

Medication Reconciliation @ Bloomington Hospital

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**Bloomington
Hospital**

Objectives

1. Understand the transitions of care in the inpatient setting important for medication reconciliation
2. Identify importance of medication reconciliation with regard to patient safety
3. Recognize the role of communication in improving medication reconciliation

What is Medication Reconciliation?

- An effective process to reduce errors and harm associated with loss of medication information, as patients transfer among community-based and hospital providers

Why is it Important?

- Medication Reconciliation can prevent medication errors
- It may prevent up to 70% of all potential medication errors and 15% of all adverse drug events
 - Whittington J, Cohen H. OSF healthcare's journey in patient safety. *Qual Manag Health Care*. 2004;13:53-59

Pitfalls of Medication Reconciliation



- Admission - Medication History
- Transfer within the hospital
- Discharge to Home

Admission - Home Med History









- Difficulties
 - Patients are poor historians
 - Patients go to many different healthcare providers and pharmacies
 - Medical Information is not easily shared among providers of care

Discharge - Difficulties

- Lot's of medications to compare
- Multiple formulary substitutions
- CICO
- Communication to outpatient providers

Select Home/Active Medication Display Sequence Home/Active Drug Category

Prescribing Physician ID

 [Find Printer](#)**ANALGESICS AND ANTIPIRETICS, MISC.**  acetaminophen (tylenol), 650 mg, oral, every 4 hours as needed**ANGIOTENSIN II RECEPTOR ANTAGONISTS**  irbesartan (avapro), 150 mg, oral, once daily**ANGIOTENSIN-CONVERTING ENZYME INHIBITORS**  lisinopril (zestril), 2.5 mg, oral, twice a day**ANTACIDS AND ADSORBENTS**  alum-mag hydroxide-simeth (maalox equiv), 30 ml, oral, every six (6) hours as needed**ANTIDEPRESSANTS**  fluoxetine (prozac), 40 mg, oral, once daily**ANXIOLYTICS, SEDATIVES & HYPNOTICS, MISC.**  zolpidem (ambien), 5 mg - 10 mg, oral, at bed time**BENZODIAZEPINES (ANXIOLYTIC, SEDATIV/HYP)**  temazepam (restoril equiv), 15mg - 30mg, oral, at bedtime as needed  alprazolam (xanax equiv), 0.25 mg, oral, every 4 hours as needed**Discharge Medication List**Prescription (Home & Active Meds | **New/Changed Meds**)

Drug Name	Dosage	Route	Frequency	Dispense	Refills	Action
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Case 1

- JB is a 64 YO male patient admitted through the Emergency Department of the hospital for severe chest pain
- He was placed in the inpatient cardiac unit for observation to rule out a heart attack

Case 1

- While being admitted, a home medication list was obtained by the Emergency Department staff from the patient's wife
- She carries a hand written list with her for such emergencies

Case 1

- Home Medications (per wife)
 - Lipitor 20mg daily at bedtime
 - Aspirin 81mg daily
 - Lisinopril 10mg daily
 - Synthroid 50mcg daily
 - Methotrexate 10mg daily
 - Sulfasalazine 1gm twice daily
- Error: Methotrexate 10mg once weekly

Case 1

- During observation, the primary cardiologist wanted to continue the patient's home medications
- Cardiologist ordered the medications with the dosing regimens recorded in the E.D.
- Cardiologist was not familiar with the rheumatoid arthritis drugs and did not question the methotrexate dose

Case 1

- Pharmacist received the order in the inpatient pharmacy for methotrexate. They were unsure of the indication, but did not question the physician.
- Patient received methotrexate 10mg daily while in the hospital for 2 days.

Case 1

- Upon discharge, cardiologist electronically reconciled the patient's medication list and ordered the patient to go home on methotrexate 10mg daily
- Patient followed this regimen for 10 days at home

Case 1

- 10 days after discharge, patient began exhibiting several odd symptoms
 - Unexplained bruising
 - Extreme weakness
 - Nausea and vomiting
 - Mouth sores
 - Bloody stools

Case 1

- JB presented to his primary care physician for a clinic appointment
- Upon explanation of recent past medical history and reviewing the discharge documentation, the error was discovered.
- Methotrexate overdoses can result in death!
- Medication reconciliation is **IMPORTANT!**

Focus Session



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Case 2

- SS is a 55 year old female admitted to the hospital for weakness, slowed heart rate, and low blood pressure
- SS was unsure of her home medications
- She doesn't carry a list of her medications, but she states that she always fills them at CVS

Case 2

- Pharmacy Technician in the ED contacts CVS and obtains a complete list of her medications recently filled
- Admitting hospitalist reviews the list of medications and discovers the patient is taking both Metoprolol and Atenolol
- These are both beta blockers. Agents used for blood pressure and heart rate control. Patient should not be on both.

Case 2

- After further investigation, it is found that the medications were prescribed by 2 different physicians
 - Atenolol by her PCP
 - Metoprolol by her Cardiologist
- Hospitalist promptly stopped the Atenolol and the patient's heart rate and blood pressure returned to normal

Case 2

- Patient was discharged from the hospital with a new medication list with instructions of which medications to continue
- Copies of the discharge medication lists were faxed to both the PCP and the Cardiologist

Summary

- Medication Reconciliation is multi-factorial
- It isn't easy to accomplish given the many pitfalls
- Primary focus is patient safety