Competing on Analytics - Using Metrics to Drive Performance

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Scott W. Goodspeed, DHA, FACHE
Principal and Vice President
iVantage Health Analytics
509 Forest Avenue, Suite 250
Portland, Maine  04101
(207) 272-9934
sgoodspeed@ivantagehealth.com
www.ivantagehealth.com
Learning Objectives

1. Understand the performance based assessment of rural healthcare in America using metrics

2. Learn how to use metrics to drive rural hospital performance

3. Learn how to create networks with other rural hospitals to offer greater value to patients. Understand how to measure their performance using metrics.
Overview

- The Perfect Storm: The Need for Improved Performance in Rural Hospitals
- The Research Surrounding High Performing Rural Hospitals and Networks
- The National Research Surrounding Rural Versus Urban Hospitals: A Performance Based Assessment of Rural Healthcare in America Using Metrics
- The Evolution of Rural Hospital Strategy
- The Five Principles of Strategy Focused Rural Hospitals
- Designing the Rural Hospital Strategy in 45-60 days: A 4 Step Process using Metrics
- Six Things Boards Should do to Support the Strategy
- The Six Main Drivers of Successful Organizational Performance
- How to Create Networks with other Rural Hospitals
- Using Metrics for Improved Performance in Rural Hospitals
- What is a Strong Rural Hospital?
The Perfect Storm: The Need to Use Metrics to Drive Performance in Rural Hospitals

- The healthcare environment is more complex with healthcare reform
- Capital needs: growing aging plants, aging population, population growth, capital needs for IT and physician recruitment
- Reserves: depleted with decline in investments
- Operating Income: reduced due to higher debt costs, more uninsured, deferred procedures
- Philanthropy: more difficult in the current economy
- Some confusion about ACO’s and the role of the rural hospital
High Performing Rural Hospitals Ask Five Key Questions:

1. Where are we today? “Situation Analysis”
2. Where should we be tomorrow? “Goal Formulation”
3. How shall we get there together? “Resource Allocation”
4. Are we getting there? “Performance Monitoring”
5. Does our culture support our strategy? (2005)
**Introduction** *(Available at iVantagehealth.com)*

1. The purpose of this National Study is to provide new information, analysis and interpretation regarding the performance of rural hospitals relative to their urban counterparts. Information employed in the Study are based on publicly-available data files, the Hospital Strength Index™ and the latest Medicare Shared Savings data files.

2. For the purpose of the Study, all US general acute care hospitals are divided into two geographic-based cohorts (urban vs. rural) using the industry standard Office of Management and Budget (OMB) geographic designation.

3. The count of Medicare Beneficiaries is listed below:

<table>
<thead>
<tr>
<th>Type</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
<th>Rural % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part A (Hospital Insurance)</td>
<td>8,063,452</td>
<td>26,842,037</td>
<td>34,905,489</td>
<td>23.1%</td>
</tr>
<tr>
<td>Part B (Supplemental Medical)</td>
<td>7,596,727</td>
<td>24,363,337</td>
<td>31,960,064</td>
<td>23.7%</td>
</tr>
</tbody>
</table>
National Rural Versus Urban Findings on Metrics

Summary of Medicare Beneficiary Payment Findings

- Approximately $7.2 billion in annual savings to Medicare alone if the average cost per urban beneficiary were equal to the average cost per rural beneficiary.
- Approximately $2.2 billion in annual cost differential (savings) occurred in 2010 because the average cost per rural beneficiary was 3.7% lower than the average cost per urban beneficiary.
- Approximately $9.4 billion per year is the existing and potential differential between Medicare beneficiary payments for rural vs. urban including the opportunity for savings if all urban populations could be treated at the rural equivalent.
National Rural Versus Urban Findings

Summary of Medicare Beneficiary Payment Findings

• Per-capita **Inpatient Hospital Service** payments for rural beneficiaries are **2% less** costly than payments for urban beneficiaries.

• Per-capita **Physician Service** payments for rural beneficiaries are **18% less** costly than payments for urban beneficiaries.

• Per-capita **Outpatient Service** payments for rural beneficiaries are **14% more** costly than payments for urban beneficiaries.
National Rural Versus Urban Findings

Summary of Hospital Performance Findings

- **Neither** the rural nor urban cohort dominates performance across the CMS Process of Care topic areas (PN, HF, AMI, SCIP and OP).
- There is *no significant performance variation* on 30-day readmission rates at the benchmark levels for the two hospital study groups. There is nominal performance variation on 30-day all-cause mortality rates.
- Rural hospital performance on HCAHPS patient experience survey measures is **better** than urban hospitals.
- For three of the four price and cost efficiency measures based on Medicare Cost Reports, rural hospital performance is **better** than urban hospitals.
National Rural Versus Urban Findings

Summary of Emergency Department Performance Findings

• The mean **Total Wait Time** in a rural Emergency Department is approximately **half as long** as the wait in an urban Emergency Department (98 vs. 247 minutes).

• The mean **Wait Time to see a Physician** in a rural Emergency Department is nearly **2 times less** than the wait in an urban Emergency Department (29 vs. 56 minutes).

• **More than 50%** of all Emergency Department visits to Critical Access Hospitals were categorized as low acuity cases.

Comments and Conclusions?
Evolution of Rural Hospital Strategy

**Strategic Planning**
- Linear Thinking
- Focus on the Scorecard

**Strategic Management System**
- Strategic Management System Linked to Operations
- Challenge Assumptions

**Organization & Change Framework**
- Strategy Focused Rural Hospitals
- Strategy/Networks/Metrics
- Focus on Culture, Alignment and Execution
- Strategy Focused Meetings. Links to Budget, Performance Reviews and Compensation

Intelligence for the new healthcare
Evolution of Rural Hospital Strategy

**Disciplined Analysis**
- External market assessment
- Internal cultural and qualitative assessment

**Strategy Formulation**
- Preferred or Breakthrough Future
- Strategic Themes
  - Quality and customer service
  - Growth and provider relations
  - Financial performance
  - People/Infrastructure/Technology
- Accountability/Ownership

**Strategy Execution**
- Scorecard to Track Performance
- Strategy Focused Board and Management Meetings

**Strategy Monitoring**
- Continuous Dynamic Disruptive Process

**Metrics and Actions**
- Strategy is Everyone’s Job
The Five Principles of Strategy Focused Rural Hospitals

**Translate Strategy**
- Mission / Vision
- Strategy Maps
- Scorecard
- Targets
- Initiatives

**Executive Leadership**
- CEO Sponsorship
- Managers Engaged
- “New Way of Managing”
- Accountable for Strategy
- A Performance Culture

**Organization Alignment**
- Community
- Hospital/Departments
- Employees
- External Partners

**Continual Process**
- Linked to Budgeting
- Linked to Ops. Mgmt.
- Management Meetings
- Feedback System
- Learning Process

**Everyone’s Job**
- Strategic Awareness
- Goal Alignment
- Linked Incentives

**Focused Organization**
- Rural Hospital Scorecard

Strategy
Designing the Rural Hospital Strategy in 45-60 Days: A Four Step Process Using Metrics

Step 1: Environmental and Market Assessment/Key Interviews

- The key interviews, along with the market assessment, are one of the most important ingredients in the development of the strategic plan. The results of the interviews are integrated into the Hospital's strategic plan and are suggestive of strategic themes, objectives, and initiatives.
- The environmental and market assessment includes the following elements:
  - Overview of the service area (including primary, secondary, target, and network service area definition)
  - Service area demographics
  - Competitive analysis
  - Medical staff analysis
  - Hospital analysis
  - Hospital utilization and market share
  - Financial results and trends

Step 2: Identify the Preferred Vision, Strategic Themes and Measures/Metrics

- The purpose of step 2 is to affirm the mission of the hospital and to gain clarity and agreement on the vision over the next three to five years, focusing on the needed strategies and metrics to move the organization toward its preferred future.
Step 3: A Written Strategic Plan is Developed Reflecting Specific Objectives:

- Understand the perspectives of the Medical Staff, Board and Executive Management Team;
- Quantify the demand for existing services as the analytical foundation for planning;
- Characterize the projected growth and change in usage of the market;
- Analyze the historical performance of clinical services, financial outcomes, and key operating indicators to determine organizational capacity;
- Evaluate regional opportunities for collaboration and leverage existing investments in capital and organizational infrastructure;
- Develop a strategic plan with clear, measurable objectives;
- Summarize strategic objectives into a scorecard to enable management level initiative development and Board monitoring; and
- Facilitate an all day retreat to share the results of the strategic plan with management, board and medical staff leadership.

Refer to Rural Hospital Strategic Planning Template
Step 4: Strategic Planning Retreat

- The purpose of the all day retreat is to share the results of the plan with the executive management team, the board and medical staff leadership. The retreat culminates with clear action steps and accountabilities for implementation of the strategic plan. (Sample Board retreat agenda)

Step 5: Strategy Execution Workshop/Cultural Assessment

- The strategy execution workshop that will focus on successful execution of the hospital strategic plan using the scorecard framework. (Sample strategy execution workshop agenda)
- Clear accountabilities, metrics/deliverable, person responsible, scorecard, target and completion date.

<table>
<thead>
<tr>
<th>Strategic Focus</th>
<th>Action Items</th>
<th>Measurement/Deliverable</th>
<th>Person Responsible</th>
<th>Score Card</th>
<th>Target Date</th>
<th>Completion Date</th>
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<tbody>
<tr>
<td>Next 12 - 18 Months</td>
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<tr>
<td>1. Create a culture of safety so each and every employee feels empowered to take actions for improved patient safety</td>
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<td>2. Adopt the Institute for Healthcare Improvement’s eight steps to achieving patient safety and high reliability and create a safety culture</td>
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Quality and Customer Service Theme

Objectives: To provide the highest level of healthcare in partnership with our physicians and community, meeting the needs of those we serve. To be our service area’s first choice for healthcare, consistently exceeding expectations

Metrics:
- Achieve top 10 percentile for CMS Core Measures
- Achieve 95th percentile for all satisfaction scores
- Achieve 100% of selected patient safety goals
- Have zero serious events in 2012

Staff Development Theme

Objective: To recruit and retain quality employees to meet the needs of our customers and organization

Metrics:
- Maintain a turnover rate of 10% for 2012
- Achieve an employee survey return rate of 75% in 2012
- Achieve an overall rating of 4.5 on the employee survey results in 2012
- Achieve a 4.5 rating on mission survey question in 2012
- Achieve a 4.5 rating on opportunities to learn and grow survey question in 2012
- Achieve a 4.6 rating on employee feeling valued survey question in 2012
- Achieve a physician satisfaction level of 85% in 2012
- Number of physicians recruited
Link Metrics to Objectives in Your Hospital Strategic Plan

Growth Theme

Objective: To increase hospital’s total revenue through enhancements of existing services and expansion of new services.

Metrics: Revenue from referrals from the secondary market
Net revenue growth in targeted specialty areas
Inpatient market share
Revenue increase in select areas
New patient volume to physician practices
Percent of net revenue growth
Diagnostic and ancillary volume and net revenue growth, i.e., lab, imaging, pharmacy

Financial Health Theme

Objective: Achieve profitability by maximizing net income through increased revenue and controlling costs and build financial requirements at the grow level (total margin)

Measures: % Increase in total revenue for 2012
Maintain bad debt at 10% or less for 2012
Maintain departmental revenue and expenses within 5% of budget for 2012
Decrease AR days to 55 by 2012
Reduce overtime by 50% by 2012

Grow = Debt Service + 1.2 X Depreciation + 4.0% of Op Expense
Sustain = Debt Service + 1.2 X Depreciation
Survive = Debt Service
Memorial Hospital
Strategic Planning Timeframe-Events and Benchmarks  2012

Task I: Environmental/Market Assessment and Key Interviews
1. Data Request and Review
2. Onsite Interviews
3. Strategy Execution Education
4. CEO Progress Report to Board
5. Prepare Market Assessment

Task II: Identify the Preferred Vision, Strategies and Measures
1. Gain Clarity on vision
   a) Draft vision
2. Draft Strategies and Measures
3. CEO Progress Report to Board

Task III: Strategic Plan Development
1. Draft Strategic Plan, including:
   a) Table of Contents
   b) Overview of Service Area
   c) Service Area Demographics
   d) Hospital Utilization and Market Share
   e) Hospital Analysis
   f) Medical Staff Analysis
   g) Financial Results and Trends
   h) Mission, Vision and Values
   i) Key Strategies, including: Case for Action, Executive Champion, Measure Targets, Initiatives, and Action Steps

Task IV: Strategic Planning Retreat
1. Strategic Planning Retreat
2. Strategy Execution Assistance
3. CEO Progress Report to Board

January
- January 7-10
- January 15-16
- January 16
- Jan 17-30

February
- Jan25-Feb 2
- Feb 4
- Board Meeting

March
- March
- Performance Monitoring via Board Report

April
- April

May

45-60 Days is the Preferred Timeframe
Six Things Boards Should Do To Support the Strategy

1. **Develop Board Ground Rules Such As:**
   - Board materials are sent out a week in advance;
   - To request that an item be put on the agenda a call “must” be made to the CEO and Board Chair prior to the meeting;
   - We will begin and end on time;
   - We will respect people’s opinions;
   - We will put the past in the past;
   - Only one person speaks at a time and no one dominates the discussion;
   - There will be no side bar conversations; and
   - We will try to create a real dialogue.

2. **Design the Board Agenda so that it Tracks With the Strategic Plan. Talk about Strategically Relevant Issues.**

3. **Monitor Hospital Performance by Focusing on the Most Important Strategic Items.**
   - Financial Health
   - Quality and Customer Service
   - Growth and Provider Relations
   - Staff Development

4. **Avoid Operational Minutia and Drilling Down.**

5. **Commit to Establish and Maintain a Board Culture that is Open, Respectful and Fair.**

6. **Review Board Performance and Meeting Time Together.**
The Six Main Drivers of Successful Organization Performance

1. Understand current reality or what’s really going on in the internal and external environment by conducting a qualitative and quantitative assessment.
   - Trust but verify
   - A market assessment is key
   - They compete on analytics

2. Have a clearly defined preferred future or vision. Put a stake in the ground 2-3 years from today.

3. Adopt and execute the five principles of strategy focused rural hospitals.

4. Create a constructive culture, get the right people on the bus and provide the right incentives.

5. Create networks with other rural hospitals to offer a broader range of services and value to patients. Create a redefined network service area.

6. Use metrics to create a competitive advantage. Understand the overall health of the healthcare organization and network using metrics.

Hospital Strength Index™
- Overall Strength
- Financial Strength: Financial Stability Index
- Value-Based Strength: Quality Index, Outcomes Index, Patient Perceptions Index, and Cost and Charges Index
- Market Strength: Competitive Strength Index, Competitive Intensity Index and Market Size and Growth Index
Questions and Comments on Designing the Rural Hospital Strategy?

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How to Create Networks with Other Rural Hospitals and Use Metrics to Drive Performance

1. Rural Hospital Network Strategy Map and Emergency Department Wait Time and Satisfaction (10 Hospitals)
2. Rural Hospital Network: Quality and Finance (20 Hospitals)
3. Rural Hospital Network: Flex Medicare Beneficiary Quality Improvement Project (MBQIP) (16 Critical Access Hospitals)
4. The Pennsylvania Critical Assess Hospital Coalition Innovative Projects (12 Hospitals)
As financial stakeholders, how do we intend to meet the goals and objectives of the Rural Healthcare Quality Network?

What do Members and Stakeholders want, need or expect?

As members of the RHQN, what do we need to do to meet the needs of our clients and customers?

What skills, infrastructure and technologies does our network need to build to grow the business?

What do Members and Stakeholders want, need or expect?

As members of the RHQN, what do we need to do to meet the needs of our clients and customers?

What skills, infrastructure and technologies does our network need to build to grow the business?

Network of 14 Rural Hospitals

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Rural Hospital Network: Emergency Department Wait Time and Satisfaction

• 2011 iVantage National ED Study Benchmarks: “Rural Relevant”
  (2.3 million patient encounters)
  - 28 minutes to ED Provider
  - 127 minutes Total ED Time
  - *If you would like to participate in this study free of charge, please leave your business card and we will contact you with more information.*

• Network Averages (10 CAHs)
  - 25 minutes to ED Provider
  - 109 minutes Total ED Time

• CDC National Benchmarks
  - 56 minutes to ED Provider\(^1\)
  - 156 minutes Total ED Time (median)\(^1\)

• Press Ganey National Benchmarks
  - 247 minutes Total ED Time\(^2\)

Benchmarks are averages unless otherwise noted

Network of 10 Rural Hospitals

“Would You Recommend This ED to Your Friends & Family”

ED Patient Satisfaction Survey Responses
Would you recommend this ED to your friend and family
1/1/2010-12/31/2010

State Average – 87%
NEW PROJECTS
This year the project will expand to include:

Financial Benchmarks  Emergency Department Benchmarks  Operational Benchmarks

EXPANDED
The Quality focus of the project will also expand to all three phases of the Medicare Beneficiary Quality Improvement Program (MBQIP) developed by the Federal Office of Rural Health Policy (FORHP). This will position Network hospitals in the vanguard of this national initiative. The components of the three phases for MBQIP are:

CMS Core Measures (IP)  Outpatient Core Measures (ED)  Transfer Communication Measures (ED)  Pharmacy  HCAHPs

ACTIVE PARTICIPATION
Hospital leadership will be instrumental in the CAH network development of comparable analytics. More importantly your active participation will result in powerful analytics for your hospital like those on the reverse side of this letter. In short, while this project maintains a quality focus it is also targeted at the financial and operational center of rural health.

LEADERSHIP
Department of Health and iVantage requests your participation at four webinars and four meetings:

CEOs  CFOs  Quality Managers  ED Directors
## Rural Hospital Network: Improving Rural Access to Medicare Beneficiaries (MBQIP)

<table>
<thead>
<tr>
<th>Project Period Years (Sept through August)</th>
<th>Measures</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1: 2010-2011</td>
<td></td>
<td>Planning for the project</td>
</tr>
<tr>
<td>Year 2: 2011-2012</td>
<td>Phase 1 (PN &amp; HF)</td>
<td>Plan for QI activities and assist with technical assistance (TA) around data collection and analysis</td>
</tr>
<tr>
<td>Year 3: 2012-2013</td>
<td>Phase 2 (OP &amp; HCAHPS)</td>
<td>Annual Benchmarking data will be available from Phase 1. Plan QI activities and TA for Phases 1 &amp; 2</td>
</tr>
<tr>
<td>Year 4: 2013-2014</td>
<td>Phase 3 (Pharmacist &amp; ED Transfer Communication)</td>
<td>Annual Benchmarking data available from Phases 1 &amp; 2. Plan QI activities and TA for all phases</td>
</tr>
<tr>
<td>Year 5: 2014-2015</td>
<td>Hospitals continue reporting on all Phases</td>
<td>Annual Benchmarking data available from all phases. Plan QI activities and TA for all phases</td>
</tr>
</tbody>
</table>
# Rural Hospital Network: MBQIP Network Summary Data

## Taking Quality One Step Further

### Network of 20 Rural Hospitals

**MBQIP Network Scorecard**

**MBQIP - Quality Improvement**

**Community Hospital**

**Q1/2010 - Q1/2011**

<table>
<thead>
<tr>
<th>Phase 1 Measures</th>
<th>CMS Core Measures</th>
<th>Target</th>
<th>2010Q1</th>
<th>2010Q2</th>
<th>2010Q3</th>
<th>2010Q4</th>
<th>2011Q1</th>
<th>2011Q2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pneumonia Topic (All-or-None)</td>
<td>100%</td>
<td>60%</td>
<td>63%</td>
<td>80%</td>
<td>80%</td>
<td>44%</td>
<td></td>
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<tr>
<td></td>
<td>PN-2: Pneumococcal Vaccination</td>
<td>100%</td>
<td>100%</td>
<td>88%</td>
<td>100%</td>
<td>80%</td>
<td>33%</td>
<td></td>
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<tr>
<td></td>
<td>PN-3b: Blood Cultures</td>
<td>100%</td>
<td>100%</td>
<td>80%</td>
<td>100%</td>
<td>100%</td>
<td>71%</td>
<td></td>
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<td></td>
<td>PN-4: Adult Smoking Cessation</td>
<td>100%</td>
<td>0%</td>
<td>0%</td>
<td></td>
<td></td>
<td>50%</td>
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<td></td>
<td>PN-5c: Initial Antibiotic Received</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
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<td></td>
<td>PN-6c: Initial Antibiotic Selection for CAP</td>
<td>100%</td>
<td>75%</td>
<td>80%</td>
<td>100%</td>
<td>100%</td>
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<td></td>
<td>PN-7: Influenza Vaccination</td>
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<td>80%</td>
<td>100%</td>
<td>71%</td>
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</table>

### Heart Failure (All-or-None)

<table>
<thead>
<tr>
<th></th>
<th>Target</th>
<th>2010Q1</th>
<th>2010Q2</th>
<th>2010Q3</th>
<th>2010Q4</th>
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<th>2011Q2</th>
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<tr>
<td>Heart Failure (All-or-None)</td>
<td>100%</td>
<td>40%</td>
<td>60%</td>
<td>0%</td>
<td>50%</td>
<td>0%</td>
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<td>HF-1: Discharge Instructions</td>
<td>100%</td>
<td>50%</td>
<td>80%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>HF-2: Evaluation of LVS Function</td>
<td>100%</td>
<td>60%</td>
<td>60%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>HF-3: ACEI or ARB for LVSD</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>67%</td>
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<tr>
<td>HF-4: Adult Smoking Cessation</td>
<td>100%</td>
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**30-Day Readmission Rates: Pneumonia and Heart Failure**
## CMS Core Measures
### Heart Failure (HF)

<table>
<thead>
<tr>
<th>Hospital</th>
<th>HF-1</th>
<th>HF-2</th>
<th>HF-3</th>
<th>HF-4</th>
<th>HF All-or-None</th>
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<tbody>
<tr>
<td>283</td>
<td>56%</td>
<td>18</td>
<td>64%</td>
<td>22</td>
<td>100%</td>
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<td>284</td>
<td>72%</td>
<td>53</td>
<td>95%</td>
<td>55</td>
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<td>100%</td>
<td>11</td>
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<td>291</td>
<td>95%</td>
<td>20</td>
<td>84%</td>
<td>31</td>
<td>86%</td>
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<tr>
<td>297</td>
<td>82%</td>
<td>11</td>
<td>93%</td>
<td>14</td>
<td>100%</td>
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<tr>
<td>299</td>
<td>100%</td>
<td>40</td>
<td>96%</td>
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<tr>
<td>234</td>
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<tr>
<td>292</td>
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<td>79</td>
<td>87%</td>
<td>108</td>
<td>89%</td>
</tr>
<tr>
<td>251</td>
<td>59%</td>
<td>22</td>
<td>51%</td>
<td>35</td>
<td>56%</td>
</tr>
<tr>
<td><strong>Network</strong></td>
<td><strong>76%</strong></td>
<td><strong>323</strong></td>
<td><strong>85%</strong></td>
<td><strong>414</strong></td>
<td><strong>89%</strong></td>
</tr>
<tr>
<td><strong>National</strong></td>
<td>77%</td>
<td>88%</td>
<td>85%</td>
<td>86%</td>
<td><strong>84%</strong></td>
</tr>
</tbody>
</table>

*Note: HF All-or-None percentages are calculated based on the highest achieved measure for each hospital.*
Network of 20 Rural Hospitals

CMS Core Measures
Quality Improvement and physician-level dashboards

### Community Acquired Pneumonia (PN)

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
<th>Count</th>
<th>Mean</th>
<th>Count</th>
<th>Low</th>
<th>High</th>
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</thead>
<tbody>
<tr>
<td>PN-2 Pneumococcal Vaccination Status</td>
<td>78%</td>
<td>18</td>
<td>39%</td>
<td>19</td>
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<td>78%</td>
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<tr>
<td>PN-4 Smoking Cessation Counseling</td>
<td>100%</td>
<td>8</td>
<td>100%</td>
<td>8</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>PN-6 Antibiotic Selection</td>
<td>78%</td>
<td>18</td>
<td>89%</td>
<td>19</td>
<td>78%</td>
<td>100%</td>
</tr>
<tr>
<td>PN-7 Influenza Vaccination</td>
<td>62%</td>
<td>13</td>
<td>62%</td>
<td>13</td>
<td>62%</td>
<td>62%</td>
</tr>
</tbody>
</table>

### Community Acquired Pneumonia (PN) - External Comparison

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>PN-2 Pneumococcal Vaccination Status</td>
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</tr>
<tr>
<td>PN-4 Smoking Cessation Counseling</td>
<td>87%</td>
<td>338</td>
</tr>
<tr>
<td>PN-6 Antibiotic Selection</td>
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<td>1002</td>
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<tr>
<td>PN-7 Influenza Vaccination</td>
<td>87%</td>
<td>830</td>
</tr>
<tr>
<td>Project Period Years (Sept through August)</td>
<td>Measures</td>
<td>Activities</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>Year 1: 2010-2011</td>
<td></td>
<td>Planning for the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phase 1 (PN &amp; HF)</td>
</tr>
<tr>
<td>Year 2: 2011-2012</td>
<td></td>
<td>Plan for QI activities and assist with technical assistance (TA) around data collection and analysis</td>
</tr>
<tr>
<td></td>
<td>Phase 2 (OP &amp; HCAHPS)</td>
<td>Annual Benchmarking data will be available from Phase 1. Plan QI activities and TA for Phases 1 &amp; 2</td>
</tr>
<tr>
<td>Year 3: 2012-2013</td>
<td></td>
<td>Annual Benchmarking data available from Phases 1 &amp; 2. Plan QI activities and TA for all phases</td>
</tr>
<tr>
<td>Year 4: 2013-2014</td>
<td>Phase 3 (Pharmacist &amp; ED Transfer Communication)</td>
<td></td>
</tr>
<tr>
<td>Year 5: 2014-2015</td>
<td>Hospitals continue reporting on all Phases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Annual Benchmarking data available from all phases. Plan QI activities and TA for all phases</td>
</tr>
</tbody>
</table>
Rural Hospital Network: Improving Rural Access to Medicare Beneficiaries

- The goal of the Flex Medicare Beneficiary Quality Improvement Project (MBQIP) is to improve rural quality care access for Medicare beneficiaries served by critical access hospitals (CAHs).

- This initiative addresses the challenges of defining and reporting rural-relevant quality measurements and adopting proven clinical delivery models that drive quality and performance-based value.

Network of 16 Critical Access Hospitals
### Network of 16 Critical Access Hospitals

#### Network CAH Flex Project

HCAHPS – January 2010 – December 2010

<table>
<thead>
<tr>
<th>Org ID</th>
<th>Nurse Communication</th>
<th>Doctor Communication</th>
<th>Received help as soon as they wanted it</th>
<th>Pain was well controlled</th>
<th>Staff explained about medicines before giving them</th>
<th>Room and bathroom were clean</th>
<th>Area around room was quiet at night</th>
<th>Given information about what to do during recovery</th>
<th>Hospital Rating</th>
<th>Would recommend the hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>247</td>
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<td>77.0%</td>
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<td>68.0%</td>
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<td>74.0%</td>
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<td>59.0%</td>
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<td>81.0%</td>
<td>64.0%</td>
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<td>60.0%</td>
<td>75.0%</td>
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<td>80.0%</td>
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<td>289</td>
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<td>66.0%</td>
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<td>60.0%</td>
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<td>85.0%</td>
<td>78.0%</td>
<td>74.0%</td>
<td>90.0%</td>
<td>72.0%</td>
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<tr>
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<td>77.0%</td>
<td>75.0%</td>
<td>64.0%</td>
<td>80.0%</td>
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<td>68.0%</td>
<td>69.0%</td>
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<td>83.0%</td>
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<td>54.0%</td>
<td>89.0%</td>
<td>73.0%</td>
<td>79.0%</td>
</tr>
<tr>
<td>Network CAHs</td>
<td>81.5%</td>
<td>82.1%</td>
<td>75.3%</td>
<td>72.7%</td>
<td>65.5%</td>
<td>80.6%</td>
<td>59.0%</td>
<td>85.4%</td>
<td>74.6%</td>
<td>73.1%</td>
</tr>
<tr>
<td>All CAHs</td>
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<td>72.5%</td>
<td>72.0%</td>
<td>63.9%</td>
<td>79.3%</td>
<td>61.8%</td>
<td>83.1%</td>
<td>71.5%</td>
<td>71.9%</td>
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<td>59.9%</td>
<td>70.8%</td>
<td>57.7%</td>
<td>81.5%</td>
<td>66.7%</td>
<td>69.0%</td>
</tr>
</tbody>
</table>

*Data compiled from Hospital Compare*
Rural Hospital Network: Improving Rural Access to Medicare beneficiaries Phase 2: HCAHPS

HCAHPS: Mean Individual/Global Item Scores by State

Note: Figures reflect publicly reported, mean adjusted top-box scores from Hospital Compare. Time collection period: Q1 2010-Q4 2010.
Rural Hospital Network:
Finance at the Network and National Levels

<table>
<thead>
<tr>
<th>Finance</th>
<th>Network Median Scores</th>
<th>Most Recent Quarter</th>
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<tbody>
<tr>
<td></td>
<td>2010Q2</td>
<td>2010Q3</td>
</tr>
<tr>
<td>Days Cash on Hand</td>
<td>55.8</td>
<td>49.1</td>
</tr>
<tr>
<td>Days in Net Accounts Receivable</td>
<td>48.8</td>
<td>52.7</td>
</tr>
<tr>
<td>EBITDA Margin</td>
<td>8.4%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Net Income</td>
<td>$84,065</td>
<td>$9,506</td>
</tr>
<tr>
<td>Operating Expense per Adjusted Admission</td>
<td>$5,605</td>
<td>$6,862</td>
</tr>
<tr>
<td>Operating Profit Margin</td>
<td>1.9%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Salary Expense as % of Total Operating Expense</td>
<td>38.5%</td>
<td>37.7%</td>
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</table>

Q1 2010 vs. Q1 2011 Network Median Scores

<table>
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<tr>
<th></th>
<th>Q1 2010</th>
<th>Q1 2011</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days Cash on Hand</td>
<td>58.4</td>
<td>81.0</td>
<td>22.6</td>
</tr>
<tr>
<td>Days in Net AR</td>
<td>52.2</td>
<td>49.0</td>
<td>3.2</td>
</tr>
<tr>
<td>EBITDA</td>
<td>7.8%</td>
<td>8.8%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Net Income</td>
<td>$41,043</td>
<td>$223,658</td>
<td>$182,615</td>
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<tr>
<td>Operating Expense per Adjusted Admission</td>
<td>$5,489</td>
<td>$4,881</td>
<td>$608</td>
</tr>
<tr>
<td>Operating Profit Margin</td>
<td>-3.4%</td>
<td>4.5%</td>
<td>7.9%</td>
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<tr>
<td>Salary Expense as % of Total Operating Expense</td>
<td>39.2%</td>
<td>39.9%</td>
<td>.7%</td>
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</table>
## Network of 20 Rural Hospitals

### Q1 2011 Network Median Scores by Ownership

<table>
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<th>County</th>
<th>System Owned</th>
<th>Network Avg.</th>
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</thead>
<tbody>
<tr>
<td>Days Cash on Hand</td>
<td>51.2</td>
<td>107.9</td>
<td>109.5</td>
<td>81.0</td>
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<tr>
<td>Days in Net AR</td>
<td>54.0</td>
<td>46.8</td>
<td>44.3</td>
<td>49.0</td>
</tr>
<tr>
<td>EBITDA</td>
<td>5.7%</td>
<td>8.8%</td>
<td>14.6%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Net Income</td>
<td>$3,543</td>
<td>$140,226</td>
<td>$594,731</td>
<td>$223,658</td>
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<td>$4,390</td>
<td>$5,371</td>
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<td>$4,881</td>
</tr>
<tr>
<td>Operating Profit Margin</td>
<td>-0.2%</td>
<td>2.5%</td>
<td>9.6%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Salary Expense as % of Total Operating Expense</td>
<td>39.9%</td>
<td>41.3%</td>
<td>35.6%</td>
<td>39.9%</td>
</tr>
</tbody>
</table>
### Network of 20 Rural Hospitals

#### Finance Dashboards

Monitoring of hospital specific financial measures with local, state and national focus

<table>
<thead>
<tr>
<th>Hospital Code</th>
<th>EBITDA</th>
<th>EBITDA Margin</th>
<th>Operating Margin</th>
<th>Salary Expense % of Operating Revenue</th>
<th>Salary Expense % of Operating Expense</th>
<th>Current Ratio</th>
<th>Days Cash on Hand</th>
<th>Days in Net AR</th>
<th>Average Age of Plant</th>
<th>Net Income</th>
<th>Operating Expense per Adjusted Admit</th>
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</thead>
<tbody>
<tr>
<td>246</td>
<td>$2,843,987</td>
<td>11.8%</td>
<td>-14.0%</td>
<td>49.8%</td>
<td>36.0%</td>
<td>1.2</td>
<td>9</td>
<td>49.5</td>
<td>53.9</td>
<td>-$1,853,209</td>
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<td>45.0%</td>
<td>38.8%</td>
<td>2.8412</td>
<td>91.9618</td>
<td>48.7735</td>
<td>30.7941</td>
<td>$2,137,247</td>
<td>$6,651</td>
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<tr>
<td>US</td>
<td>8.2%</td>
<td>-3.6%</td>
<td>43.1%</td>
<td></td>
<td></td>
<td>65.9</td>
<td>49.9</td>
<td></td>
<td></td>
<td>$1,055,428</td>
<td>$6,350</td>
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</table>
Pennsylvania CAH Coalition

- **Scale:** 12 of 13 CAHs participating
- **Start Date:** Flex FY 2002
- **Funding:** Flex pays for iVantage consulting (one contract)
  SHIP pays for basic RPM website (pooled)
  Hospitals pay for RPM customizations (ad hoc)
- **Leadership:** Larry Baronner, Flex Coordinator
- **Partners:** Hospital Association of Pennsylvania
  Quality Insights of Pennsylvania (QIO)
  Penn State University (graduate students)
  Department of Health
  Pennsylvania Health Care Quality Alliance
How to Create Networks with Other Rural Hospitals

A Simple Improvement Framework

1. Identify one or two QI Projects Per Year
2. Recruit Volunteer CAHs (denominator)
3. Assess Performance of Volunteers (Numerator)

# Hospitals Showing Improvement = 80%

\[
\frac{12}{15} = 80\%
\]

• Evaluate Performance Based on Volunteering CAHs
• What did the network do to help the CAHs that did NOT improve?
• How did the network leverage knowledge from CAHs’ that DID improve?
The Pennsylvania Network Accomplishes Innovative Projects

- Medication Management Evaluation Project (ISMP)
- Pneumonia Project (Quality Insights)
- AMI/Chest Pain Project (Quality Insights)
- CAH Nurse Manager Academy (Penn State)
- CAH Department Manager Leadership Academy (Penn State)
- Rural Community Balanced Scorecards (iVantage)
- Community Benefit Demonstration Project (iVantage/Flex)
- ED Transfer Communication Demonstration Project (iVantage/Flex)
- Gaining Strategic Edge CEO Project (iVantage)
- CAH Employee Development Training Modules (iVantage)
- PA CAH Public Reporting (PHCQA)
- PA CAH Economic Analysis (Penn State)
Questions and Comments on How to Create Networks with Other Rural Hospitals?

Scott W. Goodspeed, DHA, FACHE
iVantage Health Analytics
509 Forest Avenue, Suite 250
Portland, Maine 04101
Cell 207-272-9934
sgoodspeed@iVantagehealth.com
www.iVantagehealth.com

Next:
Using Metrics for Improved Performance in Rural Hospitals
Using Metrics for Improved Performance in Rural Hospitals

The Central Premise of Metrics

Measurement Starts with Strategy

- Strategy
- Scorecard

Measurement Motivates

- “It’s not what you expect...it’s what you inspect.”
- “What you measure is what you get.”
- “If you can measure it, you can manage it.”
Using Metrics for Improved Performance in Rural Hospitals

Key Points

• Metrics enable the hospital/network to track its progress against its strategy
• You should have enough measures to accurately track your progress and make necessary changes but not so many that the process becomes cumbersome
• There should always be a “indicator/metric library” that spells out the definition and how the metric is calculated
• Each can receive a “indicator/metric library” appropriate for rural hospitals and networks
• Link metrics to objectives in your hospital or network strategic plan
### Modified Board Report: Quality

<table>
<thead>
<tr>
<th>Topic</th>
<th>Prior</th>
<th>Current</th>
<th>Trend</th>
<th>Target</th>
<th>Frequency</th>
<th>Six-Month Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMI Topic (All Or None)</td>
<td>NA</td>
<td>70%</td>
<td>↑</td>
<td>100%</td>
<td>Quarterly</td>
<td></td>
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<tr>
<td>Measures the percentage of patients meeting all eligible measures for the Acute Myocardial Infarction (AMI) topic area</td>
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<td>73%</td>
<td>↑</td>
<td>100%</td>
<td>Quarterly</td>
<td></td>
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<tr>
<td>Measures the percentage of patients meeting all eligible measures for the Congestive Heart Failure (CHF) area</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>PN Topic (All Or None)</td>
<td>100%</td>
<td>79%</td>
<td>↓</td>
<td>100%</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td>Measures the percentage of patients meeting all eligible measures for the Pneumonia (PN) topic area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCIP Topic (All Or None)</td>
<td>0%</td>
<td>90%</td>
<td>↑</td>
<td>100%</td>
<td>Quarterly</td>
<td></td>
</tr>
<tr>
<td>Measures the percentage of patients meeting all eligible measures for the Surgical Care Improvement Project (SCIP) topic area</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Using Metrics for Improved Performance in Rural Hospitals: A Network Scorecard

<table>
<thead>
<tr>
<th></th>
<th>CAH #1 (n=8)</th>
<th>CAH #2 (n=4)</th>
<th>Indiana CAH (n=34)</th>
<th>All US CAH (n=1,256)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Finance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>$832,768</td>
<td>$1,500,748</td>
<td>NA</td>
<td>$1,055,428</td>
</tr>
<tr>
<td>EBIDA</td>
<td>7.3%</td>
<td>12.6%</td>
<td>10.4%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Operating Expense per Adjusted Admit</td>
<td>$5,888</td>
<td>$7,275</td>
<td>NA</td>
<td>$6,350</td>
</tr>
<tr>
<td>Salary Expenses as % of Operating Expense</td>
<td>52.1%</td>
<td>38.0%</td>
<td>40.3%</td>
<td>43.1%</td>
</tr>
<tr>
<td>Days in Accounts Receivable</td>
<td>36.1</td>
<td>32.8</td>
<td>42.9</td>
<td>49.9</td>
</tr>
<tr>
<td>Days Cash on Hand</td>
<td>101.0</td>
<td>80.7</td>
<td>72.6</td>
<td>65.9</td>
</tr>
<tr>
<td>Operating Margin</td>
<td>1.1%</td>
<td>1.1%</td>
<td>2.4%</td>
<td>-3.6%</td>
</tr>
</tbody>
</table>

*Cost Report benchmarks based on hospitals with end of fiscal year in 2009 or 2010*

<table>
<thead>
<tr>
<th><strong>Quality (CMS Core Measure Index)</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AMI</td>
<td>98</td>
<td>98</td>
<td>95</td>
<td>93</td>
</tr>
<tr>
<td>HF</td>
<td>84</td>
<td>95</td>
<td>87</td>
<td>80</td>
</tr>
<tr>
<td>PN</td>
<td>86</td>
<td>93</td>
<td>88</td>
<td>86</td>
</tr>
<tr>
<td>SCIP</td>
<td>91</td>
<td>97</td>
<td>90</td>
<td>92</td>
</tr>
</tbody>
</table>

*Index Score is the average of all measures across each CMS Core Topic*

<table>
<thead>
<tr>
<th><strong>Attitudes</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HCAHPS (Would you recommend?)</td>
<td>68</td>
<td>76</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Market</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare Market Share</td>
<td>26%</td>
<td>35%</td>
<td>29%</td>
<td>NA</td>
</tr>
<tr>
<td>Percent Population 65+</td>
<td>11%</td>
<td>15%</td>
<td>14%</td>
<td>NA</td>
</tr>
<tr>
<td>Adjusted Admissions</td>
<td>4032</td>
<td>4626</td>
<td>NA</td>
<td>4230</td>
</tr>
</tbody>
</table>
A Strong Hospital has the following characteristics:

- Dominant market share with growing demand
- Diffuse competition
- Outstanding quality and safety programs
- Loyal, satisfied patients
- Efficient and appropriately priced services
- Strong balance sheet with surplus capital
- High margin services
STRENGTH INDEX COMPONENTS
Using Data & Analytics to Benchmark Performance

Market Strength
What is the hospital’s market share, level of competition and the future healthcare demand of its core service area?

Value-Based Strength
Does the hospital provide high quality and safe clinical services, and are its patients loyal and satisfied?

Financial Strength
What is the hospital’s long-term financial position and does it generate adequate margin and return on capital?
### STRENGTH INDEX COMPONENTS

#### Framework Summary

#### Hospital Strength Index™

<table>
<thead>
<tr>
<th>Market Strength</th>
<th>Value-Based Strength</th>
<th>Financial Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Competitive Strength</strong></td>
<td><strong>Quality</strong></td>
<td><strong>Financial Stability</strong></td>
</tr>
<tr>
<td>Percentile Rank based on Indicator</td>
<td>Percentile Rank based on Domain Average</td>
<td>Percentile Rank based on Domain Average</td>
</tr>
<tr>
<td><strong>Market Size &amp; Growth</strong></td>
<td><strong>Outcomes</strong></td>
<td><strong>Cost and Charges Index</strong></td>
</tr>
<tr>
<td>Percentile Rank based on Domain Average</td>
<td>Percentile Rank based on Domain Average</td>
<td>Percentile Rank based on Domain Average</td>
</tr>
<tr>
<td><strong>Competitive Intensity</strong></td>
<td><strong>Patient Perspectives</strong></td>
<td><strong>Leverage:</strong> Debt Ratio (Total Liabilities/Total Assets)</td>
</tr>
<tr>
<td>Percentile Rank based on Market Competitors' HHI</td>
<td>Percentile Rank based on Domain Average</td>
<td><strong>Liquidity:</strong> (Current Assets/Current Liabilities)</td>
</tr>
<tr>
<td><strong>Market Size &amp; Growth Index</strong></td>
<td><strong>Outcomes of Care Readmission and Mortality Scores for AMI, HF, PN, SCIP, Outpatient</strong></td>
<td><strong>Resource Availability:</strong> (Total Assets/Total Expenses)</td>
</tr>
<tr>
<td>Inpatient Overall 5-Year Demand Projections for Total Market Case Volume</td>
<td>AHRO Patient Safety Indicators Composite Score</td>
<td><strong>Standard Case-Weight Methodology Applied to Most Current Year MedPAR Data</strong></td>
</tr>
<tr>
<td><strong>Quality Index</strong></td>
<td><strong>Overall Medicare Inpatient Risk-Adjusted Mortality Score</strong></td>
<td><strong>Hospital Cost Report, Healthcare Cost Report Information System (HCRIS), Quarterly Updates</strong></td>
</tr>
<tr>
<td>Percentile Rank based on Domain Average</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Data Sources

- The most recently available...

- Hospital Compare, Process of Care Measures, Quarterly Release
- Outcomes: Hospital Compare
- HCAHPS Measures, Annual Release
- Residential Case-Mix Methodology Applied to Most Current Year MedPAR Data
- Hospital Cost Report, Healthcare Cost Report Information System (HCRIS), Quarterly Updates

*HDI Derived from Market Share Calculations Based on Medicare Hospital Service Area File Data for Calculated Service Area (75% of Inpatient Origin)
STRENGTH INDEX COMPONENTS

Using Data & Analytics to Benchmark Performance

What is the hospital’s market position, level of competition and the future healthcare demand of its service area?

Market Position + Competitive Strength Index + Competitive Intensity Index + Market Size and Growth Index = Future Healthcare Demand
STRENGTH INDEX COMPONENTS
Using Data & Analytics to Benchmark Performance

Value-Based Strength

Does the hospital provide high quality and safe clinical services, and are its patients loyal and satisfied?

Quality Index + Outcomes Index + Patient Perception Index + Cost and Charges Index

Clinical Processes | Clinical Results | Attitudes | Pricing & Efficiency
STRENGTH INDEX COMPONENTS

Using Data & Analytics to Benchmark Performance

Financial Strength

What is the hospital’s long-term financial position and does it generate adequate margin and return on capital?

Financial Stability Index

- Balance Sheet Ratios
- Income Statement Ratios

Financial Position
## Benchmarking

### Assessing Your Performance Against Peers

<table>
<thead>
<tr>
<th>Nat'l. Percentile Rank</th>
<th>Overall Strength</th>
<th>Financial Strength</th>
<th>Competitive Strength</th>
<th>Market Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HSI™</td>
<td>Financial Stability</td>
<td>Quality</td>
<td>Outcomes</td>
</tr>
<tr>
<td>Your Hospital</td>
<td>76</td>
<td>77</td>
<td>90</td>
<td>61</td>
</tr>
<tr>
<td>Hospital B</td>
<td>61</td>
<td>74</td>
<td>86</td>
<td>65</td>
</tr>
<tr>
<td>Hospital C</td>
<td>61</td>
<td>97</td>
<td>86</td>
<td>88</td>
</tr>
<tr>
<td>Hospital D</td>
<td>39</td>
<td>27</td>
<td>17</td>
<td>54</td>
</tr>
<tr>
<td>Hospital E</td>
<td>67</td>
<td>97</td>
<td>98</td>
<td>82</td>
</tr>
<tr>
<td>Hospital F</td>
<td>50</td>
<td>76</td>
<td>94</td>
<td>83</td>
</tr>
</tbody>
</table>

Legend:
- Top Quartile
- 3rd Quartile
- 2nd Quartile
- 1st Quartile
Using Metrics for Improved Performance in Rural Hospitals

<table>
<thead>
<tr>
<th>Provider Name</th>
<th>PPS/CAH Designation</th>
<th>Overall Composite</th>
<th>Market Strength Index</th>
<th>Value Based Strength Index</th>
<th>Financial Strength Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>#0000000000803</td>
<td>CAH</td>
<td>34.71</td>
<td>20.80</td>
<td>25.16</td>
<td>99.32</td>
</tr>
<tr>
<td>#000000000795</td>
<td>CAH</td>
<td>3.39</td>
<td>22.49</td>
<td>0.94</td>
<td>21.26</td>
</tr>
<tr>
<td>#000000000805</td>
<td>CAH</td>
<td>8.75</td>
<td>46.65</td>
<td>3.32</td>
<td>31.29</td>
</tr>
<tr>
<td>#000000000783</td>
<td>CAH</td>
<td>21.60</td>
<td>42.38</td>
<td>22.65</td>
<td>29.37</td>
</tr>
<tr>
<td>#000000000799</td>
<td>CAH</td>
<td>68.66</td>
<td>66.24</td>
<td>51.04</td>
<td>58.67</td>
</tr>
<tr>
<td>#000000000794</td>
<td>CAH</td>
<td>63.12</td>
<td>5.96</td>
<td>82.31</td>
<td>55.74</td>
</tr>
<tr>
<td>#000000000789</td>
<td>CAH</td>
<td>4.58</td>
<td>17.46</td>
<td>5.19</td>
<td>23.50</td>
</tr>
<tr>
<td>#000000000804</td>
<td>CAH</td>
<td>46.26</td>
<td>21.35</td>
<td>64.49</td>
<td>48.22</td>
</tr>
<tr>
<td>#000000000792</td>
<td>CAH</td>
<td>3.59</td>
<td>13.02</td>
<td>8.24</td>
<td>47.76</td>
</tr>
<tr>
<td>#000000000787</td>
<td>CAH</td>
<td>2.81</td>
<td>41.41</td>
<td>2.92</td>
<td>2.06</td>
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<tr>
<td>#000000000797</td>
<td>CAH</td>
<td>16.62</td>
<td>25.93</td>
<td>14.50</td>
<td>5.16</td>
</tr>
<tr>
<td>#000000000766</td>
<td>CAH</td>
<td>20.76</td>
<td>59.63</td>
<td>9.30</td>
<td>79.08</td>
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<tr>
<td>#000000000758</td>
<td>CAH</td>
<td>4.40</td>
<td>20.11</td>
<td>4.44</td>
<td>5.71</td>
</tr>
<tr>
<td>#000000000807</td>
<td>CAH</td>
<td>40.29</td>
<td>62.58</td>
<td>30.39</td>
<td>14.63</td>
</tr>
<tr>
<td>#000000000802</td>
<td>CAH</td>
<td>38.13</td>
<td>23.01</td>
<td>85.81</td>
<td>23.10</td>
</tr>
</tbody>
</table>

Provider Average: 24.52, 30.07, 25.38, 43.54
Provider Median: 14.66, 23.01, 10.80, 31.39
STATE PPS Median: 60.90, 75.38, 64.83, 48.26
STATE CAH Median: 14.66, 23.01, 10.80, 31.39
All STATE Median: 37.98, 72.97, 61.39, 46.40

How to Interpret this Report:
- This report contains provider-level data from the Hospital Strength Index™, a broad performance scorecard based on publicly available data. For each facility appearing in the table above, HSI Percentile Ranks measure relative strength related to, and aggregated from, performance in three categories: Market, Value-Based, and Financial. Percentile scores reflect category-level performance of a given hospital or hospital cohort to all U.S. hospitals included in the study. Circles next to the score are conditionally formatted by quartile. Blanks indicate that data were not available.
Using Metrics for Improved Performance in Rural Hospitals: A Network Scorecard

Rural Hospital Networks - HSI Quality Index Percentile Rankings
Shading Represents Outmigration Contribution Margin by Zip Code

*Outmigration CM is defined as all inpatient Medicare cases going to non-System facilities, multiplied by the average Medicare MS-DRG contribution margin.
Questions and Comments

Scott W. Goodspeed, DHA, FACHE
iVantage Health Analytics
509 Forest Avenue, Suite 250
Portland, Maine  04101
Cell 207-272-9934
sgoodspeed@ivantageHealth.com
www.ivantagehealth.com