Honeywell Life Care Solutions Telemonitoring Guidelines
Heart Failure Follow Up M1510

Desired Outcomes	• **Decrease re-hospitalization incidence for patients with heart failure (HF)** • **Improve heart failure patient outcomes for HF follow up (M1510) via telemonitoring with early identification of signs and symptoms and immediate intervention**	
Standard of Care	**Rationale/Process**	**Implementation & Implications**
Patient Enrollment/Monitor Assignment Patient diagnosis of CHF (M1010: Inpatient Dx, M1016: Dx Causing Change in Tx, or M01020/1022/1024: Primary/Secondary diagnoses for home care). Patients are provided with a monitor that includes a scale peripheral in the home configured to monitor blood pressure, heart rate, pulse oximetry and weight at the Start of Care (SOC). Other VS monitoring peripherals may be included such as Glucose, PT/INR, ECG or other based on the patient's condition.	Admission clinician enters heart failure Dx on OASIS (M1010, M1016 and/or M1020/1022/1024) and Physician Plan of Care (POC) / 485 (M1010, M1016 and/or M1020/1022/1024). Admission clinician / Manager identifies need for telemonitoring and assigns monitor for use at SOC.	Initiate Heart Failure Protocol on all patients with Dx of heart failure.
Initial Patient Assessment A comprehensive assessment including OASIS is performed at admission.	Establish clinical and functional status of patient.	Utilize monitor at SOC for baseline vital signs and during completion of comprehensive assessment and OASIS.

Telemonitoring Protocol
 	
Vital sign parameters are established using monitor based upon results of assessments -including weight, & pulse oximetry (M2250a).
 	
Parameters will be included in physician plan of care/485 (traditional Medicare).
 	
Protocols and guidelines for timely Intervention for Signs & Symptoms of HF are established.
 	
Review of trends and monitoring questions and Patient re-assessment for signs and symptoms of heart failure via telemonitoring, at each visit and during each telephone contact.
	• Vital sign parameters should be discussed and approved by the physician (OASIS guidelines M2250a).
	
	• Vital sign transmission will allow remote monitoring of patient's condition
	
	• Monitoring of vital signs and symptoms will identify potential problems in a timely manner and allow clinicians to and intervene before patient's condition worsens in order to prevent hospitalization
	
	  ◦ Vital sign parameters are necessary to determine when to notify the physician regarding problems.
	  ◦ Questions specific to HF will assist clinicians to assess for potential problems
	
	Clinicians will be able to be proactive when
		1. Document the ordered parameters in the body of the physician plan of care (485) box #21.
		2. Review Signs & Symptoms of HF and steps to communicate with physician
		3. Review responses to subjective HF questions answered by the patient on the monitor including but not limited to
		  ◦ Increased difficulty breathing
		  ◦ Using extra pillows to sleep comfortably
		  ◦ Increased swelling in ankles
		  ◦ Increased utilization of oxygen
		  ◦ Development of a cough
		  ◦ Increased fatigue
		  ◦ Running low or out of any medications
		4. Monitor Vital Signs via telemonitor daily and evaluate Signs & Symptoms of HF
		  ◦ Weight gain ≥ than 3lbs. in 1 day or ≥ than 5 lbs. in 7 days
		  ◦ Orthopnea observed or reported
		  ◦ Cough/sputum production
		  ◦ SOB / use of accessory muscles / PO2 ↓ 90%

Standard of Care	Rationale/Process	Implementation & Implications
	contacting the physician and intervene before the patient worsens and potentially requires hospitalization. *Note: Additional details described in "Vital Signs Parameters Guidelines" Document*	↑ use of O2 observed or reported 5. Contact Physician same day if vital sign trends and answers to questions indicate heart failure or problems (M2000/M20002). 6. Document physician contact in *LifeStream*™ and the clinical record including identified problem and action taken. *Note: Additional details described in "Vital Signs Parameters Guidelines" Document* ***Suggested communication with physicians:*** • If weight gain ≥ 3 lbs. in 1 day or 5 lbs. in 7 days ask MD for order to increase existing diuretic for 48 hours & draw a BNP • If weight returns to baseline within 48 hours – request order to resume regular diuretic dose • If an increase of diuretics is ineffective after 48 hrs. – call MD – suggest IV loop diuretic if patient is not on one and request order to draw BMP (prior to diuretic administration) and additional BNP • Increase visit frequency (PRN visits) as indicated for cardio-pulmonary assessment • If no response from IV diuretic after 24 hours – call MD and request increase in IV diuretic
Medication Review A Clinician will conduct a medication review and reconciliation in the patient's home at the Start of Care (SOC).	Review and reconciliation of medications will ensure that the patient is taking the appropriate drugs and dosages and help to prevent omissions, drug-drug interactions and potential adverse reactions.	• Review & reconciliation of all medications • Identify high risk medications patient may be taking
Patient/Caregiver Education Plan • Teach Patient/caregiver to transmit vital signs including weight and pulse oximetry daily and to answer programmed questions • Educate Patient/caregiver on implications of High Risk Medication • Prepare Patient/Caregiver for Discharge when HF is stable /ready for self care management. • Educate patient/caregiver regarding ongoing monitor rental or purchase	• Patients/caregivers will be able to identify signs & symptoms of side effects or adverse reactions to high risk drugs • Patient/caregiver will better understand their disease process, how to identify signs and symptoms of worsening conditions and how to maintain health to the highest level of function	• Teach patient/caregiver side effects and potential adverse effects of medications and Signs & Symptoms of HF (Weight gain, edema, SOB, exhaustion) ◦ Utilize "*Teach DASH diet*" (↓salt/↑fruit, veg., whole grains, lean meat, poultry, fish, non-dairy) ◦ Utilize "*Teach Back*" technique to reinforce teaching*; ask patient to repeat what was taught* • Teach patient/caregiver to take and monitor vital signs manually (B/P, Pulse, weights)

Developed in 2010 with assistance by Lynda Laff, Laff Associates. References: American Heart Association, Heart Failure Guidelines; Heart Failure Association of American Heart Failure Guidelines 2010; Target: HF Tool Kit; CMS Interpretive Guidelines for OASIS-C.