Rapid Synthesis

Identifying Community-based Models of Care that Address the Needs of Ethno-Racial Communities

31 March 2023





EVIDENCE >> **INSIGHT** >> **ACTION**

McMaster Health Forum

Rapid Synthesis: Identifying Community-based Models of Care that Address the Needs of Ethno-Racial Communities 30-day response

31 March 2023

McMaster Health Forum

The McMaster Health Forum's goal is to generate action on the pressing health and social issues of our time. We do this based on the best-available research evidence, as well as experiences and insights from citizens, professionals, organizational leaders, and government policymakers. We undertake some of our work under the Forum banner, and other work in our role as secretariat for Rapid-Improvement Support and Exchange (RISE), COVID-19 Evidence Network to support Decision-making (COVID-END), and Global Commission on Evidence to Address Societal Challenges.

Authors

Aunima R. Bhuiya, M.Sc., PhD student, Co-lead Evidence Synthesis, McMaster Health Forum

Nakia Lee-Foon, PhD, Learning Health Systems Research Associate, Institute for Better Health, Trillium Health Partners

Kerry Waddell, M.Sc., PhD candidate, Focal Point, Rapid Improvement Support and Exchange, McMaster University

John N. Lavis, PhD, Co-Lead, Rapid Improvement Support and Exchange, and Professor, McMaster University

Timeline

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business day timeframe. This synthesis was prepared over a 10-business day timeframe. An overview of what can be provided and what cannot be provided in each of the different timelines is provided on McMaster Health Forum's Rapid Response program webpage.

Funding

The rapid-response program through which this synthesis was prepared is funded by the Government of Ontario through a grant provided to Rapid Improvement Support and Exchange (RISE). The McMaster Health Forum receives both financial and in-kind support from the Ministry of Health. The views expressed in the rapid synthesis are the views of the authors and should not be taken to represent the views of the Government of Ontario or McMaster University.

Conflict of interest

The authors declare that they have no professional or commercial interests relevant to the rapid synthesis. The funder played no role in the identification, selection, assessment, synthesis or presentation of the research evidence profiled in the rapid synthesis.

Merit review

The rapid synthesis was reviewed by a small number of policymakers, stakeholders and researchers in order to ensure its scientific rigour and system relevance.

Acknowledgements

The authors wish to thank Saif Alam, Kartik Sharma, Kunika Singh, Anika Garg, Nujud Al-Jabouri, and David Jin for their assistance in preparing the rapid synthesis.

Citation

Bhuiya AR, Lee-Foon N, Waddell K, Lavis JN. Rapid synthesis: Identifying community-based models of care that address the needs of ethno-racial communities. Hamilton, Canada: McMaster Health Forum, 31 March 2023.

Product registration numbers

ISSN 2292-7999 (online)

KEY MESSAGES

Question

• What is known about existing community-based models of care that better address the needs of ethnoracial communities?

Why the issue is important

- Many populations experience significant health disparities, including historically and currently marginalized racial and ethnic groups, people living with disabilities, those with lower socioeconomic status, people who are 2SLGBTQ+, and others.
- Health disparities have been documented for many decades, such as the higher rates of poor health and disease outcomes across different health conditions among racial and ethnic groups when compared to white populations.
- In recognition and awareness of the disproportionate impacts of the COVID-19 pandemic, ongoing racial injustices and longstanding disparities in healthcare on ethno-racial groups, there have been an increasing number of efforts and approaches to improve health outcomes through community-based models of care.
- A better understanding of the features and the effects of existing community-based models of care can help identify the types of models that can best support the needs of ethno-racial communities.

What we found

- We identified 15 evidence syntheses identifying community-based models of care that addressed the needs of ethno-racial communities across Canadian and international jurisdictions.
- We identified eight community-based models of care that focused on different racial and ethnic communities, including: 1) chronic-care model with culturally competent components; 2) collaborative care model with cultural adaptations; 3) community coalition-driven models of care; 4) community-based models involving community-health workers, Indigenous health workers, and/or community navigators; 5) Indigenous palliative care in the community; 6) integrated-care model; 7) mobile-health clinics; and 8) school-based health services.
- The literature described the use of community-based models that have been implemented in Canada, including involving Indigenous health workers and/or community navigators, and community coalition-driven models.
- Many of the models focused on facilitating access to care by engaging community-health workers to provide, navigate and coordinate services.
- Commonly described services included patient education on self-management, preventive care (e.g., immunization, screening) and services for select chronic conditions.
- The identified community-based models of care focused on Black, East Asian, South Asian, Latino/a/x and Indigenous populations; however, the models were rarely tailored to understanding the heterogeneity within these broad groupings.
- The reviews described a range of community settings for healthcare delivery, such as community health centres, churches, community-based organizations, community and primary care clinics, nurse-managed health centres and school-based health centres.
- Common features across the different community-based models of care included components on cultural safety, culturally tailored services, programs and educational materials, involvement of the community to support care coordination and healthcare navigation, use of relevant community-based locations for health service delivery, access to ethnically matched healthcare providers and multilingual clinical staff, and partnerships and collaborations across different sectors, associations and other relevant stakeholders to develop programs and services.
- While there was limited available information on the impact of community-based models of care for ethno-racial communities, some reviews reported improvements in health, clinical and healthcare utilization outcomes.

QUESTION

What is known about existing community-based models of care and international best practices that better address the needs of ethno-racial communities?

WHY THE ISSUE IS IMPORTANT

Many populations experience significant health disparities, including people from historically and currently marginalized racial and ethnic groups, people living with disabilities, those with lower socio-economic status, people who are 2SLGBTQ+ and others. Health disparities have been documented for many decades, such as the higher rates of poor health and disease outcomes across different health conditions among racial and ethnic groups when compared to white populations. In recognition and awareness of the disproportionate effects of the COVID-19 pandemic, ongoing racial injustices and longstanding disparities in healthcare, there have been an increasing number of efforts and approaches to identify inequities and improve health outcomes among different ethno-racial groups. In Canada, the Canadian Institute for Health Information (CIHI) developed pan-Canadian minimum standards for collecting race-based and Indigenous identity data to help identify and address health inequities, and to support improvements in quality of care.(1) Further, there are existing initiatives in other jurisdictions. For example, the Accountable Care Organization Realizing Equity, Access, and Community Health (ACO REACH) aims to promote health equity through better care delivery and coordination among underserved communities.(2-5)

Box 1: Background to the rapid synthesis

This rapid synthesis mobilizes both global and local research evidence about a question submitted to the McMaster Health Forum's Rapid Response program. Whenever possible, the rapid synthesis summarizes research evidence drawn from systematic reviews of the research literature and occasionally from single research studies. A systematic review is a summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select and appraise research studies, and to synthesize data from the included studies. The rapid synthesis does <u>not</u> contain recommendations, which would have required the authors to make judgments based on their personal values and preferences.

Rapid syntheses can be requested in a three-, 10-, 30-, 60- or 90-business-day timeframe. An overview of what can be provided and what cannot be provided in each of these timelines is provided on the McMaster Health Forum's Rapid Response program webpage.

This rapid synthesis was prepared over a 10business-day timeframe and involved four

- submission of a question from a policymaker or stakeholder (in this case, the British Columbia Ministry of Health)
- identifying, selecting, appraising and synthesizing relevant research evidence about the question
- drafting the rapid synthesis in such a way as to present concisely and in accessible language the research evidence
- 4) finalizing the rapid synthesis based on the input of at least two merit reviewers.

A better understanding of the features and the effects of

existing community-based models of care can help identify the types of models that can best support the needs of ethno-racial communities.

WHAT WE FOUND

We identified 15 evidence syntheses relevant to the question based on the targeted search (see Box 2 for our search strategy). We outline in narrative form below our key findings from the identified evidence. We provide an overview of the identified features and outcomes of community-based models of care that address the needs of ethno-racial communities in Table 1. Additional details from the research evidence are provided in Appendix 1 and a list of excluded documents can be found in Appendix 2.

We organized our findings from the research evidence based on the community-based models of care as described by the literature. For the purpose of this rapid synthesis, we broadly defined a 'model of care' as the way health services are delivered and outlines best practice care and services for a person, population group, or patient cohort as they progress through the stages of a condition, injury, or an event. It aims to ensure people get the right care at the right time, by the right team and in the right place. We recognize that there may be other types of models than those identified, and that the models identified may overlap in features.

Key findings from research evidence

We identified eight community-based models of care that focused on different racial and ethnic communities (full definitions derived from literature available in Table 1), including:

- chronic-care model with culturally competent elements (6)
- collaborative care model with cultural adaptations (7-11)
- community coalition-driven models of care (12)
- community-based models involving communityhealth workers, Indigenous health workers and/or community navigators (13; 14)
- Indigenous palliative care in the community (15; 16)
- integrated-care model (17)
- mobile-health clinics (18)
- school-based health services.(19)

Box 2: Identification, selection and synthesis of research evidence

We identified research evidence (systematic reviews and primary studies) by searching (in February 2023) Health Systems Evidence (<u>www.healthsystemsevidence.org</u>), Social Systems Evidence

(https://www.socialsystemsevidence.org/), HealthEvidence (https://www.healthevidence.org/) and PubMed. We used a combination of search terms and Boolean operators of the following: (racial* OR ethn* OR minorit* OR equality OR equity OR vulnerable OR inclusion OR BAME OR BME OR "hard to reach" OR "at-risk" OR african american OR latino OR asian OR caribbean OR middle eastern OR indigenous OR maori OR metis OR first nations OR inuit OR aboriginal OR native) AND (community OR primary OR home) AND ("care model" OR "model of care" OR "delivery model"). We limited our searches to reviews (both systematic and non-systematic reviews) and within the last 10 years to meet the requestor's timeline.

Reviews that included other intersectional factors (e.g., age, sex/gender, disability) were included, but we did not specifically add search terms given that the focus of the research question is on ethnic and racial factors. Primary studies and grey literature were not included in this version of the rapid synthesis. However, there may be additional insights available on specific ethno-racial groups, and these could warrant further research.

The results from the searches were assessed by two reviewers for inclusion. A document was included if it fit within the scope of the questions posed for the rapid synthesis.

For each systematic review we included in the synthesis, we documented the focus of the review, key findings, last year the literature was searched (as an indicator of how recently it was conducted), methodological quality using the AMSTAR quality appraisal tool (see the Appendix for more detail), Equity considerations (organized by PROGRESS PLUS categories), and the proportion of the included studies that were conducted in Canada. We then used this extracted information to develop a synthesis of the key findings from the included reviews.

Many of the models focused on facilitating access to care by engaging community-health workers to provide, navigate and coordinate services. Two models differentiated themselves based on the setting in which care was provided (i.e., mobile-health clinics and school-based health services). Additionally, we identified some pre-existing models (i.e., chronic-care model and collaborative-care model) that were adapted to include culturally competent elements. Some studies described 'cultural competence' as the importance, acknowledgement and integration of health beliefs and behaviours, disease prevalence and incidence, and

treatment outcomes for the care of different patient populations.(6; 10) The most commonly described services included patient education on self-management, preventive care (e.g., immunization, screening) and services for select chronic conditions (e.g., diabetes).

The identified community-based models of care were developed to serve Black, East Asian, South Asian, Latino/a/x, and Indigenous populations within the Western context (e.g., Canada, United States, Australia). The literature described the use of community-based models that had been implemented in Canada, including involving Indigenous health workers and/or community navigators, and community coalition-driven models. Specific racial and ethnic groups (e.g., African Canadian, Bangladeshi, Inuit) were seldomly described in the identified evidence syntheses. The reviews described a range of community settings for healthcare delivery such as community health centres, churches, community-based organizations, community and primary care clinics, nurse-managed health centres and school-based health centres.

We identified key features that were common across the different community-based models of care, such as:

- ensuring cultural safety and flexibility (e.g., open communication, respect of patient preferences and illness beliefs, cultural and spiritual ceremonies within service settings, involvement of family, cultural competence training among clinical staff)
- developing culturally tailored services and programs to meet the needs of patients (e.g., team-based care involving interpreters, accessible health education materials, workshops, sessions in different languages and education levels)
- involving the community to support care coordination and healthcare navigation (e.g., engagement of community-health workers, Indigenous health workers or community navigators, community leaders or Elders, faith leaders, peers)
- making use of community-relevant locations for health service delivery such as community centres or churches, when appropriate
- improving access to ethnically matched healthcare providers and multilingual clinical staff
- partnering and collaborating across different sectors, local associations, academic institutions, hospitals, community health centres and community leaders to ensure the development of appropriate and relevant services and programs specific to community needs.(6-19)

We found many positive outcomes across the different community-based models of care. The identified research evidence reported that:

- collaborative care model with cultural adaptations can help improve depressive symptoms of individuals from racial or ethnic groups or of low socio-economic status
- health system-level strategies developed by community coalitions (i.e., voluntary, cross-sectoral model that connects community-level groups to reduce health disparities in their community) showed positive small effects, especially among strategies that engaged community-health workers
- engaging community-health workers and community navigators were associated with substantial improvements in health outcomes among ethno-racial communities in the United States (with similar positive outcomes in a single Canadian study)
- a model of integrated care that used telehealth and community-health workers to facilitate medication therapy management improved medication adherence and clinical outcomes
- mobile-health clinics can improve health outcomes and offer a trusting, safe space for patients
- school-based health centres were associated with improved health (e.g., increased healthcare utilization due to early available access to treatment and routine services) and educational outcomes (e.g., academic performance, grade promotions, lower suspension and non-completion rates) and reduced healthcare utilization (e.g., lower emergency department visits and hospitalization rates).(5-19)

We identified limited information on the outcomes of chronic-care model with culturally competent elements.

Table 1: Overview of the evidence on the features and outcomes of community-based models that aim to address the needs of ethno-racial communities

Care model, setting and population addressed	Features of models	Outcomes of models
Chronic Care Model with culturally competent elements (6)	• Components of Chronic Care Model include self-management support, community resources and policies, delivery system design, clinical information systems, decision support and healthcare organization	Not reported
Implemented in: United States, England, Germany, Netherlands	 Culturally competent components included cultural tailoring to meet the needs of patients, communication, peer or community support, ethnic matching between patient and provider, and provision of training for health professionals in cultural 	
Setting: churches, community- health centres	 Examples of culturally competent components involved the 	
Population: People with type 2 diabetes who identified as Black, East Asian, South Asian, Latino/a/x	 engagement of community-health workers (e.g., 'promotoras'), partnerships with local associations (e.g., churches) and use of community-relevant locations such as community centres and churches Interventions were often one-on-one, group or mixed 	
Collaborative care model with cultural adaptations (7-11)	• Patient-centred care that includes patient education, clinical care, and care coordination with a multidisciplinary team that could include different health professionals, care coordinators, interpreters and cultural mediators	Collaborative care model can improve the depressive symptoms of individuals from racial/ethnic minority groups or of low socioeconomic status
Countries: United States, Spain Setting: Not specified	• An example of a collaborative care model on depression management included patient education, regular planned follow- up visits, monitoring of medication adherence, working with a	• Positive mental health effects can be observed within one month of implementation and can last for up to a duration of two years
Population: Black people, low-income immigrants, other ethno-racial populations	 depression case manager and connecting with a family support worker to assist with day-to-day challenges Linguistic and cultural adaptations included ethically matched healthcare providers, multilingual clinical staff, accessible educational materials and workshops that are available in multiple languages, and treatments adapted based on the patient's preferences and illness beliefs 	• The involvement of a family support worker to help support day-to-day needs such as food, housing and financial support improved engagement and treatment of patients
Community coalition- driven models of care (12)	• Voluntary, cross-sectoral model that connects community-level groups (e.g., health and social agencies and organizations,	Health system-level strategies developed by community coalitions showed positive small

Care model, setting and population addressed	Features of models	Outcomes of models
Countries: Australia, Canada, Netherlands, United States Setting: Not specified Population: Not specified	 citizens, volunteers, interest groups) who share a common interest to reduce health disparities within their community to plan and implement interventions Community coalitions involve extensive level of communication, leadership, pooled resources and implementation of strategies Broad cross-sector composition and voluntary nature of coalitions sets them apart from other types of models A lead agency or convening group could support the development of a coalition by contextualizing how to attain coalition membership, clarify the governance structure and provide training and technical support 	 effects, especially among strategies that engaged community-health workers or group-based health education and support led by health professional staff and peers Coalition-driven models may increase the likelihood of adoption of community-based strategies and interventions Improvements were seen in cancer screening, HIV risk behaviour, breastfeeding behaviour, immunization uptake, asthma symptoms, mental health quality of life, diabetes and blood pressure control, tobacco use and alcohol use
Community-based models involving community- health workers, Indigenous health workers and/or community navigators (13; 14) Countries: Australia, Canada, United States Setting: primary care or community clinics, community-based organizations, churches, social gatherings, combination of two or more settings Population: Chronic disease management or access to primary care for Black, Latin/a/x, South Asians, East Asians, immigrants, refugees, Aboriginal or Torres Strait Islander people	 Engagement of trained, culturally perceptive healthcare workers who link patients and healthcare providers by providing educational support, communication support and guidance to overcome health disparities Community-health workers and community navigators were selected based on their cultural competence and interpersonal skills Training was provided by health professionals Community-health workers, Indigenous health workers and community navigators often provided culturally tailored health education sessions and materials, lifestyle workshops, self-care training and guidance on how to navigate the health system (e.g., accessing care for chronic disease management and cancer screening) 	 Engagement of community-health workers and community navigators were associated with substantial improvements in health outcomes among ethno-racial communities in the United States (with similar positive outcomes in a single Canadian study) Indigenous health workers in an Australian primary care setting were important to client self-management support and linking the community to other health services

McMaster Health Forum

Care model, setting and population addressed	Features of models	Outcomes of models
Jopulation addressedIndigenous palliative carein the community (15; 16)Countries: Australia, Canada,Papua New Guinea, NewZealand, United States,unspecified countries in SouthAmericaSetting: Not specifiedPopulation: Indigenouscommunities	 Culturally tailored palliative care services within the community for Indigenous populations Key features of palliative care service included patient-centred care with attention to social and cultural determinants for Indigenous peoples' access to health services, family and community involvement, provision for cultural and spiritual ceremonies within service settings, open communication, respectful treatment by health service providers, and availability of Indigenous staff Other features of this model may include community engagement, education and training for health professionals, a culturally safe service delivery strategy and flexible organizational structure 	 Effective service models within rural or remote settings had strong community connections and involvement, such as partnerships with local services and academic medical centres, involvement of Elders in the community to design palliative care services and programs, and incorporating tribal and community values Providing education and training to health service providers, community stakeholders and family members were integral to community-based models
Integrated care model with culturally appropriate approaches (17) Country: United States Setting: Not specified Population: Refugees, unspecified ethno-racial populations	 Strengths-based, culturally appropriate integration and coordination of health service delivery across different sectors Engagement of community-health workers to support clinical care (e.g., interpretation during clinical visits, transportation, health promotion education, advocacy, connecting with community providers) Involvement of faith communities and community leaders related to health education outreach Provision of transportation support Use of telehealth and kiosks for mental-health screenings with different language options 	• Improvements in medication adherence and clinical outcomes and a reduction in inappropriate medication use was associated with a model of integrated care that used telehealth (e.g., videoconferencing) and engaged community-health workers to facilitate medication therapy management with refugees with poor healthcare access
Mobile-health clinics (18) Country: United States Setting: Not specified Population: Not specified	 Delivery of health services such as urgent care, preventive health screenings and chronic disease management directly within the community Mobile-health clinics may involve the engagement of community-health workers, health providers, patient-centred care focusing on patient education, cultural competence training for staff, stability and consistency of service provision and staff diversity They may also involve collaborations with local churches, community-health centres, hospitals and other clinics 	 Mobile-health clinics can: 1) provide care to hard-to-reach, vulnerable communities due to fewer logistical and administrative barriers; 2) adapt and change services based on community needs; 3) address both medical and social determinants of health; and 4) serve as a cost-effective care delivery model A number of mobile-health clinics have been shown to be a safe and welcoming environment

Care model, setting and population addressed	Features of models	Outcomes of models
		 for clients, thus facilitating the building of trusting therapeutic relationships The use of mobile-health clinics can improve general health outcomes due to their ability to offer preventive screening services and support for managing chronic conditions, and form partnerships with community members, organizations and institutions across localities to offer social services Mobile-health clinics may decrease continuity of care due to a lack of integration within health systems, financial constraints, and barriers with space, clinic structure and logistical planning
School-based health services (19) Country: United States Setting: School-based centres or school-linked centres Population: Black and Latin/a/x students in low- income communities	 Health services delivered onsite or offsite during and beyond school hours to grade-school children and youth from ethnoracial communities and/or those with low socio-economic status Provides at a minimum primary healthcare, but may also provide mental healthcare, social services, dental care and health education Primary care services may be provided by a single clinician or multidisciplinary teams Services are provided during school hours and non-school hours Services are provided to students with parental consent, and may also be provided to school staff, student family members and surrounding communities 	 School-based health centres were associated with improved health (e.g., increased healthcare utilization due to early available access to treatment and routine services) and educational outcomes (e.g., academic performance, grade promotions and lower suspension and non-completion rates) School-based health centres offering after-school availability were associated with lower emergency department and hospitalization rates

REFERENCES

- Canadian Institute for Health Information. Guidance on the use of standards for race-based and Indigenous data collection and health reporting in Canada. 2022. <u>https://www.cihi.ca/sites/default/files/document/guidance-and-standards-for-race-based-andindigenous-identity-data-en.pdf.</u>
- Offodile AC II, Gibbons JB, Murrell S, Kinzer D, Sharfstein JM. A Global Equity Model (GEM) for the Advancement of Community Health and Health Equity. *National Academy of Medicine Perspectives* 2022; <u>https://doi.org/10.31478/202211b</u>.
- 3. Government of Canada. Social determinants of health and health inequalities. 14 June 2022. <u>https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html.</u>
- 4. Government of Canada. Understanding the report on key health inequalities in Canada. 31 July 2019. <u>https://www.canada.ca/en/public-health/services/publications/science-research-data/understanding-report-key-health-inequalities-canada.html</u>
- 5. Centers for Medicare and Medicaid Services. ACO Reach. 24 March 2023. https://innovation.cms.gov/innovation-models/aco-reach.
- 6. Dauvrin M, Lorant V, d'Hoore W. Is the Chronic Care Model integrated into research examining culturally competent interventions for ethnically diverse adults with type 2 diabetes mellitus? A review. *Evaluation & the Health Professions* 2015; 38(4): 435-63.
- 7. Hu J, Wu T, Damodaran S, Tabb KM, Bauer A, Huang H. The effectiveness of collaborative care on depression outcomes for racial/ethnic minority populations in primary care: A systematic review. *Psychosomatics* 2020; 61(6): 632-44.
- 8. Hong JC, Padula WV, Hollin IL, et al. Care management to reduce disparities and control hypertension in primary care: A cost-effectiveness analysis. *Medical Care* 2018; 56(2): 179-85.
- 9. Peek ME, Lopez FY, Williams HS, et al. Development of a conceptual framework for understanding shared decision making Among African-American LGBT patients and their clinicians. *Journal of General Internal Medicine* 2016; 31(6): 677-87.
- 10. Hails K, Brill CD, Chang T, Yeung A, Fava M, Trinh NH. Cross-cultural aspects of depression management in primary care. *Current Psychiatry Reports* 2012; 14(4): 336-44.
- 11. Heywood AE, Lopez-Velez R. Reducing infectious disease inequities among migrants. *Journal of Travel Medicine* 2019; 26(2).
- 12. Anderson LM, Adeney KL, Shinn C, Safranek S, Buckner-Brown J, Krause LK. Community coalitiondriven interventions to reduce health disparities among racial and ethnic minority populations. *The Cochrane Database of Systematic Reviews* 2015; 6: CD009905.
- 13. Shommu NS, Ahmed S, Rumana N, Barron GR, McBrien KA, Turin TC. What is the scope of improving immigrant and ethnic minority healthcare using community navigators: A systematic scoping review. *International Journal for Equity in Health* 2016; 15: 6.
- 14. Schmidt B, Campbell S, McDermott R. Community health workers as chronic care coordinators: Evaluation of an Australian Indigenous primary health care program. *Australian and New Zealand Journal of Public Health* 2016; 40 Suppl 1: S107-14.
- 15. Davy C, Harfield S, McArthur A, Munn Z, Brown A. Access to primary health care services for Indigenous peoples: A framework synthesis. *International Journal for Equity in Health* 2016; 15(1): 163.
- 16. Shahid S, Taylor EV, Cheetham S, Woods JA, Aoun SM, Thompson SC. Key features of palliative care service delivery to Indigenous peoples in Australia, New Zealand, Canada and the United States: A comprehensive review. *BMC Palliative Care* 2018; 17(1): 72.

- 17. Loomis AM, Berthold SM, Buckley T, Wagner J, Kuoch T. Integrated health care and mHealth: A model of care for refugees with complex health conditions. *Social Work in Public Health* 2019;3 4(2): 189-200.
- 18. Yu SWY, Hill C, Ricks ML, Bennet J, Oriol NE. The scope and impact of mobile health clinics in the United States: a literature review. International Journal of Equity Health. 2017 Oct 5; 16(1):178.
- 19. Knopf JA, Finnie RK, Peng Y, et al. School-based health centers to advance health equity: A community guide systematic review. *American Journal of Preventive Medicine*. 2016; 51(1): 114-26.

APPENDICES

The following tables provide detailed information about the systematic reviews and primary studies identified in the rapid synthesis. The ensuing information was extracted from the following sources:

- systematic reviews the focus of the review, key findings, last year the literature was searched, and the proportion of studies conducted in Canada
- primary studies (in this case, economic evaluations and costing studies) the focus of the study, methods used, study sample, jurisdiction studied, key features of the intervention and the study findings (based on the outcomes reported in the study).

For the appendix table providing details about the systematic reviews, the fourth column presents a rating of the overall quality of each review. The quality of each review has been assessed using AMSTAR (A MeaSurement Tool to Assess Reviews), which rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to delivery, financial or governance arrangements within health systems. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered 'high scores.' A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1):S8.)

All of the information provided in the appendix tables was taken into account by the authors in describing the findings in the rapid synthesis.

Appendix 1: Summary of findings from systematic reviews and other types of reviews about community-based models of care that address the needs of ethno-racial communities

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
Systematic reviews	5				
<u>The effectiveness</u> of school-based health centres in promoting health equity in disadvantaged populations	The primary objective of this systematic review was to examine the impact of school-based health centres in reducing educational and health barriers for racial and ethnic minority population groups. In this review, school-based health centres were defined as health service clinics that offer onsite and offsite care to grade-school children and youth of low socio-economic status. Care options included access to primary, mental health, and dental care, social services and health education during and beyond school hours. The authors found evidence to suggest the use of school-based health centres were associated with improved health (e.g., increased healthcare utilization due to early available access to treatment and routine services) and educational (e.g., academic performance as demonstrated by increased grade point averages, grade promotions and lower suspension and non-completion rates) outcomes. School-based health centres offering after school availability were associated with lower emergency department and hospitalization rates. It is important to note, however, that some limitations do exist, including possible selection bias within the included studies, as well	2014	5/10 (AMSTA R rating from McMaster Health Forum)	 Race/ethnicity/ culture/language Education 	0/46
	as the inability to accurately determine the extent of the effects of school-based health centres as no baseline data was collected.				
Investigating the benefits of implementing	This review summarized the current literature on community navigators to assess whether their implementation can help	Published January 2016	3/10	• Race/ ethnicity/	1/30

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
community navigators to improve immigrant and ethnic minority health outcomes	 improve immigrant and ethnic minority health outcomes in Canada and the United States. A total of 30 studies were included in the review, with the majority examining the effectiveness of community navigators in increasing client capacity for chronic disease self-management, prevention and access to care. The most frequently studied chronic conditions include type 2 diabetes (n=11), cardiovascular disease (n=10) and cancer (n=4). Promotores de Salud' was the sole model of care that was employed within five of the included studies. In this model, residents who were identified from Latinx communities underwent a nine-week training program by the outreach program Health for Your Heart, with the goal of assisting in the prevention and management of cardiovascular disease/risk in Latinx populations. Trained navigators supported participants through various modes of communications, including group sessions, home visits and telephone calls. Across all the studies employing this model of care, significant improvements were noted with respect to the assessed risk factors for cardiovascular disease (e.g., BMI, weight, blood pressure, and cholesterol levels). Despite this model of care being the only one employed across the studies, the authors do note that many of the other methods used in the navigation programs had similar approaches to Promotores de Salud, and reported improved health outcomes within their target populations. 			culture/ language	
Examining the effectiveness of the collaborative care model on	The primary aim of this systematic review was to explore the effectiveness of the collaborative care model on depression outcomes in various racial/ethnic minority groups within the United States.	Published December 2020	3/10	• Race/ ethnicity/ culture/ language	0/19

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
depression management in racial/ethnic minority populations within the primary care sector	This review article included a total of 19 studies, of which 10 were randomized controlled trials and the remaining nine were observational studies. This model is described as providing evidence-based care that is patient-centred, team and population focused and consists of measurement-based treatment. Key features of linguistic and cultural adaptations within this model include having ethically matched interventionists, bilingual clinical staff, accessible educational material that is available in multiple languages and the inclusion of graphics. The authors found evidence to suggest that the collaborative care model has the ability to improve the depressive symptoms of individuals from racial/ethnic minority groups or of low socio- economic status. The findings do indicate that the model remains effective even if cultural or linguistic tailoring is not included, and thus should be treated as secondary to the core characteristics of the model. Positive mental health effects can be observed within one month of implementation and can last for up to a duration of two years. The authors do note that further research efforts should be focused on identifying which cultural adaptation features may provide the most benefit, identifying barriers to recruiting 'hard-to- reach' populations and the impact of including virtual components with respect to access and care delivery.			Socio-economic status	
<u>A cost-</u> <u>effectiveness</u> <u>analysis of care</u> <u>management to</u>	This cost-effectiveness analysis examined the impact of care management (non-physician care managers that enhance care coordination and patient self-management) to treat hypertension in a racially diverse patient population. The cost-effectiveness model	Published 2018	Not available	Race/ethnicity/ culture/language	N/A

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
reduce disparities and control hypertension in primary care	is based on results from the reducing disparities and controlling hypertension in primary care (ReD CHiP) care management program, which had previously been shown to be clinically effective. This program had pharmacists and dieticians collaborate with a broader care team to emphasize four key self-management behaviours for patients: diet, physical activity, medication adherence and self-monitoring. This cost-effectiveness analysis took a 15-year time horizon as its base case with a 70% African American and 30% white patient population.				
	The ReD CHiP care management program was found to be more costly but produce more quality-adjusted life years (QALYs) than the standard of care. It had an incremental cost-effectiveness ratio of \$52,850/QALY in the base case. The probability of care management being cost-effective is greater than 90% when the willingness to pay threshold is \$100,000/QALY and greater than 40% when the willingness to pay threshold is \$50,000/QALY.				
	In the sensitivity analysis, it was found that the intervention is more cost-effective with a predominantly African American population. The incremental cost-effectiveness ratio is \$48,250/QALY with a 90% African American population compared to \$80,700/QALY with a 90% white population.				
Development of a <u>conceptual</u> <u>framework for</u> <u>understanding</u> <u>shared decision-</u> <u>making among</u> <u>African American</u> <u>LGBT2SQ</u>	This review presented a conceptual framework (based on a systematic review) regarding shared decision-making between African American LGBT2SQ patients and their clinicians. Three studies from the United States were included in the review. The conceptual model put forward by the authors highlighted how the ability for patients and clinicians to engage in shared decision- making interacts with preferences, trust, and their relationship. Furthermore, patient self-management and health outcomes were	2014	4/9 (AMSTA R rating from McMaster Health Forum)	Race/ethnicity/ culture/languageGender/sex	0/3

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
patients and their clinicians	 mediated by self-efficacy, understanding, trust, satisfaction and physician outcomes. The model also emphasized how patient and providers perceive of one another through the lens of lived experiences and societal expectations. The authors stress the importance of physicians understanding the multiple, intersecting identities of African American LGBT2SQ patients to inform approaches to shared decision-making. 				
Access to primary healthcare services for Indigenous peoples	This framework synthesis examined studies identified in a previous scoping review to explore access to and accessibility of Indigenous healthcare services. The authors put forward an accessibility framework for Indigenous peoples accessing Indigenous primary healthcare services. The framework highlighted that access to services is influenced by patients' ability to engage, perceive, reach, seek and pay for services. Furthermore, it emphasized that the accessibility of services is mediated by the approachability, acceptability, availability and affordability of the services as well as the ability of these services to engage with Indigenous patients. The authors concluded by underscoring the importance of social and cultural determinants for Indigenous peoples' ability to access healthcare services are well placed to address these access issues.	Published 2016	3/9	• Race/ethnicity/ culture/language	5/62
<u>Cross-cultural</u> <u>aspects of</u> <u>depression</u> <u>management in</u> <u>primary care</u>	The review focused on cross-cultural aspects of depression management in primary care. From the 11 included studies, 8 studies evaluated the collaborative care model (with or without cultural tailoring), motivational interviewing, innovative interpretation techniques, remote simultaneous medical interviewing and a cultural consultation model.	Published 13 May 2012	2/9	• Race/ethnicity/ culture/language	0/11

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
	The collaborative care model was described as a multidisciplinary approach with patient education, planning of regular follow-up visits, monitoring of medication adherence and working with a depression case manager. Cultural tailoring included considering specific minority groups' illness beliefs, symptom presentation and treatment preferences. Only one study evaluated the implementation of the collaborative care model in a community setting. The study focused on a community-based clinic that provided coordination of care for low-income immigrants. The authors reported that day-to-day needs such as food, housing and financial support were difficult for the population, and that they added a family support worker for improved engagement and treatment of patients.				
	Two studies in primary care found improved depressive symptom severity and medication adherence with the use of collaborative care regardless of the race or ethnicity of participants. Overall, patient-focused interventions that adapted treatment to patients' stated preferences or needs, especially through cultural tailoring of treatment, was a factor for a successful intervention. Other examples included the use of an interpreter services to address language barriers, use of a depression case manager or use of a family support worker to assist with day-to-day challenges.				
Community coalition-driven interventions to reduce health disparities among racial and ethnic minority populations	The review identified 58 studies that focused on interventions driven by community coalitions that improve health outcomes or disparities among racial and ethnic minority populations. The authors defined the multi-sector coalition model as a social initiative that connects stakeholders (e.g., interest groups, agencies, organizations, citizens, volunteers) who share a common interest to reduce health disparities by changing community-level structures, processes and policies. Coalitions can be formed with a	Literature last searched 31 March 2014	10/11	• Race/ethnicity/ culture/language	2/52

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
	lead agency or convening group to address a community issue, and the authors contextualized how to attain coalition membership, clarity of mission, governance structure, training and technical support, communication, leadership, pooled resources and implementation of strategies. The broad cross-sector composition and voluntary nature of coalitions sets them apart from other types of models.				
	There were inconsistent effects on health outcomes related to community system-level change strategies (e.g., physical environments like housing, green spaces, neighbourhood safety, policies). Health system-level strategies showed positive small effects, particularly interventions that used lay community health outreach workers or group-based health education and support led by professional staff and peers. The authors indicate that coalition- driven models may increase the likelihood of adoption of community-based strategies and interventions. Improvements were seen in cancer screening, HIV risk behaviour, breastfeeding behaviour, immunization uptake, asthma symptoms, mental health quality of life, diabetes and blood pressure control, tobacco use and alcohol use.				
Examining chronic care model with culturally competent interventions for ethnically diverse adults with type 2 diabetes mellitus	The coalition structures were inadequately reported.The review identified 32 studies that focused on identifying the use of the chronic care model with culturally competent aspects for type 2 diabetes management. The authors developed five categories to classify culturally competent interventions, including cultural tailoring to meet the needs of patients, communication factors, peer or community support, ethnic matching between patient and provider, and provision of training for health professionals. Of the included studies, 20 studies focused on community resources and policies. These included interventions	Literature last searched July 2014	5/11	Race/ethnicity/c ulture/language	0/32

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
	involving link workers (e.g., promotoras), partnerships with local associations (e.g., churches) and use of community-relevant locations (e.g., community centres and churches).		0.40		
Examining the role and impact of mobile-health clinics in the United States	The primary focus of this literature review was to examine the role and impact of mobile-health clinics in the United States. This review analyzed a total of 51 articles, which revealed both positive aspects of their implementation and areas of improvement. The authors provided evidence to suggest that mobile-health clinics are particularly beneficial given their ability to: 1) provide care to hard-to-reach, vulnerable communities due to fewer logistical and administrative barriers (e.g., wait times, scheduling, distance); 2) adapt and change their services offerings according to the community of interest's needs (e.g., emergency coverage); 3) address both medical and social determinants of health (with a focus on addressing community-wide health issues); and 4) serve as a cost-effective care delivery model (e.g., savings arising from early patient initiation, enhanced self-management strategies, reduced emergency department visits and hospital admissions, improved quality of life). A number of mobile-health clinics have further been shown to be a safe and welcoming environment for clients, thus facilitating the building of trusting therapeutic relationships. Alongside this, they are effective in improving general health outcomes due to their ability to offer preventive screening services and support for managing chronic conditions, and form partnerships with community members, organizations and institutions across localities to offer social services.	Published October 2017	0/9	 Race/ethnicity/ culture/language Socioeconomic status 	Not reported

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
	Despite the many benefits of these clinics, there are some noteworthy limitations associated with this model of care, which include decreased continuity of care due to a lack of integration within the health systems (i.e., fragmentation), financial constraints (e.g., funding), and barriers with space, clinic structure and logistical planning (e.g., maintaining confidentiality may be difficult in a small space, lower quality technology due to size restrictions, staffing challenges).				
Examining strategies and models of care to reduce healthcare accessibility barriers in immigrant populations	The primary focus of this review paper was to synthesize the evidence surrounding health and infectious disease risk in immigrants. It described healthcare strategies that aim to reduce barriers to care through health promotion efforts (e.g., screening programs and culturally competent care). This review utilizes the Salud Entre Culturas (SEC) project in Madrid, Spain, as a model of care of interest. The SEC project features a multidisciplinary team of health professionals (e.g., physicians, nurses, interpreters and cultural mediators) to support the integration of the migrant community in this region. Its main programs focus on communicable disease education, infection disease screening and translating between migrants and their healthcare providers. The authors highlighted how the SEC project utilizes health education workshops to evaluate the knowledge and attitudes of their culturally and linguistically diverse members, while their 'Building Bridges' service enables mediators to bridge the language gap between migrants and health professionals during clinical interactions. The review further noted that migrants (particularly those identifying as culturally and linguistically diverse) are less likely to utilize health services despite their increased needs. Some of the key challenges for this group include health literacy and cultural	Published February 2019	Not available	Race/ethnicity/ culture/language	Not reported

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
Key features of palliative care service delivery to Indigenous peoples in Australia, New Zealand, Canada and the United States	 and language barriers (e.g., misconceptions, perception of risk, lack of trust and difference in cultural norms). The findings also revealed that community-consulted approaches are deemed as best practice in the development of health promotion and educational activities for migrant populations. Lastly, strategies to optimize care consist of utilizing migrant-friendly approaches that leverage the use of bilingual health or community-based care workers and interpreters, implementing cultural competency training, community outreach, and appropriate health promotion media (those that engage in a range of cultural, social, environmental and psychological influences have been observed to have a more positive impact). The review focused on key features of palliative care service delivery of Indigenous peoples in Australia, New Zealand, Canada and the United States. Most of the studies were focused on community-based palliative care services. Key features of palliative care service delivery include community engagement, education and training, culturally safe service delivery strategy, flexible organisational structure, patient-centred care and quality service delivery. Additionally, the authors concluded that specific preferences were identified such as family and community involvement, dying at home, provision for cultural and spiritual ceremonies within service settings, open communication, respectful treatment by health service providers and availability of Indigenous staff. For example, a conceptual model based in Australia outlined seven key principles such as equity, autonomy, trust (e.g., acknowledgement and consideration of colonization and its impact), seamless humane care (e.g., collaboration with multidisciplinary teams and community-based organizations), emphasis on living and cultural respect. 	Published 8 May 2018	3/10	• Race/ethnicity/ culture/language	8/39

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
Other types of revi	The review reported that effective service models within rural or remote settings had strong community connections and involvement such as partnerships with local services and academic medical centres, involvement of Elders in the community to design the program and incorporating tribal and community values. Additionally, providing education and training to health service providers, community stakeholders and family members were integral to community-based program models. Overall, models of care need to be flexible, adaptable to local context, inclusive of family members, and require buy-in from local communities to successfully deliver palliative care services.				
Examining the impact of mHealth in supporting integrated health models of care for refugees with complex health conditions	The main focus of this paper was to examine the potential of mHealth technologies in supporting integrated models of care for refugees with complex health conditions. It has been found that, in general, health information technologies can be utilized to assist patients with comorbidities by enhancing communication between the patient and their provider, improving health literacy, and progress-sharing with multiple providers in real time. The literature has shown that health information technology has been utilized with refugees in home- and office-based healthcare contexts. One model of care had community-health workers who were making home visits teleconference pharmacists to support their client in their medication management; this resulted in improved medication adherence and clinical outcomes. Another model of care for refugees in the primary care sector utilized web- based training for providers, kiosks for mental health screenings	Published 2019	Not available	• Race/ethnicity/ culture/language	Not reported

Type of document	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Equity considerations (organized by PROGRESS PLUS categories)	Proportion of studies that were conducted in Canada
Evaluating community-health workers as chronic care coordinators	 and clinical decision-making support for health professionals. This had many observed benefits as the kiosks could display the text in the language of the refugee's choosing. In a similar light, the authors suggested that mHealth technologies can confer similar benefits in integrated healthcare models for refugees, especially relating to removing language and communication barriers, transferring patient information between providers more fluidly, teleconferencing on mHealth applications as opposed to home visits, and translating medication labels in a range of languages. While there may be a number of benefits, some challenges with the integration of mHealth could be securing sustainable funding to drive these interventions, and privacy and data security concerns. The review focuses on the Getting Better at Chronic Care (GBACC), which is an intensive community-based case management delivered by Indigenous health workers (IHW) focusing on diabetes and at least one chronic condition among 	Published 11 November 2015	Not available		
in an Australian <u>Indigenous</u> primary healthcare program	Aboriginal or Torres Strait Islander people. A total of 388 project documents were reviewed. The authors identified enablers such as the provision of training to support IHW, communication of the IHW to other staff, IHW knowledge of their clients and environment and ongoing support from the larger organization. Some identified barriers included clinical staff shortages, lack of consistent staff and lack of awareness by some clinical colleagues of the IHW role. IHWs were important to client self-management support and linking the community to other health services. A supportive service model is required to ensure optimal placement of IHWs to improve chronic care coordination.				

Appendix 2: Excluded systematic reviews and other types of reviews

Excluded documents
A systematic review of primary care models for non-communicable disease interventions in Sub-Saharan Africa
Close to home: Evidence on the impact of community-based girl groups
Examining pediatric clinics and their ability to support the developmental outcomes and services of children living in disadvantaged communities
Examining the chronic care model and its components in individuals living with human immunodeficiency virus
Increasing equity of access to high-quality mental health services in primary care: A mixed-methods study
Integrated primary care and behavioral health services for Latinos: A blueprint and research agenda
The common characteristics and outcomes of multidisciplinary collaboration in primary health care: A systematic literature review
The process of cultural competence in the delivery of healthcare services: A model of care
The role of traditional medicine practice in primary health care within Aboriginal Australia: A review of the literature
Translating public health practices: Community-based approaches for addressing hearing health care disparities
Understanding the sustainability of community health collaboratives
The untapped potential of the nurse practitioner workforce in reducing health disparities