REUFPI
Revista de Enfermagem da UFPI
ISSN 2238-7234

Experience report

# Care-educational manual on transitional care during the postoperative period for people with diabetes mellitus: an experience report

*Manual cuidativo-educacional sobre os cuidados de transição no pós-operatório de pessoas com diabetes mellitus: relato de experiência*

*Manual educativo-asistencial sobre los cuidados de transición en el período postoperatorio de personas con diabetes mellitus: relato de experiencia*

Cléton Salbego[1], Tierle Kosloski Ramos[2], Silvana Bastos Cogo[3], Robson Giovani Paes[4], Patrícia Bitencourt Toscani Greco[5], Graciele Torezan[6], Ayalla Espelocin da Silva[2]

**Corresponding author:**
Cléton Salbego
E-mail: cleton.s@ufms.br

[1]Federal University of Mato Grosso do Sul. Coxim, Mato Grosso do Sul, Brazil.
[2]São Sepé Municipal Government. São Sepé, Rio Grande do Sul, Brazil.
[3]Federal University of Santa Maria. Santa Maria, Rio Grande do Sul, Brazil.
[4]Regional Nursing Council. Curitiba, Paraná, Brazil.
[5]Federal University of Rio Grande. Rio Grande, Rio Grande do Sul, Brazil. Serra Gaúcha
[6]University Center. Caxias do Sul, Rio Grande do Sul, Brazil.

**How to cite this article**: Salbego C, Ramos TK, Cogo SB, Paes RG, Greco PBT, Torezan G, Silva AE. Care-educational manual on transitional care during the postoperative period for people with diabetes mellitus: an experience report. Rev. enferm. UFPI. 2026 [Cited: ano mês abreviado dia];15: e7048. DOI: 10.26694/reufpi.v15i1.7048

**Resumo**

**Objective:** To report the experience of developing a care-educational manual on transitional care during the postoperative period for individuals with diabetes mellitus. **Methods:** This is an experience report on the development of a care-educational technology, guided by the *Plan* and *Do* stages of the *Plan-Do-Check-Act* continuous improvement cycle, conducted between August and December 2024. During the *Plan* stage, scientific evidence and recommendations related to perioperative care, self-care, and continuity of care following hospital discharge were identified. During the *Do* stage, a working group comprising two undergraduate nursing students and a nurse with experience in developing educational technologies selected, organized, and adapted the content and defined the textual, visual, and graphic elements of the manual. **Results:** A 33-page manual was developed and organized into 12 topics addressing surgical wounds, wound healing, signs of infection, personal hygiene, nutrition, self-esteem, self-care, glycemic control, and multidisciplinary follow-up. The material included illustrations, questions and answers, tools for recording blood glucose levels and medications, space for notes, and recreational activities. **Conclusion:** the experience enabled the systematic development of an evidence-Based manual designed to support self-care following hospital discharge. Evaluation of the content, appearance, usability, and effects of the material should be conducted in subsequent stages.

**Descritores:**
Educação em Saúde. Tecnologia Educacional. Diabetes Mellitus. Alta do Paciente. Período Pós-operatório.

**What is known?**
People with diabetes mellitus are at increased risk of postoperative complications and require clear guidance to support self-care and continuity of care following hospital discharge.

**What does this study add?**
This study describes the systematic development of a manual that brings together guidance on surgical wound care, glycemic control, nutrition, hygiene, and warning signs to support home-based care for people with diabetes mellitus.

**Abstract**

**Objetivo:** Relatar a experiência da construção de um manual cuidativo-educacional sobre cuidados de transição no pós-operatório de pessoas com diabetes mellitus. **Métodos:** Relato de experiência referente à construção de uma tecnologia cuidativo-educacional, orientada pelas etapas Plan e Do do ciclo de melhoria contínua Plan-Do-Check-Act, realizada entre agosto e dezembro de 2024. Na etapa Plan, foram identificadas evidências científicas e recomendações relacionadas ao cuidado perioperatório, ao autocuidado e à continuidade da assistência após a alta hospitalar. Na etapa Do, um grupo de trabalho composto por duas graduandas em enfermagem e um enfermeiro com experiência no desenvolvimento de tecnologias selecionou, organizou e adaptou os conteúdos, além de definir os elementos textuais, imagéticos e gráficos do manual. **Resultados:** Foi construído um manual com 33 páginas, organizado em 12 tópicos, que abordam ferida operatória, cicatrização, sinais de infecção, higiene corporal, alimentação, autoestima, autocuidado, controle glicêmico e acompanhamento multiprofissional. O material incluiu ilustrações, perguntas e respostas, instrumentos para registro da glicemia e dos medicamentos, espaço para anotações e atividades lúdicas. **Conclusão:** A experiência possibilitou a construção sistematizada de um manual fundamentado em evidências e direcionado ao apoio ao autocuidado após a alta hospitalar. A avaliação do conteúdo, da aparência, da usabilidade e dos efeitos do material deverá ser realizada em etapas posteriores.

**Descriptors:**

Health Education. Diabetes Mellitus. Educational Technology. Patient Discharge. Postoperative Period.

**Resumen**

**Objetivo:** Describir la experiencia de elaboración de un manual educativo-asistencial sobre cuidados de transición durante el período postoperatorio de personas con diabetes mellitus. **Métodos:** Se trata de un relato de experiencia sobre la construcción de una tecnología educativo-asistencial, orientada por las etapas *Plan* y *Do* del ciclo de mejora continua *Plan-Do-Check-Act*, desarrollado entre agosto y diciembre de 2024. Durante la etapa *Plan*, se identificaron evidencias científicas y recomendaciones relacionadas con los cuidados perioperatorios, el autocuidado y la continuidad de la atención después del alta hospitalaria. Durante la etapa *Do*, un grupo de trabajo compuesto por dos estudiantes de grado en enfermería y un enfermero con experiencia en el desarrollo de tecnologías educativas seleccionó, organizó y adaptó los contenidos, además de definir los elementos textuales, visuales y gráficos del manual. **Resultados:** Se elaboró un manual de 33 páginas, organizado en 12 temas, que abordan las heridas quirúrgicas, la cicatrización, los signos de infección, la higiene corporal, la alimentación, la autoestima, el autocuidado, el control glucémico y el seguimiento multidisciplinario. El material incluyó ilustraciones, preguntas y respuestas, instrumentos para el registro de los niveles de glucosa en sangre y de los medicamentos, espacio para anotaciones y actividades lúdicas. **Conclusión:** La experiencia permitió desarrollar sistemáticamente un manual basado en evidencias y destinado a apoyar el autocuidado después del alta hospitalaria. La evaluación del contenido, la apariencia, la usabilidad y los efectos del material deberá realizarse en etapas posteriores.

**Descriptores:**
Educación en Salud. Diabetes Mellitus. Tecnología Educacional. Alta del Paciente. Periodo Posoperatorio.

## INTRODUCTION

Diabetes mellitus (DM) is a chronic metabolic condition characterized by persistently elevated blood glucose levels resulting from abnormalities in insulin secretion, insulin action, or both mechanisms. When inadequately controlled, the condition may lead to microvascular and macrovascular complications, increase healthcare utilization, and contribute to a greater need for hospitalization and therapeutic interventions.[1]

The growing burden of DM represents a major challenge for healthcare systems. In Brazil, the high burden of the condition and its clinical repercussions require strategies aimed at preventing complications, ensuring longitudinal follow-up, and strengthening self-care.[1–2] Among individuals undergoing surgical procedures, DM is associated with an increased risk of surgical site infection, delayed wound healing, cardiovascular complications, and prolonged hospital stays.[3–4]

During the postoperative period, the effects of DM can be particularly challenging. Patients with DM are at increased risk of developing pressure injuries and surgical wound complications, such as delayed healing and infection.[4] The postoperative period is also associated with a risk of deep vein thrombosis (DVT), a condition that may prolong hospitalization and increase the need for therapeutic interventions.[5]

In addition, DM causes neurological and vascular changes in the extremities, compromising the anatomical and physiological characteristics of these areas.[1] Diabetic neuropathy, one of the chronic complications of the disease, is common and may result in persistent alterations in the peripheral nervous system. Diabetic retinopathy, in turn, is a major cause of visual impairment and blindness among individuals with DM.

Furthermore, patients with DM may experience dry skin, compromising its protective function and elasticity. Changes in peripheral circulation may also impair the wound-healing process, making it slower and less effective. In this context, cutaneous manifestations, such as eczema, may occur more frequently, particularly when associated with vascular changes and venous insufficiency. Maintaining adequate glycemic control over the long term is crucial for reducing these complications and is essential for recovery.[4]

In the Brazilian context, the need for an integrated and patient-centered approach has gained prominence with the concept of deinstitutionalization, which emerged in the 1970s during the psychiatric reform movement. This approach has since been expanded and incorporated into the healthcare model based on the principles of the Brazilian Unified Health System (SUS, as per its Portuguese acronym), including comprehensiveness of care. It involves a planned process of care transition that encompasses discharge preparation, communication among healthcare professionals and across the healthcare network, participation of patients and their families, and the establishment of care plans to ensure continuity of care. Insufficient guidance during this process may lead to insecurity, inadequate self-care practices, and delayed seeking of healthcare services when signs of clinical deterioration arise.[2]

Printed or digital educational technologies (ETs) can complement the verbal guidance provided by healthcare professionals, facilitate subsequent access to information, and support decision-making in the home setting.[6] To fulfill this purpose, such materials should present scientifically grounded content, accessible language, logical organization, appropriate visual resources, and guidance that is compatible with the needs and characteristics of the target population.

Insufficient knowledge about self-care may lead to inadequate practices, substantially increasing the risk of complications and compromising the effectiveness of wound healing.[7] Although recommendations for the perioperative care of individuals with DM are available, the need was identified to compile them into an educational resource focused on care transition and home-based management following surgical procedures. The development of such a resource may support future stages of evaluation, validation, and implementation in healthcare settings.

Therefore, this study aimed to report the experience of developing a care-educational manual on transitional care during the postoperative period for individuals with DM.

## METHODS

This is an experience report on the development of a care-educational technology. To organize the development process, the *Plan–Do–Check–Act* (PDCA) continuous improvement cycle was adopted as the operational framework. During the *Plan* stage, the problem, target population, purpose of the technology, and content to be included in the material were defined. During the *Do* stage, the initial version of the manual was developed, including the selection, adaptation, and organization of content, definition of language, and graphic design. The *Check* stage, intended to evaluate the material, and the *Act* stage, related to incorporating improvements and planning its implementation, were not included within the scope of this experience report. Therefore, this study presents exclusively the activities conducted during the *Plan* and *Do* stages.

During the *Plan* stage, a targeted literature search was conducted to identify recommendations for the care of individuals with DM undergoing surgical procedures and for continuity of care following hospital discharge. Among the documents consulted, the main reference adopted was the *Guideline for Perioperative Care for People with Diabetes Mellitus Undergoing Elective and Emergency Surgery*, developed by the *Centre for Perioperative Care* in partnership with *Diabetes UK*.[8] Recommendations related to the postoperative period, glycemic control, prevention of complications, health follow-up, and preparation of patients and their family members for home-based care were selected. The literature search and initial organization of the recommendations were conducted between July and August 2024.

During the *Do* stage, a working group was established comprising two undergraduate nursing students and a PhD-prepared nurse with experience in the development of educational technologies (ETs). The group held eight meetings, both in person and remotely, between September and December 2024, with an average duration of 53 minutes per meeting. The meetings focused on defining the structure of the manual, selecting and sequencing the content, adapting the language, choosing illustrations, reviewing the guidance provided, and planning the graphic presentation.

Decisions were made by consensus among the group members following a review of the selected evidence and an assessment of the appropriateness of each recommendation for the home-care setting. Initially, the content was organized into thematic domains. Subsequently, the content was transformed into brief texts, questions and answers, guidance boxes, and recording tools. During the textual revision, priority was given to short sentences, everyday vocabulary, explanations of essential technical terms, and the use of clear and objective instructions.[9] The group also reviewed the consistency between text and images, the sequence of information, and the identification of the sources consulted.

The layout and graphic design were developed using Canva Pro®, including the selection of typography, contrast, font sizes, element placement, and visual standardization across the pages. The images were selected from the platform's licensed library, in accordance with its terms of use and authorship attribution requirements. Finally, the authors conducted successive reviews of the formatted version to correct textual and graphic errors and to verify the correspondence between the recommendations and their respective sources.

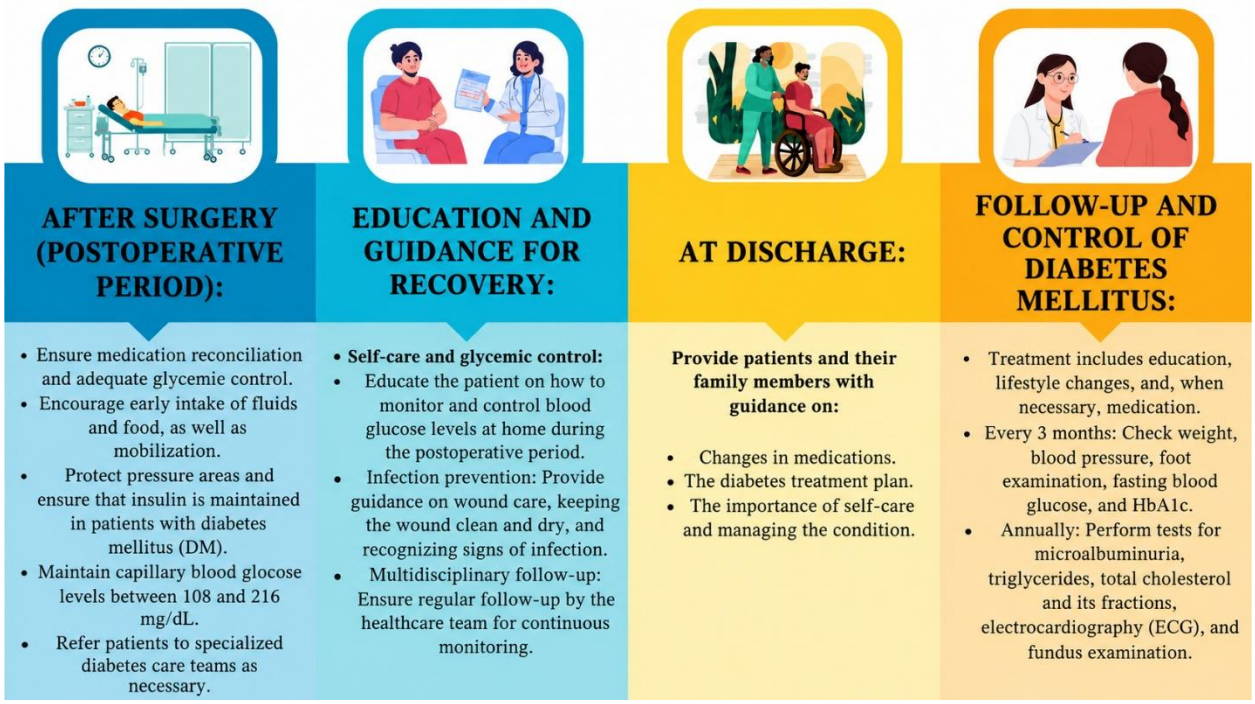
The experience report did not involve participant recruitment, the collection of individual-level data, or access to personal information. Given these characteristics, the study was not submitted for review by a Research Ethics Committee. The principles of scientific integrity were observed, including the identification and citation of the sources used in the development of the content. Graphic elements obtained from Canva Pro® were used in accordance with the platform's licensing terms. No copyrighted images from other publications were reproduced without the appropriate authorization or license for use.

## RESULTS

The *Plan* stage resulted in the definition of the purpose, target population, and thematic domains of the manual. It was established that the technology would be intended for individuals with diabetes mellitus undergoing surgical procedures and their family members or caregivers, with a focus on continuity of care following hospital discharge.

The recommendations were organized into four thematic domains: immediate postoperative care; education and guidance for recovery; discharge planning; and follow-up and management of DM in the home setting. These domains guided the selection and sequencing of the content presented in Figure 1.

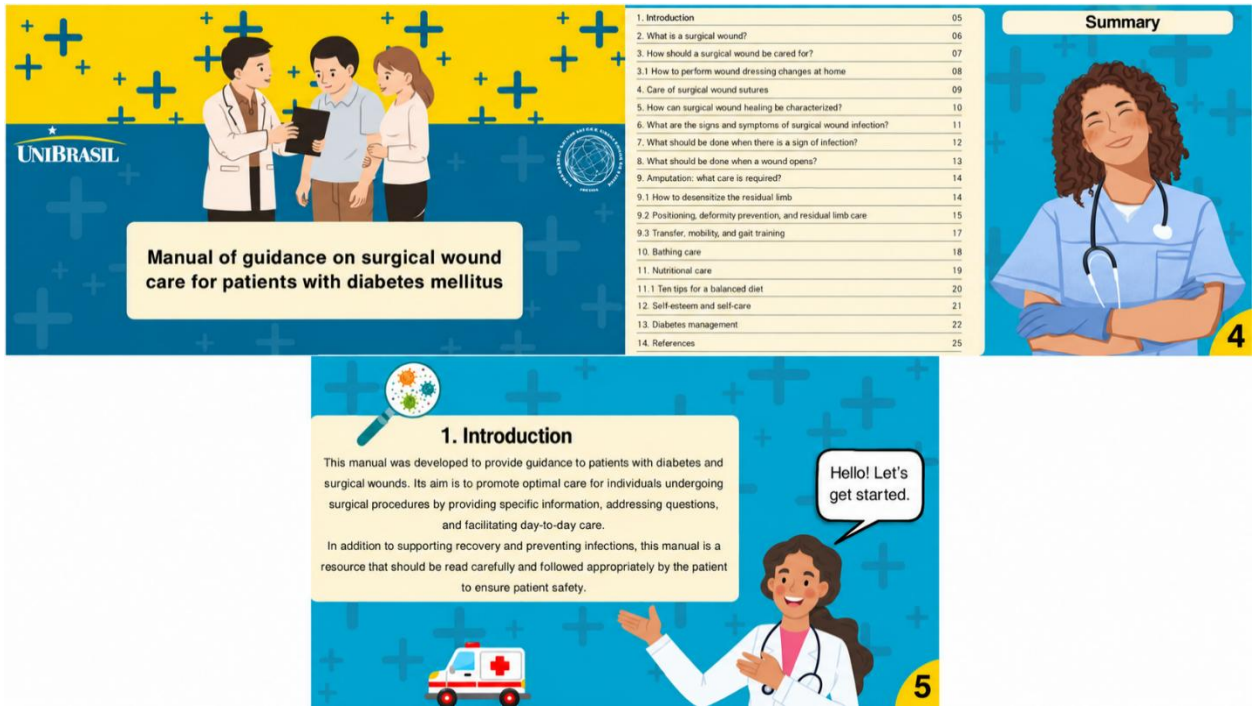
**Figure 1.** Organization of the care domains addressed in the care-educational manual. Curitiba, Paraná, Brazil, 2024.




**Source:** authors (2026).
**Caption:** DM – Diabetes mellitus; ECG – Electrocardiogram; HbA1c – glycated hemoglobin.

During the *Do* stage, the initial version of the care-educational manual was developed, comprising 33 pages, including the cover, back cover, introduction, table of contents, educational content, recording tools, and interactive activities. The material was organized into 12 topics, nine of which followed a question-and-answer format, while three were presented in an explanatory format. Brief texts and illustrations were used to facilitate the retrieval and understanding of information (Figure 2).

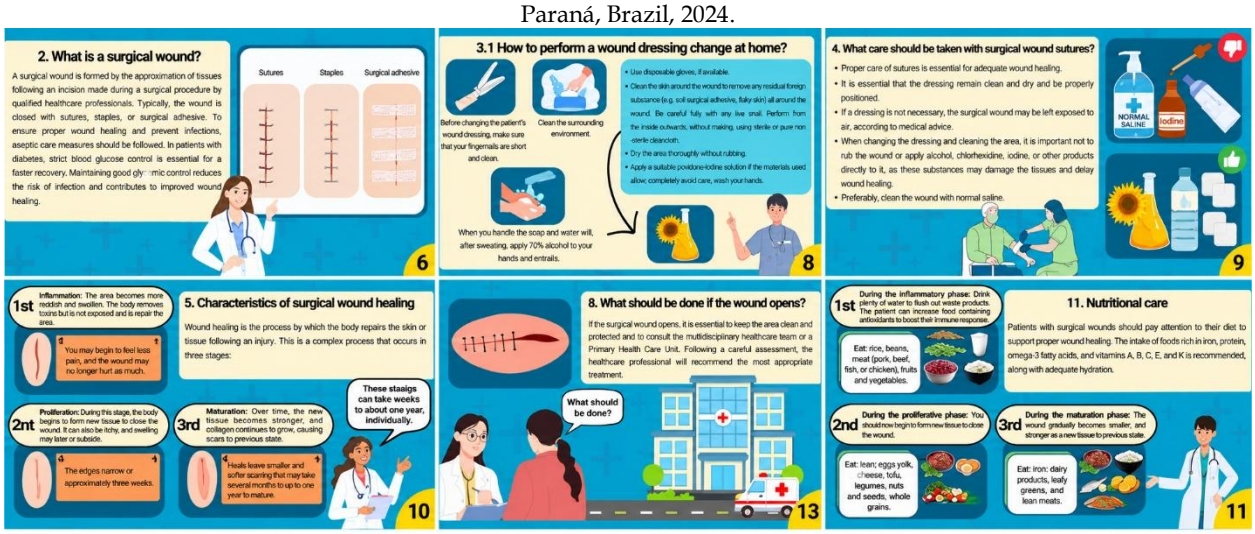
**Figure 2.** Cover, table of contents, and introduction to the care-educational manual. Curitiba, Paraná, Brazil, 2024.




**Fonte:** autores (2026).

The contents of the manual were organized into 12 topics. The first nine addressed the definition of a surgical wound; care of the wound and surgical sutures; the wound-healing process; signs suggestive of infection; management of warning signs; surgical wound dehiscence; post-amputation care; and personal hygiene. The three final topics provided guidance on nutrition during recovery, self-esteem and self-care, and DM management, including treatment, glycemic monitoring, and follow-up by the multidisciplinary healthcare team (Figure 3).

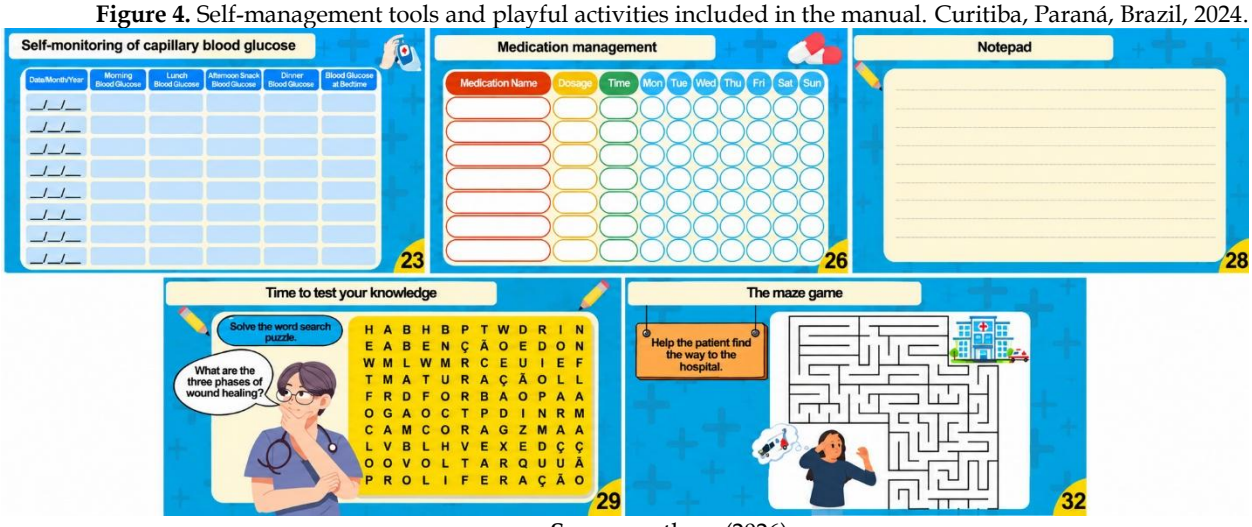
**Figure 3.** Examples of content on surgical wound care and self-care presented in the manual. Curitiba, Paraná, Brazil, 2024.




**Source:** authors (2026).

The manual also included self-management support tools, such as tables for recording capillary blood glucose levels and daily medications, as well as space for notes. A crossword puzzle and a maze activity were incorporated as playful resources intended to promote and diversify engagement with the educational material (Figure 4).

**Figure 4.** Self-management tools and playful activities included in the manual. Curitiba, Paraná, Brazil, 2024.




**Source:** authors (2026).

In addition to the formatted version, the manual was made available in digital ePUB and audiovisual formats. The full version is available in digital format (https://online.fliphtml5.com/nsfjk/zjlu/), while the audiovisual version is available on a video-sharing platform (https://www.youtube.com/watch?v=mbvra88VT7s). The material was made available in different formats to broaden access to the content and facilitate its consultation.

## DISCUSSION

The main outcome of this experience was the development of an initial version of a care-educational manual designed to support continuity of care for individuals with DM following surgical procedures. The material brought together guidance on surgical wound care, wound healing, warning signs, nutrition, hygiene, glycemic control, and multidisciplinary follow-up, as well as tools for recording treatment-related information.

The organization of these contents is consistent with recommendations emphasizing the importance of discharge preparation and continuity of glycemic management during the perioperative period. Individuals with DM are more susceptible to surgical complications, particularly infection and delayed wound healing, underscoring the need for guidance on the early recognition of changes and timely seeking of healthcare.[4,8]

The literature demonstrates a consensus regarding the importance of health education and appropriate wound management in patients with DM.[8–9] Thus, the use of a manual allows information to be systematized and made available for subsequent consultation, complementing the verbal guidance provided by healthcare professionals. However, the material should not replace communication among the healthcare team, patients, and their families, nor individualized recommendations based on the type of surgery, clinical conditions, and therapeutic plan. Its use should be integrated into a dialogical educational process in which questions, capabilities, preferences, and care conditions are taken into consideration.[4–5,9]

The inclusion of tools for recording blood glucose levels and medications brings the manual closer to self-management support strategies. Educational interventions for individuals with diabetes may contribute to improving self-care knowledge and skills, particularly when combined with professional follow-up and shared goal setting.[5,9–10] In the present study, however, adherence, glycemic control, and other clinical outcomes were not evaluated. Therefore, the potential benefits of the manual remain to be investigated.

The use of visual resources, a question-and-answer format, and playful activities was intended to diversify the presentation of information. Studies on health education indicate that accessible language, visual organization, and cultural appropriateness may facilitate engagement with educational materials.[10–11] However, the clarity, legibility, and relevance of these elements should be evaluated by the target population and by professionals with expertise in the subject matter.

The fact of providing the material in both digital and audiovisual formats may broaden access to the content and facilitate its consultation. Nevertheless, barriers related to connectivity, digital literacy, visual impairments, and socioeconomic conditions may limit its use. Maintaining both print and digital versions may accommodate different user profiles, provided that both versions undergo assessment of legibility, accessibility, and usability.[12]

Glycemic control is an important component of preventing infectious complications during the postoperative period. Evidence from clinical studies indicates an association between glycemic control strategies and a lower incidence of surgical site infection.[13] Consistent with this evidence, the manual included guidance on blood glucose monitoring, surgical wound care, and recognition of signs of infection. However, the understanding and application of these recommendations should be evaluated in future studies.

Longitudinal studies are needed to examine the effects of educational materials on knowledge, self-care behaviors, complications, and quality of life.[13–14] In the present study, the *Plan* and *Do* stages enabled the development of the initial version of the manual. The completion of the *Check* and *Act* stages will allow for the evaluation of the material, incorporation of adjustments recommended by users and healthcare professionals, and assessment of its feasibility in the healthcare setting.

The main limitations include the absence of people with diabetes, family members, and healthcare professionals from the initial development process; the lack of content and face validity assessment; the absence of evaluation of readability, usability, and user experience; and the completion of only two stages of the PDCA cycle. In addition, the study did not evaluate the effects of the manual on knowledge, self-care behaviors, complications, hospital readmissions, or quality of life.

As next steps, the material should be submitted for evaluation by the target population and healthcare professionals, followed by revision of its content and graphic elements based on the recommendations obtained. Further studies should also assess its readability, usability, and implementation in healthcare settings. These steps will make it possible to examine the relevance, comprehensibility, and feasibility of using the manual as part of hospital discharge preparation.

## CONCLUSION

This experience enabled the development of an initial version of a care-educational manual to support the post-operative transition from hospital to home for individuals with diabetes mellitus. The *Plan* and *Do* stages of the PDCA cycle guided problem definition, content selection and organization, and the textual and graphic development of the material.

The manual brought together guidance on surgical wound care, wound healing, signs of complications, hygiene, nutrition, glycemic control, treatment, and multidisciplinary follow-up, as well as recording tools and playful activities. Its development contributed to systematizing relevant information to support continuity of care at home following hospital discharge.

As this is an initial version, further stages are required, including content and face validation, evaluation by the target population, and assessment of readability and usability, as well as implementation in healthcare settings. These procedures may contribute to improving the material and enable assessment of its feasibility as a complementary resource for educational interventions and hospital discharge planning.

## AUTHOR CONTRIBUTIONS

Study conception or design: Salbego C. Data collection: Salbego C, Ramos TK. Data analysis and interpretation: Salbego C, Ramos TK. Manuscript drafting or critical revision: Salbego C, Ramos TK, Cogo SB, Paes RG, Greco PBT, Torezan G, da Silva AE. Final approval of the version to be published: Salbego C, Ramos TK, Cogo SB, Paes RG, Greco PBT, Torezan G, da Silva AE.

## REFERENCES

1. Baltazar VS, Nascimento VA, Luzia JS, Bezerra FEA, Lucas FS, Cavalcante AB, et al. Aspectos Epidemiológicos do Diabetes Mellitus no Brasil entre 2019 a 2023. Braz. J. Implantol. Health Sci. [Internet]. 2024; 6(6):1067-76. Available from:https://bjihs.emnuvens.com.br/bjihs/article/view/2339

2. Ministério da Saúde (BR). Dia Nacional do Diabetes. Brasília, DF: Ministério da Saúde; 2021.

3. Associação Americana de Diabetes; Custo econômico do diabetes nos EUA em 2007. Diabetes Care. [Internet]. 2008; 31(3):596–615. DOI: https://doi.org/10.2337/dc08-9017

4. Zhang X, Hou A, Cao J, Liu Y, Lou J, Li H, Ma Y, Song Y, Mi W, Liu J. Association of Diabetes Mellitus With Postoperative Complications and Mortality After Non-Cardiac Surgery: A Meta-Analysis and Systematic Review. Front Endocrinol (Lausanne). [Internet]. 2022;13:841256. DOI: https://doi.org/10.3389/fendo.2022.841256

5. Brevidelli MM, Bergerot CD, Domenico EBL. Programa Dia-D: ensaio propositivo de intervenção educativa para autogerenciamento em diabetes tipo 2. Esc Anna Nery. [Internet]. 2023; 27:e20220291. DOI: https://doi.org/10.1590/2177-9465-EAN-2022-0291pt

6. Echer IC. Elaboração de manuais de orientação para o cuidado em saúde. Rev Latino-am Enfermagem. [Internet]. 2005; 13(5):754-7. Available from:https://www.scielo.br/j/rlae/a/6ZJ3s4DtMzZvSJn4JbpD3WB/?format=pdf&lang=pt.

7. Nguyen V, Nguyen N, Schumacher B, Tran T. Practical Application of Plan–Do–Check–Act Cycle for Quality Improvement of Sustainable Packaging: A Case Study. Applied Sciences. [Internet]. 2020;10(18):6332. DOI: https://doi.org/10.3390/app10186332

8. Centre for Perioperative Care. Guideline for perioperative care for people with diabetes mellitus undergoing elective and emergency surgery. Londres: Academia of Medical Royal Colleges, 2021. Available from:https://cpoc.org.uk/sites/cpoc/files/documents/2021-03/CPOC-Diabetes-Guideline2021_0.pdf.

9. Santos NOD, Predebon ML, Bierhals CCBK, Day CB, Machado DO, Paskulin LMG. Development and validation a nursing care protocol with educational interventions for family caregivers of elderly people

after stroke. Rev Bras Enferm. [Internet]. 2020;73Suppl 3(Suppl 3):e20180894. DOI: https://doi.org/10.1590/0034-7167-2018-0894

10. Romero-Castillo, R.; Pabón-Carrasco, M.; Jiménez-Picón, N.; Ponce-Blandón, J.A. Effects of a Diabetes Self-Management Education Program on Glucose Levels and Self-Care in Type 1 Diabetes: A Pilot Randomized Controlled Trial. Int. J. Environ. Res. Public Health. [Internet]. 2022;19:16364. DOI: https://doi.org/10.3390/ijerph192316364

11. Brady VJ, Mathew Joseph N, Ju HH. Impact of Gaming (Gamification) on Diabetes Self-Care Behaviors and Glycemic Outcomes Among Adults With Type 2 Diabetes. Sci Diabetes Self Manag Care. [Internet]. 2023;49(6):493-511. DOI: https://doi.org/10.1177/26350106231208153.

12. Kerr D, Ahn D, Waki K, Wang J, Breznen B, Klonoff DC. Digital Interventions for Self-Management of Type 2 Diabetes Mellitus: Systematic Literature Review and Meta-Analysis. J Med Internet Res. [Internet]. 2024;26:e55757. DOI: https://doi.org/10.2196/55757.

13. Lai J, Li Q, He Y, Zou S, Bai X, Rastogi S. Glycemic Control Regimens in the Prevention of Surgical Site Infections: A Meta-Analysis of Randomized Clinical Trials. Front Surg. [Internet]. 2022;9:855409. DOI: https://doi.org/10.3389/fsurg.2022.912295

14. Abu S, Llahana S. Factors influencing the uptake of culturally tailored diabetes self-management education and support programmes among ethnic minority patients with type 2 diabetes: A systematic review. Prim Care Diabetes. [Internet]. 2025;19(2):103-110. DOI: https://doi.org/10.1016/j.pcd.2025.01.010

Conflitos de interesse: No
Submissão: 2026/03/09
Revisão: 2026/18/01
Aceite: 2026/22/09
Publicação: 2026/09/11

Editor Chefe ou Científico: José Wicto Pereira Borges
Editor Associado: Marcelo Costa Fernandes

Autores mantém os direitos autorais e concedem à Revista de Enfermagem da UFPI o direito de primeira publicação, com o trabalho licenciado sob a Licença Creative Commons Attibution BY 4.0 que permite o compartilhamento do trabalho com reconhecimento da autoria e publicação inicial nesta revista.