RRP 11-367: Systematic Assessment of Readmissions of Veterans with Heart Failure

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CHF QUERI Network

Period of Funding: 10/2011 – 9/2012

CHF QUERI Goal
Reduce (Unnecessary) Admissions

- ✓ Hospital to Home (H2H)
- ✓ Institute for Healthcare Improvement
- ✓ Project RED (Re-Engineered Discharge)
- ✓ Efforts to improve use of proven therapies
- ✓ Local (VISN, health care system) initiatives

VSSC – Disease Specific Unadjusted 30-Day Readmission Rates

	Fiscal Year 2011	Fiscal Year 2012
VHA	4,163/19,673 21.2%	3,672/17,958 20.4%
VISN 23	148/762 19.4%	129/690 18.7%
Minneapolis VAMC	51/250 20.4%	43/223 19.3%

Project Aim

Gain a better understanding of ongoing readmissions and how they might be reduced.

Methods

Developed Vista program to identify admissions (all-cause) that occurred within 30-days of a previous discharge from same facility that had a primary discharge diagnosis (ICD-9-CM code) of heart failure in closed patient treatment file (PTF) records.

- class III program that requires approval & installation by local IRM staff.
- queued to run daily.
- program sends notification of admissions to site-selected staff via Vista mailman.

Exempted by Minneapolis IRB

Office for Human Research Protections guidance: human research subjects protections do not apply to quality improvement activities including collecting data for clinical, practical or administrative purposes.

Methods

Local staff responsible for conducting systematic assessment of each readmission.

- complete patient interview as soon as possible after readmission.
- complete chart review after discharge.
- review information periodically to try to gain insights into readmissions.

Patient Interview Form

- main reason came to hospital or ER
- changes in heart failure signs, symptoms, other medical problems prior to admission
- problems accessing care prior to admission
- problems with self/home-care, adherence
- what, if anything, patient, VA or non-VA providers could have done to avoid current admission

Chart Review Form

- source of admission, discharge status
- planned or scheduled
- primary medical reasons for admission
- admission vitals, labs related to heart failure
- heart failure care prior to &
  changes during current admission
- how might admission have been prevented?

Implementation

- Web-presentation and email invitation to CHF QUEIR Network in November 2011
  - 18 sites expressed interest
  - 5 later decided not enough staff time
  - 2 not given administrative approval
  - 2 no further response to emails
  - 9 sites continued interest in using the readmission assessment tools

Implementation

- Working with health care providers or quality improvement staff at each of 9 remaining sites, project leads in Minneapolis sought regional and local IT approval to install the VistA program.
  - 6 sites installed and running
    - first January 2012, last May 2012
  - 1 site used utilization management reports as alternative
  - 2 sites not yet able to install program

Implementation

- At end of project period in September 2012, 7 sites set to complete assessment forms
  - 5 sites had completed some assessments - last began in May 2012
  - 2 sites not yet completing due lack of staff time, extended leaves of absence

Findings

- Minneapolis 29 readmissions between January – June 2012
  - 21 assessments
  - 8 repeated 30-day readmissions

Chart Review Findings

Of the 21 readmissions assessed

- 16 (76%) from private residence
- 20 (95%) not planned or scheduled
- 9 (43%) attributed to worsening HF
  - 8 had documented systolic dysfunction
- 12 (57%) not attributed worsening HF
  - 12 had preserved ejection fraction
  - reasons included cellulitis, pneumonia, renal insufficiency, chest pain, low blood sugar, leg pain, poorly fit leg brace and a bronchial mass.

Chart Review Findings

Of the 9 readmissions with documented systolic dysfunction, treatment* included

- 9 (100%) loop diuretic
- 9 (100%) beta-blocker
- 8 (88%) ACEI, ARB or hydrazine/nitrate
- 1 (12%) aldosterone receptor antagonist
- 1 (12%) cardiac resynchronization therapy
- 6 (63%) case management, home or tele-health

Chart Review Findings

Of the 21 readmissions assessed,

- 3 (14%) related to medication

  non-VA provider dc'd ACEI, C. difficile infection, trouble getting replacement antibiotic

- 4 (19%) related to social issues

  veterans refusing social services, palliative or hospice care and home caretakers refusing to follow recommended diets (restricted sodium, for dysphagia from a previous stroke).

Chart Review Findings

Of the 21 readmissions assessed,

- In the judgment of case reviewers, 6 (67%) readmissions due to worsening heart failure and 9 (75%) of others needed inpatient care.

- 3 (14%) died during readmission, and 4 (19%) discharged to another facility (nursing home, etc.)

Chart Review Findings

Of the 21 readmissions assessed,

In the judgment of case reviewers, 7 (33%) readmissions might have been preventable

- 5 (24%) better or enhanced home/self-care
- 2 (9%) better medical care/care coordination (not necessarily for HF)

Patient Interview Findings

Of the 21 readmissions assessed,

- 4 (19%) not interviewed (varying reasons)
- 5 (23%) interviewed by phone after discharge
- 12 (58%) were interviewed as inpatients when presumably recall would be better and not influenced by the care given during and after the readmission

Patient Interview Findings

Of the 17 patients interviewed,

- 7 who were readmitted for worsening HF
  - 7 (100%) aware of their worsening condition for a minimum of 3 days (median 5 days) before being readmitted
  - 0 (0%) reported problems calling or visiting a VA provider before admission, 4 (57%) did so
  - 6 (86%) continued to take their medication as prescribed
  - 5 (71%) said they needed more help taking care of themselves at home
  - 4 (57%) reportedly consumed too much salty foods and 3 thought this might have contributed to their readmission
  - 0 (0%) said the VA could have done something to prevent their readmission

Patient Interview Findings

Of the 17 patients interviewed,

- 10 weren't readmitted for worsening HF
  - 5 (50%) felt they were asked to do more than they were able to do to take care of themselves at home
  - 4 (40%) wanted more medical help during the week before readmission, but had problems calling or getting to see a doctor or nurse
  - 4 (40%) said their medical problem should have been treated during the previous admission.
  - 1 (10%) needed replacement for home care provider

Conclusions

- The VistA software can be installed by VA medical centers throughout the nation, will identify most readmissions that occur within 30 days after a veteran has been discharged alive from an admission due to heart failure, and will alert local personnel to readmissions in a timely manner. Cooperation from facility administrators and Information Resources Management is needed to make this software widely available.
- Busy health care providers were able to interview patients and review charts to collect information on most readmissions at their hospital. However, the lack of staff time to regularly check for readmission alerts and follow-up to collect timely information was a major limiting factor.

Conclusions

- A variety of individual issues with home or self-care seemed to contribute to a substantial number of the readmissions for worsening heart failure.

- Unresolved problems getting medical care contributed to a substantial number of the readmissions that were not due to worsening heart failure.

- These limited data suggest, that if a variety of individual issues could be addressed, we might be able to achieve a 20% or more reduction in readmissions.

Conclusions

- Gathering this type of patient specific information can help us understand the variety of reasons for readmissions and develop individualized interventions to efficiently try to prevent readmissions.

- Ideally, VA facilities could routinely review each readmission (and perhaps discharge) to identify and address preventable reasons for readmissions. However, a more rigorous evaluation of this approach to reducing readmissions is needed.