

### BACKGROUND

Within healthcare, it is common for patients to move between healthcare practitioners and settings as their healthcare needs and conditions change. This process is known as “transitions of care”. It is estimated that 60% of all medication errors occur during this process. Children with medical complexities and/or chronic health conditions have an even greater risk due to their frequent encounters within the health care system and have been labeled as an important high-risk group to monitor for medication errors.

### OBJECTIVE

To evaluate medication errors and discrepancies that occur as patients transition between Ranken Jordan Pediatric Bridge Hospital and outside hospitals prior to and following implementation of a pharmacist-led intervention.

### METHODS

**Study Design:** Retrospective, chart-review of patients who received at Ranken Jordan Pediatric Bridge Hospital

**Data Source:** Ranken Jordan Electronic Health Record

**Study Period:** August 2020-March 2021

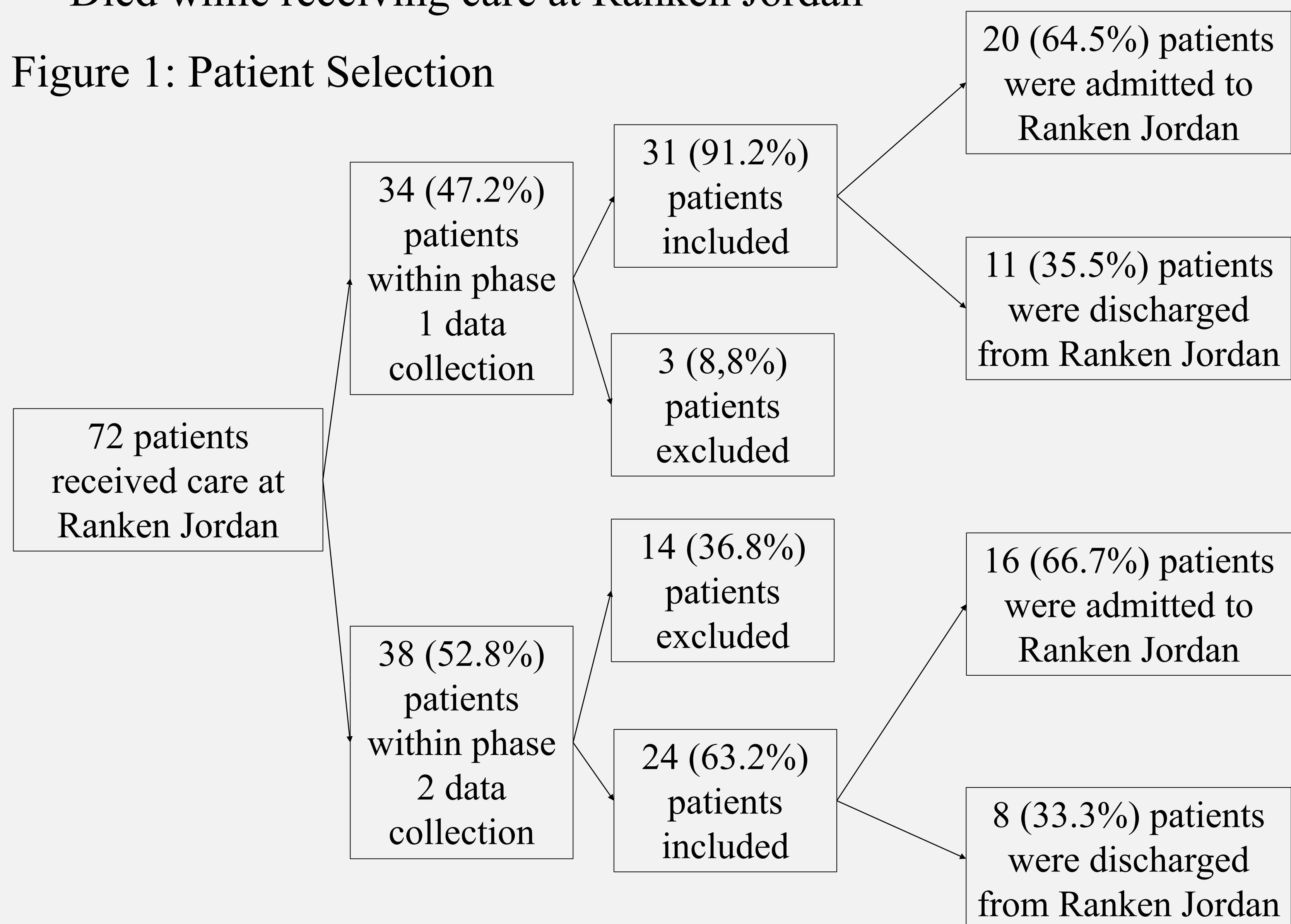
**Inclusion Criteria:**

- Received care at Ranken Jordan
- Admitted from an outside hospital
- Discharged to an outside hospital

**Exclusion Criteria:**

- Admitted from home
- Discharged from home
- Died while receiving care at Ranken Jordan

Figure 1: Patient Selection



### RESULTS

Table 2: Patient Demographics

	Pre-Intervention n=31	Post-Intervention n=24
Age- Mean (SD)	9.1 (7.98)	8.5 (6.89)
Total number of medications- no.	413	206
Number of medications: Admission- no.(%)	278 (67.3)	126 (61.2)
Number of medications: Discharge- no. (%)	167 (40.4)	80 (38.8)
Medications per patient- Mean (SD)	13 (6.98)	9 (4.25)
Patients with no errors or discrepancies- no. (%)	22 (79.6)	14 (58.3)

Figure 2: Overview of Affected Patients

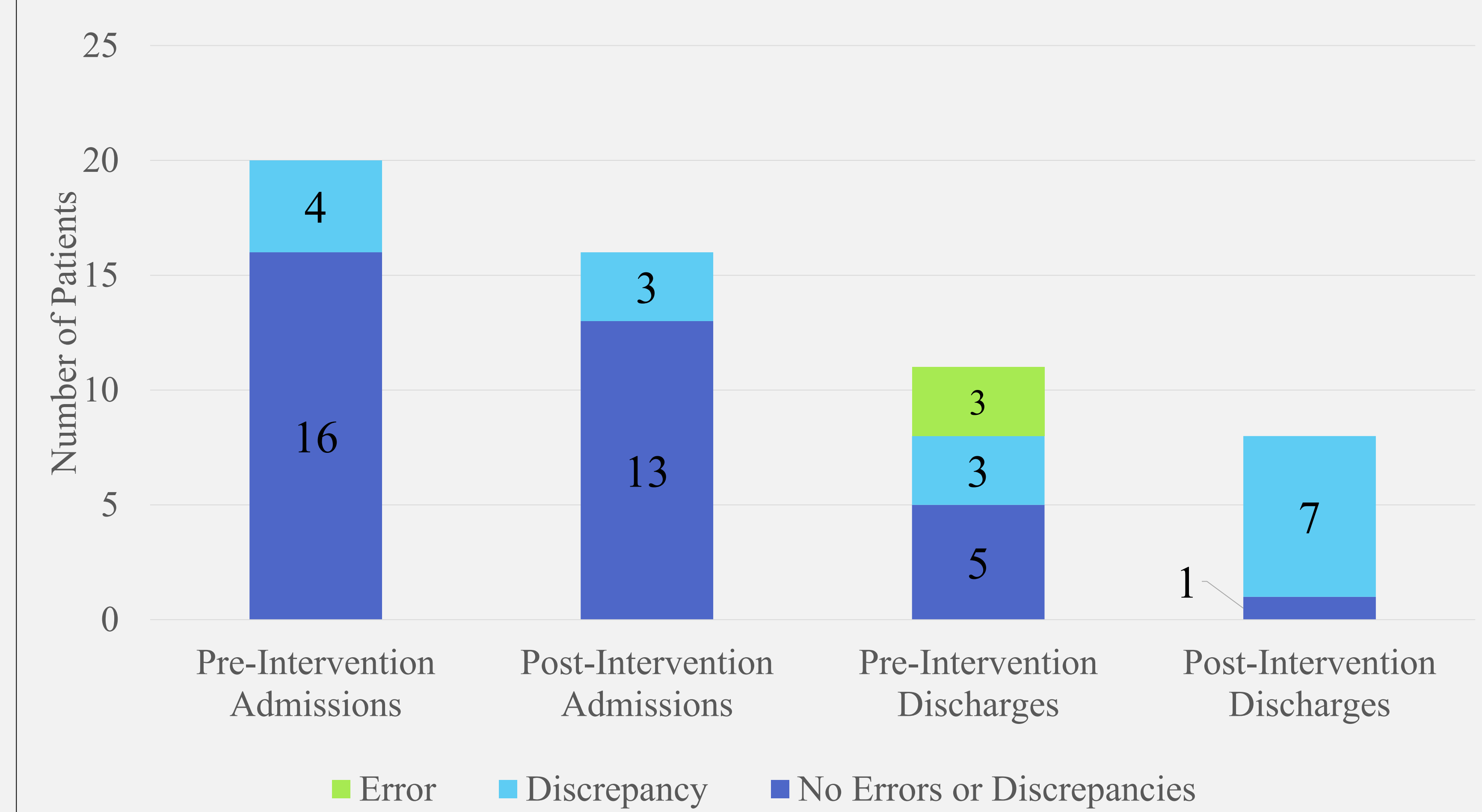
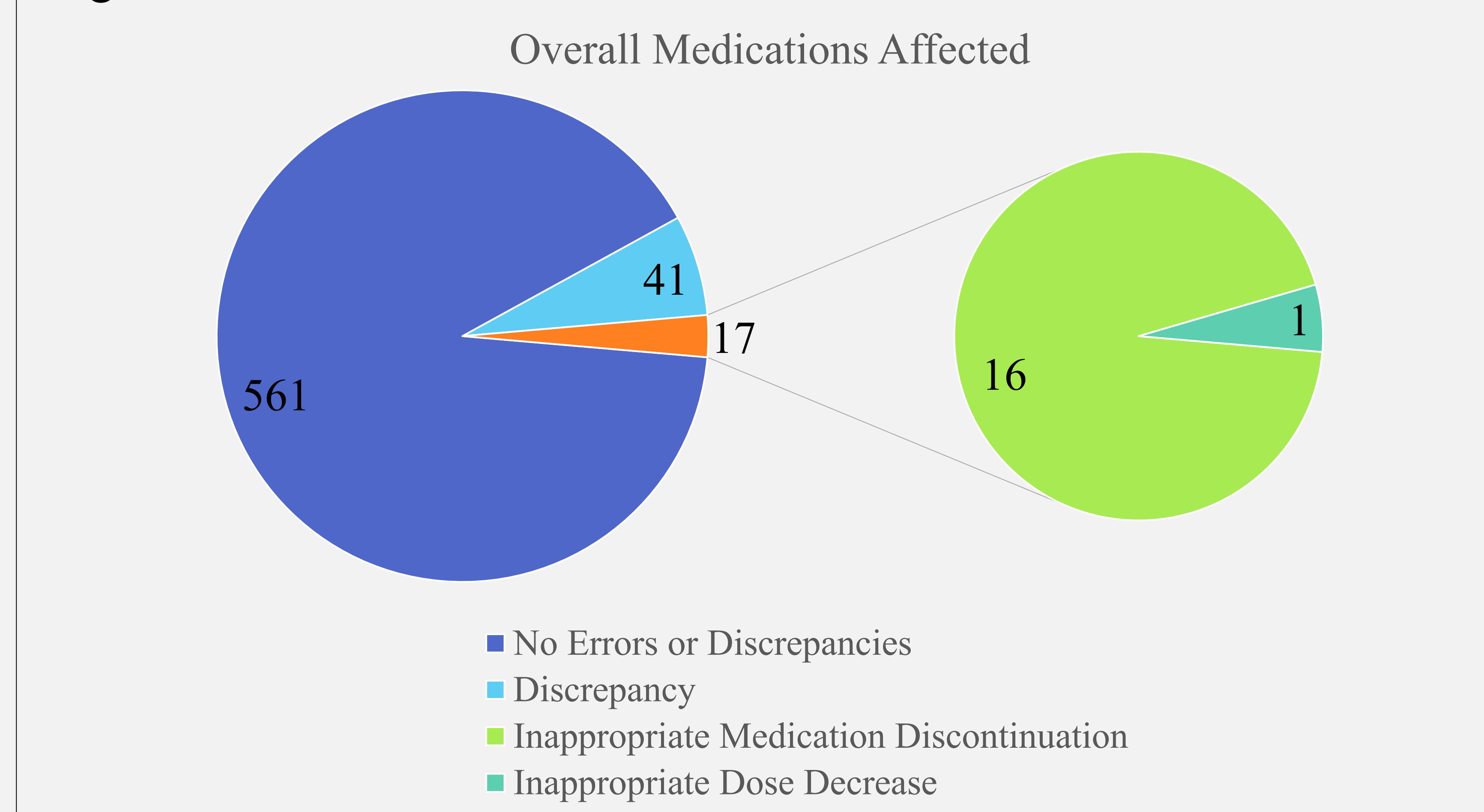


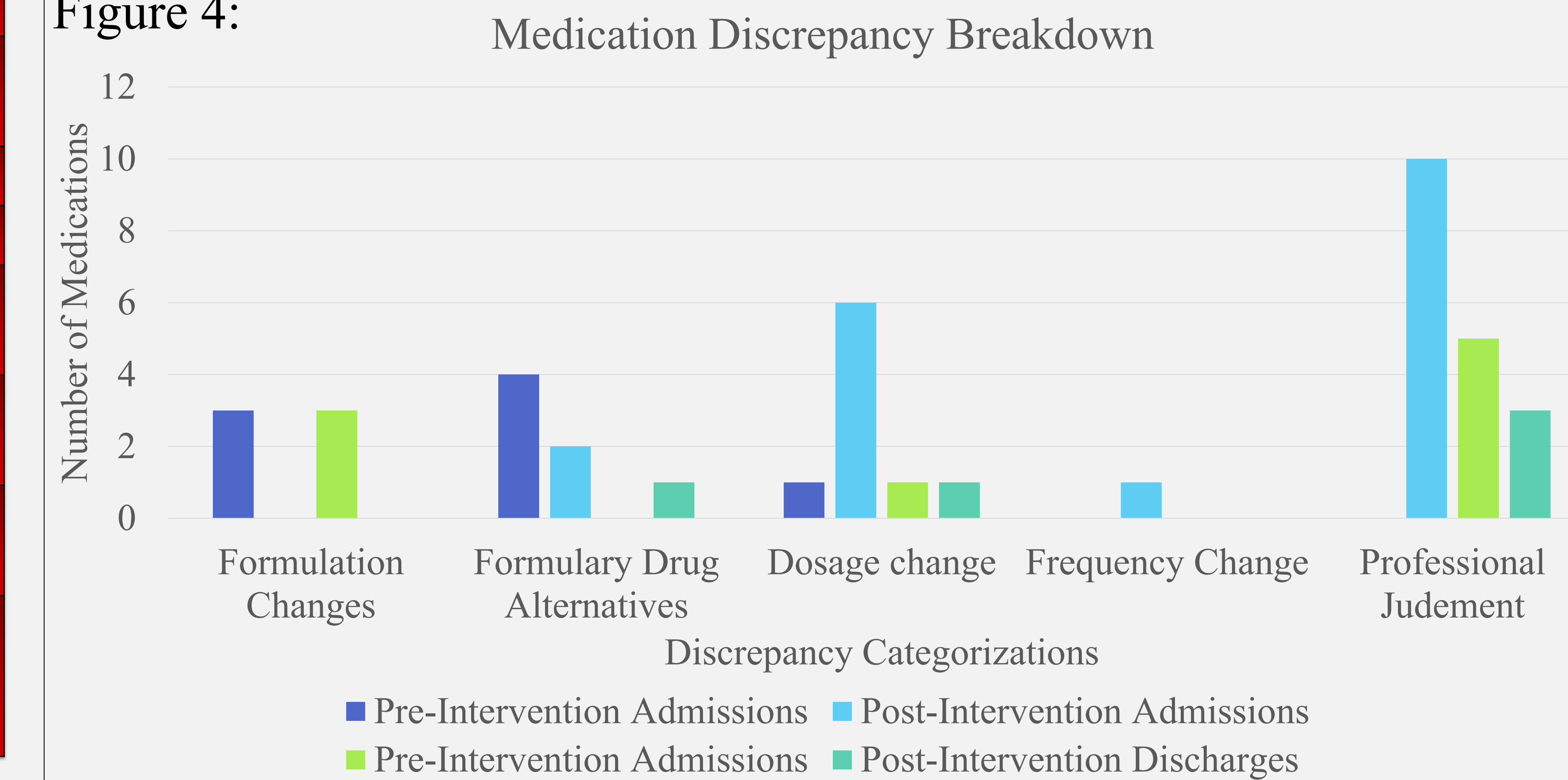
Figure 3:



Special thanks to the pharmacists at Ranken Jordan for your support.

### RESULTS

Figure 4:



### DISCUSSION

- Pre-Intervention
  - 20% of admissions experienced medication discrepancy
  - 27.3% of discharges experienced medication discrepancy
  - 27.3% of discharges experienced medication errors
  - Overall medication error rate: 4.1%
- Post-Intervention
  - 18.75% of admissions had medication discrepancies
  - 87.5% of discharges had medication discrepancies
  - Zero medication errors within each group
- Following implementation of pharmacist-to-pharmacist follow-up, the medication error rate decreased from 4.1% to 0%.
- Difficult to objectively assess the true benefit of intervention
- Participating pharmacy staff did note a perceived overall benefit of open communication between facility pharmacies ensuring no inappropriate changes in patient medication regimens occurred.
- Limitations: single site study with a small sample size, limited time frame

### CONCLUSION

This study was able to strengthen existing relationships and build rapport with other facilities and pharmacists. Collaboration and communication are essential for safe patient care. This is especially important in children with medical complexities on a multitude of medications that if not managed diligently, can lead to potential harm from the very medications that are meant to help their conditions. This is evident within the study as medication errors decreased as communication between pharmacists increased following the intervention.