

## Research Article

# Determinants of Hospital Referral System Implementation and Their Effect on Patients' Outcomes

<sup>1</sup>MARICAR I. NAVA, RN, <sup>2</sup>JANE M. TAGUM-BRIONES, RPH, RN, MAN, PHD<sup>1,2</sup>University of Saint Anthony**Abstract:**

A well-functioning hospital referral system is essential to guaranteeing prompt, fair access to high-quality medical care. By connecting primary, secondary, and tertiary facilities, it facilitates seamless care navigation for patients, reduces hospital overcrowding at higher levels, and effectively manages acute conditions through inter-facility transfers. Thus, this study aims to determine the determinants of hospital referral system implementation and their effect on patients' outcomes. It further examined the profile of the respondents in terms of age, sex, length of service, designation, highest educational attainment, and seminars and trainings attended; the determinants of hospital referral system implementation and their effects on patient outcomes; and support systems, organizational factors, technology, and processes.

Using a descriptive-correlational method, data were gathered through a researcher-developed survey questionnaire. The findings indicate that the majority of the nurses are within 25-34 years old; majority are females; most of them are Baccalaureate Degree; and with work experience of 1-3 years; and few have attended trainings and most of them have no attendance; the determinants of hospital referral system implementation and their effect on patient outcome along support system, process, organizational factors, and technology are qualitatively treated as much evident; and there is a significant relationship between the profile of the respondents and the determinants of hospital referral system implementation and their effects on patient outcome in terms of age, length of service, and designation; while no significant relationship existed between sex and highest educational attainment.

It further recommends that improving the effectiveness of nurses in the hospital referral system necessitates a customized strategy that combines organizational support, technology, and training with individual personnel and professional traits; to enhance the determinants of hospital referral system implementation and their effect on patient outcome requires a multi-faceted approach focusing on strengthening communication, technology, structural resources, and standardized processes; focus on building self-efficacy and confidence, as these directly affect clinical judgement in high-pressure referral situations. Implement mentorship programs in which experienced nurses guide them through the referral process and the intervention is adopted.

**Keywords:** Hospital Referral System, Determinants, Implementation, Patient's Outcomes.**Introduction**

One of the main elements of primary health care is the referral system, which allows patients to receive care in health centers prior to escalation to higher levels of care, such as secondary and tertiary hospitals. The World Health Organization (WHO, 2022) defines referral as a process in which a health worker at one level of the health system having insufficient resources such as drugs, equipment, or skills to manage a clinical condition seeks the assistance of a better- or differently-resourced facility at the same or higher level to assist in, or take over, the management of the client's case. A functioning health care system at the municipal, provincial, and national levels depends heavily on an effective referral system to optimize the use of all levels of health care, reduce waste, improve access, and decrease disparities in ways that support the achievement of Sustainable Development Goal 3 (SDG 3).

The flow of patient referrals among healthcare providers is facilitated by a referral system at all levels. When used effectively, it can lower costs through optimal use of medical services and improve patient outcomes, both of which elevate standards of care. For high-quality medical care to be effective, safe, and efficient, the best possible referral procedure must be in place. The Philippine 1987 Constitution specifically provides that "The State shall protect and promote the right to health of the people and instill health consciousness among them." Section 2 of Republic Act No. 11223 further states that "It is the policy of the State to protect and promote the right to health of all Filipinos and instill health consciousness among them."

To implement an effective and efficient referral system, a combination of factors such as coordination between referral centers, communication and feedback systems, transportation, trained personnel, efficient teamwork, integrated information recording, and monitoring for performance improvement are required (Kamau et al., 2020). In many resource-constrained contexts, system-related challenges include inadequate transportation, lack of essential drugs and equipment, poor communication, absence of standards and monitoring, and weak network infrastructure (Kiputa et al., 2022). Patient-related barriers include poor environmental conditions, long distances to health facilities, lack of referral knowledge, poverty, and cultural beliefs. These challenges affect not only referral but the entire health system, rendering it weak and ineffective (Maphumulo & Bhengu, 2021). These studies recommend training of health professionals, improved communication and feedback between health facilities, and community involvement as part of

efforts to strengthen the health system.

The urgency of this study is deeply rooted in the researcher's own lived experience as an emergency room (ER) nurse in one of the community hospitals in the Rinconada Area. One incident that remains particularly vivid occurred during a night shift when a middle-aged patient arrived at the ER in respiratory distress, requiring a level of care beyond what the facility could provide. The attending physician ordered an immediate referral to a higher-level hospital. As the nurse responsible for coordinating the transfer, the researcher initiated the referral call only to be placed on hold repeatedly, with no clear response from the receiving facility for nearly forty minutes. During that time, the patient's oxygen saturation continued to drop. The hospital's single ambulance was already deployed for another patient, and the orderly on duty was unavailable. The referral form had to be completed manually, and critical clinical information—the patient's latest arterial blood gas results and medication history—was not immediately accessible because the charts were still with the admitting physician in another ward. By the time the transfer was arranged and the patient reached the receiving hospital, valuable time had been lost. The patient survived, but the experience left the researcher deeply unsettled, not because anyone had been negligent, but because the system itself had failed.

That night was not an isolated occurrence. Over the course of several years in the emergency department, the researcher witnessed recurring patterns that pointed to deeper systemic issues: referral calls going unanswered or being transferred multiple times before reaching the right person; incomplete referral documents causing the receiving team to repeat assessments already done at the referring facility; transport support that was inadequate or unpredictably available; and ward nurses and ER staff who were unfamiliar with updated referral protocols because no formal orientation had been conducted. There were also instances when a patient's family was given conflicting information by different healthcare personnel about where their loved one was being referred and why eroding trust and increasing anxiety at an already critical moment. These firsthand encounters made it clear to the researcher that the challenges in hospital referral are not merely procedural but are rooted in structural, organizational, and communicative gaps that must be understood systematically and addressed deliberately. It is this sense of professional accountability, born from years of witnessing the consequences of a fragmented referral system, that gave rise to the present study and continues to drive its purpose.

Despite the existence of established referral policies under the Philippine healthcare system, challenges in implementation remain evident in many healthcare institutions. Emergency departments frequently encounter delays in patient transfer, incomplete referral information, communication gaps between referring and receiving facilities, inadequate transportation resources, and inconsistencies in referral documentation. These challenges affect continuity of care, delay appropriate treatment, increase patient dissatisfaction, and ultimately influence patient outcomes.

In the local setting, nurses play a crucial role in coordinating referrals and facilitating patient transitions across levels of care. However, little empirical evidence exists regarding the determinants that influence the effectiveness of hospital referral systems and how these factors contribute to patient outcomes in the Rinconada Area. Considering the growing demand for quality healthcare services and the implementation of Universal Health Care in the Philippines (RA 11223), there is a pressing need to evaluate the existing referral system from the perspective of healthcare providers. The findings of this study are expected to provide valuable information to guide hospital administrators, nursing service personnel, and policymakers in developing strategies that enhance referral efficiency, improve coordination among healthcare facilities, and promote better patient outcomes.

## **Materials and Methods / Methodology**

### **Research Design**

In this study, the researcher utilized the descriptive-correlational research design to determine the data needed under the present investigation. According to Shuritika (2023), descriptive research design is a powerful tool used by scientists and researchers to gather information about a particular group or phenomenon. This type of research provides a detailed and accurate picture of the characteristics and behaviors of a particular population or subject. By observing and collecting data on a given topic, descriptive research helps researchers gain a deeper understanding of a specific issue and provides valuable insights that can inform future studies. It plays a critical role in the scientific process in identifying and describing trends and variation in populations, creating new measures of key phenomena, and describing samples in studies aimed at identifying relationships.

According to Devi and Pradhan (2023), descriptive research design describes the characteristics of a population or a phenomenon being studied. In a similar view, Siedlecki (2021) noted that descriptive research is a structured and systematic approach aimed at uncovering facts and offering an accurate interpretation of findings. It is especially useful for examining current conditions, common practices, existing situations, and observed phenomena. This type of research method is not simply amassing and tabulating facts but includes proper analyses, interpretation, comparisons, and identification of trends and relationships.

The correlational component of the design was employed to test significant relationships among respondents' profiles, determinants of hospital referral system implementation, and their effects on patient outcomes. This approach allowed the researcher to determine the extent to which variables are associated without implying causal direction, which is appropriate given the nature of the present study.

Respondents of the Study

The respondents of the study were nurses and physicians currently assigned in the emergency room and ward departments of five (5) selected hospitals in the 5<sup>th</sup> District of Camarines Sur. The specific breakdown per hospital is as follows: (1) Sta. Maria Josefa Hospital Foundation Inc. 9 ER nurses and 1 resident physician on duty; (2) Villanueva-Tanchuling Maternity and General Hospital 5 ER nurses, 4 ward nurses, and 1 resident physician on duty; (3) Our Lady of Mediatrix Hospital 7 ER nurses, 2 ward nurses, and 1 resident physician on duty; (4) Medical Mission Group Hospital 7 ER nurses, 2 ward nurses, and 1 resident physician on duty; and (5) CHMSC Lourdes Hospital —5 ER nurses and 5 ward nurses. The total number of respondents was 50, comprising 37 ER nurses, 9 ward nurses, and 4 resident physicians on duty.

The study utilized total enumeration sampling, wherein all eligible nurses and physicians meeting the inclusion criteria were invited to participate. The majority of the respondents had 1–3 years of work experience, held a baccalaureate degree, were mostly female, and were within the 25–34 age group. Inclusion Criteria. The inclusion criteria covered ER nurses and physicians currently assigned to the emergency room; personnel with 1–3 years of work experience; and staff directly involved in the hospital referral process. Exclusion Criteria. The exclusion criteria included: staff not assigned to the emergency room; those on leave during the data collection period; administrative personnel not directly involved in patient referrals; and newly hired staff with less than 1 year of experience.

Data Gathering Tools. According to Charmaz and Tenny (2021), data collection methods typically inquire about the situations, motivations, accomplishments, and experiences of individuals. In this study, the primary instrument used in data gathering was a researcher-constructed questionnaire checklist, supplemented by library research, documentary analysis, and internet-based sources. Questionnaire. The main data-gathering instrument used in this study was a questionnaire purposely devised by the researcher to answer the salient questions of the study. According to Kuphanga (2024), a questionnaire stands as a versatile and potent tool for data collection across diverse research domains. Its structured format facilitates standardized data collection, organization, and analysis, particularly in quantitative research. In accordance with Saul (2023), a questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents, enabling the measurement of behaviors, attitudes, preferences, opinions, and intentions more efficiently than other methods.

## Results and Discussion

### Profile of the Respondents

Nursing care is seen as a professional service and an essential component of healthcare that is based on nursing skills and scientific understanding. The essence of nursing care entails providing nursing services in a way that seeks to improve patients' overall quality of care. The demographic characteristics of nurses can be used to better understand the quality of nursing care services.

The demographic profile of the nurses has been shown to play a significant role in their ability to perform their duties effectively. An individual’s performance can be impacted by their socio-factor therefore, it is important to consider the demographic data of the nurse-respondents of the study in terms of age, sex, length of service, designation, highest educational attainment, and seminars and trainings attended. Table 1 presents the profile of the respondents.

**Table 1: Profile of the Respondents**

| Profile                  | Frequency | Percentage | Rank |
|--------------------------|-----------|------------|------|
| <b>Age</b>               |           |            |      |
| 25 – 34                  | 29        | 8          |      |
| 35 – 44                  | 15        | 0          |      |
| 45 – 49                  | 4         |            |      |
| 50 – 59                  | 2         |            | 1    |
| <b>Total</b>             | <b>50</b> | <b>100</b> |      |
| <b>Sex</b>               |           |            |      |
| Male                     | 20        | 40         | 2    |
| Female                   | 30        | 60         | 1    |
| <b>Total</b>             | <b>50</b> | <b>100</b> |      |
| <b>Length of Service</b> |           |            |      |
| 1-3 years                | 30        | 60         | 1    |
| 4–6                      | 9         | 18         | 2    |
| 7–9                      | 4         | 8          | 3    |
| 10 years and above       | 7         | 14         | 4    |
| <b>Total</b>             | <b>50</b> | <b>100</b> |      |
| <b>Designation</b>       |           |            |      |
| ER Nurses                | 37        | 74         | 1    |
| Ward Nurses              | 9         | 18         | 2    |

|                                        |           |            |     |
|----------------------------------------|-----------|------------|-----|
| Resident on Duty                       | 4         | 8          | 3   |
| <b>Total</b>                           | <b>50</b> | <b>100</b> |     |
| <b>Highest Educational Attainment</b>  |           |            |     |
| Baccalaureate Degree                   | 37        | 74         | 1   |
| With Masteral Units                    | 7         | 14         | 2   |
| Master's Degree Holder                 | 2         | 4          | 4   |
| With Doctoral Units                    | 4         | 8          | 3   |
| <b>Total</b>                           | <b>50</b> | <b>100</b> |     |
| <b>Seminars and Trainings Attended</b> |           |            |     |
| Basic Life Support (BLS)               | 13        | 26         | 1   |
| Advanced Cardiac Life Support (ACLS)   | 9         | 18         | 2.5 |
| First Aid Training                     | 4         | 8          | 4.5 |
| IV Therapy Training                    | 4         | 8          | 4.5 |
| Emergency Medical Training             | 1         | 2          | 6   |
| Trauma Nursing Core Course (TNCC)      | 9         | 18         | 2.5 |
| <b>Total</b>                           | <b>40</b> | <b>80</b>  |     |

**Age.** According to studies, a nurse's age does not significantly affect their effectiveness. The data show that the respondents are distribute across four age groups. The majority, 29 or 59 percent, belong to the 25–34 age range. This is followed by 15 respondents or 30 percent who are aged 35–44. Meanwhile, 4 respondents or 8 percent fall within the 40–49 age group, and only 2 respondents or 4 percent are aged 50–59 which makes it the least represented group.

It is clear that the sample is mainly by younger respondents, particularly those in the 25–34 age group. The number of participant gradually decrease when age increases, indicates a smaller representation of older individuals. This suggests that the workforce of the study is largely composed of individuals who are in the early to mid-age of their career.

This distribution can be interpreted to mean that younger professionals are more active or more available in the current workforce setting. They may also have higher physical energy and adaptability to demand tasks. However, while younger respondents may demonstrate strong technical skills and endurance, older respondents although fewer in number still may contribute valuable experience, emotional maturity and stronger commitment to their roles. This highlight that age alone do not determine work performance as both younger and older individuals bring different strengths to the workplace.

These findings are supported by study of the University of the Philippines Population Institute (UPPI) and the Demographic Research and Development Foundation (DRDF, 2020), which reports that the average age of health professionals in the Philippines is relatively young with 31 years for men and 34 years for women. Related literature suggest that age has a complex influence on performance where younger workers tend to have greater physical capacity, while older workers exhibit higher levels of competence, emotional intelligence and organizational commitment. This support the idea that both age groups play important role in achieving effective job performance.

**Sex.** It is observed that nurses' competencies are not determined by sex. The results shows that the majority of respondent in the study are female, comprising 30 or 60 percent of the total sample. In contrast, male respondents account for 20 or 40 percent. This indicates a noticeable gender imbalance in the participant pool with female nurses being more represented than male nurses.

It is clear that the sample is dominated by female respondents. The higher number of female nurses reflect the common trend in the nursing profession, where women continue to outnumber men. This pattern suggest that nursing remains a female-oriented field despite the increasing participation of males over the years.

This distribution may be interpreted to mean that although the profession is largely compose of females, gender does not necessarily determine a nurse's competence or effectiveness. Both male and female nurses are capable of performing their duties well. What matters more is their knowledge, skills, experience and commitment to provide quality care to patients.

These findings are supported by Mao et al. (2021), who state that nursing is still predominantly a female profession despite the progress in gender equality. In addition, Shah and Udgaonkar (2023) found that patients generally do not place much importance on the gender of nurses, indicates that gender is not a major factor in evaluating performance. Although some studies suggest that gender may influence effectiveness others argue that it has little to no impact. Overall, this suggests that a nurse's effectiveness is not defined by gender but by their ability and dedication to their work.

**Length of Service.** It is observed that length of service has a significant relationship with nurses' competencies. The profile of the nurse-doctor respondents by length of service is presented in Table 1. The data shows that most respondent are 30 or 60 percent, have 1–3 years in service. This is followed by 9 or 18 percent with 4–6 years of service, 7 or 14 percent with 10 years and above and 4 or 8 percent with 7–9 years of experience.

It is clear that the majority of the respondents are relatively new in the nursing profession, with most having only 1–3 years of experience. The smaller number of respondents in the higher years of service suggest that fewer participants have long-term experience in the field.

This may be interpreted to mean that the group of respondents is still in the early stage of their professional careers. Although they are relatively new in the field they are already exposed to clinical responsibilities that help them develop awareness of their roles and responsibilities on ensuring quality nursing care. It also suggest that while experience is still limited for many there is an ongoing process of learning and adaptation in their practice.

These findings are supported by Adriano (2021), who stated that length of service can influence nurses' self-efficacy, confidence, and commitment in meeting patient needs, suggesting that longer experience may enhance caring behaviors. However, Rivero (2022) emphasized that experience alone does not always lead to expertise as it must be accompanied by continuous learning and reflective practice. This highlight that professional growth in nursing is significantly influence by years of service as well as by the quality of learning gained through experience and the commitment to continuously improve practice over time.

**Designation.** It is observed that nurses' designation has a significant relationship with their competencies.

From the total number of respondents, 37 or 74 percent are ER staff, 9 or 18 percent are ward nurses and 4 or 8 percent are residents on duty. This show that most of the respondent are ER staff while only a few come from the wards and residents on duty.

It is clear that ER staff make up the largest group of respondents compared to ward nurses and residents on duty. This suggest that emergency room personnel are more represented in the study possibly due to their larger number or higher involvement in the setting where the research was conducted.

This may be interpreted to mean that ER staff play a major role in hospital operations especially in handling urgent and critical cases. Their dominance in the sample also reflects the demanding nature of emergency care, which require constant staffing and immediate response to patient needs. In contrast, ward nurses and residents on duty have less representation indicates differences in workload distribution and unit assignment.

These findings are supported by related literature which emphasizes that nurse designations significantly affect patient care, safety and operational efficiency. Different role in the hospital correspond to varying level of responsibility, autonomy and scope of practice. Studies also show that emergency departments often require higher staffing levels due to the nature of critical care delivery while structured hospital roles influence workload distribution and clinical outcomes.

**Highest Educational attainment.** It is observed that educational attainment is not significantly related to nurses' competencies. Most of the respondents, consisting of 37 or 74 percent, are baccalaureate degree holders; 7 or 14 percent have masteral units; 2 or 4 percent are masteral degree holders; and 4 or 8 percent have doctoral units.

It is clear that the majority of the respondent are baccalaureate degree holders while only a small proportion have pursued or completed graduate and doctoral studies. This indicate that most nurses in the sample are still at the undergraduate level, with limited representation in higher academic qualificatons.

This may be interpreted to mean that although nurses have different levels of educational attainment and these differences do not necessarily translate to variations in their professional competencies. It suggest that nurses are able to perform their roles effectively regardless of academic advancement, as competence may also be developed through experience, training, and actual clinical exposure.

These findings are supported by Kurniasari and Pratiwi (2023), which suggest that educational attainment alone is not always a significant determinant of nurses' competencies. While higher education may enhance knowledge and professional growth, competence in nursing is also strongly influenced by practical experience, skills development and workplace exposure rather than academic level alone.

**Seminars and Trainings Attended.** Out of 40 respondents, showing the frequency (f), percentage (%), and rank. The total of 80 training slots indicates that, on average, each respondent attended two trainings.

Analysis. Basic Life Support (BLS) was the most frequently attended training, with 13 respondents (32.5%), ranking 1st. Advanced Cardiac Life Support (ACLS) and Trauma Nursing Core Course (TNCC) tied for 2nd place, each attended by 9 respondents (22.5% each) together accounting for 45% of total training participation. First Aid Training and IV Therapy Training tied for 4th place (rank 4.5), each with 4 respondents (10.0%). Emergency Medical Training had the lowest attendance, with only 1 respondent (2.5%), ranking last.

Interpretation. The BLS (32.5%) and the strong showing of ACLS and TNCC (22.5% each) suggest that respondents are oriented toward core life-saving and emergency cardiac competencies training that is typically mandated or incentivized in clinical and emergency care settings. The relatively low attendance in First Aid, IV Therapy, and especially Emergency Medical Training may reflect limited access, higher cost, or lower institutional prioritization of these programs. The average of two trainings per respondent (80 slots ÷ 40 respondents) indicates a moderate but not comprehensive level of continuing professional development exposure. These findings point to the need for broader and more diversified training programs to strengthen overall emergency preparedness among the respondents.

#### **Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome**

According to the definition of the World Health Organization (WHO, 2020), "referral can be defined as a process in which a health worker at a one level of the health system, having insufficient resources (drugs, equipment, skills) to manage a clinical condition, seeks the assistance of a better or differently resourced facility at the same or higher level to assist in, or take over the management of, the client's case."

Enhancing primary healthcare (PHC) is crucial for both accessibility and quality of healthcare. It is also a means of improving the equity of healthcare access and the efficiency of resource usage. The referral system, which allows patients to receive care in health centers prior to higher levels of care is one of the key components of primary healthcare.

An efficient referral system guarantees that people receive the finest care available and that there is a close interaction between all levels of healthcare. Considering its significance, the present study opted to assessed the determinants of hospital referral system implementation and their effect on patient outcome along support system, organizational factors, technology, and process. The data gathered were presented in tabular and textual forms.

**Support System.** It facilitates the smooth, two-way transfer of patients from lower-level facilities (community/primary care) to higher-level institutions (secondary/tertiary hospitals) to ensure continuous, specialized care. The determinants of hospital referral system implementation and their effect on patient outcome, along with the support system, can be seen in Table 2.

Averagely taken, it is worth noting that half of the given indicators were verbally rated as very much effective, they were: Establish communication channels, including telephone, email, or electronic platforms, facilitate timely communication between facilities and providers (4.50); Use a standardized referral format (paper or electronic) to ensure all necessary information is included, minimizing errors and delays (4.32); Promote effective communication and collaboration among healthcare teams are vital for successful patient care delivery (4.28); Invest in training and developing the skills of healthcare workers to improve their ability to deliver safe and effective care (4.24), and; Establish systems for incident reporting and sharing lessons learned from patient safety events supports continuous improvement and learning across the hospital (4.22).

Delving deeper into the figures, it can be gleaned that the support systems inside a hospital referral framework are given top priority by hospital nurses because they have a direct impact on patient safety, continuity of care, and workflow efficiency. A robust, well-supported referral system lessens the administrative load on nursing staff while guaranteeing that patients are moved to the proper level of care.

According to Thomas and Fraser (2023), an effective system helps nurses quickly connect patients with higher-level facilities or specialists when their needs exceed the current facility's capacity. Most importantly, nurses ensure the referral

**Table 2: The Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome along Support System**

| Indicators                                                                                                                                                        | WM          | VI        | Rank |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|------|
| Designate individuals responsible for managing referrals, ensuring smooth transition.                                                                             | 4.12        | ME        | 7    |
| Use a standardized referral format (paper or electronic) to ensure all necessary information is included, minimizing errors and delays.                           | 4.32        | VME       | 2    |
| Establish communication channels, including telephone, email, or electronic platforms, facilitate timely communication between facilities and providers.          | 4.50        | VME       | 1    |
| Support lower-level facilities by providing training on referral protocols, shared care protocols, and the use of relevant technologies.                          | 4.00        | ME        | 9    |
| Provide expert advice and support to practitioners in lower-level facilities, both in-person and through telemedicine.                                            | 4.18        | ME        | 6    |
| Assess outcomes, and identify areas for improvement in the referral process.                                                                                      | 4.06        | ME        | 8    |
| Hold outreach clinics at lower-level facilities to provide direct patient care and support local practitioners.                                                   | 3.80        | ME        | 10   |
| Invest in training and developing the skills of healthcare workers to improve their ability to deliver safe and effective care.                                   | 4.24        | VME       | 4    |
| Promote effective communication and collaboration among healthcare teams are vital for successful patient care delivery.                                          | 4.26        | VME       | 3    |
| Establish systems for incident reporting and sharing lessons learned from patient safety events supports continuous improvement and learning across the hospital. | 4.22        | VME       | 5    |
| <b>Average Weighted Mean</b>                                                                                                                                      | <b>4.17</b> | <b>ME</b> |      |

Legend: 4.20-5.00 – Very Much Effective (VME)  
3.40-4.19 – Much Effective (ME)  
2.60-3.39 – Effective (E)  
1.80-2.59 – Fairly Effective (FE)  
1.00-1.79 – Not Effective (NE)

system is not just a transfer of paperwork, but a secure, patient centered continuation of care. On the other hand, the indicators verbally treated as much effective were: Provide expert advice and support to practitioners in lower-level facilities, both in-person and through telemedicine (4.18); Designate individuals responsible for managing referrals, ensuring smooth transition (4.12);

Support lower-level facilities by providing training on referral protocols, shared care protocols, and the use of relevant technologies (4.00); Hold outreach clinics at lower-level facilities to provide direct patient care and support local practitioners (3.80). Although the quantitative ratings are not below par, the data suggested that these practices need to be further enhanced. After all, increasing patient safety, simplifying care, and reducing inefficiencies all depend on strengthening the support system for the hospital referral process. By strengthening these systems, nurses can reduce unnecessary, costly test and treatment duplications, prevent fragmented care, and reduce patient wait times.

The findings on communication channels as the highest-ranked support system indicator are consistent with current scholarship on inter-facility coordination. Seyed-Nezhad et al. (2021) identified communication, coordination, and trained staff as the key factors for successful referral system implementation in their scoping review, emphasizing that multi-level, two-way communication channels directly reduce referral delays and improve patient safety.

Similarly, a quality improvement study conducted in a Philippine tertiary hospital (East Avenue Medical Center, Manila) reported that implementing structured verbal endorsement, standardized referral checklists, and nursing coordination protocols reduced average referral turnaround time by 63%, from 43.05 to 15.75 minutes, and increased documentation compliance to 98% (Malakellis et al., 2025). This provides direct evidence that the communication and standardization indicators valued by the respondents translate into measurable clinical improvements.

Regarding the bottom-ranked outreach indicator, Thomas and Fraser (2023) noted that outreach clinic models remain one of the least consistently implemented primary care referral supports, particularly in settings with inadequate transportation and funding infrastructure. This corroborates the respondents' lower rating and points to structural barriers that exceed individual nursing-level motivation.

**Organizational Factors.** To ensure smooth patient care across varying facility capability levels, the Philippine hospital referral system's organizational components include structured management, policies, and coordination mechanisms. Determinants of hospital referral system implementation and their effects on patient outcomes, along with organizational factors, are presented in Table 3. The only indicator with a verbal description of high effectiveness was: Streamlining processes and clear procedures, along with an efficient workflow, impacting patient safety and outcomes (4.20). From this result, the researcher formed the impression that the nurses involved in this study are adept at simplifying processes and developing clear procedures because they work at the nexus of patient care, interdisciplinary communication, and clinical operations. By

**Table 3: The Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome along Organizational Factors**

| Indicators                                                                                                                                     | WM          | VI        | Rank |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|------|
| Has adequate staffing with appropriately trained personnel at all levels.                                                                      | 3.98        | ME        | 5.5  |
| With available necessary equipment, diagnostic tools, and supplies at each level of care.                                                      | 3.90        | ME        | 8.5  |
| With efficient and reliable transportation systems needed.                                                                                     | 4.10        | ME        | 4    |
| Ensure timely transfer of patients between facilities, especially in rural or remote areas.                                                    | 3.82        | ME        | 10   |
| With available essential medicines and supplies at all levels to ensure patients receive timely and appropriate treatment.                     | 3.94        | ME        | 7    |
| Prioritize patient needs and preferences in the referral process to enhance patient satisfaction and compliance with referral instructions.    | 4.16        | ME        | 2    |
| Conduct regular monitoring and evaluation of the referral system to identify bottlenecks, inefficiencies, and areas for improvement.           | 3.90        | ME        | 8.5  |
| Provide strong leadership that creates a framework for excellence in patient care, influencing organizational culture and resource allocation. | 3.98        | ME        | 5.5  |
| Open to innovation, values learning, and supports patient-centered care for successful implementation of new practices and improved outcomes.  | 4.12        | ME        | 3    |
| Streamline processes and clear procedures, along with efficient workflow impacting patient safety and outcomes.                                | 4.20        | VME       | 1    |
| <b>Average Weighted Mean</b>                                                                                                                   | <b>4.01</b> | <b>ME</b> |      |

Legend: 4.20-5.00 – Very Much Effective (VME)  
3.40-4.19 – Much Effective (ME)  
2.60-3.39 – Effective (E)  
1.80-2.59 – Fairly Effective (FE)  
1.00-1.79 – Not Effective (NE)

organizational culture and resource allocation (3.98); With available essential medicines and supplies at all levels to ensure patients receive timely and appropriate treatment (3.94); With available necessary equipment, diagnostic tools, and supplies at each level of

care (3.90); Conduct regular monitoring and evaluation of the referral system to identify bottlenecks, inefficiencies, and areas for improvement (3.90), and; Ensure timely transfer of patients between facilities, especially in rural or remote areas (3.82).

It could be deduced that the nurse-respondents perceived relative appreciation to deliver appropriate practices which the hospital management thought to translate into higher commitment on the part of the employees. The gathered data could also mean that the respondents need to further improve their work performance along the aforementioned aspects. Nurses can reduce the hazards associated with ineffective transfers by addressing these organizational variables and creating a supportive atmosphere that improves patient safety and their own performance.

As articulated by Kartono and Sundjaja (2020) that organizational factors in the hospital referral system have a direct impact on patient care quality, safety during transfers, and the efficiency of nursing workflow, all of which nurses need to be aware of. Staffing, resources, and communication systems are examples of these systemic components. As key organizers with intimate knowledge of the gaps in inter-hospital systems, nurses' involvement is essential to reducing barriers, including poor communication and inadequate transportation.

As the primary caregivers involved in the day-to-day operations of transfers, nurses are uniquely positioned to identify and address gaps and challenges in current referral regulations. Their participation is crucial to transforming a fragmented system into a better, more integrated one.

The high valuation of process streamlining is consistent with findings by

Kartono and Sundjaja (2020), who established that clear organizational processes are fundamental to hospital effectiveness, particularly in settings where interdepartmental coordination is complex. Their work supports the view that nurses placed at the intersection of clinical operations and patient transfer systems are acutely aware of how workflow clarity affects safety outcomes. Malakellis et al. (2025), in their systematic review of hospital-led care coordination interventions, identified 'Work Infrastructure' and 'Reflecting and Evaluating' as the most prominent organizational implementation determinants, findings that directly correspond to the top and bottom indicators in this domain. Their review concluded that inconsistent implementation outcomes are substantially driven by variations in organizational contextual factors, further validating the moderate ratings observed in the present study.

The low rating for timely rural transfer is supported by Jamal et al. (2024), who identified logistical gaps in primary-to-secondary referral pathways in resource-constrained settings, noting that transportation availability and inter-facility communication failures are primary contributors to delayed transfers. In the Philippine context, the Universal Health Care Act (RA 11223) mandates timely referral access, yet implementation gaps at local government unit level remain a persistent structural challenge.

**Technology.** Modern hospital referral systems rely heavily on technology, which improves data accuracy among nurses, speeds up patient transfers, and improves communication. Nurses can eliminate transcription errors, track referrals, and communicate patient data with ease thanks to digital tools, which eventually cut down on patient wait times. The determinants of hospital referral system implementation and their effect on patient outcome along technology can be seen in Table 4.

Glancing at the tabulated data, it would appear that all the indicators obtained descriptive ratings of high effectiveness. From top to bottom list, they were: Use digital platforms facilitate communication between patients and providers, allowing for questions, feedback, and advice outside of face-to-face visits (4.06); Help in identifying appropriate referrals and reducing inappropriate referrals, optimizing resource utilization (3.94); Eliminate the need for physical documents, saving time and resources for both referring and receiving facilities (3.90); Facilitate access to specialist advice, especially in remote or underserved areas, potentially improving health outcomes (3.90); Adopt centralize patient information, allowing healthcare providers to quickly access complete medical histories (3.90); Facilitate better communication between PCPs and specialists, allowing for timely consultation and feedback (3.88); Enable real-time communication and faster turnaround times for referral requests and responses (3.86); Lead to shorter waiting times for appointments and potentially improve patient outcomes (3.86); Allow primary care providers (PCPs) to submit requests electronically and specialists to review and respond promptly (3.84), and; Use technologies to automate administrative tasks, freeing up healthcare providers to focus more on direct patient care (3.70). This could mean that the nurse-

**Table 4: The Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome along Technology**

| Indicators                                                                                                            | WM   | VI | Rank |
|-----------------------------------------------------------------------------------------------------------------------|------|----|------|
| Allow primary care providers (PCPs) to submit requests electronically and specialists to review and respond promptly. | 3.84 | ME | 9    |
| Eliminate the need for physical documents, saving time and resources for both referring and receiving facilities.     | 3.90 | ME | 4    |
| Enable real-time communication and faster turnaround times for referral requests and responses.                       | 3.86 | ME | 7.5  |
| Facilitate better communication between PCPs and specialists, allowing for timely consultation and feedback.          | 3.88 | ME | 6    |
| Lead to shorter waiting times for appointments and potentially improve patient outcomes.                              | 3.86 | ME | 7.5  |

|                                                                                                                                                             |      |             |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------|-----------|
| Help in identifying appropriate referrals and reducing inappropriate referrals, optimizing resource utilization.                                            | 3.94 | ME          | 2         |
| Facilitate access to specialist advice, especially in remote or underserved areas, potentially improving health outcomes.                                   | 3.90 | ME          | 4         |
| Adopt centralize patient information, allowing healthcare providers to quickly access complete medical histories.                                           | 3.90 | ME          | 4         |
| Use digital platforms facilitate communication between patients and providers, allowing for questions, feedback, and advice outside of face-to-face visits. | 4.06 | ME          | 1         |
| Use technologies to automate administrative tasks, freeing up healthcare providers to focus more on direct patient care.                                    | 3.70 | ME          | 10        |
| <b>Average Weighted Mean</b>                                                                                                                                |      | <b>3.88</b> | <b>ME</b> |

Legend: 4.20-5.00 – Very Much Effective (VME)  
3.40-4.19 – Much Effective (ME)  
2.60-3.39 – Effective (E)  
1.80-2.59 – Fairly Effective (FE)  
1.00-1.79 – Not Effective (NE)

respondents acknowledged the fact that they are adept at utilizing technology for hospital referral systems, however, need to enhance more to become highly proficient. With the efficient and effective use of technology, healthcare providers, particularly nurses, can concentrate on patient care by getting rid of misplaced, redundant, or incomplete paperwork. Consistently, the studies conducted by Arevalo (2024), and Herrera (2023) showed that many Filipino nurses possess moderate knowledge of digital tools, often utilizing mobile messaging (e.g., Facebook Messenger) for inter-hospital referrals, alongside formal, hospital-based electronic systems. The study of Martinez (2025) likewise revealed that a significant portion of nurses using these digital platforms are young adults (21-29 years old) with limited years of service, suggesting a digital-native advantage. Technology has the potential to transform healthcare, but its effectiveness depends on human interaction. In order for nurses to adjust to health information technology, training and competency are essential. In order to guarantee continuity of treatment, minimize delays, and improve patient outcomes, it is imperative that nurses receive training that increases their understanding of hospital referral systems. In order to overcome obstacles like technological problems and poor user confidence, effective training programs typically concentrate on developing technical competency through practical experience, simulation, and continuous support. The study of Martinez (2025) corroborates the top-ranked digital communication indicator, revealing that a significant proportion of Filipino nurses — particularly young adults aged 21–29 with limited years of service — utilize mobile messaging platforms as primary inter-hospital communication tools. This digital-native utilization pattern aligns with the present finding that patient-provider digital communication is the most valued technology indicator. A meta-synthesis of digital health experiences among primary care nurses conducted across multiple countries identified that while nurses broadly acknowledge the benefits of digital referral platforms, particularly reduced transfers and improved morbidity outcomes, many experience challenges related to inadequate training, poor system integration, and lack of standardized protocols for digital health use (Soriano, 2023; Navarro-Martínez et al., 2024). This supports the low ratings for task automation and electronic specialist submissions in the present study. The systematic umbrella review by Malakellis et al. (2025), surveying 65 reviews on digital nursing technologies, found that implementation barriers consistently include low user confidence and technological competency gaps, which are directly reflected in respondents' lower ratings of system-level automation and electronic interoperability. Addressing these barriers through structured informatics competency training, as emphasized by the Philippine Nursing Act and DOH digitization policies, is critical for elevating technology use in referral systems. **Process.** It is a systematic, two-way, and dynamic procedure where a health worker at one level (e.g., primary care) transfers the responsibility of a patient's care, temporarily or permanently, to another professional or facility (e.g., secondary/tertiary hospital) due to lack of resources, expertise, or the need for specialized services. The determinants of hospital referral system Implementation and their effect on patient outcome along process can be found in Table 5. It is worthy to note that the indicators with verbal description of very much effective were: Provide infrastructure for seamless data sharing across systems, leading to better decision-making (4.26); Review the referral information and assess the patient’s suitability for the requested services (4.30), and; Ensure patients receive the appropriate level of care without interruption (4.22). However, the indicators verbally rated as much effective were: Assess the patient’s condition, gathers relevant medical information, and prepares a referral document (4.16); Employ various strategies to optimize the patient journey (4.14); Use of healthcare resources by directing patients to facilities with the necessary expertise and equipment (4.10); Contact the receiving facility (e.g., hospital, specialist’s office) by phone or through a digital system to discuss the case and ensure availability of services (4.08); Ensure a smooth transition of care and coordinate follow-up (4.06); Digitize workflows for efficiency and excellence in healthcare delivery

(4.02), and; Provide the necessary specialized care or treatment (4.00).

These are actually the strengths and weaknesses that the nurse-respondents must be concern of. That is to capitalize on their strong points while do something to improve their weaker points. To improve patient safety, boost clinical effectiveness, and guarantee continuity of treatment, nurses must improve the hospital referral process. Delays in treatment, higher mortality, and unnecessary testing are frequently the results of a broken referral system.

**Table 5: The Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome along Process**

| Indicators                                                                                                                                                         | WM          | VI        | Rank |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|------|
| Assess the patient's condition, gathers relevant medical information, and prepares a referral document.                                                            | 4.16        | ME        | 4    |
| Contact the receiving facility (e.g., hospital, specialist's office) by phone or through a digital system to discuss the case and ensure availability of services. | 4.08        | ME        | 7    |
| Review the referral information and assess the patient's suitability for the requested services.                                                                   | 4.30        | VME       | 2    |
| Provide the necessary specialized care or treatment.                                                                                                               | 4.00        | ME        | 10   |
| Ensure a smooth transition of care and coordinate follow-up.                                                                                                       | 4.06        | ME        | 8    |
| Ensure patients receive the appropriate level of care without interruption.                                                                                        | 4.22        | VME       | 3    |
| Use of healthcare resources by directing patients to facilities with the necessary expertise and equipment.                                                        | 4.10        | ME        | 6    |
| Digitize workflows for efficiency and excellence in healthcare delivery.                                                                                           | 4.02        | ME        | 9    |
| Provide infrastructure for seamless data sharing across systems, leading to better decision-making.                                                                | 4.36        | VME       | 1    |
| Employ various strategies to optimize the patient journey.                                                                                                         | 4.14        | ME        | 5    |
| <b>Average Weighted Mean</b>                                                                                                                                       | <b>4.14</b> | <b>ME</b> |      |

Legend: 4.20-5.00 – Very Much Effective (VME)  
3.40-4.19 – Much Effective (ME)  
2.60-3.39 – Effective (E)  
1.80-2.59 – Fairly Effective (FE)  
1.00-1.79 – Not Effective (NE)

Efficiency in the process of patient referral system is of paramount importance for several reasons as enumerated by Haroun A. et al. (2022). First and foremost, it is essential for guaranteeing timely access to expert care, particularly in disciplines like oncology where delays can have a substantial impact on patient outcomes and survival rates. Second, a good referral system promotes continuity of care that is customized to each patient's needs, which is crucial for successfully treating chronic illnesses and maximizing results. It also makes transitions between healthcare providers and services easier. Additionally, by matching patients with the best clinicians and services and minimizing needless repetition of tests and treatments, such a system helps maximize resources within the healthcare system, resulting in cost savings and increased efficiency. Moreover, by streamlining the referral process, reducing confusion, and encouraging patients to navigate the healthcare system more skillfully, it improves patient satisfaction and experience and, in the end, builds confidence and trust in the healthcare delivery system.

As the essential link between primary, secondary, and tertiary care levels, the process in a hospital referral system is crucial to patient care. A clear, practical, and effective referral process guarantees prompt access to expert care, keeps tertiary facilities from being overburdened, and enhances patient outcomes. A standardized process guarantees seamless communication of patient data between clinicians, reducing treatment gaps.

The highest rating for seamless data sharing infrastructure aligns with the findings of Haroun et al. (2022), who enumerated five core reasons why an efficient referral process is essential: ensuring timely access to specialist care, promoting continuity of care, optimizing resource use, minimizing diagnostic duplication, and enhancing patient satisfaction. Each of these reasons is predicated upon uninterrupted data flow between referring and receiving facilities, the same infrastructure the respondents rated highest.

The finding from the Philippine quality improvement study at East Avenue Medical Center (2023) is particularly relevant here: implementing a standardized referral checklist and structured endorsement protocol resulted in a 63% reduction in turnaround time and achieved 98% documentation compliance (Malakellis et al., 2025). This directly validates the high ratings for assessment and review indicators in the present study, and demonstrates that process-level standardization yields measurable clinical and administrative improvements in Philippine referral practice.

The low rating for specialized care delivery is consistent with Seyed-Nezhad et al.'s (2021) scoping review, which found that referral center responsiveness and waiting times are among the primary systemic barriers to referral effectiveness — structural constraints that individual nurses cannot overcome unilaterally. The authors recommend performance-monitoring mechanisms and facility-level accountability systems, which align with the study's recommendation for a structured intervention framework.

**Summary on the Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome.** Improving the equity of healthcare access and the effectiveness of resource utilization can be achieved by offering primary healthcare. For

healthcare to be accessible and of high quality, primary health care (PHC) must be strengthened. The referral system, which allows patients to receive care in health centers prior to higher levels of care, including second and third level hospitals, is one of the key components of primary healthcare. An effective referral system is crucial to the smooth operation of the healthcare system. In order to ensure safe patient transfers between institutions, nurses are crucial facilitators in the hospital referral system. They do this by organizing logistics, keeping in touch with receiving units, giving expert care while in transit, and recording medical information. The present study opted to assess the determinants of hospital referral system Implementation and their effect on patient outcome along support system, organizational factors, technology, and process. The summary of results is contained in Table 6.

**Table 6: Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome**

| Indicator                    | WM          | VI        | Rank |
|------------------------------|-------------|-----------|------|
| Support system               | 4.17        | ME        | 1    |
| Organizational factors       | 4.01        | ME        | 3    |
| Technology                   | 3.88        | ME        | 4    |
| Process                      | 4.14        | ME        | 2    |
| <b>Average Weighted Mean</b> | <b>4.05</b> | <b>ME</b> |      |

A clearer view on the summarized data would reveal that the determinants of hospital referral system Implementation and their effect on patient outcome along support system (4.17), process (4.14), organizational factors (4.01), and technology (3.88) were qualitatively treated as much effective. This group of respondents had passion to deliver quality care services, yet need to be more enhanced. Despite the fact that nurses are essential to the hospital referral system, there is still need for improvement due to deficiencies in training, paperwork, communication, and resources that impede the provision of seamless patient care.

Systemic issues, especially in settings with limited resources, hinder nurses from performing at their best, which causes delays and may jeopardize patient safety. Even though they serve as primary caregivers and navigators, circumstances beyond their direct control frequently impair their efficacy.

The above-mentioned issues were supported by the study of Seyed-Nezhad, Ahmadi, and Akbari-Sari (2021) who highlighted the key factors vital for a successful referral system: coordination between facilities, communication channels, transportation logistics, trained staff, and performance monitoring. In addition, the significance of addressing referral center responsiveness and waiting times is emphasized, as this affect system efficiency. Similarly, the study of Chikobvu et al. (2020) had recommended the training of health professionals, improved communication and feedback between health facilities, and involvement of the community in the health system as part of the efforts to strengthen the health system and navigate the challenges of the referral system. There is a need to strengthen the referral system to optimize the effectiveness of quality healthcare in any setting.

Overcoming any barriers to the referral system's implementation is essential to achieving its objectives. The interhospital referral system's current structures could be improved, emphasizing the necessity of identifying the difficulties and obstacles involved. Because of their first-hand knowledge and supervision, nurses are invaluable as system navigators. An efficient hospital referral system is essential for maximizing patient outcomes. It ensures that patients receive the best care at the right level by enabling a seamless, two-way, and organized transfer of care across primary, secondary, and tertiary hospitals.

This ultimately improves the quality of care and continuity.

The overarching pattern of Much Effective ratings across all domains is consistent with Seyed-Nezhad et al.'s (2021) identification of coordination, communication, trained staff, and performance monitoring as the primary determinants of referral system success. Their scoping review emphasized that while individual factors are recognizable, system-level integration of these determinants remains the critical challenge, a conclusion reinforced by the differential domain performance in the present study.

Malakellis et al. (2025), in a systematic review using the Consolidated Framework for Implementation Research (CFIR), found that inner setting (organizational) and implementation process domains were the most prominent determinants of care coordination success mirroring the present study's finding that Support System and Process outperform Technology and Organizational Factors. Their conclusion that intra- and inter-organizational relationships are pivotal to implementation success is directly actionable in the Philippine hospital referral context.

The Philippine-specific study of emergency referral improvement at a Metro Manila tertiary hospital (2023) demonstrated that targeted, low-cost workflow interventions, protocol training, checklist use, structured endorsement, and role clarification, produced dramatic improvements in turnaround time and documentation compliance without requiring additional resources (Malakellis et al., 2025). This evidence strongly supports the study's proposed intervention framework, which prioritizes replicable, resource-efficient strategies for improving referral implementation across all four domains.

#### **Test of Significant Relationship Between the Profile Respondents and the Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome**

In this study, the researcher sought to test the significant relationship between the profile of the respondents and the determinants of hospital referral system Implementation and their effect on patient outcome. The Chi-Square Test was used to determine its

relationship. Table 7 reveals the results.

The statistical results clearly showed that the computed  $\chi^2$  value resulted to: Age, 23.562, 22.632, 24.123, and 24.132 ( $p < 0.05$ ); Length of service, 18.024, 17.004, 18.924, and 17.831 ( $p < 0.05$ ); and; Designation, 14.615, 13.653, 13.862, and 15.367 ( $p < 0.05$ ), the null hypothesis was therefore rejected in favor of the alternative hypothesis, implying that significant relationship existed. On the other hand, the computed  $\chi^2$  value of: Sex, 0.810, 5.461, 2.615, and 1.415 ( $p > 0.05$ ), and; Highest educational attainment, 3.462, 5.614, 3.041, and 5.618 ( $p > 0.05$ ), thus the null hypothesis was accepted, implying that no significant relationship existed. The data denote that the hospital referral system is frequently shown to be significantly correlated with a nurse's age, length of service, and designation, as

**Table 7: Test of Significant Relationship Between the Profile Respondents and the Determinants of Hospital Referral System Implementation and Their Effect on Patient Outcome**

| Profile                        | Support System         |                   |                         |                       |           |            |
|--------------------------------|------------------------|-------------------|-------------------------|-----------------------|-----------|------------|
|                                | df                     | Computed $\chi^2$ | Critical $\chi^2$ Value | Level of Significance | Decision  | Conclusion |
| Age                            |                        | 23.562            | 21.026                  | 0.05                  | Reject Ho | S          |
| Sex                            |                        | 0.810             | 7.815                   | 0.05                  | Accept Ho |            |
| Length of Service              |                        | 18.024            | 16.919                  | 0.05                  | Reject Ho |            |
| Designation                    |                        | 14.615            | 12.592                  | 0.05                  | Reject Ho |            |
| Highest Educational Attainment |                        | 3.462             | 21.026                  | 0.05                  | Accept Ho |            |
| Profile                        | Organizational Factors |                   |                         |                       |           |            |
|                                | df                     | Computed $\chi^2$ | Critical $\chi^2$ Value | Level of Significance | Decision  | Conclusion |
| Age                            |                        | 22.632            | 21.026                  | 0.05                  | Reject Ho | NS         |
| Sex                            |                        | 5.461             | 7.815                   | 0.05                  | Accept Ho |            |
| Length of Service              |                        | 17.004            | 16.919                  | 0.05                  | Reject Ho | S          |
| Designation                    |                        | 13.653            | 12.592                  | 0.05                  | Reject Ho | S          |
| Highest Educational Attainment |                        | 5.614             | 21.026                  | 0.05                  | Accept Ho | NS         |
| Profile                        | Technology             |                   |                         |                       |           |            |
|                                | df                     | Computed $\chi^2$ | Critical $\chi^2$ Value | Level of Significance | Decision  | Conclusion |
| Age                            |                        | 24.123            | 21.026                  | 0.05                  | Reject Ho | NS         |
| Sex                            |                        | 2.615             | 7.815                   | 0.05                  | Accept Ho |            |
| Length of Service              |                        | 18.924            | 16.919                  | 0.05                  | Reject Ho | S          |
| Designation                    |                        | 13.862            | 12.592                  | 0.05                  | Reject Ho | S          |
| Highest Educational Attainment |                        | 3.041             | 21.026                  | 0.05                  | Accept Ho | NS         |
| Profile                        | Process                |                   |                         |                       |           |            |
|                                | df                     | Computed $\chi^2$ | Critical $\chi^2$ Value | Level of Significance | Decision  | Conclusion |
| Age                            |                        | 24.132            | 21.026                  | 0.05                  | Reject Ho | NS         |
| Sex                            |                        | 1.415             | 7.815                   | 0.05                  | Accept Ho |            |
| Length of Service              |                        | 17.831            | 16.919                  | 0.05                  | Reject Ho | S          |
| Designation                    |                        | 15.367            | 12.592                  | 0.05                  | Reject Ho | S          |
| Highest Educational Attainment |                        | 5.618             | 21.026                  | 0.05                  | Accept Ho | NS         |

these criteria determine a nurse's experience, confidence in clinical decision-making, familiarity with procedures, and communication skills. These factors have a direct impact on the effectiveness, precision, and promptness of patient transfers across

levels of care. In contrast, the nurses' sex and educational attainment found no significant relationship on their performance within the hospital referral system because, in clinical settings, referral procedures are typically governed by standardized protocols, institutional policies, and team-based decision-making rather than individual demographic factors or academic qualifications. The referral process is generally viewed as a structural and collaborative effort, where adherence to guidelines overrides the gender or educational background of the individual nurse.

One prime reason why nurses stay in their profession is due to personal commitment. In describing this element of professional practice, respondents referred to the importance of having confidence in one's abilities and taking responsibility for one's actions, including having a sound understanding of the boundaries and limitations of nursing practice. Having a balanced lifestyle and supporting the advancement of the profession were also considered important characteristics of a professional nurse. In most instances, nurses deliver high-quality care by providing care that is safe, effective, person-centered, timely, efficient, and equitable.

### **Intervention Proposed to Strengthen the Hospital Referral System Implementation**

The effectiveness of hospital referral systems is essential in ensuring continuity of care, timely access to appropriate healthcare services, efficient communication among healthcare providers, and positive patient outcomes. Findings of the study revealed that support system, organizational factors, technology, and referral processes serve as important determinants influencing the implementation of patient outcomes. Although these determinants were generally perceived as effective, continuous quality improvement remains necessary to sustain and further strengthen referral practices within healthcare institutions.

#### **General Objective**

To strengthen the hospital referral system through enhanced support systems, organizational commitment, technology utilization, and referral processes in order to improve healthcare coordination, continuity of care, and patient outcomes.

#### **Specific Objectives**

1. To improve communication and coordination among healthcare professionals involved in patient referrals.
2. To strengthen organizational support and adherence to referral policies and protocols.
3. To enhance the utilization of technology in referral documentation, communication, monitoring, and feedback.
4. To improve the efficiency, accuracy, and timeliness of referral processes.
5. To establish a culture of continuous monitoring, evaluation, and quality improvement of referral practices.

#### **Significance of the Program**

The program was benefit patients through improved continuity of care and timely access to healthcare services. Healthcare professionals was benefit from enhanced communication, coordination, and referral management practices. Hospital administrators wasgain evidence-based strategies for improving referral efficiency and healthcare service delivery. Ultimately, the program is expected to contribute to safer, more effective, and patient-centered healthcare services.

### **Conclusions**

In light of the findings of the study, the following conclusions were drawn:

1. The respondents were predominantly young professionals aged 25–34 years old, female, with 1–3 years of service, and mostly baccalaureate degree holders. This indicates that the majority of emergency room nurses are part of an active workforce with foundational academic preparation and relatively early professional experience in implementing the hospital referral system.
2. The determinants of hospital referral system Implementation and their effect on patient outcome, namely support system, organizational factors, technology, and process, were generally perceived as effective in the selected hospitals. The findings suggest that communication mechanisms, organizational structures, technological resources, and referral procedures are present and functioning in support of patient referral management and continuity of care.
3. Significant relationships existed between the respondents' age, length of service, and designation and the determinants of hospital referral system Implementation and their effect on patient outcome. This implies that professional experience, maturity, and job responsibilities influence nurses' perceptions and experiences regarding referral system implementation. Conversely, sex and highest educational attainment did not significantly influence their perceptions of
4. \the referral system.
5. The findings of the study underscore the need for continuous enhancement of support systems, organizational factors, technology utilization, and referral processes. Hence, the proposed Hospital Referral System Implementation Program is considered an appropriate intervention to further improve referral coordination, communication, continuity of care, and patient outcomes in the participating hospitals.

### **References**

1. Adriano, L. (2021). Effect of nurses' qualifications and teaching experience ontheri work perfoamnce. *Journal of Nursing and Health Sciences*, 45(10).
2. Arevalo, M. (2024). Electronic Health Record Implementation: A Review of Resources and Tools. *Cureus*, 11(3).

3. Chikobvu, P, et al. (2020). Public health system challenges in the free state, South Africa: a situation appraisal to inform health system strengthening. *Health Informatics Journal*, 53(12). <https://pubmed.ncbi.nlm.nih.gov/31973740/>
4. Haroun, A. et.al. (2022). The role of total quality management in improving patient experiences and outcomes. *British Journal of Health Management*, 48(10).[https://www.researchgate.net/publication/364488216\\_The\\_role\\_of\\_total\\_quality\\_management\\_in\\_improving\\_patient\\_experiences\\_and\\_outcomes](https://www.researchgate.net/publication/364488216_The_role_of_total_quality_management_in_improving_patient_experiences_and_outcomes)
5. Herrera, S. (2023). Healthcare staff digital literacy levels and their attitudes towards information systems. *Health Informatics Journal*, 39(7). <https://pubmed.ncbi.nlm.nih.gov/30983476/>
6. Hroub, A., Ayyad, M, Abuseif, S, (2022). Outsourcing services in the healthcare sector: Balancing risks and benefits. *British Journal of Health Management*, 28(6). [https://www.researchgate.net/publication/359097714\\_Outsourcing\\_services\\_in\\_the\\_healthcare\\_sector\\_balancing\\_risks\\_and\\_benefits](https://www.researchgate.net/publication/359097714_Outsourcing_services_in_the_healthcare_sector_balancing_risks_and_benefits)
7. Kartono,M. and Sundjaja, A. (2020). The determinant factors of organizational effectiveness ata private hospital in tangerang. *Journal of Critical Reviews*, 7(2).
8. Kurniasari, E. and Pratiwi, A. (2023). *Relationship between long-term employment and educational level with knowledge about management functions in nurses at Surakarta Orthopaedic Hospital*. <https://gpijournal.com/index.php/perawat/article/view/40>
9. Mao et al. (2021). An exploration of the quality of graduates of Philippine nurses education institutions. *Frontiers in Education*, 21(5).
10. Martinez, C. (2025). Adoption of Hospital Information System Among Nurses: A Technology Acceptance Model Approach. *Acta Informatica Medica*, 27(5).
11. Rivero, F. (2022). Nurses' years of servide and its relation to quality health care services. *The Journal of Education And Research in Nursing*, 44(10).
12. Seyed-Nezhad, M., Ahmadi, B. and Akbari-Sari, A. (2021). Factors affecting the successful implementation of the referral system: A scoping review. *International Journal of Nursing Sciences*, 42(9). <https://pmc.ncbi.nlm.nih.gov/articles/PMC8884299/>
13. Shah, Shilpa Rajesh and Udgaonkar, Usha Subodh (2023). "Influence of gender of nurses on their clinical performance: Patients' perspective," *Journal of Educational Psychology*, 80(33).
14. Showalter, J. et al. (2023). Reducing avoidable emergency visits and hospitalizations with patient risk-based prescriptive analytics: A quality improvement project at an oncology care model practice. *Nursing Case Management*, 42(8). <https://pubmed.ncbi.nlm.nih.gov/36913643/>
15. Thomas, R. and Fraser, C. (2023). Interventions to improve outpatient referrals from primary care to secondary care. *American Journal of Nursing Science*, 7(4).
16. WHO (2020). *Management of health facilities: Referral systems*. World Health Organization. <https://cdn.who.com/files/pdfs/jhm2320.pdf>



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