Sentara Healthcare Overview

- 11 Acute Care Hospitals in Virginia with a total of 2572 licensed beds
- 1 Extended stay hospital
- 9 Ambulatory Care Campuses; 5 with freestanding EDs and 2 with Urgent Care Centers
- 6 Outpatient Surgery Centers
- 12 Long-term Care/Assisted Living Facilities
- 2 PACE Sites
- 2 Adult Day Services Facilities
- 4 Medical Groups (750+ Providers)
- Air and ground transport services
Delivering Quality Clinical Outcomes

Sentara has a commitment to grow as one of the nation’s leading healthcare organizations by creating innovative systems of care that help people achieve and maintain their best possible state of health.

eICU

- Technology Solution
- Improving ICU clinical and financial outcomes.
- Leverages scarce critical care resources to increase access to specialists for improved patient outcomes.
- Standardized Care Model.
eHospital
Remote Monitoring of Med/Surg/PCU Patients

- Patient transmitter sends EKG, HR, SPO2, BP wirelessly to remote RN (critical care background)
- Analysis done for vital sign trends, meds, labs, history etc.
- Bedside RN is contacted if data indicates interventions or escalation in care needed – coaching and assistance given
- Pilot April 2007 at Sentara Leigh Hospital – Norfolk, VA
- April 2010, all patients at SLH have access to this monitoring based on criteria
- Reduction in
  - Out of unit codes
  - MRT calls on eHospital patients
  - eHospital transfers to higher level care
- 39-43% of all med/surg patients are monitored during admission.

System-wide Readmission Collaborative

- Kick-off held in January 2012 with monthly Webex check-ins
- Participants from all hospitals, Sentara Medical Group, Nursing Homes and Homecare
- Each site asked to select interventions from available options and trial them at their facilities
- Need identified based on potential CMS penalties current readmission rates
CMS Readmission Penalties

- Starting in 2013 hospitals will be assessed a penalty of up to 1% of total Medicare reimbursement based on readmission performance for AMI, Heart Failure and Pneumonia
- Program has no upside – only a penalty
- Cap on readmission penalty in 2013 – 1%, 2014 – 2%, 2015 – 3% (% of total Medicare payments)
- Year 1 – top 25% = no penalty
  Bottom 10% = 1% penalty
  Between bottom 10% and top 25% = between 0 and 1% penalty
- No Sentara hospitals fall in bottom 10%, 3 fall in top 25%

Sentara Healthcare Readmission Collaborative

Team Membership Includes:

- Physician Representation (Hospitalists and ED)
- Nursing (Nursing units and ED)
- Pharmacy
- Nutrition
- Rehab
- Care Management
- Transition Support
  - Medical Group
  - SNFs
  - Home Care
Readmissions Collaborative

- Reducing CMS 30 day readmission rates for Pneumonia, Heart failure, and Sepsis
  - Medical Group able to see these patients within 7 days
  - Provide post discharge phone calls to ensure all medications are filled, 7 day MD appointment is scheduled.
  - Use consistent system education materials with teach-back techniques for pneumonia, Heart failure and Sepsis.
  - Develop a prototype of a “huddle” that could be held daily on these patients
  - Identify potential resources for patients with questions/issues to contact post discharge
  - Evaluate use of SNFs where appropriate
  - Increase use of Home Care and Telehealth
    - Provide primary nursing
    - Front load visits and use consistent education tools using teach back technique
    - Evaluation for physical and occupational therapy to improve energy conservation
    - Ensure medication compliance with pill box education
    - Notify MD of patients at high risk for re-admission

System-wide Readmission Collaborative

- Hospital Results, Current YTD compared with 2012 YTD:
  - Improvement in Pneumonia Readmission Rates
    2012 (17.1%)  2013 (15.6%)
  - Improvement in HF Readmission Rates
    2012 (22.6%)  2013 (21.4%)
  - Stabilized in Sepsis Readmission Rates
    2012 (18.3%)  2013 (18.4%)
Sentara Home Care Services

- Ten Locations in Virginia and NE North Carolina
- 2012 Gross Revenues - $121 million
- Total number of employees – 833
- Full service home care agency (in most locations), including:
  - Home Health
  - Hospice
  - Infusion Services
  - Home Medical and Respiratory Equipment
  - Personal Emergency Response System

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Sentara Home Care Services

In 2012, Home Care:

- Had approximately 18,000 patients on service on any given day
- Made 419,550 visits:
  - 325,319 home health visits
  - 58,128 hospice visits
  - 36,103 infusion visits
- Made 41,429 medication deliveries
- Made 78,947 DME deliveries
History of Telehealth at Sentara

- Have deployed telehealth technology for more than 10 years
- Initially utilized audio-visual, two-way communication devices
- Migrated to telemonitoring devices about 5 years ago
- Currently using Philips Telehealth equipment with wireless technology for the peripherals
- Deploying 500 devices at any given time
- Deployment increasing
Why Did Sentara Home Care Invest in Telehealth

• To reduce labor costs and improve outcome

• Unintended Consequence
  – Reduction in readmissions and ED visits by 70%

How Telehealth Works

Telehealth is an in-home monitoring system that:

• Measures patient’s vital signs
  – Daily
  – As often as desired

• Transmits results to our care team
  – Weight  – ECG
  – Pulse   – Oxygen levels
  – Glucose – Temperature
  – Blood Pressure
• In addition to standard telehealth technology, nurses also use advanced technologies such as ZOE® Fluid Status Monitor for CHF patients to manage their own disease.

• Telehealth units are integrated with Sentara Home Care’s clinical software system, populating patient information for all home care staff and physicians to access.
Goals of Telehealth

• Minimize hospital readmissions and ED visits
• Reduce hospital length of stay
• Increase patient involvement in their disease management
• Optimize the patient’s quality of life
• Manage a patient more efficiently

Medical Community Benefits

• Increases patient compliance in:
  – Disease management
  – Medication adherence
  – Physician appointments

• Slight changes in medical condition can be detected early.

• Earlier recognition and intervention of a worsening health condition.

• Home care nurse visits are made immediately, thus avoiding/reducing:
  – Emergency department visits
  – Hospitalizations
  – Hospital length of stay

• Improves compliance with regularly scheduled physician appointments.
Frequently Asked Questions

• What is the cost to the patient?
  – There is no cost to the patient; telemonitoring is incorporated into their plan of care and covered by the HHRG payment.

• What are the home environment restrictions?
  – None; wireless application available for those without a landline.

• Is this only for Medicare?
  – Medicare will allow for telemonitoring as part of the Plan of Care. However, some insurances will pay a per diem for monitoring as well.

• How long are people on it?
  – Patients can be on telemonitoring as long as they meet the Medicare criteria for coverage.

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e-Home Program

Purpose

e-Home is a project between the Sentara hospitals and Sentara Home Care that identifies patients within a target group who are likely to qualify for expedited discharge from the hospital to home care and who will be monitored closely to prevent 30-day readmissions.
The program involves early identification and evaluation of potential patients, combined with specialized nursing and monitoring services in the home.

Patients with the following diagnoses qualify for the e-Home Program:

- Heart Failure
- Pneumonia
- COPD
- Shortness of Breath
- Respiratory Failure
- Atrial Fibrillation
- MI

Goals

- Improve patient compliance and reduce re-admissions for target group patients.
- Reduce hospital LOS for target group patients.
- Reduce bed capacity issues at Sentara hospitals.
- Reduce risk of hospital acquired infections.
- Improve patient satisfaction by allowing them to receive care in their home environment.
Admission Criteria

• Must be eligible for Medicare (or Medicare Replacement plans) home care services meeting homebound criteria

• Cognitively intact

• Ability and desire to learn use of in-home telehealth monitor

Referral Process

• On admission, Resource Nurses flag patients with conditions appropriate for the e-Home Program and discuss the program with the patient and family.

• Resource Nurse alerts Case Manager and physician, who approve the discharge.

• Upon agreeing to the program, patient is visited by home health aide on the day of discharge. Home health aide is responsible for the installation of telemonitoring equipment and patient education on the use of the units.

• Nursing visits are frontloaded in first three weeks following discharge to prevent hospital readmission.

- Total e-Home patients for 2012 - 247
- Total e-Home patients per 2010 – 483 (as of December 31, 2012)
- Total e-Home patients admitted with CHF – 245 (51%)
- Average Length of Stay for E-Home patients – 108
- Average Length of Stay for all Telehealth patients – 123

- Readmission rate for e-Home patients with the same diagnosis within 30 days:
  - 2.3% for all e-Home patients
  - 2.0% for CHF patients

(Sentara Home Care’s 30-day overall readmission rate is 14.8%)

- Patient satisfaction greatly improved as they were able to receive care in the comfort of their own homes.
- Sentara has rolled out the program to 6 hospitals since early 2011.