospital

<table>
<thead>
<tr>
<th>Discharges by Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatric (2)</td>
</tr>
<tr>
<td>Chronic &amp; Rehab (630)</td>
</tr>
</tbody>
</table>

8% (632) of the non-acute cohort's discharges were treated at this hospital

For descriptions of the metrics, please see Technical Appendix.
Utility Trends

How has the volume of the hospital's inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

Total outpatient visits changed compared to FY09, and how does this hospital compared to its peer cohort median? (FY09=100)

Patient Revenue Trends

What was the hospital's net inpatient service revenue per inpatient day between FY09 and FY13, and how does this hospital compare to its peer cohort median?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

Financial Performance

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital’s operating and total margins between FY09 and FY13, and how do these compare to the medians of its peer cohort hospitals?

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.

January 2015
New England Sinai Hospital is a for-profit chronic care hospital located in Stoughton. It is a member of Steward Health Care System. The hospital was founded in 1927 as a hospital for patients with tuberculosis and continues today to concentrate on pulmonary cases. It also provides long-term acute care, ambulatory, and outpatient rehabilitation services. It is a teaching affiliate for Tufts Medical School and is the rotation site for residents focused on pulmonary care. It also has the largest ventilation weaning program in Massachusetts. Between FY09 and FY13, inpatient days decreased at New England Sinai by 28.7%, compared with a median 15.0% decrease in its peer cohort. Outpatient visits also decreased during that time by 53.9%, consistent with its peer cohort median. The hospital reported a loss each year from FY09 to FY13, with a total margin of -3.0% in FY13, slightly below the median -2.4% total margin in its cohort that year.

AT A GLANCE

TOTAL BEDS: 212; 20% of cohort beds
% OCCUPANCY: 58%; < cohort avg. (67%)

INPATIENT DISCHARGES in FY13: 1,173
PUBLIC PAYER MIX: 75%; < avg. cohort hospital (79%)
TOTAL REVENUE in FY13: $56 million; 4% of statewide
TAX STATUS: For-profit
INPATIENT:OUTPATIENT REVENUE in FY13: 96.4%
ADJUSTED COST PER INPATIENT DAY: $1,176
CHANGE in OWNERSHIP (FY09-FY13): Steward Health Care - 2012

PAYER MIX

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Hospital</th>
<th>Average Non-Acute Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>Commercial &amp; Other</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>State Programs</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Medicare and Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Programs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding

GROWTH MEASURES

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital's peer cohort?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Percentage Change</th>
<th>Hospital</th>
<th>Peer Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per Day</td>
<td>Decrease</td>
<td>-3.5%</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>Decrease</td>
<td>-3.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>Decrease</td>
<td>-56.2%</td>
<td>-47.0%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>Decrease</td>
<td>-62.7%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

SERVICES

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

Discharges by Category

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic &amp; Rehab (1,173)</td>
<td>15%</td>
</tr>
</tbody>
</table>

15% (1,173) of the non-acute cohort's discharges were treated at this hospital

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

FY13 Average Length of Stay = 38.3 days

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

† Average Hospital does not include Specialty hospitals.
In FY13, Radius Specialty Hospital was a for-profit chronic care hospital located in Boston. On September 23, 2014, Radius announced it would transfer its patients to other facilities and cease operations within 30 days. It provided long-term acute care and rehabilitation services, focused primarily on respiratory care. In FY13, it had the highest public payer mix of all hospitals in its cohort; 93% of its gross patient service revenue was derived from government programs. From FY09 to FY13, there were 20.2% fewer inpatient days at the hospital, compared with a median decrease of 15.0% for cohort hospitals. In the five-year period, Radius Specialty Hospital earned a profit in FY10 through FY12 but reported losses in FY13. It had a -1.9% total margin in FY13, compared to a median total margin of -2.4% that year in its cohort.

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

How has the hospital’s average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital's inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

This hospital did not provide outpatient services from FY09 to FY13.

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

This hospital did not provide outpatient services from FY09 to FY13.

How have the hospital's total revenue and costs changed between FY09 and FY13?

How were the hospital's operating and total margins between FY09 and FY13, and how do these compare to the medians of its peer cohort hospitals?

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$42</td>
<td>$42</td>
<td>$0</td>
<td>$43</td>
<td>($0.8)</td>
</tr>
<tr>
<td>2010</td>
<td>$41</td>
<td>$41</td>
<td>$0</td>
<td>$40</td>
<td>$1.3</td>
</tr>
<tr>
<td>2011</td>
<td>$38</td>
<td>$38</td>
<td>$0</td>
<td>$37</td>
<td>$1.4</td>
</tr>
<tr>
<td>2012</td>
<td>$39</td>
<td>$39</td>
<td>$0</td>
<td>$38</td>
<td>$0.8</td>
</tr>
<tr>
<td>2013</td>
<td>$36</td>
<td>$36</td>
<td>$0</td>
<td>$37</td>
<td>($0.7)</td>
</tr>
</tbody>
</table>
Spaulding Hospital Cambridge is a non-profit chronic care hospital located in Cambridge. It provides inpatient long-term care and rehabilitation services for adults. It is a member of Partners HealthCare System. From FY10 to FY13, inpatient days increased 10.5% at the hospital, compared with a median decrease of 10.9% in its cohort. As of FY14, Spaulding Hospital Cambridge no longer provides outpatient services. The hospital earned a profit in FY10 and FY11, but reported losses in FY12 and FY13. Its total margin in FY13 was -1.1%, above the median total margin in its cohort of -2.4%.

**AT A GLANCE**
- **TOTAL BEDS:** 180; 17% of cohort beds
- **% OCCUPANCY:** 75%; > cohort avg. (67%)
- **INPATIENT DISCHARGES in FY13:** 1,754
- **PUBLIC PAYER MIX:** 71%; < avg. cohort hospital (79%)
- **TOTAL REVENUE in FY13:** $71 million; 5% of statewide
- **TAX STATUS:** Non-profit
- **INPATIENT:OUTPATIENT REVENUE in FY13:** 100:0%
- **ADJUSTED COST PER INPATIENT DAY:** $1,430
- **CHANGE in OWNERSHIP (FY09-FY13):** Partners HealthCare - 2009

**PAYER MIX**
What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

**GROWTH MEASURES**
What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

**SERVICES**
What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort’s inpatient cases did this hospital treat?

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

† Average Hospital does not include Specialty hospitals.
Spaulding North Shore is a non-profit chronic care hospital located in Salem. It provides inpatient and outpatient long-term acute care, short-term rehabilitation, and skilled nursing care. It is a member of Partners HealthCare System. Inpatient days decreased 9.8% from FY09 to FY13, compared with a median 15.0% decrease in its peer cohort. Outpatient visits increased 30.3% in that period, while median visits declined 53.9% in its peer cohort. Spaulding North Shore reported a loss each year from FY09 to FY13.

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

How has the hospital's average length of stay changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.
Vibra Hospital of Western Massachusetts is a chronic care hospital located in Springfield. It is formerly known as Kindred Hospital Park View; it was bought by Vibra Healthcare in 2013. Between FY09 and FY13, inpatient days increased 2.7%, compared to a median 15.0% decrease in its peer cohort. The hospital was unprofitable each year from FY09 to FY13. In FY13, the hospital's total margin was -12.1%, the lowest in the five-year period, and lower than the FY13 cohort median of -2.4%.

**AT A GLANCE**

- **TOTAL BEDS**: 202; 19% of cohort beds
- **% OCCUPANCY**: 74%; > cohort avg. (67%)
- **INPATIENT DISCHARGES in FY13**: 1,118
- **PUBLIC PAYER MIX**: 81%; > avg. cohort hospital (79%)
- **TOTAL REVENUE in FY13**: $51 million; 4% of statewide
- **TAX STATUS**: For-profit
- **INPATIENT:OUTPATIENT REVENUE in FY13**: 100%.0%
- **ADJUSTED\(^{2}\) COST PER INPATIENT DAY**: $899
- **CHANGE in OWNERSHIP (FY09-FY13)**: Vibra Healthcare - 2013

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures, and how do these compare to the growth rates of the hospital’s peer cohort?

- **Decrease**
  - Inpatient Net Revenue per Day: -6.4% ▲ -4.9%
  - Inpatient Days: -3.8% ▲ -2.2%
  - Outpatient Revenue: ▲
  - Outpatient Visits: ▲

- **Increase**
  - This hospital did not provide outpatient services from FY09 to FY13.
  - Other Cohort Hospitals

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13? What proportion of its peer cohort's inpatient cases did this hospital treat?

- **Discharges by Category**
  - SNFs (10)
  - Psychiatric (37)
  - Chronic & Rehab (1,071)

15% (1,118) of the non-acute cohort's discharges were treated at this hospital

For descriptions of the metrics, please see Technical Appendix.
How has the volume of the hospital’s inpatient days changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

This hospital did not provide outpatient services from FY09 to FY13.

How has the hospital’s total outpatient visits changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

This hospital did not provide outpatient services from FY09 to FY13.

What was the hospital's net inpatient service revenue per inpatient day between FY09 and FY13, and how does this hospital compare to its peer cohort median?

How has the hospital's total outpatient revenue changed compared to FY09, and how does this hospital compare to its peer cohort median? (FY09=100)

How have the hospital's total revenue and costs changed between FY09 and FY13?

What were the hospital’s operating and total margins between FY09 and FY13, and how do these compare to the medians of its peer cohort hospitals?

### Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$44</td>
<td>$44</td>
<td>$0</td>
<td>$49</td>
<td>($5.1)</td>
</tr>
<tr>
<td>2010</td>
<td>$51</td>
<td>$51</td>
<td>$0</td>
<td>$54</td>
<td>($3.1)</td>
</tr>
<tr>
<td>2011</td>
<td>$50</td>
<td>$50</td>
<td>$0</td>
<td>$54</td>
<td>($3.7)</td>
</tr>
<tr>
<td>2012</td>
<td>$52</td>
<td>$52</td>
<td>$0</td>
<td>$53</td>
<td>($1.5)</td>
</tr>
<tr>
<td>2013</td>
<td>$51</td>
<td>$51</td>
<td>$0</td>
<td>$57</td>
<td>($6.1)</td>
</tr>
</tbody>
</table>
AdCare Hospital of Worcester is a for-profit specialty hospital located in Worcester. It is the only private non-acute care hospital that concentrates on substance abuse, which it focuses on exclusively. It provides detox and inpatient services, as well as outpatient services. From FY09 to FY13, inpatient days at AdCare increased 4.1%. Outpatient visits increased by 24.1%, while outpatient revenue increased 50.2% during that period. From FY09 to FY13, AdCare had positive operating and total margins, earning a 12.6% total margin in FY13.

**AT A GLANCE**

TOTAL BEDS: 114  
% OCCUPANCY: 89%  
INPATIENT DISCHARGES in FY13: 6,304  
PUBLIC PAYER MIX: 73%  
TOTAL REVENUE in FY13: $38 million; 3% of statewide  
TAX STATUS: For-profit  
INPATIENT:OUTPATIENT REVENUE in FY13: 69%:31%  
ADJUSTED\* COST PER INPATIENT DAY: $524  
CHANGE in OWNERSHIP (FY09-FY13): Not Applicable

**PAYER MIX**

What was the hospital’s overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Payer Mix</th>
<th>Hospital</th>
<th>Average Non-Acute Hospital†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>27%</td>
<td>29%</td>
</tr>
<tr>
<td>Commercial &amp; Other</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>State Programs</td>
<td>45%</td>
<td>49%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>28%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures?

- **Inpatient Net Revenue per Day**
  - Hospital: Decrease -0.5%  
  - Increase: Increase 1.6%
- **Inpatient Days**
  - Hospital: Decrease -35%  
  - Increase: Increase 35%
- **Outpatient Revenue**
  - Hospital: Decrease -15%  
  - Increase: Increase 20%
- **Outpatient Visits**
  - Hospital: Decrease -30%  
  - Increase: Increase 30%

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13?

Discharges by bed type for this hospital in FY13 were:

- Psychiatric: 6,304

As a provider of specialty services, this hospital does not have a comparative group.

How has the hospital’s average length of stay changed compared to FY09? (FY09=100)

- **FY13 Average Length of Stay = 5.9 days**
- **Hospital: Increase 4.4%**
- **No Peer Cohort**

For descriptions of the metrics, please see Technical Appendix.
For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

‡ Costs were adjusted to exclude direct medical education costs and physician compensation.

† Average Hospital does not include Specialty hospitals.

**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$29</td>
<td>$29</td>
<td>$0</td>
<td>$27</td>
<td>$1.8</td>
</tr>
<tr>
<td>2010</td>
<td>$31</td>
<td>$31</td>
<td>$0</td>
<td>$29</td>
<td>$2.0</td>
</tr>
<tr>
<td>2011</td>
<td>$32</td>
<td>$32</td>
<td>$0</td>
<td>$30</td>
<td>$2.2</td>
</tr>
<tr>
<td>2012</td>
<td>$36</td>
<td>$36</td>
<td>$0</td>
<td>$34</td>
<td>$2.4</td>
</tr>
<tr>
<td>2013</td>
<td>$38</td>
<td>$38</td>
<td>$(30)</td>
<td>$33</td>
<td>$4.8</td>
</tr>
</tbody>
</table>

For a more detailed analysis, please refer to the technical appendix.

January 2015
Franciscan Hospital for Children is a non-profit specialty hospital located in Brighton. It focuses on providing chronic care and rehabilitation services to a pediatric population. It offers inpatient, residential, educational, surgical, outpatient, and home care programs for children with special health care needs. Between FY09 and FY13, inpatient days increased 27.1% at the hospital, and outpatient visits decreased 0.9%. In the five year period from FY09 to FY13, Franciscan Hospital for Children reported a profit each year except for FY12.

**AT A GLANCE**

| TOTAL BEDS | 112 |
| % OCCUPANCY | 52% |
| INPATIENT DISCHARGES in FY13: | 804 |
| PUBLIC PAYER MIX: | 56% |
| TOTAL REVENUE in FY13: | $56 million; 4% of statewide |
| TAX STATUS: | Non-profit |
| INPATIENT:OUTPATIENT REVENUE in FY13: | 54.46% |
| ADJUSTED COST PER INPATIENT DAY: | $1,095 |
| CHANGE in OWNERSHIP (FY09-FY13): | Not Applicable |

**PAYER MIX**

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital’s payer mix?

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Non-Acute Hospital†</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial &amp; Other</td>
<td>29%</td>
</tr>
<tr>
<td>State Programs</td>
<td>22%</td>
</tr>
<tr>
<td>Medicare and Other Federal Programs</td>
<td>49%</td>
</tr>
</tbody>
</table>

Percentage calculations may not sum to 100% due to rounding.

**GROWTH MEASURES**

What were the FY12 to FY13 growth rates at this hospital for the following measures?

<table>
<thead>
<tr>
<th>Decrease</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Net Revenue per Day</td>
<td>2.1%</td>
</tr>
<tr>
<td>Inpatient Days</td>
<td>-16.2%</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>4.3%</td>
</tr>
<tr>
<td>Outpatient Visits</td>
<td>-</td>
</tr>
</tbody>
</table>

| Hospital |

**SERVICES**

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13?

Discharges by bed type for this hospital in FY13 were:

- Psychiatric: 589
- Chronic & Rehab: 215

As a provider of specialty services, this hospital does not have a comparative group.

For descriptions of the metrics, please see Technical Appendix.
How have the hospital’s total revenue and costs changed between FY09 and FY13?

Revenue, Cost & Profit/Loss (in millions)

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$45</td>
<td>$45</td>
<td>$0</td>
<td>$45</td>
<td>$0.3</td>
</tr>
<tr>
<td>2010</td>
<td>$48</td>
<td>$48</td>
<td>$0</td>
<td>$47</td>
<td>$0.3</td>
</tr>
<tr>
<td>2011</td>
<td>$51</td>
<td>$51</td>
<td>$0</td>
<td>$50</td>
<td>$0.5</td>
</tr>
<tr>
<td>2012</td>
<td>$52</td>
<td>$52</td>
<td>$0</td>
<td>$53</td>
<td>($0.4)</td>
</tr>
<tr>
<td>2013</td>
<td>$56</td>
<td>$56</td>
<td>$0</td>
<td>$55</td>
<td>$0.7</td>
</tr>
</tbody>
</table>

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

† Costs were adjusted to exclude direct medical education costs and physician compensation.

‡ Average Hospital does not include Specialty hospitals.
Hebrew Rehabilitation Hospital is a non-profit specialty hospital located in Boston. Hebrew Rehabilitation specializes in providing hospital and community health care services to geriatric patients. It provides long-term acute, rehabilitative, outpatient, adult day health, and home health care services. It is also the healthcare facility for Hebrew SeniorLife provider organization, a provider of elder care. Outpatient visits increased 73.8% at the hospital from FY09 to FY13. Hebrew Rehabilitation reported a loss from FY10 through FY13, with a total margin of -8.7% and an operating margin of -9.1% in FY13.

What was the hospital's overall payer mix (gross charges) in FY13, and how does this hospital compare to the average non-acute hospital's payer mix?

What type(s) of inpatient services, categorized by bed type, did the hospital provide in FY13?

Discharges by bed type for this hospital in FY13 were:
- Chronic & Rehab: 261
- MACU: 317
- SNF: 849

As a provider of specialty services, this hospital does not have a comparative group.

For descriptions of the metrics, please see Technical Appendix.
**Revenue, Cost & Profit/Loss (in millions)**

<table>
<thead>
<tr>
<th>FY</th>
<th>Total Revenue</th>
<th>Operating Revenue</th>
<th>Non-Operating Revenue</th>
<th>Costs</th>
<th>Total Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$113</td>
<td>$112</td>
<td>$1</td>
<td>$112</td>
<td>$1.0</td>
</tr>
<tr>
<td>2010</td>
<td>$113</td>
<td>$113</td>
<td>$1</td>
<td>$124</td>
<td>($11.0)</td>
</tr>
<tr>
<td>2011</td>
<td>$113</td>
<td>$112</td>
<td>$0</td>
<td>$122</td>
<td>($9.3)</td>
</tr>
<tr>
<td>2012</td>
<td>$117</td>
<td>$116</td>
<td>$0</td>
<td>$127</td>
<td>($10.2)</td>
</tr>
<tr>
<td>2013</td>
<td>$115</td>
<td>$114</td>
<td>$0</td>
<td>$125</td>
<td>($10.0)</td>
</tr>
</tbody>
</table>

How have the hospital’s total revenue and costs changed between FY09 and FY13?

For descriptions of the metrics, please see Technical Appendix.

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

Costs were adjusted to exclude direct medical education costs and physician compensation.

Average Hospital does not include Specialty hospitals.

**CENTER FOR HEALTH INFORMATION AND ANALYSIS**

http://chiamass.gov/hospital-profiles

January 2015
MASSACHUSETTS HOSPITAL PROFILES

TECHNICAL APPENDIX

DATA THROUGH FISCAL YEAR 2013

JANUARY 2015
Acute and non-acute hospitals included in *Massachusetts Hospital Profiles: Data through Fiscal Year 2013* were profiled on service, payer mix, utilization, revenue, financial performance, and quality metrics. Multi-acute hospital systems were profiled based on revenue and financial performance metrics. Details for each of these metrics are included in this Technical Appendix.

Unless otherwise noted, metrics included in this report are based on financial data from Fiscal Year (FY) 2009 to FY13 reported by acute and non-acute hospitals. Discharge data from FY13 included in the acute hospital analysis was reported by acute hospitals in the Hospital Discharge Database, unless otherwise noted. Descriptive acute and non-acute hospital information is from FY13.

To compile the financial profiles, the Center for Health Information and Analysis (CHIA) relied on the following primary data sources: the DHCFP-403 Annual Hospital Cost Report (403 Cost Report), the Hospital Discharge Database (HDD), the Hospital Standardized Financial Statement Database, and Audited Financial Statements.

**Hospital 403 Cost Report:**
The 403 Cost Report is submitted each year by acute and non-acute hospitals, and contains data on costs, revenues, and utilization statistics. Acute hospitals are required to complete the 403 Cost Report based on a fiscal year end of September 30 regardless of their actual fiscal year end. Non-acute hospitals complete the 403 Cost Report based on their actual year end.

**Hospital Discharge Database (HDD):**
HDD data is submitted quarterly by acute hospitals, and contains patient-level data identifying charges, days, and diagnostic information for all acute inpatient discharges. CHIA used FY13 HDD data for the service metrics, which includes discharges between October 1, 2012 and September 30, 2013 for all acute hospitals.

**Hospital Standardized Financial Statements:**
The Hospital Standardized Financial Statements are submitted quarterly and annually by acute hospitals. They contain information on the hospital’s assets, liabilities, revenues, expenses, and profit or losses. They reflect only the hospital’s financial information; they do not reflect financial information for any larger health system with which a hospital may be affiliated.

**Audited Financial Statements:**
Audited Financial Statements are submitted annually by hospitals (or their parent systems, if applicable). In addition to the financial figures that are found in the Hospital Standardized Financial Statements, the Audited Financial Statements contain an opinion from an independent auditor as well as notes from hospital or system Management that elaborate on the financial performance and standing of the hospital or system during the fiscal year. Audited Financial Statements were used as a source primarily for the multi-acute hospital system profiles.

**Quality Data Sources:**
To compile the quality profiles, CHIA relied on the following primary data sources: HDD, the CMS Hospital Compare database, and The Leapfrog Group.

**Data Verification:**
CHIA held a series of stakeholder engagement sessions with payer representatives, acute and non-acute provider representatives, and other state agencies, to develop and refine proposed profile metrics.
Each year’s Hospital 403 Cost Reports, hospital and multi-acute hospital system Standardized Financial Statements, Relative Price, and quality data reports were verified in accordance with respective reporting regulation requirements. Additional verification reports including each hospital's reported financial data were sent to each acute and non-acute hospital for FY09-FY13.
An **acute hospital** is a hospital that is licensed by the Massachusetts Department of Public Health and contains a majority of medical-surgical, pediatric, obstetric, and maternity beds.

**Multi-Acute Hospital System Affiliation and Location**

Massachusetts hospitals are generally affiliated with a larger health system. Health systems may include multiple hospitals and/or provider organizations while others may have only one hospital with associated providers or provider organizations. Multi-acute hospital system membership identifies those health systems with more than one hospital with which the subject hospital is a member. This information was derived from the hospital’s Standardized Financial Statements.

Below is a list of Massachusetts multi-acute hospital systems and their acute hospital members:

<table>
<thead>
<tr>
<th>Multi-Acute Hospital System</th>
<th>Acute Hospital Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baystate Health</td>
<td>Baystate Franklin Medical Center</td>
</tr>
<tr>
<td></td>
<td>Baystate Mary Lane Hospital</td>
</tr>
<tr>
<td></td>
<td>Baystate Medical Center</td>
</tr>
<tr>
<td>Berkshire Health System</td>
<td>Berkshire Medical Center</td>
</tr>
<tr>
<td></td>
<td>Fairview Hospital</td>
</tr>
<tr>
<td>Cape Cod Healthcare</td>
<td>Cape Cod Hospital</td>
</tr>
<tr>
<td></td>
<td>Falmouth Hospital</td>
</tr>
<tr>
<td>CareGroup</td>
<td>Beth Israel Deaconess Hospital – Milton</td>
</tr>
<tr>
<td></td>
<td>Beth Israel Deaconess Hospital – Needham</td>
</tr>
<tr>
<td></td>
<td>Beth Israel Deaconess Hospital – Plymouth(^1)</td>
</tr>
<tr>
<td></td>
<td>Beth Israel Deaconess Medical Center</td>
</tr>
<tr>
<td></td>
<td>Mount Auburn Hospital</td>
</tr>
<tr>
<td>Heywood Healthcare</td>
<td>Athol Hospital</td>
</tr>
<tr>
<td></td>
<td>Heywood Hospital</td>
</tr>
<tr>
<td>Kindred Healthcare(^^)</td>
<td>Kindred Hospital – Boston</td>
</tr>
<tr>
<td></td>
<td>Kindred Hospital – Boston North Shore</td>
</tr>
<tr>
<td>Lahey Health System</td>
<td>Lahey Hospital &amp; Medical Center</td>
</tr>
<tr>
<td></td>
<td>Northeast Hospital</td>
</tr>
<tr>
<td>Partners HealthCare System</td>
<td>Brigham and Women’s Hospital</td>
</tr>
<tr>
<td></td>
<td>Brigham and Women’s Faulkner Hospital</td>
</tr>
<tr>
<td></td>
<td>Cooley Dickinson Hospital</td>
</tr>
<tr>
<td></td>
<td>Martha’s Vineyard Hospital</td>
</tr>
<tr>
<td></td>
<td>Massachusetts General Hospital</td>
</tr>
<tr>
<td></td>
<td>Nantucket Cottage Hospital</td>
</tr>
<tr>
<td></td>
<td>Newton-Wellesley Hospital</td>
</tr>
<tr>
<td>Steward Health Care System</td>
<td>Merrimack Valley Hospital</td>
</tr>
<tr>
<td></td>
<td>Morton Hospital</td>
</tr>
<tr>
<td></td>
<td>Nashoba Valley Medical Center</td>
</tr>
<tr>
<td></td>
<td>Quincy Medical Center</td>
</tr>
<tr>
<td></td>
<td>Steward Carney Hospital</td>
</tr>
<tr>
<td></td>
<td>Steward Good Samaritan Medical Center</td>
</tr>
<tr>
<td></td>
<td>Steward Holy Family Hospital</td>
</tr>
<tr>
<td></td>
<td>Steward Norwood Hospital</td>
</tr>
</tbody>
</table>

\(^1\) Beth Israel Deaconess Hospital- Plymouth (formerly Jordan Hospital) was acquired by Beth Israel Deaconess Medical Center effective January 1, 2014. As this acquisition took place after FY13, data for Beth Israel Deaconess Hospital- Plymouth is not included in the CareGroup system profile.
The location for each acute hospital in this report was obtained, where possible, from hospital licensing information collected by the Massachusetts Department of Public Health (DPH). The hospital license includes information on a hospital’s campuses and satellite offices.

### Regional Definitions

The geographic regions presented in this report are derived from the Health Policy Commission (HPC) static geographic regions. The HPC regions were rolled up into larger regions for this publication to facilitate better comparison within each geographic area. In *Massachusetts Hospital Profiles- Data through Fiscal Year 2012* (published in March 2014), acute hospitals were divided into more specific HPC regions. See Exhibit D for a cross-walk between data periods. The acute hospitals and the regions to which they were assigned are:

<table>
<thead>
<tr>
<th>Massachusetts Region</th>
<th>Acute Hospital Assigned to Region</th>
</tr>
</thead>
</table>
| Metro Boston         | Beth Israel Deaconess Hospital – Milton  
|                      | Beth Israel Deaconess Hospital – Needham  
|                      | Beth Israel Deaconess Medical Center  
|                      | Boston Children’s Hospital  
|                      | Boston Medical Center  
|                      | Brigham and Women’s Faulkner Hospital  
|                      | Brigham and Women’s Hospital  
|                      | Cambridge Health Alliance  
|                      | Dana-Farber Cancer Institute  
|                      | Hallmark Health  
|                      | Kindred Hospital- Boston  
|                      | Massachusetts Eye and Ear Infirmary  
|                      | Massachusetts General Hospital  
|                      | Mount Auburn Hospital  
|                      | New England Baptist Hospital  
|                      | Newton-Wellesley Hospital  
|                      | Steward Carney Hospital  
|                      | Steward St. Elizabeth’s Medical Center  
|                      | Tufts Medical Center  
| Northeastern Massachusetts | Anna Jaques Hospital  
|                      | Emerson Hospital  
|                      | Kindred Hospital- Boston North Shore  

---

<table>
<thead>
<tr>
<th>Acute Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lahey Hospital &amp; Medical Center</strong></td>
</tr>
<tr>
<td><strong>Lawrence General Hospital</strong></td>
</tr>
<tr>
<td><strong>Lowell General Hospital</strong></td>
</tr>
<tr>
<td><strong>Merrimack Valley Hospital</strong></td>
</tr>
<tr>
<td><strong>Nashoba Valley Medical Center</strong></td>
</tr>
<tr>
<td><strong>North Shore Medical Center</strong></td>
</tr>
<tr>
<td><strong>Northeast Hospital</strong></td>
</tr>
<tr>
<td><strong>Steward Holy Family Hospital</strong></td>
</tr>
<tr>
<td><strong>Winchester Hospital</strong></td>
</tr>
<tr>
<td><strong>Central Massachusetts</strong></td>
</tr>
<tr>
<td><strong>Athol Hospital</strong></td>
</tr>
<tr>
<td><strong>Clinton Hospital</strong></td>
</tr>
<tr>
<td><strong>Harrington Memorial Hospital</strong></td>
</tr>
<tr>
<td><strong>HealthAlliance Hospital</strong></td>
</tr>
<tr>
<td><strong>Heywood Hospital</strong></td>
</tr>
<tr>
<td><strong>Saint Vincent Hospital</strong></td>
</tr>
<tr>
<td><strong>UMass Memorial Medical Center</strong></td>
</tr>
<tr>
<td><strong>Cape and Islands</strong></td>
</tr>
<tr>
<td><strong>Cape Cod Hospital</strong></td>
</tr>
<tr>
<td><strong>Falmouth Hospital</strong></td>
</tr>
<tr>
<td><strong>Martha’s Vineyard Hospital</strong></td>
</tr>
<tr>
<td><strong>Nantucket Cottage Hospital</strong></td>
</tr>
<tr>
<td><strong>Metro West</strong></td>
</tr>
<tr>
<td><strong>Marlborough Hospital</strong></td>
</tr>
<tr>
<td><strong>MetroWest Medical Center</strong></td>
</tr>
<tr>
<td><strong>Milford Regional Medical Center</strong></td>
</tr>
<tr>
<td><strong>Steward Norwood Hospital</strong></td>
</tr>
<tr>
<td><strong>Sturdy Memorial Hospital</strong></td>
</tr>
<tr>
<td><strong>Western Massachusetts</strong></td>
</tr>
<tr>
<td><strong>Baystate Franklin Medical Center</strong></td>
</tr>
<tr>
<td><strong>Baystate Mary Lane Hospital</strong></td>
</tr>
<tr>
<td><strong>Baystate Medical Center</strong></td>
</tr>
<tr>
<td><strong>Berkshire Medical Center</strong></td>
</tr>
<tr>
<td><strong>Cooley Dickinson Hospital</strong></td>
</tr>
<tr>
<td><strong>Fairview Hospital</strong></td>
</tr>
<tr>
<td><strong>Holyoke Medical Center</strong></td>
</tr>
<tr>
<td><strong>Mercy Medical Center</strong></td>
</tr>
<tr>
<td><strong>Noble Hospital</strong></td>
</tr>
<tr>
<td><strong>Wing Memorial Hospital</strong></td>
</tr>
<tr>
<td><strong>Metro South</strong></td>
</tr>
<tr>
<td><strong>Beth Israel Deaconess Hospital – Plymouth</strong></td>
</tr>
<tr>
<td><strong>Morton Hospital</strong></td>
</tr>
<tr>
<td><strong>Quincy Medical Center</strong></td>
</tr>
<tr>
<td><strong>Signature Healthcare Brockton Hospital</strong></td>
</tr>
<tr>
<td><strong>South Shore Hospital</strong></td>
</tr>
<tr>
<td><strong>Steward Good Samaritan Medical Center</strong></td>
</tr>
<tr>
<td><strong>Southcoast</strong></td>
</tr>
<tr>
<td><strong>Steward Saint Anne’s Hospital</strong></td>
</tr>
<tr>
<td><strong>Southcoast Hospitals Group</strong></td>
</tr>
</tbody>
</table>
Public Payer Designations

Certain acute hospitals in Massachusetts have a special status among public payers due to their rural or relatively isolated locations:

**Critical Access Hospital** is a state designation given to hospitals that have no more than 25 acute beds, are located in a rural area, and are more than a 35-mile drive from the nearest hospital or more than a 15-mile drive in areas with mountainous terrains or secondary roads.\(^3\) Critical Access Hospitals receive cost-based payments from Medicare and MassHealth.

**Sole Community Hospital** is a Medicare designation given to hospitals that are located in rural areas or are located in areas where it is difficult to access another hospital quickly. These hospitals are eligible to receive higher inpatient payments from Medicare than other hospitals.\(^4\)

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\(^3\) In addition, Critical Access Hospitals include hospitals that were, prior to January 1, 2006, designated by the State as a "necessary provider" of health care services to residents in the area. There are additional requirements to be designated as a Critical Access Hospital, including length of stay requirements, staffing requirements, and other provisions. See 42 CFR 485.601-647.

\(^4\) 42 CFR 412.92.
Acute Hospital Cohorts

In order to develop comparative analytics, CHIA assigned hospitals to peer cohorts. The acute hospitals were assigned to one of the following cohorts according to the criteria below:

**Academic medical centers (AMCs)** are a subset of teaching hospitals. AMCs are characterized by (1) extensive research and teaching programs and (2) extensive resources for tertiary and quaternary care, and are (3) principal teaching hospitals for their respective medical schools and (4) full service hospitals with case mix intensity greater than 5% above the statewide average.

**Teaching hospitals** are those hospitals that report at least 25 full-time equivalent medical school residents per one hundred inpatient beds in accordance with Medicare Payment Advisory Commission (MedPAC) and do not meet the criteria to be classified as AMCs.

**Community hospitals** are hospitals that are not teaching hospitals and have a public payer mix of less than 63%.

**Community-Disproportionate Share Hospitals (DSH)** are community hospitals that are disproportionately reliant on public revenues by virtue of a public payer mix of 63% or greater. Public payers include Medicare, MassHealth and other government payers, including Commonwealth Care and the Health Safety Net.

**Specialty hospitals** were not included in any cohort comparison analysis due the unique patient populations they serve and/or the unique sets of services they provide.

Below is a list of acute hospital cohorts and the hospitals assigned to each:

<table>
<thead>
<tr>
<th>Cohort Designation</th>
<th>Acute Hospital</th>
</tr>
</thead>
</table>
| AMC                | Beth Israel Deaconess Medical Center  
                    | Boston Medical Center  
                    | Brigham and Women’s Hospital  
                    | Massachusetts General Hospital  
                    | Tufts Medical Center  
                    | UMass Memorial Medical Center |
| Teaching           | Baystate Medical Center  
                    | Berkshire Medical Center  
                    | Brigham and Women’s Faulkner Hospital  
                    | Cambridge Health Alliance  
                    | Lahey Hospital & Medical Center  
                    | Mount Auburn Hospital  
                    | Saint Vincent Hospital  
                    | Steward Carney Hospital  
                    | Steward St. Elizabeth’s Medical Center |
| Community          | Anna Jaques Hospital  
                    | Baystate Mary Lane Hospital  
                    | Beth Israel Deaconess Hospital – Milton  
                    | Beth Israel Deaconess Hospital – Needham  
                    | Beth Israel Deaconess Hospital – Plymouth  
                    | Cooley Dickinson Hospital  
                    | Emerson Hospital |

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M.G.L. c. 6D, Section 1 defines a Disproportionate Share Hospital (DSH) as a hospital with a minimum of 63% of patient charges attributed to Medicare, Medicaid, and other government payers, including Commonwealth Care and the Health Safety Net.
<table>
<thead>
<tr>
<th>Acute Hospital Cohorts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hallmark Health</td>
</tr>
<tr>
<td>Lowell General Hospital</td>
</tr>
<tr>
<td>MetroWest Medical Center</td>
</tr>
<tr>
<td>Milford Regional Medical Center</td>
</tr>
<tr>
<td>Nantucket Cottage Hospital</td>
</tr>
<tr>
<td>Nantucket Cottage Hospital</td>
</tr>
<tr>
<td>Nashoba Valley Medical Center</td>
</tr>
<tr>
<td>Newton-Wellesley Hospital</td>
</tr>
<tr>
<td>Northeast Hospital</td>
</tr>
<tr>
<td>South Shore Hospital</td>
</tr>
<tr>
<td>Steward Norwood Hospital</td>
</tr>
<tr>
<td>Winchester Hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community-DSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athol Hospital</td>
</tr>
<tr>
<td>Baystate Franklin Medical Center</td>
</tr>
<tr>
<td>Cape Cod Hospital</td>
</tr>
<tr>
<td>Clinton Hospital</td>
</tr>
<tr>
<td>Fairview Hospital</td>
</tr>
<tr>
<td>Falmouth Hospital</td>
</tr>
</tbody>
</table>
| Harrington Memorial Hospital^
| HealthAlliance Hospital|
| Heywood Hospital       |
| Holyoke Medical Center |
| Lawrence General Hospital|
| Marlborough Hospital^
| Martha’s Vineyard Hospital^
| Mercy Medical Center   |
| Noble Hospital         |
| North Shore Medical Center|
| Signature Healthcare Brockton Hospital|
| Southcoast Hospitals Group|
| Steward Good Samaritan Medical Center|
| Steward Holy Family Hospital|
| Sturdy Memorial Hospital^
| Merrimack Valley Hospital|
| Morton Hospital        |
| Quincy Medical Center  |
| Steward Saint Anne’s Hospital|
| Wing Memorial Hospital |

| Specialty^
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston Children’s Hospital</td>
</tr>
<tr>
<td>Dana-Farber Cancer Institute</td>
</tr>
<tr>
<td>Kindred Hospital – Boston</td>
</tr>
<tr>
<td>Kindred Hospital – Boston North Shore</td>
</tr>
<tr>
<td>Massachusetts Eye and Ear Infirmary</td>
</tr>
<tr>
<td>New England Baptist Hospital</td>
</tr>
</tbody>
</table>

^These hospitals were in different cohorts in FY12.

^The Specialty acute hospital cohort also includes Shriners Hospital for Children- Boston and Shriners Hospital for Children- Springfield; however, these hospitals are not included in this year’s publication.
**Total staffed beds** are the average number of beds during the fiscal year that were in service and staffed for patient use.

**Inpatient occupancy rate** is the average percent of staffed inpatient beds occupied during the reporting period. Percentage of occupancy is calculated as follows: Inpatient Days divided by Weighted Average Staffed Beds times 365 (or the number of days in the reporting period).

**Case mix index (CMI)** is a relative value assigned to the hospital’s mix of inpatients to determine the overall acuity of the hospital’s patients and is compared with the CMI of peer hospitals and the statewide average CMI. CHIA calculated each hospital’s CMI by applying the 3M™ All Patient Refined (APR) grouper, version 30 with Massachusetts-specific baseline cost weights to each hospital’s HDD data. Hospitals validate their HDD data submissions annually with CHIA.

The APR grouper and Massachusetts-specific baseline cost weights used in this year’s publication represent an update from the grouper and weights used in previous reports. All case mix information included in this report has been grouped under APR grouper, version 30. This may result in comparative differences between publication years for individual hospitals.

**Inpatient Discharge** information was sourced from the 403 cost report. See the Inpatient Discharge metric for more information.

**Trauma Center designation** is determined by the Massachusetts Department of Public Health and the American College of Surgeons, with Level 1 being the highest designation given to tertiary care facilities. Facilities can be designated as Adult and/or Pediatric Trauma Centers. While there are five levels of trauma center designations recognized nationally, Massachusetts hospitals only fall under Levels 1, 2, and 3 for Adult and/or Levels 1 and 2 for Pediatric.

- **Level 1 Trauma Center** is a comprehensive regional resource that is a tertiary care facility central to the trauma system. A Level 1 Trauma Center is capable of providing total care for every aspect of injury, from prevention through rehabilitation.

- **Level 2 Trauma Center** is able to initiate definitive care for all injured patients, and provide 24-hour immediate coverage by general surgeons, as well as coverage by the specialties of orthopedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology and critical care.

- **Level 3 Trauma Center** has demonstrated an ability to provide prompt assessment, resuscitation, surgery, intensive care and stabilization of injured patients and emergency operations, including the ability to provide 24-hour immediate coverage by emergency medicine physicians and prompt availability of general surgeons and anesthesiologists.

**Emergency Department Visits** include any visit by a patient to an emergency department that results in registration at the Emergency Department but does not result in an outpatient observation stay nor the inpatient admission of the patient at the reporting facility. An Emergency Department visit occurs even if the only service provided to a registered patient is triage or screening.

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7 American Trauma Society, Trauma Center Levels Explained. Available at: http://www.amtrauma.org/?page=TraumaLevels (accessed on January 9, 2015).
Public payer mix is determined based upon the hospital’s reported Gross Patient Service Revenue (GPSR). See Payer Mix metric description in this Appendix for more information.

Special public funding indicates whether the hospital received Delivery System Transformation Initiative (DSTI), Infrastructure and Capacity Building (ICB) or Community Hospitals Acceleration, Revitalization and Transformation (CHART) grants. Special public funding is grant money given to hospitals by the state or federal government. The amounts listed may be total grant allocations that will be disbursed over a period of time, or a portion of a grant that was disbursed in FY13. For more information please see the Special Public Funding notes contained in Exhibit C of this Appendix.

Commercial payer price level represents the hospital’s calendar year 2013 commercial composite relative price percentile. This percentile was derived by taking the simple average of the hospital’s blended (inpatient and outpatient) relative price percentiles across all payers. The composite percentile gives a sense of the rank of a provider’s relative price compared to other hospitals across all commercial payers. For more information on relative prices, see the Relative Price metric description in this Appendix.

Inpatient cost per (Case Mix) Adjusted Discharge measures the hospital’s adjusted inpatient costs divided by the product of the number of the hospital’s discharges and its case mix index. Hospital costs were adjusted to remove direct medical education and physician compensation from the calculation. This measure compares the hospital’s inpatient cost growth on a patient volume and severity adjusted basis. See Exhibit E of this Appendix for more information about this calculation.

Inpatient – outpatient revenue is derived from the amount of GPSR reported for inpatient and outpatient services in the hospital’s 403 Cost Report.

Change in ownership notes change in ownership during the period of the analysis. In some cases, changes in ownership may have occurred subsequent to FY13.
Acute Hospital Profiles: Services

Most common inpatient diagnosis related groups (DRGs) and the percentage of those DRGs treated at that hospital for the region.

- **Data Source:** FY13 HDD data and the 3M™ APR-DRG 30 All Patient Refined Grouper
- **Hospital Calculation:** Each discharge was grouped and ranked by DRG code. The subject hospital’s 10 most frequently occurring DRGs were identified and those DRGs were then summed for all hospitals in the region in order to calculate the percent of regional discharges that were treated at the subject hospital. The total number of the subject hospital’s discharges was compared to the sum of all hospital discharges in the region to determine the overall proportion of regional discharges.

For more information on DRGs, please see Exhibit B of this Appendix.

**Most common communities** from where the hospital’s inpatient discharges originated, and the total percent of all discharges (from Massachusetts hospitals) from that community that went to that hospital.

- **Data Source:** FY13 HDD data for discharge information; patient origin was determined by the zip codes from where the patients resided. In larger cities, the top communities may reflect postal code neighborhoods.
- **Hospital Calculation:** The zip code for each patient discharge was matched with the USPS community name, and then grouped and ranked. The most frequently occurring communities were then summed for all hospitals in the region to calculate the percent of community discharges that went to the subject hospital.

A hospital’s top communities by inpatient origin were determined using a hospital’s FY13 discharge data from the HDD. Patient origin was determined by the reported zip code for each patient’s residence. In larger cities, communities may include multiple zip codes. These zip codes were rolled up to reflect postal code neighborhoods based on the United States Postal Service Database. For more information on the zip codes included within each region, please see the Databook.

For example, Boston zip codes were rolled up to the following designations: Boston (Downtown) includes: Back Bay, Beacon Hill, Downtown Boston, the Financial District, East Boston, Fenway/Kenmore, South Boston and South End. The remaining Boston communities with multiple zip codes were rolled up to these designations: Allston, Brighton, Charlestown, Dorchester, Dorchester Center, Hyde Park, Jamaica Plain, Mattapan, Mission Hill, Roslindale, Roxbury, and West Roxbury.

Acute Hospital Profiles: Growth Measures

**Inpatient Net Revenue per CMAD** growth rate for each hospital was calculated by dividing the hospital’s Net Patient Service Revenue (NPSR) by the total CMADs for FY12 and FY13 and determining the percent change. NPSR includes both net inpatient revenue and inpatient premium revenue. The peer cohort growth rate denotes the growth in median revenue per CMAD from FY12 to FY13 for all cohort hospitals.
**Inpatient Discharges** growth rate for each hospital measures the percent change in discharges for inpatient admissions between FY12 and FY13. The peer cohort growth rate represents the median of the percent change across all hospitals in the cohort between FY12 and FY13.

**Outpatient Revenue** growth rate for each hospital represents the percent change in a hospital's reported net revenue for outpatient services between FY12 and FY13. Net outpatient service revenue includes both net outpatient revenue and outpatient premium revenue. Note that this measure examines the growth in total outpatient revenue and is not adjusted for patient volume, severity or service mix.

**Outpatient Visits** growth rate for each hospital measures the percent change in total outpatient visits to a hospital between FY12 and FY13. Note that outpatient visits may not be uniformly reported across hospitals. The peer cohort growth rate represents the median of the percent change across all hospitals in the cohort between FY12 and FY13.

**Acute Hospital Profiles: Payer Mix**

**Payer Mix** measures the distribution of total GPSR for the hospital's most recent fiscal year across the major payer categories. This provides information regarding the proportion of services, as measured by gross charges, which a hospital provides to patients from each category of payer.

- **Data Source:** 403 Cost Report: Schedule 5a, Row 44, Columns 3 through 14
- **Hospital Calculation:** State Programs = Medicaid Managed + Medicaid Non-Managed + Commonwealth Care + Health Safety Net (HSN); Federal Programs = Medicare Managed + Medicare Non-Managed + Other Government; Commercial & Other = Managed Care + Non-Managed Care + Self Pay + Workers Comp + Other.

Each of the above was divided by Total GPSR to get the percentage for each payer category.

- **Average Hospital calculation:** Represents the mean of each hospital’s percentage in each of the payer categories to arrive at a payer mix distribution for the average hospital.
  - For example, the Average Hospital’s State Programs component = Mean of the proportion of each peer cohort hospital’s State Programs funding. Note: “Average Hospital” group excludes specialty hospitals.
  - DSH status applies when a hospital has a minimum of 63% of GPSR, measured by gross patient charges, attributed to Medicare, Medicaid, and other government payers, including Commonwealth Care and the Health Safety Net. This is a Massachusetts-specific designation. It should be noted that the Centers for Medicare and Medicaid Services (CMS) determines a hospital's DSH status according to different criteria.

**Relative price** is a calculated measure that compares different provider prices within a payer’s network for a standard mix of insurance products (e.g. HMO, PPO, and Indemnity) to the average of all providers’ prices in that network. The relative price method standardizes the calculation of provider prices and accounts for the effect of differences in the services providers deliver to patients, and the different product types that payers offer to their members.
• **Data Source:** Payer Data Reports submitted pursuant to 957 CMR 2.00

• Calendar Year (CY) 2013 Payer Specific Relative Price Levels: Shows the subject hospital’s blended (inpatient and outpatient) relative price levels, expressed as a percentile, compared to the average blended relative price percentiles of the hospitals in its peer cohort for the subject hospital’s three largest commercial payers. Note that relative price levels are specific to each payer’s network and cannot be compared directly across payer networks.

**Acute Hospital Profiles: Utilization Trends**

**Change in volume of inpatient discharges** measures discharges for inpatient admissions.

• **Data Source:** 403 Cost Report: Schedule 3, Row 22, Column 12

• **Hospital index calculation:** Displays the percent change in the number of inpatient discharges for each year, using FY09 as the base year. FY10: (FY10 - FY09)/FY09, FY11: (FY11-FY09)/FY09, FY12: (FY12-FY09)/FY09, FY13: (FY13-FY09)/FY09.

• **Cohort calculation:** Represents the median of the percent change across all hospitals in the cohort for each year. For example: Cohort for FY09 = median of (% change for hospital A, % change for hospital B, % change for hospital C...)

**Change in volume of outpatient visits** measures total outpatient visits to a hospital. Note that outpatient visits may not be uniformly reported across hospitals.

• **Data Source:** 403 Cost Report: Schedule 5a, Row 39, Column 2

• **Hospital index calculation:** Calculate the percent change between each year, using FY09 as the base year. FY10: (FY10-FY09)/FY09, FY11: (FY11-FY09)/FY09, FY12: (FY12-FY09)/FY09, FY13: (FY13-FY09)/FY09.

• **Cohort calculation:** Represents the median of the percent change across all hospitals in the cohort for each year. For example: Cohort for FY09 = median of (% change for hospital A, % change for hospital B, % change for hospital C...)

**Acute Hospital Profiles: Patient Revenue Trends**

**Net inpatient service revenue per case mix adjusted discharge (CMAD)** measures the hospital’s net inpatient service revenue (NPSR) divided by the product of the number of the hospital’s discharges and its case mix index. NPSR includes both net inpatient revenue and inpatient premium revenue.

• **Data Source:** NPSR and discharges were sourced from the 403 Cost Report; Case Mix Index (CMI) is sourced from HDD.

• **Hospital calculation:** The hospital’s inpatient net revenue per CMAD was calculated by dividing NPSR by the total CMAD for each year.
• **Cohort calculation:** The range of all revenue/CMAD values for cohort hospitals are represented by the vertical black line. The cohort value denotes the median revenue per CMAD for all cohort hospitals.

**Variation in inpatient discharge counts:**

Hospitals may report different numbers of discharges on the 403 Cost Report and the HDD. Hospitals have explained that this is due to:

- **Timing** – while HDD is accurate when submitted (75 days after the close of a quarter), a case may be reclassified as outpatient, usually due to a change in payer designation. Payers may have different clinical criteria for defining an inpatient and outpatient stay.
- **HDD edits** – discharges reported by the hospital that did not pass HDD edits may have been excluded from the HDD but included in the 403;
- **Payer classification/status differences between the 403 and HDD;**

Since a hospital’s case mix index is calculated using the HDD, which often includes a lower number of discharges than reported by the hospital on the 403 Cost Report, the calculation of a hospital’s total case mix adjusted discharges equals the number of discharges reported on the 403 Cost Report, multiplied by the case mix index.

**Change in total outpatient revenue** measures a hospital’s reported net revenue for outpatient services. Net outpatient service revenue includes both net outpatient revenue and outpatient premium revenue. Note that this measure examines the growth in total outpatient revenue and is not adjusted for patient volume, severity or service mix.

- **Data Source:** 403 Cost Report: Schedule 5a, Rows 78.01 (net outpatient revenue) + 78.02 (outpatient premium revenue), Column 2

- **Hospital index calculation:** Displays the percent change between each year, using FY09 as the base year. FY10: (FY10-FY09)/FY09, FY11: (FY11-FY09)/FY09, FY12: (FY12-FY09)/FY09, FY13: (FY13-FY09)/FY09.

- **Cohort calculation:** Represents the median of the percent change across all hospitals in the cohort for each year. For example: Cohort for FY10 = median of (% change for hospital A, % change for hospital B, % change for hospital C...)

**Acute Hospital Profiles: Financial Performance**

**Total Revenue, Total Costs and Profit / Loss** measure the amount of the subject hospital’s Total Revenue, Total Costs, and Total Profit or Loss for each year from 2009 through 2013.

- **Data Sources:** Financial Statements: The line numbers for each data point are as follows: Total Unrestricted Revenue (row 65), Operating Revenue (row 57.2), Non-Operating Revenue (row 64.1), Total Expenses (row 73), and Profit / Loss (row 74).
**Total Margin** measures the subject hospital’s overall financial performance compared to the median total margin of the hospitals in its peer cohort.

- **Data Source:** Financial Statements: Excess of Revenue, Gains, & Other Support (row 74) divided by Total Unrestricted Revenue (row 65)
- **Cohort Calculation:** Calculated median for the cohort group.

**Operating Margin** measures the subject hospital’s financial performance of its primary, patient care activities compared to the median operating margin of the hospitals in its peer cohort.

- **Data Source:** Financial Statements: Operating Revenue (row 57.2) minus Total Expenses (row 73) divided by Total Unrestricted Revenue (row 65)
- **Cohort Calculation:** Calculated median for the cohort group.
As a new component, acute hospitals included in *Massachusetts Hospital Profiles- Data through Fiscal Year 2013* were profiled on select quality metrics. Details for each of these metrics are included in this Appendix.

To compile the profiles, CHIA relied on the following primary data sources:  the Hospital Discharge Database (HDD), the CMS Hospital Compare database, and The Leapfrog Group.

Metrics included in this section are based on varied data periods due to differences in reporting time frames between the data sources. For each metric on the Acute Hospital Quality Profiles, the associated reporting time period is listed.

**Acute Hospital Quality Profiles: Patient Safety**

**PSI 90** is a patient safety composite of 11 measures that indicate the frequency of procedural and post-surgical complications at a hospital. PSI 90 includes the following measures:

- PSI #3: Pressure Ulcer Rate
- PSI #6: Iatrogenic Pneumothorax Rate
- PSI #7: Central Venous Catheter-Related Blood Stream Infection Rate
- PSI #8: Postoperative Hip Fracture Rate
- PSI #9: Perioperative Hemorrhage or Hematoma Rate
- PSI #10: Postoperative Physiologic and Metabolic Derangement Rate
- PSI #11: Postoperative Respiratory Failure Rate
- PSI #12: Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate
- PSI #13: Postoperative Sepsis Rate
- PSI #14: Postoperative Wound Dehiscence Rate
- PSI #15: Accidental Puncture or Laceration Rate

The composite measure is risk-adjusted, and calculated such that the national average for each year is always 1.0. Lower scores are better.

- **Data Source:** Hospital Discharge Database (HDD)
- **Data Period:** FY2011, FY12, FY13
- **Hospital Calculation:** Reflects the rate of complications or adverse events at the hospital relative to the national average of 1.0.
- **Cohort Calculation:** Calculated median for the cohort group.
Acute Hospital Quality Profiles: Metric Descriptions

- **National Comparative**: Provided by the Agency for Healthcare Research and Quality (AHRQ).
- **Patient Population**: All Payers, Ages 18+.

**Acute Hospital Quality Profiles: Patient Experience**

*Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)* is a survey that measures patient perspectives on various aspects of their care. Results are adjusted for patient mix and survey mode (the format in which patients completed the survey) and compared to the national average. Higher scores are better.

- **Data Source**: Centers for Medicare & Medicaid Services (CMS) Hospital Compare
- **Data Period**: 2012-2013
- **Hospital Calculation**: All data were retrieved from CMS Hospital Compare as pre-calculated percentages. Where a hospital’s performance is not included on Hospital Compare because of small numbers or missing data, the measure is also not included in the report.

Displays the following categories of survey measures, and the percentage of patients who responded “always” for the following measures of patient experience:

**Communication Measures**:
- Patients who reported that their doctors “always” communicated well.
- Patients who reported that their nurses “always” communicated well.

**Care Coordination Measures**:
- Patients who reported that YES, they were given information about what to do during their recovery at home.
- Patients who reported that staff “always” explained about medicines before giving it to them.

**Comfort Measures**:
- Patients who reported that their room and bathroom were “always” clean.
- Patients who reported that the area around their room was “always” quiet at night.
- Patients who reported that they “always” received help as soon as they wanted.
- Patients who reported that their pain was “always” well controlled.

**Overall Satisfaction Measures**:
Patients who gave their hospital a rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest).

Patients who reported YES, they would definitely recommend the hospital.

- **Cohort Calculation**: No cohort comparative is displayed for this measure.
- **National Comparative**: Displays the national average, calculated by CMS.
- **Patient Population**: All Payers, Ages 18+.

**Acute Hospital Quality Profiles: Care Practices**

**Computerized Physician Order Entry (CPOE)** assesses the proportion of total medication orders that were entered via an electronic system. Electronic Health Records (EHRs) include the ability to enter medication orders directly into the system. This is believed to reduce transcription errors from handwritten notes. Furthermore, some EHRs include medical error checking to notify the doctor if the ordered medication is inappropriate for a patient’s current status, or if there are known interactions with the medications the patient is already taking.

- **Data Source**: The Leapfrog Group Hospital Survey
- **Data Period**: 2012-2013
- **Hospital Calculation**: All data were received from The Leapfrog Group as pre-calculated percentages. Participation in the Leapfrog survey is voluntary; where a hospital does not complete the survey or report on certain items in the survey, the measure is also not included in the report.
- **Cohort Calculation**: No cohort comparative is displayed for this measure.
- **Patient Population**: All Payers, All Ages.

**Acute Hospital Quality Profiles: Readmissions**

Hospital-Wide All-Cause Unplanned Readmission Measure (Medicare Fee-For-Service Only) is designed to follow patients for 30 days from discharge and determine if they are admitted to a hospital during this period. In some cases, a readmission may be part of the care plan, and the measure excludes these. Only Medicare Fee-For-Service (FFS) patients are followed and included in this measure. The measure is standardized for risk based on the clinical comorbidities of each patient, and compared to the national average. Lower numbers of readmissions are better.

- **Data Source**: CMS Hospital Compare
- **Data Period**: 2011-2012
Acute Hospital Quality Profiles: Metric Descriptions

- **Hospital Calculation**: Reflects the number of Medicare FFS patients readmitted to any hospital within 30 days for any unplanned reason, as calculated by CMS Hospital Compare.

- **Cohort Calculation**: Calculated median for the cohort group.

- **National Comparative**: Displays the national average, calculated by CMS.

- **Patient Population**: Medicare FFS only, Ages 65+.

### Acute Hospital Quality Profiles: Obstetric Care

**Early Elective Deliveries** measures what proportion of non-clinically complicated deliveries were completed prior to 39 weeks without medical necessity. Forty-one acute hospitals reported data for this indicator. All data were received from The Leapfrog Group as pre-calculated percentages. Participation in the Leapfrog survey is voluntary; where a hospital does not complete the survey or report on certain items in the survey, the measure is also not included in the report.

- **Data Source**: The Leapfrog Group Hospital Survey.

- **Data Period**: 2012-2013

- **Hospital Calculation**: Displays the percentage of newborn deliveries at the hospital that were considered clinically unnecessary inductions that occurred before the 39th week of gestation.

- **Cohort Calculation**: Calculated median of the cohort group.

- **National Comparative**: National average calculated by The Leapfrog Group.

- **Patient Population**: All Payers, All Ages.

### Acute Hospital Quality Profiles: Obstetric Care Complications

**Injury to Neonates** displays the hospital and cohort scores related to PSI #17 Birth Rate Trauma: Injury to Neonates

- **Data Source**: Hospital Discharge Database (HDD).

- **Data Period**: FY13

- **Hospital Calculation**: Displays the rate per 1,000 deliveries of this adverse event that occurred at the hospital.

- **Cohort Calculation**: Calculated median of the cohort group.

- **Patient Population**: All Payers, Ages 18+
Obstetric Trauma: With Instrument displays the hospital and cohort scores related to PSI #18 Obstetric Trauma: Vaginal Delivery with Instrument

- **Data Source**: Hospital Discharge Database (HDD).
- **Data Period**: FY13
- **Hospital Calculation**: Displays the rate per 1,000 deliveries of this adverse event, defined as a 2nd or 3rd degree laceration, which occurred at the hospital.
- **Cohort Calculation**: Calculated median of the cohort group.
- **Patient Population**: All Payers, Ages 18+

Obstetric Trauma: Without Instrument displays the hospital and cohort scores related to PSI #19 Obstetric Trauma: Vaginal Delivery without Instrument

- **Data Source**: Hospital Discharge Database (HDD).
- **Data Period**: FY13
- **Hospital Calculation**: Displays the rate per 1,000 deliveries of this adverse event, defined as a 2nd or 3rd degree laceration, which occurred at the hospital.
- **Cohort Calculation**: Calculated median of the cohort group.
- **Patient Population**: All Payers, Ages 18+
The acute hospital cohort profiles measure the acute hospital cohorts as composites of the individual hospitals assigned to each cohort. In general, metrics were determined by aggregating the values of all hospitals assigned to the cohort. For comparison purposes, the individual cohorts are compared to hospitals assigned to all other cohorts, which excludes specialty hospitals. The analytic metrics are largely the same as the metrics used for the individual hospital profiles. Please see the descriptions and calculation methods described in the Acute Hospital Metric Description section for more information.

In cases where metrics were similar to the acute hospital profile metrics, data was aggregated to determine cohort measures. For example:

The most common inpatient DRGs for each subject cohort were determined by categorizing all of the hospitals’ discharges by cohort using the All Patient Refined Grouper (3M™ APR-DRG 30), which were then summed and ranked. Each of the subject cohort’s ten most frequently occurring DRGs were then divided by the statewide count per DRG to obtain the percent of discharges to the statewide total.

The cohort comparison metric for payer mix is different from comparisons among acute hospitals:

Payer mix was calculated differently from other measures due to the fact that the underlying charges that comprise GPSR differ across hospitals. For this measure, the cohort payer mix was first calculated for each hospital assigned to the cohort in the manner described in the Acute Hospital Profiles section of this Appendix. The mean of the individual cohort hospital’s experience was determined and is displayed here. The same method was used to determine the trend in outpatient visits for comparison to all other cohort hospitals.

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8 Note that specialty hospitals are not assigned to any cohort due to their unique service mix and/or populations served.
Non-Acute Hospitals

Non-acute hospitals in Massachusetts are typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

**Non-Acute Hospital Location and Multi-Hospital System Affiliations**

The location for each non-acute hospital in this report was obtained, where possible, from hospital licensing information collected by DPH. The hospital license includes information on a hospital’s campuses and satellite offices.

Multi-hospital system membership identifies the health system with which the subject acute hospital is a member. This information was derived from the hospital’s Audited Financial Statements.

Below is a list of Massachusetts multi-hospital systems and their non-acute hospital members:

<table>
<thead>
<tr>
<th>Multi-Hospital System</th>
<th>Non-Acute Hospital Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arbour Health System</td>
<td>Arbour Hospital</td>
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<tr>
<td></td>
<td>Arbour-Fuller Memorial</td>
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<tr>
<td></td>
<td>Arbour-HRI Hospital</td>
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<tr>
<td></td>
<td>Westwood Pembroke Hospital</td>
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<tr>
<td>HealthSouth</td>
<td>HealthSouth Rehabilitation of Western Massachusetts</td>
</tr>
<tr>
<td>Kindred Health Care</td>
<td>Kindred Hospital Northeast</td>
</tr>
<tr>
<td>Partners HealthCare System</td>
<td>McLean Hospital</td>
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<tr>
<td></td>
<td>Spaulding Rehabilitation Hospital of Cape Cod</td>
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<tr>
<td></td>
<td>Spaulding North Shore</td>
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<tr>
<td></td>
<td>Spaulding Rehabilitation Hospital</td>
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<tr>
<td></td>
<td>Spaulding Hospital Cambridge</td>
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<tr>
<td>Steward Health Care System</td>
<td>New England Sinai Hospital</td>
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<tr>
<td>Whittier Health System</td>
<td>Whittier Pavilion</td>
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<tr>
<td></td>
<td>Whittier Rehabilitation Hospital Bradford</td>
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<tr>
<td></td>
<td>Whittier Rehabilitation Hospital Westborough</td>
</tr>
</tbody>
</table>

**Non-Acute Hospital Cohorts**

Non-acute hospitals were assigned to peer cohorts based upon MassHealth regulatory designations, defined by the criteria below:\(^9\):

- **Psychiatric hospitals** are licensed by the DMH for psychiatric services, and by DPH for substance abuse services.

- **Rehabilitation hospitals** provide intensive post-acute rehabilitation services, such as physical, occupational, and speech therapy services. For Medicare payment purposes, the federal government classifies hospitals as rehabilitation hospitals if they provide more than 60% of their inpatient services to patients with one or more of 13 diagnoses listed in federal regulations.\(^10\)

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\(^9\) State-owned non-acute hospitals are not included in this publication.

\(^10\) 42 CFR 412.29(b)(2)
**Chronic care hospitals** are hospitals with an average length of stay greater than 25 days. These hospitals typically provide longer-term care, such as ventilator-dependent care. Medicare classifies chronic hospitals as Long-Term Care Hospitals, using the same 25-day threshold.

Non-acute specialty hospitals were not included in any cohort comparison analysis due the unique patient populations they serve and/or the unique sets of services they provide. Non-acute hospitals that were considered specialty hospitals include:

- AdCare Hospital of Worcester - provides substance abuse services
- Franciscan Hospital for Children - provides specialized children’s services
- Hebrew Rehabilitation Hospital - specializes in providing longer term care than other chronic hospitals.

Below is a list of non-acute hospital cohorts and the hospitals assigned to each:

<table>
<thead>
<tr>
<th>Cohort Designation</th>
<th>Non-Acute Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Psychiatric Hospitals</strong></td>
<td>Arbour Hospital</td>
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<tr>
<td></td>
<td>Arbour-Fuller Memorial</td>
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<tr>
<td></td>
<td>Arbour-HRI Hospital</td>
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<tr>
<td></td>
<td>Baldpate Hospital</td>
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<tr>
<td></td>
<td>Bournewood Hospital</td>
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<td></td>
<td>McLean Hospital</td>
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<tr>
<td></td>
<td>Walden Behavioral Care</td>
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<td></td>
<td>Westwood Pembroke Hospital</td>
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<tr>
<td></td>
<td>Whittier Pavilion</td>
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<tr>
<td><strong>Rehabilitation Hospitals</strong></td>
<td>Braintree Rehabilitation Hospital</td>
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<tr>
<td></td>
<td>HealthSouth Fairlawn Rehabilitation Hospital</td>
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<tr>
<td></td>
<td>HealthSouth Rehabilitation Hospital of Western Massachusetts</td>
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<td></td>
<td>New Bedford Rehabilitation Hospital</td>
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<td></td>
<td>New England Rehabilitation Hospital</td>
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<td></td>
<td>Spaulding Rehabilitation Hospital of Cape Cod</td>
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<td></td>
<td>Spaulding Rehabilitation Hospital</td>
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<tr>
<td></td>
<td>Whittier Rehabilitation Hospital Bradford</td>
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<tr>
<td></td>
<td>Whittier Rehabilitation Hospital Westborough</td>
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<tr>
<td><strong>Chronic Care Hospitals</strong></td>
<td>Kindred Hospital Northeast</td>
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<tr>
<td></td>
<td>New England Sinai Hospital</td>
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<tr>
<td></td>
<td>Radius Specialty Hospital</td>
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<tr>
<td></td>
<td>Spaulding Hospital Cambridge</td>
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<tr>
<td></td>
<td>Spaulding North Shore</td>
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<tr>
<td></td>
<td>Vibra Hospital of Western Mass</td>
</tr>
<tr>
<td><strong>Specialty Non-Acute Hospitals</strong></td>
<td>AdCare Hospital of Worcester</td>
</tr>
<tr>
<td></td>
<td>Franciscan Hospital for Children</td>
</tr>
<tr>
<td></td>
<td>Hebrew Rehabilitation Hospital</td>
</tr>
</tbody>
</table>
Non-Acute Hospital Profiles: At a Glance

**Total staffed beds** are the average number of beds during the fiscal year that were in service and staffed for patient use. Beds ordinarily occupied for less than 24 hours are usually not included.

**Percent occupancy rate** is the average percent of staffed inpatient beds occupied during the reporting period. Percentage of occupancy is calculated as follows: Inpatient Days divided by Weighted Average Staffed Beds times 365 (or the number of days in the reporting period).

**Inpatient Discharge** information was sourced from Schedule 3 of the 403 cost report.

**Public payer mix** was determined based upon the hospital's reported GPSR. See Payer Mix metric description for more information.

**Total revenue** was sourced from the hospital’s 403 Cost Report.

**Inpatient – outpatient revenue** is derived from the amount of GPSR reported for inpatient and outpatient services in the hospital’s 403 Cost Report.

**Adjusted Cost per Day** measures the hospital’s adjusted inpatient costs divided by the hospital’s total patient days. Hospital costs were adjusted to remove direct medical education and physician compensation from the calculation. See Exhibit F for an example of the Inpatient Cost per Day calculation.

**Change in ownership** notes change in ownership during the period of the analysis. In some cases, changes in ownership may have occurred subsequent to FY13.
Non-Acute Hospital Profiles: Payer Mix

**Payer Mix** measures the distribution of total GPSR for FY13 across the major payer categories. This provides information regarding the proportion of services, as measured by gross charges, which a hospital provides to patients from each category of payer.

- **Data Source:** 403 Cost Report: Schedule 5a, Row 44, Columns 3 through 14

- **Hospital Calculation:** State Programs = Medicaid Managed + Medicaid Non-Managed + Commonwealth Care + Health Safety Net (HSN); Federal Programs = Medicare Managed + Medicare Non-Managed + Other Government; Commercial & Other = Managed Care + Non-Managed Care + Self Pay + Workers Comp + Other. Dividing each of the above by Total GPSR results in the percentages displayed for each of the three categories.

- **Average Hospital calculation:** Displays the mean of the percentages in each of the payer categories to get each of the component percentages for the average hospital.
  - For example, the Average Hospital’s state programs component = Mean of the proportion of each peer cohort hospital’s State Programs funding. Note: “Average Hospital” group excludes specialty hospitals.

Non-Acute Hospital Profiles: Services

**Types of inpatient services** are defined by Discharges.

- **Data Sources:** FY13 403 Cost Report; Schedule 3, Column 12, Rows 1 through 21.

- **Hospital calculation:** Hospital’s absolute count by weighted average bed type.

- **Cohort calculation:** Hospital’s absolute bed type count divided by cohort’s total discharges by that specific bed type.

**Average Length of Stay (ALOS)** measures the average duration of an inpatient admission.

- **Data Sources:** 403 Cost Report, Schedule 3, Column 13, Row 22

- **Hospital calculation:** Calculated percent change in the ALOS for each year, using FY09 as the base year. FY10: (FY10-FY09)/FY09, FY11: (FY11-FY09)/FY09, FY12: (FY12-FY09)/FY09, FY13: (FY13-FY09)/FY09.

- **Cohort calculation:** Represents the median of the percent change across all hospitals in the cohort for each year. For example: Cohort for FY09 = median of (% change for hospital A, % change for hospital B, % change for hospital C...)

Non-Acute Hospital Profiles: Utilization

**Change in Volume of Inpatient Days** includes all days of care for all patients admitted to each unit. Measure includes the day of admission but not the day of discharge or death. If both admission and
discharge or death occur on the same day, the day is considered a day of admission and is counted as one patient day.

- **Data Sources**: 403 Cost Report, Schedule 3, Column 6, Row 22

- **Hospital Index calculation**: Calculated percent change in Inpatient Days for each year, using FY09 as the base year. FY10: \((\text{FY10} - \text{FY09})/\text{FY09}\), FY11: \((\text{FY11} - \text{FY09})/\text{FY09}\), FY12: \((\text{FY12} - \text{FY09})/\text{FY09}\), FY13: \((\text{FY13} - \text{FY09})/\text{FY09}\).

- **Cohort calculation**: Represents the median of the percent change across all hospitals in the cohort for each year. For example Cohort for FY09 = median of \((\% \text{ change for hospital A}, \% \text{ change for hospital B}, \% \text{ change for hospital C})\)

**Change in Volume of Outpatient Visits** measures the total outpatient visits to a hospital.

- **Data Source**: 403 Cost Report; Schedule 5a, Column 2, Row 39

- **Hospital Index calculation**: Displays the percent change in the Outpatient Visits for each year, using FY09 as the base year. FY10: \((\text{FY10} - \text{FY09})/\text{FY09}\), FY11: \((\text{FY11} - \text{FY09})/\text{FY09}\), FY12: \((\text{FY12} - \text{FY09})/\text{FY09}\), FY13: \((\text{FY13} - \text{FY09})/\text{FY09}\).

- **Cohort calculation**: Represents the median of the percent change across all hospitals in the cohort for each year. For example Cohort for FY09 = median of \((\% \text{ change for hospital A}, \% \text{ change for hospital B}, \% \text{ change for hospital C})\)

**Non-Acute Hospital Profiles: Patient Revenue Trends**

**Inpatient Revenue per Day** is the hospital’s net inpatient service revenue (NPSR) divided by its total inpatient days.

- **Data Source**: NPSR was sourced from schedule 5a, column 2, rows 65.01 (net inpatient revenue) and 65.02 (inpatient premium revenue) of the 403 Cost Report. Inpatient days were sourced from Schedule 3, column 6, row 22 of the 403 cost report.

- **Hospital Index calculation**: Displays the percent change in the Inpatient Net Patient Service Revenue per Day for each year, using FY09 as the base year. FY10: \((\text{FY10} - \text{FY09})/\text{FY09}\), FY11: \((\text{FY11} - \text{FY09})/\text{FY09}\), FY12: \((\text{FY12} - \text{FY09})/\text{FY09}\), FY13: \((\text{FY13} - \text{FY09})/\text{FY09}\).

- **Cohort calculation**: Represents the median of the percent change across all hospitals in the cohort for each year. For example Cohort for FY09 = median of \((\% \text{ change for hospital A}, \% \text{ change for hospital B}, \% \text{ change for hospital C})\)

**Change in Total Outpatient Revenue** measures a hospital’s reported net revenue for outpatient services. Note that this measure examines the growth in total outpatient revenue and is not adjusted for patient volume. In addition, several non-acute hospitals do not provide outpatient services.
Non-Acute Hospital Profiles: Metric Descriptions

- **Data Source**: 403 Cost Report; Schedule 5a, Column 2, Rows 78.01 (net outpatient revenue) and 78.02 (outpatient premium revenue)

- **Hospital Index calculation**: Displays the percent change in the Outpatient Revenue for each year, using FY09 as the base year. FY10: \((\text{FY10- FY09)/FY09}\), FY11: \((\text{FY11- FY09)/FY09}\), FY12: \((\text{FY12- FY09)/FY09}\), FY13: \((\text{FY13- FY09)/FY09}\).

- **Cohort calculation**: Represents the median of the percent change across all hospitals in the cohort for each year. For example, Cohort for FY09 = median of (% change for hospital A, % change for hospital B, % change for hospital C...)

Non-Acute Hospital Profiles: Financial Performance

**Total Revenue, Total Costs and Profit / Loss** measure the amount of the subject hospital’s Total Revenue, Operating Revenue, Non-Operating Revenue, Total Costs, and Total Profit or Loss for each year from 2009 through 2013.

- **Data Sources**: 403 Cost Report, Schedule 23. The line numbers for each data point are as follows: Total Unrestricted Revenue (row 65), Operating Revenue (row 55 + row 56 + row 57 + row 60 + row 64), Non-Operating Revenue (row 58 + row 59), Total Expenses (row 73), and Profit / Loss: (row 74).

**Total Margin** measures the subject hospital’s overall financial performance compared to the median total margin of the hospitals in its peer cohort.

- **Data Source**: 403 Cost Report; Schedule 23, Column 2, Row 173

- **Cohort Calculation**: Calculated median for the cohort group.

**Operating Margin** measures the subject hospital’s financial performance of its primary, patient care activities compared to the median operating margin of the hospitals in its peer cohort.

- **Data Source**: 403 Cost Report: Schedule 23, Column 2, Row 174

- **Cohort Calculation**: Calculated median for the cohort group.

**Note**: Some for-profit hospitals are organized as S corporations. For-profit entities that are organized as S corporations, in accordance with Internal Revenue Code, do not pay federal income tax on their taxable income. Instead, the shareholders are liable for individual federal income taxes on their portion of the hospital’s taxable income. Therefore, these hospitals may have income that appears higher than hospitals organized as a C corporation, which are taxed separately from their owners.
The Health System Profiles chapter consists of two sections: (1) a comparative graphic showing the nine multi-acute hospital systems in Massachusetts drawn to scale based on operating revenue, and (2) individual pages for each system detailing the organizations that comprise the system.

The **Comparative Overview** is a proportional representation of the size of each system using operating revenue from the smallest system (Heywood Healthcare) as the base.

- For example: in FY13, Berkshire Health Systems had approximately $429 million in operating revenue, which is 3.3 times greater than Heywood Healthcare’s approximately $129 million in operating revenue. Accordingly, Berkshire Health Systems’ circle is presented with an area 3.3 times larger than Heywood Healthcare’s circle.

The individual system profiles define organizations within the system by the following categories:

- **Acute Hospitals**: a hospital that is licensed by the Massachusetts Department of Public Health, which contains a majority of medical-surgical, pediatric, obstetric, and maternity beds.

- **Non-Acute Hospitals**: typically identified as psychiatric, rehabilitation, and chronic care facilities. CHIA has defined non-acute hospitals in this publication using the Massachusetts Department of Public Health (DPH) and Department of Mental Health (DMH) license criteria.

- **Physician Organizations**: A medical practice comprised of two or more physicians organized to provide patient care services.

- **Health Plans**: An organization that contracts or offers to provide, deliver, arrange for, pay for, or reimburse any of the costs of health care services.

- **Other Health Care Providers**: any organization within a system that is engaged in providing health care services and is not categorized as an acute hospital, a non-acute hospital, a physician organization, or a health plan.

- **Other Organizations**: all organizations that are not an acute hospital, a non-acute hospital, a physician organization, a health plan, or other health care provider. Revenue and net asset values were derived by adding up values for any organization in the financial statements not already categorized in the profile as a health care-related organization.

Some system financial statements reported to CHIA included the names and descriptions of organizations but did not include financial information for them. These organizations are presented in the profiles in text format, rather than displayed within a circle like the other organizations.

Unless otherwise noted, metrics included in these profiles are based on financial data from FY13 reported by the systems. Descriptive information is from FY13.

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11 Kindred Healthcare, Inc. and Tenet Healthcare Corporation are publicly traded multistate health systems. Each owns two acute hospitals in Massachusetts (Kindred owns Kindred Hospital – Boston and Kindred Hospital – Boston North Shore; Tenet owns MetroWest Medical Center and Saint Vincent Hospital). Due to their broad presence outside of Massachusetts, CHIA did not include Kindred or Tenet in the system profiles chapter.
To compile the profiles, CHIA relied on the following primary data sources: consolidated system-level Audited Financial Statements, hospital Audited Financial Statements, and the 403 Cost Report.

All revenue and net asset information is sourced from each system’s parent organization and affiliates’ FY13 consolidated Audited Financial Statements.\(^{12}\)

Each system’s total Operating Revenue and Net Assets equal the sum of the components displayed in the individual system profiles, less any intercompany eliminations.

Consolidating Eliminations are intercompany transactions that are eliminated during the financial consolidation process. Eliminations were totaled from operating revenue and net asset information in the audited financial statement from each system. The total of the operating revenue and net assets after accounting for eliminations may not sum to the overall system operating revenue and net asset values displayed on each profile due to rounding.\(^{13}\)

Data Verification:
Data verification reports including each system’s reported data were sent to each system. Over the course of the development of this publication, CHIA adjusted or deleted some of the metrics based on feedback from the systems. Changes include revisions to the descriptions of some organizations and an additional section displaying consolidating eliminations.

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\(^{12}\) Steward Health Care System’s revenue and net asset information is sourced from its FY12 audited consolidated financial statements, which is the most recent consolidated-level data available to CHIA.

\(^{13}\) Data used in Steward Health Care System’s organizational breakout only includes financial information from the hospital entities and does not include consolidation eliminations.
Operating revenue is revenue earned from services associated with patient care, including academic research. It excludes revenue earned from non-operating activities, such as gains associated with the sale of property or income from investments.

Net assets reflect the difference between total assets and total liabilities.

Profitability ratios: CHIA standardized calculations for operating and total margins to account for the varied presentation of financial statement reporting among health systems.

Total profit/loss (often presented in hospital financial statements as "excess of revenues over expenses") and total margin are measures of the system’s overall financial performance, the former being in dollars and the latter a percentage.

- **System calculation:** Total Profit/Loss = Total Income – Total Expenses
- **System calculation:** Total Margin = Total Income ÷ (Operating Revenue + Non-Operating Gains/Losses)

Employee statistics show the approximate number of employees in the system.
Multi-Acute Hospital Systems: Metric Descriptions

The **Percentage of Massachusetts Acute Hospitals** section shows the proportion of total discharges and inpatient/outpatient revenue at each system in relation to all acute hospitals in Massachusetts. Specialty hospitals were included when preparing these calculations. This information was calculated using data from 403 Cost Reports.

**Percent of Discharges** is the number of discharges for inpatient admissions.

- **Data Source**: 403 Cost Report: Schedule 5a, Column 2, Row 25

- **System Calculation**: Discharge Percent = Total discharges across all acute hospitals in a system divided by total statewide acute hospitals’ discharges multiplied by 100

**Percent of Inpatient Revenue** reflects each system’s inpatient net patient service revenue (NPSR) as a percentage of total inpatient NPSR reported by Massachusetts acute hospitals in 2013.

- **Data Source**: 403 Cost Report: Schedule 5a, Column 2, Rows 65.01 and 65.02

- **System Calculation**: Inpatient NPSR Percent = Total inpatient NPSR across all acute hospitals in system divided by total statewide acute hospitals’ inpatient NPSR multiplied by 100

**Percent of Outpatient Revenue** reflects each system’s outpatient net patient service revenue (NPSR) as a percentage of total outpatient NPSR reported by Massachusetts acute hospitals in 2013.

- **Data Source**: 403 Cost Report: Schedule 5a, Column 2, Rows 78.01 and 78.02

- **System Calculation**: Total outpatient NPSR across all acute hospitals in system divided by total statewide acute hospitals’ outpatient NPSR multiplied by 100
Multi-Acute Hospital Systems: Other Organizations

Financial information for Other Organizations includes revenue and net assets from organizations that did not appear to fit into the other categories (acute hospital, non-acute hospital, health plan, etc.). It includes parent-level entities as well as the following organizations within each system:

**Baystate Health, Inc.**
- Ingraham Corp., a holding company for Baystate Health Ambulance
- Baystate Administrative Services, Inc., an administrative services entity
- Baystate Total Home Care, Inc., a not-for-profit entity that holds, leases, and manages real estate on behalf of Baystate
- Baystate Health Insurance Company, Ltd., a captive insurance company
- Baystate Health Foundation, Inc., a charitable foundation

**Berkshire Health Systems, Inc.**
- BHS Management Services, Inc., a corporation that provides management services to Berkshire’s affiliates
- Berkshire Indemnity Company SPC, a captive insurance entity
- Tri-State Medical Management, Corp., a corporation that manages a physician office location for the benefit of Berkshire Medical Center

**Cape Cod Healthcare, Inc.**
- Cape Cod Healthcare Foundation, Inc., a not-for-profit corporation organized to provide development and fundraising support to Cape Cod Healthcare
- Heritage at Falmouth, a not-for-profit corporation that owns an assisted living facility
- Cape Health Insurance Company, a captive insurance company
- Cape Cod Hospital Medical Office Building, a for-profit provider of leased and subleased space to Cape Cod Hospital and related affiliations

**CareGroup, Inc.**
- Greater Boston Musculoskeletal Center (GBMC) Real Estate Company, LLC, an entity created as part of a joint venture between New England Baptist and Shields Healthcare Group to develop a new location for an ambulatory surgery facility in Dedham, Massachusetts.

**Heywood Healthcare, Inc.**
- Heywood Hospital Realty Corp., a corporation that owns medical office buildings

**Lahey Health System, Inc.**
- Lahey Clinic Foundation, Inc., a corporation organized to hold capital assets, investments, debt, and infrastructure costs
- Lahey Health Shared Services, Inc., a supporting corporation with the corporate purpose of providing administrative support to the System and its affiliates
- Lahey Clinic Insurance Company, Ltd., a captive reinsurance company
- Lahey Clinical Performance Accountable Care Organization, LLC, a corporation organized to operate an accountable care organization and participate in the Federal Medicare Shared Savings Program
- Lahey Clinical Performance Network, LLC, a corporation organized to contract with payers on behalf of participating providers and/or care units that are part of the System.
Multi-Acute Hospital Systems: Other Organizations

- Lahey Clinic Canadian Foundation, a Canadian Foundation that performs fundraising activities directed at citizens and residents of Canada
- Northeast Health System, Inc., a corporation that functions as the holding company for Northeast Hospital Corp. and the Northeast affiliates
- NE Proprietary Corp., a corporation organized for the purpose of establishing and operating health care facilities, services, and organizations

Partners HealthCare System, Inc.
- Partners Community Healthcare, Inc. (PCHI) was renamed in FY14 to Partners Community Physician Organization (PCPO). PCPO represents and provides management services to Partners community network of physicians and hospitals and implements population health management programs.

Steward Health Care System, LLC
- Steward Health Care Network, Inc., a company that manages and negotiates managed care contracts
- Tailored Risk Assurance Company, Ltd., a captive insurance company
- Steward has partnered with two Massachusetts health plans to create community hospital network insurance products:
  - Steward Community Care is a partnership with Fallon Community Health Plan
  - Steward Community Choice is a partnership with Tufts Health Plan

UMass Memorial Health Care, Inc.
- UMass Memorial Health Ventures, Inc., a joint venture interest holder
- UMass Memorial Realty, Inc.
Technical Appendix:  
Exhibit A. Hospital-Specific Information & Subsequent Events

**Acute Hospitals**

**Athol Hospital** responded to the FY09 to FY13 data verification process for FY12 and FY13 data only.

**Beth Israel Deaconess Medical Center (BIDMC)** reported Graduate Medical Education (GME) costs on more than one line in the 403 Cost Report, and the corresponding statistics for those GME costs in more than one column on Schedules IX and III, respectively, on the 403 Cost Report. To ensure inclusion of these additional reported fields, CHIA manually calculated total GME expenses for BIDMC.

**Beth Israel Deaconess Hospital-Plymouth** (formerly Jordan Hospital) was acquired by Beth Israel Deaconess Medical Center effective January 1, 2014. As this acquisition took place after FY13, data for Beth Israel Deaconess Hospital-Plymouth is not included in the CareGroup system profile.

**Boston Medical Center**

Outpatient metrics for Boston Medical Center (BMC) include information for the following freestanding community health centers:
1. East Boston Neighborhood Health Center
2. Codman Square Health Center
3. Dorchester House Multi-Service Center
4. South Boston Community Health Center

**Kindred Hospitals** have limited acute hospital information included in this report, as they are considered long-term acute care hospitals. Kindred Hospital-Boston and Kindred Hospital-Boston North Shore are acute hospitals; however, as their data does not align with the other acute hospitals, they are not included in the cohort analysis.

**Lowell General Hospital** acquired Saints Medical Center effective July 1, 2012. For FY12, the Financial Statement data submitted by Lowell General Hospital includes 3 months of financial data for Saints Medical Center, in addition to 12 months of financial information for Lowell General Hospital. Saints Medical Center did not submit additional financial statement data for FY12. Each entity submitted a separate 403 Cost Report for FY09 through FY12. For FY13, both Financial Statement and 403 Cost Report data submitted by Lowell General Hospital includes Saints Medical Center data.

On October 20, 2014, Tufts Medical Center and Lowell General Hospital combined under a new parent company (Wellforce) and created a new multi-acute hospital system.

**Mercy Hospital** changed its fiscal year end date from December 31 to June 1 beginning July 1, 2013. Its 2013 Financial Statement filing reflects six months of data (January 1, 2013 - June 30, 2013).


**Saints Medical Center** submitted 403 Cost Report data for FY09 through FY13, but financial statements only for FY09 through FY11 due to a merger with Lowell General Hospital effective July 1, 2012.

**Shriners Hospitals for Children** (both Boston and Springfield locations) are not included in this report due to insufficient data reported.
**Technical Appendix:**

**Exhibit A. Hospital-Specific Information & Subsequent Events**

**Steward Good Samaritan Medical Center** is located in the Metro South region; however, one of its campuses is located in Metro West region. Information for the campus located in Metro West is included in the Steward Good Samaritan Medical Center metrics.

**Steward Health Care System:** Fiscal year data for certain hospitals in the Steward Health Care System was annualized for comparison purposes.

Steward Health Care acquired six hospitals in FY10:
- 1. Steward St. Elizabeth's Medical Center
- 2. Steward Saint Anne’s Hospital
- 3. Steward Carney Hospital
- 4. Steward Good Samaritan Medical Center
- 5. Steward Norwood Hospital
- 6. Steward Holy Family Hospital

FY11 403 Cost Report data for these hospitals reflects a period of 329 days, while FY10 403 Cost Report data reflects a period of 401 days. To account for these variances, 403-sourced data was annualized for these two fiscal years.

**Non-acute Hospitals**

**Spaulding Hospital Cambridge** (formerly Youville Hospital) did not submit 403 Cost Report data for FY09 due to a purchase transaction by Spaulding Hospital effective November 15, 2009. The 403 Cost Report submitted for FY10 reflects a partial year of 10.5 months. No adjustments were made to annualize as this was the first year of operations, and CHIA determined that the report would not materially distort the trend analysis. As of FY13, Spaulding Hospital Cambridge no longer provides outpatient services.

**Bournewood Hospital** is a sub-chapter S corporation.

**Radius Specialty Hospital** closed its Roxbury and Quincy rehabilitation facilities in October 2014.

**Whittier Pavilion** began operations in FY09; therefore, FY09 data is not be comparable to its subsequent years. In addition, outpatient services began in FY13. FY13 outpatient data represents a partial year of operation for these services.

**Multi-Acute Hospital Systems**

**Baystate Health, Inc.**
- In September 2014, UMass Memorial Health Care transferred ownership of Wing Memorial Hospital to Baystate Health.

**CareGroup, Inc.**
- The financial figures on CareGroup’s system profile were sourced from separately from Audited Financial Statements for Beth Israel Deaconess Medical Center, Mount Auburn Hospital, and New England Baptist Hospital (i.e., members of CareGroup’s Obligated Group). The total operating revenue and net assets may not fully reflect CareGroup’s financial performance, although CareGroup’s website notes that the Obligated Group members account for over 90% of
Technical Appendix:
Exhibit A. Hospital-Specific Information & Subsequent Events

CareGroup’s system profile may also not fully reflect consolidating eliminations at the parent level that may reduce total operating revenue and net assets. CHIA felt that presenting the separately audited financial information in a combined manner was appropriate to show the members of the CareGroup system and their relative size. CareGroup notes that its business model is a “confederations model in which the affiliates jointly borrow and purchase common services such as information technology support, but otherwise operate on a largely autonomous basis.”

- On January 1, 2014, Beth Israel Deaconess Medical Center became the sole corporate member of Jordan Health Systems, Inc. (Jordan). Jordan consists of Jordan Hospital, a local physicians’ practice (Jordan Physician Associates), and several management and real estate holding entities.

Lahey Health System, Inc.
- In October 2013, Winchester Hospital and its affiliate Winchester Physician Associates, Inc. announced its intention to become a member of Lahey Health. The transaction went into effect in July 2014.
- In July 2014, Lahey announced its intention to become the sole corporate member of the Visiting Nurse Association of Middlesex-East, Inc. (VNAME) and the parent of VNAME’s affiliate, Community Care, Inc. The transaction went into effect in October 2014.

Steward Health Care System, LLC
- In March 2014, Steward announced its intention to make Merrimack Valley Hospital, which was already owned by Steward, a campus of Steward Holy Family Hospital. This event went into effect in August 2014.
- On November 6th, 2014, Steward announced an imminent closure of Quincy Medical Center, which occurred on December 26, 2014. The hospital building is now operating as a satellite emergency department for Steward Carney Hospital.

UMass Memorial Health Care, Inc.
- In September 2014, UMass Memorial Health Care transferred ownership of Wing Memorial Hospital to Baystate Health.
- In June 2014, UMass Memorial Health Ventures, Inc. sold a portion of its share in Fairlawn Rehabilitation Hospital to New England Rehabilitation Management Co., LLC, which is a subsidiary of HealthSouth Corporation. UMass now has a 20% share of Fairlawn. Previously, Fairlawn had been operated as a 50-50 joint venture between UMass and HealthSouth.

Additional information on changes to health systems can be found on the Health Policy Commission’s website under Material Change Notices. Available at: www.mass.gov/anf/budget-taxes-and-procurement/oversight-agencies/health-policy-commission/material-change-notices-cost-and-market-impact-reviews (last accessed January 9, 2015).

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15 Ibid.
Diagnosis Related Groups (DRGs) are used to classify the patient illnesses a hospital treats.

The 10 most common DRGs for each hospital were determined by categorizing all of a hospital’s discharges into DRGs defined in the All Patient Refined Grouper (3M™ APR-DRG 30) and ranked by the total number of discharges. In most cases, it was necessary for CHIA to abbreviate the DRG name in order to fit the space available.

Below is a list of abbreviated DRG descriptions that appear in the report, and the full name and APR-DRG 30 code for each DRG.

<table>
<thead>
<tr>
<th>Abbreviated Description</th>
<th>Description</th>
<th>APR DRG v. 30</th>
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</thead>
<tbody>
<tr>
<td>3rd Degree Brn w Skn Grft</td>
<td>Extensive 3rd Degree Burns w Skin Graft</td>
<td>841</td>
</tr>
<tr>
<td>Acute Leukemia</td>
<td>Acute Leukemia</td>
<td>690</td>
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<tr>
<td>Acute Myocardial Infarct.</td>
<td>Acute Myocardial Infarction</td>
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<tr>
<td>Adjust Dis/Neuroses exc DD</td>
<td>Adjustment Disorders &amp; Neuroses Except Depressive Diagnoses</td>
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<tr>
<td>Alcohol &amp; Drug w/ Rehab</td>
<td>Alcohol &amp; Drug Dependence w Rehab Or Rehab/Detox Therapy</td>
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<td>Alcohol Abuse &amp; Dependence</td>
<td>Alcohol Abuse &amp; Dependence</td>
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<td>Angina Pectoris</td>
<td>Angina Pectoris &amp; Coronary Atherosclerosis</td>
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<td>Appendectomy</td>
<td>Appendectomy</td>
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<td>Asthma</td>
<td>Asthma</td>
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<tr>
<td>Bacterial Skin Infections</td>
<td>Cellulitis &amp; Other Bacterial Skin Infections</td>
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<td>Bipolar Disorders</td>
<td>Bipolar Disorders</td>
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<tr>
<td>Bone Marrow Transplant</td>
<td>Bone Marrow Transplant</td>
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<td>Bronchiolitis Pneumonia</td>
<td>Bronchiolitis &amp; RSV Pneumonia</td>
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<td>Burns w/ or w/o Skin Grft</td>
<td>Partial Thickness Burns w Or w/o Skin Graft</td>
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<td>Card Cath - Heart Disease</td>
<td>Cardiac Catheterization For Ischemic Heart Disease</td>
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<td>Cardiac Arrhythmia &amp; Conduction Disorders</td>
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<td>Cardiac Valve w/o Cath</td>
<td>Cardiac Valve Procedures w/o Cardiac Catheterization</td>
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<td>CC W Circ Disord Exc IHD</td>
<td>Cardiac Catheterization W Circ Disord Exc Ischemic Heart Disease</td>
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<td>Cleft Lip &amp; Palate Repair</td>
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<td>COPD</td>
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<td>Craniotomy; exc Trauma</td>
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<td>CVA Occlusion w/ Infarct</td>
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<tr>
<td>D&amp;L Fusion exc Curvature</td>
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<tr>
<td>D&amp;L Fusion for Curvature</td>
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<td>Degen Nrvs Syst exc MS</td>
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<td>Delivery DRGs</td>
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<td>Depression exc MDD</td>
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<td>Digestive Malignancy</td>
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<td>Diverticulitis/osis</td>
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<td>Drug/Alcohol Abuse, LAMA</td>
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<td>Eye Procs except Orbit</td>
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<td><strong>Intervertebral Disc Excis</strong></td>
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<td><strong>Intestinal Obstruction</strong></td>
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<td><strong>Kidney &amp; UT Infections</strong></td>
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<td><strong>Knee &amp; Lower Exct Foot</strong></td>
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<td><strong>Knee Joint Replacement</strong></td>
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<td><strong>Maj Cranial/Facial Bone</strong></td>
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<td><strong>Maj HEM/IG Dx exc SCD</strong></td>
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<td><strong>Maj Larynx &amp; Trachea Proc</strong></td>
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<td><strong>Maj Male Pelvic Proc</strong></td>
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<td><strong>Maj Resp &amp; Chest Proc</strong></td>
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<td><strong>Maj Resp Infect &amp; Inflam</strong></td>
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<td><strong>Maj Sml &amp; Lrg Bowel Proc</strong></td>
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<td><strong>Maj. Depressive Disorders</strong></td>
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<td><strong>Malignancy-Hept/Pancreas</strong></td>
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<td><strong>Mastectomy Procedures</strong></td>
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<td><strong>O.R. Proc for Tx Comp</strong></td>
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<td>Other Digestive System Dx</td>
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<td>Other ENT &amp; Cranial Dxs</td>
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<td>Other Resp &amp; Chest Procs</td>
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<td>Othr Muscle-skel Syst Dx</td>
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<tr>
<td>Oth OR Procs for Lymph/HEM</td>
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<tr>
<td>Othr Skin &amp; Breast Dis</td>
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<tr>
<td>Othr Skin, Tis &amp; Related</td>
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<td>Pancreas Dis exc Malig</td>
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<td>Per Cardio procs w/ AMI</td>
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<tr>
<td>Per Cardio procs w/o AMI</td>
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<tr>
<td>Procedures for Obesity</td>
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<td>Pulm Edema &amp; Resp Failure</td>
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### Technical Appendix:
### Exhibit B. Diagnosis Related Groups (DRGs)

<table>
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<th>Diagnosis/Procedures</th>
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<td>Shoulder, Upper Arm &amp; Forearm Procedures</td>
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<td>Tendon, Muscle &amp; Other Soft Tissue Procedures</td>
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<tr>
<td>Thyroid &amp; Other Procs</td>
<td>Thyroid, Parathyroid &amp; Thyroglossal Procedures</td>
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**Delivery System Transformation Initiatives (DSTI)** is a federal-state partnership that provides incentive payments to support and reward seven safety net hospitals in Massachusetts for investing in integrated care, quality innovations, and infrastructure to support alternative payment models. The DSTI amounts listed in the table below are to be distributed over a three year period.

**Infrastructure & Capacity Building (ICB)** program is a federal and state-funded program administered by MassHealth to help hospitals transition to integrated delivery systems that provide more effective and cost-efficient care to patients in need.

The **Community Hospital Acceleration, Revitalization, and Transformation Investment Program (CHART)** is a four-year, $120M program funded by an industry assessment of select providers and insurers and administered by the Health Policy Commission that makes phased investments to promote efficient, effective care delivery in non-profit, non-teaching, lower cost community hospitals.

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<th>CHART (Phase I)</th>
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### Technical Appendix:
#### Exhibit C. Special Public Funding

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**TOTAL**                                             | **$628,000,000**  | **$9,230,058**     | **$9,965,642**
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### Adjusted Cost per CMAD

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#### GME Costs

- **Post Grad Med Education**
  - 9,35,12 $ -
- **Post Grad Med Education**
  - 25,35.3 $ -
- **Total Post Grad Med Education**
  - $ -

- **Med Staff - Teaching**
  - 9,32,12 $ -
- **Med Staff - Teaching**
  - 25,32,3 $ -
- **Total Med Staff - Teaching**
  - $ -

- **Med Staff - Admin**
  - 9,33,12 $ -
- **Med Staff - Admin**
  - 25,33,3 $ -
- **Total Med Staff (B+C)**
  - $ -

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#### Determination of Total GME O/H attributed to I/P

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#### Allocation of GME Allocated to Total Ancillary Reallocated to I/P Ancillary

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#### Determination of Total Med Staff O/H attributed to I/P

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<thead>
<tr>
<th>Stats - Med Staff - hours of service</th>
<th>Stat</th>
<th>% Allocation of GME O/H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Ancillary</td>
<td>13,56,17</td>
<td>- 0.0000 - $</td>
</tr>
<tr>
<td>IP Routine</td>
<td>13,78,17</td>
<td>- 0.0000 - $</td>
</tr>
<tr>
<td>Total Patient and Non-Patient</td>
<td>13,100.17</td>
<td>- $</td>
</tr>
</tbody>
</table>

#### Allocation of Med Staff Allocated to Total Ancillary Reallocated to I/P Ancillary

<table>
<thead>
<tr>
<th>Stats - IP and OP Costs</th>
<th>Stat</th>
<th>% Allocation of GME Ancillary</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Ancillary Costs</td>
<td>17,22,4</td>
<td>$ - 0.0000 - $</td>
</tr>
<tr>
<td>Total Patient and Non-Patient</td>
<td>17,42,4</td>
<td>$ -</td>
</tr>
</tbody>
</table>

---

#### Physician Professional Fees O/H

<table>
<thead>
<tr>
<th>Stats - Costs</th>
<th>Stat</th>
<th>% Allocation of Physician O/H to IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Ancillary</td>
<td>17,22,4</td>
<td>$ - 0.0000 - $</td>
</tr>
<tr>
<td>IP Routine</td>
<td>17,32,3</td>
<td>$ - 0.0000 - $</td>
</tr>
<tr>
<td>Total Patient and Non-Patient</td>
<td>17,42,2</td>
<td>$ -</td>
</tr>
</tbody>
</table>

#### Physician Professional Fees Ancillary

<table>
<thead>
<tr>
<th>Stats - Costs</th>
<th>Stat</th>
<th>% Allocation of Physician Ancillary to IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP costs</td>
<td>17,22,4</td>
<td>$ - 0.0000 - $</td>
</tr>
<tr>
<td>Total Patient and Non-Patient</td>
<td>17,42,4</td>
<td>$ -</td>
</tr>
</tbody>
</table>

#### Physician Direct IP costs

<table>
<thead>
<tr>
<th>Stats - Costs</th>
<th>Stat</th>
<th>% Allocation of Physician Direct IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>25,100.3 $</td>
<td>3</td>
<td>$ -</td>
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</tbody>
</table>

less Non-Comparable Cost Adjustment

<table>
<thead>
<tr>
<th>Stats - Costs</th>
<th>Stat</th>
<th>% Allocation of Non-Comparable Cost Adjustment to IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ -</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Comparable Costs

<table>
<thead>
<tr>
<th>Stats - Costs</th>
<th>Stat</th>
<th>% Allocation of Total Comparable Costs to IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ -</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Divided by CMADS

Comparable IP Costs per CMAD

E-46
## Technical Appendix:
### Exhibit F. Non-Acute Hospital Inpatient Cost per Day

### Inpatient Cost per Day

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Line</th>
<th>Column</th>
</tr>
</thead>
</table>

**IP Routine Costs**

<table>
<thead>
<tr>
<th>Line</th>
<th>Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,100,10</td>
<td>$ -</td>
</tr>
</tbody>
</table>

**GME Costs**

<table>
<thead>
<tr>
<th>Post Grad Med Education</th>
<th>9,35,12</th>
<th>$ -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Grad Med Education</td>
<td>26,35,3</td>
<td>$ -</td>
</tr>
</tbody>
</table>

**Total Post Grad Med Education**

|$ - |

<table>
<thead>
<tr>
<th>Mod Staff - Teaching</th>
<th>9,32,12</th>
<th>$ -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mod Staff - Teaching</td>
<td>26,32,3</td>
<td>$ -</td>
</tr>
</tbody>
</table>

**Total Mod Staff - Teaching**

|$ - |

<table>
<thead>
<tr>
<th>Mod Staff - Admin</th>
<th>9,33,12</th>
<th>$ -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mod Staff - Admin</td>
<td>26,33,3</td>
<td>$ -</td>
</tr>
</tbody>
</table>

**Total Mod Staff (B+C)**

|$ - |

### Determination of Total GME O/H attributed to I/P

#### Stats - Post Grad - hours of service

<table>
<thead>
<tr>
<th>Stat</th>
<th>%</th>
<th>Allocation of GME O/H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Ancillary</td>
<td>13,56,18</td>
<td>-</td>
</tr>
<tr>
<td>IP Routine</td>
<td>13,76,18</td>
<td>-</td>
</tr>
<tr>
<td>Total Patient and Non-Patient</td>
<td>13,100,18</td>
<td>-</td>
</tr>
</tbody>
</table>

**Allocation of GME Allocated to Total Ancillary Reallocated to I/P Ancillary Stats - IP and OP Costs**

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<tr>
<th>Stat</th>
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### Determination of Total Med Staff O/H attributed to I/P

#### Stats - Med Staff - hours of service

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**Allocation of Med Staff Allocated to Total Ancillary Reallocated to I/P Ancillary Stats - IP and OP Costs**

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### Physician Professional Fees O/H

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### Physician Professional Fees Ancillary

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### Physician Direct IP costs

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**Less Non-Comparable Cost Adjustment**

|$ - |

**Total Comparable Costs**

|$ - |

**Divided by Days**

|$ - |

**Comparable IP Costs per Day**
Acknowledgments

CHIA wishes to acknowledge the analytic support provided by Michael Grenier, Senior Associate at the Center for Health Law and Economics at the University of Massachusetts Medical School.

This publication was collaboratively developed and produced by the following CHIA teams: Provider Financial Analysis, Health System Finance, Health System Performance- Quality, and Office of Special Projects- Health Analytics and Finance.

If you have questions or comments about this publication, please contact Mary Byrnes at Mary.Byrnes@MassMail.State.MA.US.