

Benefits of the patient navigation and oncology nursing care program: integrative review

RESUMO | Objetivo: analisar pesquisas que adotaram como objeto os benefícios do programa navegação de pacientes e a assistência de enfermagem. Método: Trata-se de uma revisão integrativa utilizando a estratégia PICO (Paciente, Intervenção, Comparação e Desfecho). Bases de dados selecionadas: LILACS, Medline, IBECS, BDENF e SCIELO, entre 2015 e 2020. Descritores de busca: Enfermagem; Navegação de pacientes; Oncologia; Assistência. Resultados: Foram analisados 11 artigos, nos quais pode-se verificar que os benefícios relativos à inserção do programa de navegação de pacientes e da enfermagem dentro dos serviços de oncologia foram: reestruturação de ambos buscando a padronização e diretrizes; agilidade no tratamento; além do empoderamento da família/cliente no seguimento dos processos/tratamentos. Conclusões: No Brasil, há poucos estudos relacionados a implementação do programa de navegação a da assistência em enfermagem na oncologia. Porém, a literatura existente trouxe como promissores os benefícios ao cliente/família e à instituição, além da agilidade nos processos inerentes ao

Descritores: Enfermagem; Navegação de Pacientes; Assistência; Oncologia.

ABSTRACT | Objective: to analyze research that adopted the benefits of the patient navigation program and nursing care as their object. Method: This is an integrative review using the PICO strategy (Patient, Intervention, Comparison and Outcome). Selected databases: LILACS, Medline, IBECS, BDENF and SCIELO, between 2015 and 2020. Search descriptors: Nursing; Patient navigation; Oncology; Assistance. Results: 11 articles were analyzed, in which it can be verified that the benefits related to the insertion of the navigation program for patients and nursing within the oncology services were: restructuring of both seeking standardization and guidelines; agility in treatment; in addition to the empowerment of the family/client in following the processes/treatments. Conclusions: In Brazil, there are few studies related to the implementation of the navigation program and nursing care in oncology. However, the existing literature brought as promising benefits to the client/family and the institution, in addition to the agility in the processes inherent to the treatment.

Keywords: Nursing: Patient Navigator: Assistance: Oncology.

RESUMEN | Objetivo: analizar las investigaciones que adoptaron como objeto los beneficios del programa de navegación del paciente y los cuidados de enfermería. Método: Se trata de una revisión integradora que utiliza la estrategia PICO (Paciente, Intervención, Comparación y Resultado). Bases de datos seleccionadas: LILACS, Medline, IBECS, BDENF y SCIELO, entre 2015 y 2020. Descriptores de búsqueda: Enfermería; Navegación del paciente; Oncología; Asistencia. Resultados: Se analizaron 11 artículos, en los cuales se puede constatar que los beneficios relacionados con la inserción del programa de navegación para pacientes y enfermería dentro de los servicios de oncología fueron: reestructuración de ambos buscando estandarización y lineamientos; agilidad en el tratamiento; además del empoderamiento de la familia / cliente en el seguimiento de los procesos / tratamientos. Conclusiones: En Brasil, existen pocos estudios relacionados con la implementación del programa de navegación y cuidados de enfermería en oncología. Sin embargo, la literatura existente trajo como beneficios prometedores para el cliente / familia y la institución, además de la agilidad en los procesos inherentes al tratamiento.

Palabras claves: Enfermería; Navegación del paciente; Asistencia; Oncología.

Andrea Cibele Roque

Nurse, Specialist in Intensive Care Unit at the Faculty of Medicine of São José do Rio Preto (FAMERP); Nursing Coordinator of the Intensive Care Unit of Hospital Unimed Regional Jaú: Master's student in Nursing at the Graduate Program, Academic Master's Course, at Universidade Estadual Paulista "Júlio de Mesquita Filho". (UNESP), Botucatu, São Paulo, Brazil.

ORCID: 0000-0003-4546-7061

Ivana Regina Gonçalves

Nurse, Doctor in Nursing, Faculty of Medici-

ne of Botucatu (FMB); Technical Responsible for Nursing CRIE /NHE HCFMB; Professor at Centro Universitário Sudoeste Paulista and Faculdades Integradas de Jaú.

ORCID: 0000-0002-0126-816X

Regina Célia Popim

Nurse, Associate Professor at the Department of Nursing, Faculty of Medicine of Botucatu (FMB), Universidade Estadual Paulista "Júlio de Mesquita Filho". (UNESP), Graduate Program in Nursing, Academic Master's and Doctoral Courses - Botucatu, São Paulo, Brazil.

ORCID: 0000-0001-8341-1590

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INTRODUCTION

ccording to data from the World Health Organization, it is estimated that there will be 27 million new cases of people affected by cancer in 2030, in addition to 17 million deaths from the disease and 75 million individuals living with this disease. 1 In this context, in the mid-1990s, an American physician Harold Freeman developed a program entitled: "Patient navigation", the program is built with the intention of bringing benefits, aiming to preserve the life of the cancer patient by providing the elimination of barriers that permeate prevention, disease discovery, diagnosis, treatment and survival until the end of life in the entire health system, in addition to reducing hospital costs. 2,3

The program assesses and is concerned with the patient's psychosocial status, understanding that their anguish may not help their treatment either. Thus, the professional who works with the "patient navigation" program must be well trained and qualified to conduct quality care and patient satisfaction, achieving better results. 3

Among the professionals who work with the patient navigation program, the nurse acts as a facilitator in care, eliminating barriers, integrating sectors and functions with other care professionals, as well as tasks, in order to include cost-effectiveness, due to the fundamental role that nurses exercise in the care of cancer patients. 4

Thus, aiming to remodel the cancer care network, the National Supplementary Health Agency launched in 2016 the OncoRede Project as a proposal for a cancer care model, which describes the implementation of oncology patient navigation programs as one of the pillars in cancer care. There is the emphasis on the nurse as responsible for navigating patient care, for being the professional with knowledge and training in the area of expertise. 5

The navigator nurse has competence and skills focused on the science of care. Within this universe, nurses establish dimensions aimed at the comprehensive monitoring of patients, providing safety and quality in care in the preventive and curative sphere, in rehabilitation or health promotion, and in monitoring cancer patients. 6 In short, the emergence of new techniques for cancer treatment is beneficial for the patient and for the entire multidisciplinary team. 7

From this perspective, this study

aims to analyze the research productions that have adopted as their object the benefits of the patient navigation program and nursing care in oncology services.



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METHOD

It is an integrative review. Therefore, the integrative review contemplates the systematic and organized search for scientific sources available in the literature. This method has had repercus-

sions in nursing in order to understand problems that impact nursing care, management and education, transforming these scenarios through evidence-based evidence. 8 In this context, this study included four steps: (1) formulation of the research problem; (2) selection of descriptors; (3) analysis of selected manuscripts; (4) elaboration of tables after analysis and application of inclusion and exclusion criteria.

In the first stage, the formulation of the research's guiding question was used with the help of the research tool, the PICO strategy (Patient, Intervention, Comparison and Outcome). The PICO strategy provides the researcher with the elaboration and construction of the research question, as well as in the systematic bibliographic search (TABLE 1). 8

The PICO strategy 8 (Chart 2) was used as a search method in databases, in order to identify the following guiding question in the literature: What benefits does patient navigation contribute to the improvement and quality of nursing care addressed in the scientific literature?

In the second stage, the selection of the sample was organized by accessing the following databases: LILACS, Medline, IBECS, BDENF and SCIELO. The following descriptors were used as a search strategy: Nursing (Enfermagem); Patient navigation (Navegação de pacientes); Oncology (Oncologia); Assistance (Assistência).

The inclusion criteria listed in this study were based on publications with less than five years in the open access modality. After performing a search in the databases, the results were analyzed using the Rayyan Systems Inc software. Manuscripts that did not address the study topic and those that had duplication between the selected databases were excluded. The selected articles were distributed in tables covering the interpretation and analysis of the study.



RESULTS

A total of 777 manuscripts published with the search in the period from 2015 to 2020 were found. In the first analysis, 101 articles were selected and after duplication and publications with approaches that do not include the theme of this study, the final sample consisted of 11 articles. The manuscripts can be found in the following journals: Clin J Oncol Nurs, Am J Manag Care, Can Oncol Nurs J, Acta Oncol, Fórum Oncol Nurs, Rev. latinoam. enferm. and Suporte Care Câncer. It is noteworthy that 10 of the manuscripts are indexed in PUBMED and one in SCIELO.

DISCUSSION

It was noticed in this study that, in places where the nurse navigator program was implemented, the result was promising, in addition to promoting adjustments in specialized oncology services. In this context, it is important to emphasize the contribution of this professional in relation to the care provided, highlighting the potential to communicate with the team and family, developing skills that promote safety and quality of care. In addition, the investment in the navigator nurse promotes satisfaction for patients/relatives and for the institution.

The "Study on Oncology Nurse Navigation: Expansion of the navigator function through telehealth", identified that the navigator nurse is in charge of important functions in the interprofessional team, he works in collaboration with patients and their families and serves as a virtual resource, in addition to providing clinical communication between managers and support staff and contributing through digital health to family members. 22

Furthermore, studies on satisfaction found that patients who received care and follow-up by the navigator

Table 1 – Description of the PICO strategy. Botucatu - SP. 2021.			
Acronym	Definition Description		
Р	Patient	People undergoing cancer treatment in the nursing care setting.	
I	Intervention	Patient Navigation Program	
С	Comparison	Use of the Patient navigation tool in the scenario of oncology nursing care	
0	Outcome	Benefits regarding the use of the Patient Navigation tool in the scenario of nursing care and oncology	
Source: Santos, 2007			

Table 2 – Description of the PICO search strategy. Botucatu - SP. 2021.				
Р		I		Со
Oncology	and/ or	patient navigation	and/ or	Nursing
Source: The author, 2021				

Table 3 - Database search strategy. Botucatu - SP. 2021.		
1°	Navegação de pacientes (Patient navigation)	
2°	Patient Navigation and Oncology Patient Navigation and Oncology and Care	
3°	Patient Navigation and Nursing Patient Navigation and Oncology and Care	
4 °	Patient navigation and care	
5°	Patient Navigation and Nursing and Oncology and Care	
Source: The author, 2021		

nurse had greater satisfaction. The researchers highlighted, in the study, that the Navigator Nurse helps patients who have lost confidence in the healthcare system to reconnect with their interdisciplinary healthcare team, promoting

quality and improvement throughout the entire stage of the disease. 23

In addition, a satisfaction questionnaire was applied among managers of an oncology health service and these providers rated the navigator nurse at a

Table 4 - Description of selected manuscripts according to author/year, objective title, method and main findings. Botucatu - SP.

Author/year	Title	Journal
Pautasso et al., 2020 ⁹	Nurse Navigator: development of a program for Brazil	Rev. latinoam. enferm. (Online)
Cantril et al., 2019 ¹⁰	Standardizing Roles: Assessing Nurse Navigator Clarity, Educational Readiness, and Scope of Work in Two Health Systems	Clin J Oncol Nurs
Rohsig et al., 2019 ¹¹	Nurse Navigation Program: Outcomes From a Breast Cancer Center in Brazil	Clin J Oncol Nurs
Yackzan et al., 2019 ¹²	Outcome evaluation: patient satisfaction score and contact with oncology nurses	Clin J Oncol Nurs
Peckham; Mott-Coles, 2018 ¹³	Interprofessional Lung Cancer Tumor Council: The Role of the Oncology Navigator Nurse in Improving Adherence to National Guidelines and Rationalization of Patient Care	Clin J Oncol Nurs
Munoz et al., 2018 ¹⁴	Multidisciplinary model of cancer treatment: a positive association between oncology nurse navigation and better outcomes for cancer patients	Clin J Oncol Nurs
Miller 2018 ¹⁵	Nurse's navigation in neuro-oncology: developing the role of a unique patient population	Clin J Oncol Nurs
Gordils-Perez et al., 2017 ¹⁶	Oncology Nurse Navigation: Program Development and Implementation in an Integral Cancer Center	Clin J Oncol Nurs
Yatim et al., 2017 ¹⁷	Analysis of navigator nurses' activities in hospital discharge coordination: a mixed-method study for the case of cancer patients	Support Care Cancer
Jeyathevan et al., 2017 ¹⁸	The role of cancer nursing navigators in increasing patient empowerment in the diagnostic phase for adult patients with lung cancer	Can Oncol Nurs J
Mertz et al., 2017 ¹⁹	The effects of individually tailored nurse navigation for patients with newly diagnosed breast cancer: a randomized pilot study	Acta Oncol

Source: The author, 2021

high level of satisfaction, highlighting the role of these navigators in care coordination, patient education, patient support resource, psychosocial support and referrals, community education and financial counseling within the institution. 10

The implementation of the Navigation Program for cancer patients in the Brazilian reality was the focus of study by a group of researchers, developing the methodology of Convergent Research in the South of the country. Scholars developed the Convergent Care Research (PCA - Pesquisa Convergente Assistencial) methodology following

the steps: conception, instrumentation, scrutiny, analysis and interpretation. The study was developed according to the Brazilian reality according to the specific needs of the patient, thus, it was necessary to create a Navigation Needs Assessment Scale (NNAS). In addition, the researchers made available and provided for the scale to be reproduced in the country in a way that they serve the patients treated in the Unified Health System. 9

In a study analyzing the role of cancer nursing navigators in improving patient empowerment in the diagnosis phase for adult patients with lung cancer, a consensus was observed between patients and participants, identifying that the navigator nurse plays a significant role in identification needs of patients and their families throughout the diagnostic process, in addition to effective communication with all sectors of the hospital. The study also analyzed the essential clinical functions of this nurse: empowerment as a patient advocate, educational skills that provide support during treatment, management and navigation resources. 18

Organizational activities during the hospital discharge process were analyzed in a study with significant scores

	Method	e, method and results. Botucatu - SP, 2021. Main findings
Objective Develop a Navigation Program for cancer patients, based on the model proposed by The GW Cancer Institute of George Washington University, adapted to the reality of a High Complexity Center in Oncology in Brazil.	Convergent care research	The development of the Navigation Program for cancer patients and the creation of the Navigation Needs Assessment Scale (NNAS) enabled the structuring of a program model suited to the needs of patients and the operation of reference service in Brazilian oncology.
¹⁰ With a goal of system wide understanding of navigation services, two healthcare institutions examined the educational preparation, responsibilities, and understanding of the ONN role.	Two lead nurses in navigation simultaneously used surveys, focus groups, and interprofessional discussions to assess the current state of navigation in their comparable organizations.	They identified a variation in the functions of the nurse navigator, which shows that it is necessary to standardize, in a universal language, exactly what role and the actions that this professional should exercise. Seeing this need, they developed recommendations to overcome the difficulties and manage to define this standardization of functions.
Describe the results of a pioneering nursing navigation program established at a breast cancer center at a private non-profit hospital in Porto Alegre, Brazil	Cross-sectional, retros- pective and descriptive study based on electro- nic medical records	There was a reduction in the time from diagnosis to start of treatment from 24 days in 2014 to 18 days in 2017. In addition, 97% (153) of patients de clared they were satisfied or very satisfied with the care provided by the nurse navigator.
¹² Assess the effect of contact with an ONN on patient satisfaction	Retrospective review of Press Ganey outpatient satisfaction surveys in oncology	They realized that patients who had contact with navigator nurses had greate satisfaction.
Determine the contributions of an oncology navigator nurse (ONN) related to physician adherence to guidelines and streamlining of patient care in an interprofessional lung cancer tumor council	Retrospective review of medical records	They realized that the navigator nurse was fundamental in the creation of stan dardized guidelines in the hospital facility, in addition to helping to improve communication between members of the patient care team and he is also a source of patient information and education that helps to better coordinate care.
¹⁴ To determine whether the inclusion of a gastrointestinal (GI) cancer navigator (ONN) nurse in the multidisciplinary cancer care team is associated with improved quality of patient care	Retrospective study	It was found that patients followed by the nurse navigator had a shorter tim- between diagnosis and the start of treatment

¹⁵ Describe the unique needs of this population and the effect of nurse navigation	Descriptive study	Navigation strategies were designed for specialized oncology environments such as neuro-oncology and they noticed an improvement in the care provided to cancer patients.
¹⁶ Assess the effect of oncology nurse navigation on access to care, patient and provider satisfaction, and enrollment for the clinical trial of patients with hematological or gynecological malignancies	Descriptive cohort study with historical control	The study successfully provided a baseline assessment of these time intervals to use as a reference for future improvements. Patients and providers were very satisfied with browser function
¹⁷ Identify and quantify the categories of activities performed by navigator nurses for hospital discharge coordination.	Qualitative quantitative study	It was noticed that, among the categories analyzed, they are related to organizational issues, navigation, lack of information and commitments. The training and qualification of nurse navigators must therefore combine clinical and managerial skills.
Explore the role of Oncology Nursing (ONN) Navigators in Increasing Patient Empowerment for Adult Lung Cancer Patients During the Diag- nosis Phase of Cancer Treatment	Qualitative descriptive design	ONNs are in a key position to adapt their practice to the emotional and support needs needed to promote patient and family empowerment.
¹⁹ To determine the feasibility and effectiveness of an individual nurse-navigator intervention to alleviate distress, anxiety, depression, and health-related quality of life in women who have been treated for breast cancer (BC) and are experiencing moderate to severe psychological and physical symptoms	Randomized pilot study	The study shows the promising feasibility of the individualized navigation nursing intervention and, although no significant effect was observed after 6 months, we found statistically significant effects on anxiety, anxiety and depression 12 months after diagnosis.

Source: The author, 2021

during the mixed method study analysis for the case of cancer patients. Nurse navigators play an important role in meeting the needs of patients and being primary care providers after the patient is discharged, such as through in-clinic monitoring, managing clinical alerts and emergencies, call support and technical issues, explanation of care protocols, in addition to the collection and transmission of patient data. 17

In an assessment of the implementation of a navigation program for National Cancer oncology nurses, tremen-

dous patient and provider satisfaction was noted, revealing a decrease in days from initial patient/referral provider call to consultation from the clinician to the start of therapy, ensuring efficient and patient-centered care. Patients reported great satisfaction with the care received. 16

The role of the oncology navigator nurse in improving adherence to national guidelines and simplifying patient care was found to be paramount in relation to improving the overall quality of care provided to patients. It was noticed that the care plan discussed and coordinated with the council followed the practice guidelines and the navigator nurse was essential in creating the facility's standardized guidelines. Thus, it is possible to identify the need to have the nurse navigator as an ally in the creation and implementation of this program in oncology services. In addition to the implementation, it is necessary to have the nurse as the author in the elaboration of the guidelines that will implement the program of navigation. 13



A study on the impact of an innovative inpatient browser program on the length of stay and 30-day readmission identified a reduction in length of stay, without an increase in 30-day readmission after program implementation. 20

It is important to highlight that, in order to carry out the implementation, it is necessary to recognize eight important factors that were highlighted by researchers in a scope review that includes studies from Canada, United States, United Kingdom, Australia, New Zealand and Europe. The first factor is related to the patient's characteristics, the others continue to be the selection and training of future navigators, accurate information about the role that the navigator will develop, operationalization of processes, human and financial resources, effective relationship inside and outside the institution, availability of services and effective communication with managers, 21

In an analysis where there was an association between the oncology nurse's navigation and the improvement in results for cancer patients, it was found that the inclusion of this professional significantly reduces the time from diagnosis to treatment. It was noticed that, in the group where the navigator nurse did not work, the necessary can-

cer staging and clinical examination were not accelerated, as these delays in treatment subsequently lead to an increase in the time from diagnosis to treatment.

The navigator nurse has the ability to guide patients through a detailed treatment care plan, eliminating the consequences that can lead the patient to emergency care, providing consultations for routine maintenance of cancer health, multidisciplinary and holistic care for patients and family members.

Another study analyzed the effects of patient satisfaction who had contact with a navigator nurse. In a retrospective review, researchers found significant differences in patient satisfaction compared to patients who were not cared for by navigators. It was evaluated that the quality of health care provision and patient-centered care increased, still obtaining good results in relation to the accreditation standards of cancer programs. 12.

In a breast cancer center in Brazil, the time from diagnosis to the start of treatment was analyzed for each year from January 2014 to July 2017. The data found revealed a decrease in the period between diagnosis and treatment, in addition to the general rate

of patient satisfaction being "very satisfied" or "satisfied". It was shown that navigation programs allow patients to overcome barriers in health services, ensuring access and preventing delays from the beginning of treatment until after diagnosis. 11

CONCLUSION

In Brazil, there are few studies regarding the implementation of the navigation program for nursing care benefits in oncology. It can be seen that the existing literature brought promising benefits to the client/family and the institution, in addition to the agility in the processes inherent to the treatment.

Among the main characteristics and functions of the nurse navigator, the management and systematization of the work environment were key factors found in this review. Therefore, it can be concluded that the benefits involving the implementation of this program are highlighted in this study as sources of satisfaction, thus, it reinforces the importance of institutions to articulate actions that promote its adoption, in order to reduce costs and achieve quality and security in the provision of care, as well as promoting humanized care centered on patient satisfaction.

References

- 1. Brasil. Ministério da Saúde, Instituto Nacional de Câncer José Alencar Gomes da Silva (INCA). Estimativa 2016: Incidência de Câncer no Brasil. https://www.inca.gov.br/en/node/2396#:~:text=A%200rganiza%C3%A7%C3%A3o%20Mundial%20da%20Sa%C3%BAde,incidir%C3%A1%20em%20pa%C3%ADses%20em%20desenvolvimento.
- 2. Freeman HP, Rodrigues RL. History and Principles of Patient Navigation. Cancer, v. 117, p 3537-3540, agosto, 2011. Disponível em: http://onlinelibrary.wiley.com/doi/10.1002/cncr.26262/references.
- 3. ROCQUE et al., The Patient Care Connect Program: Transforming Health Care Through Lay Navigation. Journal of Oncology Practice 12. 2016; no. 6 (June 01, 2016) e633-e642. DOI: 10.1200/JOP.2015.008896.
- 4. Shejila CH, Mamatha SP, Fernandes DJ. Oncology nurse navigator programme: a narrative review. Nitte Univ J Health Sci. 2015 Mar [cited 2016

- Aug 26];5(1):103- 7. Available from: http://nitte.edu.in/journal/december2014/ONNP.pdf.
- 5. Agência Nacional De Saúde Suplementar. Projeto Oncorede. A Organização da Rede de Atenção Oncológica na Saúde Suplementar. Versão Online. Rio de Jameiro: ANS, 2016. Disponível em: http://www.ans.gov.br/images/stories/Materiais_para_pesquisa/Materiais_por_assunto/FINA L_publicacao_oncorede.pdf.
- 6. Pautasso FF, Zelmanowicz AM, Flores CD, Caregnato RCA. Atuação do Nurse Navigator: revisão integrativa. Rev Gaúcha Enferm. 2018;39:e2017-0102. doi: https://doi.org/10.1590/1983-1447.2018.2017-0102.
- 7. Mendes De Melo EB, Costa Vicente M, dos Santos Pinto M, Soares Heringer Xavier BH, Curbani Vieira Manola C, Perasol L. Enfermagem e o uso de tecnologias nos serviços de terapia antineoplásica brasilei-

- ro. Nursing [Internet]. 6º de agosto de 2020 [citado 14º de outubro de 2021];23(266):4342-59. Disponível em: http://www.revistas.mpmcomunicacao.com.br/index.php/revistanursing/article/view/793.
- 8. Soares CB, Hoga LAK, Peduzzi M, Sangaleti C, Yonekura T, Silva DRAD. Integrative review: concepts and methods used in nursing. Rev Esc Enferm USP 2014; 48(2):329-39. doi: 10.1590/S0080-623420140000200020.
- 9. Pautasso FF, Lobo TC, Flores CD, Caregnato RCA. Nurse Navigator: development of a program for Brazil.Rev. Latino-Am. Enfermagem. 2020;28:e3275. DOI: http://dx.doi.org/10.1590/1518-8345.3258.3275.
- 10. Cantril C, Christensen D, Moore E. Standardizing Roles: Evaluating Oncology Nurse Navigator Clarity, Educational Preparation, and Scope of Work Within Two Healthcare Systems. Clin J Oncol Nurs. 2019 Feb 1;23(1):52-59. doi: 10.1188/19.CJON.52-59. PMID: 30681989.
- 11. Rohsig V, Silva P, Teixeira R, Lorenzini E, Maestri R, Saraiva T, Souza A. Nurse Navigation Program: Outcomes From a Breast Cancer Center in Brazil. Clin J Oncol Nurs. 2019 Feb 1;23(1):E25-E31. doi: 10.1188/19. CJON.E25-E31. PMID: 30682003.
- 12. Yackzan S, Stanifer S, Barker S, Blair B, Glass A, Weyl H, Wheeler P. Outcome Measurement: Patient Satisfaction Scores and Contact With Oncology Nurse Navigators. Clin J Oncol Nurs. 2019 Feb 1;23(1):76-81. doi: 10.1188/19.CJON.76-81. PMID: 30682008.
- 13. Peckham J, Mott-Coles S. Interprofessional Lung Cancer Tumor Board: The Role of the Oncology Nurse Navigator in Improving Adherence to National Guidelines and Streamlining Patient Care. Clin J Oncol Nurs. 2018 Dec 1;22(6):656-662. doi: 10.1188/18.CJON.656-662. PMID: 30452006.
- 14. Muñoz R, Farshidpour L, Chaudhary UB, Fathi AH. Multidisciplinary Cancer Care Model: A Positive Association Between Oncology Nurse Navigation and Improved Outcomes for Patients With Cancer. Clin J Oncol Nurs. 2018 Oct 1;22(5):E141-E145. doi: 10.1188/18.CJON.E141-E145. PMID: 30239520.
- 15. Miller E. Neuro-Oncology Nurse Navigation: Developing the Role for a Unique Patient Population. Clin J Oncol Nurs. 2018 Jun 1;22(3):347-349. doi: 10.1188/18.CJON.347-349. PMID: 29781470.
- 16. Gordils-Perez J, Schneider SM, Gabel M, Trotter KJ. Oncology Nurse Navigation: Development and Implementation of a Program at a Com-

- prehensive Cancer Center. Clin J Oncol Nurs. 2017 Oct 1;21(5):581-588. doi: 10.1188/17.CJON.581-588. PMID: 28945718.
- 17. Yatim F, Cristofalo P, Ferrua M, Girault A, Lacaze M, Di Palma M, Minvielle E. Analysis of nurse navigators' activities for hospital discharge coordination: a mixed method study for the case of cancer patients. Support Care Cancer. 2017 Mar;25(3):863-868. doi: 10.1007/s00520-016-3474-x. Epub 2016 Nov 9. PMID: 27830394; PMCID: PMC5266768.
- 18. Jeyathevan G, Lemonde M, Brathwaite AC. The role of oncology nurse navigators in enhancing patient empowerment within the diagnostic phase for adult patients with lung cancer. Can Oncol Nurs J. 2017 May 1;27(2):164-170. doi: 10.5737/23688076272164170. PMID: 31148626; PMCID: PMC6516234.
- 19. Mertz BG, Dunn-Henriksen AK, Kroman N, Johansen C, Andersen KG, Andersson M, Mathiesen UB, Vibe-Petersen J, Dalton SO, Envold Bidstrup P. The effects of individually tailored nurse navigation for patients with newly diagnosed breast cancer: a randomized pilot study. Acta Oncol. 2017 Dec;56(12):1682-1689. doi: 10.1080/0284186X.2017.1358462. Epub 2017 Jul 31. PMID: 28758822.
- 20. Kwan JL, Morgan MW, Stewart TE, Bell CM, Impacto de um programa de internação PN. J. Hosp. Med 2015; 12; 799-803. doi: 10.1002 / ihm.2442.
- 21. Valaitis RK, Carter N, Lam A, Nicholl J, Feather J, Cleghorn L. Implementação e manutenção de programas de navegação do paciente vinculando cuidados primários com serviços sociais e de saúde baseados na comunidade: uma revisão da literatura de escopo. BMC Health Serv Res. 6 de fevereiro de 2017; 17 (1): 116. doi: 10.1186 / s12913-017-2046-1. PMID: 28166776; PMCID: PMC5294695.
- 22. Kimberlee Rowett; Deborah Christensen. Enfermeira Oncológica Navegação: Expansão da função de navegador por meio da telessaúde. Revista Clínica de Enfermagem Oncológica. 24 (3): 24-31, JUNHO DE 2020. DOI: 10.1188 /CJON.S1.24-31,PMID: 32441701.
- 23. Phillips, S., Raskin, S., Zhang, Y. et al. Perspectivas de programas de navegação de pacientes oncológicos sobre práticas e necessidades de gerenciamento de informações: um estudo descritivo. Support Care Cancer 28, 515-524 (2020). https://doi.org/10.1007/s00520-019-04837-7.