Sentara Healthcare: A Case Study

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Sentara Healthcare

• 117-year not-for-profit mission
• 6 hospitals
• 7 nursing homes
• 3 assisted living facilities
• 225-physician medical group
• 319,000-member health plan
• Over 2500 community physicians

Virginia
North Carolina
Overview

• Sentara’s strategy
• A model for improving results
• Examples of initiatives that improve quality, efficiency, and/or access
  – Introducing new technology (eICU)
  – Creating reliable processes (VAP reduction)
  – Creating a culture of safety
  – Improving care for the chronically ill
  – Improving information availability (eCare)
Overall Strategy

- Focus on quality and patient safety as strategic aims
  - Use quality as differentiation
  - View quality as key to long-term success
  - Align the organization

- Embrace the IOM’s six dimensions for improvement
Framework for Improvement

Quality & Safety Results

Technology
Incorporate important information and decision support into processes at point of care

Processes
Create highly reliable processes built on principles of human factors research

People
Recruit, train, grow and retain capable, reliable workforce

Culture of Safety and Performance Excellence
New Technology: e-ICU

• First in nation
• Remote monitoring by Intensivists
• 95 ICU patients, 5 different hospitals
• Teleconferencing, data feeds, EMR, and “Smart Alerts”
• Sustained 20% decrease in mortality
• 155% ROI: Cap Gemini study
  (Crit Care Med 2004; 32:31-38)
• No third-party reimbursement
Improving Reliability: VAP Reduction

- 13 ICUs with 161 beds across 6 hospitals
- 63.7% Reduction in VAP rate (CY 02 - CY 04)
- 80 Fewer VAPs CY 02 vs. CY 04
- 3 ICUs: > 17 consecutive months w/o a VAP & counting
- $650K bottom line impact & helps relieve delays in ED
Creating a Culture of Safety

• Adapting successful strategies from nuclear power to healthcare

• Key components
  – Implement behaviors for error prevention (create safe habits)
  – Focus and simplify
  – More effective event investigation

• 47.4% reduction in serious events over 2 years
Improving Chronic Care

• Disease Management
  – Asthma: 35% total cost reduction
  – Diabetes: 21% improvement in HgbA1C<7
  – Sickle Cell: 65% decrease in ED visits

• Palliative care
  – Consult service in all 6 hospitals
  – Reduction of $2,713 in direct costs & 2.5 days ALOS/case
  – Improved patient/family satisfaction
Improving Information Availability

• “eCare” Initiative
• Offering:
  – office-based EMR to all community physicians
  – personal health record for patients/consumers
  – hospital EMR linked to physicians offices
  – order-entry with decision support for physicians
• Enabling true “patient-centered” care