Medication Reconciliation Panel Discussion

Development, testing, and implementation of the new road map
Scope of Adverse Drug Events

- More than 10,000 prescription medications
- Nearly 1/3 of adults in the US take 5 or more medications
- ADEs account for nearly 700,000 ED visits and 100,000 hospitalizations per year.
- Nearly 5% of hospitalized patients experience an ADE.

Agency for Healthcare Research and Quality- Patient Safety Network
https://psnet.ahrq.gov/primers/primer/23/medication-errors
Accessed 4/17/18
Medication reconciliation is the process of creating and documenting the most accurate list possible of all medications a patient is taking, including drug name, dosage, frequency and route, and comparing that list against the provider’s admission, transfer and/or discharge orders with a goal of providing correct medications to the patient, families and care providers at all transition points within each environment of care.
A medication reconciliation roadmap that is broad and flexible enough to be implemented by all MN hospitals for their inpatient populations will be written, tested, and distributed by the end of 2017. At least 50% of participating MN hospitals will utilize the newly developed medication reconciliation roadmap before the end of 2018 in an effort to reduce adverse health events and readmissions related to medication reconciliation.
Road Map Development Process

Road Map Drafts
- Research
- Revisions
- Stakeholder feedback

Pilot Draft
- 7 pilot sites
- Trial and feedback

Pilot Site Test
- Pilot site feedback
- Revision
- Analysis of progress

Final Road Map Published
- Online portal
- PDF version
Step 1: Develop an Accurate List of Medications Patient Takes at Home

- Utilize principles of obtaining Best Possible Medication History (BPMH)
Medication Reconciliation
Order Inpatient Medications

- Step 2: Order Inpatient Medications
  - BPMH is reference point for inpatient medications.
Medication Reconciliation
Reconcile BMPH to ordered inpatient meds

- Step 3: Review BPMH and inpatient med list to create discharge med list.
- Address unintended discrepancies
- Evaluated at each transitions in care
Medication Reconciliation
Clinical Decisions in Preparation for Discharge

- Step 4: Develop discharge med list
  - Reconcile BMPH and inpatient med list
Medication Reconciliation
Communicate discharge med list

- Step 5: Communicate discharge med list to
  - patient
  - family
  - accepting facility
<table>
<thead>
<tr>
<th>General practices</th>
<th>Road map questions (if not present at your hospital or answering no, please see next column for suggested resources)</th>
<th>If specific road map element is missing, consider the following resources:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(check each box if &quot;yes&quot;)</td>
<td>• Institute for Healthcare Improvement Model for Improvement (2011)</td>
</tr>
<tr>
<td></td>
<td>Are there defined roles and responsibilities for each discipline involved in the medication reconciliation process?</td>
<td>• AHRQ Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation (2012)</td>
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<td></td>
<td>- Do process and procedures define:</td>
<td>• Society of Hospital Medicine Medication Reconciliation Implementation Guide (download)</td>
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<td></td>
<td>○ who is responsible to conduct medication history interviews?</td>
<td>• Sample Medication reconciliation Responsibility Assignment Matrix, a.k.a. RACI (Responsible, Accountable, Consulted, Informed). A RACI matrix is designed to clarify expectation on the level of participation for each role. (Courtesy St. Luke’s Hospital, Duluth)</td>
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<tr>
<td></td>
<td>○ who is responsible to review the Best Possible Medication History (BPMH)?</td>
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<td></td>
<td>○ who is responsible to compare the admission/transfer/discharge orders with the BPMH?</td>
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<td>Are there established policies for obtaining or reviewing a BPMH when a pharmacist is not available (e.g. for non-24-hour pharmacy hospitals)?</td>
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<td></td>
<td>Do you have a policy and procedure that defines the medication reconciliation process available to all staff?</td>
<td></td>
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<tr>
<td></td>
<td>- Answer yes if you have a written medication reconciliation policy/procedure that staff can access.</td>
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[https://www.mnhospitals.org/Portals/0/Documents/patientsafety/Medication_Safety/Medication%20Reconciliation%20Road%20Map.pdf](https://www.mnhospitals.org/Portals/0/Documents/patientsafety/Medication_Safety/Medication%20Reconciliation%20Road%20Map.pdf)
MHA Medication Reconciliation Roadmap Pilot

Brent Williams, RPh., CPPS

July 2018
<table>
<thead>
<tr>
<th>Step</th>
<th>Best Practice Question</th>
<th>Progress (hospital)</th>
<th>Progress (clinic)</th>
<th>Current State</th>
<th>Recommendations</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Are there defined roles and responsibilities for each discipline involved in the med rec process?</td>
<td>1</td>
<td>1</td>
<td>Work done with RACI.</td>
<td>Policy needs to be reviewed. Differentiate based on patient’s point of entry.</td>
</tr>
<tr>
<td>2.</td>
<td>Do you have a policy and procedure that defines when the medication reconciliation process is completed?</td>
<td>1</td>
<td>1</td>
<td>Have policy.</td>
<td>Policy needs to be reviewed. Differentiate based on patient’s point of entry.</td>
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<tr>
<td>3.</td>
<td>Do you have a process in place, e.g. observation audit or staff conversation, to determine whether the medication reconciliation process is being followed?</td>
<td>0</td>
<td>1</td>
<td>Some work started. CLINICS – is tracked through MU, but can be made more formal</td>
<td>Nothing exists.</td>
</tr>
<tr>
<td>4.</td>
<td>Does the facility have a process, e.g. audit tool or method, to evaluate how well its medication reconciliation process is working?</td>
<td>0</td>
<td>1</td>
<td></td>
<td>Nothing exists.</td>
</tr>
<tr>
<td>5.</td>
<td>Does the facility have a strategy, e.g. PDSA, to conduct medication reconciliation process redesign if audits show process is not working?</td>
<td>2</td>
<td>2</td>
<td></td>
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<td>6.</td>
<td>Are patients evaluated to determine if they have barriers to obtain medications (e.g. financial and transportation)?</td>
<td>1</td>
<td>1</td>
<td>Case management may be doing some evaluation, but not all patients are seen by case management.</td>
<td></td>
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### RACI Tool

#### Step 1: Meditech medication list updated
- **Meditech medication list updated** (new meds added to the list, current medications reviewed, dosages edited to reflect what the patient is actually taking, medications the patient is no longer taking are removed from the list)

#### Step 2: Date and Time of Last Dose taken
- **Date and Time of Last Dose taken is entered in the Meditech list**

#### Step 3: Each medication on the Meditech medication list is marked as "reviewed" for the patient.
- **Each medication on the Meditech medication list is marked as "reviewed"** for the patient. Any concerns or discrepancies regarding the medication are marked as "attention required" in the comments section of the Last Taken screen

#### Step 4: The patient's preferred pharmacy is updated
- **The patient's preferred pharmacy is updated in Meditech**

#### Step 5: Medication List is marked as "complete"
- **Medication List** is marked as "complete" in a PCS intervention to indicate that the list has been obtained.

#### Step 6: Each medication on the patient's home medication list is acted upon
- **Each medication on the patient's home medication list is acted upon** for the current admission with an action of: "Continue from Amb-Queue", "Cancel", "Discontinue", "Hold" for each patient.

#### Step 7: Medication Reconciliation is marked as "complete"
- **Medication Reconciliation** is marked as "complete" in a PCS intervention in Meditech after all home medications have been addressed in step 6.
“What” vs “Who”

- Process

- People

Best Practice
ED Medication Reconciliation Process

**Controls**
- Policy and Procedure M-18
- Scope of Med Rec in ED
- Meditech Hardstops
- Identifying non-conforming outputs
- Communication between ED and inpatient units

**Human Resources**
- Roles and Responsibilities of nurses, pharmacists, and providers
- Training
- Evaluation
- Leadership Support

**Process**
1. Print & Review Meditech List
2. Interview Patient
3. Update List in Meditech
4. Print List Have Patient Review
5. Mark Med Reviewed in Meditech
6. Complete Intervention

**Inputs**
- Patient to be admitted to inpatient unit

**Outputs**
- Accurate Admission Medication List

**Resources**
- eCW
- Internal Med History
- Nursing Home MAR
- Computers / Printers (are there enough)
- Staffing levels and assignments
- TOC pharmacist
- Retail pharmacies
- VA

**Metrics**
- Internal Audits:
  - Meds marked as reviewed?
  - Accuracy of list
Table created to keep track of all the moving parts

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<tbody>
<tr>
<td>Review med sources</td>
<td>10</td>
<td>Review 2 or more sources</td>
<td>Meditech history:</td>
<td>What is the timeframe for completing the BPMH and med rec?</td>
<td>Should the Meditech history be printed and used for notes when comparing?</td>
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<tr>
<td></td>
<td></td>
<td>- Meditech history</td>
<td>- Click on Reconciled Meds tab</td>
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<td></td>
<td></td>
<td>- Ambulatory note in Meditech</td>
<td>- Use “Snapshot” tab to view other dates when Med Reconciliation was completed</td>
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<td>- VA list</td>
<td>- Print list and use as a working document to compare to</td>
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<td>- Home med list</td>
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<td></td>
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<td>- External medication history - refill history, discharge medication</td>
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<td>list from recent hospitalization, list from nursing home, etc.</td>
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<td>- One source should include the patient</td>
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<td>Ambulatory note in</td>
<td></td>
<td>Meditech:</td>
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<td>Meditech:</td>
<td></td>
<td>- Open EMR, select Other Visits → View All Visits</td>
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<td>- Select Other Reports</td>
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<td>- Select most recent clinic note by clicking text bubble under Report</td>
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<td>- Select Print at bottom of screen</td>
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<td>VA list:</td>
<td></td>
<td>Minneapolis VA and St. Cloud VA are on separate systems that do not</td>
<td>Have cover sheet for fax. This should be developed into an official form. Where</td>
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<td></td>
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<td>communicate... Twin Ports VA in Superior is actually under the</td>
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<td>Minneapolis system.</td>
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When do we Educate and Implement Changes for Medication Reconciliation?

What can we accomplish now?
1. Define Best Possible Medication History (BPMH) & Medication Reconciliation
2. Build culture around obtaining BPMH.
3. Educate on BPMH.
4. Evaluate current Meditech views by all disciplines and make changes for consistency.
5. Clarify and develop an understanding of the roles and responsibilities and the downstream effects of an accurate/inaccurate BPMH.
6. Define roles, who is responsible, for BPMH and Medication Reconciliation.

Meditech - Regardless of System
1. Basics of updating the medication list

Current System – Meditech 5.67
1. Use of Attention Required to identify medication discrepancies
2. Using Add/Edit/Delete and understanding of functionality
3. Viewing external medication history

Future System - Expanse
1. Ambulatory using same medication list – what ambulatory does will affect what we see
2. Evaluate how medication discrepancies are flagged
3. Evaluate the system sign/signal that med rec is complete
4. Determine what crosses over between modules? Does everything from the hospital module cross to ambulatory and vise versa
5. New comment fields in Expanse
Progress to date

• Defined Best Possible Medication History (BPMH) & Medication Reconciliation and time frame goals for completion of each.

• Instructional Guide for interviewing the patient to obtain the BPMH.

• Tool Tip for navigating the VA system to obtain a med list

• TOC Pharmacists hired to obtain BPMH for patients admitted through the ED.

• Meditech views consistent for all disciplines
to be continued
Medication Reconciliation Improvement Project

RiverView Health

Crookston, MN
Who We Are

- 25-bed Critical Access Hospital
- Surgical Services
- Emergency Department
- 7 Outpatient Clinics
- Home Health
- 24-bed Memory Care Unit
- Ancillary Services
The Start of a Journey

- Spring 2017: Collaboration with community long-term care facility
- October 2017: Board of Directors and hospital leadership declared Med Rec a strategic priority
  - Joined MHA’s Med Rec Pilot Program and formed internal improvement team
The Team and Tools

- Interdisciplinary team
- Lean tools
- MHA’s roadmap and resources
Current State

Baseline roadmap completion was 28%

Problem Statement
Patients being discharged with incorrect medication list, inconsistent process with variation used for completion of med rec, incomplete med rec.

• Defects/Problems:
  – Unclear roles and responsibilities
  – Patients not bringing meds/list with them
  – Lack of understanding and variability of performance within EHR
  – Physician completing Med Rec prior to nurse obtaining BPMH
  .... And Many More...
Scope and Goals

Scope
Inpatient Unit and Outpatient Departments

Goals
– 56% completion of the med rec roadmap by September 30th, 2018
– Reduce adverse drug events for hospitalized patients in 2018
Progress

• GEMBA walks and understanding EHR workflows
• Complete Medication Reconciliation Policy revision and approval
• Education development and training specific to discipline and area

ADE’s 56%
Continued Opportunities

• EHR enhancements
• Interoperability across EHR’s
• Communication with outpatient pharmacies
• Patient engagement
Next Steps

- Direct observation audits
- Preadmission reminders
- Continued focus on education and communication
Contact Information

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Questions?