Medication Reconciliation of Medically-Complex Emergency Department Patients by Second-Year Professional Pharmacy Students

Lauren Haines  
*Cedarville University*, laurenhaines@cedarville.edu

Neal S. Fox  
*Cedarville University*, nfox@cedarville.edu

Rachel Bull  
*Cedarville University*, rrbull@cedarville.edu

Jeb Ballentine  
*Cedarville University*, jballentine@cedarville.edu

Zachary Jenkins  
*Cedarville University*, zjenkins@cedarville.edu

Follow this and additional works at: [http://digitalcommons.cedarville.edu/pharmacy_nursing_poster_session](http://digitalcommons.cedarville.edu/pharmacy_nursing_poster_session)

Part of the Nursing Commons, and the Pharmacy and Pharmaceutical Sciences Commons

**Recommended Citation**

Haines, Lauren; Fox, Neal S.; Bull, Rachel; Ballentine, Jeb; and Jenkins, Zachary, "Medication Reconciliation of Medically-Complex Emergency Department Patients by Second-Year Professional Pharmacy Students" (2014). *Pharmacy and Nursing Student Research and Evidence-Based Medicine Poster Session*. 60.  
[http://digitalcommons.cedarville.edu/pharmacy_nursing_poster_session/60](http://digitalcommons.cedarville.edu/pharmacy_nursing_poster_session/60)
Medication Reconciliation of Medically-Complex Emergency Department Patients by Second-Year Professional Pharmacy Students

Rachel Bull, Neal Fox, Lauren Haines, Dr. John Ballentine, and Dr. Zachary Jenkins

Cedarville University School of Pharmacy

STATEMENT OF THE PROBLEM

Background
- A transition of care is "The movement of a patient from one setting of care (hospital, ambulatory primary care, ambulatory specialty care, long-term care, home health, rehabilitation facility) to another."2
- A medication reconciliation is "The process of identifying the most accurate list of all medications that the patient is taking, including name, dosage, frequency, and route, by comparing the medical record to an external list of medications obtained from a patient, hospital, or other provider."1
- A medication reconciliation can be performed by pharmacists, pharmacy students, nurses, or physicians.
- Research has shown pharmacy students have been more accurate in obtaining patient medication histories compared to physicians and nurses, which aids in a more complete medication reconciliation.2
- Previous research of fourth-year professional pharmacy students performing medication reconciliation in their advanced pharmacy practice experiences has been conducted to determine their competence, but second-year students have not yet been evaluated in this manner.

Significance of the Problem
- Transitions of care are commonly associated with many serious problems, including potential medication errors, which are recognized nationally by professional organizations.
- Medication reconciliation is an integral part of the Joint Commission’s National Patient Safety Goals (NPSG) 2014 for hospitals. NPSG 03.06.01 states, “maintain and communicate accurate patient medication information.”3
- Errors and discrepancies that occur throughout care transitions due to poor medication reconciliations have potential to cause adverse drug reactions.4
- Over two million serious adverse drug reactions (ADRs) occur yearly, resulting in approximately 100,000 deaths.5
- Second-year professional pharmacy students have the potential to perform more cost-effective medication reconciliations, while also enhancing patient care.

OBJECTIVES

Primary Objective: To determine the effect of second-year pharmacy student medication reconciliation on high-risk patients undergoing transitions of care within the emergency department compared to fourth-year pharmacy students in the literature.

Secondary Objective: To determine the impact on patient 30-day readmission rates.

HYPOTHESES

Null Hypothesis for Primary Objective: There is a difference between the outcomes of second-year and fourth-year pharmacy student medication reconciliation.

Null Hypothesis for Primary Objective: There is no difference between the outcomes of second-year and fourth-year pharmacy student medication reconciliation.

REFERENCES


ACKNOWLEDGEMENTS

We would like to thank Dr. Thaddeus Franz (Pharm.D) for all of his help throughout this project.