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Improving Nurse Adherence to Medication Reconciliation During Patient Admissions to Reduce Medication Errors Through Targeted Education

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Walden University

College of Nursing

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Wendy J. Marlowe

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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2025

Executive Summary: Staff Education Project
Improving Nurse Adherence to Medication Reconciliation During Patient Admissions to
Reduce Medication Errors Through Targeted Education

by

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MS, Grand Canyon University, 2019

BS, Ferris State University, 2017

Executive Summary Submitted in Partial Fulfillment
of the Requirements for the Degree of
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Summary

Medication reconciliation errors are a significant clinical concern because they have the potential to result in serious or even life-threatening harm to patients. Implementing risk-reduction strategies through targeted education and systematic processes for medication reconciliation is crucial to enhancing patient safety and mitigating the risk of errors. Over 40% of medication errors occur during patient transitions, such as admissions, which are mainly due to inadequate medication reconciliation. The project addressed a practice-focused question to increase patient admission medication reconciliation by improving nurse knowledge by 20% and reducing medication errors by 60% within 2 months. I employed a pre-/posttest design in the educational project, yielding results that showed a 15.61% increase in participant knowledge, which did not meet the projected 20% increase. An analysis of the overall error rate data revealed a 48% decrease in medication errors overall, with a mean of 0.52 errors per chart and a reduction of 1.48 errors per chart. These results did not achieve project objectives. Although objectives were not met, the project served to bring awareness to the importance of adherence to medication reconciliation during patient admissions. Targeted nurse education has the potential to lead to enhancements in patient outcomes. Ongoing education for new employees and agency nurses, along with regular audits, are essential for maintaining compliance. This initiative promoted positive social change by ensuring equitable access to safer healthcare, fostering interprofessional collaboration, and equipping nurses with education to enhance safety and quality during care transitions.

Background

The medication reconciliation process plays a vital role in reducing the incidence of medication errors that can stem from incomplete or inaccurate medication histories. The medication reconciliation process is designed to enhance patient safety by ensuring safe prescription practices and medication administration (Anazi, 2021). Upon reviewing the medication reconciliation audits at the project site skilled nursing and rehabilitation center from August to December 2024, it was found that the overall error rate was 100%, with an average of two errors per chart. Staff were not consistently following the medication reconciliation process during admissions. There was an admission checklist and a medication reconciliation section on the critical assessment that should be completed upon admission, but staff adherence to this process was lacking. To address this gap in practice, a staff education project on the medication reconciliation process was implemented to enhance staff knowledge by 20% and reduce medication errors by 60% within 2 months.

Medication reconciliation is a safety goal of the Joint Commission (2023) who emphasized the importance of accurate medication reconciliation as a cornerstone of patient safety. Over 40% of medication errors take place during care transitions, including admission, transfer, discharge, or referral, most often as a result of insufficient or absent medication reconciliation (Anazi, 2021). Ninety-one percent of medication reconciliation errors are clinically significant, with 1%–2% classified as serious or potentially life-threatening (Harper et al., 2021). Moreover, medication reconciliation contributes to shorter hospital stays, fewer patient readmissions, and reduced healthcare costs.

Despite strong evidence, the lack of education and opportunity to practice the medication reconciliation process can lead to medication errors, such as administration errors, omissions, monitoring errors, and adverse events (Harper et al., 2021). For instance, 75% of nursing schools reported that the medication reconciliation curriculum is primarily delivered in the classroom setting rather than being practiced in a clinical setting (Krivanek et al., 2019). During clinical practice, only 33% of faculty members indicated that students directly engaged in the medication reconciliation process, while another 33% had the opportunity to observe it (Krivanek et al., 2019). Additionally, 80% of nursing practice leaders indicated that their facilities do not allow nursing students to perform medication reconciliation (Krivanek et al., 2019). This demonstrated a lack of knowledge about medication reconciliation before working in a real facility setting.

I conducted a literature review and identified numerous articles that validated this project intervention. In a quality improvement collaborative project, Alghamdi et al. (2023) discussed how medication discrepancies were significantly reduced in the intervention group compared with the control. Compliance with medication reconciliation documentation within 24 hours of admission and discharge improved by an average of 17% and 24% (Alghamdi et al., 2023). Staff education during the audit highlighted the need for ongoing onsite training for all healthcare providers (i.e., physicians, nurses, pharmacists) on the reconciliation process and evaluation of current practices. Mixon et al. (2019) conducted a multicentered prospective observational study that addressed implementation of a medication reconciliation best practices toolkit to decrease total unintentional medication discrepancies in five hospitals. The researchers emphasized the value of training to take accurate medication histories. The findings further underscore

that medication reconciliation is effective in reducing harmful discrepancies through the use of dedicated medication history takers, structured training of staff in discharge reconciliation and patient counseling, and the clear delineation of clinical roles and responsibilities (Mixon et al., 2019). Komperda and Lempicki (2019) conducted a study that addressed improvement in medication safety practices among pharmacy students through simulation exercises. Their results indicated an improvement in the students' ability to perform medication reconciliation, including obtaining an accurate medication list, correctly identifying medication discrepancies, and proposing appropriate resolutions. Craig et al. (2021) identified high-fidelity simulation as a best practice strategy for nurse educators to actively engage students in the application of clinical medication safety practices. Medication reconciliation and administration are fundamental nursing responsibilities but often represent high-risk, low-frequency learning opportunities during clinical rotations; consequently, embedding such strategies into nursing curricula can strengthen students' competence, confidence, and readiness for safe medication administration in practice (Craig et al., 2021). These studies demonstrated that medication reconciliation improves patient outcomes by reducing discrepancies and errors and that education further enhances safety.

Alanazi et al. (2022) investigated the perceptions of Saudi Arabian physicians, pharmacists, and nurses regarding their functions in the medication reconciliation process and elucidated the barriers to implementing this process. Their results showed that nurses lacked a clear perspective of their roles in every step of a standardized medication reconciliation process. Many participants agreed that medication reconciliation was a valuable process and acknowledged that there were barriers to implementing this process.

Karaoui et al. (2019) assessed the clinical impact of pharmacy-led medication reconciliation performed on Day 1 of hospital admission to the internal medicine service. Third- and fourth-year pharmacy students were properly trained, closely supervised, and collected the medication history, while pharmacists at the corresponding sites performed the reconciliation process. Interventions related to the unintended discrepancies were relayed to the medical team. During the study period, 204 patients were included, and 195 unintended discrepancies were identified after the training. Aje et al. (2023) evaluated the effect of an educational intervention on the medication reconciliation practice of pharmacists among ambulatory diabetes and hypertensive patients. The baseline medication reconciliation practice was poor, but after the general educational intervention, medication discrepancy was significantly reduced by 42.8% at the intervention site ($p < 0.001$). Garsan et al. (2021) evaluated the effectiveness of an educational intervention in improving the patient medication reconciliation process, finding that, overall, the percentage of patients who received medication reconciliation was statistically higher in the postintervention group compared with the preintervention group. The common theme among these studies was that they showed a significant reduction in discrepancies with an educational intervention in medication reconciliation.

Staff Education Project Development

Before launching the medication reconciliation education initiative, I used an assessment tool to evaluate the readiness for change at the skilled nursing and rehabilitation center. The assessment revealed strong employee confidence in the organization's ability to implement change and an eagerness to participate. The survey results also showed strong readiness for change among employees. Staff felt confident in

monitoring progress, committed to overcoming challenges, and capable of coordinating tasks for seamless implementation. Employees believed they could navigate the political landscape and trusted the organization to provide necessary support during the transition.

A strengths, weaknesses, opportunities, and threats analysis of the skilled nursing rehabilitation center revealed key insights. The results indicated that the facility had strong leadership focused on improving clinical outcomes, supported by corporate collaboration that helps optimize staffing and financial performance. Challenges included a new director of nursing who lacked experience in long-term care, an isolated location that limited access to qualified nurses, and reliance on contracted agency nurses, resulting in inconsistencies in care. Noted medication management issues were discrepancies between discharge orders and electronic health records, where were compounded by the absence of an admissions nurse and inadequate verification processes. The growth opportunities identified were enhancing patient satisfaction and improving publicly reported performance metrics through targeted initiatives. Threats included the high cost of contracted labor, concerns about clinical competency, and overlooked facility policies, all of which impact operational stability and financial health.

The framework for this project was based on Lewin's change theory, which consists of three stages: unfreeze, change, and refreeze (see Burnes, 2019). I used this approach to establish a consistent routine for medication reconciliation, thereby improving patient outcomes (see Burnes, 2019).

I designed the staff education project for 10 full-time, licensed nurses across all shifts. A flyer was posted in the project site facility a month before the staff education to ensure ample time was provided to attend (see Appendix A). The goals of the education

were to improve nurses' medication reconciliation and understanding of its importance, identify barriers to the process, and discuss the medication reconciliation procedures at the skilled nursing and rehabilitation center. I delivered the educational PowerPoint in person, over 35 minutes, in the conference room at the facility (see Appendix B). A paper-based, 11-item, multiple-choice question pretest was administered over 10 minutes prior to the education (see Appendix C), and a paper-based, 11-item, multiple-choice question posttest was administered 10 minutes after the education (see Appendix D). The posttest included the same items as the pretest to evaluate the participants' knowledge on the same concepts in the same manner. To ensure anonymity, I assigned each participant a six-digit identification number for each test. The participants also completed a paper-based survey after the education to evaluate their perspectives of the education provided (see Appendix E). The survey was completed anonymously, and the participants ranked the education on a Likert-type, five-item scale.

After completion of the education, I used the Overall Error Rate/Overall Per Chart Rate Form to track the error rate (see Appendix F). Each week for 10 weeks, every admission chart was audited utilizing the facility's current tool to find the error rate per chart and for the week. After 2 months, I calculated the overall error rate per chart and overall to assess if there was a 60% decrease in error per chart and an reduced overall error rate after education. The data were analyzed with Microsoft Excel to calculate percentage increase and differences in organizational data.

Results

Ten full-time nurses participated in medication reconciliation education from February 4, 2025, to February 6, 2025. The participants' mean score on the pretest was

86.5% (min = 73%, max = 100%), and the mean posttest score was 100% (min = 100%, max = 100%). The results indicated a 15.61% increase in participant knowledge posteducation, which did not achieve the 20% increase objective.

Following the completion of the educational intervention, I conducted admission audits from February 7, 2025, to April 7, 2025. There were 29 admissions recorded. The preimplementation results showed an overall error rate of 100% and an average of two errors per chart. The postimplementation results showed an overall error rate of 52%, with an average of 0.52 errors per chart. The result indicates a 48% decrease in medication errors overall, with a mean of 0.52 errors per chart and a reduction of 1.48 errors per chart. These results did not achieve the objective of a 100% reduction in medication errors.

Ten nurses completed the postpresentation survey, which I used to gather information regarding the nurses' comfort with medication reconciliation, ease of following the education, and the ability to complete medication reconciliation on every admission. The results showed that five participants gave the education a five-star rating for content and that all respondents indicated that completing medication reconciliation after education was both attainable and essential to patient outcomes.

The objective of the project was to increase nurse knowledge regarding medication reconciliation by 20% and reduce medication errors by 60% in 2 months. While these objectives were not achieved in the project, they did represent progress. The 15.61% increase in participant knowledge and 48% decrease in medication errors indicated a clinical success for the project. These findings demonstrated that changes were being made in the right direction to address these objectives, which will give the

project site organization a foundation for continued success. The project outcomes are commendable and represent a positive step towards reducing medication errors.

A significant limitation of the project was the length of the evaluation process. The project may have achieved greater success if it had lasted longer and included scheduled, one-on-one reeducation sessions. A longer time frame could have facilitated more admissions, and a larger data set would have bolstered the evidence. The as needed nurses or pre re nata were not included in the data collection; however, offering an incentive to attend training might have improved attendance because the pre re nata staff did not work during the scheduled sessions. An incentive might have encouraged them to attend the educational sessions even though they were not scheduled to work.

The director of nursing can continue to use the education to train new hires and provide ongoing support to staff nurses. Furthermore, the importance of medication reconciliation could be highlighted even more at the local level, whether in hospitals, clinics, long-term care facilities, or community health programs from which the patient is being referred. This process could potentially occur during the intake phase, before a patient's admission to the facility. The process can also be incorporated into local health campaigns focused on polypharmacy, older patient care, or chronic disease management as part of a broader public health initiative.

Conclusions

The primary goal of this initiative was to reduce medication errors by 60% within a 2-month timeframe and enhance staff knowledge of medication reconciliation by 20% at a skilled nursing and rehabilitation center. Although these objectives were not met, notable progress was achieved. Ongoing monitoring of medication reconciliation error

rates will be crucial for evaluating the long-term effectiveness of the education provided and ensuring adherence to best practices. These efforts may significantly enhance patient safety and contribute to improved health outcomes within the facility. Future initiatives could enhance this project by providing additional training on medication reconciliation and fostering a culture of accountability among nursing staff, which is crucial for ensuring patient safety and optimal outcomes. The consistent implementation of this medication reconciliation process could be essential to enhancing health outcomes and highlighting the vital role of nursing in patient care. This project empowered licensed nurses through targeted education to decrease errors and showed significant potential for enhancing medication reconciliation practices. Additionally, the project promoted a systematic shift to the prioritization of medication reconciliation, ensuring all patients receive comprehensive and equitable care.

References

- Alanazi, N. S., Alatawi, W. A., & Prabahar, K. (2022). Medication reconciliation – Responsibilities and barriers facing physicians, pharmacists, and nurses in Saudi Arabia. *Saudi Journal for Health Sciences, 11*(1), 55-61.
https://doi.org/10.4103/sjhs.sjhs_82_21
- Alghamdi, D. S., Alhrasen, M., Kassem, A., Alwagdani, A., Tourkmani, A. M., Alnowaiser, N., Barakah, Y. A., & Alotaibi, Y. K. (2023). Implementation of medication reconciliation at admission and discharge in Ministry of Defense Health Services hospitals: A multicentre study. *BMJ Open Quality, 12*(2).
<https://doi.org/10.1136/bmjoq-2022-002121>
- Anazi, A. A. (2021). Medication reconciliation process: Assessing value, adoption, and the potential of information technology from pharmacists' perspective. *Health Informatics Journal, 27*(1). <https://doi.org/10.1177/146045822098>
- Burnes, B. (2019). The origins of Lewin's three-step model of change. *The Journal of Applied Behavioral Science, 56*(1). <https://doi.org/10.1177/00218863198926>
- Craig, S. J., Castello, J. C., Cieslowski, B. J., & Rovnyak, V. (2021). Simulation strategies to increase nursing student clinical competence in safe medication administration practices: A quasi-experimental study. *Nurse Education Today, 96*.
<https://doi.org/10.1016/j.nedt.2020.104605>
- Garsan, M. A., Leon, E., Alyami, H. S., Miller, D., Breen, M., Cacciata, M., Bactista, M., Qahoush, R., & Alshehri, H. (2021). Effectiveness of an educational intervention in improving the patient medication reconciliation in the emergency department.

The International Journal of Clinical Practice, 75(11).

<https://doi.org/10.1111/ijcp.14782>

Harper, A., Kukielka, E., & Jones, R. (2021). Patient harm resulting from medication reconciliation process failures: A study of serious events reported by Pennsylvania hospitals. *Patient Safety*, 3(1).

<https://doi.org/10.33940/data/2021.3.1>

The Joint Commission. (2023). *National patient safety goals® effective January 2024 for the ambulatory health care program*. https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2024/npsg_chapter_ahc_jan2024.pdf

Karaoui, L. M., Chamoun, N., Fakhir, J., Ghanem, W. A., Droubi, S., Marzouk, A. R., Droubi, N., Masri, H., & Ramia, E. (2019). Impact of pharmacy-led medication reconciliation on admission to internal medicine service: Experience in two tertiary care teaching hospitals. *BMC Health Services Research*, 19(493).

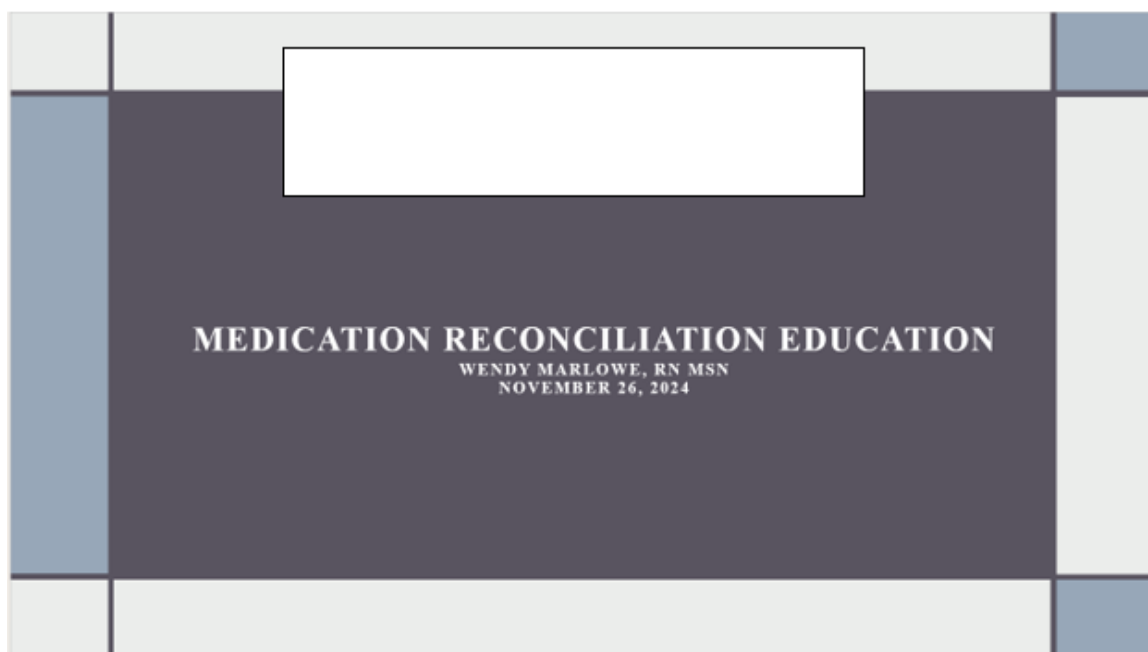
<https://doi.org/10.1186/s12913-019-4323-7>

Komperda, K., & Lempicki, K. (2019). Effectiveness of a medication reconciliation simulation in an introductory pharmacy practice experience course. *American Journal of Pharmaceutical Education*, 83(4). <https://doi.org/10.5688/ajpe6628>

Krivanek, M. J., Dolansky, M. A., Kukla, A., Ramic, M., Guliano, J., Waite, P., & Small, D. (2019). Perspectives from academic and practice leaders on nursing student's education and role in medication reconciliation. *Journal of Professional Nursing*, 35(2), 75-80. <https://doi.org/10.1016/j.profnurs.2018.07.005>

Mixon, A. S., Smith, G. R., Jr, Mallouk, M., Nieva, H. R., Kripalani, S., Rennke, S., Chu, E., Sridharan, A., Dalal, A., Mueller, S., Williams, M., Wetterneck, T., Stein, J. M., Stollendorf, D., Howell, E., Orav, J., Labonville, S., Levin, B., Yoon, C.,... Schnipper, J. L. (2019). Design of MARQUIS2: Study protocol for a mentored implementation study of an evidence-based toolkit to improve patient safety through medication reconciliation. *BMC Health Services Research*, 19(1), 659. <https://doi.org/10.1186/s12913-019-4491-5>

Appendix B: Educational PowerPoint



Agenda

- Pre-test
- Objectives
- Define Medication Reconciliation
- Medication Discrepancies
- Barriers Preventing Medication Reconciliation
- Importance of Medication Reconciliation
- Cover the facts
- Go over error rate and per chart rate
- The goal
- Explain the process
- Post-test



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Objectives

Upon completion of this educational session, you will be able to:

1. Define medication reconciliation.
2. Understand the importance of medication reconciliation.
3. Identify barriers to medication reconciliation.
4. Implement the specifically identified medication reconciliation process at Hillcrest Nursing & Rehabilitation Center.

Pre-Test



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What is Medication Reconciliation?

- The Medication Reconciliation (MedRec) process aims to improve patient safety through safe prescription and medication administration (Al Anazi, 2021).
- Process of creating a complete list of medications by reviewing the current and the newly ordered medication to promote safety and reduce the possibility of medication errors.



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What is a Discrepancy?

- Considered any medication order on the After Visit Summary (AVS) that lacks Dose, Frequency, Route, Time, Last given, Durations, Diagnoses, and any parameters.
- Any duplicate medications or omissions.



Photo generated with Adobe Firefly – text to graphic.

Barriers Preventing Medication Reconciliation

- Lack of standardized training in facilities
- Unsure of role in the process
- Not following the policy on the process
- Lack of opportunity during nursing school

Importance

The evidence shows that medication reconciliation errors are clinically significant and may result in serious or potentially life-threatening harm. Implementation of risk reduction strategies, such as intentional medication reconciliation education and processes will improve patient safety and reduce the risk of medication errors.



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Guess Overall Error Rate

From 0%-100%

Overall Error Rate

Upon reviewing medication reconciliation audits from August to November 2024 at the overall error rate was...

100%

Guess Average Error Per Chart

From 0-10

Average Error Per Chart

Upon reviewing medication reconciliation audits from August to November 2024 at the average error per chart was ...

2

Room for Improvement

Upon reviewing medication reconciliation audits from August to November 2024 at the overall error rate was 100% and the average error per chart was 2

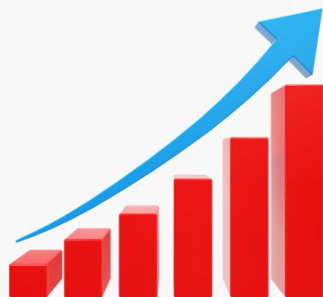


Time for Improvement... Ready?

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What is the Goal After Medication Reconciliation Education?

Increase patient admission medication reconciliation with 20% in knowledge from all nurses.



Reduce medication errors by 60% in two months.



The Process

- **1st Nurse** checks each medication on the AVS for right:
 - Dose, Frequency, Route, Time, Last given, Durations, Diagnoses, and any parameters
 - Initial each medication on the AVS as you input in the EHR
 - If the medication is not right, place it on the medication reconciliation form in EHR and find a solution (call the discharge hospital or discharge facility for clarification, or ask the doctor when verifying new medications)
 - Once clarified, put the solution on the medication reconciliation form in the EHR and update the medication order
-
- **2nd nurse** checks each medication on the AVS and medication order in the EHR the 1st nurse inputs
 - Ensures there is a solution on the medication reconciliation form if there are discrepancies
 - Initials on the AVS after the 1st nurse and signs off in the EHR if ***everything*** is correct

Post-Test



Photo retrieved from Microsoft PowerPoint pictures

References

- Al [Anazi](#), A. (2021). Medication reconciliation process: Assessing value, adoption, and the potential of information technology from pharmacists' perspective. *Health Informatics Journal*, 27(1). <https://doi.org/10.1177/146045822098>
- Anderson, R., & Ferguson, R. (2020). A nurse practitioner-led medication reconciliation process to reduce hospital readmissions from a skilled nursing facility. *Journal of the American Association of Nurse Practitioners*, 32(2), 160-167. <https://10.1097/JXX.0000000000000264>
- Dong, Phuong [Thi Xuan](#), Pham, Van [Thi Thuy](#), Nguyen, Linh [Thi](#), Le, Anh Van, Nguyen, Thao [Thi](#), Vu, Hoa Dinh, Nguyen, Huong [Thi Lien](#), Nguyen, Hoa [Thi](#), Hua, Susan, Li, Shu Chuen (2022).
- [Garsan](#), M. A., Leon, E., [Alyami](#), H. S., Miller, D., Breen, M., [Cacciata](#), M., [Bactista](#), M., [Qahoush](#), R., [Alshehri](#), H. (2021). Effectiveness of an educational intervention in improving the patient medication reconciliation in the emergency department. *The International Journal of Clinical Practice*, 75(11). <https://doi.org/10.1111/ijcp.14782>
- Harper, A., [Kukielka](#), E., & Jones, R. (2021). Patient harm resulting from medication reconciliation process failures: A study of serious events reported by Pennsylvania hospitals. *Patient Safety*, 3(1). doi:10.33940/data/2021.3.1
- [Krivanek](#), M. J., [Dolansky](#), M. A., [Kukla](#), A., [Ramic](#), M., [Guliano](#), J., Waite, P., & Small, D. (2019). Perspectives from academic and practice leaders on nursing student's education and role in medication reconciliation. *Journal of Professional Nursing*, 35(2), 75-80. <https://doi.org/10.1016/j.profnurs.2018.07.005>

Congrats **YOU** are Ready to Reduce Medication Errors!!



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Appendix C: Medication Reconciliation Pretest

Medication Reconciliation Pre-Test

1. *Purpose:* This questionnaire aims to assess your current knowledge level.
2. *Confidentiality:* Your responses will be kept confidential and anonymous.
3. *Time:* The questionnaire should take approximately 10 minutes to complete.
4. *Identification Number:* Please place a six-digit identification number on this test that you will remember as you will need to use it again following the presentation. Do not use consecutive numbers. Use a unique string of numbers (e.g., 357834). Only place the number on the test – not your name or any other personal information.

Six Digit Identification Number: _____

1. *Directions:* Please select the correct response to each of the following items by circling your selection. There is only one correct response for each item.
 1. **What is Medication reconciliation?**
 - A. The list of medication on the After Visit Summary (AVS)
 - B. Process of creating a complete list of medications by reviewing the current and the newly ordered medication to promote safety and reduce the possibility of medication errors
 - C. Calling the doctor to verify the medication list
 - D. None of the above
 2. **Why is medication reconciliation important?**
 - A. Medication discrepancies occur most often at transitions in care - admission, transfer, and discharge
 - B. Medication discrepancies are common and can cause adverse events
 - C. 91% of medication reconciliation errors are clinically significant
 - D. All of the above
 3. **Medication order: Augmentin 250mg PO Q12hr x7 days for Cellulitis, what is missing?**
 - A. The route
 - B. Time
 - C. Diagnosis
 - D. It is correct

4. **True or False: Medication reconciliation is a safety best practice designed to minimize the potential for adverse events related to medication discrepancies.**
 - A. True
 - B. False

5. **Medication order: Mr. Green Keflex 500mg PO BID x 7 days, what is missing?**
 - A. The route
 - B. Time
 - C. Resident
 - D. Diagnosis

6. **Admitted on 1/12/24 at 1900, medication order: Mrs. Purple Omeprazole 20mg PO BID for GERD. If given in the 0900 at the hospital, when should the next dose be scheduled?**
 - A. No set time
 - B. 1900
 - C. 1/13/24
 - D. At Bedtime

7. **Medication order: Mr. Blue Lovenox subq daily for DVT. What is missing?**
 - A. Route
 - B. Resident
 - C. Stop date (duration)
 - D. Time

8. **Medication order: Mrs. Orange Fish Oil PO, what needs to be clarified?**
 - A. Time
 - B. Route
 - C. Diagnosis
 - D. A and C

9. **When completing admission orders, the Medication Reconciliation Worksheet needs to be filled out with medication discrepancies (if found) and a second nurse checks it?**
 - A. True
 - B. False

10. If a discrepancy is found, a solution needs to be placed on the Medication Reconciliation Worksheet?

- A. True
- B. False

11. Who needs to initial each medication on the After Visit Summary?

- A. Nurse 1
- B. Nurse 2
- C. Both Nurses
- D. No nurses

Appendix D: Medication Reconciliation Posttest

Medication Reconciliation Post-Test

1. *Purpose:* This questionnaire aims to assess your knowledge level of the presentation.
2. *Confidentiality:* Your responses will be kept confidential and anonymous.
3. *Time:* The questionnaire should take approximately 10 minutes to complete.
4. *Identification Number:* Use your six-digit identification number created during pre-test as your identification– not your name or any other personal information.

Six Digit Identification Number: _____

5. *Directions:* Please select the correct response to each of the following items by circling your selection. There is only one correct response for each item.
6. *Submission:* After completing this post-questionnaire, submit your form to the designated collection point.

1. What is Medication reconciliation?

- A. The list of medication on the After Visit Summary (AVS)
- B. Process of creating a complete list of medications by reviewing the current and the newly ordered medication to promote safety and reduce the possibility of medication errors
- C. Calling the doctor to verify the medication list
- D. None of the above

2. Why is medication reconciliation important?

- A. Medication discrepancies occur most often at transitions in care - admission, transfer, and discharge
- B. Medication discrepancies are common and can cause adverse events
- C. 91% of medication reconciliation errors are clinically significant
- D. All of the above

3. Medication order: Augmentin 250mg PO Q12hr x7 days for Cellulitis, what is missing?

- A. The route
- B. Time
- C. Diagnosis
- D. It is correct

4. **True or False: Medication reconciliation is a safety best practice designed to minimize the potential for adverse events related to medication discrepancies.**
 - A. True
 - B. False

5. **Medication order: Mr. Green Keflex 500mg PO BID x 7 days, what is missing?**
 - A. The route
 - B. Time
 - C. Resident
 - D. Diagnosis

6. **Admitted on 1/12/24 at 1900, medication order: Mrs. Purple Omeprazole 20mg PO BID for GERD. If given in the 0900 at the hospital, when should the next dose be scheduled?**
 - A. No set time
 - B. 1900
 - C. 1/13/24
 - D. At Bedtime

7. **Medication order: Mr. Blue Lovenox subq daily for DVT. What is missing?**
 - A. Route
 - B. Resident
 - C. Stop date (duration)
 - D. Time

8. **Medication order: Mrs. Orange Fish Oil PO, what needs to be clarified?**
 - A. Time
 - B. Route
 - C. Diagnosis
 - D. A and C

9. **When completing admission orders, the Medication Reconciliation Worksheet needs to be filled out with medication discrepancies (if found) and a second nurse checks it?**
 - A. True
 - B. False

10. If a discrepancy is found, a solution needs to be placed on the Medication Reconciliation Worksheet?

- A. True
- B. False

11. Who needs to initial each medication on the After Visit Summary?

- A. Nurse 1
- B. Nurse 2
- C. Both Nurses
- D. No nurses

Appendix E: Posteducation Survey

Post-Education Survey

Directions:

- Circle the stars that best represent your perspective of the educational program.
- Please add your comments where requested to better address future presentations.

Thank you!

1. From Pre-test to Post-test, do you feel more comfortable with medication reconciliation?



2. Was the education easy to follow?



3. Did this education meet your expectations?



4. What is 1 aspect you enjoyed about the provided education?

5. What is 1 aspect that could be improved upon with the provided education?

6. Will you be able to complete medication reconciliation on every admission with accuracy?



Appendix F: Overall Error Rate and Overall Per Chart Rate AVS

Overall Error Rate and Overall Per-Chart Rate AVS

Week 1	<u>Overall Error Rate %</u>	<u>Overall Per-Chart Rate</u>
#1 chart		0 error
For the week	0%	0
Week 2	<u>Overall Error Rate</u>	<u>Overall Per-Chart Rate</u>
#2 chart		0 error
#3 chart		1 error
#4 chart		1 error
#5 chart		0 error
For the week	50%	0.5
Week 3	<u>Overall Error Rate</u>	<u>Overall Per-Chart Rate</u>
#6 chart		1 error
#7 chart		1 error
For the week	100%	1
Week 4	<u>Overall Error Rate</u>	<u>Overall Per-Chart Rate</u>
#8 chart		0 error
#9 chart		1 error
#10 chart		1 error
#11 chart		0 error
#12 chart		0 error
#13 chart		0 error
#14 chart		1 error
For the week	43%	0.43
Week 5	<u>Overall Error Rate</u>	<u>Overall Per-Chart Rate</u>
#15 chart		1 error
#16 chart		0 error
For the week	50%	0.5
Week 6	<u>Overall Error Rate</u>	<u>Overall Per-Chart Rate</u>
#17 chart		0 error
#18 chart		1 error
#19 chart		1 error
#20 chart		0 error
For the week	50%	0.5

4/7/25

