



# STRENGTHENING COMMUNITY CONNECTIONS

The Future of Public Health is at the Neighbourhood Scale

#### ACKNOWLEDGEMENTS

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This report presents findings from a critical realist review commissioned by the Office of the Chief Public Health Officer (CPHO) at the Public Health Agency of Canada to inform the 2021 annual CPHO report. The overall objective of this review was to identify key actions for public health to strengthen community capacity and influence to inform a bold vision for a renewed public health system in Canada.

The National Collaborating Centres for Public Health, in partnership with the authors and the Office of the CPHO are publishing this report to allow broader dissemination of these findings.

To read the 2021 CPHO report, <https://nccph.ca/projects/reports-to-accompany-the-chief-public-health-officer-of-canadas-report-2021>.

To read the 3 other reports that were commissioned to inform the 2021 CPHO report, <https://nccph.ca/projects/reports-to-accompany-the-chief-public-health-officer-of-canadas-report-2021>.

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# SUMMARY

Community-led action at the neighbourhood scale has proved vital to addressing complex health inequities during the COVID-19 pandemic in Canada. It has led to adaptive innovations including mobile and pop-up vaccination clinics, door-to-door outreach by trusted community ambassadors, informal isolation checks for people living alone, and formal efforts to push governments to make decisions based on equity data. Community organizations, partnered with public health, health care, and other government services, have demonstrated how to meet equity needs within a targeted universalist approach to public health. This approach sets population-level goals and establishes targeted processes to achieve those goals, adapting them to ensure safe, effective, and appropriate approaches for communities facing barriers to health and wellbeing.

Focusing on the role of communities and the neighbourhood scale can strengthen our understanding of what is needed to support targeted universalism and build systems for health and wellbeing that are resilient, equitable, and accountable. It can support epistemic justice in public health in which diverse forms of community knowledge and ways of knowing are heard, understood, and respected. And it can help to shift the loci of power and expertise, the structures of colonialism and medicine that continue to shape our systems.

This report sets out four key actions by which public health in Canada can more fully incorporate and support the capacity of communities beyond the COVID-19 crisis:

## **ACTION 1**

### **Strengthen the work of community health and wellbeing at the neighbourhood scale**

by investing in the comprehensive model to address inequities set out by the World Health Organization (WHO). Ensure public health and community organizations are full partners in locally driven health and social services networks, replace burdensome project-based funding for community organizations with stable core funding, and strengthen structural linkages between community organizations and public health.

## **ACTION 2**

**Ensure accountability for community involvement in governance and decision-making** through performance indicators; funding and reporting requirements; and curricula and core competencies that incorporate accountabilities for community engagement, coproduction and codesign, and governance in public health.

## **ACTION 3**

### **Build community and equity into new data architectures**

by supporting community organizations' technology and data needs, incorporating and respecting community knowledge, supporting the collection and use of equity data, and linking community organizations into learning public health systems.

## **ACTION 4**

### **Confront structural and historic barriers to systems transformation.**

Recognize historic and structural drivers of current inequities and address contemporary power imbalances within Canadian health and public health systems, with the aim of building trust, collaboration, and collective impact.





The report follows a critical realist review methodology (1.2), which provides a flexible approach to the complexity of understanding real-world challenges and considers multiple forms of evidence, draws attention to underlying structures of power, and presents a clear line of reasoning that can be evaluated on the basis of the supporting sources presented. Community action and community perspectives on health equity are not always adequately represented in the academic literature, particularly when the work is as emergent as that undertaken during the COVID-19 crisis. This report therefore

draws on a range of sources broadly related to “community,” “health equity,” and “public health,” with an emphasis on sources from Canada from the past five years. Sources include published and grey literature in English and French; research, commentaries, and expert opinion; informational interviews with system leaders from across the country; and feedback from an advisory panel. Direct consultations with a diverse range of communities and community organizations — essential to the success of community-led health transformation — were beyond the scope of this stage of work.

# COMMUNITY, EQUITY, AND “RESILIENCE”

## The involvement of communities

and community organizations at the neighbourhood scale is a core component of both health equity and systems resilience. A 2021 Public Health Ontario rapid evidence review found that key components of government-led COVID-19 equity action included the mobilization of resources, including appropriate funding and targeted investments; implementation of equity-centred practices; capacity building and training; collection of equity-focused data; and consistent use of trust-focused approaches to community participation throughout decision-making processes (3). A further global analysis of health systems resilience during COVID-19 found that community participation, alongside health equity and intersectoral coordination, was core to the ability of systems to “prepare for, recover from and absorb shocks” (4 p964).

Systems resilience provides an important perspective on the current and future role of public health in tackling not only infectious diseases but also other complex intergovernmental problems such as the opioid crisis and the population health impacts of climate change (5). A resilient, equitable, and intersectoral public health system requires consistent, trust-focused approaches to community participation; embeds impacted communities within

networked and hierarchical governance across scales; uses hyperlocal knowledge and disaggregated data within a learning public health system; and draws on the distinctions, capacities, and self-determination of impacted communities.

A resilient public health system is one that is ready to meet complex challenges in partnership with other sectors within a whole-of-society approach. This is distinct from a system focused solely on individual or community-scale resilience, or the structural expectation that equity-deserving individuals and communities demonstrate extraordinary endurance under unjust conditions. Health promotion literature has linked resilience terminology to racist narratives of the superhuman physical and psychological ability of racialized and marginalized communities to survive under oppressive and health-damaging conditions — such as the archetype of the “strong Black woman” in Nova Scotia (6) — and to a focus on individuals’ inner lives at the expense of modifiable contextual factors (7). This report uses the term resilience to refer to health systems in their broad social and ecological contexts, recognizing that even at the broadest level one system’s resilience often comes at the expense of another’s, and that the costs are most often borne by those with the least social power (8).

## ACTION 1

### Strengthen the work of community health and wellbeing at the neighbourhood scale

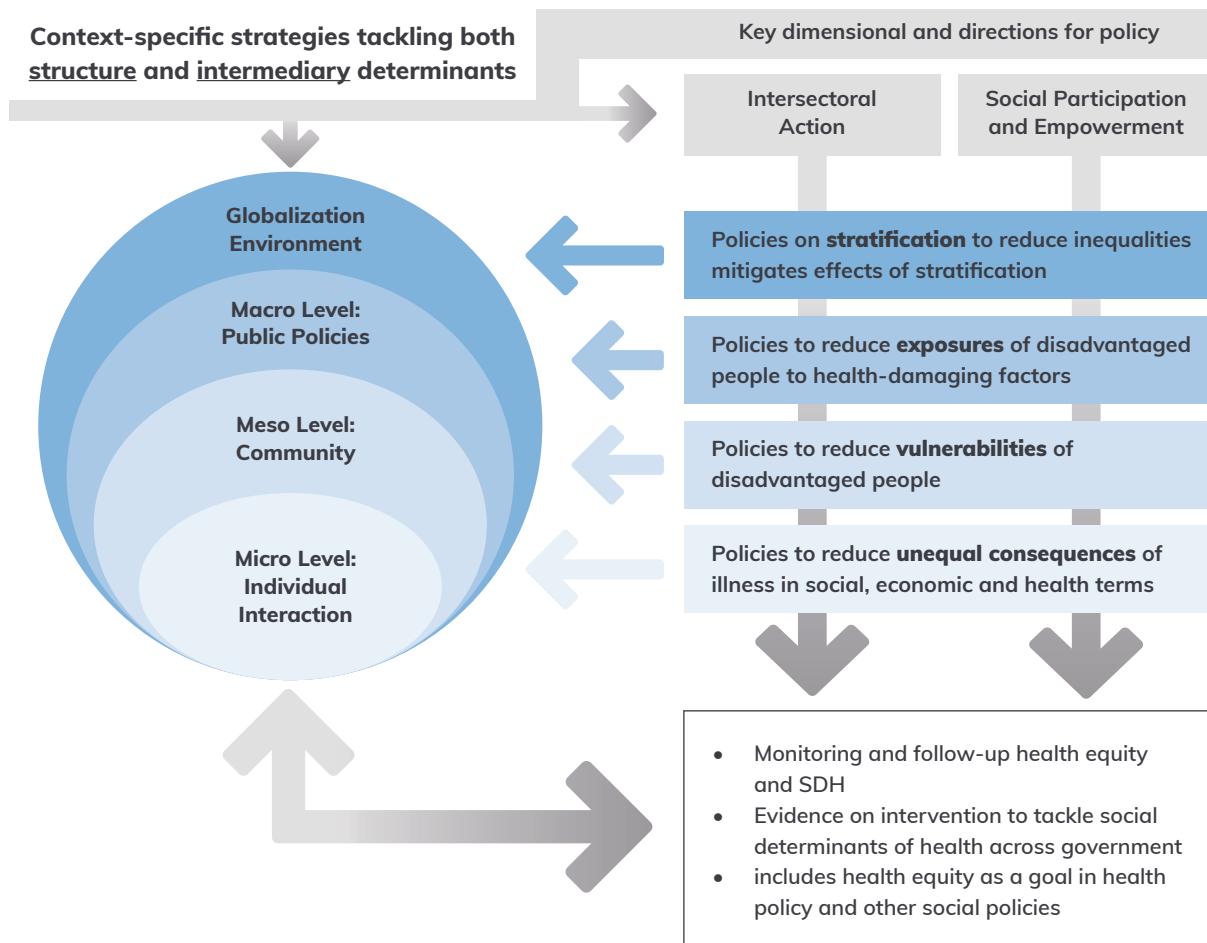
The inequitable impacts of the COVID-19 crisis on populations who were already facing exclusion, discrimination, and health and social disparities are well documented (5) as characteristic of a syndemic. In this kind of synergistic epidemic, infectious disease exacerbates, interacts, and clusters with preexisting health, social, and environmental conditions, impacting communities according to predictable indicators of health equity (9,10). Less well documented, but increasingly recognized, is the role that community-based and community-led infrastructure at the neighbourhood scale has played in backstopping public health and supporting the survival and wellbeing of both equity-deserving and mainstream populations throughout the crisis and beyond (11,12). Across Canada, community-based and community-led infrastructure, in several cases funded by local and federal public health departments, has supported the health of the population through a range of responses, including these:

- Coalitions and voluntary organizations such as the South Asian Health Network (13), the Black Scientists Task Force on Vaccine Equity (14), and the Indigenous Primary Health Care Council (15) stepped in to generate and deploy culturally appropriate, culturally safe outreach programs for vaccine confidence.
- Vaccine Hunters Canada, a voluntary organization, played a vital role in communicating the location and availability of vaccination clinics across the country (16).
- The Canadian Red Cross, funded by the Public Health Agency of Canada, mobilized international medical graduates to work in emergency non-clinical and supervised roles for outbreaks in long-term care, corrections, and community settings across the country. Most had been working outside of health care and facing barriers to working in their fields in Canada (17,18).
- Partnerships between community organizations, public health, and primary care led to an “unprecedented” collaborative response to support immigrant workers impacted by major outbreaks at the High River Cargill meat packing plant (19).
- The East Toronto Health Partners Ontario Health Team developed its own contact tracing and vaccination approaches that linked community partners with hospital resources, with plans to take on more traditional public health functions (20,21).
- Informal networks provided grassroots supports led by and for affected communities, from caremongering (22) to Black communities’ mutual aid (23).
- Home care, community care, and social services organizations supported people isolated at home with drop-offs of food and essentials, virtual care, telephone outreach, and mail (24).
- Community Health Centres provided direct COVID-19 testing and vaccination services and wraparound supports for high-risk and high-impact neighbourhoods (25).

These manifestations of community capacity support Hancock’s observation to the Canadian Senate Subcommittee on Population Health that “even the most challenged and disadvantaged communities ... have significant and sometimes astonishing strengths, capacities and assets that can be used by the community to address their problems and to enhance their health, wellbeing and level of human development” (26 pB-8). This is the work of health protection and promotion at what

the World Health Organization calls the “meso level” between public policies and individual interaction [Figure 1], which seeks to reduce the impacts of health inequities on specific populations; mobilize for action at other scales; and address the more than 75% of health determinants that “exert their influences ... in the community setting – homes, schools, neighbourhoods, workplaces, towns, and cities” (26 pB-11).

FIGURE 1: WHO FRAMEWORK FOR ADDRESSING SOCIAL DETERMINANTS OF HEALTH (SDH) INEQUITIES (27 P8)



Relationships between public health and community organizations vary across the country. Public health provides some operational and project-based funding, such as the Public Health Agency of Canada's Immunization Partnership Fund (28), aimed at supporting community-based COVID-19 education, promotion, and outreach. In many areas, strong interpersonal relationships have led to effective partnerships between public health and primary care or other community-based partners (29). However, except for Quebec where public health is a core component of integrated health and social services centres (CISSS) and integrated university health and social services centres (CIUSSS) (30), most provinces and territories do not have a formal public health structure in community health and wellbeing at the neighbourhood scale.

In part because community organizations rarely have the time, mandate, or resources to publish about their work, community approaches are underrepresented in the

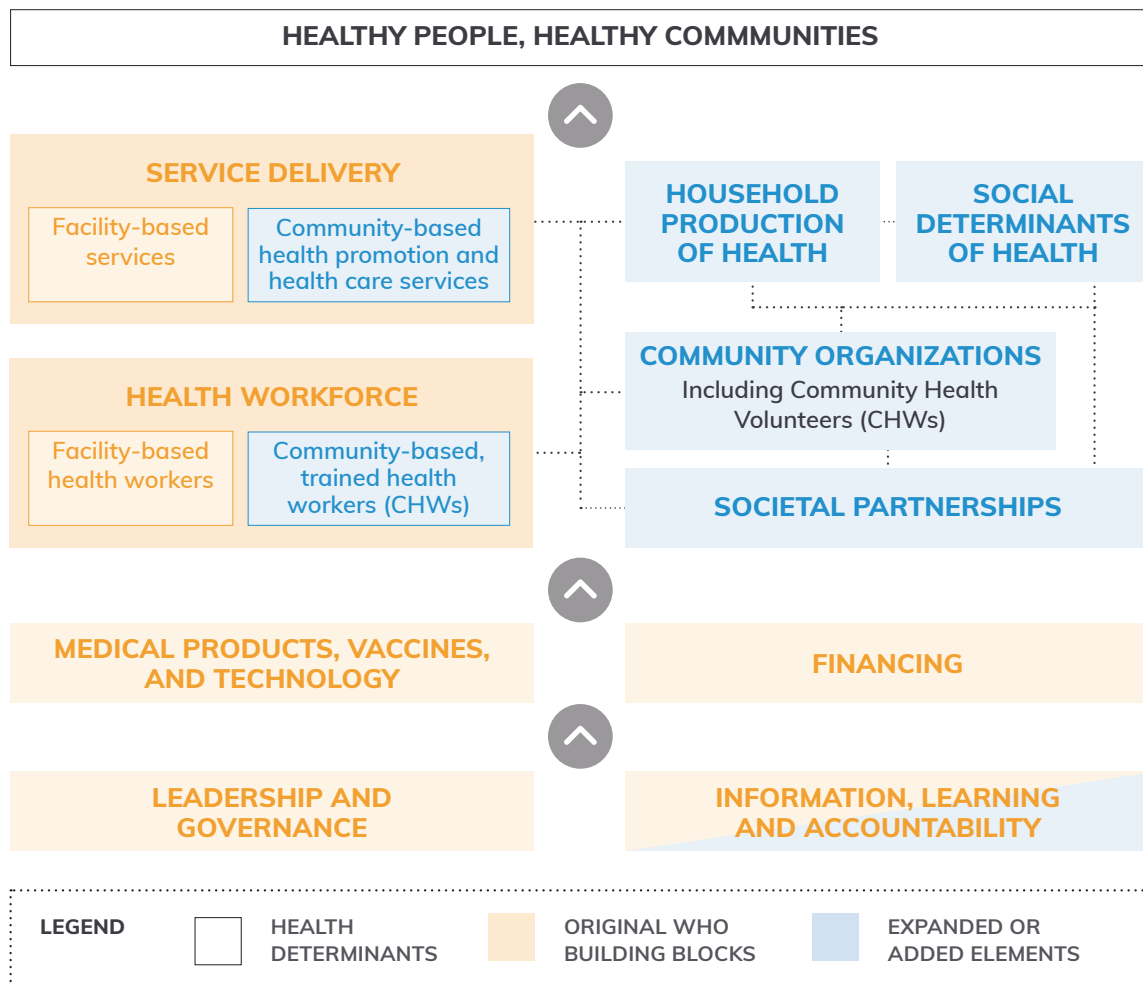
published and grey literature. They have been characterized in academic research as a natural consequence of the downloading of state responsibility (31), as attempts by local community organizations "to compensate for the government's limitations by meeting the needs of vulnerable groups in the community" (32 p4) while constrained by significant limits to marginalized communities' capacity, efficacy, organization, and/or willingness (33). Or they are not seen as part of the health system at all, despite the global reality that "service delivery and health workforce approaches often rely on community health workers and strategies, without adequate investment or recognition at the policy level" (34 p1). When effectively resourced, however, community-led approaches can build better health through local participatory actions and structures that redistribute empowerment to the community scale: "a redistribution of the power that allows the community to possess a high level of influence in decision-making and the development of policies affecting its well-being and quality of life" (27 p43).



Stable core funding and formal connections with public health services could improve efficiency by reducing time spent on project-based funding and administration and on the development of ad hoc partnerships. They could also improve accountability and capacity by building clear linkages and accountabilities with other scales of public health funding, policy, and action. Strong

meso-scale action can also serve as the foundation for community participation across other scales of public health. Explicit attention to the sometimes implicit contributions of community-level services, actors, and partnerships can strengthen our understanding of the building blocks of health systems [see Figure 2] (34).

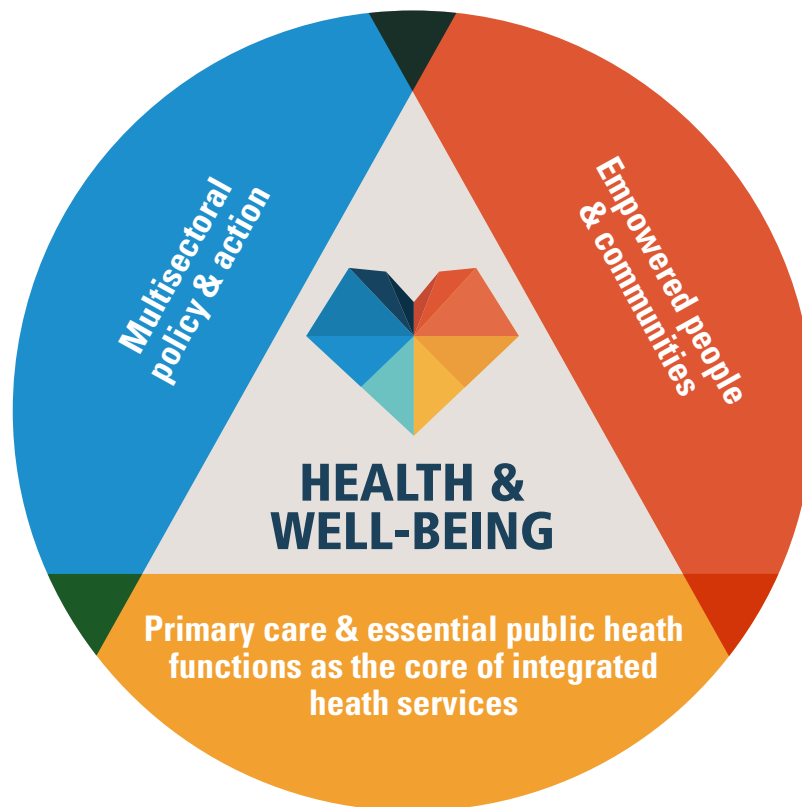
FIGURE 2: EXPANDED FRAMEWORK FOR HEALTH SYSTEMS: 'BEYOND THE BUILDING BLOCKS' (34 P3)



One way to recognize and resource the community scale is through investment in what the WHO calls comprehensive primary health care [Figure 3]. Primary health care is not the simple delivery of clinical primary care services; it is a comprehensive approach to community health and wellbeing that links public health and primary care as the

core of integrated health systems and builds individual and community empowerment through multisectoral policy and action. This approach has been endorsed by the WHO's 1978 Alma-Ata (35) and 2018 Astana (36) declarations as a means to achieve global goals of Health For All.

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FIGURE 3: THE WHO MODEL OF  
PRIMARY HEALTH CARE (37 P2)



Investing in primary health care is not the same as forcing mergers of public health functions with mainstream primary care such as that provided in individual doctor or nurse practitioner clinics — an approach that has generated “concern that a rapprochement could result in a deprioritizing of public health approaches and a focus on individual, rather than population-level solutions” (38 p4). Rather, primary health care is “the overarching framework for efficiently, effectively, and equitably organizing health and social services in order to produce optimum health in populations” (39 p2). Primary health care at the neighbourhood scale does not replace the full spectrum of public health action but serves as a structural support that organizes community members and organizations and better links them to other scales and domains of public health. This approach shares many characteristics of public health and has three major components: providing equitable, safe services that meet people’s essential health needs throughout their lives; empowering individuals, families, and communities to thrive in healthy environments; and supporting multisectoral policy and action to address the broader determinants of health (35,36).

While some may not recognize public health as providing health “care” per se, in practice public health has always provided some components of primary health care, filling gaps in clinical services when needed — from sexual health and family support to oral health and chronic disease management — particularly for equity-deserving populations.

During the COVID-19 crisis, countries with strong primary health care approaches demonstrated local resilience in the face of national and state-level public health barriers. For example, Community Health Centres in the United States successfully leveraged \$6 billion in federal investment to link with public health to rapidly deliver locally trusted vaccination approaches to that country’s most marginalized communities (40).

In Canada, a small subset of primary care providers currently offer primary health care for equity-deserving and underserved communities within community-governed and team-based structures such as centres locales de services communautaires (local community service centres or CLSCs), Community Health Centres, Manitoba My Health Teams, and other equity-focused interprofessional primary health care teams (41,42). The research evidence shows primary health care in Canada addresses the needs of populations facing complex social and medical conditions, takes whole-person and whole-community approaches that reduce bias and inequity, focuses on prevention, situates itself geographically where it is most needed, and creates systems savings by diverting people facing social and medical complexity from acute care (43,44). The evidence-based model for action is grounded in equity; its best practices include community governance, anti-oppression, community development, teamwork, person- and community-centredness, and accountability (44).

Primary health care can also provide vital inputs into a learning public health system through the “structured gathering and analysis of disaggregated health care data which can also be used for timely detection and response to health emergencies” (45 p3) and by providing communities access to information that empowers them to take informed decisions about their health. However, not all communities across the country have access to this level of comprehensive care, and many equity-deserving communities subsist in “healthcare service deserts” because mainstream health care funding disincentivizes providers from serving people living with complex social and medical needs (46,47).

Fortunately, municipal and nonprofit community social services organizations are more often located in these underserved areas. Another way to rapidly expand primary health care for equity-deserving communities, then, is to create formal linkages between mainstream primary care, public health, and non-health actors at the community scale, such as social services organizations, libraries, community centres, housing providers, and schools. Libraries, for example, have emerged as an important community-scale site of

health equity through the work of library social workers, digital equity and device-access programs, literacy-building and connection programs, and fee-free lending (48,49). These organizations are frequently located within equity-deserving communities, are skilled in anti-oppression and cultural safety, have strong relationships with community members and influencers, and are often comprised of community members themselves.

Influenced in part by a wave of post-SARS Masters of Public Health graduates in the community and social services workforce, community organizations are increasingly framing their own work within a health equity and social determinants of health approach, such as that demonstrated by YWCA Canada (50). There are strong examples of local-scale collaborations across Canada; a 2014 review integrated findings from several partnerships into an ecological framework for building successful collaborations (51). During the COVID-19 syndemic, for example, many community-led initiatives mobilized volunteers and social services organizations in collective action and impact on the determinants of health in ways that could be further linked with public health and primary care:



- in Saint John, New Brunswick, the community inclusion network Living SJ mobilized community capacity to guide the provincial government in codeveloping the Greater Saint John Emergency Food Program;
- in Lethbridge, Alberta, the city pooled volunteers, needs, and community services resources in collective databases that supported grassroots mutual aid; and
- in Whitehorse, Yukon, food organizations came together to meet emergency needs and developed collaborations and a food systems understanding that they intend to build on post-pandemic (12).



Globally, a trend toward population health management, value-based care, integrated care, and social prescribing in high-income countries' health systems — linking all geographically proximate health and social services providers with accountability for the health outcomes of a defined population — has also created new opportunities for intersectoral and collaborative community-scale action. It is important to note that historically top-down “integration, consolidation, budget cuts and standardization” have been observed to erode public health resources and independence in jurisdictions across Canada, at times eliminating or centralizing community and local functions within acute care, putting health equity at risk (52). However, newer approaches to integrated care do not entail forced integration and may not entail structural or governance integration at all. Best practice- and locally driven integrated care brings together actors from across systems to collaborate, build mutual trust, and ensure mutual accountability under a collective impact and collaborative governance approach (53). This approach draws on several population-focused traditions that share some characteristics with public health and its aim to reduce the amount of disease, premature death, and disease-produced discomfort and disability in the population.

A rapid evidence review conducted by the McMaster Health Forum during the COVID-19 pandemic highlighted the importance of including public health in integrated health responses (54). In Alberta, for example, public health is included under the umbrella of Alberta Health Services, a structure “deemed to be absolutely essential by key informants from the province, who noted that it facilitated seamless communication” (54 p6). In settings where public health was not part of provincial or regional service structures, the review found that effective leadership and governance came from local “triads representing public health, primary care, and acute care” (54 p9) as well as the integration of home and community care services. The review also called attention to the need to shift emergency planning from a focus on acute care surges to a focus on meeting the social and health needs of equity-deserving populations. This could be accomplished through partnerships between public health, health care, social services, and home and community care organizations, to build on trusted relationships and focus planning on the social determinants of health relevant to the population.



Some examples:

- The Ottawa Health Team, one of the Ontario Health Teams in Ontario's collaborative model (54), built on strong collaborative foundations between community health, acute care, and public health to mobilize rapidly in meeting community needs during COVID-19 (55).
- The Canadian Red Cross's community connectors programs in New Brunswick (56) and the United Way's social prescribing programs in British Columbia (57) offer examples of health-related collaborations led by community social services organizations.
- A partnership between the City of Toronto, United Way, and University Health Network hospitals is investing in supportive housing for people facing health inequities (58).
- In the United States, health systems funding tied to population health outcomes has encouraged Accountable Care Organizations to take action on the social determinants of health, from housing and food to social isolation, in partnership with public health (59).



# APPROACHES TO POPULATION HEALTH AND WELLBEING OUTSIDE PUBLIC HEALTH SERVICES

**Community health** is a place-based, collective approach that promotes health and its determinants by, with, and for a geographically or culturally defined group, centring the community and its characteristics as “an essential determinant of health” (60 p2) for each member. An example of community health in Canada is the work of Community Health Centres (43).

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**Population health**, or population health management, uses an outcome-driven approach to “manage” health and its determinants for a specific group of individuals based on health care team accountability for improvements in health status indicators. When financial rewards are contingent on health outcomes, this is sometimes called accountable care or value-based care (59,61). Ontario Health Teams are an emerging example of population health in Canada (62).

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**Social medicine** emerged globally as a social criticism of both public health’s focus on institutional hygiene and sanitation and health care’s market-based, technology-driven models. Social medicine focuses instead on action by health care providers “to tackle the social roots of ill-health” (27 p6) — health inequity and the determinants of health. An example of social medicine in Canada is the University Health Network’s Social Medicine Program, which shares resources as directed by community organizations to collaboratively impact health equity and social determinants of health (63).

**Social prescribing** links person-centred and integrated health care with public health practice. Supported referrals link health and social services to address needs rooted in the social determinants of health and empower individuals and communities to build capacity and self-determination (64). Examples of social prescribing in Canada include initiatives by Fraser Health with the United Way of the Lower Mainland in British Columbia (65) and by Community Health Centres in Ontario (66).



## ACTION 2

### Ensure accountability for community involvement in governance and decision-making

Consistent, trust-focused approaches to community involvement in decision-making are a core component of health equity strategies worldwide. A recent knowledge synthesis by Canada's National Collaborating Centre for the Determinants of Health (67) set out five core practices for working with community: valuing engagement as core public health practice, sharing power with communities, building trust first, codeveloping the structure and expectations of engagement, and using language that values community. Accountability to communities and for equitable processes and outcomes is also a necessary component of community participation, whether in engagement, coproduction, or governance approaches.

Global scientific and nongovernmental organizations, including the WHO, UNICEF, and International Federation of Red Cross and Red Crescent Societies, have called for investment and attention to bottom-up, participatory approaches to working with community during the COVID-19 syndemic (68). This call has been echoed by Canadian public health ethicists working directly on pandemic responses (69). However, despite clear WHO recommendations for COVID-19

that emphasized the need for community participation, there is little evidence of formal or system-wide Canadian commitments to community engagement linked to public health decision-making for COVID-19 (70).

There are immediate opportunities to purposefully and equitably incorporate community involvement through performance indicators; funding and reporting requirements; and curricula and core competencies that incorporate accountabilities for community engagement, coproduction and codesign, and governance in public health. While community participation has been incorporated into performance indicators, core competencies, and operating standards for emergency preparedness in Canadian public health systems (71–73), this is often structured in limited ways. Improved indicators could embed clear accountabilities for community strengths and capacity to weather shocks (resilience), community distinctions and structural marginalization (equity), community inclusion in decision-making structures (governance), community mobilization and organizing, and Indigenous health (74,75).

## I. COMMUNITY ENGAGEMENT

Community engagement, sometimes used as a catch-all for community participation, most often refers to government- or institution-led activities that build trust with residents by centring “respect for lived experience, individual and community priorities, and diversity of the public in balance with the mandate and interests of those holding government positions” (76 p328). Community engagement results in more impactful, sustainable, and trusted interventions because communities themselves are best positioned to prioritize the policies, resources, and care that are most appropriate for their own situations (77). Communities also hold important knowledge about local context and trusted relationships as well as local and/or traditional ecological knowledge that is not held at other parts of public health systems (78).

Globally, states with stronger preexisting community engagement structures are more prepared to meaningfully embed local feedback into national response plans, particularly for complex situations (68). This is also true of neighbourhoods and communities within countries:

*A central theme across the evidence is the vital importance of community-led responses that draw upon local knowledge and resources, and build capacity and channels of interconnectedness between government, community organisations and the public. The evidence clearly shows that those communities that entered the pandemic with such infrastructure have been best placed to respond (11 p7).*

Accountability to communities is an integral component of community engagement. In its work supporting the Canadian pandemic response, the Canadian Red Cross applied its “community engagement and accountability” framework used in international disaster and development contexts (79). The eight-step approach centres reflection throughout and forms a microcosm of a community-embedded learning health system: consult communities before assessments; understand the local information ecosystem and community structures; engage communities in planning; integrate community engagement and accountability activities into plans and budgets; provide information and listen to communities using the most relevant channels; act on community feedback and use it to improve activities; monitor if people feel informed, engaged, and listened to; and involve communities in evaluations and share findings back with them and colleagues.

Another example of community engagement is the “Community Wellbeing Framework” developed by DIALOG and the Conference Board of Canada with active input from public health leaders (80). The framework, currently being updated to include equity indicators, has been used across Canada to broker dialogues about wellbeing between communities, governments, and private sector actors such as the developers who shape a neighbourhood’s built form.



## II. COPRODUCTION AND CODESIGN

Coproduction and codesign are participatory techniques that help multiple stakeholders share power more equitably and build and adapt services and systems to meet the needs of service users and impacted communities. These approaches respect community self-determination and mitigate unintended harms caused by outside actors working with communities (81). For example, coproduction and codesign have become cornerstones of community-based harm reduction programming throughout Canada's opioid crisis, centring peer leadership under the principle of “nothing about us without us”

(82). Coproduction and codesign are also core to social prescribing, which links health and social care through deliberate pathways of shared meaning and purpose for individuals and communities (83).

A rapid review of the evidence for COVID-19 mental health risks for those with preexisting chronic health conditions and facing social and economic barriers recognized community assets as vital to the success of health interventions (39). The review further identified several key mechanisms essential for successful coproduction, including trust and feedback (open and honest relationships

between people and organizations) rooted in a recognition of prehistories and context; shared accountability, including coproduction of protocols that detail roles and responsibilities and can ensure collective responsibility and inclusion of the needs of all people; shared power, equally distributed between partners on different levels, such as ensuring all stakeholders' views and experiences have the same weight in program design; resilience-building initiatives such as streamlined funding applications for nimbly-deployed community services in times of crisis; and social connection initiatives that build a sense of mattering and link people across all socioecological levels, such as social prescribing and community connectors who link health and social services.

### III. PARTICIPATORY AND COMMUNITY GOVERNANCE

Participatory and community governance encompasses asset-based approaches that decentralize policy processes and entrust local communities with the power to make decisions — moving from “nothing about us without us” to “by us, for us” (81). Most public health jurisdictions across Canada do not include public members on governance boards, although some do. A notable example is the Toronto Board of Health, where several of the board's six community members have helped to advance an equity agenda (84). Some communities impacted by inequities have begun to self-organize to increase their decision-making presence and power in public health. For example, Black health leaders and other community organizations in Hamilton

have spearheaded an ongoing campaign to restructure their city's Board of Health to ensure representation and expertise from impacted communities (85).

Many community-scale organizations and most Community Health Centres are community governed, and this has proved an important factor in promoting organizational and community resilience (54,86). In British Columbia, for example, community-governed Community Health Centres stayed open for their communities, weathering budget cuts and regionalization in 2014 by moving to new sources of funding. Community Health Centres without community governance lacked an independent community voice and were shuttered (87).

A review of decision-making and participatory governance in Canadian municipalities during COVID-19 set out a number of recommendations for entrusting communities with formal decision-making (88). These include recommendations to develop new methods of decision-making with members of equity-deserving communities, such as directed consultations, compensation, and accessibility; create or strengthen advisory committees with representation from affected communities, ensuring that participation in, and the reporting structure of, these committees allows for meaningful outcomes; prioritize public consultation and ensure it continues during states of emergency; and grow the role of community organizations focused on collaborative and innovative government practice.



## ACTION 3

### Build community and equity into new data architectures

During the COVID-19 pandemic, the importance of collecting and using disaggregated sociodemographic and race-based data came to the fore as jurisdictions sought to understand how to apply resources and public health measures where they were most needed (89). These data — when governed according to community-determined approaches such as the First Nations principles of ownership, control, access, and possession (OCAP®) (90–92) — provide vital information to support evidence-informed decision-making and resource allocation within targeted universalism. With the advent of Big Data approaches to public health, systems are developing capacity to include data generated at and about the smallest possible scales, from clinical and social data generated at the point of care (such as vaccination and testing clinics) to the input of community leaders' trusted, hyperlocal knowledge about socioenvironmental conditions (93), within a learning public health system.

However, as community, health care, and public health organizations sought to work together in local areas and across scales, it quickly became apparent that the underfunded data and information systems in existence were not immediately capable of generating these data or sharing other vital public health data across institutions and sectors. In addition to technological and funding barriers, a key challenge is the

regulatory uncertainty that has led to a prioritization of individual health privacy over the public interest and the needs of health equity across Canadian jurisdictions (94). For novel approaches such as social prescribing and locally driven integrated care, a system that supports and enables data sharing within and across systems is a fundamental requirement. The development of new information systems during and after the COVID-19 crisis could provide infrastructure and architecture for the development of locally informed, collaborative, and systems approaches within integrated care.

Both primary health care and community organizations can contribute to a learning public health system through structured gathering, analysis, and sharing of disaggregated health care data (45). For example, the Canadian Primary Care Sentinel Surveillance Network (95) consists of 12 practice-based research and learning networks linking public health and primary care in eight provinces and one territory. Under a common governance structure, the network supports the use of de-identified data from point-of-care electronic medical records (EMR) and related primary care tools for research, disease surveillance, and quality improvement. It also supports data linkages between EMR and administrative health data at regional scales for complex conditions involving many variables. In order for local



public health, primary care, and community organizations to participate fully in data systems and sharing, they require sufficient resourcing and recognition of their vital roles. In particular, small organizations require consistent training in the use of data systems and sufficient hardware and infrastructural support to bridge digital divides between have and have-not sectors and communities (96) — divides that have made access to broadband Internet and digital devices an important social determinant of health (97).

Good governance and oversight also demand reliable local-scale data. Boards of health,

governments, and regional health authorities should incorporate measurable progress on community participation and the reduction of health inequities as annual measures of public health and health systems performance. As noted above, performance indicators for emergency preparedness in Canadian public health systems incorporate community participation (72,73) but in often limited ways. Indicators could be improved by embedding clear accountabilities for community-level data in decision-making — an approach sensitive to considerations of equity, inclusive governance, community mobilization, and Indigenous health (74,75).

## ACTION 4

### Confront structural and historic barriers to systems transformation

Investing in comprehensive primary health care that links public health, primary care, and community services at the meso level with existing public health structures and networks will require Canada to face structural determinants that have posed barriers to historic efforts and public health and health systems reform (98–100). One barrier is that — despite individual examples of strong public health–primary care collaboration across the country and the identification of key systemic, organizational, inter- and intrapersonal factors for successful collaborations (51) — funding for mainstream primary care remains outside the purview and accountability structures of regional and public health. Many have called for more accountability, funding reform, and collaboration with primary care services rather than the seemingly intractable and individualist fee-for-service status quo, a legacy of Medicare compromises more than 60 years ago (101,102).

Other barriers include histories and ongoing practices of colonialism and structural racism, including those embedded in health systems and services, as key structural determinants of health, drivers of the causes of the causes of inequities in health access and outcomes (103). Over time, health and legislative structures, from Confederation omissions to Medicare trade-offs, created path dependencies that constrain creativity and inhibit successive efforts at transformation and change (104). Canadian health equity literature has tended

to avoid these structural determinants of health, focusing instead on “identifying and illustrating racial and ethnic disparities, often without naming the causes for those disparities” (105 p2) in forces such as racism, global capitalism, and colonialism.

There are, however, important signs of potential readiness for change in the post-COVID-19 period. The leadership of Indigenous communities in decolonizing public health offers guidance to other public health actors in revisiting historic health structures as does the leadership of Black communities in confronting anti-Black racism in health (106). For health systems, a rapid shift to virtual health care during COVID-19 demonstrated that significant systems changes are possible (107). Other promising trends include the steadily growing interest among graduating physicians in joining salaried team-based and comprehensive models (108); increasing focus on health workforce wellbeing within a health system’s “quintuple aim” of quality of care, cost, client experience, equity, and inclusion, and the prevention of workforce burnout (109,110); and physicians’ increasing interest in addressing equity and determinants of health within their practices (111,112). An important step in redistributing power to communities will be facing, naming, and collectively addressing the historic and contemporary power imbalances within Canadian health and public health systems, with the aim of building trust, collaboration, and collective impact.

# A SYSTEMS APPROACH IN TORONTO: EQUITY DATA, COMMUNITY AGENCIES, AND A WHOLE-OF-GOVERNMENT HEALTH EQUITY PLAN

**Community in governance:** At the request of its Board of Health, which includes a mix of city councillors and public members from the community, Toronto Public Health became the first local public health jurisdiction in Canada to collect and use race-based and sociodemographic data related to the COVID-19 pandemic (113). These data provided transparent, publicly available information that informed real-time decision-making, although important questions remain about community governance of health equity data to ensure ownership, control, access, and possession (OCAP®) principles (92) are followed and rest with impacted communities, including Black and Indigenous communities (114). This in turn informed Canada's first whole-of-government or health-in-all-policies health equity approach to COVID-19, TO Supports (115).

**Community in a learning public health system:** The resulting data dashboard and maps (116) highlighted significant disparities, shifted focus to the drivers of health inequities, and helped to inform decision-making about neighbourhood-level health responses such as mobile testing, vaccination clinics, and wraparound supports. A systems response emerged in which municipal, public health, and health care partners worked alongside community health organizations in a “hotspotting” approach that focused on the needs of communities at risk rather than on the capacity limitations of acute care (54,117).

**Community and self-determination:** Community-led approaches emerged before or in parallel with government-funded approaches. Over time, both the City and the Ontario government (118) learned from community-led approaches and resourced community organizations directly for their leadership role in advising and carrying out trusted community responses. COVID-19 community ambassadors hired with new COVID-19 funds were often recent graduates and internationally trained medical professionals who held significant locally situated knowledge and expertise (119). Indigenous-led approaches brought culturally safe, accessible vaccination and testing to targeted communities across the city (120).



# RENEWING PUBLIC HEALTH IN AND WITH COMMUNITY

**The global COVID-19 crisis has illustrated** the complex and systemic nature of contemporary public health challenges, including inequitable impacts on communities already facing barriers to health equity. The syndemic has also drawn attention to the power of focused, funded, and formalized neighbourhood partnerships for community health and wellbeing to meet the goals of targeted universalism. A renewal of public health post-COVID-19 is an opportunity to incorporate community participation into public health systems across networks and scales by sharing power, ensuring clear accountabilities, and centring community

self-determination through processes of engagement, coproduction, and governance. By mandating and valuing community participation throughout decision-making structures and processes; investing in trusted, community-led infrastructure and data systems at the neighbourhood scale, linked as part of a dynamic and learning public health system; and addressing historic and structural barriers to equitable systems reform, Canada can build a more resilient and equitable public health system, one that will see us through current and future challenges and that belongs to all of us.

## REFERENCES

1. Coleman PM. A critical realist review of practice learning experiences within pre-registration nursing programmes. *EAS J Nurs Midwifery*. 2020 May-Jun;2(3):202–12. doi: 10.36349/EASJNM.2020.v02i03.030.
2. Edgley A, Stickley T, Timmons S, Meal A. Critical realist review: exploring the real, beyond the empirical. *J Furth High Educ*. 2016;40(3):316–30. doi: 10.1080/0309877X.2014.953458.
3. Public Health Ontario. Addressing health inequities within the COVID-19 public health response [Internet]. Toronto (ON): PHO; 2020 Dec 7 [cited 2021 Nov 26]. 21 p. Available from: [https://www.publichealthontario.ca/-/media/documents/ncov/he/2020/12/covid-19-environmental-scan-addressing-health-inequities.pdf?sc\\_lang=en](https://www.publichealthontario.ca/-/media/documents/ncov/he/2020/12/covid-19-environmental-scan-addressing-health-inequities.pdf?sc_lang=en)
4. Haldane V, De Foo C, Abdalla SM, Jung AS, Tan M, Wu S, et al. Health systems resilience in managing the COVID-19 pandemic: lessons from 28 countries. *Nat Med*. 2021 Jun;27(6):964–80. doi: 10.1038/s41591-021-01381-y.
5. Public Health Agency of Canada. From risk to resilience: an equity approach to COVID-19 [Internet]. Ottawa (ON): PHAC; 2020 Oct [cited 2021 Nov 26]. 83 p. (Chief Public Health Officer of Canada's report on the state of public health in Canada; 2020). Available from: <https://www.canada.ca/content/dam/phac-aspc/documents/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/cpho-covid-report-eng.pdf>
6. Etowa JB, Beagan BL, Eghan F, Thomas Bernard W. "You feel you have to be made of steel": the strong Black woman, health, and well-being in Nova Scotia. *Health Care Women Int*. 2017;38(4):379–83. doi: 10.1080/07399332.2017.1290099.
7. Mahdiani H, Ungar M. The dark side of resilience. *Advers Resil Sci*. 2021 Sep;2(3):147–55. doi: 10.1007/s42844-021-00031-z.
8. Brewington SD. The social costs of resilience: an example from the Faroe Islands. *Archeol Pap Am Anthropol Assoc*. 2016 May;27(1):95–105. doi: 10.1111/apaa.12076.
9. Mendenhall E. The COVID-19 syndemic is not global: context matters. *Lancet*. 2020 Nov 28;396(10264):1731. doi: 10.1016/S0140-6736(20)32218-2.
10. Horton R. Offline: COVID-19 is not a pandemic. *Lancet*. 2020 Sep 26;396(10255):874. doi: 10.1016/S0140-6736(20)32000-6.
11. British Academy. The COVID decade: understanding the long-term societal impacts of COVID-19 [Internet]. London (UK): British Academy; 2021 Mar [cited 2021 Nov 26]. 172 p. Available from: <https://www.thebritishacademy.ac.uk/documents/3238/COVID-decade-understanding-long-term-societal-impacts-COVID-19.pdf>
12. Attygalle L, Born P. 10 – a guide for a community-based COVID recovery [Internet]. Waterloo (ON): Tamarack Institute; 2021 [cited 2021 Nov 26]. 43 p. Available from: <https://www.tamarackcommunity.ca/library/ten-guide-community-based-covid-recovery-2021>
13. South Asian Health Network [Internet]. Toronto (ON): The Network; [cited 2021 Nov 26]. Available from: <https://southasianhealthnetwork.ca/>
14. Black Scientists' Task Force on Vaccine Equity [Internet]. Toronto (ON): The Task Force; [cited 2021 Nov 26]. Available from: <https://www.torontoblackcovid.com/>
15. Indigenous Primary Health Care Council. COVID-19 [Internet]. Toronto (ON): IPHCC; [cited 2021 Nov 26]. [about 12 screens]. Available from: <https://www.iphcc.ca/covid-19/>
16. Vaccine Hunters [Internet]. [place unknown]: Vaccine Hunters Canada; [updated 2021 Nov 25; cited 2021 Nov 26]. Available from: <https://vaccinehunters.ca/>
17. Mueller K. Doctor from Ecuador helps lead Red Cross response to COVID-19. 2021 Feb 16 [cited 2021 Nov 26]. In: Canadian Red Cross. Blog [Internet]. Ottawa (ON): Canadian Red Cross; [2010 Apr 19] - . [about 3 screens]. Available from: <https://www.redcross.ca/blog/2021/2/doctor-from-ecuador-helps-lead-red-cross-response-to-covid-19>

18. Red Cross Talks. New Brunswick volunteer joined the Red Cross response at an LTC home in Manitoba. 2021 Feb 19 [cited 2021 Nov 26]. In: Canadian Red Cross. Blog [Internet]. Ottawa (ON): Canadian Red Cross; [2010 Apr 19] - . [about 2 screens]. Available from: <https://www.redcross.ca/blog/2021/2/new-brunswick-volunteer-joined-the-red-cross-response-at-an-ltc-home-in-manitoba>
19. CBC News. COVID-19 outbreak led to 'unprecedented' health-care response in High River, officials say [Internet]. Calgary (AB): CBC News; 2020 Apr 24 [cited 2021 Nov 26]. [about 5 screens]. Available from: <https://www.cbc.ca/news/canada/calgary/covid-high-river-stop-spread-isolation-calgary-meat-plant-cargill-1.5543597>
20. Wojtak A, Altenberg J, Annett C, Babcock A, Chung K, Downey S, et al. Mobilizing a whole community: policy and strategy implications of an integrated local system response to a global health crisis. *Healthc Q*. 2020 Oct;23(3):15–23. doi: 10.12927/hcq.2020.26338.
21. Pham TN, Powis J, Fam M, Fraser I, Wojtak A. Early lessons: tackling a global crisis with a community response. *Insights (Essays)* [Internet]. 2020 Mar [cited 2021 Nov 26]:[about 6 screens]. Available from: <https://www.longwoods.com/content/26167/essays/early-lessons-tackling-a-global-crisis-with-a-community-response>
22. Seow H, McMillan K, Civak M, Bainbridge D, van der Wal A, Haanstra C, et al. #Caremongering: a community-led social movement to address health and social needs during COVID-19. *PLoS One*. 2021 Jan 14;16(1):e0245483 [11 p.]. doi: 10.1371/journal.pone.0245483.
23. Mochama V. Black communities have known about mutual aid all along. *The Walrus* [Internet]. 2020 Sep/Oct [updated 2020 Sep 15; cited 2021 Nov 26]:[about 15 screens]. Available from: <https://thewalrus.ca/black-communities-have-known-about-mutual-aid-all-along/>.
24. Steinman MA, Perry L, Perissinotto CM. Meeting the care needs of older adults isolated at home during the COVID-19 pandemic. *JAMA Intern Med*. 2020 Jun;180(6):819–20. doi: 10.1001/jamainternmed.2020.1661.
25. Zafar A. COVID-19 exposes need for more collaborative, community-based health care [Internet]. Toronto (ON): CBC News; 2021 Mar 11 [cited 2021 Nov 26]. [about 10 screens]. Available from: <https://www.cbc.ca/news/health/community-covid-1.5943004>
26. Hancock T. Act locally: community-based population health promotion. In: Canada, Parliament, Standing Senate Committee on Social Affairs, Science and Technology, Senate Subcommittee on Population Health. *A healthy, productive Canada: a determinant of health approach* [Internet]. Ottawa (ON): Senate; 2009 Jun [cited 2021 Nov 26]. p. B1–81. Available from: <https://sencanada.ca/content/sen/Committee/402/popu/rep/appendixBjun09-e.pdf>
27. Solar O, Irwin A. A conceptual framework for action on the social determinants of health [Internet]. Geneva (Switzerland): World Health Organization; 2010 [cited 2021 Nov 26]. 75 p. Available from: <https://apps.who.int/iris/rest/bitstreams/52952/retrieve>
28. Public Health Agency of Canada. Immunization Partnership Fund [Internet]. Ottawa (ON): PHAC; [modified 2021 Aug 17; cited 2021 Nov 26]. [about 15 screens]. Available from: <https://www.canada.ca/en/public-health/services/immunization-vaccine-priorities/immunization-partnership-fund.html>
29. Valaitis RK, Wong ST, MacDonald M, Martin-Misener R, O'Mara L, Meagher-Stewart D, et al. Addressing quadruple aims through primary care and public health collaboration: ten Canadian case studies. *BMC Public Health*. 2020;20:Article 507 [16 p.]. doi: 10.1186/s12889-020-08610-y.
30. CIUSSS West-Central Montréal. Public health [Internet]. Montréal (QC): CIUSSS West-Central Montréal; [updated 2021 Nov 16; cited 2021 Nov 26]. [about 3 screens]. Available from: <https://www.ciuSSWestCentral.ca/programs-and-services/public-health/>.
31. Landry MD, Deber RB, Jaglal S, Laporte A, Holyoke P, Devitt R, et al. Assessing the consequences of delisting publicly funded community-based physical therapy on self-reported health in Ontario, Canada: a prospective cohort study. *Int J Rehabil Res*. 2006 Dec;29(4):303–7. doi: 10.1097/MRR.0b013e328010badc.

32. Morrison V, Mantoura P. Policy approaches to reducing health inequalities: a practical exercise using the example of food insecurity [Internet]. Montréal (QC): National Collaborating Centre for Healthy Public Policy; 2020 Jun [cited 2021 Nov 26]. 9 p. Available from: <https://ncchpp.wpengine.com/docs/2020-inequalities-policy-approaches-example-food-insecurity.pdf>
33. Watt F, Tissington P. The utility of perceived community efficacy in emergency preparedness. In: Evans TR, Steptoe-Warren G, editors. *Applying occupational psychology to the Fire Service: emotion, risk and decision-making*. Cham (Switzerland): Palgrave Macmillan; 2019. p. 169–204.
34. Sacks E, Morrow M, Story WT, Shelley KD, Shanklin D, Rahimtoola M, et al. Beyond the building blocks: integrating community roles into health systems frameworks to achieve health for all. *BMJ Glob Health*. 2018 May;3(Suppl 3):e001384 [12 p.]. doi: 10.1136/bmjgh-2018-001384.
35. World Health Organization. Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata [Internet]. Geneva (Switzerland): WHO; 1978 [cited 2021 Nov 26]. 3 p. Available from: [https://www.who.int/docs/default-source/documents/almaata-declaration-en.pdf?sfvrsn=7b3c2167\\_2](https://www.who.int/docs/default-source/documents/almaata-declaration-en.pdf?sfvrsn=7b3c2167_2)
36. Jungo KT, Anker D, Wildisen L. Astana declaration: a new pathway for primary health care. *Int J Public Health*. 2020 Jun;65(5):511–2. doi: 10.1007/s00038-020-01368-5.
37. World Health Organization; United Nations Children's Fund (UNICEF). *A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals* [Internet]. Geneva (Switzerland): WHO; 2018 [cited 2021 Nov 26]. 46 p. Available from: <https://apps.who.int/iris/handle/10665/328065>
38. Canadian Institutes of Health Research, Institute of Population and Public Health. *Building public health systems for the future* [Internet]. Toronto (ON): IPPH; 2021 Apr [cited 2021 Nov 26]. 9 p. Available from: <https://cihr-irsc.gc.ca/e/documents/building-public-health-systems-for-the-future-en.pdf>
39. Davison K, Carroll S, Chen J, Cheung R, Collins B, Colautti J, et al. *COVID-19 and mental health for all: a framework for moving forward* [Internet]. Surrey (BC): Kwantlen Open Resource Access; 2021 Feb 21 [cited 2021 Nov 26]. 3 p. Available from: <https://kora.kpu.ca/islandora/object/kora:629>
40. The White House. Fact sheet: Biden Administration announces historic \$10 billion investment to expand access to COVID-19 vaccines and build vaccine confidence in hardest-hit and highest-risk communities [Internet]. Washington (DC): The White House; 2021 Mar 25 [cited 2021 Nov 26]. [about 8 screens]. Available from: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/25/fact-sheet-biden-administration-announces-historic-10-billion-investment-to-expand-access-to-covid-19-vaccines-and-build-vaccine-confidence-in-hardest-hit-and-highest-risk-communities/>
41. Gaumer B, Fleury MJ. CLSCs in Quebec: thirty years of community action. *Soc Work Public Health*. 2008;23(4):89–106. doi: 10.1080/19371910802162413.
42. Peckham A, Ho J, Marchildon GP. Policy innovations in primary care across Canada [Internet]. Toronto (ON): North American Observatory on Health Systems and Policies; 2018 Mar [cited 2021 Nov 26]. 59 p. Available from: [https://ihpme.utoronto.ca/wp-content/uploads/2018/04/NAO-Rapid-Review-1\\_EN.pdf](https://ihpme.utoronto.ca/wp-content/uploads/2018/04/NAO-Rapid-Review-1_EN.pdf)
43. Bhuiya AR, Scallan E, Alam S, Sharma K, Wilson MG. *Rapid synthesis: identifying the features and impacts of Community Health Centres* [Internet]. Hamilton (ON): McMaster Health Forum; 2020 Oct 23 [cited 2021 Nov 26]. 42 p. Available from: [https://www.mcmasterforum.org/docs/default-source/product-documents/rapid-responses/identifying-the-features-and-impacts-of-community-health-centres.pdf?sfvrsn=234559d5\\_3](https://www.mcmasterforum.org/docs/default-source/product-documents/rapid-responses/identifying-the-features-and-impacts-of-community-health-centres.pdf?sfvrsn=234559d5_3)
44. Rayner J, Muldoon L, Bayoumi I, McMurchy D, Mulligan K, Tharao W. *Delivering primary health care as envisioned: a model of health and well-being guiding community-governed primary care organizations*. *J Integr Care (Brighton)*. 2018;26(3):231–41. doi: 10.1108/JICA-02-2018-0014.



45. Kraef C, Kallestrup P. After the Astana declaration: is comprehensive primary health care set for success this time? *BMJ Glob Health*. 2019 Nov;4(6):e001871 [7 p.]. doi: 10.1136/bmjgh-2019-001871.
46. Dosen KM, Karasiuk AA, Marcaccio AC, Miljak S, Nair MH, Radauskas VJ. Code grey: mapping healthcare service deserts in Hamilton, Ontario and the impact on senior populations. *Cartographica*. 2017 Summer;52(2):125–31. doi: 10.3138/cart.52.2.5103.
47. Glauser W. Why aren't the doctors where the sick people are? *The Local* [Internet]. 2019 Spring [cited 2021 Nov 26];(1):[about 14 screens]. Available from: <https://thelocal.to/why-arent-the-doctors-where-the-sick-people-are/>.
48. Flaherty MG. Promoting individual and community health at the library. Chicago (IL): American Library Association; 2018. 144 p.
49. Schweizer E. Social workers within Canadian public libraries: a multicasestudy [master's thesis on the Internet]. Calgary (AB): University of Calgary; 2018 Apr [cited 2021 Nov 26]. 212 p. Available from: <http://dx.doi.org/10.11575/PRISM/31913>
50. Sultana A, Ravanera C. A feminist economic recovery plan for Canada: making the economy work for everyone [Internet]. Toronto (ON): YWCA Canada; 2020 Jul 28 [cited 2021 Nov 26]. 34 p. Available from: <https://www.feministrecovery.ca/s/Feminist-Economy-Recovery-Plan-for-Canada.pdf>
51. Valaitis R, MacDonald M, Wong S, Martin-Misener R, O'Mara L, Meagher-Stewart D. Development of an ecological framework for building successful collaboration between primary care and public health. *BMC Health Serv Res*. 2014;14(Suppl 2):Article P133 [1 p.]. doi: 10.1186/1472-6963-14-S2-P133.
52. National Collaborating Centre for Determinants of Health. Building a culture of equity in Canadian public health: environmental scan 2018 [Internet]. Antigonish (NS): NCCDH, St. Francis Xavier University; 2018 [cited 2021 Nov 26]. 60 p. Available from: [https://nccdh.ca/images/uploads/comments/Building\\_a\\_culture\\_of\\_equity\\_in\\_Canadian\\_public\\_health\\_-\\_An\\_environmental\\_scan\\_EN\\_Final.pdf](https://nccdh.ca/images/uploads/comments/Building_a_culture_of_equity_in_Canadian_public_health_-_An_environmental_scan_EN_Final.pdf)
53. Tamarack Institute. Building collaboration capacity for Ontario Health Teams [Internet]. Waterloo (ON): Tamarack Institute; [cited 2021 Nov 26]. [about 7 screens]. Available from: <https://www.tamarackcommunity.ca/building-collaboration-capacity-for-ontario-health-teams>
54. Evans C, Waddell K, Dion A, Bullock HL, Lavis JN. Lessons from COVID-19: leveraging integrated care during Ontario's COVID-19 response [Internet]. Hamilton (ON): McMaster Health Forum; 2021 Mar 26 [cited 2021 Nov 26]. 27 p. Available from: [https://www.mcmasterforum.org/docs/default-source/product-documents/rapid-responses/lessons-from-covid-19--leveraging-integrated-care-during-ontario-s-covid-19-response.pdf?sfvrsn=3ea91109\\_6](https://www.mcmasterforum.org/docs/default-source/product-documents/rapid-responses/lessons-from-covid-19--leveraging-integrated-care-during-ontario-s-covid-19-response.pdf?sfvrsn=3ea91109_6)
55. Miller J. When an Ottawa family of five all contracted COVID-19, emergency service sprang into action. *Ottawa Citizen* [Internet]. 2021 Feb 4 [updated 2021 Feb 8; cited 2021 Nov 26]:[about 11 screens]. Available from: <https://ottawacitizen.com/news/local-news/when-an-ottawa-family-of-five-all-contracted-covid-19-emergency-service-sprang-into-action>
56. Canadian Red Cross. Connection New Brunswick [Internet]. [place unknown]: Canadian Red Cross; [cited 2021 Nov 26]. Available from: <https://connectionnb.redcross.ca/>.
57. United Way British Columbia, Lower Mainland Region. Healthy aging programs [Internet]. Burnaby (BC): UWBC; [cited 2021 Nov 26]. [about 4 screens]. Available from: <https://www.uwlm.ca/your-impact/healthyaging/haprograms/>.
58. University Health Network. UHN part of first-in-Canada social medicine modular housing in Parkdale [Internet]. Toronto (ON): UHN; 2021 Jun 7 [cited 2021 Nov 26]. [about 4 screens]. Available from: [https://www.uhn.ca/corporate/News/Pages/UHN\\_part\\_of\\_first\\_in\\_Canada\\_Social\\_Medicine\\_Modular\\_Housing\\_in\\_Parkdale.aspx](https://www.uhn.ca/corporate/News/Pages/UHN_part_of_first_in_Canada_Social_Medicine_Modular_Housing_in_Parkdale.aspx)
59. NEJM Catalyst. What Is value-based healthcare? [Internet] Waltham (MA): NEJM Catalyst; 2017 Jan 1 [cited 2021 Nov 26]. [about 9 screens]. Available from: <https://catalyst.nejm.org/doi/full/10.1056/CAT.17.0558>

60. National Association of County and City Health Officials. Mobilizing for Action through Planning and Partnerships (MAPP) glossary [Internet]. Washington (DC): NACCHO; [cited 2021 Nov 26]. 12 p. Available from: <https://www.naccho.org/uploads/downloadable-resources/Programs/Public-Health-Infrastructure/MAPP-Glossary.pdf>
61. Maraccini AM, Galiatsatos P, Harper M, Slonim AD. Creating clarity: distinguishing between community and population health. *Am J Accountable Care* [Internet]. 2017 Jun [cited 2021 Nov 26];5(2):27–32. Available from: <https://www.ajmc.com/view/creating-clarity-distinguishing-between-community-and-population-health>
62. Pilon M, Brouard F. Description and observations of the transition to a model of Ontario Health Teams [Internet]. Rochester (NY): SSRN; 2020 Mar 31 [cited 2021 Nov 26]. 12 p. Available from: <https://ssrn.com/abstract=3765535>
63. University Health Network. Social Medicine Program [Internet]. Toronto (ON): UHN; [cited 2021 Nov 26]. [about 2 screens]. Available from: <https://www.uhn.ca/social-medicine#about>
64. Drinkwater C, Wildman J, Moffatt S. Social prescribing. *BMJ*. 2019 Mar 28;364:l1285. doi: 10.1136/bmj.l1285.
65. Smith K. Identifying barriers to accessing community-based services for clients of Fraser Health's social prescribing program [master's project on the Internet]. Victoria (BC): University of Victoria; 2021 [cited 2021 Nov 26]. 89 p. Available from: <https://dspace.library.uvic.ca/handle/1828/12767>
66. Mulligan K, Hsiung S, Bhatti S, Rehel J, Rayner J. Rx: Community – social prescribing in Ontario, final report [Internet]. Toronto (ON): Alliance for Healthier Communities; 2020 Mar [cited 2021 Nov 26]. 79 p. Available from: [https://cdn.ymaws.com/aohc.site-ym.com/resource/group/e0802d2e-298a-4d86-8af5-21156f9c057f/rxcommunity\\_final\\_report\\_mar.pdf](https://cdn.ymaws.com/aohc.site-ym.com/resource/group/e0802d2e-298a-4d86-8af5-21156f9c057f/rxcommunity_final_report_mar.pdf)
67. National Collaborating Centre for Determinants of Health. Let's talk: community engagement for health equity [Internet]. Antigonish (NS): NCCDH, St. Francis Xavier University; 2021 [cited 2021 Nov 26]. 13 p. Available from: <https://nccdh.ca/images/uploads/comments/Lets-Talk-Community-Engagement-EN.pdf>
68. Gilmore B, Ndejjo R, Tchetchia A, de Claro V, Mago E, Diallo AA, et al. Community engagement for COVID-19 prevention and control: a rapid evidence synthesis. *BMJ Glob Health*. 2020 Oct;5(10):e003188 [11 p.]. doi: 10.1136/bmjgh-2020-003188.
69. Smith MJ, Upshur REG. Learning lessons from COVID-19 requires recognizing moral failures. *J Bioethical Inq*. 2020 Dec;17(4):563–6. doi: 10.1007/s11673-020-10019-6.
70. Cresswell K, Dhani S, Sheikh A. National COVID-19 lockdown exit strategies need to pay more attention to community engagement and workplace safety. *J Glob Health*. 2020 Dec;10(2):Article 020323 [4 p.]. doi: 10.7189/jogh.10.020323.
71. Public Health Agency of Canada. Core competencies for public health in Canada: release 1.0 [Internet]. Ottawa (ON): PHAC; 2008 [cited 2021 Nov 26]. 25 p. Available from: <https://www.canada.ca/content/dam/phac-aspc/documents/services/public-health-practice/skills-online/core-competencies-public-health-canada/cc-manual-eng090407.pdf>
72. Khan Y, Brown AD, Gagliardi AR, O'Sullivan T, Lacarte S, Henry B, et al. Are we prepared? The development of performance indicators for public health emergency preparedness using a modified Delphi approach. *PLoS One*. 2019 Dec 23;14(12):e0226489 [19 p.]. doi: 10.1371/journal.pone.0226489.
73. Public Health Ontario. Public health emergency preparedness framework and indicators: a workbook to support public health practice [Internet]. Toronto (ON): PHO; 2020 May [cited 2021 Nov 26]. 43 p. Available from: <https://www.publichealthontario.ca/-/media/documents/w/2020/workbook-emergency-preparedness.pdf?la=en>
74. Hunt S. Review of core competencies for public health: an Aboriginal public health perspective [Internet]. Prince George (BC): National Collaborating Centre for Aboriginal Health; 2015 [cited 2021 Nov 26]. 27 p. Available from: <https://www.cnsa-nccah.ca/docs/context/RPT-CoreCompetenciesHealth-Hunt-EN.pdf>

75. National Collaborating Centre for Infectious Diseases; National Collaborating Centre for Determinants of Health. Measuring what counts in the midst of the COVID-19 pandemic: equity indicators for public health [Internet]. Antigonish (NS): NCCDH, St. Francis Xavier University; 2020 Sep [cited 2021 Nov 26]. 29 p. Available from: [https://nccdh.ca/images/uploads/comments/NCCDH-Measuring-what-counts-equity-indicators\\_EN.pdf](https://nccdh.ca/images/uploads/comments/NCCDH-Measuring-what-counts-equity-indicators_EN.pdf)
76. Jewett RL, Mah SM, Howell N, Larsen MM. Social cohesion and community resilience during COVID-19 and pandemics: a rapid scoping review to inform the United Nations Research Roadmap for COVID-19 Recovery. *Int J Health Serv*. 2021 Jul;51(3):325–36. doi: 10.1177/0020731421997092.
77. McMahon M, Nadigel J, Thompson E, Glazier RH. Informing Canada's health system response to COVID-19: priorities for health services and policy research. *Healthc Policy*. 2020 Aug;16(1):112–4. doi: 10.12927/hcpol.2020.26249.
78. Unuigbo NF. Traditional ecological knowledge and global pandemics: biodiversity and planetary health beyond Covid-19. London (UK): Routledge; 2021. 94 p.
79. International Federation of Red Cross and Red Crescent Societies. Minimum community engagement and accountability (CEA) actions [Internet]. Geneva (Switzerland): IFRC; [cited 2021 Nov 26]. 1 p. Available from: <https://www.ifrc.org/sites/default/files/2021-06/CEA-in-programme-cycle.pdf>
80. DIALOG. Community Wellbeing Framework [Internet]. San Francisco (CA): DIALOG; [cited 2021 Nov 26]. [about 18 screens]. Available from: <https://www.dialogdesign.ca/community-wellbeing-framework/>.
81. Russell C. Getting to authentic co-production: an asset-based community development perspective on co-production. In: Loeffler E, Bovaird T, editors. *The Palgrave handbook of co-production of public services and outcomes*. Cham (Switzerland): Palgrave Macmillan; 2021. p. 173–92.
82. Greer AM, Luchenski SA, Amlani AA, Lacroix K, Burmeister C, Buxton JA. Peer engagement in harm reduction strategies and services: a critical case study and evaluation framework from British Columbia, Canada. *BMC Public Health*. 2016;16:Article 452 [9 p.]. doi: 10.1186/s12889-016-3136-4.
83. Bhatti S, Rayner J, Pinto AD, Mulligan K, Cole DC. Using self-determination theory to understand the social prescribing process: a qualitative study. *BJGP Open*. 2021 Apr;5(2):Article BJGPO.2020.0153 [10 p.]. doi: 10.3399/BJGPO.2020.0153.
84. City of Toronto. Board of Health [Internet]. Toronto (ON): City of Toronto; [cited 2021 Nov 26]. [about 4 screens]. Available from: <https://secure.toronto.ca/pa/decisionBody/44.do>
85. City of Hamilton. Board of Health addendum [Internet]. Hamilton (ON): City of Hamilton; 2021 Mar 22 [cited 2021 Nov 26]. [about 2 screens]. Available from: <https://pub-hamilton.escribemeetings.com/Meeting.aspx?id=e3034a95-a787-4b40-a5e3-0d07d4cf91&Agenda=Addendum&lang=English>
86. Church J, Triska O, Rondeau K, Wilson D, Wagner PS, McKim B, et al. Citizen Participation Partnership Project [Internet]. Edmonton (AB): University of Alberta, School of Public Health, Centre for Health Promotion Studies; 2006 May [cited 2021 Nov 26]. 46 p. Available from: <https://www.deslibris.ca/ID/231108>
87. Herriot R, Persaud S, Tao R, Stacey S. Changes to Community Health Centres will hurt primary care in B.C. [Internet]. Toronto (ON): Healthy Debate; 2014 Jul 9 [cited 2021 Nov 26]. [about 5 screens]. Available from: <https://healthydebate.ca/2014/07/topic/community-health-centres/>.
88. Smit A, Syed H, Stewart A, Duchene T, Fazzari M. States of emergency: decision-making and participatory governance in Canadian municipalities during COVID-19 [Internet]. Windsor (ON): Windsor Law Centre for Cities; 2020 Sep [cited 2021 Nov 26]. 48 p. Available from: <https://windsorlawcities.ca/wp-content/uploads/2020/11/Windsor-Law-Centre-for-Cities-States-of-Emergency-Report.pdf>
89. Blair A, Warsame K, Naik H, Byrne W, Parnia A, Siddiqi A. Identifying gaps in COVID-19 health equity data reporting in Canada using a scorecard approach. *Can J Public Health*. 2021 Jun;112(3):352–62. doi: 10.17269/s41997-021-00496-6.
90. Ismail SJ, Tunis MC, Zhao L, Quach C. Navigating inequities: a roadmap out of the pandemic. *BMJ Glob Health*. 2021 Jan;6(1):e004087 [9 p.]. doi: 10.1136/bmjgh-2020-004087.

91. Glazier R. The lessons of COVID-19 for Canadian learning health systems [Internet]. Toronto (ON): Longwoods; 2020 Oct 21 [cited 2021 Nov 26]. 39 p. Available from: [https://www.longwoods.com/articles/images/Longwoods\\_Breakfast\\_slides\\_Oct\\_21\\_Glazier.pdf](https://www.longwoods.com/articles/images/Longwoods_Breakfast_slides_Oct_21_Glazier.pdf)
92. Mecredy G, Sutherland R, Jones C. First Nations data governance, privacy, and the importance of the OCAP® principles. *Int J Popul Data Sci.* 2018;3(4):320. doi: 10.23889/ijpds.v3i4.911.
93. Bertagnolli MM, Anderson B, Norsworthy K, Piantadosi S, Quina A, Schilsky RL, et al. Status update on data required to build a learning health system. *J Clin Oncol.* 2020 May 10;38(14):1602–7. doi: 10.1200/JCO.19.03094.
94. Bernier A, Knoppers BM. Pandemics, privacy, and public health research. *Can J Public Health.* 2020 Aug;111(4):454–7. doi: 10.17269/s41997-020-00368-5.
95. Canadian Primary Care Sentinel Surveillance Network (CPSSCN) [Internet]. [place unknown]: CPCSSN; [cited 2021 Nov 26]. Available from: <https://cpcssn.ca/>.
96. Koch K. Infrastructure policy trends: the digital divide and the lack of broadband access during COVID-19. *School of Public Policy Publications.* 2020;13:[2 p.]. doi: 10.11575/sppp.v13i0.70382.
97. Clare CA. Telehealth and the digital divide as a social determinant of health during the COVID-19 pandemic. *Netw Model Anal Health Inform Bioinform.* 2021;10(1):Article 26 [3 p.]. doi: 10.1007/s13721-021-00300-y.
98. National Advisory Committee on SARS and Public Health. Learning from SARS: renewal of public health in Canada [Internet]. Ottawa (ON): Health Canada; 2003 Oct [cited 2021 Nov 26]. 224 p. Available from: <https://www.canada.ca/content/dam/phac-aspc/migration/phac-aspc/publicat/sars-sras/pdf/sars-e.pdf>
99. Health Canada. The Kirby report [Internet]. Ottawa (ON): Health Canada; [modified 2005 Jan 13; cited 2021 Nov 26]. [about 2 screens]. Available from: <https://www.canada.ca/en/health-canada/services/health-care-system/health-human-resources/strategy/kirby-report.html>
100. Health Canada. Commission on the Future of Health Care in Canada: the Romanow Commission [Internet]. Ottawa (ON): Health Canada; [modified 2009 Apr 30; cited 2021 Nov 26]. [about 3 screens]. Available from: <https://www.canada.ca/en/health-canada/services/health-care-system/health-human-resources/strategy/romanow-commission.html>
101. Marchildon G. The integration challenge in Canadian regionalization. *Cad Saude Publica.* 2019;35(Suppl 2):e00084418 [8 p.]. doi: 10.1590/0102-311X00084418.
102. National Collaborating Centre for Determinants of Health; National Collaborating Centre for Infectious Diseases. Reflections on the relationship between public health and primary care [Internet]. Antigonish (NS): NCCDH, St. Francis Xavier University; 2021 [cited 2021 Nov 26]. 4 p. Available from: [https://nccdh.ca/images/uploads/comments/Reflections-on-the-relationship-between-public-health-and-primary-care\\_EN\\_2021.pdf](https://nccdh.ca/images/uploads/comments/Reflections-on-the-relationship-between-public-health-and-primary-care_EN_2021.pdf)
103. Commission of the Pan American Health Organization on Equity and Health Inequalities in the Americas. Just societies: health equity and dignified lives [Internet]. Washington (DC): PAHO; 2019 [cited 2021 Nov 26]. 285 p. Available from: <https://iris.paho.org/handle/10665.2/51571>
104. Hutchison B, Levesque JF, Strumpf E, Coyle N. Primary health care in Canada: systems in motion. *Milbank Q.* 2011 Jun;89(2):256–88. doi: 10.1111/j.1468-0009.2011.00628.x.
105. Hassen N, Lofters A, Michael S, Mall A, Pinto AD, Rackal J. Implementing anti-racism interventions in healthcare settings: a scoping review. *Int J Environ Res Public Health.* 2021;18(6):Article 2993 [15 p.]. doi: 10.3390/ijerph18062993.
106. Leitch S, Corbin JH, Boston-Fisher N, Ayele C, Delobelle P, Gwanzura Ottemoller F, et al. Black Lives Matter in health promotion: moving from unspoken to outspoken. *Health Promot Int.* 2021 Aug;36(4):1160–9. doi: 10.1093/heapro/daaa121.
107. Glazier RH, Green ME, Wu FC, Frymire E, Kopp A, Kiran T. Shifts in office and virtual primary care during the early COVID-19 pandemic in Ontario, Canada. *CMAJ.* 2021 Feb 8;193(6):E200–10. doi: 10.1503/cmaj.202303.



108. Resident Doctors of Canada. November 2020 National Resident Survey: summary of findings [Internet]. Ottawa (ON): RDoC; 2021 [cited 2021 Nov 26]. 5 p. Available from: <https://residentdoctors.ca/wp-content/uploads/2021/05/RDoC-Summary-of-Findings-2020-R3.pdf>
109. Shekelle PG, Begashaw M. What are the effects of different team-based primary care structures on the quadruple aim of care? A rapid review [Internet]. Washington (DC): United States, Department of Veterans Affairs; 2021 Feb [cited 2021 Nov 26]. 54 p. Available from: <https://www.ncbi.nlm.nih.gov/books/n/vaespteamcare/pdf/>.
110. Srinivasan M, Phadke AJ, Zulman D, Israni ST, Madill ES, Savage TR, et al. Enhancing patient engagement during virtual care: a conceptual model and rapid implementation at an academic medical center. *NEJM Catal Innov Care Deliv*. 2020 Jul 10;[10 p.]. doi: 10.1056/CAT.20.0262.
111. Nowak DA, Mulligan K. Social prescribing: a call to action. *Can Fam Physician*. 2021 Feb;67(2):88–91. doi: 10.46747/cfp.670288.
112. Pinto AD, Bloch G. Framework for building primary care capacity to address the social determinants of health. *Can Fam Physician* [Internet]. 2017 Nov [cited 2021 Nov 26];63(11):e476–82. Available from: <https://www.cfp.ca/content/63/11/e476>
113. Toronto City Council. City Council consideration on May 28, 2020: HL16.2 COVID-19 update [Internet]. Toronto (ON): City Council; 2020 May 28 [cited 2021 Nov 26]. [about 6 screens]. Available from: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.HL16.2>
114. McKenzie K. Socio-demographic data collection and equity in covid-19 in Toronto. *EClinicalMedicine*. 2021 Apr;34:Article 100812 [2 p.]. doi: 10.1016/j.eclinm.2021.100812.
115. City of Toronto, Community and Social Services, Deputy City Manager. TO Supports: COVID-19 Equity Action Plan [Internet]. Toronto (ON): City of Toronto; 2020 Nov 30 [cited 2021 Nov 26]. 11 p. Available from: <http://www.toronto.ca/legdocs/mmis/2020/hl/bgrd/backgroundfile-159097.pdf>
116. City of Toronto. COVID-19: pandemic data [Internet]. Toronto (ON): City of Toronto; [updated 2021 Jun 1; cited 2021 Nov 26]. [about 2 screens]. Available from: <https://www.toronto.ca/home/covid-19/covid-19-pandemic-data/>.
117. Béland F. Pandemics, inequities, public health, information, response: Canada's failure? *Can J Public Health*. 2021 Jun;112(3):349–51. doi: 10.17269/s41997-021-00511-w.
118. Ontario, Office of the Premier. Ontario supporting high priority communities [Internet]. Toronto (ON): Queen's Printer for Ontario; 2020 Dec 21 [cited 2021 Nov 26]. [about 5 screens]. Available from: <https://news.ontario.ca/en/backgrounder/59793/ontario-supporting-high-priority-communities#>
119. Shephard T. Community ambassadors in north Etobicoke are helping people get vaccinated [Internet]. Toronto (ON): thestar.com; 2021 May 5 [cited 2021 Nov 26]. [about 6 screens]. Available from: <https://www.thestar.com/local-toronto-etobicoke/news/2021/05/05/community-ambassadors-in-north-etobicoke-are-helping-people-get-vaccinated.html>
120. Ireland N. Here's how community groups are getting COVID-19 vaccinations to Indigenous people in Canada's largest city [Internet]. Toronto (ON): CBC News; 2021 Mar 14 [cited 2021 Nov 26]. [about 10 screens]. Available from: <https://www.cbc.ca/news/canada/toronto/covid-19-vaccination-outreach-indigenous-people-1.5949046>