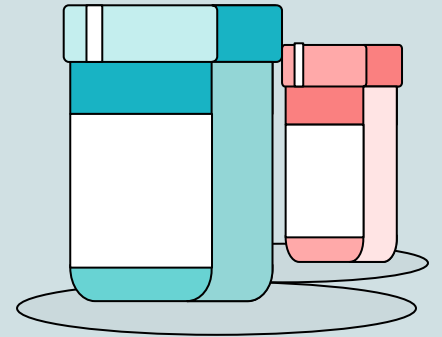




Medication Safety

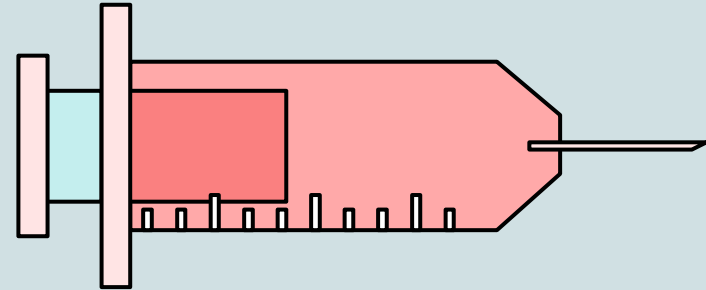
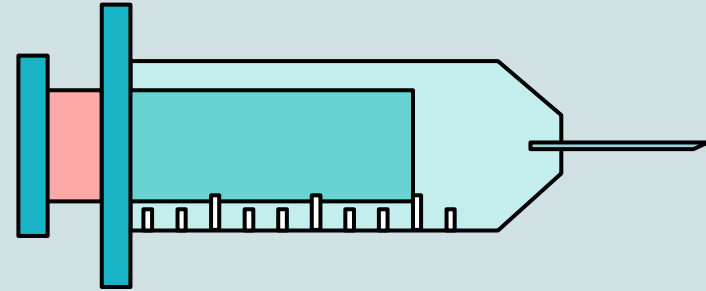
*By: Arya Patel, Raphael Jang, Michael Lei,
Nicole Zheng, and Hojun Son*

*Advisors: Dr. Laressa Bethishou, Pharm.D,
BCPS, APH*



Objectives

- ❖ Discuss considerations of transitions of care
- ❖ Discuss a pharmacist's role in transitions of care and how interventions impact medication safety
- ❖ Discuss methodologies including databases, search terms, and inclusion criteria used to research
- ❖ Discuss and make conclusions based on the result



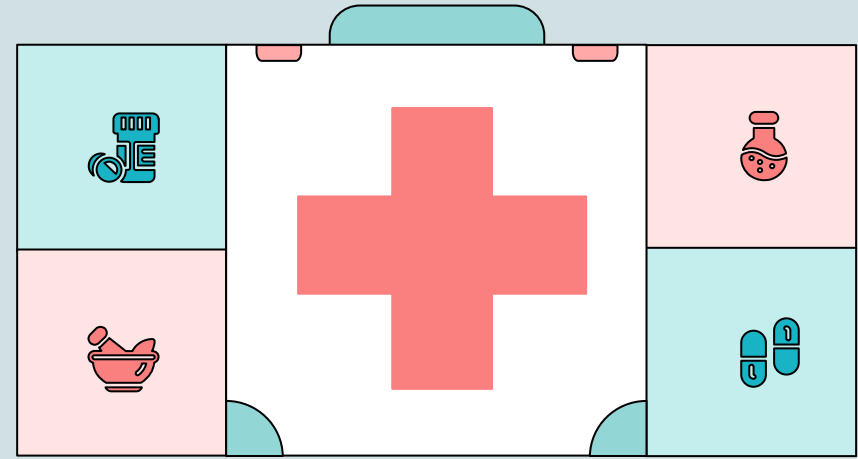
Research Question:

How do pharmacist interventions aid in medication safety during transitions of care?



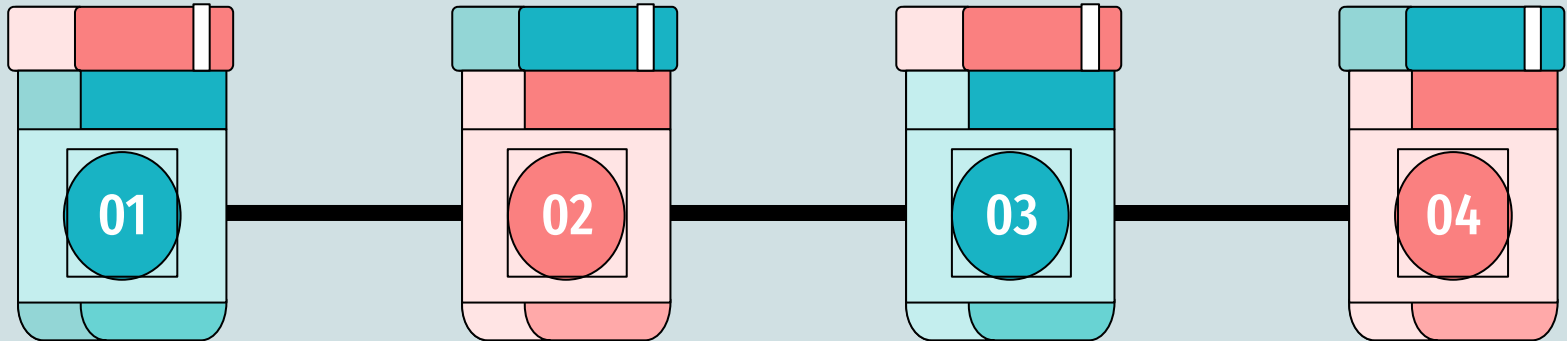
What is Medication Safety?

Medication safety involves implementation of safe medication practices to bridge critical communication gaps in medication use process. These could include appropriate prescription and risk assessment, medication review, patient engagement and communication, as well as medication reconciliation.

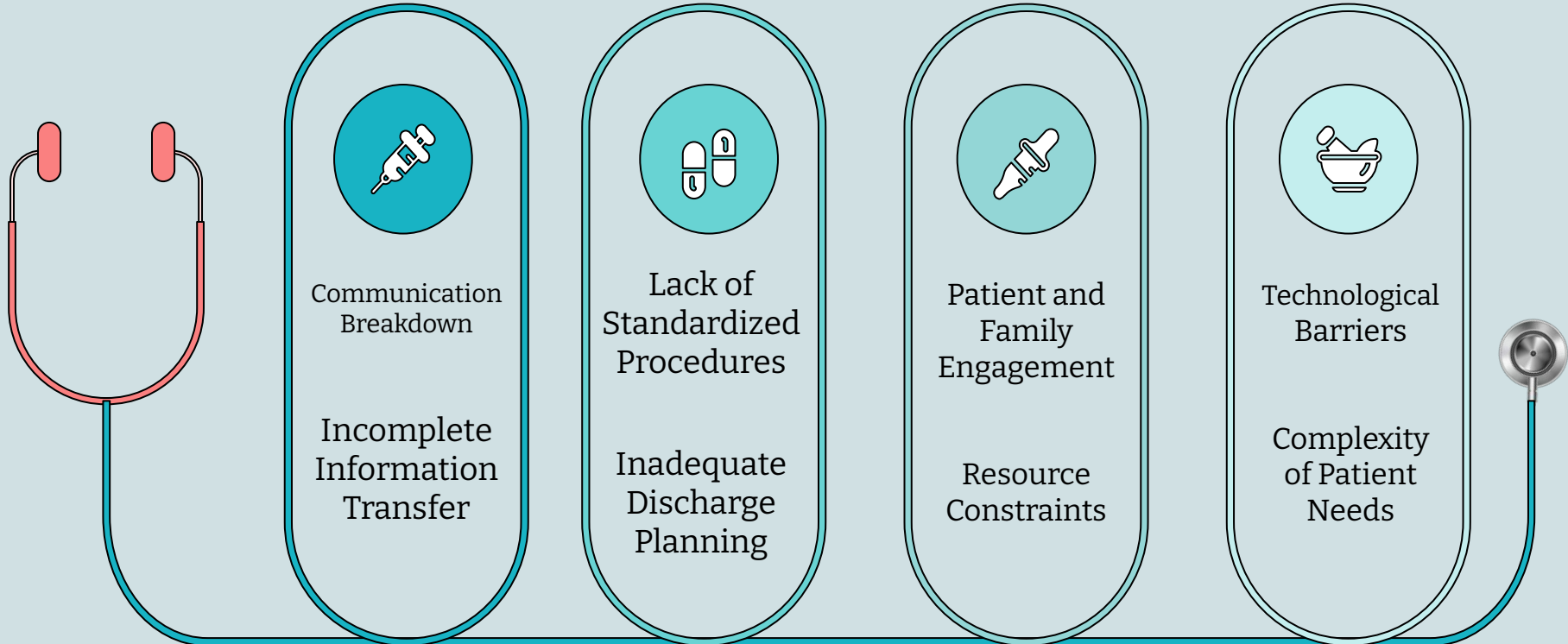


What are Transitions of Care?

Transitional care refers to the coordination and continuity of health care during a movement from one healthcare setting to either another facility or home, called care transition, between health care practitioners and settings as their condition and care needs change during the course of a chronic or acute illness.

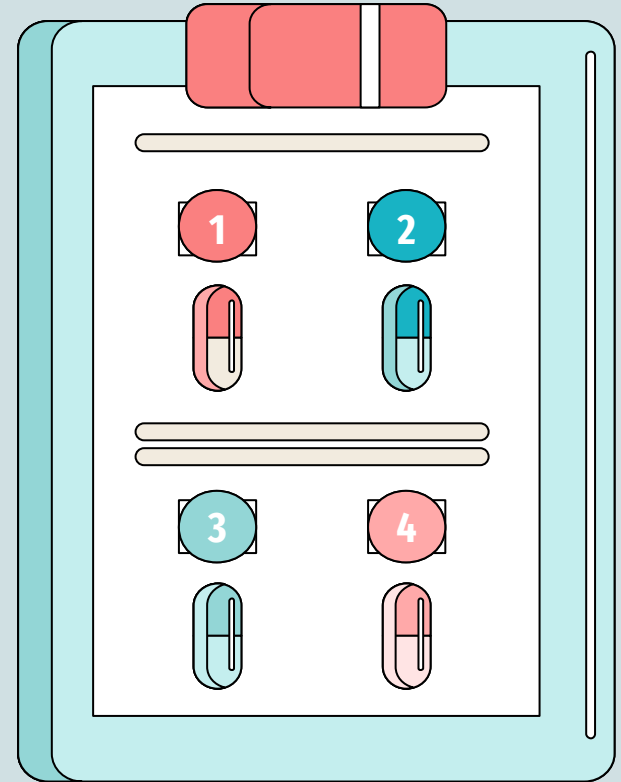


Causes for Poor Healthcare Transitions



Why are Pharmacist Interventions Important?

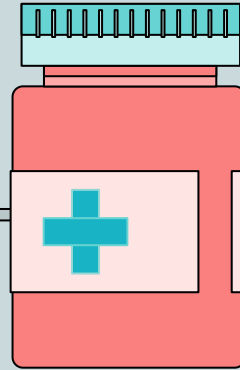
- Decreases the risk of medication errors/reactions
- Educates patients on how to properly use their medication and also what their medication will cause so that they can better manage their health
- Adjusting medication to patient condition



Different Kinds of Pharmacist Interventions

Educate Patients

Teaching patient about their medication so that they know how to use them and also the risks

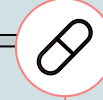
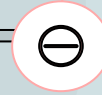


Reviewing Medication

Checking if medication is correct and needs adjustments to the patient

Addressing Adherence Barriers

When the patient can't/isn't taking their medication



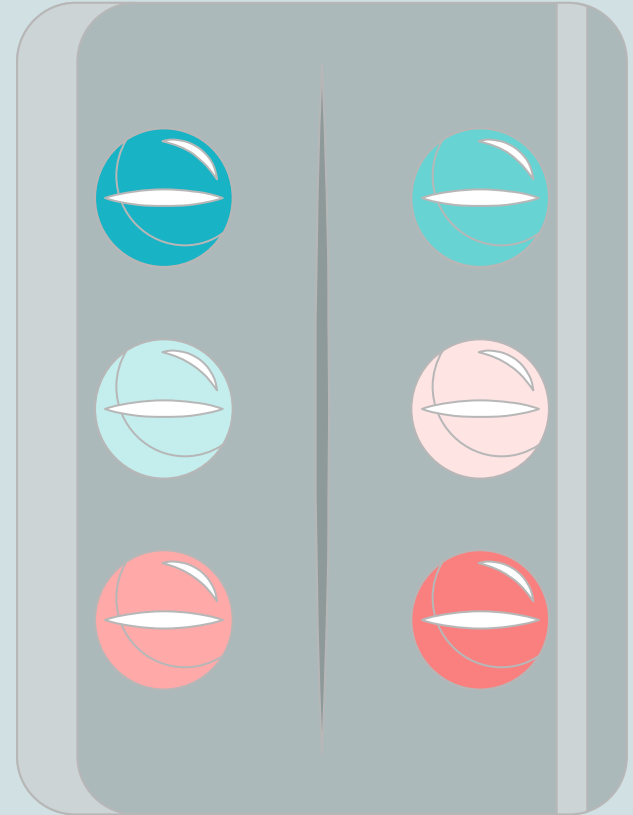
Hand-off Communication

Transferring new patient information to next care provider for continued patient safety

Medication Reconciliation

Medication reconciliation is the process of comparing a patient's new and old medications. This process comprises five steps:

1. Develop a list of current medications
2. Develop a list of medications to be prescribed
3. Compare the medications on the two lists
4. Make clinical decisions based on the comparison
5. Communicate the new list to appropriate caregivers and to the patient.

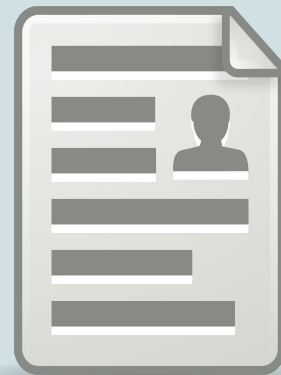


Search Terms:

- ❖ Pharmacist
- ❖ Medication Safety
- ❖ Transitions of Care

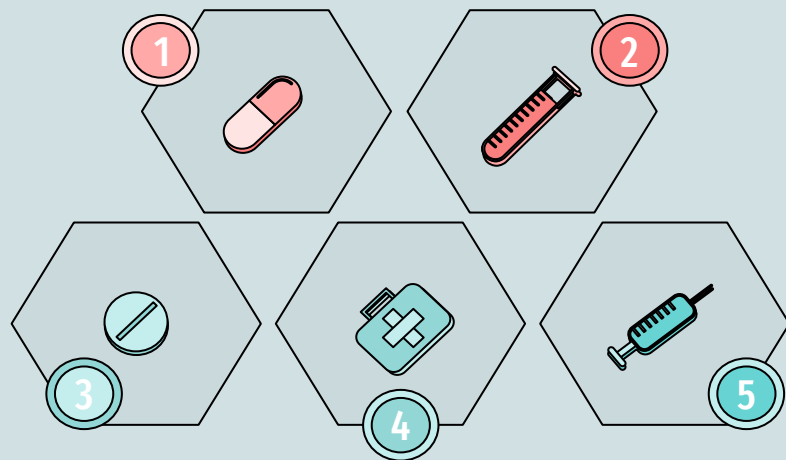
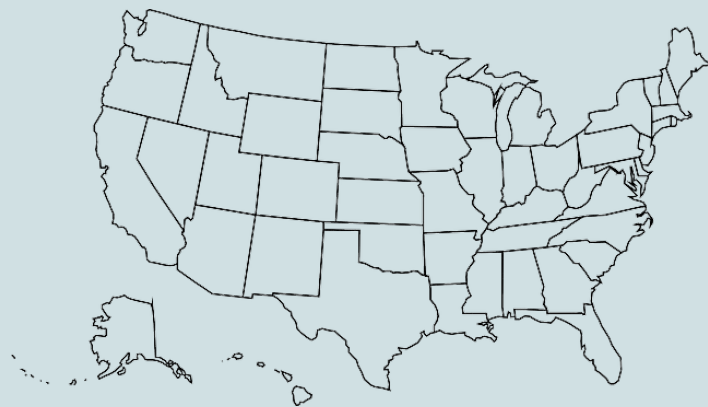
Article Quantity:

- ❖ Initial Search - 227
- ❖ After limiting to Clinical and Observational Trials - 56
- ❖ Post Inclusion Criteria Search - 14



Inclusion Criteria:

- ❖ Intervention was in the United States
- ❖ Studies done from 2000 to 2024
- ❖ Age group (18+)
- ❖ Intervention by pharmacist



Describing the Impact of Pharmacist Interventions (Table)



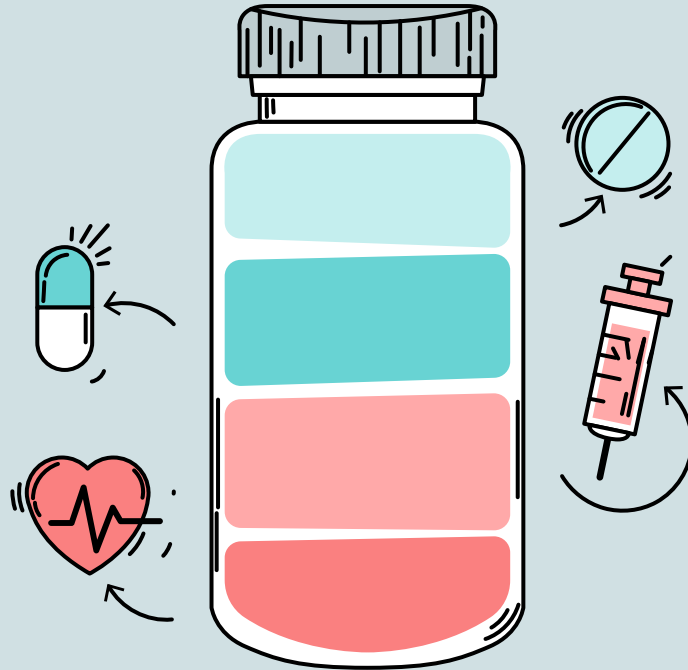
Results: Study Characteristics

Settings of Care:

- ❖ Hospital: 12/14
- ❖ Outpatient: 7/14

Providers Involved:

- ❖ MD collaboration: 12/14 studies
- ❖ RN collaboration: 7/14 studies



Interventions

Provided:

- ❖ Medication reconciliation: 13/14
- ❖ Patient education: 8/14
- ❖ Addressing access issues: 3/14
- ❖ Hands-off communication: 7/14

Results: Patient Safety Outcomes

Patient Safety Outcomes:

- ❖ Medication error reduction
- ❖ Readmission reduction
- ❖ Adverse drug effects
- ❖ Disease state management
- ❖ Unnecessary health care utilization (ED and urgent care)
- ❖ Accurate medication history
- ❖ Medication safe use

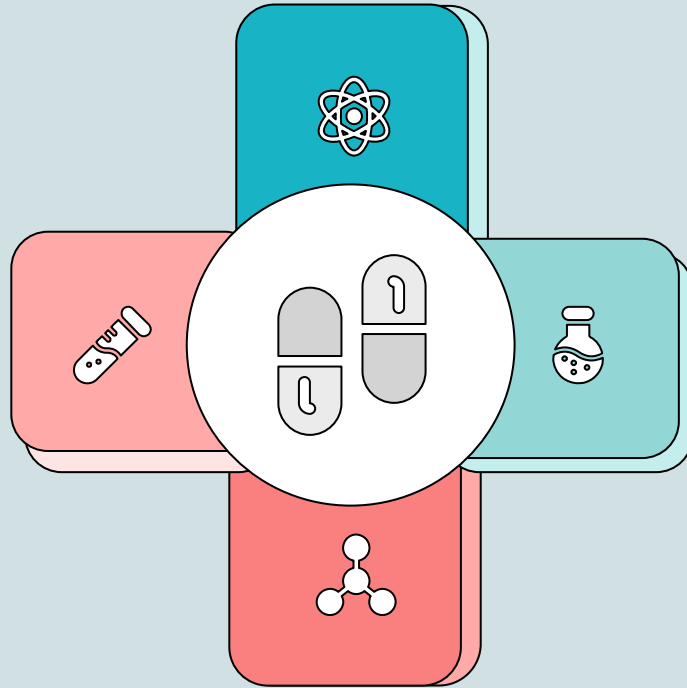


Pharmacist Impact:

- ❖ Reducing readmissions
- ❖ Preventing medication errors
- ❖ Reducing inappropriate health utilization
- ❖ Improving disease state management
- ❖ Ensuring accurate medication history

Discussion

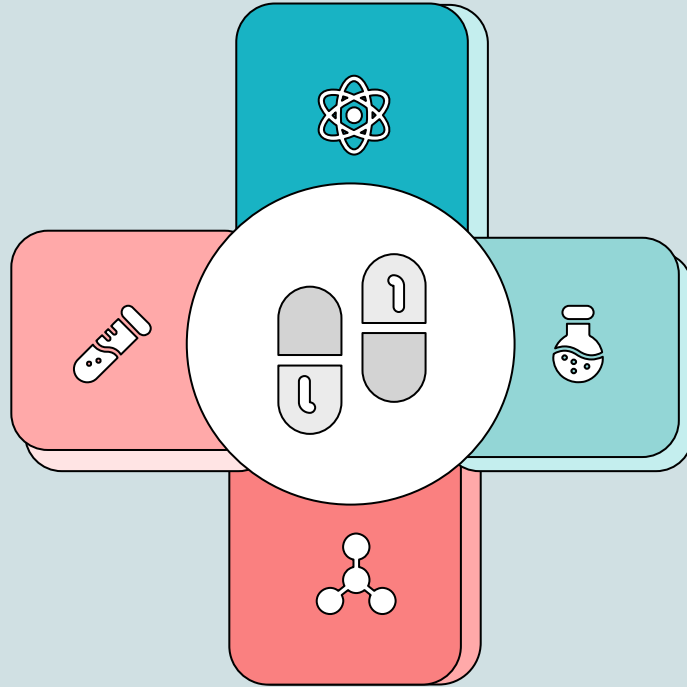
Medication safety-needs depend on the patient population, the medications provided, and the setting of care.



Pharmacists can provide interventions, including medication reconciliation, patient education, and hand-off communication to positively impact medication safety.

Discussion

Patient populations which **benefit from pharmacist interventions** include: transplant patients, those on blood thinners or opioids, the elderly, athletes, etc.



Collaboration with other healthcare providers (like physicians and nurses) **can improve medication safety.**

Conclusion

Pharmacists play an important role in medication safety, helping high risk, patient populations, and those on high risk medications, however this intervention is not a one size fits all solution.

More data needed to develop best practices regarding the individual and their needs.

Thank

You!