

promoting adherence to the scientific guidelines, such as Get With the Guidelines®-Heart Failure (GWTG-HF), assists hospitals in effectively delivering high quality care to improve patient outcomes. The objective of this project is to form multidisciplinary collaboratives that will rapidly implement evidence-based guidelines to develop best practices that can be shared to improve heart failure patient outcomes.

**Methods:** The AHA will lead a quality improvement initiative for transforming heart failure care in three major cities including Chicago, Milwaukee and St. Louis.

- A retrospective review was conducted using GWTG-HF on measures with low adherence from participating hospitals in the metro markets.
- Baseline data of specific HF measures from Quarter 1, 2018 were analyzed and to determine areas of improvement needed.
- Using regional and 1:1 hospital meetings, AHA will lead a quality improvement initiative to transform HF patient care.
- The HF project will focus on professional education, enhancing systems of care and facilitating the sharing of best practices.
- The patient population will include patients from GWTG-HF with a principal/primary diagnosis of heart failure.

**Results:** The project goal within the 2-year timeframe of this initiative is to achieve 20% improvement from baseline data OR achieve AHA's 85% adherence threshold in each measure. AHA Quality staff will observe and monitor market-level data within GWTG-HF to uncover and recommend improvements, provide consultation to clinicians, deliver targeted training and resources such as webinars, conferences, toolkits, care pathways, educational materials and to foster best-practice sharing to address common barriers.

**Limitations:** Participating hospitals vary in size, discharge volume, GWTG participation tenure, FTE support and resources

- \*There is incomplete baseline date for the three thirty day follow up measures
- Initiative implementation may vary slightly in 3 metro markets

**Conclusions:** The two-year multi-city quality initiative will bring together multiple hospitals to share best practices, develop resources and analyze Get With The Guidelines data for performance improvement to accelerate heart failure patient outcomes. Further investigation is merited evaluating the effectiveness of quality collaboratives to enhance care.

## PRACTICE IMPROVEMENT

### Safely Ambulating Patients with a Pulmonary Artery Catheter: Changing Practice and Improving Care

**Background:** Patients waiting for a heart transplant can be hospitalized for extended periods of time, ranging from months to over a year. During this time, patients typically require continuous hemodynamic monitoring with pulmonary artery catheters (PACs) to guide medical

management. Out of concern for catheter movement/dislodgement, the standard of care for patients with PACs historically has their activity limited to bed rest. Decreased physical activity leads to deconditioning, osteoporosis and emotional distress. Recent data of ICU patients demonstrated beneficial effects from early mobility. There is limited data in the literature with regards to safely ambulating patients with PACs but from what has been studied, patients expressed a feeling of improved physical and emotional well-being (Harris et al., 2013).

**Purpose:** To determine if patients with PACs can ambulate safely, without movement or dislodgement of their catheter, in order to prevent physical deconditioning and improve emotional well-being.

**Method:** All patients on the Cardiomyopathy Unit with a PAC in place were included in this quantitative analysis. Inclusion/Exclusion criteria were created as patients were considered unsafe to ambulate if they had the following: symptomatic arrhythmias, low blood pressure, low SV02, substantial oxygen requirements ( $\geq 4L$ ) or had inotropes started within 12 hours. Those with significant physical therapy constraints such as non-weight bearing, non-ambulatory, or an assist of  $\geq 2$  were not eligible. The Heart Failure Nurse Practitioner evaluated the patients and entered an order if ambulation was deemed appropriate. The patient was educated on ambulating with a PAC guidelines. The patient was allowed to ambulate on telemetry twice daily, accompanied by a RN only. Prior to ambulation, the RN measured PAC position externally, ensured securement of an occlusive dressing at the site and catheter immobilization, printed RA and PA waveform strips to be placed on a tracking sheet. The patient's transducer cables were then disconnected from the bedside monitor. The patient was allowed to ambulate as tolerated, while being monitored for arrhythmias on telemetry, (hemodynamic waveforms were not monitored during ambulation). Post ambulation, the patient's PAC transducer cable was reconnected to the monitor and zeroed. The RN then reassessed the PAC position externally, printed RA and PA waveforms to compare to prior and ensured integrity of the dressing. The RN replaced the dressing if it was no longer occlusive to prevent infection. If a complication occurred, the Heart Failure Nurse Practitioner was notified and the type of complication was documented on the tracking sheet.

**Results:** 89 patients were observed for potential complications associated with PACs during ambulation including: migration of the PAC (forward/backward), fracture in the catheter, dislodgement of catheter, life threatening dysrhythmias. No complications were observed in 493 ambulation experiences.

**Conclusions:** By utilizing and inclusion/exclusion criteria, setting limits on the frequency a patient is allowed to ambulate and creating a protocol to ensure a controlled setting, patients with PACs can safely ambulate without monitoring the PA waveforms. The use of a standard dressing and immobilization technique prevents catheter dislodgement during ambulation. By increasing physical activity, patients will gain strength to help prevent deconditioning during prolonged hospitalizations