

5-2-2011

Universal Health Care Coverage in Massachusetts: A Follow-up on the Effects on Neurosurgical Practice

Anthony M. Burrows

University of Massachusetts Medical School, anthony.burrows@umassmed.edu

Julie G. Pilitsis


University of Massachusetts Medical School, Julie.Pilitsis@umassmemorial.org

Lynn Levecque

University of Massachusetts Medical School

See next page for additional authors

Follow this and additional works at: <http://escholarship.umassmed.edu/ssp>

 Part of the [Health and Medical Administration Commons](#), [Life Sciences Commons](#), and the [Surgery Commons](#)

Repository Citation

Burrows, Anthony M.; Pilitsis, Julie G.; Levecque, Lynn; Moser, Richard P.; and Litwin, Demetrius E. M., "Universal Health Care Coverage in Massachusetts: A Follow-up on the Effects on Neurosurgical Practice" (2011). University of Massachusetts Medical School. *Senior Scholars Program*. Paper 112.
<http://escholarship.umassmed.edu/ssp/112>

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in Senior Scholars Program by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

Universal Health Care Coverage in Massachusetts: A Follow-up on the Effects on Neurosurgical Practice

Authors

Anthony M. Burrows, Julie G. Pilitsis, Lynn Levecque, Richard P. Moser, and Demetrius E. M. Litwin

Comments

Medical student Anthony Burrows participated in this study as part of the Senior Scholars research program at the University of Massachusetts Medical School.

Anthony Burrows, Class of 2011
Department of Surgery / Division of Neurosurgery

**Universal Health Care Coverage in Massachusetts:
A Follow-up on the Effects on Neurosurgical Practice**

Anthony M Burrows¹ BS, Julie G Pilitsis¹ MD PhD, Lynn Levecque² MBA, Richard P Moser¹ MD, Demetrius E Litwin² MD MBA

¹Division of Neurosurgery, ²Department of Surgery, University of Massachusetts Medical School, Worcester, MA

Background:

It has been four years since the introduction of universal health care coverage in Massachusetts. Our initial assessment performed from 2007-2008 demonstrated largely positive results.

Objectives:

We performed a follow-up study to assess the long term financial impact of universal health care on hospital charges associated with neurosurgical operative cases at our institution.

Methods:

The billing records from July 1, 2009 – June 30, 2010 were compared to those from 2007 and 2008. Records were analyzed for length of stay, case mix, patient age, hospital charge, reimbursement, and procedure.

Results:

Case volume increased by 31% and mean acuity increased from 2.3 to 3.1 ($p < 0.005$). Hospital stays lengthened by 1 day ($p < 0.005$). Payor mix changed over this time with Commonwealth Care and Medicaid comprising 2.9% and 12.4%, respectively, of neurosurgical inpatients; neither had significantly different acuity or lengths of stay. Despite an increase in case volume by 31% and significantly increased acuity in 2010, revenue increased 14% over early reform data. When volume was normalized, extrapolations of pre-reform and early reform coverage on current financials demonstrated that the change in payor mix alone had decreased revenue by 30% and 24%, respectively. When modifying 2010 financials by considering 2007 reimbursement rates and 2007 payor mix, these changes together resulted in a revenue reduction of 36%.

Conclusions:

Taken together, our data suggests that revenue associated with hospital charges for neurosurgical inpatients has decreased significantly since health care reform went into effect.