Nursing Sciences Journal. Vol. 10, No. 2, Oktober 2026
P- ISSN: 2598-8220, E-ISSN: 2598-8212

THE EFFECT OF SBAR-BASED BEDSIDE HANDOVER COMMUNICATION WITHIN A PATIENT-CENTERED CARE FRAMEWORK INTEGRATED WITH ELECTRONIC MEDICAL RECORDS ON PATIENT SAFETY AND SATISFACTION

Achmad Hidayatullah[1] , Yanis Kartini[2] , Dyah Ika Krisnawati[3]

[1,2,3]Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya, East Java, Indonesia

Email: 1110024012@student.unusa.id

ABSTRACT

Background: Non-standard handovers can lead to safety incidents and decreased patient satisfaction, thus requiring an effective, structured, and patient-oriented handover method. This study aims to analyze the effect of bedside handover using the PCC-based method with EMR on patient safety and satisfaction in the inpatient ward of Dr. H. Slamet Martodirdjo General Hospital, Pamekasan. Method: This quantitative study employed a quasi-experimental design with a pretest-posttest control group approach. The total study population consisted of 50 patients per group. The sample size for each group was 48 respondents, selected via purposive sampling. The intervention group received bedside handover using the SBAR Method based on PCC with EMR for a minimum of three days during the 14-day study period. The instruments used included a patient safety observation sheet and a PNSCQQ questionnaire for patient satisfaction. Data analysis utilized the Wilcoxon rank test and the Mann-Whitney test. Results: The results of the Wilcoxon rank test indicated a significant difference between the pre- and post-tests in the intervention group for the safety and satisfaction variables, whereas no difference was observed in the control group. The results of the influence analysis using the Mann-Whitney test showed a significant influence on patient satisfaction (p=0.000), while there was no significant influence of the intervention on the safety variable (p=0.085). Conclusion: The SBAR bedside handover method based on patient-centered care (PCC) with electronic medical records (EMR) had a significant effect on patient satisfaction, but did not show a significant effect on patient safety, although there was a decrease in patient safety incidents in the intervention group.

Keywords: Bedside Handover, Patient Safety, Patient Satisfaction, Patient-Centered Care, Electronic Medical Records, Sbar.

INTRODUCTION

Poor or ineffective communication is one of the primary risk factors contributing to adverse events in healthcare (WHO, 2021) . A strategy to improve communication quality among nurses during bedside handover is the Situation, Background, Assessment, Recommendation (SBAR) approach. SBAR communication has been proven to be systematic, concise, and to encourage patient and family involvement. Furthermore, this approach aligns with the principles of patient-centered care (PCC), which positions the patient as an active partner in their care (Picker Institute, 2022) . However, the implementation of PCC-based SBAR bedside handover still faces challenges. Some hospitals have

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

attempted to implement it but have not yet optimally integrated it into their electronic medical record (EMR) documentation systems. EMR can actually support data consistency and accelerate access to information (Nugroho and Pramudita, 2024) . A large-scale project by the European Commission has stated that handover communication accounts for 25% to 40% of adverse events in healthcare (Eggins and Slade, 2015) . In fact, another study states that communication is the main challenge in the handover process and is often the cause of adverse events (Raeisi, Rarani and Soltani, 2019) . Another study states that communication is the main challenge in the handover process and is often the cause of adverse events . A preliminary study at Dr. H. Slamet Martodirdjo General Hospital in Pamekasan found that hospital management has not yet implemented standard operating procedures (SOPs) regarding bedside handover, and handover documentation does not follow standard operating procedures using the SBAR format, tools, and communication methods. Nurses in the inpatient ward do not yet have instruments or formats for nursing shift handover. Handover is still conducted manually, is not recorded in the patient's electronic medical record, and bedside handover is only performed during the morning shift; patient and family involvement in handover remains very minimal. This results in the handover process documentation not being recorded in the nursing notes. It was found that at Pamekasan Regional General Hospital, the number of patient safety incidents in 2024 among inpatients remains quite high, at 32 incidents, with a breakdown of 6.25% KTD, 25% KTC, and 68.75% KNC. Meanwhile, the reporting compliance rate remains low at only 18%, with only 4 out of 18 units regularly submitting reports. Other data indicate that inpatient satisfaction levels are still suboptimal; a patient satisfaction survey revealed that 6% were satisfied, 65% were somewhat satisfied, and 29% were dissatisfied.

Incomplete information during patient handover can result in nurses on the next shift failing to understand the patient's current clinical condition, vital signs, and treatment regimen (Oktaviani, 2019) . A recent survey revealed that staff and patients who were less aware of the physician handover process experienced reduced satisfaction during weekend shift transitions (Ryan et al., 2025) . Efforts to address this issue include strengthening the implementation of bedside handover using SBAR communication based on patient-centered care, supported by RME technology. A quasi-experimental study demonstrated that modifying SBAR communication and handover procedures can improve the quality of communication and handover among nurses in the emergency department (Alizadeh-Risani et al., 2024) . Another study in Norway found that implementing the ISBAR protocol effectively improved the structure of communication during intrahospital handover (Reime et al., 2024). The implementation of the ISBAR protocol has an impact on improving handover with more effective handover times, although this is not yet statistically significant (Reime et al., 2024) . Based on this phenomenon, the researchers were interested in conducting a study on "the effect of bedside handover using SBAR communication based on patient-centered care using electronic medical records on patient safety and satisfaction." This study is expected to develop a learning module for the implementation of bedside handover using SBAR communication based on patient-centered care, combined with documentation via electronic medical records, thereby fostering a better patient safety culture, improving the quality of nursing care, and enhancing patient satisfaction.

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

METHODS

This study employed *a quasi-experimental pretest–posttest design with a control group.* The study was conducted by providing *treatment* to patients through the implementation of SBAR-based *bedside handover* communication *centered on patient-centered care* using RME, while in the control group, *handover* was conducted in accordance with hospital standards. The study population consisted of patients in inpatient wards. The study sites included the general ward, the internal medicine ward, the surgical ward, and the orchid ward. The total sample size was determined based on the average inpatient bed occupancy rate (BOR) of 80 percent, resulting in a total of 50 patients for each control and intervention group. The sample size was determined using the Slovin formula, resulting in 48 patients for each group. The inclusion criteria for this study were: a minimum hospital stay of 3 days, willingness to participate as a respondent, being of sound mind, able to communicate effectively, and being18 years age . The exclusion criteria were: patients discharged during the study period and patients transferred to another ward. The independent variable in this study is the implementation of SBAR *bedside handover* communication based on *patient-centered care* using RME. The dependent variables in this study are patient safety and satisfaction. Patient safety was measured using the observation method and based on incident reports from the Hospital Quality Committee. For the patient satisfaction variable, the PSNCQQ (*Patient Satisfaction With Nursing Care Quality Questionnaire*) was used. The PSNCQQ questionnaire was developed by Laschinger, Hall, Pedersen, & Almost (2005) in (Badrin, Rachmawaty, and Kadar, 2019).

The results of the first phase of the study involved the development of a module through a series of steps, including a literature review, focus group discussions (FGDs), and expert consultations, which resulted in a module and Standard Operating Procedure (SOP) for implementing PCC-based SBAR bedside handover communication using electronic medical records that are standard-compliant and easy to apply. The PCC-based SBAR *bedside handover* communication module with electronic medical records (EMR) serves as the initial step in this study to ensure the internal validity and reliability of the intervention. The availability of a standardized module serves as a standard operating procedure (*SOP*) that standardizes actions and ensures *treatment fidelity* (adherence to the protocol) throughout the study. This aligns with the study *et al.*, 2021) , which highlights that one of the barriers in *handover* is the lack of hospital policies regarding the implementation of standard procedures, resulting in staff not understanding or failing to apply standard *handover* procedures. Therefore, it is necessary to develop a model aligned with *handover* guidelines and standards to serve as a guide for conducting *handover* accurately and appropriately. The novelty of this module lies in the integration of *bedside handover* procedures based on Patient-Centered Care (PCC), combined with the SBAR documentation method within the electronic medical record, into a single systematic intervention package. This module not only aims to improve communication among nurses but also to actively involve patients in the nursing process Characteristics of the study subjects in the intervention and control groups.

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

Table 1. Characteristics of Study Respondents by Age, Gender, Marital Status, Education, Occupation, and Length of Stay at Dr. H. Slamet Martodirdjo Regional General Hospital in Pamekasan, December 2025 (n=48)

Characteristics	Intervention (n=48)		Control (n=48)		Equivalence Test
	N	(%)	n	(%)	
Patient Age					
18–20 years	1	2.1	2	4.2	0.160
21–30 Years	7	14.6	7	14.6	
31–40 years	5	10.4	2	4.2	
41–50 years	3	6.3	12	25.0	
51–60 years	17	35.4	14	29.2	
Over 60 years	15	31.3	11	22.9	
Gender					
Male	19	39.6	28	58.3	0.102
Female	29	60.4	20	41.7	
3–5 days	1	2.1	0	0	
Education					
Not in school	5	10.4	4	8.3	0.194
SD	18	37.5	21	43.8	
Junior High School	2	4.2	8	16.7	
High School	19	39.6	11	22.9	
University	4	8.3	4	8.3	
Marital Status					
Married	43	89.6	40	83.3	0.552
Unmarried	5	10.4	8	16.7	
Employment					
Not working	21	43.8	18	37.5	0.070
College Students / High School Students	2	4.2	1	2.1	
Civil Servant	6	12.5	13	27.1	
Private Sector	9	18.8	16	33.3	
Farmers	10	20.8			
Initial length of stay (before intervention)					
1–2 days	47	97.9	48	100	0.315
3–5 days	1	2.1	0	0	
Total	**48**	**100**	**48**	**100**	

Table 1 shows that in both groups, the largest age group was 51–60 years old (35.4% : 29.2%). Regarding gender, the majority (60.4%) in the intervention group were women, while in the control group, the majority were men (58.3%). Educational attainment was similar in both groups, with most being elementary school graduates (37.5%;43.8%).

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

Marital status in both groups was almost entirely married. The most common employment status was unemployed (43.8% : 37.5%). In both groups, at the initial assessment (before treatment), data were almost entirely collected on days 1–2 (97.9% : 100%). The results of the equivalence test showed p-values > 0.05, meaning there were no differences between the two groups; thus, the two groups were equivalent.

Table 2. Frequency Distribution of Patient Safety Incidents in the Intervention Group and s in the Control Group at Dr. H. Slamet Martodirdjo General Hospital, Pamekasan, 2025

Characteristics	**Intervention (n=48)**				**Control (n=48)**			
	Pre-Test		Post-Test		Pre-Test		Post-Test	
	n	(%)	N	(%)	N	(%)	N	(%)
Patient Safety								
No incidents	39	81.2	45	93.8	40	83.3	39	81.2
Incidents occurred	9	18.8	3	6.2	8	16.7	9	18.8
Total	48	100	48	100	48	100	48	100

Table 2 shows that in both groups prior to the intervention, patient safety incidents occurred (18.8%; 16.7%); after the *bedside handover* intervention, the incidence decreased to 6.2% in the intervention group and increased to 18.8% in the control group. Data on patient safety incidents in the intervention group prior to the intervention showed 9 incidents, consisting of 3 non-injury incidents (KTC), 4 near-miss incidents (KNC), and 2 potential injury incidents (KPC). Following the intervention, the number of safety incidents decreased to 3 incidents, comprising 1 near-miss and 2 potential injury incidents. In the control group prior to the *handover* intervention using the hospital's standard method, there were 8 patient safety incidents, consisting of 3 non-injury incidents, 3 near-miss incidents, and 2 potential injury incidents. After the intervention, there was an increase in patient safety incidents to 9 incidents, with 3 non-injury incidents, 4 near-miss incidents, and 3 potential injury incidents.

Table 3. Frequency Distribution of Patient Satisfaction in the Intervention Group and Control Group at Dr. H. Slamet Martodirdjo General Hospital, Pamekasan, in 2025

Characteristics	**Intervention (n=48)**				**Control (n=48)**			
	Pre-Test		Post-Test		Pre-Test		Post-Test	
	N	(%)	N	(%)	n	(%)	N	(%)
Patient satisfaction								
Very Satisfied	4	8.3	20	41.7	0	0	0	0
Satisfied	29	60.4	28	58.3	26	54.2	38	79.2
Fairly Satisfied	15	31.3	0	0	22	45.8	10	20.8
Dissatisfied	0	0	0	0	0	0	0	0
Very Dissatisfied	0	0	0	0	0	0	0	0

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

Table 3 shows that in both groups prior to the intervention, the majority expressed satisfaction with the service (60.4%: 54.2%). After the *bedside handover* intervention was implemented, satisfaction in the intervention group increased to "very satisfied" (41.7%), and in the control group, the percentage of those satisfied increased to 79.2%, though none reported being "very satisfied."

Table 4. Analysis of Differences in Patient Safety Incidents Before and After the Implementation of *Bedside Handover* at Dr. H. Slamet Martodirdjo General Hospital, Pamekasan

Variable	Group	N	Z	p-value	Notes
Patient Safety	Intervention	48	-2.121	0.034	significant
	Control	48	-0.447	0.655	Not significant

Table 4 shows the results of the Wilcoxon test, indicating a significant difference in the incidence of patient safety incidents before and after the implementation of *bedside handover* using SBAR communication in the intervention group (Z = -2.121; p = 0.034), demonstrating a reduction in patient safety incidents following the implementation of *bedside handover* using SBAR communication based on PCC with RME. In the control group, there was no difference before and after *the handover* was conducted according to hospital standards (Z = -0.447; p = 0.655).

Table 5. Analysis of the Effect of PCC-Based SBAR Communication *Bedside Handover* with RME in the Intervention and Control Groups on Patient Safety at Dr. H. Slamet Martodirdjo General Hospital, Pamekasan

Variable	Group	N	Mean Rank	p-value
Patient Safety (Pre-Test)	Intervention	48	49.00	0.790
	Control	48	48.00	
Patient Safety (Post-Test)	Intervention	48	45.50	0.085
	Control	48	51.50	

Table 5 shows the results of the Mann–Whitney test, indicating that there was no significant difference between the intervention and control groups either before (p = 0.790) or after the intervention (p = 0.085). However, based on the post-intervention mean rank, there was a trend toward lower values in the intervention group compared to the control group. This indicates that following the intervention—*bedside handover* communication using the SBAR method based on PCC with RME—there was a decrease in patient safety incidents in the intervention group. In the control group, there was an increase in patient safety incidents after the handover intervention in accordance with hospital standards. However, the analysis results show that the *bedside handover* communication intervention using the SBAR method based on PCC with RME had no effect on patient safety.

Table 6. Analysis of Differences in Patient Satisfaction Before and After the Implementation of PCC-Based SBAR Communication *Bedside Handover* with RME at Dr. H. Slamet Martodirdjo General Hospital, Pamekasan.

Variable	Group	N	Z	p-value	Description
Patient Satisfaction	Intervention	48	5.396	0.000	significant
	Control	48	-3.207	0.001	significant

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

Table 6, based on the results of the Wilcoxon test, shows a significant difference in patient satisfaction before and after the implementation of PCC-based SBAR *bedside handover* communication with RME in the intervention group (Z = 5.396; p = 0.000), indicating an increase in patient satisfaction after the s received PCC-based SBAR *bedside handover* communication with RME. The control group also showed a significant difference in patient satisfaction before and after *the handover* was conducted according to hospital standards (Z = -3.207; p = 0.001).

Table 7. Analysis of the Effect of PCC-Based SBAR Communication During *Bedside Handover* Using RME in the Intervention and Control Groups on Patient Satisfaction at Dr. H. Slamet Martodirdjo General Hospital, Pamekasan

Variable	Group	N	Mean Rank	p-value
Patient Satisfaction (Pre-test)	Intervention	48	53.08	0.064
	Control	48	43.92	
Patient Satisfaction (Post-Test)	Intervention	48	61.42	0.000
	Control	48	35.58	

Table 7 The results of the *Mann–Whitney* test show that prior to the intervention, there was no significant difference in satisfaction levels between the intervention group and the control group (p = 0.064), indicating that the initial conditions of both groups were relatively homogeneous. After the intervention, there was a significant difference between the two groups (p = 0.000), with the intervention group having a higher satisfaction level than the control group. This indicates that the PCC-based SBAR Communication intervention with RME is effective in improving patient satisfaction.

Development of a *Bedside Handover* Module for PCC-Based SBAR Communication with RME

The PCC-based SBAR *bedside handover* communication module developed with RME serves as the first step in this study to ensure the internal validity and reliability of the intervention. The availability of a standardized module functions as a standard operating procedure (*SOP*) that helps standardize practices and ensures *treatment fidelity* (adherence to the protocol) throughout the study. This aligns with the study *et al*., 2021) , which highlights that one of the barriers in *handover* is the lack of hospital policies regarding the implementation of standard procedures, resulting in staff not understanding or failing to apply *handover* procedures that meet standards. Therefore, it is necessary to develop a model consistent with *handover* guidelines and standards to serve as a guide for conducting *handover* accurately and appropriately. The novelty of this module lies in the integration of PCC-based *bedside handover* procedures combined with the SBAR documentation method in electronic medical records into a single systematic intervention package. This module not only aims to improve communication among nurses but also to actively involve patients in the nursing process.

The Effect Of Pcc-Based Sbar Communication Bedside Handover With Emr On Patient Safety

Data analysis indicates that the PCC-based SBAR *bedside handover* intervention with RME was effective in reducing patient safety incident rates in the intervention group. This is evident from the results of the analysis usin g *the*

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

Wilcoxon rank test (*)*, which showed that the *post-test* patient safety incident rates in the intervention group were statistically significantly lower than the *pre-test* scores, indicating that this intervention is a highly effective strategy. The decrease was quite significant, from 9 incidents during the pre-intervention period to 3 incidents during the post-intervention period. Meanwhile, in the control group, there was an increase in patient safety incidents from 8 incidents during *the* pre-intervention *handover* using the hospital's standard method to 9 incidents post-intervention. This reduction in patient safety incident rates is attributed to the intervention's ability to enhance the clarity of information. This aligns with findings from other studies indicating that *bedside handover* using SBAR communication based on PCC with RME assists healthcare providers in conveying information concisely, succinctly, and in a structured manner, ensuring messages are clearly understood by recipients. This reduces and minimizes *miscommunication*—a common cause of *medical errors* or *adverse events*—ensuring information is effectively conveyed, minimizing the risk of errors, and improving the quality of nursing care (Pazar *et al.*, 2024)). Another study noted that the implementation of an EMR-based SBAR tool successfully improved nurses' compliance with patient handover procedures during shift changes. This increased compliance positively impacted communication quality among nurses during shift reports and patient safety, with a reduction in the potential for communication errors. (Chandler, 2023) . The study results did not reveal any significant incidents in the form of adverse events (AEs) among patients in the intervention group. This aligns with research indicating that the implementation of bedside handover using the SBAR technique is effective in enhancing nurses' knowledge and compliance, strengthening communication between nurses and patients, and reducing the potential for miscommunication that could trigger adverse events (AEs) (Rahmi Saptarianti, 2025) . The results of the impact analysis indicate that there were no significant differences between the intervention and control groups, either before or after the intervention, regarding patient safety variables. This is because many other factors or variables can contribute to the occurrence of patient safety incidents. PCC-based SBAR *bedside handover* communication with RME focuses only on effective communication, whereas other factors in the implementation of patient safety goals (PSGs) also need to be carried out properly to prevent incidents. The research results showed that the most common incident was medication errors; this was caused by patient safety goals that were not addressed by the researchers, namely medication safety precautions and patient identification. This aligns with other studies stating that improvements in service quality should go hand in hand with increased patient safety through the implementation of patient safety goals and the minimization of incidents (Astika Handayani, 2025) .

The results of this study indicate an increase in patient satisfaction following the implementation of a PCC-based SBAR *bedside handover* communication protocol using RME. Patient satisfaction scores increased significantly after the intervention compared to scores prior to the intervention. This increase indicates that the intervention improved effective communication and actively engaged patients in their care. The results of the analysis of patient satisfaction data between the intervention group ( ) and the control group also showed significant results, indicating that the intervention had an impact on increasing patient satisfaction. Research findings clearly demonstrate that *Patient-Centered Care* (PCC)-based *bedside handover* offers significant benefits for patients, including improved patient satisfaction, increased patient adherence to

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

care, better clinical outcomes, and reduced healthcare costs. These results align with other studies indicating that PCC can enhance the quality of life for patients and their families, as well as improve the relationship between patients and healthcare providers (Putra *et al.*, 2024) . Other studies indicate that patients receiving PCH demonstrate higher levels of participation in several aspects compared to those who do not receive PCH (Lantz *et al.*, 2023) . A *bedside handover* approach emphasizing the SBAR communication framework and PCC protocols can improve patient safety, communication quality, and patient satisfaction (Chien *et al.*, 2021) . Other studies show that standardized SBAR-based *bedside handoffs* and *walking rounds*, along with electronic reports via RME, reduce communication errors, support team collaboration, and have been shown to improve patient safety, patient satisfaction, as well as nurse accountability and efficiency (Taylor, 2015) . A recent survey revealed that staff and patients who are less aware of the *handover* process experience decreased satisfaction (Ryan *et al.*, 2025) . Results from a qualitative study in Ethiopia also emphasize that inconsistent *handoffs* lead to an increase in medical errors, patient dissatisfaction, and prolonged hospital stays (Dumbala *et al.*, 2025)

CONCLUSION AND RECOMMENDATIONS

The SBAR-based PCC *bedside handover* communication intervention guide module with RME was developed as a practical guide for nurses and inpatients. This module serves as an easy-to-implement and effective *handover* method for addressing communication issues and is capable of improving overall interaction with patients , thereby actively identifying patients' care needs. PCC-based SBAR *bedside handover* communication with RME had no effect on patient safety, although there was a decrease in patient safety incidents in the intervention group. PCC-based SBAR *bedside handover* communication with RME was effective in improving patient satisfaction. The implementation of PCC-based SBAR *bedside handover* communication with RME can serve as a combined method that can be further developed by hospitals and students. This method warrants further research in the future to make it even more effective in improving patient safety and satisfaction.

ACKNOWLEDGMENTS

Praise be to Allah. The author offers his deepest gratitude to Allah SWT, the One and Only God, for all His blessings and abundant mercy, which have enabled the author to complete this thesis titled "The Effect of SBAR-Based *Bedside Handover* Communication *Centered* on *Patient-Centered Care* Using Electronic Medical Records on Patient Safety and Satisfaction in the Inpatient Ward of Dr. H. Slamet Martodirdjo General Hospital, Pamekasan." In the preparation of this thesis, the researcher received significant assistance, guidance, support, and cooperation from various parties. On this occasion, the researcher would like to express gratitude to the thesis advisors and examiners, as well as the entire academic community, particularly the Applied Master's Program in Nursing at the Faculty of Nursing and Midwifery, Nahdlatul Ulama University, Surabaya. Thanks are also extended to the Director of Dr. H. Slamet Martodirdjo General Hospital in Pamekasan, along with all parties who granted permission, provided opportunities, and offered their cooperation, enabling the researcher to conduct the study effectively, as well as to the patients who agreed to participate as research respondents.

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

REFERENCES

Alizadeh-Risani, A. *et al.* (2024) 'Comparison of the SBAR method and modified handover model on handover quality and nurse perception in the emergency department: a quasi-experimental study.', *BMC Nursing*, 23(1), p. 585. Available at: https://doi.org/10.1186/s12912-024-02266-4.

Astika Handayani (2025) 'Analysis of Factors Influencing the Implementation of Patient Safety Goals', 9(2), pp. 119–125.

Badrin, N.N., Rachmawaty, R., and Kadar, K. (2019) 'Patient Satisfaction Instrument Regarding Nursing Services: A Literature Review', *Jurnal Endurance*, 4(1), p. 87. Available at: https://doi.org/10.22216/jen.v4i1.3674.

Chandler, K.L. (2023) 'Implementation of a Situation, Background, Assessment, Recommendation (SBAR) Patient Handoff Tool in the Electronic Medical Record (EMR)', (August). Available at: https://www.gcu.edu/degree-programs/dnp-educational-leadership.

Chien, L.J. *et al.* (2021) 'Improving patient-centered care through a tailored intervention addressing nursing clinical handover communication in its organizational and cultural context', *Journal of Advanced Nursing*, 78(5), pp. 1413–1430. Available at: https://doi.org/10.1111/jan.15110.

Dumbala, G. *et al.* (2025) 'Clinical handover experience among nurses working in Ethiopia: phenomenological qualitative study', *BMC Nursing*, 24(1), p. 540. Available at: https://doi.org/10.1186/s12912-025-03184-9.

Eggins, S. and Slade, D. (2015) 'Communication in Clinical Handover: Improving the Safety and Quality of the Patient Experience', *Journal of Public Health Research*, 4(3), p. jphr.2015.666. Available at: https://doi.org/10.4081/jphr.2015.666.

Lantz, A.C.H. *et al.* (2023) 'Evaluation of patient participation in relation to the implementation of a person-centered nursing shift handover', *Worldviews on Evidence-Based Nursing*, 20(4), pp. 330–338. Available at: https://doi.org/10.1111/wvn.12666.

Nugroho, Y.W. and Pramudita, F.A. (2024) 'The Role of Electronic Health Records in Improving Efficiency, Quality of Healthcare Services, and Patient Safety: A Systematic Literature Review', *Indonesian Journal of Health Promotion (MPPKI)*, 7(2), pp. 343–350. Available at: https://doi.org/10.56338/mppki.v7i2.4867.

Oktaviani, E. (2019) *The Relationship Between Nurse Handover and Near-Miss Incidents (NMI) in the Inpatient Ward of Lukas Hilisimaetano Regional General Hospital, South Nias Regency*. (Master's Thesis in Public Health) UGM (Gadjah Mada University).

Pazar, B. *et al.* (2024) 'Implementation and Evaluation of the SBAR Communication Model in Nursing Handover by Pediatric Surgery Nurses.', *Journal of Perianesthesia Nursing: Official Journal of the American Society of PeriAnesthesia Nurses*, 39(5), pp. 847–852. Available at: https://doi.org/10.1016/j.jopan.2023.12.021.

Picker Institute (2022) *Principles of Patient-Centered Care*, *Retrieved from https://picker.org*. Available at: https://doi.org/Retrieved from https://picker.org.

Putra, G. *et al.* (2024) *: Leadership and Nursing Management*. Jambi: PT Sonpedia Publishing Indonesia.

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026

Raeisi, A., Rarani, M.A., and Soltani, F. (2019) 'Challenges of the patient handover process in healthcare services: A systematic review.', *Journal of Education and Health Promotion*, 8, p. 173. Available at: https://doi.org/10.4103/jehp.jehp_460_18.

Rahmi Saptarianti (2025) 'Bedside Handover as an Intervention Strategy to Improve Nurse Interaction in Patient-Centered Care', *Compromise Journal: Community Professional Service Journal*, 3(1), pp. 61–70. Available at: https://doi.org/10.57213/compromisejournal.v3i1.541.

Reime, M.H. *et al.* (2024) 'Intrahospital Handovers before and after the Implementation of ISBAR Communication: A Quality Improvement Study on ICU Nurses' Handovers to General Medical Ward Nurses', *Nursing Reports*, 14(3), pp. 2072–2083. Available at: https://doi.org/10.3390/nursrep14030154.

Ryan, J.M. *et al.* (2025) 'Patient perspectives on surgical handover quality: a mixed-methods survey', *Patient Safety in Surgery*, 19(1), p. 14. Available at: https://doi.org/10.1186/s13037-025-00437-z.

Taylor, J.S. (2015) 'Improving patient safety and satisfaction with standardized bedside handoff and walking rounds', *Clinical Journal of Oncology Nursing*, 19(4), pp. 414–416. Available at: https://doi.org/10.1188/15.CJON.414-416.

WHO (2021) *Patient Safety: Global Patient Safety Action Plan 2021–2030*. Geneva: World Health Organization.

Article History:
Received: September 29, 2026; Revised: October 31, 2026; Accepted: October 31,, 2026