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# Navigation for youth mental health and addictions: protocol for a realist review and synthesis of approaches and practices (The NavMAP standards project)

Roula Markoulakis ![ORCID],[1,2] Simran R A Arora,[1] Sugy Kodeeswaran,[3] Michelle Di Febo,[3] Liisa Kuuter,[3] James Fleming,[4] Cathy Walsh,[5] Adina Hauser,[6] Kristin Cleverley ![ORCID],[7,8] Sander L Hitzig,[1,2] Kristina Kokorelias,[9] Amy Cheung,[1,2,3] David Willis,[10] Anthony Levitt[1,2,3]

For numbered affiliations see end of article.

**Correspondence to**
Dr Roula Markoulakis;
roula.markoulakis@sunnybrook.ca

## ABSTRACT

**Introduction** Mental health and/or addiction (MHA) concerns affect approximately 1.2 million children and youth in Canada, yet less than 20% receive appropriate treatment for these concerns. Youth who do not receive appropriate support may disengage from care and may experience lasting MHA issues. Families of these youth also support them in finding and accessing care. Thus, system supports are needed to help youth and their families find and equitably access appropriate care. Navigation is an innovation in MHA care, providing patient-centred support and care planning that helps individuals and families overcome barriers to care. Despite the increasing availability of navigation services for youth with MHA concerns, practices and models vary, and no single source has synthesised evidence regarding approaches and outcomes for this population into comprehensive standards.

**Methods and analysis** The proposed research will bring together evidence in youth MHA navigation, to establish this important system support as a factor that can enhance the integration and continuity of care for these youth. Our team, which includes researchers, administrators, clinical leads, an MHA navigator and youth and caregivers with lived experience, will be involved in all project stages. Realist Review and Synthesis methodology will be used, the stages of which include: defining scope, searching for evidence, appraising studies and extracting data, synthesising evidence and developing conclusions, and disseminating findings.

**Ethics and dissemination** Ethics approval is not required, as the study involves review of existing data. Dissemination plans include scientific publications and conferences and online products for stakeholders and the general public.

## STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Realist synthesis is well suited to the evaluation of complex interventions such as youth mental health and addiction system navigation.
⇒ This synthesis will identify what features of navigation services for youth with mental health and addictions and their families elucidate certain outcomes within various settings.
⇒ This application of realist methods will have implications for real-world implementation of youth mental health and addiction navigation services, which will be of interest to researchers, health administrators and front-line service providers and decision-makers.
⇒ Realist reviews and syntheses rely on the transparency and adequacy of data reporting on contexts, mechanisms and relationships to the produced outcomes in the sources being reviewed. The potential lack of adequate data in this regard might impact study feasibility (by increasing time spent contacting programmes and data source authors) and may limit transferability of the produced standards.

psychological changes.[2 3] During this time, the first onset of mental health and/or addictions (MHA) concerns may occur, along with increases in severity and complexity in already existing concerns.[2–4] While MHA concerns affect approximately 1.2 million Canadian children and youth, it is estimated that fewer than 20% receive appropriate treatment.[5] Furthermore, an estimated 70% of Canadian adults with MHA concerns indicate these concerns began during their youth,[6] highlighting the importance of early intervention to reduce current and lifetime burden of illness.[1 2 7 8] Families (including family of choice) are often involved in youth's

## INTRODUCTION

Youth (typically considered to be between 12 and 29 years of age)[1 2] experience considerable social, developmental, biological and

care by preference or by necessity, particularly when the youth is not developmentally ready to independently access care or the youth's symptoms prevent them from independently participating in care.[9] Families may thus take a role in driving the youth's care plan, advocating for their care needs and/or motivating the youth throughout their participation in care.[10] Family involvement may even persist into the time when the youth is a legal adult and present complexities associated with privacy and confidentiality.[11]

Youth with MHA issues encounter many emotional, social, financial and systemic inequities and barriers to care.[10 12] They also have complex needs that can affect their transitions through many elements of the care system.[13] For example, youth ageing out of child services must meet different eligibility criteria for adult services. As a result, they may be considered not unwell enough for adult services, leading to interruptions in care.[4 14] Youth may also transition between many different levels and types of care, including emergency departments, hospital admissions, outpatient or community services and supports, primary care appointments and mobile crisis response units.[15 16] Through these encounters, they might not receive effective treatment for their needs, possibly due to a lack of expertise[17] or insufficient access to intensive or appropriate supports.[18] Consequently, overall service utilisation decreases during youth care transitions,[4] resulting in substantial unmet need for service and less connection to service than other age groups.[4 19] Experiences of unsupported transitions, interruptions in care, or care that does not consider youth's race, culture, gender or social needs may spur youth to develop negative attitudes about care or mistrust of the MHA system,[9 20] or to disengage from care completely.[3 9 20] Thus, navigation services may be a mechanism to enhance service access and continuity. The recent growth in these types of MHA services[21] necessitates that existing evidence regarding navigation approaches and practices be synthesised to inform navigation supports that improve service integration and continuity of care for these youth and their families.

Navigation was developed as a clinical service in response to inequities in care experienced by patients faced with systemic (eg, information, financial) and individual (eg, ethnocultural, emotional) barriers to care.[22] Navigation is a patient-centred healthcare delivery support service that reduces barriers by facilitating timely access to care, working closely with patients and their families to guide them through their care plans and ensuring seamless transitions in care.[22] Since its first introduction in breast cancer care, navigation has been applied to diverse populations with complex care needs, such as other cancers, HIV[23 24] and autism.[25] In these conditions, navigation has been shown to improve screening and diagnosis rates, as well as access and adherence to treatment.[25 26]

Navigation is increasingly being used as a support for people needing to access care in the MHA system.[27–29] The MHA system is fragmented, with numerous barriers and unclear pathways that can leave individuals unsupported.[30 31] While there are often many services available, pathways to and through the most appropriate care are unclear. Navigation services act as a single point of contact to guide individuals through their care plans, thereby helping patients and families connect with appropriate supports and empowering them in managing their health.[22 32–37] Within the existing evidence for navigation in MHA for adults, findings suggest that navigation is associated with a reduction in barriers to healthcare and substance use services,[33] improved access to MHA care providers,[38] and decreases in current health problems and in primary care visits.[39] Navigation services adopt various models of care. Some offer lay navigation provided by peers or professional navigation offered by trained clinicians, while others offer both.[40] A scoping review by our team also indicated that there is also a great deal of variation in the use of the term navigation, in that many health professionals perform functions of navigation without consistency in approaches and offerings.[41] Furthermore, duration of navigation may range from short term to long term, depending on the programme and client and/or caregiver needs.[42] Navigation delivery methods also differ, with a mix of phone, email, text message and occasionally, in-person services.[40] Navigation plans may also involve the whole family, with caregivers and siblings being matched to resources along with the youth experiencing MHA concerns.[36] Despite promising findings in MHA navigation for adults and the increasing availability of youth MHA navigation supports, no single source has sought to capture navigation approaches and outcomes through a comprehensive review and synthesis of evidence as it pertains to youth MHA navigation services.

A coordinated solution is needed to support youth with MHA concerns and their families accessing and transitioning through available supports.[4 43 44] To this end, an essential objective of navigation services includes enhancing access to and transition through the healthcare system.[22] Navigation is highly scalable and spreadable, in that it is inherently flexible and adaptive to various individual needs, systemic contexts and local settings.[28] In this way, navigation also aligns with the Quadruple Aim in healthcare, a framework that promotes the advancement of healthcare quality in four domains: improved patient experience, reduced costs, better outcomes and improved provider experience.[45] Although navigation can be of particular importance for youth and their families, models, practices and approaches vary, and existing evidence has not yet been consolidated into a comprehensive set of standards. Standards are documents that lay out characteristics, accepted practices and nomenclature with respect to an activity or diverse field.[46] In contrast with practice guidelines, standards can set expectations and public accountabilities of navigation services, while practice guidelines would pertain to specific practice-related issues and decision-making.[47] Developing standards for youth MHA navigation is an important step in

this newer area, and can support an accessible, equitable and sustainable mental healthcare system that ensures youth have undisrupted access to MHA care that meets their needs. Moreover, enhancing evidence-based practice in this area can inform public policy by providing decision-makers with a framework by which to model and evaluate navigation services in their jurisdictions. Thus, the question guiding all activities of this project is: according to existing evidence, how are navigation services delivered to ensure equitable access to quality care for youth seeking mental health and/or addictions care and their families?

## OBJECTIVES

The objective of this project is to develop a comprehensive understanding of current approaches and practices through a consolidated set of standards in MHA system navigation for youth and their families. As navigation services across Canada grow and become increasingly recognised as an essential element of youth MHA services,[1] the importance of identifying and describing current practices in youth MHA system navigation cannot be overstated. Doing so will serve to identify service standards in navigation in line with the quadruple aim, focusing on improving: (1) patient experience and outcomes by providing patient-centred navigation services, supporting identification and timely and equitable access to appropriate care in the community, and supporting efficient transitions between services; (2) system sustainability and reducing 'revolving door' and fragmented care by better connecting youth and families to community supports and appropriately specialised services for their needs and (3) provider experience by reducing provider burden associated with informal navigation for youth and families and developing role clarity for navigation service providers.

As such, enhancing understanding of navigation services for youth with MHA concerns and their families can catalyse their scale and spread by supporting evidence-based decision making regarding programme considerations, approaches to navigation supports, developing navigation care plans, and supporting youth and families throughout the navigation care plan; thereby ensuring a mental healthcare system that is readily able to support youth and families in traversing and connecting with needed care.

## METHODS AND ANALYSIS
### Study design

This study is a realist review and synthesis that will use existing evidence to develop standards ('NavMAP standards') in MHA system navigation for youth and families. This project will be conducted over several phases, guided by the approach proposed by Pawson *et al*[48] and by the Realist And Meta-narrative Evidence Syntheses: Evolving Standards I Quality and Publication standards

for realist reviews.[49] These phases include: defining scope, searching for evidence, appraising studies and extracting data, synthesising evidence and developing conclusions, and disseminating findings.[48] Stakeholders, including decision-makers in navigation and youth MHA services, navigation service providers, researchers and youth and caregivers with lived experience, will be involved in every stage of the review.

Realist review is iterative, and as such, these stages are not expected to proceed in perfectly linear fashion. For example, the review question may be refined in light of emerging search results, and additional categories of extraction might be identified in response to developing syntheses of findings. Furthermore, realist reviews do not identify the effectiveness of an intervention, given that complex interventions are often implemented in varying circumstances, leading to mixed evidence. Instead, realist reviews focus on identifying what works, why and how, for whom and under what circumstances.[49] As such, realist reviews can provide deeper understandings of youth MHA navigation and how it can perform optimally, resulting in rich and practical understandings of use for policy makers and practitioners when planning at national and regional levels.[48]

### Defining the scope

The research team will identify the key issues and questions considered. This process will include determining the nature and content of navigation interventions under study (eg, delivery models; navigator roles; populations served, including, eg, marginalised or vulnerable youth, racialised youth, 2SLGBTQIA youth, homeless youth; systems navigated outside of MHA care)[50] A half-day workshop will be conducted, virtually or in-person, and led by a neutral facilitator, for community consultation with relevant stakeholder groups, to allow broader comment and direction pertaining to the scope of the NavMAP standards.[51] Through this work, the guiding review question, search strategy (consulting with a Sunnybrook librarian), and data extraction template will be developed. This phase will take place from May to September 2022.

### Searching for evidence

This stage will involve review of academic literature, clinical expertise and experience, expert opinions, environmental scanning of existing youth MHA navigation services, along with other information identified as relevant to project scope; as they pertain to virtually-delivered navigation supports. Recognising there may be challenges associated with identifying and incorporating sources in the relatively new and limited navigation evidence base, stakeholders within and beyond the research team will be consulted,[51] to ensure appropriate coverage of academic literature and to allow for consideration of practice-based evidence through grey literature and consultation. Sources meeting the study scope, focusing on youth (ages 12–29) with MHA concerns, and available in the English language will be included. There will be no exclusions

**Table 1** Sample search strategy

| # | Query | Results from 29 July 2022 |
|---|---|---|
| 1 | Adolescent/ or Young Adult/ | 2 642 650 |
| 2 | (youth or teen* or adolescen* or young adult* or young person* or young people or youngster* or child*).ti,ab,kf. | 1 915 264 |
| 3 | (caregiver* or famil* or parent* or guardian*).ti,ab,kf. | 1 658 099 |
| 4 | or/1–3 [Youth) | 5 025 223 |
| 5 | Mental Health/ or exp Mental Disorders/ or exp Substance-Related Disorders/ | 1 448 750 |
| 6 | mental health services/ or community mental health services/ | 55 772 |
| 7 | (mental health or mental disorder* or mental* ill* or addict* or psychiatr*).ti,ab,kf. | 551 946 |
| 8 | ((substance or drug or drugs or alcohol) adj2 ("use" or abuse or misuse or disorder*)).ti,ab,kf. | 209 169 |
| 9 | (schizo* or bipolar or depression or depressive or depressed or anxiety or anxious* or eating disorder* or feeding disorder* or disordered eating or bulimi* or anorex* or panic* or manic or mania or obsess* compuls* or OCD or delusion* or hallucinat* or posttrauma* or PTSD or traumatic stress or withdraw* or overdos* or mood or affective or psychosis or psychoses or psychot* or personality trait* or personality disorder*).ti,ab,kf. | 1 241 645 |
| 10 | or/5–9 [Mental Health and Addictions) | 2 423 192 |
| 11 | Patient Navigation/ | 994 |
| 12 | (navigator* or navigation).ti,ab,kf. | 33 686 |
| 13 | ((navigat* or wayfind* or brows*) adj3 (support or supports or tool* or resource* or aid or aids or help or approach* or intervention* or service* or system* or care or patient*)).ti,ab,kf. | 15 383 |
| 14 | or/11–13 [Navigation) | 37 837 |
| **15** | 4 and 10 and 14 | 889 |

based on evidence type or methodology. Hand-searching and reference chaining will also be conducted,[48 50] by searching relevant journals for appropriate articles, reference lists of included articles for additional sources, along with searches of forward citations of included articles, using Google Scholar. This phase will take place from September to October 2022. A full search strategy is included as an online supplemental file.

The lead author (RM) and research assistant (SRAA), with the support of a medical librarian, will conduct a comprehensive search of published literature in MEDLINE, Embase, PsycINFO, AMED, and CINAHL. A sample search strategy is in table 1.

This strategy may change based on stakeholder feedback obtained during stage 1 (defining the scope).

### Appraising studies and extracting evidence

The primary focus of appraisal will be relevance to the review. Although there are no absolute requirements for quality appraisal in realist reviews, if a source is deemed relevant a minimum level of quality in reporting will be ascertained using an existing Quality Assessment Rubric[52] prior to data extraction, to ensure rigour in reporting and interpretation of findings.[50] A data extraction template will be developed specific to the review, and will include headings that align with the goals of the synthesis, including, for example, navigation models, navigation team composition, navigator roles, navigation service standards (eg, response times, length of service), local contexts, youth populations served, virtual navigation supports provided, family involvement, observed outcomes, etc. Particular attention will be paid to diverse identities, with dedicated sections in the extraction template, in order to identify navigation programme approaches and potential differences in outcomes when supporting youth and caregivers of different genders, ethnicities, sexual orientations, socioeconomic statuses, etc. This phase will take place from October to November 2022.

### Synthesising evidence and developing conclusions

The analysis and synthesis of findings will involve numerical description of the general information extracted (eg, numbers of studies originating from specified countries) and thematic analysis[53] of information extracted, with particular attention to the contexts (eg, local settings, institutions, infrastructure), mechanisms (eg, navigator roles, approaches to virtual support), and outcomes (eg, improved youth functioning, reduced caregiver strain) of the services reviewed; in line with realist syntheses. Themes representing synthesised evidence will inform standards in youth MHA navigation. Once the evidence has been analysed and synthesised, the research team will generate the consolidated NavMAP standards.

The NavMAP standards will identify the classes of evidence on which guidance was drawn.[54] Areas lacking in evidence will also be highlighted, which will emphasise areas where the research team was called on to apply subjective judgement and serve to support future research

and practice priorities.[54] Economic considerations will be included in the standards, however, it is expected that existing evidence in the relatively new field of youth MHA navigation may not include robust cost-effectiveness data. This phase will take place from November 2022 to January 2023.

### External consultation and disseminating findings

Once the draft NavMAP standards are prepared, these will be made available for stakeholder consultation and public comment.[55] The draft NavMAP standards will be shared with stakeholder groups such as local youth mental health agencies with navigation supports, Ontario Health Teams (local health authorities spread across the province of Ontario) with navigation supports, and youth and family MHA navigation supports in other regions and provinces. The draft will also be available for public consultation on the FNP website and promoted through newsletters by the FNP and other participating organisations. Stakeholders will also be invited to a half-day workshop, led by a neutral facilitator, for review and feedback on the standards. Feedback sought will include whether the outcomes addressed are appropriate and whether recommendations are appropriate for enhanced care and experiences of youth, families and providers. Subject-matter experts, in particular, will be invited to comment on literature that may have been missed or misinterpreted with regard to the nature of the outcomes or quality of the evidence, whether there were any flaws in the synthesis of findings, or any unintended bias in presentation of the findings.[54] The research team will revise the NavMAP standards in accordance with feedback collected in this phase.[51] Through these broader consultations, the research team can ensure the NavMAP standards resonate with individuals and groups in the youth MHA navigation field and welcome critique to improve the synthesis of evidence and framing of standards.[54] This phase will take place from January to February 2023.

### Patient and public involvement

The project research team includes a youth representative and caregiver representative with lived experience of using a navigation programme, who are involved in all aspects of this study and are being compensated for their time. Numerous project team members also represent service provider and decision-maker roles in the MHA system. These individuals are co-authors of this piece and are involved in study design, interpretation of results and dissemination activities. Further stakeholder consultation is also being conducted at predetermined stages as described in the methodology above.

## ETHICS AND DISSEMINATION
### Ethical considerations

Ethics approval is not required, as the study involves review of existing data. Any potential conflicts of interests will be declared and all contributors will be acknowledged.

### Dissemination

This project will be written into original manuscripts for publication, with at least one being published in an open-access journal to promote accessibility for community mental health organisations. This work will also be submitted to relevant conferences. Findings will be presented at academic hospital rounds to directly reach medical professionals. A series of webinars (recorded for future viewing) will be held to present findings from the realist review and synthesis process, as well as the finalised standards. The webinars will be tailored for all key stakeholder groups. Team members representing at least two stakeholder groups will copresent at every webinar so that varied perspectives are represented to each target audience.

A NavMAP Standards Toolkit will be developed and hosted online. This Toolkit will contain a series of written and visual documents tailored for youth, family members, service providers, researchers and decision-makers providing practical information based on findings, presenting key findings for each stakeholder group. These will cover a range of topics and purposes, including, for example, summaries for clinicians and decision-makers interested primarily in the key recommendations; a technical report showcasing details regarding the scientific rigour of the evidence review, results of the evidence synthesis and tables summarising evidence extractions; the full NavMAP standards document, including the background, analytical framework, evidence and recommendations; and a lay version of the NavMAP standards document, focused on aspects that will be of interest to lay audiences and in plain language. Knowledge user team members will be an important resource when developing this Toolkit by helping develop materials that provide effective and relevant information for the groups they represent. Collectively, these research and knowledge translation activities will generate high-quality, real-world sources of evidence to inform the implementation and adoption of navigation within the health system and optimise outcomes for youth with MHA concerns and their families.

**Author affiliations**
[1]Sunnybrook Research Institute, Toronto, Ontario, Canada
[2]Temerty Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
[3]Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada
[4]Youth Advisory Council, Family Navigation Project at Sunnybrook, Toronto, Ontario, Canada
[5]Family Advisory Council, Family Navigation Project at Sunnybrook, Toronto, Ontario, Canada
[6]Michael Garron Hospital, Toronto, Ontario, Canada
[7]Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, Ontario, Canada
[8]Centre for Addiction and Mental Health, Toronto, Ontario, Canada
[9]Sinai Health System, Toronto, Ontario, Canada
[10]Keystone Child, Youth, and Family Services, Owen Sound, Ontario, Canada

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**ORCID iDs**
Roula Markoulakis http://orcid.org/0000-0001-9149-025X
Kristin Cleverley http://orcid.org/0000-0002-2822-2129

## REFERENCES

1 Carver J, Cappelli M, Davidson S, *et al*. Taking the next step forward: building a responsive mental health and addictions system for emerging adults, 2015. Available: https://www.mentalhealthcomm ission.ca/English/document/76936/taking-next-step-forward
2 Wilens TE, Rosenbaum JF. Transitional aged youth: a new frontier in child and adolescent psychiatry. *J Am Acad Child Adolesc Psychiatry* 2013;52:887–90.
3 Singh SP. Transition of care from child to adult mental health services: the great divide. *Curr Opin Psychiatry* 2009;22:386–90.
4 Pottick KJ, Bilder S, Vander Stoep A, *et al*. Us patterns of mental health service utilization for transition-age youth and young adults. *J Behav Health Serv Res* 2008;35:373–89.
5 Waddell C, Offord DR, Shepherd CA, *et al*. Child psychiatric epidemiology and Canadian public policy-making: the state of the science and the art of the possible. *Can J Psychiatry* 2002;47:825–32.
6 The Government of Canada. The human face of mental health and mental illness in Canada 2006, 2006. Available: http://www.phac-aspc.gc.ca/publicat/human-humain06/index-eng.php
7 Office of the Provincial Advocate for Children and Youth for Ontario. Statement on child and youth mental health in Ontario, 2011. Available: http://provincialadvocate.on.ca/main/en/publications/
8 Children and Youth. Mental health Commission of Canada. Available: http://www.mentalhealthcommission.ca/English/focus-areas/children-and-youth [Accessed September 27, 2016].
9 Rickwood DJ, Deane FP, Wilson CJ. When and how do young people seek professional help for mental health problems? *Med J Aust* 2007;187:S35–9.
10 Gulliver A, Griffiths KM, Christensen H. Perceived barriers and facilitators to mental health help-seeking in young people: a systematic review. *BMC Psychiatry* 2010;10:1–9.
11 Cleverley K, Rowland E, Bennett K, *et al*. Identifying core components and indicators of successful transitions from child to adult mental health services: a scoping review. *Eur Child Adolesc Psychiatry* 2020;29:107–21.
12 Salaheddin K, Mason B. Identifying barriers to mental health help-seeking among young adults in the UK: a cross-sectional survey. *Br J Gen Pract* 2016;66:e686–92.
13 Manion IG. Provoking evolution in child and youth mental health in Canada. *Canadian Psychology / Psychologie canadienne* 2010;51:50–7.
14 Richards M, Vostanis P. Interprofessional perspectives on transitional mental health services for young people aged 16-19 years. *J Interprof Care* 2004;18:115–28.
15 Gandhi S, Chiu M, Lam K, *et al*. Mental health service use among children and youth in Ontario: population-based trends over time. *Can J Psychiatry* 2016;61:119–24.
16 Adnanes M, Steihaug S. Obstacles to continuity of care in young mental health service users' pathways - an explorative study. *Int J Integr Care* 2013;13:e031.
17 Toronto Central Local Health Integration Network. Transitional aged youth mental health and addictions (TAYMHA) Advisory Committee final report, 2015. Available: http://www.torontocentrallhin.on.ca/~/media/sites/tc/TC LHIN Docs/Resources/TAYMHA FINAL REPORT_ Final 30 June 2015.pdf?la=en
18 Children's Mental Health Ontario. *Residential treatment: working towards a new system framework*, 2016.
19 Cheung AH, Cook S, Kozloff N, *et al*. Substance use and internalizing symptoms among high school students and access to health care services: results from a population-based study. *Can J Public Health* 2019;110:85–92.
20 Davis M. Addressing the needs of youth in transition to adulthood. *Adm Policy Ment Health* 2003;30:495–509.
21 Markoulakis R, Luke A, Reid A, *et al*. Proceedings of the inaugural Canadian healthcare navigation conference: a forum for sharing innovations and best practices in navigation services. *BMC Proc* 2021;15:24.
22 Freeman HP, Rodriguez RL. History and principles of patient navigation. *Cancer* 2011;117:3539–42.
23 Paskett ED, Harrop JP, Wells KJ. Patient navigation: an update on the state of the science. *CA Cancer J Clin* 2011;61:237–49.
24 Bradford JB, Coleman S, Cunningham W. Hiv system navigation: an emerging model to improve HIV care access. *AIDS Patient Care STDS* 2007;21 Suppl 1:S-49–S-58.
25 Feinberg E, Abufhele M, Sandler J, *et al*. Reducing disparities in timely autism diagnosis through family navigation: results from a randomized pilot trial. *Psychiatr Serv* 2016;67:912–5.
26 Wells KJ, Battaglia TA, Dudley DJ, *et al*. Patient navigation: state of the art or is it science? *Cancer* 2008;113:1999–2010.
27 Bieling PJ, Madsen V, Zipursky RB. A 'navigator' model in emerging mental illness? *Early Interv Psychiatry* 2013;7:451–7.
28 Mullen JN, Levitt A, Markoulakis R. Supporting individuals with mental health and/or addictions issues through patient navigation: a scoping review. *Community Ment Health J* 2022. doi:10.1007/s10597-022-00982-2. [Epub ahead of print: 01 Jun 2022].
29 Cleverley K, Gore D, Nasir S, *et al*. Facilitating effective transitions from hospital to community for children and adolescent mental health services: overview of the transition support worker role and function. *J Can Acad Child Adolesc Psychiatry* 2018;27:228–35.
30 Kirby M, Keon WJ. Out of the shadows at last: transforming mental health, mental illness and addiction services in Canada, 2006. Available: https://mentalhealthcommission.ca/wp-content/uploads/2021/09/out_of_the_shadows_at_last_-_full_0_0.pdf
31 Waddell C, McEwan K, Shepherd CA, *et al*. A public health strategy to improve the mental health of Canadian children. *Can J Psychiatry* 2005;50:226–33.
32 Anderson JE, Larke SC. Navigating the mental health and addictions maze: a community-based pilot project of a new role in primary mental health care. *Ment Health Fam Med* 2009;6:15–19.
33 Binswanger IA, Whitley E, Haffey P-R, *et al*. A patient navigation intervention for drug-involved former prison inmates. *Subst Abus* 2015;36:34–41.
34 Compton MT, Hankerson-Dyson D, Broussard B, *et al*. Opening doors to recovery: a novel community navigation service for people with serious mental illnesses. *Psychiatr Serv* 2011;62:1270–2.
35 Druss BG, von Esenwein SA, Compton MT, *et al*. A randomized trial of medical care management for community mental health settings: the primary care access, referral, and evaluation (PCARE) study. *Am J Psychiatry* 2010;167:151–9.
36 Markoulakis R, Weingust S, Foot J, *et al*. The Family Navigation Project: An innovation in working with families to match mental health services with their youth's needs. *Can J Commun Ment Health* 2016;35:63–6.
37 Fishman KN, Levitt AJ, Markoulakis R, *et al*. Satisfaction with mental health navigation services: Piloting an evaluation with a new scale. *Community Ment Health J* 2018;54:521–32.
38 Diaz-Linhart Y, Silverstein M, Grote N, *et al*. Patient navigation for mothers with depression who have children in head start: a pilot study. *Soc Work Public Health* 2016;31:504–10.

39 Brekke J, Siantz E, Pahwa R, *et al*. Reducing health disparities for people with serious mental illness: development and feasibility of a peer health navigation intervention. *Best Pract Ment Health* 2013;9:62–82.

40 Reid AE, Doucet S, Luke A. Exploring the role of lay and professional patient navigators in Canada. *J Health Serv Res Policy* 2020;25:229–37.

41 Rossos A, Markoulakis R, Levitt A. *Navigation and other professional roles that connect individuals with mental health and/or addictions concerns to services: a scoping review*, 2021.

42 Kokorelias KM, Shiers-Hanley JE, Rios J, *et al*. Factors influencing the implementation of patient navigation programs for adults with complex needs: a scoping review of the literature. *Health Serv Insights* 2021;14:117863292110332.

43 Boak A, Hamilton H, Adlaf E, *et al*. *Drug use among Ontario students, 1977-2015: OSDUHS highlights*, 2015.

44 Boak A, Hamilton H, Adlaf E, *et al*. *The mental health and well-being of Ontario students, 1991-2015: OSDUHS highlights*, 2015.

45 Valaitis RK, Wong ST, MacDonald M, *et al*. Addressing quadruple aims through primary care and public health collaboration: ten Canadian case studies. *BMC Public Health* 2020;20:1–16.

46 Standards Council of Canada. What are standards? 2020. Available: https://www.scc.ca/en/standards/what-are-standards

47 College of Nurses of Ontario. Standards & Guidelines, 2021. Available: https://www.cno.org/en/learn-about-standards-guidelines/standards-and-guidelines/

48 Pawson R, Greenhalgh T, Harvey G, *et al*. Realist review--a new method of systematic review designed for complex policy interventions. *J Health Serv Res Policy* 2005;10 Suppl 1:21–34.

49 Wong G, Greenhalgh T, Westhorp G, *et al*. RAMESES publication standards: realist syntheses. *BMC Med* 2013;11:21.

50 Rycroft-Malone J, McCormack B, Hutchinson AM, *et al*. Realist synthesis: illustrating the method for implementation research. *Implement Sci* 2012;7:1–10.

51 National Institute for Health and Care Excellence. *Developing NICE guidelines: the manual. process methods Guid*, 2014: 245. http://www.nice.org.uk/article/pmg20

52 Markoulakis R, Kirsh B. Difficulties for university students with mental health problems: a critical interpretive synthesis. *Rev High Ed* 2013;37:77–100.

53 Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77–101.

54 Woolf S, Schünemann HJ, Eccles MP, *et al*. Developing clinical practice guidelines: types of evidence and outcomes; values and economics, synthesis, grading, and presentation and deriving recommendations. *Implementation Sci* 2012;7:1–12.

55 Pawson R, Walshe K, Greenhalgh T. Realist Synthesis : An Introduction, 2004. Available: https://www.betterevaluation.org/sites/default/files/RMPmethods2.pdf