



## Performance of university students doing outreach work in patient safety practice in a university hospital

Atuação de extensionistas na prática de segurança do paciente em um hospital universitário

Actuación de los extensionistas en la práctica de la seguridad del paciente en un hospital universitario


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### ABSTRACT

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**Introduction:** The occurrence of adverse events remains a challenge in Brazilian hospitals, even after the implementation of the six international patient safety goals since 2009. In this context, University Outreach serves as a pedagogical tool by integrating teaching, service, and community, promoting engagement with a culture of safety. To describe the actions of healthcare students on patient safety in a university outreach program. **Method:** This experience report was developed between June 2022 and June 2023 by nursing, medicine, nutrition, and pharmacy students from the Federal University of Piauí, participating in the project "Good Practices for Patient Safety and Quality of Care." The actions were organized into three stages: planning (training and institutional integration), execution (educational activities, assessments, and reporting), and evaluation (supervision and critical analysis). **Results:** The outreach program enabled actions focused on patient safety and quality of care, with activities such as practical training, protocol monitoring, bedside health education, and strategies for preventing adverse events. **Implications:** The experience contributed to the development of clinical, ethical, and collaborative skills, strengthening student education and raising awareness of safe practices focused on quality care.

### DESCRIPTORS

Patient Safety. Students. Outreach Programs.

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## INTRODUCTION

Patient safety has become one of the main pillars of quality care in healthcare institutions. In Brazil, this agenda gained momentum with the creation of the National Patient Safety Program (NPSP), established in 2013 by Ordinance number 529/2013 of the Ministry of Health and regulated by Resolution of the Collegiate Board (RDC) number 36/2013. The program aims to prevent and mitigate adverse events (AEs) that compromise the quality of care and healthcare outcomes in health services<sup>1-2</sup>.

The NPSP is operationalized through the implementation of care protocols, the work of Patient Safety Centers (PSC), and the use of incident reporting systems, such as Notivisa, which became mandatory in 2014<sup>3-4</sup>. However, challenges remain: in addition to the high incidence of AEs in the country, there is a significant problem of underreporting of these events, which compromises the monitoring and improvement of care practices<sup>4</sup>.

Globally, the World Health Organization (WHO) also highlights the importance of active participation by patients, family members, and the community as a strategy for safe care. Since 2013, through the *Patients for Patient Safety* initiative, the WHO has promoted partnerships between healthcare professionals and users, recognizing that many incidents are not identified by professionals and that listening to patients can improve the detection and prevention of risks<sup>5</sup>.

Given this scenario, it is essential that the training of health professionals includes educational strategies that encourage engagement with the culture of safety. In this context, University Outreach is a powerful pedagogical tool, promoting integration between teaching, service, and community. As an inseparable dimension of higher education, it contributes to critical, ethical training committed to the real needs of society. Outreach projects focused on patient safety promote meaningful learning, allowing students to develop technical and reflective skills based on concrete experiences in health services<sup>6</sup>. Practical work in sectors such as Quality Management and Patient Safety enhances the construction of knowledge aimed at consolidating safe and humanized practices in care.

In addition, the Patient Safety Curriculum Guide highlights the importance of incorporating skills that promote a culture of safety and the prevention of adverse events into the training of healthcare professionals, guiding evidence-based practices and the continuous improvement of the quality of care. However, the issues surrounding this guide highlight challenges in effectively integrating these guidelines into academic curricula, which may compromise the adequate preparation of future professionals to work in contexts that demand rigorous safety standards<sup>7</sup>.

The project “Good practices for patient safety and quality of care” should be linked to the guidelines of the Patient Safety Curriculum Guide, a fundamental document that guides professional training for the development of skills and attitudes aimed at promoting a culture of safety and preventing adverse events. This approach can enhance student engagement and promote broader training that is connected to the real needs of the healthcare system, favoring the effective impact of patient safety practices.

Furthermore, this study contributes directly to the Sustainable Development Goals (SDGs), especially SDG 3 - Good Health and Well-Being, by promoting actions aimed at patient safety and quality of care, which are fundamental aspects for reducing harm and improving the quality of care in health services. It also reinforces SDG 4 - Quality Education, by highlighting the role of university outreach as a training strategy that combines theory and practice, developing professional skills committed to a culture of safety. Finally, it also aligns with SDG 17 - Partnerships and Means of Implementation, by integrating universities, health services, and the community in a collaborative effort that strengthens the impact of educational and care actions<sup>8</sup>.

Thus, this article aims to describe the actions of health students on patient safety in a university outreach program.

## METHOD

This is a descriptive study, in the form of an experience report, on the outreach activities carried out by nursing, medicine, nutrition, and pharmacy students at the Federal University of Piauí (UFPI), who are members of the university outreach project entitled: “Good practices for patient safety and quality of care.” The project runs for one year, from June 2022 to June 2023.

This outreach project aims to promote actions that ensure safe and quality care for patients admitted to a hospital through the implementation of actions provided for in NPSP<sup>1</sup>. In addition, it aims to train health students to work in patient safety services through educational activities and surveillance for reporting incidents and adverse events in the hospital, supervised by nurses, physicians, biologists, and pharmacists in that sector.

The institution where the study was conducted is a university hospital located in the Northeast region of Brazil. It has a large physical structure, with a built area of over 20,000 square meters, more than 180 hospital beds, including intensive care unit beds. It has outpatient clinics and operating rooms, covering care in various specialties, including outpatient and oral and maxillofacial surgeries. The unit also has a diagnostic and therapeutic center equipped with technologies such as magnetic resonance imaging, computed tomography, x-ray, ultrasonography, hemodynamics, video endoscopy, electrocardiography, electroencephalography, and ergometer testing.

This report describes the tasks performed during the activities carried out in person as part of the outreach program within the hospital. Thus, after the outreach activities began in June 2022, a schedule was drawn up to divide the tasks among the professionals in the sector, assigned to the four inpatient wards and the Intensive Care Unit (ICU). In total, there were 12 outreach workers, divided into pairs during the week from Monday to Friday, in the morning and afternoon shifts.

The activities were based on patient safety goals and included: active search using standardized hospital instruments for correct patient identification, feeding the collection system, active search for falls and pressure injuries, verification of safe surgery, verification of prescription and administration of medications, and participation in educational activities within the health centers. In addition, the students observed hand sanitize specifically in the Intensive Care Unit (ICU) by health professionals, filling out the protocol of the National Health Surveillance Agency (ANVISA)<sup>9</sup> in order to assess the adherence of professionals to hand sanitize protocols and identify opportunities for improvement.

The systematization and evaluation of observational data occurred through continuous records of the actions developed, based on the six international patient safety goals. Activities such as verifying the correct identification of patients, prescribing and administering medications, preventing falls and pressure injuries, safe surgery, and participation in educational activities were described in reports organized by the students and monitored by supervisors. In the specific case of hand sanitize observation in the ICU, the ANVISA protocol was used, which enabled systematic and standardized data collection, focusing on professionals' adherence to recommended practices. These records allowed for the identification of compliance, failures, and opportunities for improvement, contributing to critical analysis and the proposal of actions aimed at improving patient safety in the service.

As this is an experience report study related to the activities carried out by outreach workers in patient safety and quality of care services, approval from a Human Research Ethics Committee (REC) was not required, and the confidentiality of those involved was respected. However, this study complies with Resolution number 466/2012 of the National Health Council (NHC)<sup>10</sup>.

RESULTS

The project involved students from the Nursing, Medicine, Nutrition, and Pharmacy courses at the Federal University of Piauí (UFPI), forming a multidisciplinary team in training, coming from different socioeconomic backgrounds. Most of the outreach workers were regularly enrolled between the 4<sup>th</sup> and 9<sup>th</sup> semesters of their respective courses and involved in teaching and research activities, which favored the integration of theory and practice.

Box 1 shows the categorization of the activities developed by the students during the university outreach program on patient safety according to each of the six International Patient Safety Goals, presented below:

Box 1. Activity in accordance with the Patient Safety Goals developed, Teresina, Piauí, Brazil, 2025.

GOAL	ACTIONS DEVELOPED
Goal 1: Correctly identify the patient	<ul style="list-style-type: none"><li>Monitoring the use of identification bracelets;</li><li>Strategic inspections in imaging and outpatient departments;</li><li>Educational activities with patients about identification bracelets;</li></ul>

	<ul style="list-style-type: none"> <li>• Application of an assessment tool with a comprehensive checklist.</li> </ul>
<b>Goal 2:</b> To improve communication among professionals	<ul style="list-style-type: none"> <li>• Monitoring training and protocol updates;</li> <li>• Participation in trade shows and multiprofessional meetings;</li> <li>• Promoting a culture of safety and interprofessional dialogue.</li> </ul>
<b>Goal 3:</b> To improve safety in prescribing, using, and administering medications	<ul style="list-style-type: none"> <li>• Participation in pharmacovigilance activities;</li> <li>• Reporting adverse reactions to the Health Surveillance and Hospital Risk Management System (VIGIHOSP) and the Health Surveillance Notification and Investigation System (VIGIMED);</li> <li>• Promoting the 9 rights of medication administration;</li> <li>• Providing patient health education about medications.</li> </ul>
<b>Goal 4:</b> Safe surgery	<ul style="list-style-type: none"> <li>• Analysis of checklist completion;</li> <li>• Recording of surgical data and presence of infections;</li> <li>• Reporting cases to VIGIHOSP;</li> <li>• Indirect care with support from the nursing team.</li> </ul>
<b>Goal 5:</b> To perform hand sanitize to prevent infections	<ul style="list-style-type: none"> <li>• Assessment of hand sanitize at the 5 moments recommended by ANVISA;</li> <li>• Application of observation forms by professional category;</li> <li>• Specific guidance on the correct sanitize technique.</li> </ul>
<b>Goal 6:</b> To reduce the risk of falls and pressure injuries	<ul style="list-style-type: none"> <li>• Active screening of hospitalized patients for falls and PI;</li> <li>• Verification of notifications and Braden and Morse scales;</li> <li>• Health education with patients and companions on the concept of falls and the importance of the yellow fall risk bracelet;</li> <li>• Raising staff awareness of the importance of reporting.</li> </ul>

**Source:** Prepared by the authors themselves, Teresina, Piauí, Brazil, 2025.

## EXPERIENCE REPORT

The outreach project focuses on patient safety and quality of care, seeking to promote continuous improvement in health services, reducing risks and harm to patients. Specific objectives may vary according to the context and needs of the community, but some of the main ones are: Raising awareness among health professionals, managers, and the community about the importance of patient safety and quality of care; Train professionals to identify, prevent, and manage risks in health services; Promote a culture of safety in health institutions, encouraging the reporting of adverse events and the analysis of causes; Disseminate knowledge and best practices in patient safety and quality of care; Strengthen the partnership between the university and health services for the development of joint actions.

The activities began with the “Introduction to Patient Safety Course”, taught by the coordinating professors and presented with research conducted by the students, with a presentation of the six international patient safety goals, each goal presented by a pair of students and then discussed and commented on by the project's supervising professor with the participation of graduate students. All outreach workers undergo an initial adaptation period at the hospital, receiving protocols related to the goals by e-mail and being registered in the hospital system. They are then divided between the Quality and Patient Safety Management Unit (QPSMU) and the Health Surveillance Unit (HSU).

### Goal 1: Correctly identify the patient

Correct patient identification is considered one of the pillars for preventing adverse events in healthcare institutions, representing the first of six international patient safety goals proposed by the WHO. Evidence shows that failures in this process are among the main factors contributing to medication errors, procedures performed on the wrong patients, and other preventable events<sup>11</sup>.

A recent study reinforces that the systematic use of identification bracelets with at least two identifiers—usually the full name and date of birth—is an effective practice for reducing risks, provided that it is accompanied by active checking by healthcare professionals before any procedure. In addition, patient involvement in the identification process has proven to be a relevant complementary strategy, as it improves the accuracy of identification and strengthens the culture of safety<sup>12,13</sup>.

The students, in the outreach activities, went to the stations carrying the hospital's own assessment instrument on professional conduct in each ward of the inpatient sector, regarding the use of identification

bracelets. The instrument listed questions involving not only the presence of the bracelet, but also what identifiers were present, whether the letter was legible, whether the patient was aware of why the bracelet was being used, whether they understood the importance of their identification through this technology for preventing adverse events, and whether the professionals who attended to them checked their bracelet and how often.

Correct identification is the first stage in preventing adverse events and effects, and this goal is achieved by checking the white bracelet, which must be worn on an upper or lower limb of the patient. Thus, the check is performed by confirming at least two identifiers, such as asking for his full name and date of birth.

It is important to note that if the client was unaware of the importance of the identification bracelet, it was the responsibility of the students/preceptors of the outreach project to provide health education at the bedside. There was also space for observations by those applying the instrument, noting any non-conformities that might be present, such as: illegible bracelets, bracelets removed by patients, too loose, and in some cases too tight, especially when the patient was edematous.

A nurse initially accompanied each student from QPSMU for this practical evaluation activity at the stations, where the professionals applied the instrument with the students in a ward and then supervised the students' first use of the questionnaire. In addition, the students conducted a strategic inspection of professional adherence to goal 1 in the imaging and outpatient sector of the hospital. The outreach workers positioned themselves at a strategic point that allowed them to approach patients who had just undergone an examination or consultation in progress, regarding their correct identification.

In this sense, this assessment seeks to reduce the occurrence of incidents to ensure the care provided to the client, and should be performed upon admission to the hospital service and remain in place for as long as the patient is under care, with the need for regular inspections of the integrity of the bracelet, associated with its visibility and the accuracy of the information present on the object, the purpose of which, in addition to the objective of the goal, is to observe the need for replacement<sup>13</sup>.

Furthermore, the literature reinforces that the effectiveness of this goal depends not only on the presence of the bracelet, but also on its legibility, adherence to the patient's body, and the awareness of all those involved regarding its function. Studies show that health education aimed at patients on the importance of wearing the bracelet, combined with continuous verification by quality and safety teams, contributes to the reduction of non-conformities<sup>14</sup>. Systematic inspections and educational approaches at the bedside, such as those promoted by outreach projects, have been valued as training strategies that combine teaching with safe practice and the promotion of patient-centered care<sup>15</sup>.

Thus, the observations made resulted in relevant outcomes, such as the identification of non-compliance in the use of identification bracelets and improved adherence by professionals to actively checking at least two identifiers. Educational activities were carried out at the bedside whenever it was identified that the patient did not understand the function of the bracelet, strengthening the culture of safety and patient-centered care. In addition, the non-conformities observed were reported to the Quality and Patient Safety Management Unit (QPSMU), feeding into the internal surveillance systems.

## **Goal 2: To improve communication between professionals**

In goal 2, activities aimed at improving care were carried out, in which the participation of outreach workers was focused on monitoring professionals in the sector participating in interventions, such as: presentation of changes in hospital protocols; on-site training on incident and disease reporting; use or training for the implementation of a new protocol for the hospital; and fairs and/or meetings, with the purpose of discussing topics in a multidisciplinary manner with hospital employees.

It is clear that communication is the main tool within a work environment for maintaining the organizational structure<sup>16</sup>. Thus, in this goal, it was possible to perceive the importance of communication within the work environment, since professionals are truly receptive to training and participate actively.

Recent studies show that communication failures are among the main factors contributing to adverse events, such as medication errors, delays in diagnosis, and inappropriate treatments<sup>17</sup>. The implementation of face-to-face training and updates to institutional protocols, as promoted by outreach workers at the university hospital, directly contributes to aligning the flow of information among team members, reinforcing safe conduct and reducing fragmentation of care. In addition, educational actions in the workplace encourage multidisciplinary involvement and strengthen the culture of patient safety<sup>18,19</sup>.



Studies indicate that ineffective communication is one of the main outcomes that interfere with the occurrence of adverse events in the provision of care. Failure to communicate can directly influence the team's decision-making, which may be related to decisions that can influence diagnosis or treatment<sup>20</sup>.

Research shows that investing in spaces for dialogue, such as interdisciplinary meetings, alignment meetings, and ongoing training, is essential for strengthening communication within teams and promoting a collaborative learning environment. From this perspective, the presence of university outreach students working alongside hospital professionals allows for a practical approach to teaching-service, in addition to enabling enriching exchanges that impact both student training and the quality of care provided. Thus, Goal 2, by prioritizing effective communication, expands the capacity of services to anticipate risks, respond to critical situations with greater precision, and, consequently, prevent harm to patients<sup>18,19,21</sup>.

### **Goal 3: To improve safety in prescribing, using, and administering medications.**

In Goal 3, medication use is one of the most critical areas in healthcare, accounting for a portion of preventable AEs in hospital settings. Pharmacy students participated most heavily in outreach activities, developing activities such as antimicrobial control, investigation of generalized infections, and pharmacovigilance, with students being directly monitored by a pharmacist.

In pharmacovigilance, one of the most frequently performed activities was adverse reaction investigation, with most reports focusing on antineoplastics in the High Complexity Oncology Unit (UNACON). Outreach workers were also responsible for recording reports in the Health Surveillance and Risk Management Application (VIGIHOSP). In addition to this system, the ANVISA platform for reporting adverse drug events (VIGIMED) was also used.

The students' involvement in pharmacovigilance not only allows for the early detection of adverse reactions but also contributes to the development of a culture of reporting and traceability of medications used, especially high-risk ones, such as antineoplastic drugs. Studies show that computerized reporting systems, such as VIGIHOSP and VIGIMED, facilitate the collection, analysis, and dissemination of data on AEs, promoting continuous process improvement and reducing harm to patients<sup>22</sup>.

Furthermore, we also sought to observe the client's understanding of medications. Therefore, attention is focused on professionals, because errors associated with the therapeutic use of medications can occur, such as prescription errors, administration errors, and medication mix-ups due to similar spelling. Therefore, it is recommended to minimize these occurrences by reading the medication label, checking the patient's name, medication name, and route of administration, time of administration, prescribed dose, registration, form, and correct response of the medication.

These prevention methods are important to prevent errors. Patients should always be informed about the medication, its prevention, and potential adverse effects before administration, thus providing health education. Additionally, legible prescriptions and uniform drug graphics are important for improving medication administration safety.

Educational practices and double-checking strategies for medication administration have been strongly recommended to prevent errors related to prescribing, dispensing, and use. Patient education and reinforcement of the "nine rights" of medication administration—right patient, right medication, right dose, right route, right time, right record, right reason, right response, and right form—are essential actions to ensure therapeutic safety<sup>23</sup>. Involving students in validation and guidance processes, with the support of clinical pharmacy professionals, strengthens not only multidisciplinary practice but also the development of safe, focused care<sup>24</sup>.

### **Goal 4: Safe surgery**

Goal 4 involved completing a form developed by the hospital for each procedure to verify the procedure being performed. This form was completed by a nurse from the Surgical Center (SC). Students then analyze this data, which is entered daily into a spreadsheet and shared with the patient safety department.

At this point, data analysis involves verifying the completion of the form, recording the data, and checking the online medical record for any post-surgical infections. This report allows for monitoring any errors in the surgical process or procedures that may not be in accordance with the plan. This stage is not performed solely by the student; a nurse from the department is responsible for verifying the students' analysis.

Furthermore, indirect patient care is provided by observing the surgical center staff completing the sign-in, time-out, and sign-out checklists. From this perspective, sign-in refers to the moment before anesthetic induction, and should ensure correct identification of the patient, the surgical site, the procedure to be performed, the completion of the informed consent form, and the verification of allergies and possible ventilation difficulties and risk of aspiration.

The systematic adoption of surgical checklists, such as sign-in, time-out, and sign-out, is internationally recognized as an essential measure for patient safety during invasive procedures. The literature shows that the proper use of these instruments is associated with the reduction of preventable errors, such as incorrectly sited surgeries, unplanned procedures, and retention of surgical materials, in addition to contributing to a decrease in surgical infection rates<sup>25</sup>. However, for these checklists to have a real impact, it is essential that their application is not limited to mechanical completion, but involves the engagement of the multidisciplinary team and periodic training that reinforces the culture of safety and the importance of effective communication in the surgical environment<sup>26</sup>.

Regarding the timeout, the moment before the skin incision, it seeks to verify team members' confirmation, confirmation of the patient, surgical site, and type of procedure, verification of critical points of the surgery, anesthesia, and nursing during care, in addition to administering antibiotic therapy.

Before the patient leaves the operating room, sign-out, the procedure performed must be confirmed, instruments, compresses, and needles removed from the surgical wound, biological material must be checked, identified, and properly stored for laboratory analysis, and necessary care during the anesthetic recovery period must be planned. After completing each surgical timeout, the actions performed must be recorded to demonstrate the patient care actions performed. Therefore, providing training for the surgical team on the importance of completing and implementing checklists is crucial for teams performing invasive procedures.

#### **Goal 5: To sanitize the hands to prevent infections**

Goal 5 was consolidated primarily through hand sanitize observation. Students went to the stations (especially the ICU) with the hand sanitize observation sheet and conducted direct inspections of the professionals' work spaces. They assessed whether hand sanitize was performed at five different times (before touching the patient; before performing aseptic procedures; after exposure to patient fluids; after touching the patient; and after touching surfaces near the patient), as well as the method of hand sanitize (whether with alcohol-based hand rub or soap and water).

It is important to note that the sheet used is from ANVISA, which allows for assessment of whether hand sanitize was not performed and at which of the five times it was not performed. It also divided each evaluation column into a distinct professional category, thus facilitating subsequent assessment by HSU professionals. With this goal, students were able to perform infection prevention actions within an institution as large as a university hospital through actions aimed at monitoring hand sanitize among professionals. Hand sanitize adherence is one of the simplest and most effective practices for preventing healthcare-associated infections. However, healthcare worker adherence is still considered unsatisfactory in many settings, which reinforces the importance of educational strategies, systematic assessments, and continuous feedback. The participation of outreach students as auditors strengthens the culture of active surveillance and promotes practical learning about biosafety protocols<sup>27</sup>.

In addition to monitoring, students were also able to act as knowledge disseminators, providing specific guidance in the workplace on correct technique and appropriate times for hand sanitize. This educational and participatory approach helps correct errors in real time and reinforces the institution's commitment to patient safety. Studies indicate that interventions based on direct observation and individualized feedback, such as those implemented in this project, can increase adherence to the practice and reduce rates of Healthcare-Associated Infections (HAIs)<sup>28</sup>.

#### **Goal 6: To reduce the risk of falls and pressure injuries**

For goal 6, an active search was conducted, defining which station the students would visit weekly to determine whether the patient had a pressure injury (reviewed in the medical record and confirmed with the nurse responsible for the patient on the day of the assessment) and whether the patient had suffered a fall (asked verbally after defining the occurrence so that the patient understood the concept of

a fall).

If a fall was identified/reported, the students checked whether it had been reported in the VIGIHOSP notification system, through the hospital's internal system. Any professional could do this. After assessing the incident, if it had not been reported, the students would report it. Furthermore, during the searches, the completion of the Braden and Morse scales was also verified, serving as guidance for the outreach workers regarding the patient's condition and whether they were correctly identified in the medical record and by their bracelet. If there were discrepancies between the students' observations and what was documented on the bracelet or medical record, the situation was reported to the nurse responsible for the patient or the department, and an assessment was made for changes if necessary.

Although many attributed falls to something with extreme potential for harm, especially among the most critically ill and fragile patients, falls were only understood in their full magnitude if damage and injury occurred. Because the outreach workers went through a thorough process of reading theoretical references before the practical activities, they recognized the need to educate patients on the range of events that characterize a fall and its importance, even if the victim did not fall to the ground.

It is important to emphasize that students were often the first to learn of incidents involving no injuries, such as falls, because the patients themselves did not understand the reportable circumstance as relevant. All this reflection, stemming from direct immersion in the hospital environment, alongside the target audience for patient safety initiatives, solidified an extremely enriching experience, beyond academic certifications: critical thinking in care delivery.

Preventing falls and pressure injuries in hospital settings requires the integration of active surveillance, continuous risk assessment, and health education aimed at both professionals and patients. Studies highlight that the use of standardized scales, such as Braden and Morse, combined with targeted interventions based on identified risk factors, results in a reduction in these AEs<sup>29</sup>.

In this sense, the students' active participation in the active detection and reporting of falls, even those without injuries, helped raise awareness among healthcare staff about the importance of early detection and accurate reporting of these events, fostering the improvement of the institutional safety culture. Furthermore, the educational approach delivered directly to patients on the broader concept of falls proved essential for increasing the public's understanding of their vulnerability, also making them active agents in prevention<sup>30</sup>.

### Implications

This study's limitations include its experience in a single hospital, which limits the generalizability of the results, and its descriptive nature, based on student perceptions, which may involve subjectivity. Another limitation was the lack of a precise estimate of the number of individuals directly reached. Although it was not possible to accurately measure this reach, the records and observations made demonstrated the active involvement of participants and the positive impacts on patient safety practices. This experience reinforces the importance of adopting more systematic monitoring strategies in future editions of the project to expand the evaluation of results and improve the planning of outreach activities.

Nevertheless, the findings demonstrate important contributions to healthcare education, highlighting that student participation in outreach projects focused on patient safety contributes to the development of critical competencies and practices aligned with quality of care. The experiences reported reinforce the potential of outreach projects as a strategy for integrating teaching and service, encouraging the consolidation of a safety culture from undergraduate level onward.

## CONCLUSION

The students' participation in the outreach project enabled the development of patient safety-focused initiatives, such as educational activities, training support, participation in institutional campaigns, and collaboration in internal assessments. These initiatives were integrated into the routines of the Quality Management and Patient Safety department, fostering the connection between teaching and service. The practical experience allowed students to understand the application of safety protocols in the hospital setting and recognize the challenges of care management. From a training perspective, the outreach program contributed to the development of ethical, technical, and collaborative skills. For the service, the presence of the students fostered integration with professionals and management, fostering



an exchange of knowledge and experiences in line with the principles of safety culture and quality of healthcare.

Furthermore, the activities carried out contributed to the implementation of health education within the hospital, enriching the outreach workers' experience and expanding their perspective on the professionals' work in integrating with other areas, not only for patient care but also for prevention practices. It is clear that the outreach workers demonstrated their skills during the process of working in the sectors described. The work provided not only aptitude, but also knowledge and autonomy, in line with integration with professionals from a wide range of areas. It is clear that the outreach project in patient safety and quality of care is essential to ensuring the quality and safety of patient care. By promoting education, research, innovation, and collaboration, this project contributes to building a safer and more efficient healthcare system.

## REFERENCES

1. BRASIL. MINISTÉRIO DA SAÚDE. PORTARIA Nº 529, DE 1º DE ABRIL DE 2013. Institui o Programa Nacional de Segurança do Paciente (PNSP). Disponível em: [https://bvsms.saude.gov.br/bvs/saudelegis/gm/2013/prt0529\\_01\\_04\\_2013.html](https://bvsms.saude.gov.br/bvs/saudelegis/gm/2013/prt0529_01_04_2013.html). Acesso: 18 de fevereiro de 2023.
2. BRASIL. MINISTÉRIO DA SAÚDE. Programa Nacional de Segurança do Paciente (PNSP). Brasília - DF, 2022. Disponível em: <https://www.gov.br/saude/pt-br/acao-a-informacao/acoes-e-programas/pnsp>. Acesso: 20 de fevereiro de 2023.
3. MARQUES CA, ROSETTI KAG, PORTUGAL FB. Segurança do paciente em serviços de urgência e emergência: uma revisão integrativa da literatura. Revista Baiana de Saúde Pública, v. 45, n. 2, p. 172-194abr./jun, 2021. DOI: 10.22278/2318-2660.2021.v45.n2.a3405.
4. Ferreira Netto N, Paula VAA de, Carneiro M, Püschel VAA, Carbogim FC, Alvim ALS. Teaching-learning strategies on patient safety in higher education institutions: a scoping review. Rev Bras Enferm. 2025;78(1):e20240270. DOI: 10.1590/0034-7167-2024-0270.
5. VILLAR VCFL, DUARTE SCM, MARTINS M. Segurança do paciente no cuidado hospitalar: uma revisão sobre a perspectiva do paciente. Caderno de Saúde Pública, 36 (12) 18 Dez, 2020. DOI: <https://doi.org/10.1590/0102-311X00223019>.
6. Ministério da Educação. Resolução N° 035/14 - Aprova as Diretrizes da Política de Extensão Universitária da UFPI. [Internet]. Universidade Federal do Piauí. 2014. [citado 2025 jul. 8]. Disponível em: [https://ufpi.br/arquivos\\_download/arquivos/cchl/arquivos/files/resolucao%20n%20035-14%20CEPEX.pdf](https://ufpi.br/arquivos_download/arquivos/cchl/arquivos/files/resolucao%20n%20035-14%20CEPEX.pdf).
7. Brasil. Ministério da Saúde. Guia Curricular de Segurança do Paciente para a Formação dos Profissionais de Saúde. Brasília: Ministério da Saúde; 2014.
8. Organização das Nações Unidas (ONU). Transformando nosso mundo: a Agenda 2030 para o Desenvolvimento Sustentável [Internet]. Nova York: ONU; 2015 [citado em 2025 jul. 7]. Disponível em: <https://brasil.un.org/pt-br/sdgs>.
9. Brasil. Agência Nacional de Vigilância Sanitária (ANVISA). Nota Técnica Nº 01/2018-GVIMS/GGTES/ANVISA: Orientações gerais para higienização das mãos em serviços de saúde. Brasília: ANVISA; 2018.
10. BRASIL. MINISTÉRIO DA SAÚDE. RESOLUÇÃO Nº 466, DE 12 DE DEZEMBRO DE 2012. Brasília - DF, 2013. Disponível em: <https://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf>. Acesso: 20 de fevereiro de 2023.

11. Costa AL, Siman AG, Brito MJM. Identificação do paciente como prática segura: um desafio para a enfermagem. *Rev Bras Enferm.* 2020;73(6):e20180745. doi:10.1590/0034-7167-2018-0745.
12. Batista J, D’Innocenzo M. Envolvimento do paciente na sua própria identificação: estratégias para segurança. *Rev Gaúcha Enferm.* 2022;43:e20210485. doi:10.1590/1983-1447.2022.20210485.
13. Conselho Regional de Enfermagem de São Paulo (COREN-SP), Rede Brasileira de Enfermagem e Segurança do Paciente (REBRAENSP). Cartilha “10 passos para a segurança do paciente”. São Paulo: COREN-SP/REBRAENSP; 2023.
14. Oliveira JLC, Silva LMG, Fujita MS, Bellucci Júnior JA, Gabriel CS. Avaliação da qualidade da identificação do paciente: indicadores e fatores associados. *Texto Contexto Enferm.* 2021;30:e20200258. doi:10.1590/1980-265X-TCE-2020-0258.
15. Ferreira MA, Dias MV, Fonseca LMM, Couto DL, Silva RMM. Ações de extensão universitária como estratégia para promoção da segurança do paciente: relato de experiência. *Rev Enferm UFPE.* 2021;15(1):e244260.
16. Blazenaite A. Communication as a determinant of success in organizations. *Frontiers in Communication.* 2023. Disponível em: *Frontiers publica que a comunicação eficaz, em todos os níveis da organização, assegura estabilidade, coerência organizacional e alta performance institucional.*
17. Alves DF, Guedes HM, Avelar AFM, Pedreira MLG. Comunicação efetiva como estratégia para a segurança do paciente em unidades pediátricas. *Rev Esc Enferm USP.* 2020;54:e03636. doi:10.1590/S1980-220X2019020803636.
18. Oliveira JLC, Peres AM, Bellucci Júnior JA, Padilha EF, Rocha FLR. Práticas seguras de comunicação na transferência de cuidados entre unidades hospitalares. *Rev Gaúcha Enferm.* 2022;43:e20210216. doi:10.1590/1983-1447.2022.20210216.
19. Souza MBO, Silva FAM, Amorim AM, Oliveira MA. Treinamento in loco como ferramenta para aprimorar a comunicação e a notificação de incidentes. *Cogitare Enferm.* 2021;26:e72183. doi:10.5380/ce.v26i0.72183.
20. Villar VCFL, Duarte SCM, Martins M. Segurança do paciente no cuidado hospitalar: uma revisão sobre a perspectiva do paciente. *Cad. Saúde Pública*, 36 (12) 18, Dez, 2020. DOI: <https://doi.org/10.1590/0102-311X00223019>.
21. Rosa RS, Oliveira JLC, Matsuda LM, Évora YDM. Comunicação interprofissional na assistência hospitalar: percepção de profissionais de saúde. *Texto Contexto Enferm.* 2020;29:e20180342. doi:10.1590/1980-265X-TCE-2018-0342.
22. Santos LCS, Oliveira JLC, Fujita MS, Tonini NS, Matos TFR. Segurança do paciente na administração de medicamentos: revisão integrativa. *Enferm Foco.* 2021;12(1):147-52. doi:10.21675/2357-707X.2021.v12.n1.3769.
23. Ministério da Saúde (BR). Protocolo de segurança na prescrição, uso e administração de medicamentos. Brasília: ANVISA; 2021.
24. Castro PJA, Lima SBS, Oliveira RD, Barbosa PSS, Almeida MVS, Leite KNS. A importância da farmacovigilância na segurança do paciente: relato de experiência. *Rev Saúde Desenvol.* 2022;16(19):35-43. doi:10.18316/rsd.v16i19.40329.

25. Haynes AB, Weiser TG, Berry WR, Lipsitz SR, Breizat AH, Dellinger EP, et al. A surgical safety checklist to reduce morbidity and mortality in a global population. *N Engl J Med*. 2009;360(5):491-9. doi:10.1056/NEJMs0810119.
26. Paranaguá TT, Bezerra ALQ, Oliveira AC. Uso do checklist de cirurgia segura: percepções da equipe multiprofissional. *Rev Bras Enferm*. 2021;74(1):e20200135. doi:10.1590/0034-7167-2020-0135.
27. Santos SS, Souza PA, Tipple AFV. Adesão à higiene das mãos em unidades de terapia intensiva: revisão integrativa. *Rev Bras Enferm*. 2020;73(6):e20190684. doi:10.1590/0034-7167-2019-0684.
28. Allegranzi B, Gayet-Ageron A, Damani N, Bengaly L, McLaws ML, Moro ML, et al. Global implementation of WHO's multimodal strategy for improvement of hand hygiene: a quasi-experimental study. *Lancet Infect Dis*. 2013;13(10):843-51. doi:10.1016/S1473-3099(13)70163-4.
29. Borges EL, Ferraz AF, Carvalho REFL, Ramos JGR, Menezes HF, Chianca TCM. Intervenções para prevenção de lesões por pressão em adultos hospitalizados: revisão integrativa. *Rev Bras Enferm*. 2020;73(6):e20190449. doi:10.1590/0034-7167-2019-0449.
30. Santiago LM, Tadeu LFR, Maia CS, Andrade LZC. Percepção de pacientes e familiares sobre risco de queda: contribuições para segurança do paciente. *Rev Enferm UFPE*. 2021;15:e245123. doi:10.5205/1981-8963.2021.245123.

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#### CONFLICT OF INTEREST

There is no conflict of interest in this study.

#### DECLARATION OF USE OF ARTIFICIAL INTELLIGENCE FOR CONTENT GENERATION

No artificial intelligence was used to generate the manuscript's content at any stage of the article's writin.