Pharmacist Medication Reconciliation in an Outpatient Internal Medicine Center
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Background
• Medication reconciliation is a major focal point of the Joint Commission National Patient Safety Goals
• Pharmacists located in an outpatient, ambulatory care setting are in an ideal position to help with this medication reconciliation process

Objectives
• This study describes and quantifies medication reconciliation efforts and resulting interventions by a pharmacist in an outpatient internal medicine center

Methods
Study design
• IRB approved, retrospective review of a medication reconciliation database of patients at an academic internal medicine center
• A medication reconciliation database was completed based on medication reconciliation activities performed by the pharmacist and student pharmacists from April 2014 to April 2015
• Total number of interviews was recorded as well as the incidence of each discrepancy, patient counseling activity and intervention
• Descriptive statistics were used to report data quantitatively
• Surveys were given to resident’s to assess their perception of the collaboration with the clinical pharmacist in this process

Description of site
• Outpatient internal medicine center with approximately 24 internal medicine residents and 1 clinical pharmacist
• As a part of a new service, a pharmacist and student pharmacists perform medication histories and reconciliation on most clinic patients 2-3 half days per week
• Medication reconciliation is performed prior to the medical resident visiting with the patient and discrepancies and/or interventions are communicated to the physician verbally or through a medication reconciliation communication form

Results

• A total of 434 patient interviews were completed and a total of 3261 active medications were reviewed, an average of 7.5 medications per patient
• A total of 1620 clinical discrepancies were documented with an average of 3.7 discrepancies per patient
• A total of 39 allergies were clarified with 40 new allergies being added to the EHR
• The frequency of as needed medications was clarified 165 times and patient refill requests were identified and communicated 190 times
• Patients were counseled 405 times, an average of 0.93 per patient

• A total of 405 interventions were performed collaboratively with clinic physicians, an average of 0.9 interventions per patient
• Over 50% of the interventions involved identification of patients not reaching treatment goals and resulted in adjustment of drug therapy

Discrepancies (n=1620) # %
- Mediations no longer taken 468 29
- OTC and herbal medications added 279 17
- Prescription medications added 402 25
- Medications taken differently than prescribed 297 18
- Non-adherence identified 142 9
- Directions clarified or added 32 2

Patient counseling activity (n= 216) #
- Drug information counseling 105
- Disease state counseling 51
- Medication adherence 35
- Diet counseling 17
- Smoking cessation counseling 7
- Exercise counseling 1

Interventions (n=405) # %
- Therapy changed/adjusted 151 37
- Therapy initiated 109 27
- Therapy D/C 62 15
- ADR identified or prevented 36 9
- Lab monitoring recommended 21 5
- Drug interaction identified 13 3
- OTC recommended 13 3
- Medication list provided to patient 5 1

Conclusion
• Pharmacist led medication reconciliation in an outpatient internal medicine center resulted in correction of many discrepancies in EHR medication lists
• The medication reconciliation chart review and interview allowed for the identification of drug-related problems and resulted in a number of collaborative interventions
• These interventions have the potential to improve patient outcomes and safety; however, future studies are needed to address the clinical impact of this service
• Incorporating medication reconciliation led by the clinical pharmacist is an effective way to expand clinical pharmacy services, assist with patient education, and increase clinical interventions

Disclosure
All authors have nothing to disclose