



USE AND UPDATING OF STANDARD OPERATING PROCEDURES IN HOSPITAL NURSING: A REFLECTIVE STUDY*

USO E ATUALIZAÇÃO DOS PROCEDIMENTOS OPERACIONAIS PADRÃO NA ENFERMAGEM HOSPITALAR: UM ESTUDO REFLEXIVO

USO Y ACTUALIZACIÓN DE LOS PROCEDIMIENTOS OPERATIVOS ESTÁNDAR EN LA ENFERMERÍA HOSPITALARIA: UN ESTUDIO REFLEXIVO

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How to cite: Carneiro RR, Rodrigues MCS, Boução DMN. Use and updating of standard operating procedures in Hospital Nursing: a reflective study. Online Braz J Nurs. 2026;25(1):e20266840. <http://doi.org/10.17665/1676-4285.20266840>

RESUMO

Objetivo: Apresentar uma reflexão sobre os processos de uso e atualização dos procedimentos operacionais padrão na assistência de Enfermagem no contexto hospitalar. **Método:** Estudo de reflexão crítico-analítico, fundamentado em revisão de literatura científica e nas experiências profissionais dos autores, articulando evidências disponíveis e vivências acadêmicas e assistenciais na área da Enfermagem hospitalar. **Resultados:** A análise evidenciou que, embora os procedimentos operacionais padrão sejam reconhecidos como instrumentos essenciais para padronizar práticas assistenciais e promover a segurança do paciente, qualificando o cuidado, sua utilização no cotidiano ainda enfrenta barreiras estruturais, operacionais e culturais. Observou-se, também, a inexistência de processos sistematizados de atualização, o que pode comprometer a adequação contínua às melhores evidências científicas e à realidade das instituições de saúde. Além disso, identificaram-se fatores limitantes, como dificuldades de acesso aos protocolos, insuficiência de treinamentos, sobrecarga de trabalho e desinteresse profissional. **Conclusão:** A efetividade dos procedimentos operacionais padrão depende da criação de estratégias de acesso facilitado, da implementação de ações de educação permanente e da sistematização de processos de atualização participativa. Esta reflexão contribui ao propor recomendações dirigidas a diferentes atores envolvidos nos processos de sua utilização e atualização e, assim, promover práticas seguras e de qualidade na assistência de Enfermagem.

Descritores: Enfermagem; Segurança do Paciente; Protocolos Clínicos; Qualidade da Assistência à Saúde; Educação Permanente em Enfermagem.

ABSTRACT

Objective: To present a reflection on the processes of use and updating of standard operating procedures in Nursing care within the hospital context. **Method:** A critical-analytical reflection study, based on a scientific literature review and the authors' professional experiences, articulating available evidence with academic and clinical experiences in the field of hospital Nursing. **Results:** The analysis revealed that, although standard operating procedures are recognized as essential instruments for standardizing care practices, promoting patient safety, and improving the quality of care, their daily use still faces structural, operational, and cultural barriers. It was also observed that there is a lack of systematized updating processes, which may compromise continuous alignment with the best scientific evidence and the reality of healthcare institutions. Furthermore, limiting factors were identified, such as difficulties in accessing protocols, insufficient training, work overload, and professional disinterest. **Conclusion:** The effectiveness of standard operating procedures depends on the creation of easy-access strategies, the implementation of permanent education actions, and the systematization of participatory updating processes. This reflection contributes by proposing recommendations directed at different stakeholders involved in the use and updating processes, thereby promoting safe and high-quality practices in Nursing care.

Descriptors: Nursing; Patient Safety; Clinical Protocols; Quality of Health Care; Education, Nursing, Continuing.

RESUMEN

Objetivo: Presentar una reflexión sobre los procesos de uso y actualización de los procedimientos operativos estándar en la asistencia de Enfermería en el contexto hospitalario. **Método:** Estudio de reflexión crítico-analítico, basado en la revisión de la literatura científica y en las experiencias profesionales de los autores, articulando evidencias disponibles con vivencias académicas y asistenciales en Enfermería hospitalaria. **Resultados:** El análisis evidenció que, aunque los procedimientos operativos estándar son reconocidos como herramientas esenciales para estandarizar las prácticas y promover la seguridad del paciente y la calidad del cuidado, su uso cotidiano aún enfrenta barreras estructurales, operativas y culturales. Asimismo, se observó la ausencia de procesos sistematizados de actualización, lo que puede comprometer su adecuación a las mejores evidencias científicas y a las necesidades institucionales. Entre los factores limitantes se identificaron dificultades de acceso a los protocolos, insuficiente capacitación, sobrecarga laboral y bajo compromiso profesional. **Conclusión:** La efectividad de los procedimientos operativos estándar depende de estrategias que faciliten el acceso, fortalezcan la educación permanente y promuevan procesos participativos y continuos de actualización, favoreciendo prácticas seguras y de calidad en la asistencia de Enfermería.

Descritores: Enfermería; Seguridad del Paciente; Protocolos Clínicos; Calidad de la Atención de Salud; Educación Continua en Enfermería.

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What is already known:

- Standard Operating Procedures (SOPs) are fundamental instruments for standardizing practices and improving safety in the care provided and the quality of Nursing assistance.
- Despite being institutionalized, SOPs show low adherence in daily Nursing practice.

What this article adds:

- Highlights structural, operational, and cultural barriers that limit the effective use of SOPs.
- Identifies that there are no systematized models for the continuous updating of SOPs described in the literature.
- Proposes recommendations for a participatory and continuous model of SOP use and updating, offering practical and reflective support for the stakeholders involved in these processes.

INTRODUCTION

The standardization of practices constitutes a central element of healthcare management, especially in the hospital context, where diagnostic and therapeutic procedures predominate, alongside repetitive tasks of high care complexity performed by multiple professional categories⁽¹⁾. In this context, Standard Operating Procedures (SOPs) emerge as care and management instruments with an educational interface, designed to guide, systematize, and qualify professional practice, contributing to patient quality and safety, as well as the reduction of unwanted care variability.

SOPs are widely used instruments in hospital Nursing, playing a strategic role by describing, in a structured manner, the steps necessary for the safe execution of procedures, aligning with the best available scientific evidence, institutional regulations, and regulatory requirements^(2,3). As a health technology, it is observed that these instruments are more than normative documents; they integrate organizational processes involving continuous stages of creation, implementation, use, and updating, being directly influenced by the structural, operational, and cultural conditions of healthcare institutions.

Although widely institutionalized in hospital services, studies point to significant challenges regarding the adherence of Nursing professionals to the use of SOPs in their daily practice⁽⁴⁻⁸⁾. The analyzed literature highlights the existence of barriers that need to be debated and overcome, such as limitations in accessing documents, inadequacy between protocol content and available resources, work overload, weaknesses in permanent education processes, and cultural aspects related to resistance to change. However, rather than simply stating the "low utilization" of SOPs, there is a scarcity of studies that systematically evaluate the implementation and effective use of these instruments in daily care, limiting the understanding of their real impact on practice.

Another gap identified in the scientific production on this topic refers to the absence of systematized models for reviewing and updating SOPs—especially those incorporating participatory approaches from the creators and users of this tool and considering, in an integrated manner, emerging scientific evidence, professional expertise, and the operational reality of each institution. It is also noted that the updating of SOPs, when addressed in studies, is treated in an ad hoc and poorly substantiated manner, which may result in outdated protocols and/or those disconnected from real care needs.

Given this scenario, it becomes relevant to expand the reflection on the processes of use and updating of SOPs in hospital Nursing care beyond their normative conception, problematizing them as "living technologies" embedded in complex organizational systems. To this end, a critical and analytical analysis of the subject was developed, supported

by available scientific and normative literature, articulated with the academic experiences and professional expertise of the authors, seeking to contribute to the deepening of the debate and the construction of reflective guidelines that can provide support for safer care practices.

METHOD

This is a critical-analytical reflection study of a qualitative nature, based on the theoretical research developed in the lead author's doctoral dissertation, conducted between 2021 and 2025⁽⁹⁾. The analyzed publications were predominantly those used during the dissertation's theoretical framework, supplemented, when necessary, by additional relevant references for conceptual and contextual deepening of the theme. This four-year investigative journey enabled the identification of gaps and peculiarities in the literature regarding SOPs, which served as the theoretical and conceptual foundation for the reflections presented here. The interpretive analysis of national and international scientific and regulatory literature was complemented by the authors' professional expertise in the fields of patient safety, hospital Nursing care, and care management, allowing for the articulation between scientific evidence, practice regulations, and experiences accumulated in the academic and clinical fields.

The construction of this reflection is based on a selection of studies that followed criteria of scientific relevance, timeliness, and thematic pertinence. Priority was given to the inclusion of publications from the last five years; however, some references considered classics were retained due to their established relevance and pioneering role in the conceptual consolidation of SOPs and the standardization of Nursing work. The consulted sources include national and international databases recognized in the health field, as well as regulatory and institutional documents related to healthcare quality and patient safety.

The analysis consisted of: 1) in-depth and systematized reading of the selected materials, and 2) thematic organization of the content. From this process, it was possible to identify convergences, gaps, and difficulties related to the process of creation, use, and updating of SOPs, which gave rise to the reflective axes that structure the development of this article, allowing for a critical analysis of the potential, barriers, and challenges associated with the use of these instruments in clinical practice.

Thus, this article proposes a reflection on the use and updating of this health technology as a strategy to understand and enhance its contribution to daily practices, thereby promoting its continuous improvement.

Promoting quality of care and patient safety

Quality of health care and patient safety have established themselves, over the last decades, as permanent con-

cerns within healthcare institutions, gaining significant relevance for both users and professionals. These themes, increasingly present in discussions related to public health and hospital management, demand important transformations in the training^(8,11) and performance of healthcare workers, in order to align competencies, practices, and available resources with contemporary needs⁽¹⁰⁻¹²⁾.

In this sense, the quality of health care can be understood as the result of the integration between updated scientific knowledge, the appropriate use of health technologies, and organizational conditions favorable to professional practice. Patient safety, in turn, refers to a set of actions that go beyond the technical dimension of care, encompassing cultures (of safety and quality), work processes, procedures, behaviors, technologies, permanent education, and safe care environments. It is, therefore, a collective and systemic construct that, when implemented consistently and sustainably, reduces risks and prevents avoidable harm. These actions make healthcare errors less likely or, furthermore, mitigate their impacts when an adverse event occurs⁽¹²⁻¹³⁾.

To achieve high standards of quality and safety, the use of tools that guide and standardize hospital professional practice becomes essential. In this context, quality certification programs (widely sought after by institutions) recognize the development of work manuals as an essential requirement. The nomenclature of these instruments may vary according to the source consulted: manuals of routines, norms, procedures, techniques, processes, or even standard operating procedures. Regardless of the name adopted, their central function is to standardize and guide actions to minimize the risk of adverse events, promoting quality, optimizing resources, and contributing to patient safety and satisfaction.

Thus, SOPs stand out as a fundamental instrument for the provision of systematized Nursing care. When articulated with the Nursing Process, they allow for the organization of professional work regarding method, the distribution of responsibilities, and the use of institutionally available resources.

In summary, the standardization of processes, procedures, and practices—grounded in scientific evidence and operationalized through protocols, checklists, guidelines, and regulations—is widely recognized in the literature as an essential component for risk management, the prevention of adverse events, and the improvement of patient safety⁽¹³⁾. However, the literature also points out that the formal existence of SOPs, in itself, does not guarantee improvements in care quality and patient safety; their effectiveness is, therefore, conditioned by institutional, organizational, and cultural factors, such as the availability of resources compatible with what is described in these tools, easy access to documents, integration with permanent education processes, and team engagement.

Scientific production on the use of standard operating procedures

The scientific production regarding SOPs in the field of Nursing reveals a field in consolidation. Although they are widely used in contemporary healthcare services, their origin lies in Management Science, having been developed in the 1940s as tools for standardizing industrial processes. Thus, they established themselves as central instruments of Total Quality Management (TQM), aimed at excellence in products, services, and procedures⁽³⁾.

Within the scope of Nursing, however, there are no precise records of when these resources were incorporated into the clinical field. Classic authors in the field of Administration and Nursing Management, such as Idalberto Chiavenato and Paulina Kurcgant, already described the use of manuals and routines as work organization strategies between the 1980s and 1990s, but also associated them with the bureaucratization of practice. This trajectory contributed to SOPs sometimes being perceived more as administrative requirements than as support tools for clinical practice—an outlook that still impacts their critical appropriation by Nursing teams today.

In a synthetic and interpretive manner, studies^(1,2,4-13) indicate that SOPs must essentially possess five key characteristics: they must be accessible, clear, explanatory, updated, and coherent with the institutional reality regarding the availability of resources and supplies.

Advancing to conceptual analysis, it is observed that scientific literature presents different classifications for SOPs, understanding them as care, managerial, educational, or care-educational technologies, all with the intent of adapting standardized procedures to various application contexts⁽¹⁴⁾. Regardless of the nomenclature, there is a consensus that understanding their processes of creation, implementation, and—most importantly—updating is essential for improving Nursing practice and education. Thus, SOPs should be understood not as an end in themselves, but as a support resource for work and teaching, capable of enhancing safety without replacing the effectiveness of human interaction^(8,9,14,15).

From this perspective, studies^(4-8,13,16,17) using different methodological approaches show that the use of SOPs in Nursing still faces significant obstacles that compromise their effectiveness and daily adoption. These barriers can be organized into three dimensions: structural, operational, and cultural, as summarized in Chart 1, which facilitates a clearer and more systematized view of the main identified barriers.

Chart 1 – Main barriers to the use of standard operating procedures. Brasília, DF, Brazil, 2026

Dimensions	Main Barriers
Structural	Limited access to documents (physical or digital); unavailability of materials described in the SOPs; lack of appropriate equipment.
Operational	Lack of time for consultation; inadequate professional staffing; work overload; outdated content; absence of specific training (insufficient or absent permanent education).
Cultural	Professional disinterest; maintenance of outdated practices; lack of awareness regarding the importance of standardization; lack of management incentives; preference for easier methods over correct ones.

Source: prepared by the authors, 2026.

Thus, as summarized in Chart 1, it is understood that although SOPs are recognized as fundamental instruments for the standardization and safety of Nursing care, their effective implementation and utilization still face diverse barriers. Overcoming these challenges requires not only constant content updates and alignment with institutional reality

but also the development of awareness strategies, effective permanent education actions, and professional integration. This ensures that procedures cease to be merely formal documents (required by regulatory bodies and accreditation companies) and become "living tools" in daily care, constructed in a collaborative manner.

Review and updating processes of standard operating procedures

The analysis of different studies and methodologies regarding the production of knowledge on SOPs^(1-11,14,17) allows for the identification that these instruments generally follow a cycle composed of three major stages: creation, implementation, and review/updating. Although this division is not formally theorized in the literature, it proves useful for reflecting on the theme and understanding the relevant aspects existing in each phase.

In the creation stage, it is observed that most published research describes a path composed of two central phases: (a) the identification of a specific need that justifies the creation of an SOP; and (b) the construction and methodological evaluation of the instrument. This stage is generally the most detailed in the literature, highlighting a concern with academic rigor during creation, but also revealing an imbalance in the attention given to the subsequent stages of the SOP lifecycle.

The implementation stage, in turn, is frequently addressed superficially in the consulted research. Many studies limit themselves to stating that the SOP was implemented and made available to the care team, without clarifying how this process was carried out or indicating whether there was follow-up to evaluate adherence or content understanding through indicators. Few studies describe the development of educational actions or experimental analyses to verify the effectiveness of the SOP against evidence-based practices. This lack of detail raises questions about the real impact of implementation and potential gaps between the institutionalized protocol and its daily clinical application.

Finally, the review and updating of SOPs emerges as the least explored stage in the studies. Only two research papers^(5,11) mention a timeframe for updating these instruments, ranging from six months to one year, "as needed" or "when there is a change in technique," with a maximum limit of two years. Furthermore, they do not provide justifications for the choice of these intervals, nor do they present a systematized model to operationalize this process. This lack of systematization may result in the persistence of outdated protocols that are inconsistent with the best evidence or obsolete in the face of technological and organizational changes.

Reflecting on this scenario leads us to the understanding that for safe and high-quality practice, one must use the best and most current scientific information available and combine it with professional expertise and the reality of each institution. Thus, updating SOPs should not be treated as an ad hoc or bureaucratic task, but as a continuous and dynamic cycle, where what was initially implemented—even if methodologically rigorous—must keep pace with the constant advancements in health sciences. This updating cycle must be systematized, dynamic, and participatory, with well-defined phases, and should not take too long to complete, even if the SOP was previously created and evaluated by a reliable

methodology.

Recommendations for practice

Based on the critical reflection presented throughout this study and considering the need to overcome the identified structural, operational, and cultural barriers, aiming to qualify the development, updating, and application of SOPs in hospital Nursing care, a set of recommendations is proposed for the various stakeholders involved in the different phases of the SOP lifecycle. These recommendations were developed with the purpose of strengthening the effectiveness of these instruments as support technologies for clinical practice, care management, and permanent education, moving beyond the logic of individual accountability and recognizing the centrality of organizational conditions for the daily use of SOPs.

The recommendations were organized into two complementary axes: use and updating. Each axis addresses managers and institutional leaders, Nursing teams, and stakeholders linked to professional training and permanent education, as summarized in Chart 2.

Regarding the use of SOPs, the strategic role and responsibility of managers and leaders in providing favorable structural resources for incorporating these instruments into daily care are emphasized. Recommendations for the Nursing team, in turn, are directed toward active participation in SOP-related processes as a way to recognize their practical expertise in improving protocols. Finally, within the scope of training and permanent education, educators and preceptors play a fundamental role in the consolidation and effective use of SOPs, promoting synergy between teaching and clinical practice.

In relation to updating SOPs, the need to institutionalize systematized, periodic, and participatory processes is underscored. The creation of interdisciplinary review groups is recommended, integrating managers, staff nurses, nursing technicians, educators, preceptors, and representatives from the Patient Safety and Quality Nuclei (PSQN). These groups must have the time and resources to conduct proper SOP review activities, preventing updates from being carried out in an ad hoc manner, without incentives, or disconnected from the work routine.

In this regard, the frequency of updates should be flexible and consider institutional specificities, the nature of the procedure, and the need to incorporate new scientific and technological evidence. Furthermore, it must be ensured that the updating process is continuous, responsive to changes in practice, and supported by clear institutional workflows, with shared responsibilities among the stakeholders involved and the established interdisciplinary groups.

Thus, the implementation of these recommendations in a collaborative manner among managers, the care team, and educators can reveal the transformative potential of SOPs—elevating them from mere formal documents to dynamic, updated tools incorporated into daily care. This transformation, therefore, constitutes a fundamental step toward consolidating a patient safety culture, in addition to promoting the continuous qualification of the Nursing team through the strengthening of permanent education.

Chart 2 – Recommendations for improving the use and updating of standard operating procedures in Nursing care. Brasília, DF, Brazil, 2026

Stakeholders	Recommendations	
	<i>Use</i>	<i>Updating</i>
Managers and Leaders	<ul style="list-style-type: none"> • Ensure easy and intuitive access to SOPs (through digital platforms, mobile apps, or other user-friendly means). • Ensure that the physical structure and available supplies are aligned with what is described in the SOPs. • Include SOP utilization as a performance indicator for the team and care quality. 	<ul style="list-style-type: none"> • Establish a systematized process for mandatory periodic review, with a timeframe suited to the institutional reality. • Create a Multidisciplinary Committee including nurses, technicians, preceptors, and educators for joint review with the PSQN. • Allocate time and resources within the workday for updating activities (or offer other types of temporal or financial compensation).
Nursing Team	<ul style="list-style-type: none"> • Actively participate in training and capacity-building on SOPs, remaining open to new evidence-based practices. • Incorporate SOP consultation into the daily planning of the care to be provided. • Report operational difficulties and suggestions for improvements to managers and the PSQN. 	<ul style="list-style-type: none"> • Participate in the multidisciplinary review committee, contributing with daily practical experience. • Suggest SOP reviews whenever new evidence or changes in practice are identified.
Educators and Preceptors	<ul style="list-style-type: none"> • Include the critical discussion of SOPs in the training curriculum and encourage their consultation during practical activities. • Use real cases based on the institution's SOPs for teaching. • Emphasize the use of SOPs for Patient Safety and the enhancement of care quality. 	<ul style="list-style-type: none"> • Contribute to the updating committee and the PSQN, aligning recent scientific evidence with institutional practice. • Assist in the adaptation of SOPs to align scientific knowledge with clear and accessible language in the revised documents.

Legend: SOPs (Standard Operating Procedures); PSQN (Patient Safety and Quality Nuclei).

Source: prepared by the authors, 2026.

CONCLUSION

In light of the practical recommendations presented, which articulate the actions of managers, the care team, and educators, it is recognized that the SOP has established itself across different Nursing practice settings, presenting well-defined stages of design and creation supported by consistent methodological processes. However, its implementation process still faces barriers among teams, and there is no consolidated, systematized updating method that truly ensures practice is aligned with the best available evidence.

The scarcity of studies on the implementation and effective use of SOPs in daily care, as evidenced by the literature analysis, points to the need to expand access to institutionalized documents and promote the active participation of stakeholders at each stage of their lifecycle, including the updating phase. Therefore, the development of a systematized review and updating model is proposed, incorporating the participation of nurses, nursing technicians, preceptors, and students to ensure that the protocol reflects both the most recent scientific knowledge and the operational reality of institutions. The effectiveness of this model, as outlined, depends on an active and participatory stance from the stakeholders involved, where the demands of clinical practice directly inform the revision of SOPs.

Furthermore, the importance of organizations responsibly strengthening permanent education actions and investing in the creation of accessible and interactive technologies is reinforced, as these are capable of bringing professionals and students closer to patient safety and quality nuclei. Such strategies can favor team engagement, optimize SOP implementation, and consolidate safer, more effective, and sustainable care practices over time. The integrated implementation of the proposed recommendations establishes a viable path for transforming SOPs from static documents into dynamic tools aligned with the team's needs.

However, as a critical-analytical reflection, this study does not present empirical results nor does it allow for generalizations to different care contexts. Its construction was based on the available scientific literature and the authors' experience, which may imply interpretative biases. Additionally, the lack of studies systematizing the updating processes of standard operating procedures—a gap identified in the literature—limits the comparison between different proposals, should they exist. Thus, these aspects reinforce the need for future empirical investigations to evaluate implementation and updating strategies in real-world Nursing practice scenarios.

This study, therefore, contributes by highlighting practical and conceptual gaps in the implementation and updating of SOPs, proposing reflective guidelines that articulate scientific evidence and professional experience. The reflections and recommendations presented provide support for managers in creating institutional updating workflows, for educators in including the topic in training curricula, and for Nursing professionals in strengthening evidence-based practice. Thus, the study expands the debate on the systematization of SOPs and points to concrete paths for improving the quality of Nursing care and patient safety.

*This article was extracted from the doctoral thesis entitled "Mobile Application and Updating Diagram for Standard Operating Procedures in Nursing: technological solutions based on heuristic usability and participatory design", submitted to the Graduate Program in Nursing at the University of Brasília, Brasília, DF, Brazil, in 2025.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

FUNDING

This study was supported by the Graduate Program in

Nursing at the University of Brasília – Brazil – Internal Call No. 001/2024 [SEI Process No. 23106.067023/2024-05].

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Study conception: Carneiro RR.

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Data interpretation: Carneiro RR, Rodrigues MCS, Boução DMN.

All authors are responsible for the textual writing and critical review of the intellectual content, for the final published version, and for all ethical, legal, and scientific aspects related to the accuracy and integrity of the study.



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