# Choosing Wisely® recommendations for the treatment of infections in hard-to-heal wounds: experience report


## ABSTRACT

**Objective** To report on the experience of developing and validating Choosing Wisely® recommendations for the treatment of infections in hard-to-heal wounds.

**Method** This is an experience report developed from a literature review, preparation of recommendations was based on the best evidence and validation by expert judges using the Delphi technique.

**Results** Five recommendations were developed on practices to be avoided in the treatment of these wounds. The process involved the participation of specialists from different regions of Brazil, generating unprecedented material for nursing and stoma therapy.

**Conclusion** The experience highlighted the relevance of a collaborative, evidence-based process to support safe, cost-effective clinical practices aligned with the Choosing Wisely® campaign.



**Keywords** choosing wisely, patient safety, good clinical practices, nursing, experience report.

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## INTRODUCTION

Skin lesions resulting from different etiologies—such as trauma, intentional causes or surgical procedures—are characterised by the discontinuity of the epithelial tissue and impairment of its protective function.[1]Among these, hard-to-heal wounds pose a clinical and social challenge, with economic, emotional and care impacts for patients, family members and healthcare providers. In addition to secretions and odors, they require daily care, frequent consultations and follow-up by qualified teams, which reinforces the need for specialised and decisive care.[2]

The treatment of these wounds is a complex process that requires careful clinical evaluation, continuous monitoring and appropriate selection of dressings. Although there are several supplies available for cleaning, debridement, exudate control and healing stimulation, the choice should consider not only the characteristics of the wound but also the particularities of the patient, including clinical history and external factors that influence the healing process.[2,3,4,5]

Although industrialised dressings are highly effective, their inappropriate use can significantly increase healthcare costs. In this sense, cost monitoring and health auditing become essential tools for planning and management, contributing to the sustainability of services and data-based decision-making.[6]

Given this scenario, the Choosing Wisely campaign, created in 2012 in the United States, proposed a paradigm shift by encouraging healthcare providers to rethink their practices, avoiding unnecessary interventions and favoring effective, safe and cost-effective practices.[7,8] The initiative, which has been gaining global support, aims to develop lists of recommendations on procedures and treatments that should be avoided or minimised, contributing to reducing waste, promoting patient safety, and improving healthcare.

In this context, it is relevant to report on the experience of developing Choosing Wisely® recommendations applied to the treatment of infections in hard-to-heal wounds, considering their originality and potential impact on clinical nursing practice and enterostomal therapy.

## METHOD

This is an experience report on the process of developing Choosing Wisely® recommendations to treat infections


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located in hard-to-heal wounds, developed between April 2022 and August 2023. This type of report contributes to the improvement of knowledge by describing an experience and allowing for a critical-reflective analysis supported by a theoretical-methodological framework.

In the field of health, Choosing Wisely statements serve as evidence-based recommendations that guide healthcare providers, managers and patients on which tests, treatments, behaviors or procedures should not be performed routinely or indiscriminately because they do not provide proven benefits for most patients, may cause harm, generate excessive costs without a positive impact on health and contribute to avoiding the waste of resources that could be applied to more effective care.

To create a Choosing Wisely list, a medical or specialty society should lead the process, form a group of experts to propose evidence-based recommendations on what not to do, and use the Delphi Method and voting to refine and select the best options. The final recommendations should be simple, written in a language accessible to laypeople, and include supporting text with justification, exceptions and alternatives, maintaining a focus on what is unnecessary and potentially harmful. The process requires transparency, multidisciplinary participation, and a patient-centered approach, with final validation of the list by a vote of the specialty's members.

In this context, this product was developed through the Brazilian Association of Enterostomal Therapy (SOBEST®) and ambassadors of Choosing Wisely® Brazil.

## DESCRIPTION OF THE EXPERIENCE

Initially, the researchers established a partnership and received support from the Brazilian Association of Enterostomal Therapy (SOBEST) to construct and validate the Choosing Wisely statements in accordance with the recommendation of Choosing Wisely International.

After that, contact was made with representatives of the campaign in Brazil to better understand the preparation of statements in accordance with the campaign proposal. The study was developed in three stages: integrative literature review, construction of statements, and validation of content appearance.

The first stage consisted of an integrative review of the literature, conducted in national and international databases, with the aim of identifying non-recommended practices in the treatment of hard-to-heal wounds with localised infection. The review followed the assumptions of Evidence-Based Practice[9] and used the PICO strategy[10] to formulate the guiding question: "What practices are not recommended for the treatment of hard-to-heal wounds in adults or the elderly?" The process involved the careful selection of articles, analysis of levels of evidence[11] and categorisation, according to previously defined inclusion and exclusion criteria.

During the integrative literature review, a total of 4,504 articles was searched within international and national databases, distributed as follows: Medline via Pubmed (n=1,536); LILACS (n=67); BDENF (n=19); CINAHL (n=34); Web of Science (n=1244); SCOPUS (n=1604). 1997 studies were found pertaining to non-recommended practices in the treatment of hard-to-heal wounds with localised infection. Of these, 1919 articles were excluded because they did not answer the guiding question, leaving 78 eligible studies.

In the first screening, 78 studies were preselected, of which 59 were excluded because the texts were incomplete, were in vitro studies, or case studies. Thus, the sample consisted of 19 studies.

The literature review identified evidence on recommended practices for the treatment of infected hard-to-heal wounds regarding approaches considered effective for wound treatment. However, it should be noted that most studies are literature reviews and that these practices are recommended and effective according to the country where they were developed.

Based on this analysis, it was possible to list in the studies those practices that are not recommended because they are unnecessary. In the second stage, the Choosing Wisely statements were constructed based on the findings of the integrative review and in accordance with international recommendations.

To this end, the criteria of relevance, objectivity, and clarity proposed by Pasquali (2010) were observed.[12] Enterostomal therapy specialists contributed to this process. Also in this stage, to meet the recommendations of the Choosing Wisely campaign, the following steps were taken: informing the community of interest; defining best practices; recruiting experts for evaluation; consulting the community for their opinion on the statements.

The third stage consisted of content validation and development of the statements, carried out using the Delphi technique, which consists of two rounds of evaluation to reach consensus among expert judges.[13] To ensure methodological robustness, 25 judges with proven qualifications and experience in enterostomal therapy and wound treatment were invited, including an official member of the Choosing Wisely campaign in Brazil. The selection was made via the Lattes Platform, considering criteria such as qualifications, scientific production and experience in the field.

Data collection was conducted using electronic forms sent to judges after formal acceptance and signing of the Free and Informed Consent Form. Each statement was evaluated for relevance, objectivity and clarity on a Likert scale. The results were analysed using the Content Validity Index (CVI), with a cutoff point of ≥0.8, and the Kappa Coefficient, which measures agreement between evaluators.

The research was approved by a Research Ethics Committee at the Federal University of São João Del-Rei, registered with the Brazilian National Research Commission, and complied with the Declaration of Helsinki.

## RESULTS

It was possible to construct and validate five statements for the treatment of localised infections in hard-to-heal wounds after two rounds of evaluation by the judges. Table 1 shows the CVI for each criterion evaluated in relation to the domains that comprise the non-recommended practices related to localised infection in hard-to-heal wounds in the Delphi I and II evaluation rounds.

In the first round (Delphi I) with a CVI of 0.64, the instrument was not considered valid, so adjustments had to be made based on the judges' suggestions to improve the instrument. After the relevant modifications, the instrument underwent a second round of evaluation (Delphi II). At the end of the second round of evaluation, all criteria evaluated reached a CVI of 0.84 and a ρ-value greater than 0.05.

Kappa statistics aim to assess whether two or more judges agree in the evaluation of a set. Regarding Choosing Wisely, 25 judges answered in the first round. There will be a single Kappa test for Delphi 1 with a value of 0.1174 (p=0.00012) and a single Kappa test for Delphi 2 with a value of 0.0308 (p=0.301). Therefore, the items in Delphi I have a significant Kappa (p<0.05) and Delphi II does not (p>0.05). This is due to the fact that the number of judges who responded in the second round was lower than in the first round.

*Table 1. Choosing Wisely content validation process for infected hard-to-heal wounds, Divinópolis, MG, Brazil, 2023*

| Statements for validation | Delph I | | Delph II | |
|---|---|---|---|---|
| | CVIi | CVIt | CVIi | CVIt |
| **Statement 01:** Do not use products or dressings with antimicrobial action without a clinical diagnosis of localised infection. | 0.8 | 0.64 | | 0.84 |
| **Statement 2:** Do not use antiseptic solutions to clean wounds without local signs of infection. | 0.4 | | 0.8 | |
| **Statement 3:** Do not collect microbiological samples from wounds without signs of disseminated or systemic infection. | 0.72 | | 1 | |
| **Statement 4:** Do not use antimicrobial dressings for prolonged periods. | 0.8 | | | |
| **Statement 5:** Do not use systemic antibiotics to treat localised infections. | 0.5 | | 0.8 | |

At the end of the process, five statements considered as non-recommended practices for the treatment of localised infections in hard-to-heal wounds were validated. For each statement, a justification was provided based on scientific evidence. The statements were forwarded to the ambassadors of Choosing Wisely® Brazil for organisation in accordance with international standards and were translated into English and Spanish by Choosing Wisely® Brazil for dissemination (Figure 1).

## DISCUSSION

Recommendations on procedures that should be avoided or minimised in healthcare aim to reduce overdiagnosis and overtreatment of conditions that do not harm the patient.[14] Biases in scientific research and marketing strategies by pharmaceutical and technology industries generate uncertainty about therapeutic approaches, reinforcing a culture that associates quality of care with the number of tests performed, procedures followed and medications administered.[15]

The Choosing Wisely® statements on infections in hard-to-heal wounds represent the first global recommendation in enterostomal therapy translated into English and Spanish. Protocols regarding good and non-recommended practice guide clinical conduct, but do not replace the individualised assessment of each patient's needs and risks.[16]

This study sought to reduce unnecessary actions in the management of complex wound infections, rationalise resources and provide a basis for interprofessional discussion. Choosing Wisely® recommendations are evidence-based, developed by professionals with a patient-centered vision and focused on equity, quality and safety, ensuring transparency in the guidelines.

In clinical practice, therapies of uncertain or proven limited efficacy are used, as well as diagnostic and prognostic tests of questionable clinical value, favoring overdiagnosis and

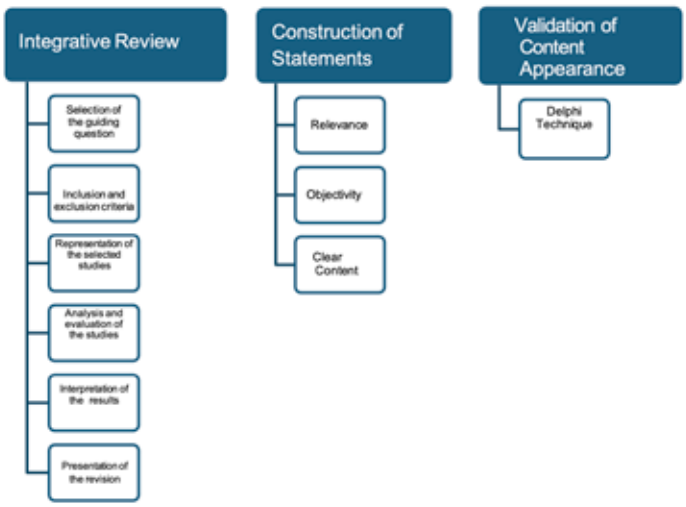


*Figure 1. Stages of construction and validation of Choosing Wisely statements for the treatment of hard-to-heal wounds*

*Figure 2. Choosing Wisely® statements for the treatment of localised infections in hard-to-heal wounds*

unnecessary treatments. Enterostomal therapy involves procedures, technologies and tests that can facilitate care or generate waste, depending on knowledge of how, when and where they are applied. They should always based on patient needs and scientific evidence.

## FINAL CONSIDERATIONS

Five statements were developed and validated in the Choosing Wisely® model, targeting practices not recommended in the management of infections located in hard-to-heal wounds. These statements arise from a critical analysis of clinical practice, identifying behaviours that should be avoided or minimised, due to either the absence of robust scientific evidence proving their effectiveness or due to the risk of unnecessarily increasing treatment costs and the burden on health services.

The study offers a broad and reflective view of clinical practice, encouraging healthcare providers to rethink procedures, tests and interventions of questionable clinical value. In addition, it promotes the adoption of evidence-based practices focused on patient safety, resource rationalisation and therapeutic efficiency, contributing to more ethical, sustainable care centered on the individual needs of each patient.

## CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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