Incentives for Hospital Performance:
The Leapfrog Hospital Rewards Program™

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Presentation Topics

- Emergence of Value-Based Purchasing (VBP)
- Opportunity for Hospital Quality & Value Improvements
- Aligning Incentives Works
- Tools for VBP:
  - Performance Measures: Leapfrog Hospital Insights
  - Rewards: Leapfrog Hospital Rewards Program™
Current Landscape

• Well-documented cost and quality problems (IOM, RAND, Commonwealth Fund, etc.)
• Poor quality care costs a typical employer between $1,900 and $2,250 per covered employee year.¹
  – For a 150 employee company – loss of $200,000/year
  – For a 30,000 employee company – loss of $40 MM/year

¹Midwest Business Group on Health/Juran Institute 2003
Current Landscape

- Increasing focus on fixing the “toxic payment system” (high quality ➔ lower cost)
- Numerous private sector initiatives (269 listed in Leapfrog Compendium)
- President’s Executive Order, August 2006
- Secretary Leavitt’s Value-Driven Health Care Initiative
  - Launched November 2006
  - 150 companies have already pledged their support
- Deficit Reduction Act – VBP in Medicare
Pillars of Value-Based Purchasing

- Standard Measures and Practices
- Transparency
- Incentives and Rewards
The Opportunity for Improvement
There is significant variance in hospital performance.

Sample LHRP Quality and Efficiency Performance (AMI)
The Top Performing Hospitals Show What is Achievable

Sample LHRP Quality and Efficiency Performance (AMI)

Quality Score

Efficiency Score

Top 25% in Quality and Efficiency
What If All Hospitals Improved?

Sample LHRP Quality and Efficiency Performance (AMI)
Aligning Incentives Works
Aligning Incentives:
CMS-Premier Hospital Quality Incentive Demonstration

• Three year initiative linking hospital payment to measured performance
• > 260 Premier hospitals participating
• Five clinical areas
  – Acute Myocardial Infarction *
  – Congestive Heart Failure *
  – Coronary Artery Bypass Graft *
  – Hip and Knee Replacement
  – Community Acquired Pneumonia *
• Hospitals in top two deciles of performance for each clinical area earn additional payments

* Clinical area included in the Leapfrog Hospital Rewards Program.
Early Evidence: Aligning Incentives Works

- Quality improvement across all hospitals and clinical areas
- AMI alone – 235 “lives saved”
  - Based on evidence-based analysis
- Top performers represented large and small facilities across the country.
  - 10% of top performers in AMI, 29% within CAP, and 17% within HF had < 100 beds. No hospital with less than 100 beds performed CABG procedures but 26% of CABG top performers were in the next bedsize grouping of between 100 to 200 beds.
Quality Improvements: Year 1

HQID Year 1: Improvement in Composite Quality Score by Clinical Area
First Data Quarter to Fourth Data Quarter - Final Data

AMI
87.43% 90.81%
4Q03 3Q04

CABG
84.94% 89.71%
4Q03 3Q04

CAP
69.37% 79.17%
4Q03 3Q04

HF
64.58% 74.19%
4Q03 3Q04

HK
84.93% 90.14%
4Q03 3Q04
Leapfrog Hospital Rewards Program Mission

- The CMS/Premier demonstration shows that hospitals respond to performance incentives
- Make it easy for the private sector to engage in value-based purchasing
- Focus on clinical areas relevant to the working age population
- Win-win for hospitals, payers, and patients.
  - Financial bonuses based on shared savings
  - Advance purchasers’ and consumers’ ability to make informed health care decisions
Tools for VBP: Measurement & Rewards
Leapfrog Hospital Insights: Hospital Performance Measurement for LHRP

- Focuses on five clinical areas:
  - 33% of commercial inpatient admissions
  - 20% of commercial inpatient spend
- Opportunity for quality improvement
- Actuarial work shows potential dollar savings as quality improves

### Top 10 Clinical Focus Groups

<table>
<thead>
<tr>
<th>Clinical Focus Group</th>
<th>Total Potential Opportunity ¹</th>
<th>Total Payments ²</th>
<th>NQF-approved measures?</th>
</tr>
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<tbody>
<tr>
<td>CORONARY ARTERY BYPASS GRAFT</td>
<td>$62,666,869</td>
<td>$691,772,784</td>
<td>Yes</td>
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<tr>
<td>PERCUTANEOUS CORONARY INTERVENTION</td>
<td>$58,157,873</td>
<td>$717,954,275</td>
<td>Yes</td>
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<tr>
<td>ACUTE MYOCARDIAL INFARCTION</td>
<td>$53,616,015</td>
<td>$607,227,166</td>
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<tr>
<td>COLON SURGERY</td>
<td>$38,389,673</td>
<td>$396,004,245</td>
<td>Yes</td>
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<tr>
<td>HEART FAILURE</td>
<td>$34,983,226</td>
<td>$224,919,006</td>
<td>Yes</td>
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<tr>
<td>COMMUNITY ACQUIRED PNEUMONIA</td>
<td>$29,536,322</td>
<td>$355,686,956</td>
<td>Yes</td>
</tr>
<tr>
<td>OTHER CARDIAC SURGERY</td>
<td>$25,767,191</td>
<td>$211,578,764</td>
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</tr>
<tr>
<td>DELIVERY AND NEWBORNS</td>
<td>$23,368,721</td>
<td>$1,781,273,763</td>
<td>Yes</td>
</tr>
<tr>
<td>VASCULAR SURGERY</td>
<td>$16,412,194</td>
<td>$133,287,531</td>
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<tr>
<td>SPINE - OTHER</td>
<td>$12,925,843</td>
<td>$422,595,301</td>
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</table>

¹ Total Payments x Readmission Rate
² Premier Commercial Payment data (10/2001 - 9/2002)
What is Leapfrog Hospital Insights?

• Leapfrog Hospital Insights is The Leapfrog Group’s new, most comprehensive voluntary hospital public reporting initiative

• Expands health care transparency by gathering hospital quality & efficiency information

• Provides hospitals with data feedback that enables hospital performance comparisons & guides future improvement efforts

• Uses nationally accepted and standardized measures
Leapfrog Hospital Insights

Measures

Quality Measures:
- Leapfrog Survey + JCAHO core measures
- Weighted & Rolled-up in an overall quality score, by clinical area

Resource-Based Measure of Efficiency:
- Average actual LOS / case, broken down by routine care days and specialty care days
- Severity adjusted based on risk factors
- Re-admission rate to same hospital, by clinical condition, within 14 days

Overall Performance
- Nexus of Quality & Efficiency
Hospital Ranking

• Leapfrog places hospitals into quality and efficiency tiers, with the best hospitals in Tier 1.
  – Tier 1: The top 25% of hospitals
  – Tier 2: Hospitals below the top 25%, but with low confidence that the difference from Tier 1 is significant
  – Tier 3: Hospitals below the top 25%, and with some confidence that the difference from Tier 1 is significant
  – Tier 4: Hospitals below the top 25%, and with high confidence that the difference from Tier 1 is significant

• Once a hospital is put into tiers for quality and efficiency, the performance group is determined by the lower of the two tiers. For example, a hospital that is Tier 2 for quality and Tier 3 for efficiency is a Performance Group 3 hospital.
Hospitals Arrayed in Four Groups
Example: Pneumonia

![Graph showing hospitals arrayed in four groups with quality and resource-based efficiency axes.](image-url)
Leapfrog Hospital Rewards Program™: A Tool for Aligning Incentives
Savings Analysis - Results

<table>
<thead>
<tr>
<th></th>
<th>AMI</th>
<th>CABG</th>
<th>CAP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># hospitals</td>
<td>% of Total</td>
<td>Avg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hospitals</td>
<td>Payment</td>
</tr>
<tr>
<td>Cohort 1</td>
<td>9</td>
<td>8.2%</td>
<td>$13,631</td>
</tr>
<tr>
<td>Cohort 2</td>
<td>56</td>
<td>50.9%</td>
<td>$18,699</td>
</tr>
<tr>
<td>Cohort 3</td>
<td>14</td>
<td>12.7%</td>
<td>$23,372</td>
</tr>
<tr>
<td>Cohort 4</td>
<td>31</td>
<td>28.2%</td>
<td>$25,700</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>110</td>
<td>100.0%</td>
<td>$20,852</td>
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Cohort 1 “Top Performance” Hospitals are Top Quadrant in Efficiency and Effectiveness

### PCI

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<thead>
<tr>
<th></th>
<th># hospitals</th>
<th>% of Total Hospitals</th>
<th>Avg Payment</th>
<th>% of Grand Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1</td>
<td>3</td>
<td>2.7%</td>
<td>$11,050</td>
<td>73%</td>
</tr>
<tr>
<td>Cohort 2</td>
<td>72</td>
<td>64.9%</td>
<td>$12,438</td>
<td>82%</td>
</tr>
<tr>
<td>Cohort 3</td>
<td>9</td>
<td>8.1%</td>
<td>$17,641</td>
<td>116%</td>
</tr>
<tr>
<td>Cohort 4</td>
<td>27</td>
<td>24.3%</td>
<td>$20,190</td>
<td>133%</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>111</td>
<td>100.0%</td>
<td>$15,170</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Deliveries / Newborn

<table>
<thead>
<tr>
<th></th>
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<th>% of Total Hospitals</th>
<th>Avg Payment</th>
<th>% of Grand Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1</td>
<td>17</td>
<td>6.9%</td>
<td>$3,071</td>
<td>75%</td>
</tr>
<tr>
<td>Cohort 2</td>
<td>137</td>
<td>55.7%</td>
<td>$3,708</td>
<td>90%</td>
</tr>
<tr>
<td>Cohort 3</td>
<td>28</td>
<td>11.4%</td>
<td>$4,082</td>
<td>99%</td>
</tr>
<tr>
<td>Cohort 4</td>
<td>64</td>
<td>26.0%</td>
<td>$5,048</td>
<td>123%</td>
</tr>
<tr>
<td>Grand Mean</td>
<td>246</td>
<td>100.0%</td>
<td>$4,113</td>
<td>100%</td>
</tr>
</tbody>
</table>

\(^1\) Cohort 1 "Top Performance" Hospitals are Top Quadrant in Efficiency and Effectiveness
### Savings Analysis - Results

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<tr>
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<td>110</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Cohort 1 "Top Performance" Hospitals are Top Quadrant in Efficiency and Effectiveness.
National Program Rewards Principles

**Principle 1:** Bonuses to hospitals must be based on shared savings that accrue to the purchaser/payer

**Principle 2:** All top LHRP Performance Group hospitals should receive bonus payments

**Principle 3:** Hospitals demonstrating sustained improvement should receive bonus payments

**Principle 4:** Patients should be encouraged to go to Performance Group 1 & Performance Group 2 hospitals through benefit design

**Principle 5:** Performance Group 1 hospitals and hospitals showing sustained improvement should be publicly recognized as well as financially rewarded

**Principle 6:** Rewards should be calculated every 6 months

*Specific rewards methodologies can be tailored to local market needs.*
LHRP Rewards Structure

- Direct financial rewards based on shared savings model — “rewards pool”
- Program sponsors may contribute additional dollars to rewards pool
- Bonus payments are derived from a percentage of savings accrued (50% recommended)
- Savings are calculated by comparing hospital performance from one period to the next (6 month cycle) (weighted for volume)
LHRP Rewards Structure (cont’d)

- Savings calculated separately for each clinical area
- Savings calculated separately for each payer, using payer-specific cost data
- Different hospital LHRP savings calculations and rewards methodologies
  - Per diem reimbursement
  - Case rate/DRG payments (under development)
Other Types of Rewards

• Rewards Principles also allow for encourage non-financial and indirect financial rewards for hospital performance
• Examples of non-financial rewards:
  – public recognition in your community (media attention, awarding certificates/plaques, etc.)
• Examples of indirect financial rewards:
  – shifting market share to high performing hospitals; improved efficiency could yield greater profitability over time
## Summary

<table>
<thead>
<tr>
<th>Admission Type</th>
<th>Potential for Lives Saved</th>
<th>Potential for Avoided Readmissions</th>
<th>Potential for $$ Saved (billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMI</td>
<td>33,832</td>
<td>24,838</td>
<td>$5.596</td>
</tr>
<tr>
<td>CABG</td>
<td>4,089</td>
<td>9,246</td>
<td>$3.962</td>
</tr>
<tr>
<td>PCI</td>
<td>2,800</td>
<td>15,203</td>
<td>$2.795</td>
</tr>
<tr>
<td>CAP</td>
<td>2,673</td>
<td>48,962</td>
<td>$2.039</td>
</tr>
<tr>
<td>Newborn Delivery</td>
<td>12,749</td>
<td>46,674</td>
<td>$4.142</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>63,953</strong></td>
<td><strong>144,923</strong></td>
<td><strong>$18.536</strong></td>
</tr>
</tbody>
</table>

Lives saved total includes 7,810 lives saved from ICU staffing
Estimate opportunity for improvement with Leapfrog’s new ROI Estimator

Thank you for your interest in the Leapfrog Hospital Rewards Program (LHRP). Employers and health plans participating in the LHRP lead the way in motivating hospitals to deliver high quality, efficient hospital care by rewarding hospitals for improvements and excellence in these areas.

The LHRP ROI Estimator is intended for use by employers and health plans interested in implementing the Leapfrog Hospital Rewards Program. This tool can be used to estimate expected costs of program participation and potential financial benefits.

IMPORTANT:
- The ROI Estimator was developed to provide only an estimation of results; the results generated by the LHRP ROI Estimator are not guaranteed. Actual ROI will vary by participant and is dependent upon many factors in the specific market area. In addition, the ROI Estimator does not incorporate economic benefits from reduced absenteeism and improved productivity at work.
- The ROI Estimator is not appropriate in environments in which hospitals are reimbursed on a cap-rate or DRG basis. Please contact The Leapfrog Group directly to discuss application of the LHRP in a case rate setting.

The ROI Estimator is intended to collect data that will help Leapfrog calculate and interpret your expected return on investment for the LHRP. To obtain the results of this calculation, you will need to complete this tool and submit the data to The Leapfrog Group. Leapfrog will contact you soon after you submit your data to review your results with you.
Summary

• Growing Importance of Value-Based Purchasing
• Hospital performance improvement can be motivated through VBP
• Design of the Leapfrog Hospital Rewards Program
  – National measure set
  – Methodology customizable to market needs