Variation in Payment for Hospital Care in Rhode Island

Medicaid Enterprise Systems Conference
September 12, 2013
Agenda

• Working with the study stakeholders
• Requesting, collecting and validating the baseline data
• Grouping and analyzing the data
• Methods for comparing payment
• The findings

The published report can be found at: http://www.ohic.ri.gov/2012%20Rhode%20Island%20Hospital%20Payment%20Study.php

This material is solely the responsibility of Xerox and should not be attributed to the Rhode Island Office of the Health Insurance Commissioner (OHIC) or the Rhode Island Executive Office of Health and Human Services (EOHHS).
Communication and Consultation

• Purpose of the study was to understand patterns of payment, utilization and cost for hospital care in Rhode Island

• Commissioned by the RI OHIC and EOHHS

• Representatives from the health plans, RI Medicaid and the 14 RI hospitals were invited participate in a stakeholder group

• Throughout the process, all data and findings were presented to the stakeholders as preliminary

• Comments and feedback from both hospitals and plans on preliminary data was requested

• Project spanned 16 months from data request to report publication
16 Payers Included in the Study

- 5 United Healthcare plans – 3 commercial, Medicaid managed care, Medicare managed care
- 6 BCBSRI plans – 4 commercial, Medicaid managed care, Medicare managed care
- Neighborhood Health Plan of RI (Medicaid managed care)
- 2 Tufts Health Plans – both commercial
- Medicaid fee-for-service
- Medicare fee-for-service – inpatient only, no payments

- Payers were grouped into five payer categories. Payer-specific detail was not shared publicly.
- Medicare inpatient data was from RI Department of Health dataset
- No Medicare outpatient data was available. We used CMS’s Provider Statistical & Reimbursement Report (PS&Rs) for summary data.
Data Request

Met with health plans and Medicaid for a consensus on the data request criteria and the data elements (along with their definitions)

• Claims from RI employers/contracts for RI residents billed by both RI hospitals and out-of-state hospitals

• One year of final, paid claims for covered services and covered members with specified dates of service and dates of payment

• Excluded interim claims, late charge claims and asked that multiple claims for a single stay should be chained into a single record

• Exclude claims where plan is secondary payer behind Medicare or other payer

• No patient names, social security numbers, patient account numbers or dates of birth except infants
Data Collection

We requested three files from each payer

1. Inpatient header file
2. Outpatient header file
3. Outpatient detail file

- The entire data file submission and validation process took about five months and included repeated submissions from most payers to achieve complete and accurate data.

- Health plan representatives participated extensively and cooperatively in both the data collection and data validation processes.

- No changes were made to any data without the plan’s express approval
Data Collection Challenges

• Minimal line-level detail for outpatient data – claims were rolled up into two or three lines
• Payer claims systems that substituted the revenue code for the procedure code
• Variation by payer in number of ICD-9 diagnosis and procedure codes
• Payers who used another entity to process certain types of claims, such as mental health claims
• Medicare data was not available directly from CMS
Data Validation Highlights

• Identifying non-hospital claims that should be excluded
• Identifying incomplete stays that should be combined or excluded
• Looking for anomalous or missing field values, such as negative dollars, extreme values, zero-allowed claims
• Checking for invalid ICD-9 codes, HCPCS codes, and revenue codes
• Checking totals between outpatient header file and outpatient detail file to ensure consistency
• Checking the number of procedure codes present in the outpatient line level file. We typically like to see HCPCS procedure codes on 95%-100% of the lines with rev codes on which procedures are expected.
• Looking for any claims outside the data request criteria
Final Baseline Dataset

- Final dataset included 73% of IP stays and about 62% of outpatient visits at the general hospitals in RI.
- Study did not include self-pay, no pay, workers’ compensation, TRICARE, self-insured plans not administered by BCBSRI or United, and out-of-state patients or plans.
Analyzing Utilization and Payment

- Emphasis was on robustness across methods and datasets
  - Compared results from different measurement methods
  - Minimal emphasis on small differences
- “Payment” = adjusted allowed payment, i.e., allowed amount plus any non-claim payments (such as settlements)
- Allowed amount = the “price” of the service, before third party liability and patient cost sharing
- Comments and suggestions were welcomed from stakeholders about how to compare payment levels accurately and fairly
- “Apples to apples” was the fundamental challenge
Tools for the Analysis

• Inpatient
  – Data was grouped by MS-DRG (adult medical-surgical stays only) and APR-DRG (all stays)
  – Assigned care categories based on groups of DRGs

• Outpatient
  – Data was grouped by APC and EAPG
  – Assigned reason for visit groupings based on hierarchy of revenue codes
  – Selected clinical vignettes (colonoscopy, chest pain)

• Estimated cost for both inpatient and outpatient using Medicare cost reports
Measures for Payment Comparison

- Casemix-adjusted payment per inpatient stay - MS-DRG & APR-DRG
- Inpatient payment per stay within certain groups of DRGs
- Inpatient payment per day (mental health only)
- Outpatient payment per visit - EAPG
- Outpatient payment per clinical vignette
- Payment relative to what Medicare would pay
- Pay-to-cost ratios
- Pay-to-charge ratios (within a given hospital only)
Findings: Dimensions of Variation

1. Substantial Variation Existed in Payments for Similar Care
   - Data showed this variation across all measures for both inpatient and outpatient

2. Commercial Plans Tended to Pay More than Medicaid, which Tended to Pay More than Medicare
   - Commercial payment high ranking holds true nationally as well

3. Commercial Plans Tended to Pay More to Lifespan and Care New England than to Other Hospitals
   - The five highest-paid hospitals all belonged to the two largest hospital systems

4. Inpatient Specialties Showed Similar Patterns of Variation
   - Specialties included maternity, mental health, orthopedics and oncology

5. Studies Elsewhere Found Even Wider Payment Variation
   - Compared our results with other studies in MA, RI and others
Findings: Factors Affecting Variation

6. Hospitals Varied Considerably in Costliness
   - This held true for both inpatient and outpatient services; cost was casemix or service mix adjusted

7. Higher Cost Hospitals Tended to be Paid More, Especially Care New England and Lifespan
   - This finding explored the correlation of cost to payment

8. The Limited Evidence on Quality Did Not Show a Direct Link with Payment
   - Used publicly available measures
Findings: Factors Affecting Variation

9. The Evidence Did Not Appear to Support a Consistent “Cost Shift” Hypothesis from Public to Commercial Payers
   – Did not consistently find that hospitals with lower public insurer payments had higher private insurer payments

10. The Concentrated Marketplace for Hospital Care Probably Affected Variation in Payment
    – RI market in the study period was dominated by two large insurers negotiating with two large hospital systems
Finding 1: Substantial Variation Existed in Payments for Similar Care - Inpatient

Chart 3.1.1
Considerable Variation in Inpatient Payment Levels

Panel A: Payment Per Stay, All Care Categories, Casemix Adjusted (Statewide Average = 1.00)
Panel B: Payment Relative to Medicare, Adult Medical/Surgical Care (Medicare = 1.00)
Panel C: Pay to Cost, All Care Categories (Average = 99%)

Pay-to-cost ratios exclude payments and cost for direct medical education.

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Finding 1: Substantial Variation Existed in Payments for Similar Care - Outpatient

Chart 3.1.2
Considerable Variation in Outpatient Payment Levels

Panel A: Payment per Visit
(EAPG Service Adjustment; RI Average = 1.00)

Panel B: Payment Relative to Medicare
(Medicare = 1.00)

Panel C: Pay to Cost
(RI Average = 100%)

| Low hosp | 0.56 | 0.54 | 0.67 | 0.86 | 1.00 | 0.89 | 0.79 | 0.88 | 0.98 | 56% | 66% | 66% | 72% | 106% |
| High hosp | 1.19 | 0.81 | 1.25 | 1.48 | 1.00 | 1.62 | 0.96 | 1.83 | 2.16 | 87% | 109% | 76% | 118% | 135% |
| Average | 0.88 | 0.64 | 1.02 | 1.09 | 1.00 | 1.07 | 0.84 | 1.41 | 1.33 | 81% | 89% | 67% | 101% | 123% |

Panel A does not show Medicare FFS data because claim-level data were unavailable. Pay-to-cost ratios exclude payments and cost for direct medical education.
Finding 8: The Limited Evidence on Quality Did Not Show a Direct Link with Payment

Chart 4.3.1
Commercial Payment and Patient Satisfaction

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<th>Hospital</th>
<th>Pt sat scores</th>
<th>Payment</th>
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<tbody>
<tr>
<td>Lndmrk</td>
<td>52%</td>
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<td>St J</td>
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<td>RIH</td>
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<tr>
<td>So Co</td>
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</tr>
</tbody>
</table>

Hospitals are ranked in increasing order of the quality measure. Payment = commercial payment, casemix-adjusted using APR-DRGs.
Finding 10: The Concentrated Marketplace for Hospital Care Probably Affected Variation in Payment

Chart 4.5.1
The Market for Hospital Care Was Highly Concentrated

The Herfindahl-Hirschman Index is a common measure of market concentration. Interpretations of "moderately concentrated" and "highly concentrated" are as defined by the U.S. Department of Justice. See Appendix Section B.6 for more information.
For Further Information

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