The Role of Telehealth Innovations in Managing Chronic Illness and Co-morbid Depression.

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Burden of Chronic Illness

- Medicare beneficiaries
  - 82% have chronic illness
  - 65% have multiple chronic illnesses
  - Chronic illness accounts for 75% of all US health care expenditures

- Wagner’s chronic care model - Delivery of medical care must change due to new patient composition.
Depression in Chronic Illness

- Rates of depression range from 11 to 25%.
- Depression associated with increased morbidity, mortality, and services use.
- Depression or distress accounted for 25% of total cost of heart failure.

- Sullivan et al., 2002
Chronic Illness Interventions

- **Illness management:**
  - Rich et al., 1995 – Reduced rehospitalization
  - Lorig et al., 1999, 2001 - Decreased per patient cost $480 in hospitalizations and $100 in outpatient charges

- **Home-Monitoring**
  - Several Studies – most without a control group. VISN 8 Community Care study found reduced hospitalizations and improved functioning.
Integration Model

- Integrate depression illness management into a standard CHF protocol including home-monitoring
  - More likely to be used by cardiology
  - Improve depression outcomes in chronic illness
  - Perhaps improve outcomes in minor depression
Education and Goal Setting

- Heart failure
- Weighing
- Salt Restriction
- Medication Compliance
- Exercise/Rest
- Contact with cardiac care providers when indicated

- Depression
- Coping with Impairment
- Depression Education
- Identification and Treatment
- Referrals for antidepressant evaluation when indicated
Hybrid Model

- Interpersonal Psychotherapy
  - Loss of former functioning
  - Role Transition

- Behavioral Activation
  - Developing new meaningful routines
  - Finding new reinforcing behaviors
Changing Roles

Living with heart failure means living with change. This booklet aims to help you adjust to the changes in your life brought on by heart failure.
You may find it more difficult to do things you have done in the past. If you don’t accept these changes, you may be spending a lot of your energy and time feeling angry, frustrated, and helpless. If you do accept these changes, then you will be more free to focus your energy on developing a new life for yourself.
“When one door to happiness closes, another opens: but often we look so long at the closed door that we do not see the one that has been opened for us.”
Modify Activities and Learn New Activities

- People with heart failure often face physical limitations that may result in some loss of independence, and loss of former hobbies or enjoyable activities. If this happens, it is important to focus on what you can do. Often you can make adaptations so you can still participate in an enjoyable activity or find a new hobby.

- For example, you may enjoy gardening, but feel overwhelmed or get too tired by the work it takes to maintain a garden. You can modify this activity by using special tools, working on indoor projects, or container gardening. You may also need to rest frequently.
“And in the end it’s not the years in your life that count. It’s the life in your years.”
Heart failure can affect how you feel physically and how you feel emotionally. This program is designed to help you feel your best.

The key to feeling your best includes learning how to manage the physical aspects of your illness AND how to cope with the emotional challenges of heart failure.
Preliminary Results-Major and Minor Depression Combined- Beck Depression Inventory-II   N=33

- Baseline BDI-II
- Week 12 BDI-II

Living Well with Heart Failure: 
- Baseline BDI-II: 20.6
- Week 12 BDI-II: 10.5

Treatment as Usual: 
- Baseline BDI-II: 16.9
- Week 12 BDI-II: 16.8
50% decline or greater on the BDI-II

- In the intervention group, 44% experienced a 50% or greater decline on the BDI-II.
- Only one in the treatment-as-usual group (7%) experienced a 50% or greater decline on the BDI-II.
Medical Outcomes Study - Self Care Index - Range 0-6

- Living Well with Heart Failure
- Treatment as Usual

Baseline
Week 12
What are personal health records?

- The personal health record is
  - An electronic, universally available, lifelong resource of health information
  - Individual own and manage the information which comes from the health care provider and the individual
  - Maintained in a secure and private environment
  - Separate and does not replace the legal record of the provider - American Health Information Management Association
What functions do PHRs serve?

- Maintains both personal and health care provider records
  - Full medication list including OTC
  - Health history
  - Labs
  - Health Trends
  - Allergies/prior medication response
  - Family history
Functions Continued

- Facilitates interaction with provider
  - Medication refill
  - Appointment viewing and scheduling
  - Secure messaging
Continuity of Care

- Full complete medical record can be shared with other health care providers and with family members.
An estimated 70 million people in the United States have some form of electronic personal health record.
Types of Personal Health Records

- Internet Based
- PC Based
- Portable Devices
- Mixed models: e.g. PC based and USB chip
Why personal health records?

- **Empower patients**
  - Institute of Medicine Crossing the Quality Chasm delineated 10 “design rules” for improving care and the success of 6 rules depends on patient involvement in his or her own care.

- **Continuity of care**
  - 1st personal health records built by
    - Frustrated physicians
    - Frustrated caregivers
Case Example

Mrs. Johnson 79-year old with diabetes and congestive heart failure.

- Secure messaged her physician to be certain about Rx instructions.
- Received test results in a timely fashion
- Used site to get illness related information
- Emergency room continuity of care
- Avoidance of Rx interaction
Background Statistics

- Nearly 24 million veterans and 259,000 VA staff are eligible to use My Health e Vet; almost 8 million veterans enrolled in VA.
- More than 598,000 registered users.
- More than 6.1 million Rx refills have been processed since August 31, 2005.
- More than 18 million visits to My Health e Vet since launched in November 2003.
Who are our users?
What are their characteristics, needs, and preferences?
Where do they access My HealthVet?
How often?
Why?
What is working well and what can be improved?
My HealthVet ACSI Survey

Data Collection Period:
October 2007 – May 2008
61,186 respondents

Sampling percentage: 4%
Loyalty factor: 4 pages

My HealthVet average: 17.0%
ForeSee average: 6.5%
My HealtheVet ACSI Results

1. Which of the following best describes you?

- 93% Veteran
- 4% Family member of veteran
- 1% Other role
- <1% VA employee
- <1% Federal government employee
- <1% Veteran Service Organization
- <1% General public

MHV Registration Data

- 86% Veteran
- 4% VA Employee
- 3% Health Care Provider
- 2% Veteran Advocate
- 1% Other

*72% VA Patient
2. What is your age range?

- 1% 19 to 30 years
- 4% 31 to 40 years
- 11% 41 to 50 years
- 34% 51 to 60 years
- 34% 61 to 70 years
- 16% 71 or older

MHV Registration Data

- 12% Under 40
- 66% 40 to 69 years old
- 22% 70 or older

Median age is 60
16. What were you trying to accomplish today in My HealthVet?

- 76% Request a prescription refill
- 24% Access prescription history from my VA medical record
- 18% Look up information about a medication
- 14% Enter/keep track of personal information (e.g. my caregivers)
- 13% Enter/keep track of personal health care information (e.g. blood pressure)
- 9% Other
- 6% Research a health condition
- 6% Find information about VA benefits
- 2% Find a VA health care facility
22. What additional services would you like to see on My Health¥Vet?

88 % View my upcoming appointments
76 % Change or schedule my appointments
75 % Look at information in my VA medical record
67 % Online secure communication with my doctor
22. What additional services would you like to see on My HealthVet? (continued)

49 % Checking that different medications I take are safe when used together
36 % Notification of new content/features on the site
36 % Advance check-in for my VA clinic visits
33 % Reminders of preventive care I need (e.g. shots)
27 % Monthly email newsletter
24 % Share information with other people (e.g. family, doctor)
21 % Educational programs
17 % Advanced directive (e.g. living will, power of attorney, etc.)
 9 % Other
 8 % Information about the quality of VA health care
33. My use of the My HealthVet personal health record has improved my ability to manage my health.

17% Strongly agree
39% Agree
26% Not sure
4% Disagree
3% Strongly disagree
Considering all of your experiences to date, how satisfied are you with the My HealthVet program overall?

Results: 8.3 out of 10

How likely are you to recommend this site to someone else?

Results: 8.6 out of 10

How likely are you to return to this site?

Results: 9.1 out of 10
Main Conclusions

- Elders who use personal health records are satisfied with it.
- Medication management and functionality in general drive use.
- Self-management tasks less of a draw to personal health records.
Future Directions: Rural Health Research Study

- Goal: Develop training session to teach elder veterans to use Personal Health Record to improve communication about medication between VA and non-VA providers