

The impact of patient navigation: a scoping review protocol

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Review objective/question: The objective of this review is to synthesize the evidence on the impact of patient navigation for all populations across all settings. The question of this review is: What is the existing evidence on the impact of patient navigation?

Keywords Health care delivery; impact; outcomes; patient navigation; scoping review

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Introduction

Patient navigation (PN) is increasingly being used to improve healthcare delivery across Canada and globally. This innovative model of care is growing quickly as an approach to address the complex and often fragmented nature of health, education and social service delivery.¹ The phrase “patient navigation” was coined by Dr. Harold Freeman, who initiated the first PN program during the 1990s in Harlem, New York.² When first introduced, patient navigators facilitated communication between health providers and guided patients through any emotional, physical and/or financial challenges that occurred with a cancer diagnosis.³ Today, PN remains an integral part of cancer care, but has expanded throughout the healthcare continuum to serve patient populations with a range of conditions and needs.^{2,4} Patient navigation is now recognized as one way to help mitigate social determinants of health, such as income, social support and education, that can hinder one’s ability to receive timely care.¹ Although PN is still relatively new, the evidence that demonstrates the impact of PN has continued to grow over time.⁵ As such, the purpose of this scoping review is to map the current state of knowledge in this area.

Rooted in cancer care, PN is a “community-based service delivery intervention designed to promote access to timely diagnosis and treatment of cancer and other chronic diseases by eliminating barriers to care”, as defined by Freeman.^{6(p.3540)} Another definition also emphasizes timely care and support, noting that PN connects persons with mental health needs to timely and accessible resources, and supports clients by helping them engage with existing services.⁷ Many PN programs define PN in a way that fits with the goals of their intervention and acknowledges the patient population they serve. To remain consistent throughout this current scoping review and to ensure that all patient populations are eligible for inclusion, PN will be defined as a partnership between patient, family or member(s) of the care team, and the patient navigator, who facilitates timely access to health and/or community resources and fosters self-management and autonomy through education and emotional support.^{4,8}

Patient navigators may be individuals with a professional background, such as a registered nurse or social worker, trained lay navigators who come with various educational backgrounds, or peer navigators who have the lived experience of navigating through the system themselves or for someone in their care.^{1,2,7,9} There are several terms that have been used for the role of a patient navigator in the literature, including care coordinator, nurse navigator, community health worker, system navigator or health navigator.³ Patient navigators may work in

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community settings, primary health clinics or hospitals, and may engage with patients or families either in a face-to-face format or virtually.^{10,11} As a model to improve the integration of health services delivery, PN strengthens person-centered care by addressing the multidimensional needs of the individual or population across settings and levels of care.¹²

Patient navigation interventions have been implemented and studied across a number of areas, including cancer care,² mental health,^{7,9} diabetes,¹³ HIV,¹⁴ autism¹⁵ and various other populations with complex care needs.^{10,11} Most studies have reported positive results on outcomes of PN, including adherence and/or engagement with care, patient and family support, increased access to various services and resources, decreased time to diagnostic resolution, and collaboration and/or care coordination.^{7,9,11,14,15} Other research has discussed mixed results, including a decrease in hospitalization rates in those 60 years and older, while the same PN intervention has shown an increase in hospitalization rates in individuals younger than 60 years.¹⁶

Given the growing body of literature on PN, both systematic and scoping reviews are emerging in the following areas: i) characteristics and effectiveness of PN for people with chronic disease¹⁷; ii) patient satisfaction with patient navigators in ambulatory care¹⁸; iii) the role of patient navigators in facilitating access to primary care⁵; and iv) PN in primary care, including the role of patient navigators as well as the hiring and training processes.¹ The reviews published to date have limitations, including the exclusion of qualitative studies and unpublished reports,¹⁷ examining outcomes (e.g. patient satisfaction) for defined age groups (e.g. patients 18 years and up)¹⁸ or settings (e.g. primary care),¹ and the exclusion of non-Organisation for Economic Co-operation and Development countries.⁵ The current review will expand on the contributions of previous reviews by capturing a wider range of patient populations, geographic locations, settings, study types and publishing status.

Scoping reviews are useful when seeking to systematically map the current state of knowledge in an area of interest.¹⁹ A preliminary search of CINAHL, PubMed, and the *JBIR Database of Systematic Reviews and Implementation Reports* was conducted, and no current or ongoing reviews with

the same objective on this topic were identified. We will be following the JBI Methodology for Scoping Reviews, as it is recommended to use standardized guidelines in the design and reporting of scoping reviews to ensure a replicable and robust review.¹⁹ The results of this scoping review will address a gap in the literature by generating a clear picture of the available evidence in this area of study to inform future research, policy, and practice related to PN programs across settings. The objective of this review is to synthesize the evidence on the impact of PN for all populations across all settings.

Inclusion criteria

Participants

The focus of our scoping review is on PN for all populations. The review is not specific to any condition, sex, age, ethnicity or other demographic variable. Participant details will not be applied as the basis for study selection. Rather, we will consider research and other sources of literature that provide information on the impact of PN.

Concept

The main concept is PN. Patient navigation will be defined as a partnership between a patient, family or member(s) of the care team and a patient navigator (including professional, lay, or peer navigators) who facilitates timely access to health and/or community services and resources, and fosters self-management and autonomy through education and emotional support.^{4,8} We will accept various terms used in the literature regarding patient navigators (e.g. lay or peer navigator, community health worker, nurse navigator, system navigator, health navigator). To ensure consistency, studies will be excluded if their descriptions do not follow our definition of PN. For example, studies where the navigator's main role is to deliver clinical care (e.g. triage) will be excluded. This review will consider studies and other literature sources that include an evaluation of PN.

The secondary concept is impact. Impact has been described by the Centers for Disease Control and Prevention as an assessment of a program's "effectiveness in achieving its ultimate goals".^{20(p.1)} For the purposes of this review, impact refers to whether the PN (service/program/intervention) has been able to achieve its intended goals. Impact can be presented in multiple ways. For example, an analysis of

administrative data, the results from a randomized controlled trial, qualitative patient narratives or provider-reported outcomes may be considered for inclusion to demonstrate the impact of PN. Both positive and negative impacts will be reported.

Context

The review will consider PN in all settings, such as hospital, clinic or community-based settings. There will not be any geographic limitations placed on this review as the intent is to explore the impact of PN across all settings and locations.

Types of sources

This scoping review will consider all study designs including randomized controlled trials, non-randomized controlled trials, quasi-experimental, before and after studies, prospective and retrospective cohort studies, case-control studies and analytical cross-sectional studies. This review will also consider descriptive observational study designs including case series, individual case reports and descriptive cross-sectional studies for inclusion.

Qualitative studies will also be considered, including, but not limited to, designs such as phenomenology, grounded theory, ethnography and qualitative description. In addition, systematic, scoping and literature reviews that meet the inclusion criteria will be considered.

Other literature, such as unpublished papers and/or evaluation reports, will also be considered for inclusion.

Methods

The proposed scoping review will be conducted in accordance with the Joanna Briggs Institute methodology for scoping reviews.¹⁹

Search strategy

The search strategy will aim to locate both published and unpublished literature. An initial search of PubMed and CINAHL was undertaken to identify initial search terms (keywords) on the topic and to further develop the search strategy. The search terms found in the titles and abstracts of relevant articles, and the index terms, were used to develop a full search strategy. Similar terms were removed and reintegrated to test for impact on search results.

For example, we determined that keeping both “evaluation” and “impact” was necessary. The strategy was tested and translated into equivalent search strategies for PubMed, CINAHL, PsycINFO and Social Work Abstracts with the assistance of a librarian (see Appendix I). Studies published in English and/or French since 1990, the inception year of PN, will be considered for inclusion.

We found a difference in how articles are currently indexed versus how they were indexed before 2013, as there was not a specific term for PN before then.²¹ Therefore, two distinct search strategies were created, and the results merged to address this discrepancy and to locate the greatest number of relevant articles possible. The reference list of all studies selected for critical appraisal will be screened for additional studies.

Study selection

Following the search, all identified citations will be collated and uploaded into Mendeley (Mendeley Ltd., Elsevier, Netherlands) and duplicates removed. Remaining citations will then be imported to Covidence (Covidence, Melbourne, Australia) and titles and abstracts will be screened by two independent reviewers for assessment against the inclusion criteria. The full texts of potentially relevant studies will be retrieved in Covidence and assessed against the inclusion criteria. Full-text citations that meet the inclusion criteria will be imported into the Joanna Briggs Institute’s System for the Unified Management, Assessment and Review of Information (JBI SUMARI) (Joanna Briggs Institute, Adelaide, Australia). Reasons for exclusion of full-text studies that do not meet the inclusion criteria will be recorded and reported in the final scoping review. Any disagreements that arise between the reviewers at any stage of the study selection process will be resolved through discussion between the two reviewers, or with a third reviewer as a tie-breaker, when needed. The results of the search will be reported in full in the final report and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram.²²

Data extraction

Data will be extracted from papers included in the scoping review by the two independent reviewers

using a data extraction tool developed by the reviewers. The data extracted will include specific details about the population, concept, context, study methods and key findings relevant to the scoping review objective. A draft of the extraction table is provided (see Appendix II). This will be modified and revised as necessary during extraction of the included studies. Modifications will be detailed in the full scoping review report. Any disagreements that arise between the two reviewers will be resolved through discussion or with a third reviewer, as needed. Authors of research articles and other sources of literature may be contacted to request additional or missing data, where needed.

Data presentation

The data extracted from relevant published and unpublished literature will be presented in a tabular form that is aligned with the objective of this scoping review. Data that are presented in tables will reflect the information collected using the data extraction tool (Appendix II). This will include i) the author and year of publication; ii) type of source (e.g. published randomized controlled trial, unpublished review); iii) geographic location; iv) setting; v) target population; vi) navigator title and type (e.g. lay or professional); vii) objective(s) and outcome(s); and viii) impact. A narrative summary will accompany the tabulated and/or charted results and will describe how the results relate to the review objective and question.

References

- Carter N, Valaitis RK, Lam A, Feather J, Nicholl J, Cleghorn L. Navigation delivery models and roles of navigators in primary care: a scoping literature review. *BMC Health Serv Res* 2018;18(1):1–13.
- Freeman HP. The history, principles, and future of patient navigation: commentary. *Semin Oncol Nurs* 2013;29(2): 72–5.
- Shockney LD. Evolution of Patient Navigation. *Clin J Oncol Nurs* 2010;14(4):405–7.
- Luke A, Doucet S, Azar R. Paediatric patient navigation models of care in Canada: an environmental scan. *J Paediatr Child Health* 2018;23(3):46–55.
- Peart A, Lewis V, Brown T, Russell G. Patient navigators facilitating access to primary care: a scoping review. *BMJ Open* 2018;8(3):1–12.
- Freeman HP, Rodriguez RL. The History and Principles of Patient Navigation. *Cancer* 2011;117(15 0):3539–42.
- Anderson JE, Larke SC. The Sooke Navigator project: using community resources and research to improve local service for mental health and addictions. *Ment Health Fam Med* 2009;6(1):21–8.
- Kelly K, Doucet S, Luke A. Exploring the roles, functions, and background of patient navigators and case managers: a scoping review. *Int J Nurs Stud*. In press.
- Corrigan P, Pickett S, Batia K, Michaels P. Peer navigators and integrated care to address ethnic health disparities of people with serious mental illness. *Soc Work Public* 2014;29(6):581–93.
- The New Brunswick Navigation Centre for Children with Complex Care Needs [Internet]. New Brunswick: NaviCare/ SoinsNavi; 2018 [cited 2018 July 20]. Available from: <https://www.navicarenb.ca>.
- Lawson KA, Bloom SR, Sadof M, Stille C, Perrin JM. Care coordination for children with special health care needs: evaluation of a state experiment. *Matern Child Health J* 2018;15(7):993–1000.
- World Health Organization. Integrated care models: an overview [Internet]. Europe: World Health Organization; 2016 [cited 2018 July 18]. Available from: <http://www.euro.who.int/en/health-topics/Health-systems/health-services-delivery/publications/2016/integrated-care-models-an-overview-2016>.
- Abernethy SH. Neonatal Diabetes: Nurse navigator role. *J Paediatr Nurs* 2018;38:145–6.
- Steward WT, Sumitani J, Moran ME, Ratthagana MJ, Morris JL, Isidoro L, et al. Engaging HIV-positive clients in care: acceptability and mechanisms of action of a peer navigation program in South Africa. *AIDS Care* 2018;30(3):330–7.
- Feinberg E, Abufhele M, Sandler J, Augustyn M, Cabral H, Chen N, et al. Reducing disparities in timely autism diagnosis through family navigation: Results from a randomized pilot trial. *Psychiatr Serv* 2016;67(8):912–5.
- Balaban RB, Zhang F, Vialle-Valentin CE, Galbraith AA, Burns ME, Laroche MR, et al. Impact of a patient navigator program on hospital-based and outpatient utilization over 180 days in a safety-net health system. *J Gen Intern Med* 2017;32(9):981–9.
- McBrien KA, Ivers N, Barnieh L, Bailey JJ, Lorenzetti DL, Nicholas D, et al. Patient navigators for people with chronic disease: a systematic review. *PLoS One* 2018;1392:e0191980.
- Ranaghan C, Boyle K, Meehan M, Moustapha S, Fraser P, Concert C. Effectiveness of a patient navigator on patient satisfaction in adult patients in an ambulatory care setting: a systematic review. *JBHI Database System Rev Implement Rep* 2016;14(8):172–218.
- Peters MDJ, Godfrey C, McInerney P, Baldini Soares C, Khalil H, Parker D. Chapter 11: Scoping Reviews. In: Aromataris E, Munn Z (Editors). *Joanna Briggs Institute Reviewer's Manual*. Adelaide: Joanna Briggs Institute; 2017. [internet]. [cited 2018 August 14]. Available from: <https://reviewersmanual.joannabriggs.org/>.

20. Centers for Disease Control and Prevention. Types of Evaluation. Division of STD prevention. [internet]. [cited 2018 November 16]. Available from: <https://www.cdc.gov/std/Program/pupestd/Types%20of%20Evaluation.pdf>.
21. National Center for Biotechnology Information [Internet]. Bethesda, MD: Mesh; Patient navigation; 2013. [cited 2018 Aug 14]. Available from: <https://www.ncbi.nlm.nih.gov/mesh/?term=patient+navigation>.
22. Moher D, Liberati A, Tetzlaff J, Altman DG. The PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Med* 2009;6(6):e1000097.

Appendix I: Search strategies

CINAHL, PsycINFO, Social Work Abstracts
((“navigator” OR “navigation”) AND (“care coordination” OR “access” OR “continuity of patient care” OR “community health” OR “health services”) AND (“evaluation” OR “impact”)) OR ((“patient navigator” OR “patient navigation”) AND (“evaluation” OR “impact”))
PubMed
((“navigator”[all Fields] OR “navigation”[All Fields]) AND (“care coordination”[All Fields] OR “access”[All Fields] OR “continuity of patient care”[All Fields] OR “Patient Navigation”[Mesh] OR “community health”[All Fields] OR “health services”[All Fields]) AND (“evaluation”[All Fields] OR “impact”[All Fields])) OR ((“patient navigator” [All Fields] OR “patient navigation”[All Fields]) AND (“evaluation” [All Fields] OR “impact” [All Fields]))

Appendix II: Data extraction tool

Data extraction tool			
	Study A	Study B	Study C
Author/year			
Type of source/study design			
Geographical location			
Setting			
Target population			
Navigator title/type			
Purpose/objective(s)			
Outcome(s)			
Impact			