How Everyone Can Win by Combining P4P with Gainsharing to Lower Healthcare Costs & Improve Profitability

THE SECOND NATIONAL PAY FOR PERFORMANCE SUMMIT

February 14-16, 2007
Agenda

1. Does *high quality, efficient care* cost less to deliver?

2. *Gainsharing* can provide incentives for clinical improvement

3. *Pay 4 Performance* and hospitals

4. *Combining* Gainsharing and Pay 4 Performance

5. *Trust* is the most important Success Factor
Does High Quality, Efficient Care Cost Less To Deliver?
Does High Quality, Efficient Care Cost Less to Deliver?

• **The Premier/CMS Demonstration** showed that as much as $1.4 billion in hospital costs could have been saved in 2004 for selected patient problems

• **The published study results of John Wennberg, MD,** demonstrate that higher quality clinical outcomes are positively correlated with lower case costs

• **CareScience comparisons of performance** across high frequency DRGs indicate the potential for a 20%+ reduction in case costs along with comparable reductions in severity-adjusted mortality rates
Improving Clinical Outcomes Requires The Design of Standardized Protocols/Pathways and Physician Adherence to Them.

1. Pick a patient condition that is a high priority for performance improvement -- clinical and financial
2. Select a national or hospital-based clinical protocol that reflects evidence-based best practices for that patient condition
3. Identify related opportunities to streamline hospital departmental performance
4. Define relevant outcome measures of clinical and financial performance
5. Compare adherence and outcomes for your hospital with peer group benchmarks, adjusted for severity
6. Set performance targets for your hospital and customize the clinical protocol
7. Measure and monitor performance against process and outcome targets
8. Compare outcomes for cases that adhere to the protocol with those that do not
9. Compare outcomes among physicians who treat the condition and regularly share comparative information with those physicians
10. Follow up with selected physicians to reduce variability in practices and outcomes
Premier, Care Science, Cerner and Other Vendors Are Offering Hospitals Computerized Information Systems That Support Proactive Management Of The Care Process

- **Severity-adjusted clinical outcome data** permits you to examine and equitably compare clinical outcomes across physicians, clinical specialties and peer hospitals.

- The use of **causal hypotheses helps you identify root causes** in the clinical process so that you can model alternative solutions.

- These tools support the active involvement, understanding and commitment of the physicians involved in the care process to **redesign the clinical process** to produce:
  - Better **clinical outcomes**
  - Lower **costs per discharge**.
## Possible Inpatient Cost Savings At CGH For Nine Different Kinds Of Patient Conditions Total $6 Million Per Year

### Possible Performance Improvements Based On Top Quartile Of Premier Hospitals As Target

<table>
<thead>
<tr>
<th>PATIENT CONDITION</th>
<th>DISCHGS</th>
<th>ACTUAL</th>
<th>TARGET*</th>
<th>IMPROVEMENT</th>
<th>ACTUAL</th>
<th>TARGET*</th>
<th>IMPROVEMENT</th>
<th>TOTAL COST SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEDICAL (NON-SURGICAL) CONDITIONS</strong></td>
<td>3,278</td>
<td>7.5%</td>
<td>5.8%</td>
<td>23%</td>
<td>$6,395</td>
<td>$4,675</td>
<td>13%</td>
<td>$2,369,971</td>
</tr>
<tr>
<td>1. Acute Myocardial Infarction (including)</td>
<td>940</td>
<td>8.9%</td>
<td>7.2%</td>
<td>19%</td>
<td>$6,890</td>
<td>$6,081</td>
<td>12%</td>
<td>$760,537</td>
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<tr>
<td>2. Congestive Heart Failure</td>
<td>966</td>
<td>4.4%</td>
<td>3.0%</td>
<td>32%</td>
<td>$4,822</td>
<td>$4,198</td>
<td>13%</td>
<td>$596,963</td>
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<tr>
<td>3. Community Acquired Pneumonia</td>
<td>1,003</td>
<td>8.7%</td>
<td>7.1%</td>
<td>18%</td>
<td>$4,837</td>
<td>$4,134</td>
<td>15%</td>
<td>$704,919</td>
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<tr>
<td>4. Stroke</td>
<td>379</td>
<td>8.3%</td>
<td>6.8%</td>
<td>30%</td>
<td>$4,605</td>
<td>$3,820</td>
<td>17%</td>
<td>$297,563</td>
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<tr>
<td><strong>SURGICAL CONDITIONS</strong></td>
<td>1,288</td>
<td>1.8%</td>
<td>0.7%</td>
<td>61%</td>
<td>$16,361</td>
<td>$13,974</td>
<td>15%</td>
<td>$3,075,134</td>
</tr>
<tr>
<td>5. Coronary Artery Bypass Graft (CABG)</td>
<td>647</td>
<td>3.3%</td>
<td>1.4%</td>
<td>58%</td>
<td>$22,493</td>
<td>$19,472</td>
<td>13%</td>
<td>$1,964,632</td>
</tr>
<tr>
<td>6. Hip and Knee Replacement</td>
<td>334</td>
<td>0.6%</td>
<td>0.0%</td>
<td>100%</td>
<td>$9,783</td>
<td>$8,787</td>
<td>10%</td>
<td>$332,703</td>
</tr>
<tr>
<td>7. Spine Surgery: Back &amp; Neck Procedures, Except Dorsal and Lumbar Fusion</td>
<td>241</td>
<td>0.0%</td>
<td>0.0%</td>
<td>N/A</td>
<td>$8,220</td>
<td>$6,708</td>
<td>18%</td>
<td>$384,376</td>
</tr>
<tr>
<td>8. Spine Surgery: Dorsal &amp; Lumbar Fusion Procedure, Except For Curvature of Back</td>
<td>66</td>
<td>0.0%</td>
<td>0.0%</td>
<td>N/A</td>
<td>$19,272</td>
<td>$12,856</td>
<td>33%</td>
<td>$423,423</td>
</tr>
<tr>
<td><strong>OBSTETRICS CONDITIONS</strong></td>
<td>2,112</td>
<td>0.4%</td>
<td>0.2%</td>
<td>50%</td>
<td>$3,996</td>
<td>$3,709</td>
<td>7%</td>
<td>$605,436</td>
</tr>
<tr>
<td>9. Pregnancy and Related Conditions (Including Newborns)</td>
<td>2,112</td>
<td>0.7%</td>
<td>0.2%</td>
<td>71%</td>
<td>$3,996</td>
<td>$3,709</td>
<td>7%</td>
<td>$605,436</td>
</tr>
<tr>
<td><strong>TOTAL 9 BENCHMARK CONDITIONS</strong></td>
<td>6,578</td>
<td>4.1%</td>
<td>3.0%</td>
<td>27%</td>
<td>$7,067</td>
<td>$6,163</td>
<td>13%</td>
<td>$8,041,541</td>
</tr>
</tbody>
</table>

*Targets set at top quartile of Premier Perspective online hospitals
Note: Data have been severity adjusted by Premier
Source: Premier/Clinical Performance Reports, CGH Administration, and Reynolds and Company

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Gainsharing Can Provide Incentives for Clinical Improvement
Generally, Physicians are Disinclined to Participate In Hospitals’ Clinical Process Improvement Efforts

- Most physicians in private practice see their *practice incomes* threatened by purchasers’ tightening payment policies

- Much of their attention is focused on *maximizing revenue* in their own practices by treating larger volumes of patients and adding new revenue sources

- **Hospitals**, on the other hand, have opportunities to improve their clinical outcomes (mortality, complication and readmission rates) while reducing resource consumption patterns if their physicians will take an active role

- Physicians are *understandably reluctant*, however, to take time away from their practices to help re-design hospital-based care processes and dilute their professional autonomy when they do not receive any compensation
Physicians and hospitals face five related issues:

- **Affordability:** Increasing operating costs and malpractice practice insurance premiums
- **Clinical quality** of outcomes: Mortality and Complication rates
- **Payment methods** that often don’t cover cost increases
- **Declining profitability** of hospital and physician services
- **CMS** is moving to value-based purchasing policies

**Clinical Gainsharing can produce synergistic results:**

- **Hospital benefits:**
  - Improved outcomes, such as mortality and readmission rates, that differentiate services
  - Greater coding accuracy
  - Lower cost per case
  - Increase in market share from differentiated services

- **Physician benefits:**
  - A share of realized hospital cost savings
  - Increasing reputation for high quality results
  - Better market positioning and increased volume
A Legally Permissible Gainsharing Arrangement Should Satisfy Four Requirements

- **The Stark law** prohibits a physician from making referrals for designated health services, for which payment may be made under the Medicare or Medicaid program, to entities with which the physician has a financial relationship. Exceptions are enforced by CMS.

- **The Anti-Kickback statute** makes it a felony for persons knowingly and willfully to solicit, receive, offer or pay any remuneration to induce a person to refer patients for Medicare or Medicaid reimbursed services. A facts and circumstances test is enforced by the OIG.

- **The Civil Monetary Penalty statute** prohibits a hospital from knowingly making a payment to a physician as an inducement to reduce or limit services to Medicare or Medicaid beneficiaries. Enforced by the OIG.

- **Private Benefit/Inurement**: to maintain tax-exempt status, a tax-exempt hospital must avoid permitting private inurement to a physician. Enforced by IRS.

- **Health Plan Sponsorship of a Gainsharing Program**, however, avoids issues of compliance with the Civil Monetary Penalty statute.
The Launch of A Clinical Gain Sharing Program Focuses on Six Tasks

1. Agree on Focus, Scope and Performance Improvement Targets
   - Select:
     - Patient conditions
     - Outcomes to be measured and rewarded
   - Demonstrate provisions to meet legal requirements

2. Identify Planned Changes in Clinical Practices

3. Identify Planned Changes in Hospital Operations

4. Agree on:
   - Improvement potential for:
     - Clinical Outcomes
     - Case Costs
     - Activities of physicians
   - Set formulas for sharing cost savings
   - Assure that data system can measure + monitor performance variables

5. Deliver Services
   - Measure Performance
   - Report quarterly
   - Discuss results
   - Fine tune processes

6. Measure clinical and financial performance
   - Assess results
   - Distribute cost savings
   - Report on outcomes

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This Approach Calls for Distributing Cost Savings to Participating Physicians Only if They Simultaneously Improve Clinical Outcomes

- Using baseline year values for relevant measures of clinical and direct cost performance for the selected patient condition, targets for improvement in these outcome measures are set in conjunction with evidence-based changes in the clinical and operational care process.

- During the implementation year, dollars of cost savings associated with the targeted patient condition flow into a pool which will be shared proportionately between the hospital and participating physicians.

- Prior to implementation, the definition of fair market value for payments to the physicians will be agreed upon; this definition may involve use of a cap.

- Interim clinical and financial results are reviewed quarterly with participating physicians, and process design elements are fine-tuned to improve outcomes.

- At the end of the implementation year changes in clinical and case cost outcomes are measured, and cost savings that are correlated with improvements in clinical outcome measures are distributed.

- The design and implementation activities go on for three years for each targeted patient condition to give the team sufficient time to get up the learning curve with respect to clinical effectiveness and economic efficiency.
This Approach to Improving Clinical and Cost Performance Focuses on Targeting Severity-Adjusted Outcomes for Process Redesign.

- **Patient-centered problems and opportunities to be addressed:**
  - Clinical outcomes, such as mortality, complications and readmissions
  - Operational inefficiencies, such as discharge planning
  - LOS and Case Costs

- **Likely team members:**
  - High volume physicians and Chief of Service
  - Relevant diagnostics/therapeutics Chiefs
  - Nurse/Case Manager
  - Chief Medical Officer
  - Chief Information Officer
  - Senior Managers, as necessary

- **Care process characteristics** to review for underlying problems and opportunities:
  - LOS by procedure and admission source/discharge destination
  - Cases by kinds and frequency of complications
  - Cases by patient care unit
  - Cases by timing and opportunities of diagnostics/therapeutics
  - Physician ordering patterns for diagnostics and therapeutics
  - Physician LOS patterns by procedure.

- **Design changes** to improve clinical effectiveness and efficiency

- Methods for **monitoring adherence** to process design and related outcomes
Pay 4 Performance and Hospitals
Pay for Performance Demonstrations Have Called for Public and Private Purchasers to Pay More to Those Providers Who Deliver Better Practices and Outcomes

- Healthcare opinion leaders view Pay for Performance as a way to reward quality and as a strategy to increase efficiency in healthcare delivery
- Many purchasers accept the theory that better clinical outcomes are correlated with lower case costs
- Pay for Performance programs for physicians tend to focus on office-based care for patients with chronic conditions
- Pay for performance programs for hospitals have tended to focus on adherence to best practices for selected inpatient conditions, but this focus is broadening
Pay for Performance Programs for Hospitals Are Just Getting Underway

- There are over 110 P4P Programs in the USA
- They involve *Physicians, Hospitals and Payers*
  - Most of the Programs involve *Physicians and Payers*
  - Some of the Programs involve *Hospitals and Payers*
  - *None* involve Physicians, Hospitals and Payers in sharing risks and rewards
- The *major players in P4P for hospitals* to-date include:
  - CMS and Premier
  - The Leapfrog Group
**The Leapfrog Group:**
*National Incentive & Reward Program*

### Hospital Rewards Program: Efficiency and Effectiveness

#### Comparison of Leapfrog Hospital Rewards Program & CMS-Premier

<table>
<thead>
<tr>
<th>E2Reward Program</th>
<th>CMS/Premier Demonstration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conditions</strong></td>
<td></td>
</tr>
<tr>
<td>Coronary Artery Bypass Graft (CABG), Acute Myocardial Infarction (AMI), Percutaneous Coronary Intervention (PCI), Community Acquired Pneumonia (CAP), Pre/Newborn</td>
<td>CABG, AMI, HF, CAP, Hip/Knee</td>
</tr>
<tr>
<td><strong>Effectiveness Measures</strong></td>
<td>NQF Hospital Care Measures + Leapfrog</td>
</tr>
<tr>
<td><strong>Efficiency Measures</strong></td>
<td>Risk-adjusted and regional price adjusted total cost of condition</td>
</tr>
<tr>
<td><strong>Measure Reporting</strong></td>
<td>JCAHO ORYX Vendors, Leapfrog Hospital Quality and Safety Survey</td>
</tr>
<tr>
<td><strong>Hospitals invited</strong></td>
<td>All contracted hospitals</td>
</tr>
<tr>
<td><strong>Basis of Rewards</strong></td>
<td>Hospitals ranked in four cohorts based on performance along two dimensions: Effectiveness &amp; Efficiency</td>
</tr>
<tr>
<td><strong>Size of Rewards</strong></td>
<td>Hospitals in top E+2 quartile can receive at least 2% direct financial rewards (DFR) &amp; incremental market share. Hospitals in other cohorts also get a DFR for improving</td>
</tr>
</tbody>
</table>
The Leapfrog Group’s Reward Program Principles

- **Top hospital performers** will get bonuses and the expectation of increased market share through patient shift (co-pay/co-insurance differentials)

- **Other hospitals** will get bonuses when they improve performance

- **Rewards for top hospital performers** will kick in after second reporting period if they are still in the top cohort

- **Rewards for all others** will kick in after second consecutive reporting of sustained improvement
Combining Gainsharing and Pay 4 Performance
The Gainsharing and Pay for Performance Concepts Grew Out of Two Different Initiatives

- The **Gainsharing concept** came out of a Medicare Demonstration Project which paid a global rate for physician and hospital services to CABG patients.

- The **Pay for Performance concept** is a response to the Institute of Medicine’s recommendation that payment policies should be realigned to promote quality care.
Gainsharing and Pay for Performance
Both Focus on Improving Clinical Outcomes

- The **Gainsharing** concept calls for physicians and hospitals to share the financial benefits of:
  - Redesigning the *care process* to be more effective
  - Improving *clinical outcomes* and patient satisfaction
  - Producing *cost savings* by being more efficient

- The **Pay for Performance** concept as applied to hospitals calls for purchasers to reward hospitals that are effective in delivering high quality care. To-date:
  - The focus has been on *measuring adherence* to best practices in the care process
  - Offering *non-recurring financial rewards* for making investments in clinically related capabilities and reporting on compliance
Flow Chart for Launching a Gainsharing Demonstration

- Agree on Focus, Scope and Performance Improvement Targets
- Select:  
  - Patient conditions
  - Resources to be conserved
  - Outcomes to be measured and rewarded

- Identify Planned Changes in Clinical Practices
- Identify Planned Changes in Hospital Operations

- Approach possible participants and discuss:  
  - Concept for combined demonstrations
  - Likely opportunities for performance improvements
  - Potential benefits
  - Expected roles of:  
    - Physicians
    - Hospitals
    - Insurer

- Develop Memorandum of Understanding  
  - Spell out specifics of demonstration
  - Pin down Payment Contracts
  - Address legal requirements
  - Fine Tune data systems and infrastructure
  - Sign contracts

- Monitor Performance  
  - Monitor impact on each participant’s bottom line

- Deliver Services  
  - Measure Performance
  - Report quarterly
  - Fine tune process

- Set formulas for sharing cost savings
- Assure that data system can measure + monitor performance
- Demonstrate provisions to meet legal requirements
- Settle up on P4P responsibilities, performances
- Distribute cost savings

Flow Chart for Adding a P4P Component to the Demonstration

- Measure clinical and financial performance
- Assess results
- Distribute cost savings

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This Incentive Cycle for A Hospital, Its Physicians & A Purchaser Was Used to Simulate the Effects of a Combined Program

Purchaser offers hospital incentive for improvement ("P4P")
Key issues:
- What performance changes are sought?
- What is the potential size of the incentive?
- What metrics are used?
- How is the incentive calculated?
- What is the probability that the hospital will earn the incentive?

Hospital makes administrative changes and investments to foster improvement.
Key issues:
- What kinds of investments?
- What are the sizes of these investments?
- What benefits do the investments have for the hospital besides earning incentives?

Hospital performance improves?
Key issues:
- What is the level of improvement, and how does it correlate to the size of incentive (at both the hospital and staff level)?

If the hospital fails to improve, or does not receive adequate rewards to sustain commitment, the process will stall. If medical staff does not receive adequate rewards, the process will stall.

Purchaser pays reward to hospital.
Key issue:
- What is the size of the reward?
- What is duration of reward?

Hospital pays reward to medical staff.
Key issue:
- What is the size of the reward?
- What is duration of reward?

Are the economic incentives adequately aligned so that the cycle is self-sustaining?

YES
NO
## List of Variables in Our Combined Model

<table>
<thead>
<tr>
<th>3-year rewards and gain-sharing initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hospital with [a] annual admissions for DRG 109 (CABG), with a growth rate of [ad]%</td>
</tr>
<tr>
<td>2. At the outset of the project (Year 0), the hospital's average payment is $[b]$ for a DRG 109 admission, and incurs $[c]$ in costs.</td>
</tr>
<tr>
<td>3. Hospital must invest [d] in each of the three years of the initiative. The hospital deducts this amount before any gain-sharing awards are calculated.</td>
</tr>
<tr>
<td>4. Annual collateral benefits to the hospital from the quality investment are $[z]$.</td>
</tr>
<tr>
<td>5. Physicians must “invest” [e] in each of the three years of the initiative, representing the opportunity cost of implementation.</td>
</tr>
<tr>
<td>6. Physicians have an [f] probability of meeting quality criteria in the first year, reducing by [g] each year thereafter.</td>
</tr>
<tr>
<td>7. The discount rate is [h].</td>
</tr>
<tr>
<td>8. If the physicians meet the quality criteria, the improvement in the hospital’s (Leapfrog) quality score is from [q] to [r]%, with [s] being the most likely value [triangular distribution]. If the physicians fail to meet the quality criteria, the improvement in the hospital’s quality score is from [t] to [u]%, with [v] being the most likely value</td>
</tr>
<tr>
<td>9. For each 1% improvement in the quality score, the hospital’s per admission costs are reduced between [i]% and [j]% (uniform distribution).</td>
</tr>
<tr>
<td>10. For purposes of physician ROI calculation, hospital contributions to the departments count as [ac]% of direct rewards to physicians.</td>
</tr>
<tr>
<td>11. In the year after any per case cost reductions are achieved, the payer’s per case payment to the hospital is reduced by [p]% of the amount of the per case cost reduction.</td>
</tr>
<tr>
<td>12. If the physicians achieve their targets, the hospital shares [o]% of the cost savings from baseline (after annual implementation costs) with the physicians. Otherwise, the hospital contributes [o]% of the savings to the department.</td>
</tr>
</tbody>
</table>
Combined P4P and Clinical Gain Sharing Program that Enables Hospital to Share Savings with Participating Physicians While Generating Financial Benefit to the Purchaser

CABG Example for 500 Cases

Payment/case
$26,000
Cost/case
$25,000
$22,000

Start Finish Time
1st Yr 2nd Yr 3rd Yr

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Financial Benefits to Key Players

Hospital Cumulative Net Value (Undiscounted)

Net Present Value: $2.0 Million

Physician Cumulative Net Value (Undiscounted)

Net Present Value: $0.7 Million

Payer Cumulative Net Value (Undiscounted)

Net Present Value: $8.3 Million
Changes in Quality, Cost per Case & Payment Rate

<table>
<thead>
<tr>
<th>% Improvement in Quality by Year</th>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00%</td>
<td>2.50%</td>
<td>2.51%</td>
<td>2.49%</td>
<td>0.00%</td>
<td>0.00%</td>
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<table>
<thead>
<tr>
<th>Hospital Cost per Admission</th>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<td></td>
<td>$25,000</td>
<td>$24,061</td>
<td>$23,154</td>
<td>$22,287</td>
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<table>
<thead>
<tr>
<th>Payment per Admission</th>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
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<tr>
<td></td>
<td>$26,000</td>
<td>$26,000</td>
<td>$25,268</td>
<td>$24,553</td>
<td>$23,863</td>
<td>$23,863</td>
</tr>
</tbody>
</table>

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Trust is The Most Important Success Factor
Current Issues Pertain to Misaligned Incentives

• **Physicians**, concerned with maintaining their procedure-based practice incomes, have no incentives to work with hospital managers to improve hospital performance

• **Hospital managers** have no incentives to reduce cost per case for those insurer contracts that pay per diem rates or a percentage of charges

• **Insurers** who anticipate that CPOE and EMR applications will eventually produce better clinical outcomes at lower case costs have few incentives now to share cost savings with hospitals
A Combination of P4P and Clinical Gain Sharing Programs Could Realign the Incentives for All of the Players By:

- **Motivating physicians to participate** in clinical process redesign and compliance activities that increase quality and reduce cost per case in hospitals

- **Utilizing existing retrospective clinical information systems**, with nominal investments of time and funds, to measure and compare clinical and financial outcomes in hospitals

- **Providing a means to reassure hospital managers** through P4P demonstrations that are based on hospital case rates

- **Affording innovative insurers** lower payment rates and a market positioning opportunity that offers the successful hospitals and physicians to consumers as a narrow panel provider network

- Motivating insurers, hospitals and physicians to pursue innovative P4P arrangements for hospital and physician services that **make healthcare more affordable and profitable**
Who Gets the Savings

- The *elephant in the room* is the potential 20% +/- of cost savings per case for hospital inpatient services.

- Is there a way in each situation for the potential cost savings to be *distributed among the purchasers and providers* that will motivate all of them to participate?
Two Factors Are Critical to Success in Making This Combination Work

- **Physicians must be engaged** in efforts to improve hospital performance

- All of the **key players must be able to trust** that their contributions to cost reduction will be equitably rewarded