H2H Post-Discharge Medication Management Challenge: “Mind Your Meds”

Webinar #1
Tuesday, October 18, 2011
1:00 pm – 2:00 pm ET

Webinar Format

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<td>Welcome</td>
<td>MaryAnne Elma, MPH</td>
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<td>H2H Challenges</td>
<td>MaryAnne Elma, MPH</td>
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<td>Post-Discharge Med Management Evidence</td>
<td>Adrian Hernandez, MD, MHS Leora Horwitz, MD</td>
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<td>Success Measures</td>
<td>Leora Horwitz, MD</td>
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<td>Question-and-Answer</td>
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Welcome

Take Home Messages
• Understand the evidence to support improved post-discharge medication management on reducing readmission rates
• Ask yourself if you/your facility are meeting the success metrics
• Help build the Challenge by asking and answering questions on the listserv

Community Reach
• 1000+ Organizations
• 2000+ Participants
• 34 Partners
• 25 QIOs
• $70K grants in 2010

Key Activities
• 25+ presentations
• 3+ listserv topics/month
• 6 best practice webinars
• 400 people per webinar
• Best practices study with Yale and the Commonwealth Fund
Where we’re going

H2H Challenges
• 6-month projects
• 1 topic focus
• 1 tool kit
• 3 webinars

Community call-to-action

H2H Early Follow-Up Challenge: “See You in 7”

Goal
All patients discharged with a diagnosis of HF or MI have a follow-up appointment/cardiac rehab referral scheduled within 7 days of discharge

Lessons Learned
• Success metrics help focus improvements
• Challenges promote “good practice”
H2H Challenge #2: Post-Discharge Medication Management

Mind Your Meds

H2H “Mind Your Meds” Challenge

Participant expectations
1. Review the “pre-flight checklist”
2. Post to the listserv
3. Use the success metrics as a guide
4. Test one or a combination of tools
5. Participate in the webinars
Post Discharge Medication Management

Adrian Hernandez, MD, MHS
- Dr. Hernandez is a cardiologist at Duke University Medical Center and an Associate Professor of Medicine at the Duke Clinical Research Institute.
- He is actively involved in clinical research from quality of care to clinical trials with a focus on heart failure.
- Dr. Hernandez earned his MD from University of Texas-Southwestern.
- He completed residency at the University of California-San Francisco and fellowship at Duke University.

Post Discharge Medication Management

Leora Horwitz, MD
- Dr. Horwitz is a general internist and an assistant professor of medicine at Yale.
- She conducts research on transitions of care including readmissions and chairs the Yale-New Haven Hospital readmission reduction committee.
The importance of early medication management to reducing readmissions

• In a study where a nurse educator provided cardiovascular patients with a pharmacological plan (a description of the reason for drug use, mechanism of action, possible drug interactions, and symptom management) in addition to providing a list of medications, dosage, and instructions, participating patients had a 35% lower risk of readmission or death.¹

• Discharge planning and home follow-up including medication management has been shown to reduce readmissions and reduce length of hospital stay. In a study of elderly patients who received medication management discharge planning and follow-up, total Medicare reimbursements for health services in the control group were approximately 1.2 million and only 600,000 in the intervention group.¹

• It is estimated that issues with medication use and poor medication adherence in cardiovascular treatment costs the U.S. $100 billion annually.²³

Reduce Risk and Cost
Improve Patient Quality of Life

- As patients experience changes in their medication therapy, clinicians can make efforts to keep patients balanced and healthy.
- The clinician should keep in mind whether the patient understands any changes in their medication and how to manage medications.
- Medication management is crucial to keeping patients satisfied. Patients perceive their health status to be better if they are on evidence based medications.\textsuperscript{11}

Medication use correlates with a decrease in patient mortality

Medication use has been proven to reduce morbidity and mortality in patients with Heart failure and AMI.\textsuperscript{15,5,13} The use of medication as a treatment continues to increase and good medication management is imperative.

The increase in cardiovascular medication

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<tr>
<td>Use of cardiovascular drugs after MI hospitalization</td>
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<tr>
<td>Post-MI statin</td>
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<tr>
<td>Post-MI BB</td>
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<td>Post-MI ARB (ARB)</td>
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<td>Post-MI angiotensin</td>
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Notes: p-value is for categorical variables and mean (SD) for continuous variables. Differences were assessed during the 12-month period prior to and during the index MI admission. Post-MI does not indicate the index MI event.

ACE/ARB = angiotensin-converting enzyme inhibitor/angiotensin receptor blocker; BB = beta blocker; BF = myocardial infarction; PDI = persistence during index admission; PTA = persistence to traditional coronary medications.
Defining Medication Management

Medication Management Defined

- According to The Joint Commission on Accreditation of Healthcare Organizations, medication management includes ensuring that self-administered medications are safely and accurately administered.

- Patients and caregivers must be given information about what medication they are taking, a description of the method for administering it, expected actions and adverse effects, and the method for monitoring side effects. Follow-up should be used to monitor the treatment.\(^{24}\)

- Post-discharge medication management includes the initial evaluation of the patient’s need for medications, the provision of a prescription, and ongoing medical monitoring/evaluation as necessary.\(^{20}\)

Medication Management means:

- Medication adherence (system level definition)
- Medication reconciliation (system level definition)
- Optimal medication therapy (clinician-level definition)
- Health literacy (patient-level definition)
Medication Adherence

The importance or adherence

• 31-58% of cardiovascular patients are non-adherent in taking medications.¹
• 33% - 69% of medication-related hospital readmissions in the U.S. are due to poor medication adherence.³

• Improved medication adherence among HF patients can lead to a decrease in emergency department visits, rehospitalization, and mortality.³⁴

• Though the use of evidence-based medication for AMI patients is increasing, there continue to be high rates of discontinuation. Especially in elderly patients, efforts to reduce to gap in treatment are effected by high rates of discontinuation.¹⁶

Consequences to Non-Adherence

• Medication non-adherence contributes to 20-64% of heart failure rehospitalizations.¹
• In MI patients, good medication adherence (a rate of filling or taking medication at least 80% of the time) has been linked to lower rates of subsequent MI and lower mortality rates.²

Self-Reported Medication Adherence by Medication Type

Adherence becomes harder to achieve with multiple medications.²
Medication Reconciliation

- Medication error and patient confusion most commonly occur during care transitions (during admission, transfer, or discharge from a health care facility).27,18

- “Medication reconciliation is the process of comparing a patient’s medication orders to all of the medications that the patient has been taking. This reconciliation is done to avoid medication errors such as omissions, duplications, dosing errors, or drug interactions. It should be done at every transition of care in which new medications are ordered or existing orders are rewritten.”27

- Reconciliation of medication needs to be done during hospital admission, discharge, and in follow-up to make certain that all of the patient’s healthcare providers know what the patient’s medications are at time of discharge. A successful transitional medication management program can reduce heart failure patient readmissions, length of stay, cost of hospitalization, and mortality rates.”
Medication Reconciliation

According to the Joint Commission’s Hospital Patient Safety Goals, hospitals must:

• Find out what medicines each patient is taking.
• Make sure that it is healthy for the patient to take any new medicines with their current medicines.
• Give a list of the patient’s medicines to their next caregiver or to their regular doctor before the patient goes home.
• Give a list of the patient’s medicines to the patient and their family before they go home. Explain the list.
• Some patients may get medicine in small amounts or for a short time. Make sure that it is healthy for those patients to take those medicines with their current medicines.

Optimal Medication Therapy

Optimal Medication Therapy is a process which includes prescribing safe, effective, and efficient medication for a specific patient. The optimization of drug therapy is a crucial step to helping patients manage their medications. The appropriate drugs and appropriate doses should be prescribed.

Medication type:
Aspirin, beta-blockers, and aggressive reperfusion therapy have improved the area of medication management by reducing one-year mortality after myocardial infarction.

Monitor the dose:
Drugs such as ACE inhibitors and B-adrenergic blocking agents are often not prescribed in optimal doses due to their need to be titrated up.
Health Literacy

• Health literacy describes an individual’s cognitive and social skills determining their motivation and ability to gain access to, understand and use information for improving and maintaining health. **Health literacy creates empowerment** through increasing access to health information and increasing a person’s ability to use information.33

• In a study of heart failure patients, an intervention provided **support from a pharmacist, verbal instructions, written materials developed at a low literacy level, and communication between the pharmacist and the patient’s healthcare providers.** The intervention group had greater medication adherence, fewer ED visits, hospitalizations, lower costs, and increased patient satisfaction than the control group.12

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Barriers to Successful Medication Management

Helping Cardiovascular Professionals
Barriers to Successful Medication Management

**Medication-Related Barriers:**23,19,22,34
- Complex medication regimens
- Side effects or adverse effects from the medication
- Taking multiple medications at the same time
- Length of therapy
- Pharmacy wait time

**Patient-Related Barriers:**23,19,22,32,14,9,31,34
- Forgetfulness
- Lack of knowledge about medication and its use
- Cultural, health, and/or religious beliefs about the medication
- Denial or ambivalence regarding conditions
- Length of therapy
- Financial challenges
- Lack of health literacy
- Lack of social support
- Lack of transportation to appointments and/or pharmacy
- Confusion about prescription labels
- Difficulty swallowing medication

**Clinician-Related Barriers:**23,19,22,34
- Poor relationship with clinician
- Poor communication with clinician
- Cultural, health, and/or religious beliefs—disparity between clinician and patient
- Lack of feedback and ongoing reinforcement from clinician

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Barriers to Medication Adherence

**Medication Complexity**
The number of medications prescribed to HF patients continues to increase. Patients can benefit from reducing the number of times per day that they take medication and the number of pills they take. Polypills provide two or more medications in one pill.¹

**Cost**
The cost of medication continues to increase. Generic medications can be used to decrease the cost. Patient discharge can include a conversation about a drug payment plan.¹

**Side Effects**
Empowering patients through education on possible side effects can improve adherence. They are better equipped to deal with side effects that they understand, especially if they know which side effects are temporary and which are permanent.¹
Provider Communication

• In a study of adult AMI patients, communication with health care professionals caused confusion about AMI severity and medication treatment. *Patients mistakenly interpreted symptoms as a result of medication instead of as a result of having had a heart attack.*

• Healthcare professionals can address barriers by helping patients to understand HF symptoms, review the effectiveness of medication to manage symptoms, develop environmental cues to form a habit of taking medications, and establish a positive relationship between patients and their healthcare providers.

• “When screening for appropriate medication use, communicate in an empathetic, nonjudgemental, collaborative way and ask open-ended questions. This will improve the chance of the patient talking about his/her barriers to medication use as prescribed.”

Cost and Access

• Coverage of prescription medications is an important factor in helping patients to have access to their medications. Costs of heart failure medications continue to increase. In addition, many heart failure patients are on medications for other conditions. Patients may be avoiding taking medication because they cannot afford it. It is important for healthcare professionals to be knowledgeable about the cost of medications. Medicare Part D, for example, will likely require substantial out of pocket costs.

• Healthcare providers can help their patients by focusing on what patients can do to overcome perceived and real barriers instead of strictly providing them with information. Discuss any opportunities for assistance with transportation and cost.
Understanding Prescription Labels

It is often difficult for patients to understand drug labels.

- Single-step instructions are easier for patients to understand than multiple-step instructions on medication labels.\(^{32}\)
- Lower levels of literacy and balancing many different medications increase misunderstanding of prescription drug labels.\(^{14}\)
- Patient comprehension increases with more precise wording on labels.\(^{9}\)
- Drug label instructions are generally awkwardly phrased and vague, creating patient misunderstanding.\(^{21}\)

Patient Knowledge of Medications

- In a study about patient awareness of medications prescribed during a hospital visit, \textit{44% of patients believed they were receiving a medication they were not, and 96% were unable to recall the name of at least one medication} that they had been prescribed during hospitalization.\(^{30}\)

  In an intervention where nurses contacted patients every 90 days, knowledge of prescribed medications improved.\(^{29}\)

- Heart failure patients more accurately understand what they are taking better when they have specific written instructions.\(^{21}\)
Facilitators and Interventions

Medication management is best accomplished by teams of clinicians. In a study, readmission rates were 4 times higher in patients who did not receive an education intervention from a nurse prior to discharge and in follow-up.

“Bringing together the knowledge, skills, and perspectives of an interprofessional team of physicians, nurses, physician assistants, nurse practitioners, and others where appropriate provides the expertise and synergy to optimize medication therapy decisions, educate patients, implement and monitor medication therapy, enhance adherence, and achieve and measure quality clinical outcomes.”

Teams can include:
- Physicians
- Nurses
- Pharmacists
The Role of Physicians

- Physicians can be a key source of support for HF patients. Many patients struggle with negative emotions and complexity of the self-care regimen. Physicians have an important role in providing social support to patients and increasing their motivation to engage in healthy behaviors.25

- It is also important for the physician to put HF patients in touch with social workers, counselors, and other care providers that can provide support to the patient.25

Nurse Participation

Nurse-directed patient education should include1:

- Comprehensive counseling about discharge medications
- Rationale for use in heart failure or after myocardial infarction
- Dose, how to take, when to take, what to do if a dose is skipped
- Anticipated or transient adverse effects, serious adverse effects
- When to contact a health care provider, which health care provider to contact
- Food, other drugs, or over-the-counter therapies that could affect drug effectiveness

Include patients’ family members/caregiver in education session(s)1:

- Review of medications
- Review of possible adverse effects and serious adverse effects

Outpatient reinforcement of educational information1:

- Patient reminders: written, telephone
- Home visits
- Clinical visits
Pharmacist Participation

• Pharmacists are accessible and have the skills and knowledge to help patients manage their medications. **Pharmacists are in a position to optimize medication use**, reduce or prevent medication-related problems, and improve patient health.\(^{35}\)

• Pharmacists can play a key role in reconciliation of medications. A study comparing a discharge routine involving only doctors and nurses to a team of doctors, nurses, and pharmacists showed that **the team including a pharmacist significantly reduced the risk of medication discrepancies and prescription errors in** patients with heart failure within the first month after discharge.\(^{10}\)

• Patients who received recommendations from clinical pharmacists were more likely to not have issues such as medication non-adherence, untreated indications, suboptimal medicine choices and cost-ineffective drug treatments.\(^2\)

Assess Patient Readiness

Patients need to feel ready and able to make healthy changes in order to adhere to their treatment. A healthcare professional should take the time to establish whether a patient is motivated to change their habits and accept a new form of therapy.

• Ask the patient about their understanding of their condition.

• Ask about their personal reasons and specific goals for wanting to recover or control their condition.

• Ask what you can do to help.

• If a patient is not ready to make change, it is best to educate them more on their condition and benefits of treatment.

• If a patient is not sure if they are ready to change, remind them why change is important and educate them on the skills and tools to achieve behavior change.

• If a patient is ready to make changes to improve their health, help them to set goals, create a medication plan. Continue to motivate them and recognize their achievements during each visit.\(^{23}\)
Patient Counseling

Counseling can help to individualize addressing a patient’s barriers to medication management. It can also provide the opportunity to address a patient’s misperceptions about their condition and treatment, and improve adherence.

Education and counseling for patient and family/caregiver should include:
- Basic drug information, dose, and possible side effects.
- What to do with other prescriptions from previous physician visits or hospitalizations.
- Possible natural remedies and vitamins
- How to best manage a complicated medicine regimen
- Issues related to the cost of medication
- Strategies to facilitate adherence
- Discuss barriers and how to overcome them

Methods and Tools:
The teach-back method has shown positive results in patient self-management. Visual aids such as medication schedules have shown improving patient understanding, reducing in medication errors, and improving health outcomes.

Intervention is Needed

- Intervention through a patient-centered message has been shown to change beliefs of HF patients about the benefits and barriers to taking medications.
- Patients who receive early follow-up are more likely to be prescribed evidence-based drug therapies and more likely to use them.
Follow-up Increases Medication Use

Figure 2. Unadjusted medication use at 6 months among candidates for each therapy according to 1-month follow-up status. ASS indicates angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; BB, β-blockers, and LDL-C, low-density lipoprotein cholesterol (to convert LDL-C to milligrams per liter, multiply by 0.0259).

Figure 3. Unadjusted and adjusted likelihood of 6-month medication use adjusted for study site, baseline demographics, socioeconomic factors, patients' avoidance of medications or care because of cost, psychosocial factors, medical history, clinical status on admission, cardiac rehabilitation participation, myocardial infarction characteristics, and discharge medications. ASS indicates angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; CI, confidence interval; LDL-C, low-density lipoprotein cholesterol; RR, relative risk. To convert LDL-C to milligrams per liter, multiply by 0.0259.

A Comprehensive Intervention

A successful intervention should be comprehensive.23,22,1,19

- Identify and target patients who are at high risk for rehospitalization
- Assess and address patient factors that affect adherence to regimens and ability to engage in self-care
- Simplified dosage regimens
- Education about the medication, its benefits, side-effect management, duration of therapy, and what a patient can expect is provided
- Follow-up care and reminders
- Positive relationships with healthcare providers
- Patients are involved in the decision-making process
- Patients and providers work together to set goals
- Rewards for achieving goals
- Ongoing reinforcement, motivation, and support at every step in the health care system
- Social support, include family members and caregivers in education
- Self-care management training to increase the patients ability to understand and promote patient self-care
- Teach skills, don’t just present information
“Mind Your Meds” Success

The clinician is successful if:

1. HF and MI patients are prescribed appropriate medications, dose, type, and frequency.
2. Medication reconciliation is performed accurately as appropriate for every patient AND is documented in the medical record.
3. Possible external barriers to obtaining prescribed medications are identified in advance, addressed, and documented in the medical record.
4. Possible barriers to patients remembering/understanding the need to take medications as prescribed are identified in advance, addressed, and documented in the medical record.
5. Patient/Caregiver is provided with documented instructions and prescriptions for all their medications, especially when and how they should be taken, during the discharge process.
6. Patient/Caregiver can demonstrate they understand the importance of taking their medications, of adhering to their medication as prescribed, and of adhering to any changes to their prescriptions – especially medications that are discontinued.
7. Patient/Caregiver can demonstrate they understand possible side effects and symptoms that may be related to their medications, and who to call if they have symptoms that may be related to medications.
“Mind Your Meds” Success

The patient is successful if:

8. Patient/Caregiver remembers to take all their medications as prescribed (i.e., dose, type, frequency).
9. Patient/Caregiver can demonstrate they understand what each medication does, why the medication is important to take as prescribed, and what potential side effects there may be for medicines.
10. Patient/Caregiver brings his/her medications or a medication list to each and every clinic visit.
11. Patient/Caregiver can discuss any challenges, problems, issues, side effects, or questions about medications with clinician.

How this will work

Timeline

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<tr>
<td>Webinar #2: “Mind Your Meds” Tool Kit</td>
<td>Thu Dec 8</td>
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<tr>
<td>Webinar #3: Lessons Learned</td>
<td>March*</td>
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* Exact dates to be determined.

Everything will be available online at http://www.h2hquality.org
Accept the H2H Challenge

Over the next 6 months:
- Succeed in the H2H Challenge!
- Try a recommended strategy or tool
- Participate in the webinars
- Post to the listserv
- Tell us your strategies for improvement

Moderated Question-and-Answer Session

Please submit your question online at this time.
References Cited

   http://www.hhs.state.ne.us/med/medication.pdf
References Cited


Thank You