Utilizing Home Telehealth Services in the Management of Veterans with Heart Failure

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HOME TELEHEALTH

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What is Telehealth?

• VA Telehealth Services uses health informatics, disease management and telehealth technologies to target care and case management to improve access to care, improving the health of veterans.

• **Telehealth changes the location where health care services are routinely provided.**

• The value VA derives from telehealth is not in implementing telehealth technologies alone, but how VA uses health informatics, disease management and telehealth technologies to target care/case management thereby facilitating access to care and improving the health of veterans.

• Website: [www.telehealth.va.gov](http://www.telehealth.va.gov)
Types of Telehealth Technologies

- Clinical Video Telehealth
  - Real time Clinic Based Video Telehealth

- Store and Forward Telehealth

- Home Telehealth (HT)
What is Home Telehealth (HT)?

- The use of telecommunications technologies to provide clinical care and promote patient self management as an adjunct to traditional face-to-face care.

- Health information is exchanged from the Veteran’s home or other location to the VA care setting, thus alleviating the constraints of time and distance.

- A variety of home telehealth technologies are used to monitor selected patients with chronic diseases such as diabetes, heart failure, hypertension and COPD.
Goals of Home Telehealth

- Improve veteran clinical outcomes and access to care
- Reduce veteran complications, hospitalizations and clinic or ER visits for Veterans in post-acute care settings and high-risk patients with chronic disease
Referrals

- Project Red (Re-engineering Discharge)
- Hospitalists
- Primary Care MDs, (PACT)
- Self Referrals
- Pharmacists
- RNs, NPs, LVNs
- Social Workers
- Case Managers
Appropriate Referrals Per Disease Process

- Heart Failure
- HTN
- Diabetes Mellitus
- COPD
- Depression
- CAD (Cardiac Rehabilitation)
Management is a Team Effort

- Veteran can be managed by PCP or be referred to the Heart Failure Clinic
- PACT
  - PCP
  - PACT RN Coordinator
  - Home Telehealth RN
- Heart Failure Clinic
  - Attending physician
  - Registered Nurse Practitioner
  - Home Telehealth RN
Home Telehealth Enrollment Process

- Referral Submitted
- Contact with Veteran to determine interest
- Initial assessment done
- Equipment sent to Veteran & a connection is established
- Assessment provided to referring provider
- Care Coordinator sets alert parameters
- Parameters include Wt, BP, HR, SPO2, Glucose and symptoms
Red Alerts

- Wt gain: > 3 lbs daily or 5 lbs weekly
- Blood Pressure: > 140/90 : < 90/50 or individualized (Provider to set goal)
- Heart Rate: < 50: > 100: or individualized (Provider to set goal)
- Symptoms: Increased SOB, DOE, PND, orthopnea, LE Edema, cough, bloating, fatigue
Cornerstones of Treatment

- Sodium restricted diet < 2000 mg daily
- Fluid Restriction < 2 Liters daily
- Adherence to Medications
  - Beta Blockers, Ace Inhibitors, ARB’s, Diuretics, Potassium, Digoxin, Hydralazine, Nitrates, Anticoagulants for AF
- Getting adequate rest
- Daily Weights
- Early recognition and reporting of signs and symptoms of worsening heart failure
- Ongoing heart failure related education
- Close Monitoring
- Avoiding any toxins (i.e., alcohol, drugs, cigarettes)
Home Telehealth
Quality Improvement (QI) Project

Goals of HT QI Project:

- Grow the Telehealth Program
- Improve access for Veterans
- Increase number of consults sent to Home Telehealth
- Identify factors influencing resistance to the Home Telehealth Program
- Use results to improve program
Conducted in collaboration with the CHF QUERI.

Purpose to understand reasons for poor utilization of telehealth services.

Aims included: documentation of respondent use of HT services and preferences regarding standardized procedures and data communication frequency.

Survey sent to all providers within the Palo Alto Health Care System (n=198)
Results

- Response rate was 43%
- 58% of respondents refer patients to HT
- Remaining respondents (42%) don’t refer patients to HT for the following reasons:
  - Don’t know about HT or the referral process
  - Don’t know who was allowed to make referrals
  - HT information not being useful or helpful to the PACT
  - Belief that HT duplicated PACT management services
  - Belief that HT data not presented in an interpretable or useful format
  - Question of Veteran suitability
Barriers to Referring to HT

- Lack of Caregiver or Veteran interest
- Time & effort needed to review HT notes
- Limited time to review serial biometric data
- Lack of marketing and outreach to staff
- Variable skill level on the part of the staff
- Veteran’s not having land lines needed for bio-monitoring equipment
Action Plan to Address Survey Findings

- Reached out to providers and met with many directly.
- Increased visibility of HT staff at meetings and in clinic if needed.
- Educated staff, specifically on interpreting the information collected and on it’s presentation.
- Improved documentation by educating staff on “Writing Completed Notes”
- Encourage staff to practice at the top of their license.
Heart Failure Veterans Most Likely to Benefit from Home Telehealth

- Multiple admissions/readmissions in the past year for heart failure
- Frequent ER visits for heart failure
- At risk for institutional care
- Frequent face to face visits to control heart failure
- Complex health and/or psychosocial conditions (need for frequent monitoring, distance/travel problems/medication adherence needs, educational gaps)
Advantages of Home Telehealth in the Care of Veterans with Heart Failure

- Cost effective way to manage heart failure patient at home through the use of technology and the heart failure DMP protocol.
- Prevent readmissions by recognizing early signs and symptoms of heart failure
- Engage Veteran in their own care
- Assess Veteran’s who are reporting weight gain, abnormal BP and HR readings and who are reporting new symptoms.
- Assist with the transition from hospital to home with either new admissions or established HT Veteran’s
- Reinforcement of plan of care from either the heart failure clinic or discharging physician
- Ongoing medication reconciliation
- Provides an electronic WT, BP, HR log
Advantages of Home Telehealth in the Care of Veterans with Heart Failure (contd.)

- Close collaboration with the RNP’s following Veteran’s with heart failure
- Providing access to data for the RNP’s and other providers
- HT Care Coordinator provides ongoing education and counseling regarding
  - Medications, diet, exercise and symptom recognition and Providers specific plan of care
Challenges in Managing Veterans with Heart Failure

- Heart failure is a fatal illness
- Lifestyle management is key to success
- Dietary or fluid indiscretion
- Non-responders to Home Telehealth
- Veterans who are non-adherent to medication regime
Enhancing Care through Collaboration

- Cardiology Clinic refers Veteran to Home Telehealth
- HT RN monitors daily transmissions
- HT RN calls and does an initial assessment
- HT RN reconciles medications
- HT RN reinforces all Heart Failure education
- HT RN writes a note and copies RNP on the note alerting him/her to specific problems that need attention
- HT RN also uses telephone, Lync and secure email to communicate with RNP
Together
We
Can
Do
A
Better
Job
REFERENCES

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