

## **BENEFITS AND CHALLENGES ASSOCIATED WITH THE IMPLEMENTATION OF NAVIGATION PROGRAMS IN CANCER CENTERS: AN INTEGRATIVE REVIEW<sup>1</sup>**



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### **ABSTRACT**

The increasing complexity of cancer treatments, combined with the fragmentation of the health system, exposes patients to a series of challenges that can compromise quality of life and treatment outcomes. In this context, patient navigation emerges as a promising strategy to optimize care, ensuring continuity of care and the best possible experience for patients throughout the oncological pathway. This integrative review aims to analyze the scientific evidence on the effectiveness of patient navigation in the oncology context, identifying the main benefits and challenges of implementation in oncology centers. To this end, an integrative literature review was carried out, with the selection of descriptors and keywords based on the PICO strategy. The search and selection process of primary studies was carried out in the Virtual Health Library (VHL), including the following databases: Medical Literature Analysis and Retrieval System Online (MEDLINE), Latin American and Caribbean Literature on Health Sciences (LILACS) and Nursing Database (BDENF). The search returned 2,019 publications, of which 5 were eligible for analysis. Despite the challenges in implementing navigation in cancer centers, the promising results justify the effort. By optimizing the patient journey, navigation provides a more humanized experience, improves the quality of life of patients and their families, and contributes to the efficiency of the health system, enabling the identification and correction of failures and the optimization of the use of resources.

**Keywords:** Patient Navigation. Oncology and Nursing Care.

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## INTRODUCTION

Cancer is widely recognized as one of the major public health problems in the world, being among the leading causes of death and, consequently, acting as a significant barrier to increased life expectancy. In several countries, it ranks first or second among the causes of premature death, before the age of 70 (SUNG et al., 2021).

Estimates from the International Agency for Research on Cancer (IARC), supported by the best available data for 2022, reveal the increasing burden of cancer in the world, with a particularly intense impact on vulnerable populations and the urgent need to reduce cancer-related inequalities globally. In this sense, the World Health Organization (WHO) reinforces this urgency by presenting the results of a survey carried out in 115 countries, which showed that, in most of these countries, inadequate resources are allocated to priority oncology and palliative care services within universal health coverage (PAHO, 2024).

Recent studies by IARC indicate that, in 2022, about two-thirds of new cases and deaths from cancer were due to only 10 types of the disease, considering data from 185 countries and 36 types of cancer (PAHO, 2024). In this scenario, lung cancer is the most common type in the world, with 2.5 million new cases, representing 12.4% of the total, female breast cancer ranks second, followed by colorectal, prostate and stomach cancer.

In terms of mortality, lung cancer is also the most lethal, with 1.8 million deaths, corresponding to 18.7% of all cancer deaths. This increase in the number of cases may be associated with the persistence of tobacco use, especially in Asia (PAHO, 2024).

A warning for 2050 is that cancer cases are expected to rise by 77%, reaching more than 35 million new cases, a frightening increase compared to the 20 million cases estimated in 2022 (FIOCRUZ, 2024). This panorama requires understanding of health systems and actions concerning oncological conditions, new cases, patients already affected, but, above all, prevention mechanisms and access to health services in order to contain this advance.

In addition, inequality manifests itself with the increase in cases of cancer, especially breast cancer. In countries with a high human development index (HDI), one in 12 women will be diagnosed, while in countries with a low HDI, this rate is one in 27. In addition, women in countries with lower HDI are 50% less likely to receive an early diagnosis due to inadequate access to quality treatment (PAHO, 2024).

Regarding the comprehensiveness and universality of health care, oncology is a highly complex specialty, requiring patients to undergo various treatments that often require multiple hospital visits and regular imaging and laboratory tests (ROQUE et al., 2023). The main therapeutic modalities, such as surgery, chemotherapy and radiotherapy, involve the transmission of a significant volume of information to patients and their families at the beginning of treatment, which often makes it difficult to fully assimilate this content. (PAUTASSO et al., 2020)

In international contexts, the health system has been poorly prepared to deal with the growing demand of patients, mainly due to the shortage of a committed workforce and the fragmentation of health systems, factors that compromise efficiency and quality (ROCQUE et al., 2016). According to data from the Ministry of Health and Welfare of Taiwan, cancer has been the leading cause of death in the country for more than four decades, with breast cancer being the second leading cause of cancer deaths among women (WEI-ZHEN et al., 2024).

In Brazil, the weaknesses that the health system presents include the fragmentation of care and the difficulty in navigating a system that requires the integration of multiple specialties. This reality results in barriers that make it difficult for patients to access timely diagnosis and treatment. In the specific case of breast cancer, the high mortality rate, estimated at 12.78 deaths per 100,000 women per year, is largely attributed to the delay in diagnosis and treatment initiation (LIMA et al., 2021).

Although there are guidelines, such as Ordinance No. 3,535, of September 1998, which establishes a hierarchical network of High Complexity Oncology Centers (CACON), and Law No. 12,732, which guarantees the start of treatment within 60 days after diagnosis, these initiatives are still not enough to solve the structural problems of the health system. The barriers to access to care are even more pronounced for socially vulnerable patients, who face financial, communicational, and systemic difficulties that complicate their treatment journey. (LIMA et al., 2021).

## **THEORETICAL FRAMEWORK - PATIENT NAVIGATION**

In the context of oncological health care, the Patient Navigation Program (NP) emerges as an innovative proposal to address these weaknesses. Inspired by the work of Dr. Harold Freeman, in the 1990s, the first patient navigation program was created in the State of New York, United States. This pioneering program aimed to eliminate several

barriers that can hinder access to and continuity of care for patients, such as those of a socioeconomic, sociocultural, psychological, communication, and bureaucratic nature (ROQUE et al., 2023).

The approach of the PN program contemplates the process of the *health continuum*, ranging from prevention and early detection to diagnosis, treatment and palliative care at the end of life. Thus, PN emerged as an innovative strategy to ensure that individuals receive more integrated and humane care, making it easier to navigate the complex healthcare system and improving clinical outcomes and patient experience (PAUTASSO et al., 2020).

Harold Freeman, in his 20 years of study on Patient Navigation, outlined nine fundamental principles that guide this practice. Such principles aim to optimize the patient's journey in the health system, ensuring comprehensive and effective care. In summary, patient navigation, as advocated by Freeman, seeks: a patient-centered model of care to ensure that the patient's trajectory in the health system is fluid and coordinated; integration between the levels of care to facilitate communication and collaboration between the various sectors of the health system; a solid therapeutic relationship to establish a bond of trust between the patient and the navigator; clear roles and responsibilities to delimit the tasks of each member of the health team; financial efficiency and sustainability to optimize available resources and ensure adequate cost-benefit; task assignment to distribute tasks according to each browser's background and experience; delimitation of the process to understand when the navigation starts and when it is completed; connection between the points of care to act as a link between the various health services and the qualified coordination to supervise and coordinate the work of navigators. In short, Freeman's nine principles represent a valuable guide for implementing effective patient navigation programs (ROQUE et al., 2023).

Freeman's work achieved a significant increase in five-year survival rates, from 39% to 70%, in addition to reducing the incidence of cancer in advanced stages from 40% to 21%, which contributed to the creation of the *Patient Navigator Outreach and Chronic Disease Prevention Act*, in 2005 (FREEMAN; RODRIGUEZ; 2011).

The studies also identified the health system as the main barrier to effective treatment. Thus, observing the successful approaches in countries such as the United States and Canada, PN aims to facilitate access to timely diagnosis and treatment, ensuring that patients receive the necessary attention at all stages of their journey. This

practice involves the assessment of individual needs, the planning and implementation of actions that promote care coordination. In addition, it seeks to empower patients, providing information and support, so that they can interact more effectively with health professionals (PAUTASSO et al., 2018).

PN has been shown to be effective in several areas, with evidence demonstrating its ability to increase treatment adherence, reduce delays in the initiation of cancer treatments, and improve clinical outcomes (PAUTASSO et al, 2018).

In a cancer center of a regional teaching hospital in northern Taiwan, a randomized controlled trial evaluated the impact of nurse navigators on the mental health of cancer patients, the inclusion of these in cancer care teams was effective in reducing gaps between patients and health providers, promoting more agile referrals and access to adequate services. This approach also contributes to significant psychosocial benefits, positively impacting various dimensions of mental health and reinforcing its role in improving the quality of life of cancer patients (WEI-ZHEN et al., 2018)

Regarding the average length of hospital stay, a study indicates that patients who do not receive follow-up by nurse navigators tend to stay in the hospital for an average period of 9 to 11 days longer than those who have this support. In addition, PN results in a reduction in visits to the urgent and emergency sector of hospitals, reduces the length of hospital stay, and promotes a better use of available resources. The guidance and continuous support offered to patients by the nurse navigator are fundamental factors that contribute to these positive results (RODRIGUES et al., 2021).

At the *Madonna del Soccorso* Hospital, in Italy, a comparative study with 100 cancer patients followed by nurse navigators and a control group of an equal number of patients treated three years earlier, without this follow-up, showed significant improvements in clinical outcomes. The results showed advances in activities of daily living (20% vs. 8%), reduction of nutritional problems (40% vs. 21%), pain (18% vs. 2%), surgical wounds (45% vs. 1%), and improvement in mobilization (8% vs. 0%) between the group with and without a nurse navigator, respectively (MERLINI et al., 2024).

Another relevant aspect of PN refers to the patients' experience and their well-being, explicitly placed at the center of the process, promoting a more humanized and integrated approach. This strategy not only aims to improve clinical outcomes, but also seeks to minimize the emotional and social impacts that the disease can bring. In addition, the

incorporation of this program into the health network is urgent, to increase the reach and effectiveness of the treatment offered by health professionals (RODRIGUES et al., 2020).

In the United States, significant efforts have been made to develop and standardize metrics related to the impact of PN on the health of the oncology population. In March 2010, the *American Cancer Society* hosted the National Patient Navigation Leadership Summit with the goal of establishing consensus on common outcome metrics in order to strengthen scientific evidence on the effectiveness of patient navigation. More recently, the Academy of Oncology Nurses and Patient Navigators has also led initiatives to create standardized metrics for program certification and to assess the reliability and validity of 10 key metrics. These efforts aim to improve consistency in assessments, although there is still some documented heterogeneity in the outcome measures used (BATTAGLIA et al., 2022).

In Brazil, the development of NP programs is still incipient, with the first relevant publications occurring from 2018 onwards. In 2020, a PN program aimed at patients with head and neck cancer, structured for the Brazilian reality, was evidenced, along with the Navigation Need Assessment Scale (PAUTASSO et al, 2023). The Brazilian panorama regarding the legislation and regulation of the patient navigation program (PN) has advanced, although it still faces significant challenges. The first national event on the topic took place on January 30, 2020, at the headquarters of the Regional Nursing Council - COREN-SP, marking an important step in the dissemination of knowledge about patient navigation in Brazil (COREN-SP, 2020)

Within the scope of the supplementary health system, the search for more efficient and patient-centered care models has been constant. In this sense, in 2016, the National Health Agency - ANS launched the OncoRede Project in the supplementary health sector, aiming to restructure cancer care. Through the OncoRede Project, the ANS encouraged the adoption of patient navigation as a strategy to improve the quality of cancer care in the supplementary health sector (ANS, 2016).

Law No. 14,450, enacted on September 21, 2022, created the National Patient Navigation Program for People with Malignant Breast Neoplasm. This program aims to provide support and guidance to patients from diagnosis to treatment within the Unified Health System (SUS). Subsequently, Law No. 14,758, approved on December 19, 2023, institutes the National Policy for Cancer Prevention and Control, encompassing the



National Program for the Navigation of People with a Diagnosis of Cancer, with the objective of integrating PN actions with cancer-related health policies.

Additionally, COFEN Resolution No. 735, of January 17, 2024, regulates the performance of nurse navigators and clinical specialists, establishing parameters for the training and practice of these professionals, which are fundamental for the effectiveness of the navigation program (LIMA, 2024). In addition to federal legislation, initiatives at the municipal level are also being developed. An example is Bill No. 32/2023, which proposes the creation of a PN program with malignant breast neoplasm in the municipality of Guaxupé, in Minas Gerais, reflecting a local action that complements national guidelines (GUAXUPÉ, 2023).

While these legislations represent significant advances, there is still a need for more comprehensive regulation and a consolidated legal framework that directs the practice of navigation in Brazil, ensuring that patients receive the necessary support in an effective and coordinated manner. Continuity of professional regulation is essential for PN programs to be able to fully operate and provide comprehensive care to cancer patients. Laws and guidelines, both federal and municipal, are crucial for strengthening the navigation program, allowing the practice to integrate into the health system and meet the needs of patients effectively.

One of the pioneering PN programs was implemented in an oncology hospital in Porto Alegre, Rio Grande do Sul (PAUTASSO et al., 2020). This hospital belongs to a philanthropic hospital complex and serves patients from the Unified Health System, the supplementary health system and private individuals. Classified as a High Complexity Oncology Care Center (CACON), it is one of the three CACON existing in the state, offering extensive care to cancer patients in various specialties. The PN program focused on patients with breast cancer was developed between October 15, 2019 and August 15, 2022, and remains active to this day, highlighting the importance of continuity in care and support for these patients (PAUTASSO et al., 2023).

However, the absence of standardized metrics to document the impact of NP and identify best practices prevents a consistent evaluation of results and compromises the development of sustainable guidelines in our country. This knowledge is essential to support public policies and strengthen the sustainability of the program (BATTAGLIA et al., 2022).

In view of the scarcity of studies that deal with the benefits of PN in the Brazilian context, the present study proposed to carry out an integrative review with the objective of analyzing scientific evidence on the benefits and challenges associated with the implementation of patient navigation programs in cancer centers. Through this analysis, it is expected to contribute to the discussion on the effectiveness of navigation approaches in the fight against cancer and in the promotion of more efficient and humanized care, which respects the particularities of each patient and always seeks to improve the quality of life and health of the population.

This review is essential to deepen the theoretical and practical understanding of PN in the Brazilian oncological context. In addition, the review seeks to fill gaps about the real benefits of PN, expanding the scientific knowledge base and enabling the creation of new explanatory models that guide future research.

With the perception that each program should make use of its reality of epidemiological profile, access tools, among others, this study can contribute to the construction and evaluation of PN programs adapted to different contexts, with the same purpose of improving access and experience of cancer patients.

## METHOD

Integrative review of the scientific literature, carried out through the following steps: 1) definition of the question of the review question; 2) search and selection of primary studies; 3) Extraction of data from primary studies; 4) Critical evaluation of primary studies; 5) Summary of the results of the review and 6) Presentation of the Review. (MENDES; SCOTT; GALVÃO; 2019).

For the construction of the question and the search for primary studies, the PICO strategy was used, considering P = population; I = intervention; C = comparison; and O = result. For element P, "cancer patients" were considered, for I "implementation of the navigation program", for C "absence of a navigation program, and O "reduction in the time to start treatment and better clinical outcomes". Thus, resulting in the guiding question: What are the benefits and challenges associated with the implementation of navigation nursing programs in cancer centers? Deriving from this question, *insights* emerge on how these factors impact the treatment and clinical outcome of patients.

The search and selection process of primary studies was carried out in the Virtual Health Library (VHL), including the following databases: *Medical Literature Analysis and*



*Retrieval System Online* (MEDLINE), Latin American and Caribbean Literature on Health Sciences (LILACS) and Nursing Database (BDENF).

The following inclusion criteria were considered: studies that contained the search terms listed anywhere in the document, articles published in full with free online access, in Portuguese, English or Spanish, with a 5-year period of publication and that answered the research question. The exclusion criteria were: editorials, letters, expert comments, abstracts of proceedings, theses, dissertations, course completion papers, official documents of national and international programs, books, literature reviews and duplicate studies.

The search strategy used the descriptors in Health Sciences (DeCS): 'patient navigation', 'oncology' and 'nursing care', in three languages, being Portuguese, English and Spanish for the research to include Latin America. They were combined with each other by the Boolean operators "AND" and "OR" (Chart 1).

Chart 1 – Search strategies in the databases

MEDLINE	("Navegação de Pacientes" OR "Patient Navigation" OR "Navegación de Pacientes" ) AND ( oncologia OR "Medical Oncology" OR "Oncología Médica") OR ("Assistência de Enfermagem" OR "Nursing Care" OR "Atención de Enfermería") AND db:("MEDLINE") AND instance:"regional"
BDENF	("Navegação de Pacientes" OR "Patient Navigation" OR "Navegación de Pacientes") AND (oncologia OR "Medical Oncology" OR "Oncología Médica") OR ("Assistência de Enfermagem" OR "Nursing Care" OR "Atención de Enfermería") AND db:("BDENF") AND instance:"regional"
LILACS	("Navegação de Pacientes" OR "Patient Navigation" OR "Navegación de Pacientes") AND (oncologia OR "Medical Oncology" OR "Oncología Médica") OR ("Assistência de Enfermagem" OR "Nursing Care" OR "Atención de Enfermería") AND db:("LILACS") AND instance:"regional"

Source: authorial. 2025

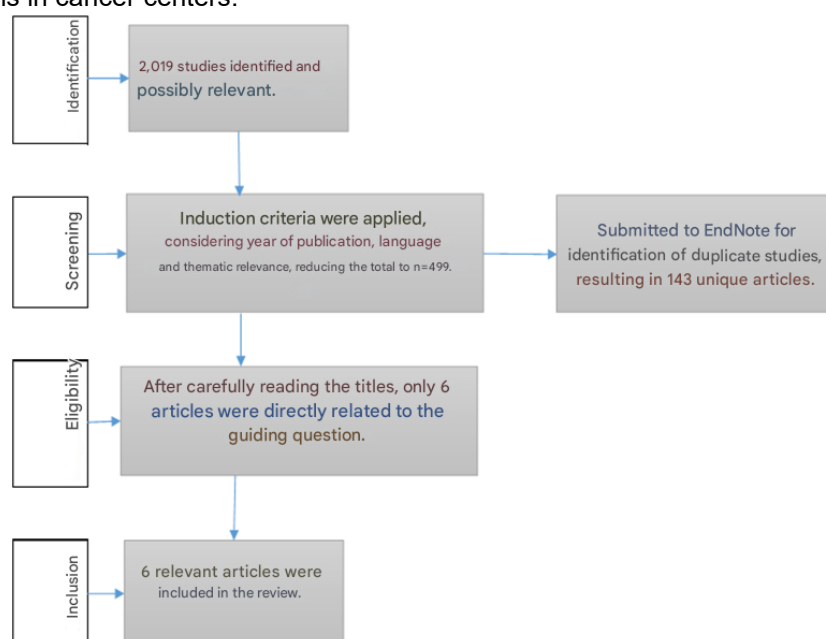
Subsequently, the selection of studies occurred in two stages, starting with the reading of the titles and abstracts to identify the relationship with the research question, as well as with the inclusion and exclusion criteria adopted. Next, we proceeded with the critical evaluation and complete reading of the pre-selected studies, excluding those that did not meet the inclusion criteria.

The searches were carried out using the combined descriptors, obtaining a total of 2,019 articles. Then, the inclusion criteria were applied, considering the year of publication, language, and thematic relevance, resulting in 499 articles. These articles were then submitted to the EndNote tool for the identification of duplicate studies, resulting in 143

unique articles. After careful reading of the titles, only 5 articles presented a direct relationship with the guiding question, and were included in the review.

The selection of studies occurred in two main stages: In the first phase, the titles of the studies were read. This approach allowed us to exclude records that clearly did not meet the inclusion criteria defined earlier. After an initial screening, a full reading was carried out, following the same rigor as in the previous phase, resulting in the final selection of the studies that made up the review sample (Figure 1).

Figure 1 - Selection of studies on the benefits and challenges associated with the implementation of patient navigation programs in cancer centers.



Source: author, 2025.

After selecting the studies, the main information was extracted with the aid of a script. The following information was selected: title, author, year, objective, methodological design, results and conclusions. This step was performed by one reviewer and then reviewed by a second reviewer. In addition, data related to the location of the primary study, the profile of patients in the study sample, and the main results of each study were analyzed in an instrument adapted from Ursi et al., (2006).

After identifying the primary studies in the given databases, the records were exported to an Excel spreadsheet. This organization allowed the systematization of the essential information of each article, categorizing them by author/year of publication, title, objective, summary of the main findings, and whether or not the study was accepted for inclusion in the review.

To assess the methodological quality of the primary studies included in the review, the theoretical framework of Melnik and Fineout Overholt (2022) was used for an assessment of the hierarchy of evidence, in which the quality of evidence is classified into six levels, namely: level 1, evidence from a systematic review or meta-analysis of all relevant RCTs; level 2, evidence from the opinion of authorities and/or reports from expert committees; level 3, Evidence obtained from well-designed controlled trials without randomization; level 4, Evidence from well-designed case-control and cohort studies; level 5, evidence from systematic reviews of descriptive and qualitative studies; level 6, evidence from single descriptive or qualitative studies; level 7, evidence from the opinion of authorities and/or reports from expert committees. (MELNIK; FINEOUT-OVERHOLT, 2022).

A narrative analysis and the integration of data extracted from the studies were elaborated in order to generate a new perspective on the benefits and challenges of patient navigation programs and navigation nursing in cancer centers, summarized in a descriptive table. In addition, similarities and distinctions between the studies were analyzed in order to promote a broad understanding of the health system.

The results of the present review were organized in relation to data related to the year, place and origin of the publications. Next, a table was elaborated that presents the selected studies in a summarized way, being analyzed in the light of the theoretical framework on patient navigation programs.

## RESULTS

The present review aims to analyze scientific evidence on the benefits and challenges associated with the implementation of patient navigation programs in cancer centers. For this, it has a sample of 5 studies that deal with the proposed theme.

02 (two) articles from the year 2019, 01 (one) article from the year 2020 and 02 (two) articles from the year 2023 were selected. Regarding the place of publication, there are 02 from Brazil, 01 (one) from Germany, 01 (one) Australia, 01 (one) United States

Most of the articles have low strength of evidence, as can be seen in Chart 2.

Chart 2 – Selected studies (n=5) on the benefits and challenges associated with the implementation of patient navigation programs in cancer centers.

Autor/Ano	Título/Local	Objetivo/ Delineamento / NE	Amostra	Benefícios/Desafios
A1 / Pautasso, et al., 2020	Nurse Navigator: desenvolvimento de um programa para o Brasil* / Porto Alegre, RS, Brasil	Desenvolver um Programa de NP oncológicos, fundamentado no modelo proposto pelo <i>The George Washington University</i> .  Estudo descritivo: NE: 6	Pacientes com câncer de cabeça e pescoço em tratamento em um CACON	A estruturação de um modelo de programa adequado às necessidades dos pacientes e ao funcionamento de um serviço de referência em oncologia brasileiro acarretará importantes mudanças no seu contexto assistencial. / Desafio: A principal limitação do estudo foi que, devido ao tempo necessário para o desenvolvimento e adaptação do Programa de NP à realidade do CACON, não foi possível realizar a avaliação da sua efetividade.
A2 Pautasso, et al., 2023.	Trajatória para implementação de programa de navegação de pacientes na oncologia: relato de experiência / Porto Alegre, RS, Brasil	Descrever a trajetória para a implementação de um Programa de Navegação para pacientes oncológicos. Relato de experiência / NE: 7.	Pacientes com câncer de cabeça e pescoço e de mama	Houve uma redução de 70% na mediana de tempo entre indicação e primeira consulta com a oncologia clínica (de 105 para 31,5 dias); redução de 28,6% do tempo entre sintoma ou a primeira consulta e o diagnóstico (de 21 para 15 dias); 26% de redução do tempo entre diagnóstico e início de neoadjuvância (de 77 para 57 dias); e o tempo entre indicação do tratamento e início de neoadjuvância (de cerca de 30 para 8 dias). / Desafio: O tempo insuficiente (2horas por dia) impediu o seguimento adequado do processo de NP e o acúmulo de trabalho das enfermeiras assistenciais e da gestora, que dividiam suas funções específicas com a NP, impossibilitou a implementação efetiva do programa
A3 Enomoto; Shen, 2019	Reflexão do autor da ASO: Demonstrando os benefícios da navegação da oncologia / Winston Salem, NC	Investigar a diferença no tempo entre a primeira consulta oncológica e a data do primeiro tratamento em pacientes com qualquer neoplasia maligna pancreática antes e depois da inclusão de um navegador oncológico. Estudo descritivo: NE: 6	Pacientes com neoplasia maligna pancreática.	Houve uma redução de tempo de espera em quase 16 dias, o que foi estatisticamente significativo e clinicamente relevante. / Desafio: A neoplasia pancreática carece de evidências científicas robustas.
A4 Schindler et al., 2023	Associações entre suporte à navegação e utilização de cuidados de saúde e custos em pacientes com câncer avanzado: uma análise baseada em dados administrativos de planos de saúde / Alemanha	Avaliar associações entre suporte de navegação e utilização de cuidados de saúde, e os custos associados a esses cuidados. Estudo randomizado: NE:3	Foram incluídos 717 pacientes (GI: 149, GC: 568).	Os pacientes do GI apresentaram menor tempo médio de internação hospitalar. No GI, foram prescritos 21% menos medicamentos e houve em média 15% menos contatos médicos ambulatoriais por mês. Os custos médios faturados no GI foram 23% menores do que no GC(p<0,001). / Desafio: As economias esperadas não foram atingidas devido a desafios na navegação entre setores, especialmente no atendimento ambulatorial. Estudos futuros devem investigar como os benefícios da presença de um navegador no hospital podem ser estendidos ao setor ambulatorial, considerando as preferências do paciente.
A5 Holdsworth et al., 2019	Negociando Questões Leigas e Clínicas: Implementando um Programa de Navegação Leiga no Tratamento do Câncer / Austrália	Descrever esses desafios de implementação em 1 centro acadêmico de câncer para informar esforços futuros.  Método misto com abordagem qualitativa: NE:6.	676 pessoas entrevistadas	Benefícios: Ponto positivo da navegação leiga é a redução de carga de trabalho da equipe de atendimento clínico. / Desafio: implicações na vida real: A implementação de programas de navegação leiga fora da equipe de atendimento clínico pode não ser eficaz para superar falhas do sistema que afetam negativamente a coordenação do atendimento. Os navegadores leigos provavelmente precisam ser integrados ou trabalhar sob a direção de equipes clínicas para alcançar uma implementação bem-sucedida e produzir os resultados positivos para os pacientes que muitos programas demonstraram.

Source: authorial. 2025. NE: Level of Evidence (MELNIK; FINEOUT-OVERHOLT, 2022).

## DISCUSSION

The analysis of the studies in the present review reveals a growing interest in the implementation of oncology navigation programs as a strategy to optimize the journey of cancer patients. The studies demonstrate the diversity of contexts, approaches and results obtained, evidencing the complexity and importance of this theme.

The studies identified challenges common to the implementation of navigation programs, such as the lack of resources, the need for professional qualification, and the complexity of care coordination at different levels of care. On the other hand, most studies have shown positive results in terms of reducing waiting times, improving quality of life, and increasing patient satisfaction, these being the different indicators to evaluate the impact of navigation. In addition, all studies aimed to improve the experience of cancer patients, reducing barriers to access, optimizing care coordination, and ensuring continuity of treatment.

## IMPACTS TO THE PATIENT AND THE SYSTEM

In a pilot project for the implementation of PN in a CACON, located in Rio Grande do Sul, it was found that this model of care emerges as a light in oncological care in Brazil and, when developed with a focus on patient-centered care, can illuminate the lives of

many people who still live in the shadow of the barriers to access to care in the current health system. so fragmented and disjointed (PAUTASSO, et al., 2020)

Similarly, in a navigation program implemented at a large-scale community cancer center in the southeastern United States, significant advantages were shown after one year of operation. A survey comparing patients who included navigation services with those undergoing usual treatment revealed statistically significant differences in aspects such as access, timely time, financial resources, assistance, qualification, and satisfaction. As no group was excluded based on diagnosis, treatment, socioeconomic status, or ethnicity, the results suggest that navigation can benefit all patients using the current health service who suffer from fragmentation, reinforcing that these services should not be restricted to specific minorities, but widely available to all patients (CAMPBELL et al., 2010).

In both studies, carried out in Brazil and the United States, oncological navigation proved to be effective in overcoming the barriers of the health system, providing a more humanized and patient-centered care, showing that despite different sociocultural contexts and health systems, it results in similar benefits for patients (CAMPBELL et al., 2010; PAUTASSO, et al., 2020).

The study by Enomoto et al. (2019), carried out at the Department of Surgery of the Wake Forest Baptist Medical Center, in the United States, also incisively evidenced the impact of oncological navigation in reducing the waiting time for the start of treatment in patients with pancreatic neoplasms. By including an oncology navigator, the researchers were able to reduce the interval between the first contact with the patient and the performance of any intervention by almost 16 days, demonstrating the effectiveness of this strategy in optimizing care for this specific population.

Another benefit demonstrated by Schindel et al. (2023), in a study with a private health plan, shows that the implementation of a navigation program for patients with advanced cancer resulted in a significant reduction in both the average length of hospital stay and the number of medications prescribed, culminating in a 23% saving in total costs. These results highlight the potential of navigation not only to improve the quality of life of patients, but also to optimize the management of resources in a private health system.

The studies were carried out in different contexts (public, private, rural, urban), with distinct population and organizational characteristics. All studies demonstrated a significant reduction in the time between diagnosis and initiation of treatment, evidencing the effectiveness of navigation in speeding up the care process. Navigation contributes to a

better quality of life for patients, providing emotional support, clear information and facilitating access to health services, it has also demonstrated a positive economic impact of navigation, with a reduction in hospital and medication costs.

## **ROLE OF THE NAVIGATOR**

Navigation programs present different models of action, with variations in the profile of the professional navigator, in the intensity of the intervention and in the scope of activities (Pautasso et al. 2020). Nurses, for example, have specific attributions in addition to the basic ones. The patient navigator plays a fundamental role in the journey of individuals with cancer. Its main function is to guide and assist the patient in all stages of treatment, from diagnosis to post-treatment follow-up, acting as a true "beacon" in an often complex and challenging process. The navigator acts in the coordination of care as a link between the patient and the different health professionals involved in the treatment, ensuring communication and continuity of care.

It offers clear and accurate information about the diagnosis, treatment options, side effects, and available resources, helping the patient to make decisions, as it identifies and seeks solutions to the barriers that the patient may encounter during treatment, such as financial, logistical, or bureaucratic difficulties. In addition, it offers emotional support to the patient and their family, helping them to cope with the emotions and challenges of the disease. The navigator ensures that the patient's rights are respected and that they receive the appropriate treatment, acting as an *advocacy*.

The study by Holdsworth et al. (2019) is an example of a program with a different model of action, it evidenced the complexity of implementing lay navigation programs, which is different from the approach of the studies already mentioned, especially with regard to integration with clinical teams. The authors highlight that the lack of clarity in the attributions and the distrust on the part of health professionals can compromise the success of these initiatives. In addition, both the need for browsers to master a wide range of information about the services offered, as well as the difficulties in performing complex administrative tasks, are additional challenges.

This reality highlights the need for a paradigm shift in the health system, encouraging professionals to adhere to the practice of navigation. Lay navigation not only benefits the treatment, but also generates savings for the institutions.



## **CHALLENGES IN THE IMPLEMENTATION OF NP**

Although PN contributes significantly to treatment adherence and continuity of care, its implementation faces challenges that permeate the scarcity of resources, the need for professional training, and the complexity of coordinating care at different levels of care. The proper qualification of the professionals involved is essential to overcome these barriers and ensure the success of these programs.

The present literature review demonstrates that the exclusive dedication of a professional to patient navigation is essential to ensure the quality of care. Pautasso et al. (2023) evidenced this need, by demonstrating that the allocation of only two hours a day for the activity significantly limited the performance of the process. This finding reinforces the importance of investing in qualified human resources dedicated exclusively to the implementation of effective navigation programs.

Another challenge frequently encountered in the implementation of navigation programs is the lack of patient preparation, proven in the same pilot project, in which most patients required complementary tests and did not have previous biopsies, significantly delaying the start of treatment. This situation demonstrates the importance of health education actions and better articulation between the levels of care to ensure that patients arrive at the reference services properly prepared (PAUTASSO et al, 2023).

The studies identify challenges common to the implementation of navigation programs, such as the lack of resources, the need for professional qualification, and the complexity of care coordination at different levels of care.

The patients' experience, mediated by navigation, shows that failures in the system, such as delays in starting treatment, directly impact their results and quality of life. This reality requires a restructuring of work processes, with the aim of ensuring more effective and humanized care.

## **CONCLUSION**

The present review analyzed scientific evidence on the benefits and challenges associated with the implementation of patient navigation programs in cancer centers. The analysis revealed a growing interest in the implementation of oncological PN programs in various contexts, approaches and results obtained, highlighting the complexity of the topic as relevant as the disease itself.

Evidence shows favorable results in reducing waiting times, improving quality of life, and increasing patient satisfaction. On the other hand, common challenges to the implementation of PN highlight lack of resources, lack of professional qualification, and the complexity of care coordination at different levels of care.

Despite the challenges in implementing navigation in cancer centers, the promising results justify the effort. By optimizing the patient journey, navigation provides a more humanized experience, improves the quality of life of patients and their families, and contributes to the efficiency of the health system, enabling the identification and correction of failures and the optimization of the use of resources.

## REFERENCES

1. ANS. Agência Nacional de Saúde Suplementar. (2016). Projeto Oncorede: Organização da rede de atenção oncológica na saúde suplementar. Retrieved from <https://www.gov.br/ans/pt-br/arquivos/assuntos/gestao-em-saude/projeto-oncorede/final-publicacao-oncorede3-pdf> on November 18, 2024.
2. Batalha, T. A., Fleisher, E. U., Dwyer, A. J., Trevo, D. E., Poços, K. J., Wightman, P., Strusowski, T., & Calhoun, E. (2022). Barreiras e oportunidades para medir o impacto da navegação do paciente oncológico: Resultados da pesquisa da Mesa Redonda Nacional de Navegação. *American Cancer Society*, 128(S13), 2568-2577. Available at: <https://acsjournals.onlinelibrary.wiley.com/doi/10.1002/cncr.33805>. Retrieved on October 10, 2024.
3. Brasil. (2012). Lei nº 12.732, de 22 de novembro de 2012. Dispõe sobre o primeiro tratamento de paciente com neoplasia maligna comprovada e estabelece prazo para seu início. Retrieved from [http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2012/lei/l12732.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/l12732.htm) on October 17, 2024.
4. Campbell, C., Craig, J., Eggert, J., & Bailey-Dorton, C. (2010). Implementando e medindo o impacto da navegação do paciente em um centro comunitário abrangente de câncer. *Oncology Nursing Forum*, 37(1), 61-66. Available at: <https://pubmed.ncbi.nlm.nih.gov/20044340/>. Retrieved on November 5, 2024.
5. COFEN. Conselho Federal de Enfermagem. (2024). Resolução COFEN nº 735 de 17 de janeiro de 2024. Retrieved from <https://www.cofen.gov.br/resolucao-cofen-no-735-de-17-de-janeiro-de-2024/> on October 10, 2024.
6. COREN-SP. (n.d.). Navegação de pacientes: Uma nova tendência na enfermagem. Retrieved from <https://portal.coren-sp.gov.br/noticias/navegacao-de-pacientes-uma-nova-tendencia-na-enfermagem/> on October 10, 2024.
7. Enomoto, L. M., & Shen, P. (2019). Reflexões do autor: Demonstrando os benefícios da navegação oncológica. *Annals of Surgical Oncology*, 26(3), 840-841. Available at: <https://link.springer.com/article/10.1245/s10434-019-08003-5>. Retrieved on November 23, 2024.
8. FIOCRUZ. (n.d.). OMS aponta aumento da carga global de câncer. Retrieved from <https://cee.fiocruz.br/?q=oms-aponta-aumento-da-carga-global-de-cancer> on October 26, 2024.
9. Freeman, H. P., & Rodriguez, R. L. (2011). História e princípios da navegação do paciente. *American Cancer Society*, 117(S15), 3537-3540. Available at: <https://acsjournals.onlinelibrary.wiley.com/doi/10.1002/cnc26262>. Retrieved on September 5, 2024.

10. Guaxupé. Prefeitura Municipal de Guaxupé. (2023). Lei nº 3.071, de 6 de outubro de 2023. Dispõe sobre o Programa de Navegação de Pacientes Portadores de Neoplasia Maligna de Mama. Retrieved from <http://leismunicipa.is/0uuh8> on October 18, 2024.
11. Holdsworth, L. M., Zions, D., Wang, S., Veruttipong, D., Brown-Johnson, C., Asch, S. M., Rosenthal, E. L., & Winget, M. (2020). Negociando questões leigas e clínicas: Implementando um programa de navegação leiga no cuidado com o câncer. *JCO Oncology Practice*, 16(1), e84-e91. Available at: <https://ascopubs.org/doi/10.1200/JOP.19.00339>. Retrieved on October 10, 2024.
12. Instituto Nacional de Câncer José Alencar Gomes da Silva. (2022). Estimativa 2023: Incidência de câncer no Brasil. INCA. Available at: <https://www.inca.gov.br/sites/ufu.sti.inca.local/files/media/document/estimativa-2023.pdf>. Retrieved on November 2, 2024.
13. Lima, M. E. R. F. de, et al. (2021). Atuação do enfermeiro navegador no acolhimento ao paciente oncológico. *RECIMA21 - Revista Científica Multidisciplinar*, 2(10), e210815. Available at: <https://recima21.com.br/index.php/recima21/article/view/815>. Retrieved on September 6, 2024.
14. Melnyk, B. M., & Fineout-Overholt, E. (2022). *Prática baseada em evidências em enfermagem e saúde: Um guia para as melhores práticas*. Lippincott Williams & Wilkins.
15. Mendes, K. D. S., Silveira, R. C. de C. P., & Galvão, C. M. (2019). Uso de gerenciador de referências bibliográficas na seleção dos estudos primários em revisão integrativa. *Texto & Contexto-Enfermagem*, 28, e20170204. Available at: <https://www.scielo.br/j/tce/a/HZD4WwnbqL8t7YZpdWSjypj/?format=html&lang=pt>. Retrieved on September 14, 2024.
16. Merlini, I., Antonini, F., & Di Saverio, S. (2024). O papel de um enfermeiro navegador de oncologia dedicado nas vias de oncologia cirúrgica: 1 ano de experiência em uma unidade de cirurgia geral no centro da Itália com acompanhamento. *Updates in Surgery*, 74(1), 2011-2018. Available at: <https://link.springer.com/article/10.1007/s13304-024-01916-1#citeas>. Retrieved on September 13, 2024.
17. OPAS. Organização Pan-Americana da Saúde. (2024, February 1). Carga global de câncer aumenta em meio a crescente necessidade de serviços. Retrieved from <https://www.paho.org/pt/noticias/1-2-2024-carga-global-cancer-aumenta-em-meio-crescente-necessidade-servicos> on November 2, 2024.
18. Pautasso, F. F., Lobo, T. C., Flores, C. D., & Caregnato, R. C. A. (2020). Nurse navigator: Desenvolvimento de um programa para o Brasil. *Revista Latino-Americana de Enfermagem*, 28, 3275. Available at: <https://www.scielo.br/j/rlae/a/ZMWdWh8DB6q76wsH8NvN7Xh/?lang=en>. Retrieved on September 2, 2024.

19. Pautasso, F. F., et al. (2024). Trajetória para implementação de programa de navegação de pacientes na oncologia: Relato de experiência. *Online Brazilian Journal of Nursing*, 22(2), 6712. Available at: <https://www.objnursing.uff.br/index.php/nursing/article/view/6691>. Retrieved on September 15, 2024.
20. Pautasso, F. F., Zelmanowicz, A. M., Flores, C. D., & Caregnato, R. C. A. (2018). Atuação do nurse navigator: Revisão integrativa. *Revista Gaúcha de Enfermagem*, 39(1), e2017-0102. Available at: <https://pesquisa.bvsalud.org/porta1/resource/pt/biblio-960816>. Retrieved on September 14, 2024.
21. Rocque, G. B., et al. (2016). Programa Patient Care Connect: Transformando os cuidados de saúde por meio da navegação leiga. *Journal of Oncology Practice*, 12(6), 633-642. Available at: <https://ascopubs.org/doi/full/10.1200/JOP.2015.008896>. Retrieved on November 16, 2024.
22. Rodrigues, R. L., Schneider, F., Kalinke, L. P., Kempfer, S. S., & Backes, V. M. S. (2021). Resultados clínicos da navegação de pacientes realizada por enfermeiros no cenário da oncologia: Revisão integrativa. *Revista Brasileira de Enfermagem*, 74(2), 8. Available at: <https://pubmed.ncbi.nlm.nih.gov/33886831/>. Retrieved on November 15, 2024.
23. Roque, A. C., Gonçalves, I. R., & Popim, R. C. (2023). Experiência de enfermeiras assistenciais: Aproximações aos princípios da navegação de pacientes oncológicos. *Texto & Contexto Enfermagem*, 32(1), 14. Available at: <https://www.scielo.br/j/tce/a/8PgythPkGnvKmrnMwKQGVWC/?lang=pt>. Retrieved on September 2, 2024.
24. Schindel, D., Gebert, P., Frick, J., Letsch, A., Grittner, U., & Schenk, L. (2023). Associações entre suporte de navegação e utilização e custos de cuidados de saúde em pacientes com câncer avançado: Uma análise baseada em dados administrativos de seguro de saúde. *Cancer Medicine*, 12(7), 8662-8675. Available at: <https://onlinelibrary.wiley.com/doi/10.1002/cam4.5574>. Retrieved on November 20, 2024.
25. Sung, H., et al. (2021). Estatísticas globais de câncer 2020: GLOBOCAN estima a incidência e mortalidade em todo o mundo para 36 cânceres em 185 países. *CA: A Cancer Journal for Clinicians*, 71(3), 209-249. Available at: <https://acsjournals.onlinelibrary.wiley.com/doi/10.3322/caac.21660>. Retrieved on September 7, 2024.

26. Yu, W. Z., et al. (2024). O efeito da navegação de enfermeiros oncológicos na saúde mental de pacientes com câncer em Taiwan: Um ensaio clínico controlado randomizado. *Current Oncology*, 31(7), 4105-4122. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC11276177/>. Retrieved on September 5, 2024.