2014-10-02

Vermont Price Variation Analysis

Katharine London
University of Massachusetts Medical School

Et al.

Let us know how access to this document benefits you.
Follow this and additional works at: https://escholarship.umassmed.edu/commed_pubs

Part of the Health Economics Commons, Health Law and Policy Commons, Health Policy Commons, Health Services Administration Commons, and the Health Services Research Commons

Repository Citation

This material is brought to you by eScholarship@UMassChan. It has been accepted for inclusion in Commonwealth Medicine Publications by an authorized administrator of eScholarship@UMassChan. For more information, please contact Lisa.Palmer@umassmed.edu.
Price Variation Analysis

Presentation to the Green Mountain Care Board
October 2, 2014
Overview

I. Background
   A. Project genesis
   B. Prior studies

II. Methodology

III. Results of Analyses

IV. Implications

V. Recommendations
Background & Project Overview

Richard Slusky,
Director of Payment Reform GMCB
Background

• The Green Mountain Care Board (GMCB) has been interested in the causes and consequences of health care price variation for several years.
  – The amount paid for a service can vary widely, depending on who is delivering the service, where it is delivered, and who is paying for it.

• In 2012, the Board contracted with the Vermont Association of Hospitals and Health Systems to examine the magnitude of this variation.

• That study identified wide variation in several dimensions, including in the amount an individual insurer paid an individual provider for a specific service.
Overview of this Project

• In April, 2013, the Board issued an RFP for a more comprehensive examination of price variation, focusing on causes, consequences, and potential remedies.
• A contract was awarded to a team that included policy experts and economists from the University of Vermont and the University of Massachusetts Medical School.
• This analysis looked at commercial payers and Medicaid. Medicare data was not available.
Context for this Report

• Confirm or refute that variation in payments exist
• Identify potential causes of the variation
• Recognize why this variation may be a problem in the context of payment reform
• Identify principles, recommendations, and policy issues the GMCB should consider if they decide to address payment variation.
GMCB Role in Price Setting

• Principles for establishing payment methods and rates must be in alignment with statutory requirements and principles
  – Chapter 220, Section 9376 requires the GMCB to “set reasonable rates…”
  – GMCB may consider legitimate differences in costs among health care professionals
  – The GMCB shall approve payment methodologies that encourage cost containment high quality services, and integration of care
Presentation of Report
The Team

University of Vermont College of Medicine
Global Health Economics Unit
Vermont Center for Clinical and Translational Science
• Christopher Jones, DPhil, Center Director and Assistant Professor
• Steven Kappel, MPA, Research Associate
• Mujde Erten, PhD, Assistant Professor

University of Massachusetts Medical School
Center for Health Law and Economics
• Katharine London, MS, Principal Associate
• Michael Grenier, MPA, Senior Associate
• Carol Gyurina, MMHS, Associate
• Rebecca Kushner, MA, MPA, Senior Policy Analyst
• Tami Ohler, PhD, Policy Analyst

Wakely Consulting Group
• Julie Peper, FSA, MAAA
• Karan Rustagi, ASA, MAAA
Key Terms

- **Charge:** the amount billed by the provider.
- **Price:** the total amount received by a provider, including what is paid by the insurer and what is paid by the patient. This is determined contractually, and is often referred to as **allowed charge** or **allowed amount**.
- **Cost:** the value of resources needed to provide the service (salaries, supplies, etc.)

**NOTE:** This study did not explore the relationship between price and provider’s cost to deliver the service.
Key Terms (2)

• **Discounted charge**: a method of establishing price based on a negotiated discount from charges. This is most common in hospital payments.

• **Prospective payment system**: payment method that establishes a fixed amount for a group of services. The amount is independent of charges. Most common in hospital payment.

• **Fee schedule**: a method of establishing prices based on a price schedule for individual services that is independent of charges. This is most common in professional payments.
Methodology
Methodology

• In order to develop a comprehensive picture, the team combined statistical analyses with stakeholder interviews.
• Analyses relied on the state’s VHCURES claims data system.
• Interviewees included both payers and providers, with a special focus on small physician practices.
• The report contains a detailed discussion of methodology. Additional information is available on request.
Discussion of Data Sources

• This report relies heavily on VHCURES, the state’s claims database. While the information in VHCURES is extremely useful, several caveats should be kept in mind.
  • Individual payers have not had an opportunity to verify information in VHCURES.
  • In our analyses, we relied on DRG assignments made by Onpoint, the state’s database contractor, rather than using DRGs submitted by the payers. This was necessary to ensure comparability, completeness, and accuracy.
Discussion of Data Sources

• Caveats (continued)
  • Data issues which may be relevant to the analyses in this report have been identified by other data users.
  • While we have made every effort to maximize data quality, statistical uncertainties remain.
  • Where appropriate, we have suppressed results based on small numbers to protect patient confidentiality and proprietary information.
Analysis of Price Variation: Methods

• Using statistical modeling, we estimated how well various factors explain the variation in commercial professional prices.
  – Identified factors that might explain price variation
  – Completed regression modeling to determine what percent of the variation could be explained by each of these factors
Analysis Findings
Analysis of Price Variation: Findings

There are many factors that explain why some health care providers are paid more than others for the same services:

<table>
<thead>
<tr>
<th>Payer-Related Factors</th>
<th>Provider-Related Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payer</td>
<td>Provider Size</td>
</tr>
<tr>
<td>Health Plan Product</td>
<td>Provider Region</td>
</tr>
<tr>
<td>Payment Method</td>
<td>Provider Type</td>
</tr>
<tr>
<td>Patient Share of Payment</td>
<td>Site of Service</td>
</tr>
<tr>
<td>Calendar Quarter</td>
<td>Additional Service Detail</td>
</tr>
</tbody>
</table>
Analysis of Price Variation: Findings

- Eval & Mgmt Office Visits: 20% Provider Related, 37% Payer Related, 43% Unexplained
- Medical and Ancillary visits: 29% Provider Related, 27% Payer Related, 44% Unexplained
- Radiology: 87% Provider Related, 4% Payer Related, 9% Unexplained
- Surgical visits: 32% Provider Related, 11% Payer Related, 57% Unexplained
Analysis of Price Variation: Findings

There is no consistency in the share of variation explained by each factor across services. Factors explain different shares of variation for different services. Examples include:

- Health Plan Product (e.g. HMO, PPO, POS) explains approximately half the variation in prices paid for an Evaluation & Management office visit for a patient age 40-64.
- Provider Type (e.g. primary care or specialty physician) explains 22% the variation in prices paid for a joint injection.
- Payment Method (e.g. fee schedule, charge, other) explains 20% of the variation in prices paid for a psychotherapy visit.
- Additional detail about the service provided explains 80% of the variation in prices paid for a mammogram.
Analysis of Price Variation: Findings

Unexplained price variation might include:

• a unique payment adjustment negotiated between a payer and a provider
• an individual provider’s historical method for setting charges
• a special circumstance that the payer did not report in the claims data for the specific service provided, for example a clinical condition that required far more resources than an average patient
Example of Price vs. Charge - Professional

One payer paid for one service based on charges, at least 4 different standard fees, and other unique payment methods

CPT 99214 – Evaluation & Management Office Visit (25 minutes)

Payers use fee schedules to standardize the price they pay to similar providers under similar circumstances.

Note however that different payers may define “similar providers” and “similar circumstances” differently from each other.
These boxplots demonstrate the clustering or skewness of datapoints. The top and bottom of the boxes represent the first and third quartile prices. The middle line represents the median price. In cases where a payer pays the same price for a large share of visits, the median price may equal the first or third quartile price. The diamond shape represents the mean price. The “whiskers,” that is the top and bottom lines, represent the mean plus or minus one standard deviation. The circles are outliers that are greater than one standard deviation from the mean price.

Example of Price Variation
CPT 99214, E&M Office Visit (25 minutes) by Health Plan Product

All health plan products pay a wide range of prices.

The mean price, represented by the diamond, is highest for products with higher degrees of managed care (e.g. EPO, and HMO).

Point of Service (POS) products require members to select a PCP but allow them to go out of network at higher cost-share. The dark circles (outliers) likely reflect out-of-network payments.
Example of Price vs. Charge - Inpatient
Analysis of Price Variation: Summary

• There is substantial variation in price for both professional and hospital services.

• Contributors to variation include payer size, payer type (public or private), provider size, provider type (e.g. private practice, FQHC, hospital-owned practice), specific product, payment mechanism (discount or PPS) and site of care.

• The relative influence of these factors varies by type of service.
Stakeholder Interviews
Stakeholder Interviews

• Payers and hospitals typically negotiate an aggregate rate increase. Negotiations may also address adjustments of fee schedules and quality reporting.

• There is very little negotiation of prices between payers and most physician groups; most physician groups are “price takers.” However, other aspects of the contract may be subject to negotiation.
Stakeholder Interviews (cont.)

• The way that a price is calculated can contribute to price variation. For example, some rates are set as a percentage discount from charges, while others are based on fee schedules.

• Some contracts provide for lump sum payments that are not tied to individual claims. These payments may come in the form of withholds, end of year settlements, or separately negotiated amounts, such as a fixed amount to support medical education.
Stakeholder Interviews (cont.)

• Both payers and providers reported that the GMCB hospital budget decisions play a significant role in hospital contract negotiations. However, there was a difference of opinion as to which side gains an advantage as a result of the regulatory process.
Recommendations
Strategic Recommendations: GMB’s Next Steps

1. Develop a set of principles for establishing payment methods and rates in alignment with the statutory requirements. In developing these principles, seek input from advisory committees and other stakeholders.

2. Develop draft payment methods and rates based on the principles.

3. Model the impact of implementing consistent payment methods and rates statewide in terms of dollars gained or lost by individual health care providers, payers, as well as by state government and groups of consumers.
Strategic Recommendations: GMB’s Next Steps

4. Develop a plan for phasing in standard methods and rates over time in order to buffer the initial effects and to give health care providers time to adjust their business practices to meet the new financial requirements.

5. Continue efforts to improve the accuracy and utility of VHCURES data.
Examples of Strategic Rate Setting Principles for GMCB Consideration

The next several slides list examples of principles that the GMCB could adopt for setting payment methods and rates.

The principles listed are examples only, and the GMCB may wish to make substantive changes.

However, the GMCB should consider adopting a principle that in some way addresses each of these topic areas.
Examples of Strategic Rate Setting Principles for GMCB Consideration

a. **Process**: The GMCB will establish payment methods and rates in a fair, predictable, and transparent manner, consistent with statutory requirements.

b. **Cost level**: The GMCB will establish payment rates that are sufficient to meet the reasonable costs of an efficiently and economically operated provider and that takes into account the education, capital equipment, and other resources required to provide specific services.

c. **Basis of payment**: The GMCB will establish an index payment per discharge for inpatient services and per visit for ambulatory services that will serve as the base for consistent payment rates statewide.
Examples of Strategic Rate Setting Principles for GMCB Consideration

d. **Standard payment rate adjustments**: The GMCB will establish consistent payment rates statewide, except that the GMCB will adjust rates to reflect legitimate differences in costs related to:
   - providing a specific necessary service or services that may not be available elsewhere in the state, such as trauma services
   - the need for health care professionals in particular areas of the state, particularly in underserved geographic or practice shortage areas
   - access to primary care health services for underserved individuals, populations, and areas
   - a clinician’s licensure or certification
   - graduate medical education costs
   - support for Critical Access Hospitals, Federally Qualified Health Centers (FQHCs), FQHC lookalikes, Rural Health Clinics (RHCs)
   - charity care or bad debt
Examples of Strategic Rate Setting Principles for GMB Consideration

e. **Quality-based payment adjustments**: The GMB may adjust payment rates to provide incentives for:
   - provision of high-quality, evidence-based health services in an integrated setting
   - patient self-management
   - healthy lifestyles

f. **Alternative payment methods**: The GMB will allow providers to enter into agreements with payers to accept alternative payment methods, such as shared savings agreements, bundled payments, episode-based payments, and global payments, for providing high-quality, evidence-based health services in an integrated setting.
Examples of Strategic Rate Setting Principles for GMCB Consideration

g. **Applicability of Payment Rates:** The GMCB will require all Vermont fully insured plans, and will encourage other payers, to pay providers using either the standard payment rates or alternative payment methods approved by the GMCB. Providers may charge no more than the GMCB established rates to individuals who pay out of pocket for health care services.

h. **Annual update factor:** The GMCB will increase rates annually by a factor no greater than the increase in Gross State Product, Consumer Price Index, or other standard. The GMCB could consider holding the standard fee schedule to a lower rate of growth than alternative payment methods.
Examples of Strategic Rate Setting Principles for GMCB Consideration

i. **Phase-in period**: The GMCB will phase-in standard payment methods and rates over a period of three years.

j. **Transparency**: The GMCB will post standard payment methods and rates online on a consumer-friendly website and in formats that payers and providers can easily download and apply.
Additional Policy Questions
Additional Policy Questions from RFP

1. Should payments based on discounts off charges be eliminated entirely? If, so, what would replace them and over what period of time.

A: Inpatient: A substantial portion of inpatient care is currently paid for using DRGs. While not all providers are paid by private insurers using DRGs, all providers are accustomed to DRG payments from Medicare and Medicaid. This would be a fairly straightforward replacement for discounts.

Outpatient: Our interviews and analysis indicated that less than half of professional services are paid for using fee schedule, and a smaller percent of hospital outpatient uses fee schedules. Discount off charges appears to be a common practice, therefore careful modeling of a fee schedule basis of payment would be needed.
2. Should FFS contracts always incorporate quality metrics into the negotiated reimbursement rates?

A: Provider contracts should include quality metrics. Payers require providers to meet minimum quality standards in order to receive payment. Additional payment for meeting or exceeding quality targets is usually paid separately, or incorporated into bundled or global payment amounts. Quality metrics are generally not incorporated into FFS rates.
Additional Policy Questions from RFP

3. Should those with high deductibles or the uninsured only be required to pay an amount for services that would be capped at some percentage above what Medicare or Medicaid would pay?

A: It would be simpler for providers to administer a system where all payers, including individuals paying out of pocket, pay the same rates.
4. Should the cost of medical education be carved out of the amount paid for hospital services and reimbursed separately through a negotiated budget amount that is shared by all payers?

A: It would be administratively simpler for the GMCB to determine the total amount to be allocated for medical education and include it as an explicit adjustment to standard payment rates. Otherwise, the GMCB would need to administer a separate system for collecting and remitting payment for medical education costs.
5. Should higher payment for facility-based services that can be performed in a lower cost setting be eliminated entirely?

A: Payment rates should not include incentives to provide services in a more costly environment. Payment rates should be based on the reasonable costs of the education, capital equipment, and other resources required to provide the service. However, standard payment rates may include adjustments to maintain certain facilities’ capacity to provide necessary services, such as emergency and trauma services or a specific necessary service that may not be available elsewhere in the state. The cost of maintaining this capacity may be spread across payment rates for other services, resulting in higher payment rates for services provided in certain facilities than would be paid for those services when they are provided elsewhere.
Additional Policy Questions from RFP

6. For all payers should annual updates be increased for evaluation and management codes, and updates for procedural diagnosis codes frozen for a period of three years, except for those that are demonstrated to be currently undervalued?

A: The GMCB should establish fair and consistent payment methods and rates for health care services in Vermont, as well as a plan for phasing in these methods and rates over several years.
Questions?