INTRODUCTION
Pharmacy departments have embraced key performance indicators (KPIs) that include achievement of clinical outcomes, increased patient contact, and reduced harm. Student pharmacists can assist in meeting KPIs while meeting school of pharmacy goals of increasing direct patient interactions.

OBJECTIVE
To characterize the volume and types of medication discrepancies identified on medication history and medication reconciliation reviews completed by student pharmacists.

METHODS

Rotation Design
- Four year, elective longitudinal, Mon – Thurs evenings (5-9pm)
- Students interview patients, call community pharmacies, skilled nursing facilities and primary care providers to obtain a comprehensive medication history for patients within 24 hours of hospital presentation
- Medical record is updated and with preceptor guidance, the admission medication reconciliation is reviewed
- Physicians contacted to resolve urgent discrepancies
- Non-urgent discrepancies communicated to the day-shift clinical pharmacists using an electronic notebook
- Students participate in journal clubs on relevant topics throughout the year

Setting
- 730-bed tertiary care, community hospital
- Primary referral center and flagship institution of a 6-hospital system in an 18 county region of Western North Carolina; over 40,000 hospital discharges per year
- Ten pharmacy residents and affiliation with University of North Carolina (UNC) Eshelman School of Pharmacy and School of Medicine

Study Design
- Prospective, observational, descriptive study
- Part of a larger project in the curriculum of a specific school of pharmacy
- Electronic data abstraction from Access® data base
- IRB exemption obtained; Research Institute reviewed

Inclusion Criteria
- Admission medication histories and reconciliations at Mission Hospital obtained by student pharmacists from May 2014 – April 2015

STUDY DEFINITIONS
- Medication History = process of obtaining what the patient or caregiver reports the patient takes at home, supplemented by external resources
- Medication Reconciliation Review = process of comparing the newly obtained medication history to current inpatient orders with identification and resolution of discrepancies
- High risk Medications = cardiac medications, anticoagulants and antiplatelet agents, injectable and oral hypoglycemic agents

RESULTS (May 2014 – April 2015)

Number of medications reviewed: 9,785
Number of patients seen: 1,018
Average number discrepancies per patient: 4.2
Average student time spent per patient: 22 min
Number of discrepancies (% high risk)
- Medication history: 2,959 (25%)
- Medication reconciliation: 1,307 (26%)

TOOLS

Patient identification
- Daily automated report of patients admitted in previous 24 hours
- Patient priorities for student pharmacists:
  1. Medication reconciliation completed but no medication history
  2. Medication history completed by physician
  3. Neither medication history or reconciliation completed

Data Collection and Preceptor Checkout
- Patient data collected on a standard form also used to present and discuss patient with evening preceptor
- Preceptor guides student in resolution of medication reconciliation discrepancies

STATISTICAL ANALYSIS
Basic descriptive statistics using frequencies, means, medians

CONCLUSIONS
• The success of a student-driven pharmacy medication history and reconciliation service enabled our institution to reduce harm and provide additional direct patient contact.
• Student pharmacists were able to obtain a more accurate and comprehensive history when compared to other health care providers.

LIMITATIONS
• No control group, observational study
• Short study period

REFERENCES

DISCLOSURE
Authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of the presentation.