

NURSING LEADERSHIP AND MANAGEMENT RESIDENCY PROPOSAL IN EMERGENCY INSTALLATION OF ADVENT BANDUNG HOSPITAL

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ABSTRACT

KEYWORDS

Emergency nursing,
simulation training,
Urgent Care, patient
outcomes, competency
development

Emergency Department (ED) nurses are critical in delivering rapid, life-saving care, requiring continuous competency updates through training (e.g., BLS, ACLS) to enhance technical skills, decision-making, and stress management. However, delays due to triage inefficiencies, high patient volume, and staffing shortages undermine patient satisfaction, necessitating systemic improvements like Urgent Care integration. This study aims to (1) evaluate the impact of simulation-based training on ED nurse competency and (2) assess how Urgent Care implementation (e.g., digital queues, structured referrals) improves patient outcomes and workflow efficiency. A quasi-experimental design will compare EDs with and without interventions. Pre- and post-intervention data will be collected from 100 nurses (convenience sampling) via skills tests, stress metrics, and patient satisfaction surveys. Validity and reliability will be ensured through expert-reviewed instruments and Cronbach's alpha (>0.7). Data analysis will use SPSS v.26 for t-tests and regression. Expected outcomes include improved nurse competency (20% faster decision-making), reduced wait times (30%), and higher patient satisfaction (15% increase). The study offers evidence-based strategies to optimize ED performance by integrating training innovations and systemic reforms, addressing both skill gaps and operational bottlenecks.

INTRODUCTION

Hospitals are one of the main pillars in the healthcare system, providing much-needed medical care for patients who are suffering from illness or injury (Alazmy et al., 2020; Badran, 1995; Rios et al., 2020). One of the most crucial units within the hospital is the Emergency Facility (IGD) which serves as the main entrance for patients who require immediate medical treatment (Idris, 2022; Kusumardani et al., 2024; Wijayanti & Prasetyo, 2024). The emergency room is the first place for patients who come with an emergency or life-threatening condition, either through a quick ambulance ride or coming directly to the hospital waiting room (Ketelaar, 2024; Reuter-Oppermann et al., 2017). Due to the characteristics of patients who come in unexpected and critical conditions, IGD requires special attention in terms of the readiness and competence of nurses to provide optimal care (Lunenborg, 2020; Thoonsen et al., 2025).

Nurses in the emergency room are dealing with various medical conditions that require immediate action, ranging from trauma due to accidents, heart attacks, strokes, to other acute medical conditions that are life-threatening (Buettner, 2021; Organization, 2018). Decisions taken in these situations must be quick and precise, as slow or incorrect handling can be fatal. Therefore, the competence of nurses plays a crucial role in ensuring safe and high-quality care. A report from the Institute of Medicine states that medical errors that occur due to a lack of competence of nurses cause an estimated 44,000 to 99,000 deaths each year, emphasizing the importance of competence in maintaining patient safety (Grow, 2021; Nabilou et al., 2015; Saks & Landsman, 2020; Valint, 2016).

Decisions taken in emergency situations can save patients' lives. The competence of nurses in this is a key factor. Medical errors that occur frequently and can be prevented, demonstrate the importance of the role of competent nurses to reduce the risk of errors and improve treatment outcomes (Saintsing et al., 2011). Nurses in emergency departments are faced with a variety of urgent medical challenges, ranging from trauma to life-threatening illnesses (Curtis et al., 2023; Decker et al., 2015; Pavedahl et al., 2022). In this stressful environment, nurses must be able to make quick and precise decisions, as well as adapt interventions based on the patient's rapidly changing condition. They must be skilled in handling complex medical conditions and work closely with other medical teams to ensure proper and effective care. The ability to manage multiple emergency situations and manage multiple patients at the same time is part of the competencies required in the emergency room (Trisyani et al., 2023).

The competence of nurses is not only determined by their technical skills, but also by knowledge, experience, and communication skills. In the emergency room, nurses often have to manage patients with critical conditions, prioritize care, and work in highly dynamic situations. Therefore, nurses in the emergency room need to have good and constant training to improve their skills. Orientation and training programs are essential to help nurses adapt to this challenging environment, as well as ensure they can provide safe, high-quality care (Rabelo et al., 2020).

Competency models such as "*Novice to Expert*" developed by Benner are particularly relevant to understanding the competency journey of nurses. In this model, nurses progress through five levels of competence—from beginner to expert—based on clinical experience and reflection on their practice. In the emergency room, nurses often face high-risk situations, so it is important for them to develop skills through hands-on experience. With ongoing training and reflection on clinical experience, nurses can improve their competencies and provide more effective care (Benner, 1982).

To maintain the competence of nurses in the emergency room, continuous training and professional development are essential. This training includes not only clinical skills, but also leadership and communication skills. Good leadership in the emergency room helps coordinate patient care effectively and reduces the potential for errors. By strengthening competencies in various areas, including clinical, leadership, and communication skills, nurses in the emergency room can continue to provide high-quality care in a stressful and ever-changing environment (Dickerson & Chapel, 2016).

Nursing leadership and managerial are core competencies in ensuring the achievement of effective and efficient health services. In the era of the development of health technology and the complexity of patient needs, nurses are not only tasked with providing nursing services but must also have skills in managing human resources, facilities, and service methods to achieve optimal quality. Nursing leadership and management residency programs are one of the strategic approaches in integrating leadership theory and practice in the field.

Bandung Adventist Hospital (RSAB), as one of the leading health institutions in Indonesia, is a strategic location to implement this residency program. RSAB owned by the Seventh-day Adventist Church Foundation was established on October 2, 1950 which is a type B hospital with a capacity of 254 beds which is currently located on Jl. Cihampelas No. 161, Cipaganti, Coblong District, Bandung City, West Java.

The Emergency Installation (IGD) is one of the health services provided at the RSAB. Health services in the emergency room must meet the rules set by the government as well as the Emergency Service standards set by the RSAB. Thus it can improve emergency services both held at the scene, during the trip to the hospital, and in the hospital. Emergency communication can be done through the emergency room number

Master of Nursing students at Adventist University of Indonesia carry out a nursing leadership and management residency at the emergency installation of RSAB. Through residencies, master's in nursing management students have the opportunity to learn about hospital management systems firsthand, including challenges in human resource management, technology, logistics, procedures, and funding in emergency departments and other units (Hartati, Pratama, & Handayani, 2023).

This residency activity also supports the hospital's efforts to improve the quality of health services, optimize the use of resources, and build a work culture based on transformational leadership. This is relevant to the demands of national and international accreditation which increasingly emphasize the leadership aspect in hospital management .

This study aims to (1) evaluate the impact of simulation-based training on ED nurse competency and (2) assess how Urgent Care implementation (e.g., digital queues, structured referrals) improves patient outcomes and workflow efficiency. This research introduces a dual-focused approach by combining high-fidelity simulation training (e.g., immersive BLS/ACLS scenarios) with Urgent Care systemic integration (e.g., digital triage, collaborative workflows), a novel strategy not yet explored in existing studies. While prior research emphasizes individual competency models or Urgent Care benefits in isolation, this study uniquely evaluates their synergistic impact on nurse performance and patient outcomes, addressing gaps in both training efficacy and operational efficiency.

METHOD RESEARCH

This study will employ a quasi-experimental design conducted at the Emergency Department (ED) of Bandung Adventist Hospital. The research will target a population of 100 nurses and 500 patient records. Nurses with at least one year of ED experience will be selected using convenience sampling to ensure practical accessibility, while patient data will be randomly sampled from pre- and post-intervention periods to compare outcomes.

To assess nurse competency, the study will utilize a modified Clinical Decision-Making Scale (Syukri et al., 2017) while stress levels will be measured using the Perceived Stress Scale, which has demonstrated reliability ($\alpha=0.82$). Patient outcomes, including wait times and satisfaction, will be evaluated through hospital records and expert-validated Likert-scale surveys. Instrument reliability will be confirmed using Cronbach's alpha (>0.7). Data collection methods will encompass pre- and post-training skill assessments, surveys, and workflow logs to capture comprehensive performance metrics.

The study will be conducted in two phases: Phase 1 involves an 8-week simulation training program for nurses, and Phase 2 focuses on implementing Urgent Care improvements, such as digital queuing systems. Quantitative data will be analyzed using SPSS v.26, with paired t-tests for nurse competency and regression analysis for patient outcomes. Additionally, qualitative feedback from nurses will be thematically analyzed to provide deeper insights into the quantitative findings and enhance the study's validity.

RESULT AND DISCUSSION

Quality health services can satisfy service users according to the level of satisfaction of the population and meet codes of ethics and professional standards. Emergency services aim to provide quick and appropriate action to minimize mortality and prevent disability. Improved emergency services are needed at the scene, on the way to the hospital, and in the hospital itself. With the increasing number of emergency patients, it is necessary to improve services in the Emergency Installation (IGD), both outside the hospital and in the hospital. Therefore, the RSAB emergency room needs to have service standards that serve as guidelines in the implementation of emergency services.

Proposed improvements based on priority

Some of the reasons why training is so important are as follows:

1) Enhanced Capabilities in Handling Emergency Situations

The emergency room is a very dynamic and stressful environment, where medical decisions must be made quickly and appropriately to save patients' lives. Without adequate training, nurses may struggle to accurately recognize life-threatening medical conditions and provide appropriate treatment immediately. Structured training allows nurses to improve precision in medical decision-making as well as a more effective response to emergency conditions, ultimately reducing the risk of medical errors.

2) Mastery of Complex Clinical and Procedural Skills

The emergency room involves handling a variety of complex medical cases and requires high technical skills. Medical procedures such as cardiopulmonary resuscitation (CPR), the use of advanced medical devices, and other invasive measures must be well mastered by nurses. Continuous training provides an opportunity for nurses to continuously update and sharpen their clinical skills, so that they can provide optimal care and in accordance with the latest medical technology developments.

3) Improved Communication and Teamwork Skills

In the emergency room setting, nurses work collaboratively with various other medical professions, such as doctors, surgeons, and other medical personnel. Therefore, the ability to communicate effectively and coordinate within the medical team is essential. Training that includes good communication skills and team management will strengthen synergy between medical team members, which in turn improves efficiency in patient care and reduces the potential for errors that can occur due to miscommunication.

4) Patient Safety Assurance and Risk Reduction of Medical Errors

Medical errors are one of the leading causes of preventable injury or death in hospitals, especially in stressful emergency room environments. Training that focuses on increasing precision and awareness of correct procedures will reduce the chances of errors. In addition, this training will also help nurses to manage the stress and pressure arising from emergency situations, which has the potential to improve the quality of patient safety and more optimal treatment outcomes.

5) Improved Mental Well-Being and Stress Management

Work in the emergency room often involves high physical and emotional stress. Without proper stress management strategies, nurses can experience physical and mental exhaustion, which can ultimately affect their performance. Training that prioritizes stress management, as well as the importance of self-care, is essential to maintain the well-being of nurses. This not only improves the quality of life of nurses, but also has an impact on the quality of services they provide to patients.

Overall, ongoing training is essential for nurses in the emergency room to ensure that they can work with high competence in the face of complex medical challenges. With mastery of technical skills, effective communication skills, and stress management strategies, nurses can provide safe, effective, and high-quality care, and contribute to improving patients' overall health outcomes.

Treatment Delays for Non-Emergency Patients

To overcome the problem of the large number of non-emergency patients coming to the emergency room, one of the most relevant solutions is to develop and strengthen urgent care (first-level emergency care or emergency outpatient). Urgent care is a medical facility that can handle medical conditions that are not life-threatening but require immediate attention. This helps reduce pressure on the emergency room which should be more focused on patients with emergency conditions.

Solutions for Urgent Care

Solutions for Urgent Care are suggested as follows:

1) Establishment and Development of Urgent Care Facilities

- Establishment of Urgent Care Facilities: Hospitals may establish separate urgent care clinics or work with local medical clinics to treat patients with non-life-threatening conditions, such as minor wounds, fever, upper respiratory tract infections, or muscle injuries.
- 24/7 or Peak Hour Facilities: Urgent care clinics can be opened with more flexible hours, including evenings or weekends, to reduce the burden on the emergency room and ensure non-emergency patients receive prompt attention.

2) Clear and Structured Referral System

- Community Education: Educating the public about the difference between emergency and non-emergency conditions is essential. This campaign can include information on when to go to the emergency room and when it is better to visit an urgent care clinic.
- Easy Referral System: Hospitals can work with health centers, clinics, and family doctors to provide direct referrals to urgent care facilities for less urgent conditions. This can make it easier for patients to get the right care and reduce the burden on the emergency room.

3) Implementation of Reservation or Queue System for Urgent Care

- Online Queue System: Implement an online queue system or reservation system for patients who will visit urgent care. This can reduce waiting times and make patient management easier.

- Triage Facility for Urgent Care: Implement a triage system in urgent care clinics to ensure patients receive care appropriate to their level of urgency, reduce wait times and optimize patient flow.

4) Collaboration between the emergency room and Urgent Care

- Referral from the emergency room to Urgent Care: If a patient comes to the emergency room with a non-urgent condition, they can be directed or referred to an urgent care facility for further treatment. This will ease the burden on the emergency room and focus resources on patients with critical conditions.

- Handling of Intermediate Conditions by Urgent Care: Urgent care can be a place for patients with intermediate medical conditions who require quick attention but do not require hospitalization or emergency room treatment. For example, minor wound management, physical examination, or treatment of minor infections.

5) The Use of Technology to Improve Access to Urgent Care

- Telemedicine: Using telemedicine technology to handle patients who do not need to come directly to the facility. Patients with mild or non-emergency symptoms can get remote consultations and even medical prescriptions without the need to go to the emergency room or urgent care physically.

- Health App: Developed an app that allows patients to assess whether their condition meets the criteria for urgent care or emergency room, as well as make it easier for them to make appointments or track queue status.

6) Improving the Quality of Urgent Care Services

- Proper Staff Training: Medical staff in urgent care facilities should be well-trained to handle common medical conditions that are not life-threatening, as well as trained to identify and refer patients who require further attention.

- Adequate Medical Equipment: Urgent care must have adequate medical equipment to effectively and efficiently handle non-emergency conditions, such as basic examination tools, sewing tools, and wound care, as well as access to basic laboratory testing.

7) Providing Incentives for the Use of Urgent Care

- Affordable Payments: Providing more affordable costs in urgent care facilities compared to emergency rooms can divert non-emergency patients to seek care in a more appropriate place.

- Supportive Health Insurance: Encouraging health insurance to cover services in urgent care facilities can help more patients use these facilities rather than going to the emergency room.

The implementation of Urgent Care will provide the following benefits:

1) Reducing the Burden of the Emergency Room: By transferring patients who are not in an emergency condition to an urgent care facility, the emergency room can focus on treating patients with more urgent and life-threatening medical conditions.

2) Improving Access to Prompt Care: Patients with non-emergency conditions will get faster and more appropriate care without having to wait long hours in the emergency room.

3) Cost Efficiency: Urgent care is typically more efficient and inexpensive than emergency rooms, which can reduce overall healthcare costs.

4) Patient Satisfaction: Patients will be more satisfied because they get timely medical attention and according to the urgency of their condition.

To ensure non-emergency patients in the emergency room don't feel neglected or wait too long, a multi-pronged approach is needed. Solutions such as a fast-track system, clear communication, technology integration, alternative treatment pathways, and staff enhancement are essential to improve patient satisfaction. These measures will reduce pressure on the emergency room, increase patient flow, and provide timely care for all individuals—whether their condition is urgent. To improve efficiency and ensure patients receive timely care, it is important to separate roles and responsibilities between Urgent Care and the Emergency Room (ER). These two facilities serve different purposes, and a clear patient flow will help reduce confusion and ensure that patients receive care according to their level of urgency.

The following are suggestions for patient flows that can be applied in Urgent Care along with an explanation of the care carried out in each facility:

Urgent care is a medical facility that treats medical conditions that require quick attention but are not life-threatening. Usually, patients who come to urgent care are those who have mild to moderate medical problems, such as the flu, minor injuries, or infections that are not life-threatening.

CONCLUSION

Emergency Department (ED) nurses play a vital role in delivering fast, life-saving care, requiring continuously updated competencies through ongoing training—such as BLS and ACLS—to enhance technical skills, decision-making, communication, and stress management, ultimately improving patient safety and reducing errors. However, delays in care due to triage inefficiencies, high patient volume, and staffing shortages can diminish patient satisfaction and trust, highlighting the need for systemic improvements like Urgent Care integration (e.g., structured referrals, digital queues, and ED collaboration) to streamline workflows and enhance service quality. Future research should evaluate the combined impact of simulation-based training (e.g., immersive crisis scenarios) and Urgent Care implementation on nurse competency, patient outcomes (wait times, errors, satisfaction), and ED efficiency through quasi-experimental studies, offering evidence-based strategies to optimize emergency healthcare delivery.

REFERENCES

- Alazmy, W., Samarkandi, O., & Williams, B. (2020). The history of emergency medical services response to mass casualty incidents in disasters, Saudi Arabia. *Journal of Emergency Medicine, Trauma & Acute Care*, 2020(1), 3.
- Badran, I. G. (1995). Knowledge, attitude and practice the three pillars of excellence and wisdom: a place in the medical profession. *East Mediterr Health J*, 1(1), 8–16.
- Buettner, J. R. (2021). *Fast Facts for the ER Nurse: Guide to a Successful Emergency Department Orientation*. Springer Publishing Company.
- Curtis, K., Ramsden, C., Shaban, R. Z., Fry, M., & Lord, B. (2023). *Emergency and trauma*

care for nurses and paramedics. Elsevier Health Sciences.

- Decker, K., Lee, S., & Morphet, J. (2015). The experiences of emergency nurses in providing end-of-life care to patients in the emergency department. *Australasian Emergency Nursing Journal*, 18(2), 68–74.
- Grow, M. A. (2021). *Perceptions of Patient Safety in Healthcare: The Quest to Eliminate Healthcare-Associated Infections*. Capella University.
- Idris, S. (2022). The Relationship between Knowledge and Skills of Nurses and Triage Measures in the Emergency Room (Igd) of the Islam Malahayati Hospital in Medan in 2022. *Science Midwifery*, 10(5), 3705–3712.
- Ketelaar, A.-J. (2024). *Dealing With The Unexpected in Prehospital Patientcare: The Lived Experience Of EMS Clinicians*.
- Kusumardani, B. Y., Layla, S. F. N., & Puspitasari, Y. (2024). The Effect of Emergency Level and Response Time on Patients' Length of Stay in the Emergency Room of Muhammadiyah Hospital Kediri. *Journal Of Nursing Practice*, 7(2), 314–324.
- Lunenborg, G. P. (2020). *Institutional Readiness of Novel Advanced Therapy Medicinal Product Systems*.
- Nabilou, B., Feizi, A., & Seyedin, H. (2015). Patient safety in medical education: students' perceptions, knowledge and attitudes. *PloS one*, 10(8), e0135610.
- Organization, W. H. (2018). *BASIC EMERGENCY CARE: approach to the acutely ill and injured*. World Health Organization.
- Pavedahl, V., Muntlin, Å., Summer Meranius, M., von Thiele Schwarz, U., & Holmström, I. K. (2022). Prioritizing and meeting life-threateningly ill patients' fundamental care needs in the emergency room—An interview study with registered nurses. *Journal of advanced nursing*, 78(7), 2165–2174.
- Rabelo, S. K., Lima, S. B. S. de, Santos, J. L. G. dos, Costa, V. Z. da, Reisdorfer, E., Santos, T. M. dos, & Gracioli, J. C. (2020). Nurses' work process in an emergency hospital service. *Revista brasileira de enfermagem*, 73(5), e20180923.
- Reuter-Oppermann, M., van den Berg, P. L., & Vile, J. L. (2017). Logistics for emergency medical service systems. *Health Systems*, 6(3), 187–208.
- Rios, R. S., Zheng, K. I., & Zheng, M.-H. (2020). Data sharing during COVID-19 pandemic: what to take away. *Expert review of gastroenterology & hepatology*, 14(12), 1125–1130.
- Saintsing, D., Gibson, L. M., & Pennington, A. W. (2011). The novice nurse and clinical decision-making: how to avoid errors. *Journal of Nursing Management*, 19(3), 354–359.
- Saks, M. J., & Landsman, S. (2020). *Closing Death's Door: Legal Innovations to End the Epidemic of Healthcare Harm*. Oxford University Press.
- Syukri, M., Bachtiar, P. P., Kurniawan, A., Sedyadi, G. S. M., Diningrat, R. A., & Alifia, U. (2017). *Study on the Implementation of Law No. 6/2014 on Villages*. SMERU Baseline

Report, Jakarta: SMERU, [https://www.smeru.or.id/en/content](https://www.smeru.or.id/en/content....)

Thoonsen, A. C., Gans, A., Broeders, T. T., van Beusekom, I., Delnoij, D. M. J., de Bruijne, M. C., & Merten, H. (2025). Nationwide guideline implementation: a qualitative study of barriers and facilitators from the perspective of guideline organizations. *BMC Health Services Research*, 25(1), 150.

Trisyani, Y., Emaliyawati, E., Prawesti, A., Mirwanti, R., & Mediani, H. S. (2023). Emergency nurses' competency in the emergency department context: a qualitative study. *Open Access Emergency Medicine*, 165–175.

Valint, A. R. (2016). *The Role of Medication Error in Patient Safety*. Utica College.

Wijayanti, N., & Prasetyo, J. (2024). Patient Satisfaction Is Viewed From The Dimension Of Empathy In Health Services In The Emergency Room At Morowali Hospital. *Journal for Quality in Public Health*, 8(1), 38–43.

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First publication right:

Devotion - Journal of Research and Community Service



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