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Home Health Initiatives Reduce Avoidable Readmissions by Leveraging Innovation

The Alliance for Home Health Quality and Innovation has compiled a series of case studies to illustrate how home health care providers can decrease avoidable hospital readmissions by using innovative programs and technology solutions to manage complex conditions such as heart failure. In each of the following profiles, a home health care provider reduced their acute care hospitalization rates through a strong care management program combined with the use of in-home technologies.[1] Each profile seeks to identify key elements that led to their success.

One of the primary goals of health care reform is to provide better outcomes for patients by including reducing unnecessary hospitalizations. The Affordable Care Act requires the Centers for Medicare and Medicaid Services (CMS) to track unnecessary hospital readmissions and penalize providers for "excess readmissions." The Readmission Reduction Program, which became effective in fiscal year 2013, targets hospitals and applies between a 0.01% and 1% penalty of Medicare revenue, with higher penalties for high rates of heart failure, mycardial infarction (heart attack), and pneumonia.[2] Approximately 2,217 U.S. hospitals may face penalties as high as $280 million. Home health care providers can play a critical role in reducing unnecessary rehospitalizations through better-coordinated care transitions from acute to post-acute care settings.

As many home health agencies continually look for ways to improve patient care, technology has played an increasing role in comprehensive chronic care management programs. Some home health providers use telehealth systems and other technologies to assist in avoiding rehospitalizations and improve quality of life and patient satisfaction. ❖

How Does CMS Measure the Rate of Acute Care Hospitalization (ACH)?

Until January 2013, CMS measured Acute Care Hospitalization (ACH) through the Outcomes Assessment and Information Set (OASIS) reporting tool. Home health care providers indicated the date that the patient began home health services, the setting where the patient received care before starting home health, and the setting the patient goes to after leaving home health. Using these data points, CMS calculated rates of ACH, tracking when a patient discharged from an acute care hospital into home health returns to the hospital setting. Under current measurements, CMS uses Medicare claims data to determine a home health agency's rate of ACH.

Additionally, home health care providers report a wide range of data through the OASIS reporting tool including: whether clinicians have completed required clinical processes, patient outcomes, and the quality of care. Many of the OASIS measures are made publicly available to patients through Home Health Compare.[3] Home health providers may also voluntarily report their OASIS data to the Home Health Quality Improvement Campaign (HHQI) to measure and track patient outcomes and pursue quality improvement initiatives. [4]

[1] For the purposes of this paper, the term "telehealth" remote patient monitoring systems that allow home healthcare providers to monitor a patient's symptoms and vital signs remotely.

[2] See Amy Boutwell, Time to Get Serious About Hospital Readmission, Health Affairs (Oct. 10, 2012), available online at: http://healthaffairs.org/blog/2012/10/10/time-to-get-serious-about-hospital-readmissions/.

[3] See What is Home Health Compare?, available online at: http://www.medicare.gov/homehealthcompare/About/What-Is-HHC/What-Is-HHC.aspx. For additional information on the various data sources used in Home Health Compare, please visit: http://www.medicare.gov/homehealthcompare/Data/Quality-Measures/Quality-Measures-List.aspx.

[4] See http://www.homehealthquality.org/.

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CASE STUDY

Norwell Visiting Nurse Association and Hospice

Early Intervention and Patient Education Lead to a Significant Decrease in Acute Care Hospitalizations

"The goal of the program is early intervention, health maintenance and the continued prevention of avoidable acute hospitalization episodes for HF and COPD patients."

BACKGROUND: Norwell VNA and Hospice is an independent nonprofit home health care agency serving Boston's South Shore since 1920. The agency's reputation for providing cost-effective, exceptional services with innovation and integrity has established its position as a regional leader in 21st century home care. Norwell has been named to the HomeCare Elite™ Top Agencies in the country for the last seven years. Norwell has an average daily census of approximately 600 home health care patients.

Beginning in October 2011, Norwell Visiting Nurse Association and Hospice (Norwell) established a task force with a sole focus to prevent unnecessary hospital readmissions. Norwell's care management team focused on early intervention using CARDIOCOM® telehealth technology. Using real-time information received through the telehealth technology, the Norwell program empowered 115 patients (from March through November 2011) with a primary diagnosis of heart failure (HF) to take control of their health through timely and targeted patient education. Since the inception of the program, Norwell has provided telehealth services to support the management of their disease in over 8,300 patient months of service.

RESULTS: Norwell's care management program, combined with telehealth technology, successfully reduced the organization's overall ACH rate in 2011 from 25% to 20% as reported in Home Health Compare. HF patients included in Norwell's telehealth program, ACH rate was 19%.[1] Of the 115 patients in the program, 22 were hospitalized within 30 days and four were discharged to hospice care. The two most prevalent reasons for hospitalization were dyspnea and falls.[2]

Under the new Medicare claims methodology, the overall rate of unplanned hospitalizations was 16% for all Norwell home health patients between October 2011 and September 2012, below the national average of 17% and the Massachusetts state average of 18%.

PATIENT PROFILE: Norwell enters all patients with a history of HF (regardless of whether the diagnosis is primary, secondary) into their care management program. The goal of the program is early intervention, health maintenance and the continued prevention of avoidable acute hospitalization episodes for HF and COPD patients.

[1] Norwell calculated this rate through a manual tracking process where the numerator included HF re-admissions and the denominator included all patients on the HF formal protocol excluding planned admissions. This methodology is non-risk adjusted. Strategic Healthcare Programs, LCC. (SHP) processes patient information for the purpose of providing outcomes data for an agency's patients. SHP data is real time and follows similar methodology of Home Health Compare.

[2] The typical patient hospitalized during the first week of home health care tended to be 88 years old, female, living alone and with a OASIS M1032 Rehospitalization Risk Score of 4.1.

"The Telehealth team includes a Nurse Practitioner (NP), three Registered Nurses (RNs) on a rotating schedule, and one technician to manage the telehealth equipment."

THE CARE TEAM: Norwell's Rehospitalization Task Force is comprised of several different teams, with each focusing on a different area of patient care:

- High-Risk Patients;
- Case Management;
- Hospital Admissions;
- Telehealth; and
- Palliative Care.

The Telehealth team includes a Nurse Practitioner (NP), three Registered Nurses (RNs) on a rotating schedule, and one technician to manage the telehealth equipment. The Telehealth team works closely with the home health care team to manage the patient's conditions. The home health team includes the home health nurse, the agency's Medical Director, occupational and physical therapists, case managers, home health aides, nutritionists, and medical social workers.

WHY TARGET HEART FAILURE PATIENTS?

Norwell's program targeted patients with heart failure (HF) because:

- HF patients typically have high rates of re-hospitalization;
- Patients managing chronic disease benefit from education on how to best self-manage their condition at home and with family or personal caregivers;
- A strong chronic care management program including early intervention and patient education has been successful at reducing ACH rates for HF patients in the past; and
- Telehealth monitoring devices accurately capture both subjective and objective information which in turn enables clinicians to track patient health data and intervene if their condition deteriorates. By flagging changes such as weight gain, a clinician caring for a HF patient can surmise that weight gain may indicate fluid retention and signal the need for a change in medication or clinical support.

HOW NORWELL REDUCED AVOIDABLE ACH FOR HF PATIENTS:

There are two foundational elements to Norwell's program: (1) a strong clinical commitment to integrated chronic care management and (2) early intervention using telehealth technology.

1. Frequent Clinical Contact at the Start of Care: At the start of care, the team's nurse practitioner identifies high-risk patients based on OASIS responses M1032 (Risk for Hospitalization) and M1034 (Patient's Overall Status). Norwell then "front loads" visits for high-risk patients during the first week of care, a strategy that increases the number of interactions between the patient and their home health care team at the beginning of care.

Within twenty-four hours of discharge, the home health team meets with the patient to complete the OASIS assessment, reconcile patient medications, and assess home safety. The home health nurse assesses the patient's readiness to use telehealth technology,

installs the telehealth system if appropriate, and teaches the patient how to use the equipment. After set up, patients measure their vital signs and respond to health status questions that are immediately sent to Norwell's Care Team to determine whether the patient's data warrants further intervention.

Within forty-eight hours, the nurse returns to the patient's home to continue patient education on self-management of their disease. The telehealth system works as a teaching

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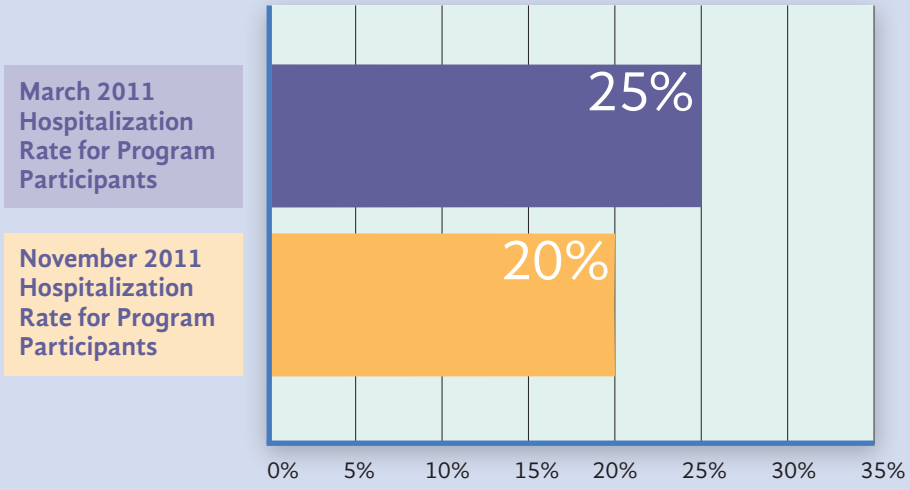
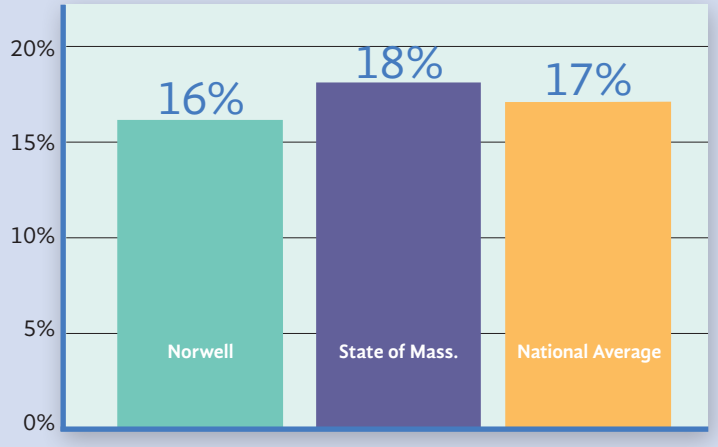
Initial Program Impact, Norwell



Overall ACH Rates for Norwell VNA

Oct. 2011 - Sept. 2012 (Home Health Compare)



"The telehealth system gives staff objective, targeted data to support their clinical decisions, including each patient's vital status information that may indicate when a patient's conditions appear to be worsening."

tool to help the patient recognize the signs and symptoms that may indicate their HF is worsening. For example, it can provide a comparison to the prior day's weight or a physician specified "dry weight." The telehealth system can also provide daily health status assessment and education. Based on the patient's responses, the telehealth e quipment helps the patient understand the daily behaviors that influence their health condition and provides data to the clinician to track the patient's progress or flag signs that the disease is worsening.

2. Timely Care Coordination: Throughout the episode of care, the team conducts bi-weekly interdisciplinary case conferences and utilize the Integrated Chronic Care Model (ICCM).[3] The nurse practitioner leads the case conferences that include all of the patient's clinicians. The team works collaboratively with case managers and physicians to optimize the plan of care and foster self-care behaviors.

The telehealth system gives staff objective, targeted data to support their clinical decisions, including each patient's vital status information that may indicate when a patient's conditions appear to be worsening. If the clinical assessment warrants a change in the plan of care then the physician is contacted or a visit is scheduled. The telehealth technology helps the clinical team to focus on at-risk patients and identify signs of worsening health before the patient requires a costly rehospitalization. ❖

[3] See PM Suter, et al., Best practices for heart failure: a focused review, *Home Healthcare Nurse,* (July – August 2012), available online at: http://www.ncbi.nlm.nih.gov/pubmed/22664959.