# RIASE

REVISTA IBERO-AMERICANA DE SAÚDE E ENVELHECIMENTO REVISTA IBERO-AMERICANA DE SALUD Y ENVEJECIMIENTO

# CONTRIBUTIONS OF THE ISBAR TECHNIQUE TO NURSING CARE HANDOFF IN HOSPITALIZED PATIENTS: SCOPING REVIEW

CONTRIBUTOS DA TÉCNICA ISBAR

NA TRANSFERÊNCIA DE CUIDADOS EM ENFERMAGEM

NO DOENTE HOSPITALIZADO: SCOPING REVIEW

CONTRIBUCIONES DE LA TÉCNICA ISBAR EN LA PASE DE GUARDIA DE CUIDADOS DE ENFERMERÍA EN PACIENTES HOSPITALIZADOS: REVISIÓN SCOPING

Marta Sousa<sup>1</sup>, Mariana Santos Sousa<sup>1</sup>, Nelson Gonçalves<sup>1</sup>, Rita Mosa<sup>1</sup>, Vanessa Pinto<sup>1</sup>, Maria do Céu Marques<sup>2</sup>.

 <sup>1</sup>Unidade Local de Saúde do Algarve, Unidade de Faro, Portugal.
 <sup>2</sup>Universidade de Évora, Comprehensive Health Research Center (CHRC), Escola Superior de Enfermagem São João de Deus, Évora, Portugal.

Received/Recebido: 2025-10-16 Accepted/Aceite: 2025-12-08 Published/Publicado: 2025-12-28

 $DOI: \ http://dx.doi.org/10.60468/r.riase.2025.11(03).805.39-46$ 

©Authors retain the copyright of their articles, granting RIASE 2025 the right of first publication under the CC BY-NC license, and authorizing reuse by third parties in accordance with the terms of this license.

©Os autores retêm o copyright sobre seus artigos, concedendo à RIASE 2025 o direito de primeira publicação sob a licença CC BY-NC, e autorizando reuso por terceiros conforme os termos dessa licença.

VOL. 11 NO. 3 DECEMBER 2025

#### Abstract

Introduction: Health care transitions involve high risks, mainly due to communication failures among professionals. Transition moments are prone to errors, compromising patient safety. The adoption of effective methods, such as the ISBAR technique, enhances predictability, clarity, and continuity of care, reducing incidents and adverse events. Obiective: To man the contribution of the ISBAR technique in nursing care transitions for hospitalized patients. Methodology: In the B-On and PubMed databases, a review was conducted following the scoping review protocol and the PCC methodology of the Joanna Briggs Institute to formalize the research question and study objective. According to the PRISMA model, 7 articles were selected for further analysis Results: The use of the ISBAR technique, as a structured and standardized tool, facilitates communication by prioritizing clinical information, reducing errors, promoting critical thinking, decision-making, and teamwork, as well as supporting the integration of new professionals. Thus, a direct contribution to patient safety is observed. Conclusion: Scientific evidence shows that the use of a homogeneous communication technique is essential for the quality and continuity of care, patient safety, and consequently, successful health outcomes. However, its effective application requires training and guidance, through simulated practices or training sessions, to prevent failures and ensure uniformity in communication.

**Keywords:** Communication; Hospitals; Patient; Patient Handoff; Nursing.

#### Resumo

Introdução: A transferência de cuidados em saúde envolve riscos elevados, sobretudo por falhas de comunicação entre profissionais. Os momentos de transferência de cuidados são voláteis a erros comprometendo a segurança do doente. A adoção de métodos eficazes, como a técnica ISBAR, favorece previsibilidade, clareza e continuidade dos cuidados, reduzindo incidentes e eventos adversos Objetivo: Mapear o contributo da técnica ISBAR na transferência de cuidados em Enfermagem no doente hospitalizado. Metodologia: Nas bases de dados B-On e PubMed, foi realizada uma revisão que seguiu o protocolo  $\mathit{scoping}$   $\mathit{review},$ e a metodologia de PCC da Joanna Briggs Institute para formalização da questão de revisão e objetivo de estudo. Seguindo o modelo PRISMA, foram selecionados 7 artigos para posterior análise. Resultados: A utilização da técnica ISBAR, por ser uma ferramenta estruturada e padronizada, facilita a comunicação ao priorizar a informação clínica, reduzir erros, promover pensamento crítico, tomada de decisão e trabalho em equipa, além de facilitar a integração de novos profissionais. Desta forma, verifica-se uma contribuição direta para a segurança do doente. Conclusão: A evidência científica demonstra que o recurso a uma técnica homogénea de comunicação é preponderante para a qualidade da continuidade dos cuidados, segurança do doente e, consequentemente, sucesso dos resultados em saúde. Contudo, a sua aplicação eficaz exige treino e orientação, através de práticas simuladas ou sessões de formação, para prevenir falhas e assegurar uniformidade no discurso.

Palavras-chave: Comunicação; Doente Hospitalizado; Enfermagem; Hospitais; Transferência do Doente.

# Resumen

Introducción: La transición de cuidados en salud conlleva altos riesgos, principalmente por fallos de comunicación entre profesionales. Los momentos de transición son vulnerables a errores, comprometiendo la seguridad del paciente. La adopción de métodos eficaces, como la técnica ISBAR, favorece la previsibilidad, claridad v continuidad de los cuidados reduciendo incidentes y eventos adversos Objetivo: Mapear la contribución de la técnica ISBAR en la transición de cuidados de Enfermería. en el paciente hospitalizado. Metodología: En las bases de datos B-On v PubMed, se realizó una revisión siguiendo el protocolo de  $scoping\ review$  y la metodología PCC del Joanna Briggs Institute para formalizar la pregunta de investigación y el objetivo del estudio. Según el modelo PRISMA, se seleccionaron 7 artículos para posterior análisis. Resultados: El uso de la técnica ISBAR al ser una herramienta estructurada y estandarizada, facilita la comunicación al priorizar la información clínica. reducir errores, promover el pensamiento crítico, la toma de decisiones y el trabajo en equipo, además de facilitar la integración de nuevos profesionales. De esta forma, se observa una contribución directa a la seguridad del paciente. Conclusión: La evidencia científica demuestra que el uso de una técnica homogénea de comunicación es esencial para la calidad v continuidad de los cuidados, la seguridad del paciente y, en consecuencia, el éxito de los resultados en salud. No obstante, su aplicación eficaz requiere formación y orientación, a través de prácticas simuladas o sesiones de capacitación, para prevenir fallos y asegurar la uniformidad en el discurso.

**Descriptores:** Comunicación; Enfermería; Hospitales; Paciente; Pase de Guardia.

### Introduction

The transfer of information in healthcare has gained prominence worldwide, as it is intrinsically linked to communication among healthcare professionals, particularly nurses. However, care handover moments—such as shift changes or intra- and interhospital transfers—constitute highly complex and vulnerable situations, and are particularly susceptible to error<sup>(1)</sup>. These moments present incident and adverse event rates ranging from 6% to 70%, in which communication errors and the absence of an effective strategy play a central role<sup>(2)</sup>.

The impact of these failures is significant. Patient safety is an increasing priority and depends largely on the effectiveness of communication during care transitions<sup>(3)</sup>. A systematic review involving 46 studies estimates that 13.2% of recorded safety incidents among hospitalized patients result exclusively from communication failures between professionals<sup>(4)</sup>. Experienced nurses, particularly those working in critical care settings, report that a standardized communication technique enhances predictability, clarifies roles, and increases the safety of care delivery, contributing to more efficient organization of multidisciplinary teams<sup>(5)</sup>. Thus, it is essential for nurses to develop communication management skills and adopt methods that ensure the timely, accurate, complete, and clearly understood transmission of information to the receiver $^{(4,6)}$ .

In response to this challenge, the Department of Quality of the Directorate-General of Health (DGS) proposed, in 2017, the ISBAR technique as a standardized communication tool. This mnemonic guides professionals in identifying the patient and the interlocutor (I), describing the situation (S), presenting relevant clinical data (B), assessing clinical progression and care plans (A), and formulating recommendations (R)<sup>(6)</sup>. The ISBAR technique has been widely studied due to its advantages, particularly in improving the accuracy and clarity of transmitted information. It is well established that inadequate communication can prolong hospitalization and increase the likelihood of adverse events and poor health outcomes<sup>(5)</sup>.

Nevertheless, despite the availability of a structured tool, a knowledge gap persists. This review arises from the need to understand whether the adoption of a standardized tool—specifically, the ISBAR technique—contributes to improving the quality of clinical communication among nurses and, consequently, to reducing failures that compromise the continuity and safety of care.

#### Objective

To map the contribution of the ISBAR technique to nursing care handovers in hospitalized patients.

# Methods

This review article was conducted following a scoping review protocol methodology. According to the Joanna Briggs Institute, the PCC mnemonic (Participant, Concept, Context) was used to guide the formulation of the research question, with the Participant defined as hospitalized patients, the Concept as the ISBAR technique, and the Context as nursing care handover. The resulting research question was: "What are the contributions of the ISBAR technique to nursing care handovers in hospitalized patients?"

The search terms were validated through indexing in the DeCS/MeSH (Descriptors in Health Sciences/Medical Subject Headings) systems, resulting in the descriptors communication and patient handoff. Additionally, the term ISBAR was included, which, although not indexed in the aforementioned systems, was essential for the search. Inclusion criteria comprised peer-reviewed articles published in the last five years (2019–2024), published in academic journals, available in full text, and written in Portuguese or English.

In the B-On database (Online Knowledge Library), an initial total of 12 results was obtained using the descriptors combined with the Boolean operator AND. After applying the temporal filter, 11 studies remained; restricting the results to peer-reviewed articles yielded 10. Of these, 1 study was excluded due to duplication and 2 based on title screening,

leaving 7 studies. Abstract screening led to the exclusion of three additional studies, resulting in 4 articles that were read, analyzed, and included in the review.

In the PubMed database, the application of the same descriptors identified 22 studies, reduced to 9 after applying the temporal filter. Of these, 6 were excluded based on title screening, leaving 3, and 1 study was subsequently excluded following abstract screening, resulting in 2 articles included.

Additionally, a search of scientific journals relevant to the field yielded 1 further study, which was also included, resulting in a total of 7 records.

Overall, the review integrated 2 integrative literature reviews (levels of evidence 4.d and 5.b), 1 scoping review, 1 qualitative study (level of evidence 4), 1 qualitative case study (level of evidence 5.c), 1 quasi-experimental study (level of evidence 3.b), and 1 observational, descriptive, cross-sectional quantitative study (level of evidence 4.c). This allowed for a broad and diversified analysis of the contributions of the ISBAR technique to care handovers in hospitalized patients.

Figure 1 presents the PRISMA flowchart following the scoping review protocol methodology for article selection.

# Results

Following screening, reading, and methodological analysis of the selected articles, the main findings are presented in Table 1. These findings were selected to address the defined review question.



Figure 1: Adapted from the PRISMA flowchart, scoping review protocol methodology, for the selection of articles to be analyzed<sup>(12)</sup>.

Table 1: Study identification and main findings.			
Authors/Year	Study Type/JBI Analysis	Study Objective/Question	Results
Burgess, Diggele, Roberts & Mellis, $2020^{(1)}$	Integrative literature review/4.d $$	Highlight key elements of effective care handover and explore teaching techniques to ensure the ISBAR technique is used effectively.	Using the ISBAR technique ensures complete and accurate information transfer, minimizes time spent, increases peer confidence, promotes focus on the issue, and supports information documentation. However, correct use requires adequate training and education.
Figueiredo, Potra & Lucas, $2020^{(3)}$	Scoping review	To map and examine the scientific evidence related to the benefits of using the ISBAR technique.	Minimizes information loss, includes the family in care, increases patient safety, manages expectations, improves information transfer, and enhances confidence in provided care.
Haddeland, Marthinsen, Söderhamn, Flateland & Moi, $2022^{(5)}$	Qualitative study/4 $$	Explore how nurses and an esthesiologists in Intensive Care Units experience the ISBAR technique in clinical practice.	The ISBAR technique is important for a standardized and structured language among all team members. It is fundamental for reducing clinical errors due to poor communication, promoting patient safety, improving teamwork, and evaluating clinical cases.
Castro, Marques & Vaz, $2022^{(7)}$	Observational, descriptive, cross-sectional, quantitative study /4.c $$	Assess nurses' opinions on care handovers during shift changes in the emergency department and their knowledge about patient safety.	50% of the sample considers it important to revise the methods used during shift handovers; $78%$ believe this should be done using a standardized technique; $84%$ indicate ISBAR as the best technique.
Siqueira, Silva, Cypriano, Figueredo, Almeida & Marins, $2002^{(8)}$	Integrative literature review/5.b	Which tools are used to improve communication among ICU professionals?	ISBAR technique promotes effective and complete communication, quality of care, and patient safety, while reducing the incidence of errors and harm. Professionals should receive training and guidance on the tool.
Ferreira, Melo, Araujo, Gandra & Alves, $2023^{(9)}$	Qualitative case study/3 $$	Analyze care handovers (shift changes) performed by nursing staff in an urgent care unit.	Care handovers should be clear, objective, multidisciplinary, effective, competent, and empathetic. Using techniques such as ISBAR minimizes errors, difficulties, care discontinuity, and the use of confusing, unidirectional, inaccurate, incomplete, or irrelevant language.
Araujo, Almeida, Paula, Nepomuceno & Marins, $2020^{(10)}$	Quasi-experimental study/3.b	Analyze the implementation of the ISBAR technique during nursing shift handovers in an Intensive Care Unit.	After adopting the ISBAR technique, handover moments became richer in consistent and accurate information, and professionals demonstrated greater confidence in their communication.

# Discussion

Hospital clinical contexts are highly complex, constantly changing environments, rich in information for healthcare professionals. Nursing care handovers, particularly in hospital settings, represent a critical moment for the safety, continuity, and quality of patient care. The use of mnemonics, due to their structured format, constitutes one of the main communication tools for care handovers, making it essential that they are clearly defined<sup>(1,5,7–8)</sup>.

When questioned, 50% of Portuguese nurses considered it important to restructure shift handovers to achieve better health outcomes. Professionals often report that irrelevant information is transmitted during handovers, with omissions of important data, highlighting a lack of structured communication. This renders handover moments lengthy, unengaging, and potentially hazardous due to the poor quality of information. Professionals emphasize the need to adopt a standardized technique as a solution to these problems, with 84% indicating ISBAR technique as the appropriate method<sup>(7)</sup>.

In 2017, the DGS published Standard 001/2017 to standardize, nationally and across all levels of care, nursing handovers based on the ISBAR technique<sup>(6)</sup>. The ISBAR technique mnemonic was developed to provide a structured, standardized, and uniform communication tool for patient information transmission, aiming to prevent failures in care continuity that could compromise patient safety. It can be adopted across different hospital settings<sup>(1,5)</sup>.

The remaining analyzed articles were consistent with the findings of Castro and colleagues<sup>(7)</sup> and unanimously reported a set of benefits associated with the use of ISBAR in care handovers, highlighting its direct relationship with patient safety<sup>(1,5,7–8)</sup>.

Analysis of the articles revealed the main benefits of using this technique to include: achieving effective and complete communication, reducing errors and adverse events through language standardization, ensuring continuity of care<sup>(3,8)</sup>, optimizing and managing time during handovers<sup>(3,7)</sup>, increasing confidence in provided care, promoting peer trust and multidisciplinary respect and understanding, minimizing information loss, and ensuring accurate documenta-

tion<sup>(1,5,10)</sup>. Additional benefits include rapid decision-making, enhanced critical thinking, improved quality of care, and increased patient safety<sup>(8)</sup>.

In the context of critically ill patients, particularly in Emergency, Urgency, and Intensive Care Units, the studies by Yulianti and others<sup>(1)</sup> present a relevant divergence compared to other analyzed articles. This difference relates to the duration of handover moments. While Burgess, Diggele, Roberts, and Mellis<sup>(2)</sup> report a reduction in handover time, Yulianti and others<sup>(1)</sup> found no strong evidence in this regard. These authors argue that the main focus should be on the benefits associated with the quality of transmitted information, highlighting four evaluation indicators: information quality, interaction and support, efficiency, and patient involvement.

The ISBAR technique model encourages nurses to adopt a critical and reflective stance, particularly in the Assessment and Recommendation step, where professionals do not merely transmit data but also suggest actions and intervention needs. This aspect reinforces the nurse's role as an active participant in care management. Additionally, it promotes the humanization and patient-centeredness of care, as Identification is the first step of the mnemonic. By prioritizing patient identification and characterization, ISBAR technique reinforces individualized care, respects each person's uniqueness, and contributes to patient-centered handovers, rather than merely following administrative routines<sup>(1,3)</sup>.

The analysis confirmed the relevance of a structured information transmission technique to ensure standardization and uniformity in handovers, safeguarding continuity and quality of care. The reviewed authors report consistent results, identifying ISBAR technique as the most effective strategy to achieve these goals<sup>(1,3,5–10)</sup>. Pun<sup>(11)</sup> reinforces these findings, demonstrating significant improvements in both the quality of transmitted information and nurses' perception of received information in bilingual clinical contexts.

However, observed benefits occurred after specific training and simulated practice, which are essential for optimal use of the technique. The need for adequate training and guidance to prevent errors, heterogeneity in communication, and the transmission of incomplete, inaccurate, or irrelevant information remains a limitation to its widespread adoption. This training process can be conducted through simulation exercises or instructional sessions<sup>(1,8,11)</sup>.

# Conclusions

Nursing care handovers are an integral part of care delivery. Handovers are essential for continuity of care and must be conducted using effective, efficient, and standardized communication. This is achieved through the use of the ISBAR technique.

Structuring information via ISBAR technique reduces clinical errors associated with poor communication. As a standardized tool, ISBAR technique prioritizes clinical information, enhancing critical thinking, decision-making, and teamwork. It also facilitates the integration of new professionals into healthcare teams. When communication is ensured, the continuity and quality of nursing care, as well as patient safety, are guaranteed. The ISBAR technique has a positive impact on patient safety.

In Portugal, clinical guidelines already recommend the use of the ISBAR technique during care handovers. However, the level of knowledge and implementation across services varies, indicating the need for investment in training and monitoring. Although the DGS standard was published nearly a decade ago, some lack of awareness persists among healthcare teams, particularly nursing staff, resulting in some resistance to its application. Insufficient training may underlie this issue, making capacity-building essential to overcome this challenge.

This study contributes specific evidence on the applicability and effectiveness of ISBAR technique in critical care handovers—a context particularly vulnerable to communication failures and adverse events. By demonstrating that structured protocol use facilitates clear and complete transmission of clinical information, this work emphasizes the relevance of ISBAR technique as a patient safety tool

and highlights its practical utility in highly complex scenarios. It provides an innovative contribution by systematically evaluating the technique in critical care, offering insights to inform institutional policies, training programs, and future research aimed at improving continuity and quality of care.

# References

- 1. Burgess A, van Diggele C, Roberts C, Mellis C. Teaching clinical handover with ISBAR. BMC Med Educ. 2020 Dec 3;20(S2):459.
- 2. Yulianti L, Putra K, Supriati L, Utami Y, Djanatunisah A, Yniarsih W. Introduction situation background assessment recommendation (ISBAR) checklist to improve nurses' handover quality. Babali Nurs Res. 2025;6(2):282–98. Available from: https://doi.org/10.37363/bnr.2025.62476
- 3. Figueiredo ARE, Potra TMFS, Lucas PRMB. Transferência de cuidados de enfermagem: ISBAR na promoção da segurança dos doentes revisão scoping. Ámbitos. 2020;49:32–48. Available from: https://doi.org/10.12795/Ambitos.2020.i49.03
- 4. Keshtkar L, Bennett-Weston A, Khan AS, Mohan S, Jones M, Nockels K, et al. Impacts of communication type and quality on patient safety incidents. Ann Intern Med. 2025 May;178(5):687–700.
- 5. Haddeland K, Marthinsen GN, Söderhamn U, Flateland SMT, Moi EMB. Experiences of using the ISBAR tool after an intervention: a focus group study among critical care nurses and anaesthesiologists. Intensive Crit Care Nurs. 2022;70:103195. Available from: https://doi.org/10.1016/ j.iccn.2021.103195
- 6. Direção-Geral da Saúde. Norma n.º 001/2017: Comunicação eficaz na transferência de cuidados de saúde [Internet]. Lisboa: DGS; 2017 [cited 2024 October 19]. Available from: https://normas.dgs.min-saude.pt/wp-content/uploads/2019/10/comunicacao-eficaz-natransicao-de-cuidados-de-saude.pdf
- 7. Castro CMCS, Marques MCMP, Vaz CROT. Comunicação na transferência de cuidados de enfermagem em um serviço de emergência de Portugal. Cogitare Enferm. 2022;27:e81767. Available from: https://doi.org/10.5380/ce.v27i0.81767
- 8. Siqueira CP, Silva HS, Cypriano LB, Figueredo LN, Almeida LF, Marins AL. Communication tools among professionals in intensive care: an integrative review. Braz J Health Biomed Sci. 2022;21(1):75–82. Available from: https://doi.org/10.1055/s-0040-1712105
- 9. Ferreira BES, Lima Melo C, Milagres Araújo C, Gandra EC, Alves M. Transferência de cuidados: olhar e prática da enfermagem em um serviço de pronto atendimento. Saúde Coletiva (Barueri). 2023;13(87):12854–71. Available from: https://doi.org/10.36489/saudecoletiva.2023v13i87p12854-12871

- 10. Araujo RDM, Almeida LF, Paula VG, Nepomuceno RDM, Marins ALC. Aplicabilidade do técnica ISBAR em uma unidade de terapia intensiva adulto. Cogitare Enferm. 2020;25:e70858. Available from: https://doi.org/10.5380/ce.v25i0.70858
- 11. Pun J. Using a simulation-based approach to promote structured and interactive nursing clinical handover: a preand post-evaluation pilot study in bilingual Hong Kong. BMC Nurs. 2023;22(1):38. Available from: https://doi.org/:10.1186/s12912-023-01189-w
- 12. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. Syst Rev. 2021 Dec 29;10(1):89.

Corresponding Author/Autora Correspondente Marta Sousa — Unidade Local de Saúde do Algarve, Unidade de Faro, Portugal.

martasousa1999@gmail.com

Authors' contributions/Contributo dos Autores MS: Study coordination, study design, data collection, storage and analysis, review and discussion of results.

MSS: Study design, data collection, storage and analysis, review and discussion of results. NG: Study design, data collection, storage and analysis, review and discussion of results. RM: Data analysis, review and discussion of results

results. VP: Data analysis, review and discussion of results.

MM: Data analysis, review and discussion of results.

All authors have read and agreed with the published version of the manuscript.

Ethical Disclosures/Responsabilidades Éticas Conflicts of Interest: The authors have no conflicts of interest to declare. Financial Support: This work has not received any contribution, grant or scholarship. Provenance and Peer Review: Not commissioned; externally peer reviewed. Conflitos de Interesse: Os autores declararam não possuir conflitos de interesse. Suporte Financeiro: O presente trabalho não foi suportado por nenhum subsídio ou bolsa. Proveniência e Revisão por Pares: Não comissionado; revisão externa por pares.

©Authors retain the copyright of their articles, granting RIASE 2025 the right of first publication under the CC BY-NC license, and authorizing reuse by third parties in accordance with the terms of this license. ©Os autores retêm o copyright sobre seus artigos, concedendo à RIASE 2025 o direito de primeira publicação sob a licença CC BY-NC, e autorizando reuso por terceiros conforme os termos dessa licença.