

Children's Mercy Kansas City

## SHARE @ Children's Mercy

---

### Posters

---

2018

## Pharmacy Driven Best Possible Admission Medication History at a Pediatric Institution

Damon Pabst

*Children's Mercy Hospital*

Charity Thompson

*Children's Mercy Hospital*

Brandon French

*Children's Mercy Hospital*

Brian O'Neal

*Children's Mercy Kansas City*

Garret Matthews

*Children's Mercy Hospital*

Let us know how access to this publication benefits you  
~~See next page for additional authors~~

Follow this and additional works at: <https://scholarlyexchange.childrensmercy.org/posters>



Part of the [Health Services Research Commons](#), [Patient Safety Commons](#), [Pediatrics Commons](#), [Pharmaceutical Preparations Commons](#), and the [Pharmacy and Pharmaceutical Sciences Commons](#)

---

### Recommended Citation

Pabst, Damon; Thompson, Charity; French, Brandon; O'Neal, Brian; Matthews, Garret; Benner, Zeb; and Meade, Joshua, "Pharmacy Driven Best Possible Admission Medication History at a Pediatric Institution" (2018). *Posters*. 28.

<https://scholarlyexchange.childrensmercy.org/posters/28>

This Poster is brought to you for free and open access by SHARE @ Children's Mercy. It has been accepted for inclusion in Posters by an authorized administrator of SHARE @ Children's Mercy. For more information, please contact [hlsteel@cmh.edu](mailto:hlsteel@cmh.edu).

---

**Authors**

Damon Pabst, Charity Thompson, Brandon French, Brian O'Neal, Garret Matthews, Zeb Benner, and Joshua Meade

## BACKGROUND

The need to improve the quality of medication histories upon admission has been identified by The Joint Commission as a potential error point during a patient's transition of care.<sup>1</sup> Our study was conducted due to increased need for quality medication history documentation to minimize adverse drug events. Additionally, research on medication histories in the field of pediatrics is limited. The results and trends from this study are to be used to establish processes to ensure that the number of admission medication discrepancies carried over to the inpatient profile are minimized.

## AIM STATEMENT

To reduce the number of incomplete or inaccurate admission medication histories by 80% from baseline by May 2018.

## METHODS

**Outcome Measure:** Percent of incomplete or inaccurate medication histories

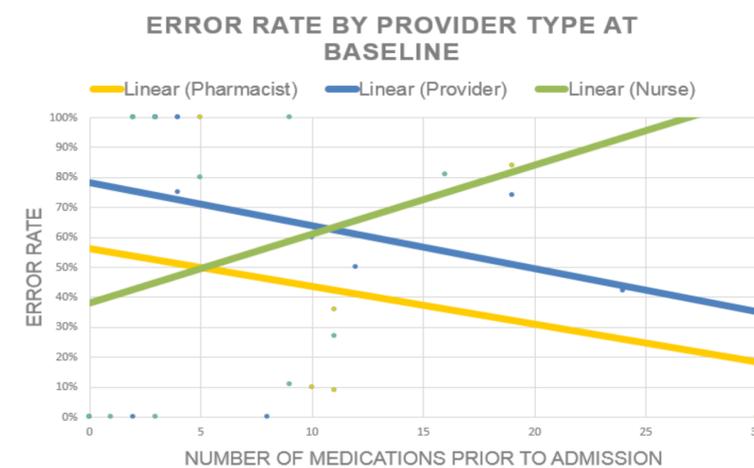
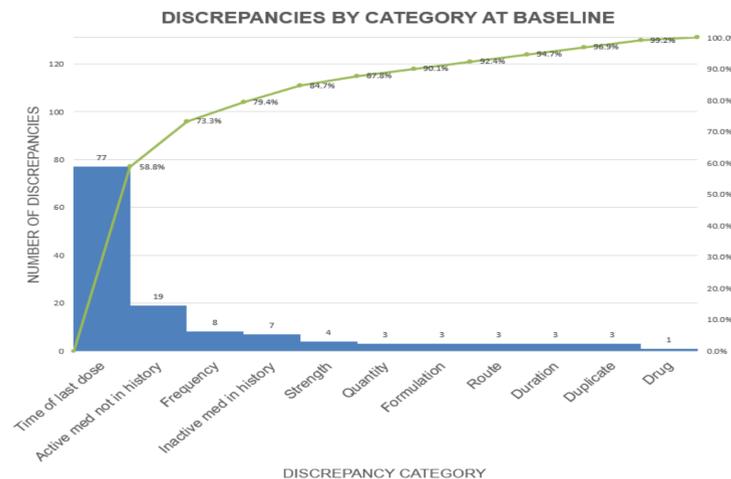
**Process Measure:** Number of discrepancies based on categories

**Balancing Measure:** Amount of time needed to complete a best possible admission medication history

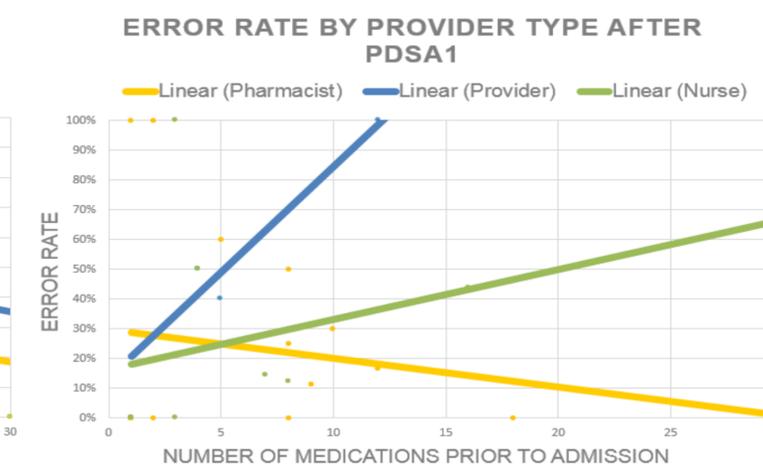
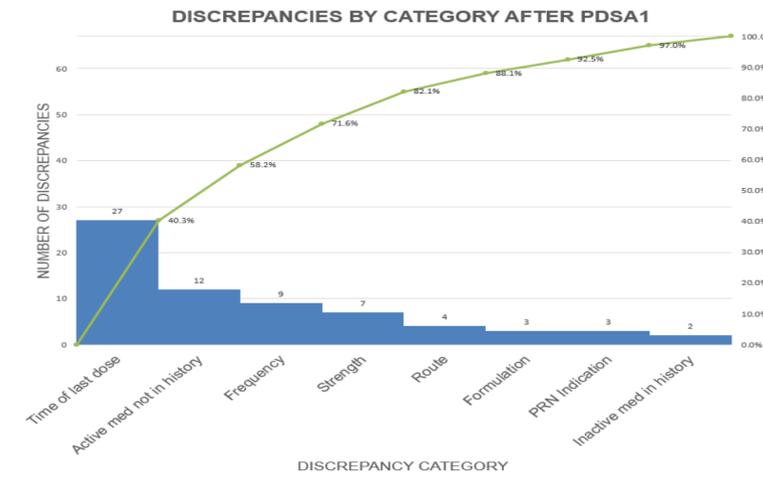
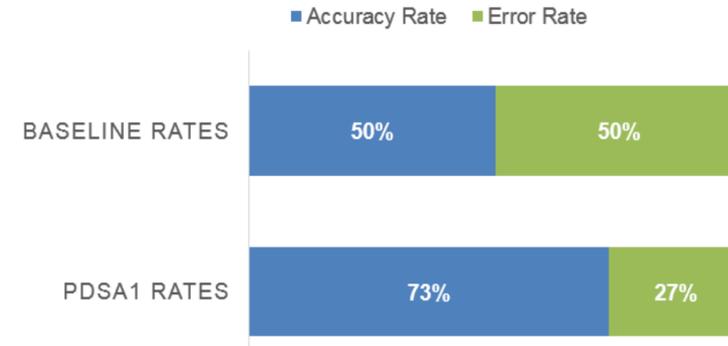
**Plan Do Study Act (PDSA) Cycle 1:** Children's Mercy Adele Hall Campus pharmacy students and pharmacists involved in this quality improvement measure were trained on how to complete a best possible admission medication history. Each were provided with an interview form to prompt questions with patients and caregivers, as well as Cerner® documentation training. Validated best practice questions to ask during a best possible medication history interview include: medication name, dose, duration, PRN indication, special instructions, quantity, frequency, strength, route, formulation, time of last dose, & removal of duplicate or inactive medications.<sup>1,2,3</sup> Nursing and providers did not change their practice during this implementation process due to the authors' inability to influence practice.

## RESULTS

During this study we noted a 46% decrease from baseline for admission medication history errors. After PDSA1, admission medication histories completed by a pharmacy team member demonstrated a decline in errors as the number of medications on the patient's medication list increased, whereas admission medication histories completed by other disciplines experienced an increase in the number of errors in relation to the number of medications. It was hypothesized that admission medication histories completed by a pharmacy team member would be consistently completed at a higher accuracy rate compared to other disciplines.

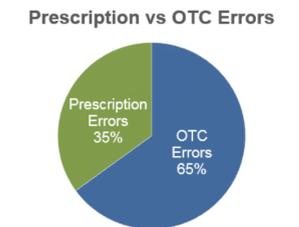


## IMPLEMENTATION OF BEST POSSIBLE MEDICATION HISTORY PRACTICES



## RESULTS

Upon deeper investigation it was noted that admission medication histories completed by a pharmacy team member had a 5% error rate if over the counter (OTC) medication errors were excluded from the data.



The average time to complete a best possible admission medication history by a pharmacy team member was 14.6 minutes per patient.

## CONCLUSIONS & FUTURE DIRECTION

This study demonstrates the necessity for advanced expertise to complete a best possible admission medication history. The next PDSA cycle will be to implement a pharmacy driven best possible admission medication history process at Children's Mercy Kansas. In response to our findings surrounding OTC error rates, the interview form utilized during best possible admission medication histories has been updated to include an emphasis on OTC medications.

## ACKNOWLEDGEMENTS

Heather Alvarez; Children's Mercy Adele Hall Medical-Surgical Pharmacists; Sophia Sterner, MD, FAAP; Stephanie Burrus, DO; Amita Amonker, MD; & Cinthia Priest, PharmD.

## REFERENCES

- 1) Mueller, Stephanie K., et al. "A Toolkit to Disseminate Best Practices in Inpatient Medication Reconciliation: Multi-Center Medication Reconciliation Quality Improvement Study (MARQUIS)." *The Joint Commission Journal on Quality and Patient Safety*, vol. 39, no. 8, 2013.
- 2) Dersch-Mills, Deonne, et al. "Completeness of Information Sources Used to Prepare Best Possible Medication Histories for Pediatric Patients." *The Canadian Journal of Hospital Pharmacy*, vol. 64, no. 1, 2011.
- 3) Salanitro, Amanda H, et al. "Rationale and Design of the Multicenter Medication Reconciliation Quality Improvement Study (MARQUIS)." *BMC Health Services Research*, vol. 13, no. 1, 2013.