Medication Reconciliation
Post-Hospital Discharge

Jenny Arnold, PharmD, BCPS
Director of Pharmacy Practice Development
Washington State Pharmacy Association

Steve Riddle, PharmD, BCPS, FASHP
Vice President of Clinical Affairs
Pharmacy One Source/Wolters Kluwer Health
The objectives are to describe…

- why timely medication reconciliation is critically important following a hospital discharge.
- about current health care regulatory, accreditation and other drivers for performing medication reconciliation.
- strategies for performing efficient medication reconciliation, including examples from primary care practice settings where access to a shared EHR does not exist.
I recently saw a patient in my office complaining of dizziness, blurred vision, and severe nausea. This was a 67-year-old female with a history of CHF, hypertension, and arthritis who was seen in the ED about two weeks ago for acute pneumonia. She was admitted to the hospital, treated with a broad spectrum antibiotic and discharged. Her medications upon admission were digoxin 0.125 mg one tablet daily, furosemide 10 mg one tablet in the morning, lisinopril 10 mg one tablet daily, atorvastatin 20 mg one tablet daily, and ibuprofen 400 mg one tablet three times a day.

Upon discharge the hospitalist increased her digoxin dose to 0.25 mg one tablet daily and wrote a new prescription for Lanoxin 0.25 mg. Upon reviewing exactly what her current list of medications were, it was discovered that she was taking both digoxin 0.125 mg from the prior prescription I had written for her and Lanoxin 0.25 mg from her new prescription. She had been taking both of these medications for the last 8 days.
Why “Med Rec” Matters to You

Medication Reconciliation

Patient Safety
Regulatory Compliance
Patient Outcomes
Reimbursement
Defining Medication Reconciliation

No standard exists!

The Joint Commission recommends...

The process of verifying that a patient’s current list of medications (including dose, route, and frequency) is correct and that the medications are currently medically necessary and safe.

Other Perspectives on Med Rec

Goal

- Avoid medication errors and discrepancies such as omissions, duplications, dosing errors, or unnecessary therapy, as well as, to observe compliance and adherence patterns.

Medication reconciliation should…

- be completed any time there is a change in therapy
- occur at every transition of care
- be a patient-centered process
- target improvement in patient well-being through education, empowerment, and active involvement
- promote communication among patients and healthcare providers
Medication Reconciliation

The Process

Collect
Clarify
Verify
Reconcile
Communicate
Educate

Change in…
• Care Setting
• Medications
Why Medication Reconciliation Matters
“Medication errors are one of the leading causes of injury to hospital patients, and chart reviews reveal that over half of all hospital medication errors occur at the interfaces of care.”

Medication discrepancies are common, occurring in up to 70% of patients at hospital admission or discharge, with almost one-third of these having the potential to cause patient harm (ie, potential ADEs [PADEs]).

ADEs occur in up to 40% of hospitalized patients and 17% of patients after discharge.

Studies indicate similar discrepancies in the hospital and community settings. (Figure 1)


Medication Safety and Primary Care Practice Demands

Average MD has about 100 visits/week and spends about 15 min with each patient

Average panel of primary care MD in US = 2300

- = 7 hours a day of preventive care
- = 10 hours a day of chronic dx care

Medication Safety Issues per MD*

- #1610 patients with discrepancies
- #345 with serious potential medication problem

*Based on estimates of 70% of patients with at least 1 medication discrepancy and 15% classified as serious
Cost Impact of Medication-related Problems in the US

Annual U.S. costs of improper medication use = $177.4 billion*

HHS estimates that medication-related errors cost the Medicare $1.2b annually#


Drivers for Medication Reconciliation
Natl Patient Safety Goal 3: *Improve the safety of using medications*

NPSG.03.06.01: *Maintain and communicate accurate patient medication information*

Five Elements of Performance (EPs)
- Obtain, Compare, Provide ('list'), Explain

**Applies to:**
- Hospitals, including Critical Access Hospitals
- Ambulatory Care
- Office (Ambulatory) Surgery
- Home Care
- Long-term Care
- Behavioral Health
The Patient Protection and Affordable Care Act (H.R. 3590)

Value-Based Purchasing (VBP)

Core Measures (Section 3001)

Healthcare-Associated Infections (HAI) (Section 3001)

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) (Section 3001)

At Risk: 1% in FY2013 growing annually to 2% in FY2017 (70% Core Measures + HAI and 30% HCAHPS)

Medicare Reimbursement

At Risk: 1% reduction beginning FY2015

At Risk: 1% reduction in FY2013 and will Rise to 3% by FY2015

Hospital Acquired Conditions (HAC) (Section 3008)

Readmission Rates (Section 3025)

COPD, CABG, PTCA, etc.

Med Rec seen as critical component
Medication reconciliation post-discharge:
% of discharges for members ≥65 years for whom medications were reconciled within 30 days of discharge

Medication Reconciliation:
Reconciliation After Discharge from an Inpatient Facility

• % of discharged patients ≥65 years from any inpatient facility (eg, hospital, skilled nursing facility, or rehabilitation facility) and…

• seen within 60 days following discharge by the MD providing on-going care…

• who had a reconciliation of the discharge medications with the current medication list documented in the medical record
ARRA: Meaningful Use & Med Rec

To quality for HIT reimbursement providers must demonstrate...

- **2011**: Perform med rec
- **2013**: Med rec at 80% of care transitions
- **2015**: Med rec at 90% of care transitions
Pursuing Medication Reconciliation
4 Key Steps to Successful Med Rec

1. Create policies and procedures to facilitate standardization
2. Clarify responsibilities and roles
   • Gain collaboration of the multidisciplinary team
3. Focus on activities that improve patient outcomes
4. Disseminate appropriately reconciled medication lists to other relevant providers
Hospital Results to Date

- Studies consistently demonstrated a reduction
  - medication discrepancies (17 of 17 studies)
  - potential ADEs (5 of 6 studies)
  - ADEs (2 of 2 studies)
- Studies show an inconsistent reduction in post-discharge health care utilization (improvement in 2 of 8 studies).
- Key aspects of successful interventions included
  - intensive pharmacy staff involvement
  - targeting the intervention at high-risk patients

Community Practice Stories and Info
Medication Reconciliation: Multiple Players

- Patient
- Hospital
- Primary Care Physician
- Specialist
- Community Pharmacy
- Home/Caregivers
## Medication Reconciliation: Process

<table>
<thead>
<tr>
<th>Activity</th>
<th>Role</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointment Scheduled</td>
<td>• Office Staff</td>
<td>• Med list form, patient education (letter, script)</td>
</tr>
<tr>
<td>Appointment Confirmed</td>
<td>• Office Staff</td>
<td>• Phone call script, med list form, copy of EMR Med List</td>
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<tr>
<td>Patient Arrives at Clinic</td>
<td>• Patient, Caregiver</td>
<td>• EMR med list, med list form, assistance filling out form from Rx bottles</td>
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<td>Patient is Roomed</td>
<td>• Nursing Staff, Pharmacist</td>
<td>• Staff training, contact community pharmacist/other providers for clarification.</td>
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<tr>
<td>Patient is seen by provider</td>
<td>• Prescriber, Pharmacist</td>
<td>• Provide patient with copy of update EMR med list</td>
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### Activity Details:
- **Appointment Scheduled**
  - Establish expectation of providing med list
  - Role: Office Staff
  - Tools: Med list form, patient education (letter, script)

- **Appointment Confirmed**
  - Reinforce expectation of providing med list
  - Role: Office Staff
  - Tools: Phone call script, med list form, copy of EMR Med List

- **Patient Arrives at Clinic**
  - Provide med list
  - Role: Patient, Caregiver
  - Tools: EMR med list, med list form, assistance filling out form from Rx bottles

- **Patient is Roomed**
  - Clarify and verify med list
  - Role: Nursing Staff, Pharmacist
  - Tools: Staff training, contact community pharmacist/other providers for clarification.

- **Patient is seen by provider**
  - Reconcile and update med list
  - Role: Prescriber, Pharmacist
  - Tools: Provide patient with copy of update EMR med list
Examples Around the NW

- Family Practice Clinic
  - Getting the word out to patients
  - Issues with MAs
  - Allocating time
- Primary Care
  - Paper-based system
  - Scanning list
  - Aiming for good…not perfect!
Tools to Consider

- Med list template
  - Develop or borrow med list template
  - Provide patient a copy of med list you have on file and ask patient to notate any changes—can be done at appointment or ahead of time
  - Incorporate risk strat (definitions, risk assess)

- Script for staff
  - Ensures you get complete information
  - Supports staff that may not have experience with medications
  - Example in Appendix
Making Time for Med Rec

• Basic intervention
  • Minimal medication information and list creation
    • Simple patient = 5 min
    • Complex patient = 15-20 min

• Complete medication interview and reconciliation
  • Medication history and MRP surveillance
    • Simple patient = 10 min
    • Complex patient = 30-40 min

• Published data indicate an average of around 30 min for complete reconciliation
### Resources To Assist

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<th>Responsibilities</th>
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| Community Pharmacist          | • Clarify med list before/after seeing patients  
• Collaborate with pharmacists on patient on Rx use |
| Consultant Pharmacist         | • Manage complex cases (ie, multiple meds, high risk drugs, hx of MRPs)  
• Provide patient education and self-management |
| Patient Education             | • Letter about medication reconciliation                                                                                                           |
| Hospital Portholes            | • Can you connect?                                                                                                                                  |
| Med list vendors              | • Ex-Surescripts' Medication History for Acute Settings                                                                                           |
Patient Stratification for Resource Allocation

**Simple Patients**
- The majority of patients, the minority of med rec time
- Increase self efficacy
- Increased efficiency will offset more time with complex patients
- • Rely on patient as main resource
  • Contact other resources PRN for clarification

**Complex Patients**
- The minority of patients, but the majority of med rec time
- May be good candidate for extra help (ie, consultant PharmD, vendor med list)
- Have designated staff (MA) contact community pharmacy/hospital/other providers BEFORE appointment to try to get med list and pertinent info.
### Patient Risk Stratification for Medication-related Problems

<table>
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<th>Category</th>
<th>Criteria</th>
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<td><strong>Age</strong></td>
<td>&gt; 65 - 80 years</td>
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| **Meds**  | > 4-10 routine drugs  
|           | Presence of high-risk agents (hypoglycemics & insulin, antiplatelets & anticoagulants, narcotic analgesics) |
| **Conditions** | ≥ 3 chronic, comorbid conditions |

Benefits of Patient Engagement in Medication Reconciliation

Only the patient knows every medication (Rx, OTC, supplement, herbal) they are taking and HOW they are taking them.

The patient is the strongest link between prescribers.

Increasing patient engagement in med rec will act to increase the patient’s overall involvement and investment in their health maintenance.

Increased patient involvement means decreased time and resources needed to perform med rec at the physician’s office.

Patient engagement improves med rec which in turn improves patient care and health outcomes.

Provide patients with tools—knowledge, skills and confidence—to facilitate active engagement.
Med Rec To The Rescue

- My mother is 87 years-old with multiple medical conditions. She manages her own medications and routinely takes around 15 pills a day plus multiple doses of insulin (2 types). She visits several specialty physicians regularly and is asked on each visit to validate her medications.

- Several years ago we created a medication list where we recorded all her medications with dose, frequency, and indication, along with her medication allergies & a list of all her conditions and prior procedures. She carries this around with her and brings a fresh copy to each physician visit.

- The physicians’ office staff all LOVE her organized, clear and concise list which helps them keep accurate records for her. Whenever they comment about her list she proudly announces, ‘Well, my daughter is a nurse!’"
“My Medicine List”

A WPSC Sponsored Project
“My Medicine List” Resources

- www.mymedicinelist.org
Considerations for your practice: Where to begin?

- Define goals and communicate expectations regarding medication reconciliation.
- Organize your team or staff—determine roles according to skill, patient needs and available resources. Choose a champion!
- Design the medication reconciliation process and necessary tools to support the safe delivery of care.
- Engage patients and their family or caregivers in the medication reconciliation process.
- Adequately document changes to the patient’s medication regimen and inform those who need to know.
- Ensure that the medication reconciliation process and support tools are easily transferable to other settings of care.
How Can You Help?
Remember the 3 As

- **ASK** every patient about his or her medicine list at each encounter.
- **ADVISE** your patients to carry a list
- **ASSIST** your patients with resources & tools

Refer your patients to
**mymedicinelist.org**
for information and resources

What you don’t know about your patients could harm them!
Resources

- WPSC My Medicine List
  - www.mymedicinelist.org
- The Physicians Role in Medication Reconciliation; Issues, Strategies and Safety Principles (AMA)
- Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation (AHRQ)
  - http://www.ahrq.gov/qual/match/
- Preventing ADEs with Medication Reconciliation (IHI)
  - http://www.ihi.org/explore/adesmedicationreconciliation/Pages/default.aspx
Thank You!
Med Interview Script #1

- What medications do you take? Can you tell me the names of all your medications, including vitamins, OTC drugs, supplements and neutraceuticals?
- Why is it important to take your medications?
- Why do you take this medication? How long have you been taking this medication? Do you have a medical condition? What medical condition(s) do you have? What did your doctor say to you about this medication?
- How do you take your medications (e.g., time of day, with food)?
- Are you taking your medication the way the doctor told you to? When was the last time you took it? When was the time before that?
- What do you do when you make a mistake? Do you ever skip medications or take two when you miss a dose?
- Is your medication making you feel better, worse or no change?
- What other medicines, herbals, supplements, neutraceuticals, drops or sprays are you taking? Do you take other drugs that a physician has not prescribed?
- From where do you get your medications? A local pharmacy? Mail order? The Internet? From another country? Other?
- Who buys the medicines in your family? Should we talk to him or her to make sure we have a complete list of all the medicines you take?
• What prescription medications do you currently take? Why (or for what reason)?
• Are there any that you take only sometimes or when you need it? What and how often?
• What over-the-counter or nonprescription medications/supplements do you take? Why (or for what reason)?
• Are there any that you take only sometimes or when you need it? What and how often?
• How do you take your medicines (with food, morning, night, etc.)?
• What barriers prevent you from taking your medications as prescribed? (time, money, etc.)
• What medications have you recently stopped on your own? When and why?
• Who assists you with your medications? Have you taken anyone else’s medications recently?
• Do you bring your medications with you to your doctor’s office or carry a medication list or pocket med card?
• What pharmacy/pharmacies do you currently use?
• Do you see more than one physician (cardiologist, endocrinologist, oncologist, family physician, etc.)?
Training Tips for Staff Interviewing Patients for Medication History

Things to remember when interviewing:

- Utilize open-ended questions (what, how, why, when) and balance with yes/no questions
- Use nonbiased questions that do not lead the patient into answering something that may not be true
- Pursue unclear questions until they are clarified
- Ask simple questions, avoid using medical jargon, and always invite the patient to ask questions
- Let pt know the importance of using one central pharmacy/pharmacist
- Educate the pt on the importance of using a med wallet card and bringing their meds to the hospital, physician’s office, etc.
- When asking about all medications, be sure to get name, dosage form, dosage, dosing schedule, last dose taken – be as specific as possible about prn medications
- Prompt the patient to try and remember patches, creams, eye drops, inhalers, sample meds, shots, otc, herbals, vitamins, minerals
- When discussing allergies, educate pt on the difference between a side effect and a true allergy - rash, breathing problems, hives
- Have pt describe how and when they take their medications (more vague responses may indicate noncompliance)

Steps to take if patient cannot remember a medication or if clarification is needed:

- Obtain a detailed description of the medication from pt or family member - dosage form, strength, size, shape, color, markings,
- Talk to any family members that are there or contact someone that could possibly bring in the medication or read it over the phone