

Utilizing a Medication Reconciliation Activity With Interruptions in a Professional Skills Laboratory to Improve Attention to Detail Among Pharmacy Students

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INTRODUCTION

- Pharmacists provide optimal patient-centered care by ensuring patient medication lists are complete, accurate and up-to-date and are compared against all inpatient, transfer, and discharge orders.¹
- Pharmacists have competing responsibilities that distract from accurately completing a medication reconciliation.
- There is a paucity of literature addressing how to prepare healthcare professionals for these scenarios during their didactic education.

OBJECTIVES

To evaluate if an activity within a Professional Skills Laboratory in a Doctor of Pharmacy program can help students:

- Identify at least one method for accurately completing a medication reconciliation when interruptions occur during their workflow.
- Improve accuracy among pharmacy students when interruptions occur.
- Learn how to read a nursing facility Medication Administration Record (MAR).

STUDENTS

- Over two years, first and second year pharmacy students completed these activities using different cases and interruptions.
- The Class of 2024 (n=38) completed all four cases.

SKILLS PRACTICED

- Interpreting a skilled nursing facility MAR.
- Updating a medication list from a MAR and reconciling it with inpatient orders.
- Practicing handling an interruption while in the middle of a task.
- Checking over one's own work for accuracy.

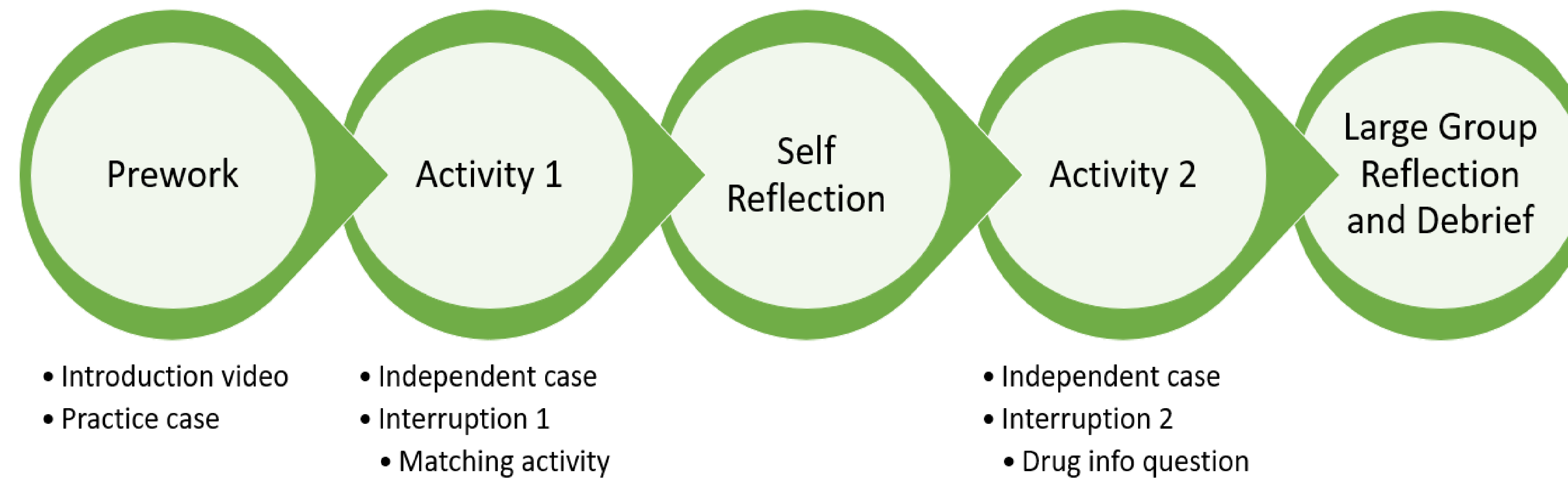


Scenario: A patient was admitted to the hospital from a nursing facility. The admitting physician already reconciled the patient's home medications based on an old medication list.

Student task: Update the admission medications using the facility MAR. Communicate necessary order changes with the physician.



METHODS

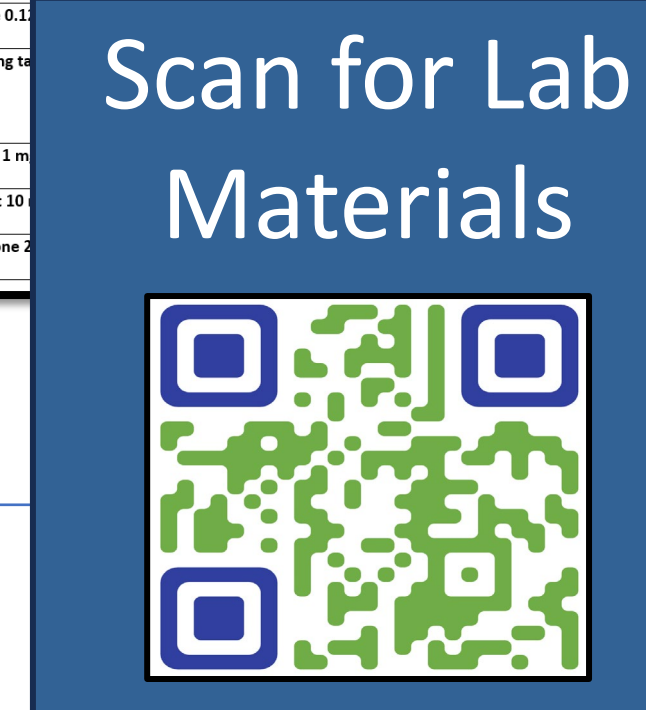


- Introduction video
- Practice case

- Independent case
- Interruption 1
- Matching activity

- Independent case
- Interruption 2
- Drug info question

Medication	Directions	Current Medication	Changes to make with admission
Atenolol 50mg PO	Take 1 tablet once daily	Atenolol 50mg PO	No change
Aspirin 81mg PO	Take 1 tablet once daily	Aspirin 81mg PO	No change
Hydrochlorothiazide 25mg PO	Take 1 tablet once daily	Hydrochlorothiazide 25mg PO	No change
Metoprolol 50mg PO	Take 1 tablet once daily	Metoprolol 50mg PO	No change
Warfarin 5mg PO	Take 1 tablet once daily	Warfarin 5mg PO	No change
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CONCLUSIONS

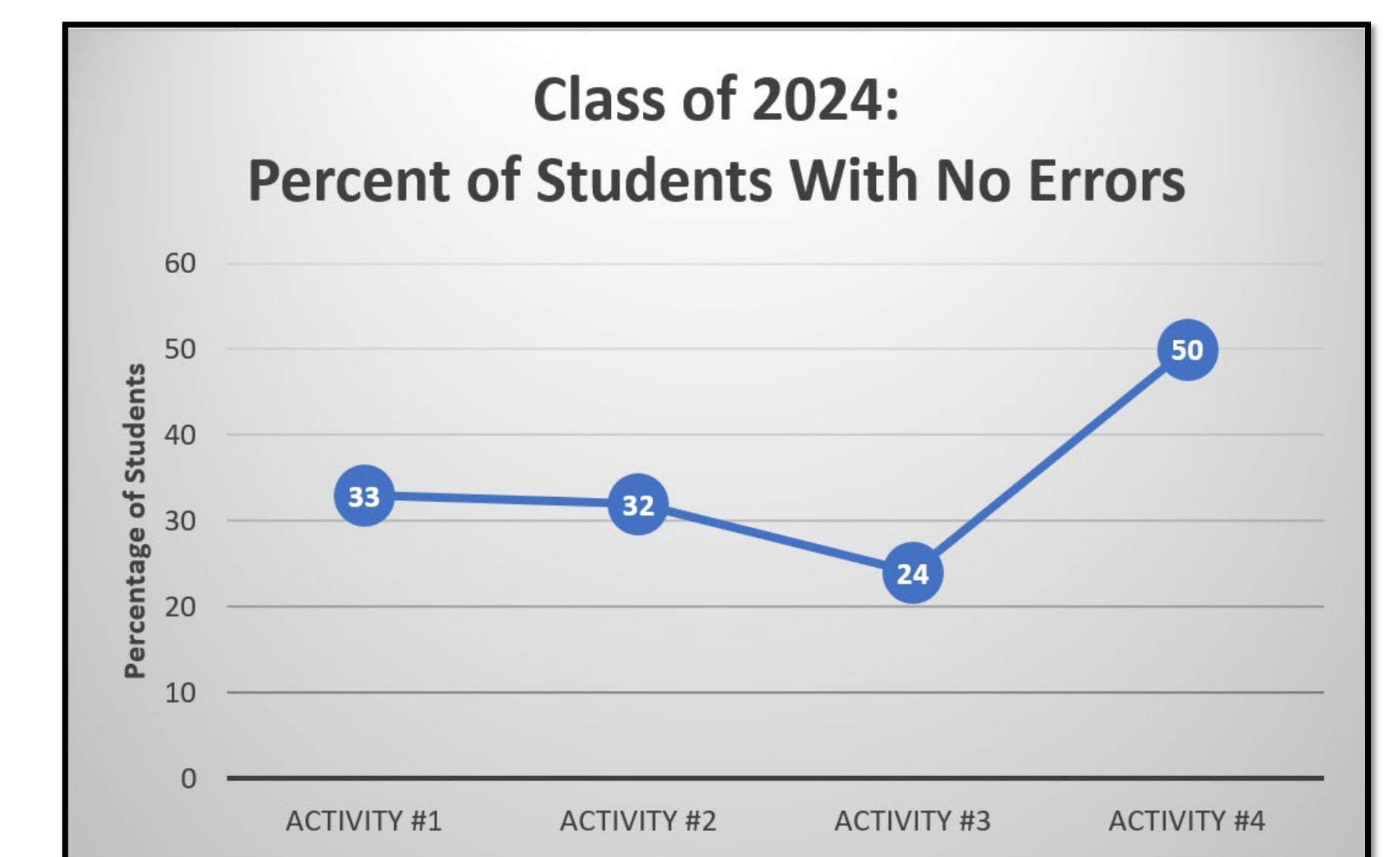
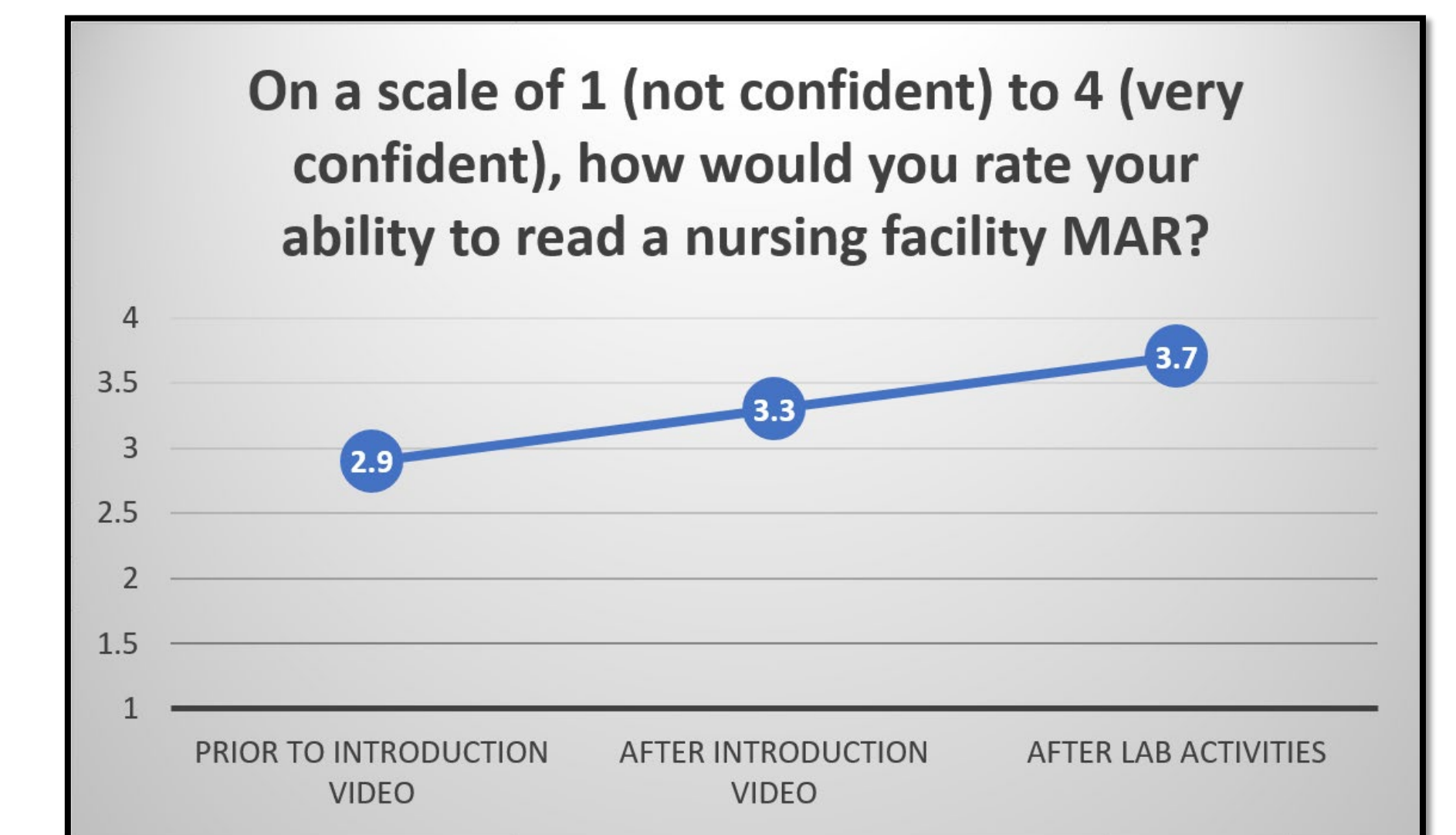
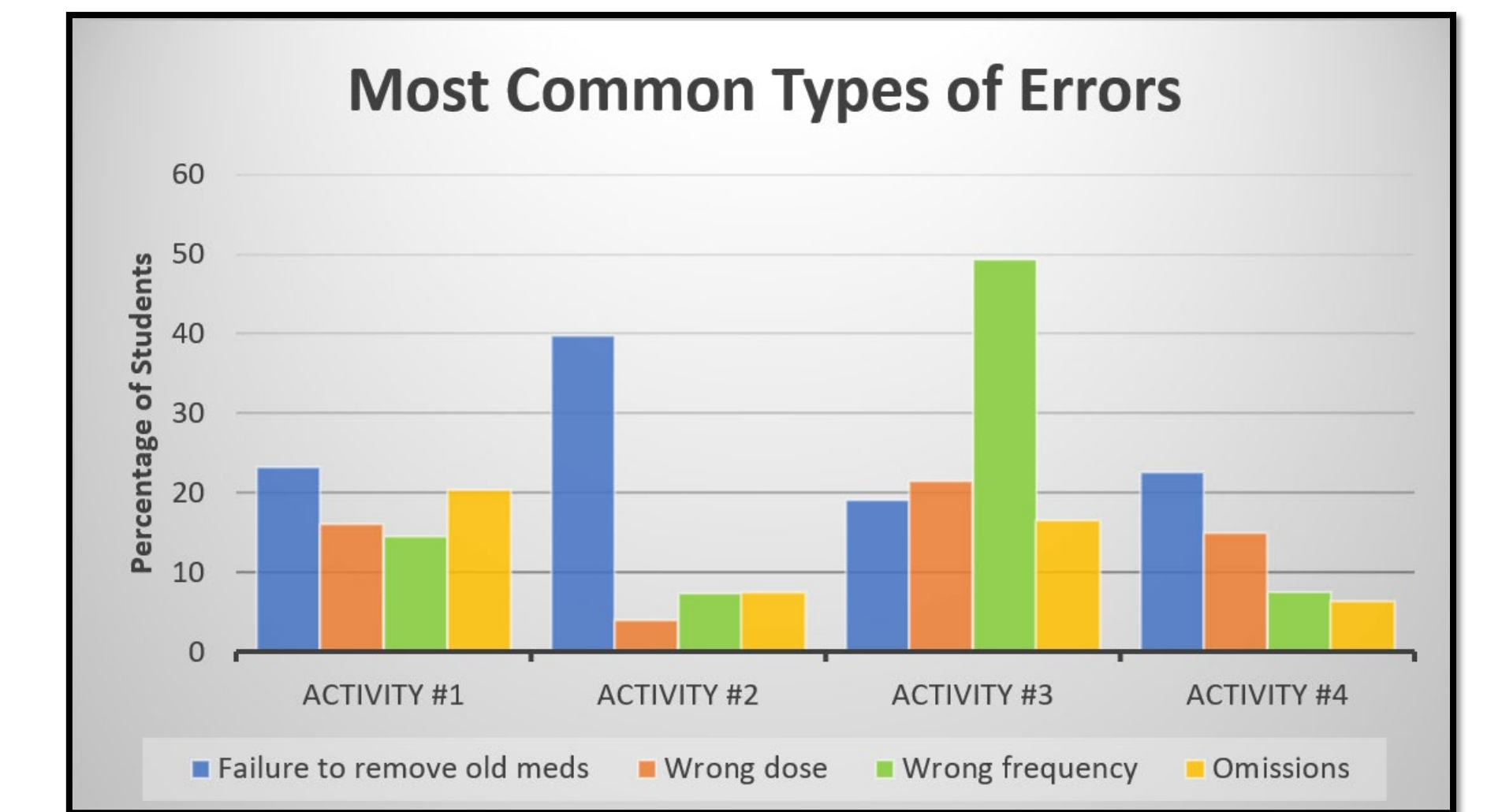
- The students' attention to detail improved with additional practice of medication history and reconciliation activities.
- The most common types of errors found among students are similar to those found in previous literature on medication reconciliation errors among professionals.^{1,2}
- Students found this exercise valuable in identifying methods for accurately updating a medication list while being interrupted with competing pharmacist responsibilities.



FUTURE DIRECTIONS

- Pairing up PY1 and PY2 students with the goal for each team to create two accurate medication lists with appropriate reconciliation. The students would have the opportunity to update one medication list and practice checking their partner's work. This would allow the students to practice providing and receiving feedback.

RESULTS



REFERENCES

- Ziaie S, Mehralian G, Talebi Z. Evaluation of medication reconciliation process in internal medicine wards of an academic medical center by a pharmacist: errors and risk factors. Internal & Emergency Medicine. 2021 Aug 03.
- Institute for Healthcare Improvement. Medication reconciliation to prevent adverse drug events. 2018. <http://www.ihl.org/Topics/ADEsMedicationReconciliation/Pages/default.aspx>.