

Reconciling Medications

A Medication Safety Best Practice
Initiative
Success in a Rural Hospital Setting

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Discussion

- History of Massachusetts Project
- Process of Medication Reconciliation
- Keys to Success
- The Patient's Home Medication List

History in Massachusetts Reconciling Medications

The Massachusetts Statewide Patient Safety Collaborative

Massachusetts Coalition
for the
Prevention of Medical Errors

M | H | A
**Massachusetts Hospital
Association**

Mass. Coalition Initiative

- Funding from AHRQ grant to DPH to reduce rate of two types of adverse medical events using voluntary collaborative model
- Modeled after successful Coalition Best Practice initiatives
 - Medication Error Prevention
 - Restraints & Seclusion

Topic Selection

- **Review of evidence for following criteria**
 - Importance
 - Existence of good preventive strategies
 - Feasibility
 - Measurability
- **Statewide poll, Advisory Committee vote**
 - Reconciling medications
 - Communicating critical test results



Timeline

-
- Consensus Group Meetings Sept, Oct, Nov 2002
 - Set of Consensus Best Practices December 2002
 - Dissemination February 2003
 - Promote Implementation 2003-2004



Medications

- Most common intervention in health care
- Across the continuum of care
- Patient is a key member of the team
- Information to be transferred is
 - Complex
 - Sometimes incomplete



Topic Resonance

- Medication safety remains major concern statewide
- Complex process, need for standardization and simplification
- Information transfer at patient handoffs well-known opportunity for error



Project Goals

- Identify *consensus* Best Practices
- Widespread dissemination, with endorsements, high visibility
- Adoption by *all* Massachusetts hospitals
- Reduce medication errors at patient interfaces
- Reduce preventable adverse drug events statewide



What is *"Reconciling Medications"*?

Based on work by Roger Resar, MD
Luther-Midelfort Hospital

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Historical Perspective

- Staff at Luther-Midelfort determined that over half of medication errors occurred at the interface of care
 - Admission
 - Intra-hospital transfers
 - Discharge

Problem Identified

- Poor or inadequate process to compare list of current medications
- Examples of problems
 - “Continue home meds”
 - Critical care meds continued as patient moves to different level of care
 - “Discharge on home meds”

The Reconciling Process

(1) Getting the home med list (at intake)

- Interviewing strategies to promote accuracy
- Input from patient/family/alternative sources
- Outreach: patients arrive with accurate list

(2) Writing medication orders

- Goal: work from accurate home med list

(3) Identify and reconcile discrepancies

- ★ Order (no omissions, no duplicates, right med/dose/
frequency/route)
- ★ Communicate (to next level of service)

Goals

- To design a process that will ensure the most accurate patient medication list available, thus reducing the number of medication events upon admission, transfer and discharge

Goals (cont.)

- The goal is “to make it easy to do the right thing”
- Find ways to improve the process
 - **Do not stop with trapping the errors**

How are Medications Reconciled Upon Admission?

- The patient's home medications are compared to the physician's admission medication orders
- The medication history can be obtained from the patient and/or family
- Strategies for when the patient and/or family not able/available

Reconciling Upon Admission (cont.)

- When the patient and/or family is not able or available, the following sources are used:
 - transfer form if patient is being transferred from another facility
 - checking with the physician
 - calling the patient's pharmacy
 - having the patient's medications brought in
 - searching through recent records

How Are Medications Reconciled Upon Transfer from a Specialty Unit to Another Nursing Unit ?

- The patient's most current medication record is compared against the physician's transfer orders
- Appropriateness of medication
- Change in the patient condition



Reconciling Upon Internal Transfer (cont.)

- Special issues for ICU
- Special issues for surgery patients
 - Pre-op assessment process
 - Medications not related to surgery



How Are Medications Reconciled Upon Discharge ?

- The patient's reconciled list of admission medications is compared against the physician's discharge orders

Reconciling Upon Discharge (cont.)

- To be considered
 - Was patient on medication prior to admission?
 - Is the patient receiving a prescription for a medication s/he has at home?
 - Brand vs. generic names?
 - Change in directions?



Impact

- Rate of medication errors reduced 70% in short seven month period
- ADEs reduced by over 15%
- Significant efficiency gains Time saved
 - At admission (nurse): 20-25 min.
 - Transfer from CCU: 25-45 min.
 - At discharge (pharmacist): 35-50 min.

Source: Luther Midelfort [Rozich, Resar JCOM Oct. 2001]



Implementation Case Study:

The Holyoke Experience and Franklin Medical Center Experience

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Medication Reconciliation Form

Admission Assessment
Collect for all drugs/herbals/homeopathic

1. Drug
2. Dose
3. Route
4. Frequency
5. Written on admit (Y/N)
6. MD contacted (Y/N)
7. Result of MD contact:
med ordered (Y/N)

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Medication Reconciliation Form

Column Heading	Instructions
Date, Time, Initials of Interviewer	Record date and time information was gathered and signature of health care professional recording/confirming data entered into the first six columns. Be sure your full signature, your professional designation, (RN, RPH) is recorded.
Drug Name, Dose, Schedule	Record full name, dose, and patient's actual usage pattern. Record deviation from labeled instructions in Comments section. Include Over the counter, and herbal /alternative medicines.
Last Taken	Record date and time patient took last dose.
Amount of NON-compliance	Record number of scheduled doses missed in one week. "0" = patient takes every dose as scheduled Record number of "prn" doses taken in a time period, "4 per day" or "6 times per week"
Data Source	Record source of information: Pt = patient interview Fam = spouse, family member Clinic = clinic records H&P = recent history & physical Trans = transfer records from another facility RX = prescription vials or pharmacy call Other = data source explained in comments section
Order on Admit?	Reconcile MD's initial medication orders with medication history. Y = continued on admission Held = MD does not want medication given at time of admission Changed = same medication but different dose or schedule Replaced = different medication with similar action ordered instead
Order at Discharge?	Reconcile discharge orders with medication history. Y = continue same medication and dose Changed = same medication but different dose or schedule Replaced = different medication will similar action ordered instead D/C'd = medication stopped during hospitalization, not appropriate at discharge
Patient's Pharmacy	Document name(s) of pharmacy(ies) that maintain a patient profile for this patient and can be used as a reference. Include city and phone number if known. Hospital pharmacist can provide phone number if needed.
Comments	Record deviations from labeled instructions. Record any pertinent observations or assessments you feel important in understanding patient's therapy and/or ability to self medicate. Record any special requirements for discharge prescriptions.

Additional instructions for Outpatient Surgicenter patients seen in Prep Office or prior to same day admit:

Complete the first five columns only.

Document Pre-Procedure Medication Instructions at the bottom of "Comments" section.

Medication Reconciliation Form

GEN116 - #012570
REV 04/22/05

NUR-016 Med Reconciliation

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Best Practices for Reconciling at Admission

Policies:

- Assign responsibility to someone with sufficient expertise, within context of shared accountability
- Reconcile within specified timeframes
- Develop clear policies and procedures

Technique:

- Adopt standardized form
- Place form in highly-visible location



Best Practices (cont.)

Technique (cont.):

- Provide access to drug information and pharmacist advice at reconciling
- Improve access to complete medication lists at admission

Support & Maintenance:

- Provide orientation and ongoing education to all healthcare providers
- Provide feedback, ongoing monitoring



Educating Staff Supporting Patients

- Involve nursing education staff members from the beginning
- Develop clear policies and procedures linked to new process, forms
- Provide initial & ongoing staff training
- Patient medication cards



The Community Education Piece

I) Patient Medication Cards

- Design
- Distribution: Physician Office
 - Senior Groups
 - Community Groups
 - Emergency Dept
 - On Discharge from hospital
- Automated List on Discharge

II) Education of Patients

- Bring to Doctor Visits
- Bring to Hospital



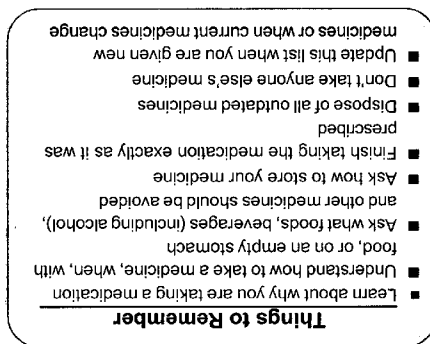
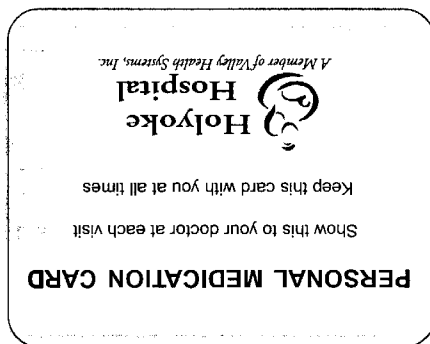
BEING SAFE WITH MEDICINES: HOW YOU CAN HELP BY USING THIS ION CARD



Medications have many uses. They can help control blood pressure and cure diseases. Medications are strong chemicals, so you need to use them correctly.

Whenever you seek health care, remember that you are part of the health care team. You share the responsibility for safe medication use. It is important that you learn as much as you can about the medications that you are taking. Keeping a current list of all these medicines, dietary supplements, vitamins, and herbal products will help your pharmacists, doctors, and dentists safely manage your care. Should you ever have to be hospitalized, this card will help our nurses and doctors make sure that you receive the right medication at the right time.

Taking an active role in the safe use of medications has many advantages. It can help prevent medication mistakes and make you a more informed health care consumer.



Name _____ Date of Birth _____
Address _____ Tel. _____

Present Medical Problems _____

Allergies-Food/Environment _____

Allergies-Drug _____

Physician _____ Tel. _____

In Case of Emergency _____ Tel. _____

Pharmacy(s) _____ Tel. _____

Health Insurance _____ Policy # _____

Health Care Proxy No Yes Location of Document _____

Name of Agent _____ Tel. _____

Living Will No Yes Today's Date: _____

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Keys to Successful Implementation

- Flowchart existing processes to assess priority problem areas
- Start small
- Multidisciplinary development of reconciliation processes



Keys to Successful Implementation (cont.)

- Access to pharmacist on the nursing unit
- Structural support: policies and procedures
- Documentation tools: forms for each step (admission, transfer, discharge)



Keys to Successful Implementation (cont.)

- Software links from online MAR onto discharge order sheets
- Discharge order sheet doubling as prescription order form
- Staff education
- Patient education

Getting the Home Med List

What have we learned?

- Adopt standardized form
- Share responsibilities, ordering prescriber accountable...
- Validate with the patient
- Don't let perfection be the enemy of the good



Identifying, reconciling discrepancies

What have we learned?

- Establish timeframes for categories
 - immediate
 - w/in 4 hours or before next prescribed dose
 - no off-hour calls for non-urgent (eg OTCs)
- MD awareness of safety tenets of reconciling
- Maintain accurate coverage lists for when ordering prescriber not available in the time frame



Using home list when writing orders

What have we learned?

- Make highly visible
- Provide access at point when orders are written
- Having reconciling form serve as an order sheet? benefits and issues...

Implementation Pitfalls

- How can we find the time to do this?
- Lack of multidisciplinary teams and coordination across departments
- Lack of MD buy-in/MD availability to do timely reconciliation
- Difficulty in maintaining the gains