

implemented, the average 6-month HF 30-day All-Cause readmission rate decreased by 39% postintervention over the 6-month pilot period.

**Conclusions:** The team-based HF Nurse Navigator interventions described when implemented for every Acute HF patient admission decreased HF readmission rates. There is a need to have 7-day a week coverage by a HF NN in an institution to ensure identification of services unique to each HF patient's complex needs. The HF NN can ensure that the HF patient has a smooth transition from hospital to home with these interventions, resulting in a decreased readmission risk.

**Case Study: Daily review of telemonitoring data by a critical care nurse improves outcomes in a patient with Class IV, Stage D heart failure with reduced ejection fraction receiving home intravenous dobutamine for palliation.**

**Purpose:** The purpose of this case study is to demonstrate how a robust telemonitoring program, which includes daily critical care nurse review of heart failure symptoms, vital signs, oxygen saturation, weight, and blood glucose levels, prompts clinical interventions that result in overall improved symptom management and decreased hospital readmissions for a patient requiring home inotrope infusion.

**Objectives:** 1. To summarize particular telemonitoring data that triggered nursing telephonic outreach for further patient evaluation  
2. To summarize clinical interventions resulting from data and nursing telephonic outreach  
3. To report patient outcomes (symptom improvement and avoidance of hospitalizations)

**Methods:** A retrospective review of this patient's medical record was performed, which consisted of telemonitoring data, physician order changes, and clinical assessments performed by critical care nurses.

**Results:** This 50 year old male with Class IV, Stage D heart failure with reduced ejection fraction was admitted to this home infusion provider on 03/26/2015 to receive palliative treatment with continuous intravenous dobutamine 2.5 mcg/kg/min and daily telemonitoring. He was not a candidate for advanced heart failure therapies, such as left ventricular assist device or heart transplant, due to prior non-compliance with his treatment plan. The first telemonitoring data was transmitted on 03/28/2015. The patient was largely compliant with daily data transmissions throughout the course of care, which ended 06/03/2015 when the patient's insurance changed and the payor mandated transfer of care to another home infusion provider. A telephonic assessment performed by a critical care nurse occurred each day the transmitted data triggered an alert. A total of 25 alerts were received and are summarized as follows: 1 increased lower extremity edema, 5 weight increased more than 2 pounds in 24 hours, 7 heart rate and blood pressure elevations, 2 blood glucose elevations, 1 increased orthopnea, 1 significant weight loss in 24 hours, and 8 missing daily data transmissions. These alerts and resulting telephonic assessments prompted 61 clinical interventions, which

included: 32 nursing visits for IV furosemide administration, 7 patient education sessions, 1 additional dose of oral furosemide, 7 rechecks of blood pressure and heart rate, 6 physician contacts, and 8 patient contacts requesting health check/data transmission.

**Conclusions:** Daily critical care nurse telemonitoring resulted in nearly daily interventions with gradual stabilization of weight and vital signs, no decline in respiratory status, and no hospitalizations throughout 69 days of service. Of particular significance is the fact that telemonitoring improved the patient's compliance to his treatment plan, which resulted in an evaluation for a left ventricular assist device placement.

**It takes a Village to Care for the Mechanical Circulatory Support Device Patient throughout the Care Environment**

**Purpose:** Over 23,000 mechanical circulatory support (MCS) devices have been implanted since 2006. Survival for patients with MCS at 3 years is approximately 60%. In the hospital environment, there are an increasing number of patients with devices from both index admissions, readmissions and non-device related admissions. Frequently patients in the Progressive and Acute Care settings are required to travel off the unit requiring nurses to leave their other patients while accompanying the MCS patient. Our urban, academic medical center needed a way to support these patients and the team members caring for them.

**Objectives:** Creating a safe environment for patients to receive care is of utmost importance in a complex patient population with essential life sustaining equipment. Empowering knowledge to our team members allows for smoother transitions throughout the practice areas and a shared ownership for their safety.

**Methods:** A class was developed for support team members and taught by CT Surgery Clinical Nurse Specialists and VAD Coordinators. Transporters, care partners, occupational therapists, physical therapists, speech therapists, nurses in procedural/ambulatory areas, and others attended the educational class. The 2 hour class consisted of introduction to MCD devices - Heart Mate II, III / HeartWare and Total Artificial Hearts devices. Opportunities for hands on learning allowed for greater comfort with handling the equipment during everyday care or an emergency. This annual required education was offered monthly.

**Results:** Stable ventricular assist device patients are able to travel off the Progressive and Acute care units without a nurse or VAD coordinator due to this collaborative effort. There has not been any serious safety events related to VADs being transported off the units since this practice was implemented in 2013.

**Conclusions:** It takes a village to care for patients with Mechanical Circulatory Support and this organization welcomes them throughout the care environment. Non-licensed team members in addition to nurses in ambulatory areas can safely care for patients when leaving their primary inpatient units, allowing for greater awareness of the special needs of this complex population.