

2022-
2023



What tools or resources are effective in helping older adults and/or their caregivers navigate support services and/or the healthcare system?

VISIONS FOR CHANGE POLICY CHALLENGE 2022-2023

LYNE OUELLET

SEULEMENT DISPONIBLE EN ANGLAIS



Background

It is estimated that as of November 15, 2022, the world's population reached an all-time high of 8 billion people (United Nations, 2022; CBC 2022). The proportion of those who are aged 65 and over is growing. Among Canada's almost 37 million people, 19% are aged 65 and over, making them larger in proportion than those under the age of 15, who represent 16.3% of Canada's population (Statistics Canada, 2022). With age comes vibrancy but also challenges. Older adults contribute more volunteer hours than the national average (Government of Canada, 2021), are responsible for more charitable donations (Government of Canada, 2022) and other positive aspects that come with age. However, challenges also include an increase in health issues. As a result, older adults, as a category, tend to access healthcare services more often than others (Turner et al. 2018).

The World Health Organization (WHO) identifies the importance of individuals having medical, psychological, and related knowledge to attain and/or maintain complete health (World Health Organization, 2019). Having relevant information during and outside clinical interactions can enable older adults and their caregivers to ask informed questions. They may also be able to provide feedback on proposed health strategies to increase compliance resulting in improved health outcomes (Ayers & Kronenfeld, 2007; Bolle et al., 2015; Kim et al., 2009). Accessing relevant and trusted health and community support information is challenging for older adults and their caregivers, yet accurate information can assist in making informed choices about one's own health.

Understanding how older adults and their caregivers seek information is useful in developing strategies to ensure they are armed with accurate and up-to-date materials. Both groups have discussed the need to be able to trust the reliability of information they receive to make informed decisions. The most often mentioned source they seek to expand their health and community knowledge is to seek information from other individuals. They tend to ask healthcare professionals, followed by reaching out to family and friends. The internet and other sources are often mentioned after these categories (Chaudhuri et al., 2013; Denton et al., 2010; Ploeg et al., 2009; Tindale et al., 2011; Willis et al., 2016).

Including community to provide holistic healthcare

The Decade on Healthy Ageing of 2021-30 is a global strategy, put forth by the United Nations and implemented by the WHO. It seeks to unite government stakeholders, academics, private sector and media to focus on four areas of community health including ageism, age-friendly communities, person-centered care that fosters older adults' abilities, and quality long-term care to promote longevity *and* health (World Health Organization, 2021). Contained within these focus areas is an understanding that health exists beyond biology and genetics; it is influenced by the physical and social environments in which older adults exist. The ability to access community supports can either enable or inhibit healthy ageing (World Health Organization, 2022).

Community support services (CSS) are formal supports delivered in the home or in a community setting that address medical, social, financial, and personal needs and may be delivered by private, public or non-profit/community organizations (Denton et al., 2010; Gallagher & Truglio-Londrigan, 2004; Tindale et al., 2011). Examples of CSSs include peer support programs, meal delivery services, transportation assistance, day programs and caregiver support services (Denton et al., 2010; Ploeg et al., 2009; Tindale et al., 2011). They have been shown to assist with maintaining a high quality of life and support independent living at home, as well as decrease costs of institutionalized care such as nursing homes or hospitals (Abel et al., 2018; Dickinson & Wills, 2022; Hshieh et al., 2018; Pennant et al., 2010; Tindale et al., 2011).

Efforts to improve healthcare systems would be well served by incorporating communities and their resources into their strategies. Communities are where the determinants of health that contribute to service delivery exist. They are where the impact on the health workforce occurs. The social fabric and social norms that influence individual behaviours, and become influenced by the individual, develop in the community. Collaborative approaches between communities and healthcare institutions can be opportunities to improve health outcomes. Indeed, successful programs aiming to improve the health literacy of older adults have tapped into existing community networks to spread information related to health and community resources (Morse et al., 2022; Sacks et al., 2019; Mulligan, 2022; OECD, 2019).

How to become 'aware' of health and community services

Access to health and community services has been shown to have numerous barriers, including lack of accessible transportation to attend activities (Montoro-Rodriguez et al., 2003) or prohibitive costs for individuals (Townsend et al., 2021). However, another primary barrier is lack of awareness that the services exist (Gong et al., 2022; Felix et al., 2019; Denton et al., 2010; Ploeg et al., 2016; Strain & Blandford, 2016; Tindale et al., 2011) and having information about what is available is an essential first step in accessing any relevant and useful services. The remainder of this analysis introduces the use of people as sources of information to help older adults and their caregivers navigate health and community services. The report explores how these individuals assist in navigation, the training they receive, as well as how they stay informed about services. It also discusses their feasibility as reliable information sources to assist in increasing older adults' effective use of relevant resources.

Research approach

A review of the literature was conducted with the help of a research librarian to identify key words. Search items included navigation/navigator, community connector, community health worker, boundary spanning, community supports, health supports, older adults, caregivers, information seeking behaviour and health information. Databases included in the search were PubMed, CINAHL, Medline, EBSCO, Google, Google Scholar, Web of Science and Joanna Briggs Institute EBD. The search identified a total of 64 potentially relevant peer-reviewed articles published after 2010. Articles were excluded if they did not include older adults or their caregivers or did not discuss the individual's increasing awareness and/or access to health and community supports, leaving 16 to be included in the final analysis. Vignettes were created with information obtained from articles describing each identified program, along with supporting evidence from the community website.

Key findings

Researchers note that adults and their caregivers seek information about relevant health and community resources by asking others whom they trust. These can be formal healthcare providers, or they may be informal sources such as family and friends (Denton et al., 2010; Tindale et al., 2011; Turner et al., 2018; Willis et al., 2016). Healthcare providers have reported having limited awareness of supportive services, both due to the abundance that exists, lack of a centralized source to access information about such resources, as well as limited time during their interactions with patients to assist with such issues (Ploeg et al., 2016, 2017). Since people are the most often referred to source of health information, the healthcare system could be strengthened by drawing on any and all people who come in contact with someone who is in need of information. This has been referred to as an “eyes on the ground” approach (Freedman & Nicolle, 2020).

Community Connectors

System navigation has proven effective for increasing access to health and community support services, improving an individual’s ability to engage with their own care management, and for assisting with transitions from healthcare institutions to the community (Alderwick et al., 2021; Valaitis et al., 2020; Felix et al., 2019). Community connector programs are over-arching strategies that aim to support individuals by connecting them to existing community resources (Jopling, 2020; Wallace et al., 2018, 2019). Community connectors are “members of the community who enable the flow of information, resources and relationships across cultural, social and organisational boundaries.” (Wallace et al., 2019, p. 366).

Community connectors have been given many titles, including navigator, link worker, peer supporter, health champion, and more (Giebel et al., 2020; May & Contreras, 2007; Valaitis et al., 2017; Wallace et al., 2018). They carry out numerous activities, from simple referral to an existing community-based health and social service (CBHSS), to sitting one-on-one with an individual to create a unique plan to connect them with appropriate resources. Training varies according to what their activities are. More training is required for roles that include added responsibilities. For those roles that have fewer activities, training sessions are brief and focus on fewer topics (Abel et al., 2018; Wallace et al., 2018). Community connectors thus can be very

formalized, with in-depth training and have a strong organizational alignment, or they may be very organic, harnessing the energy of socially engaged members of the community who are very much embedded at a ground level (Figure 1) (Wallace et al., 2018, 2019).

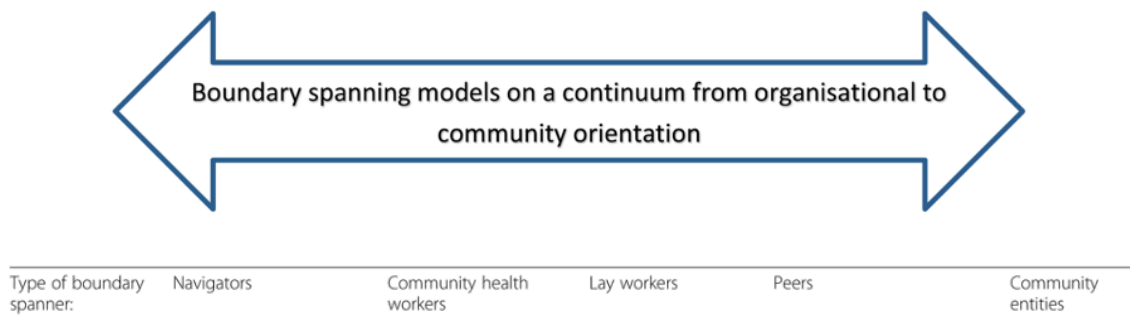


Figure 1 - Adapted from Wallace et al., 2018, indicating community connectors can operate in a range, where they are embedded in healthcare to where they are more aligned within the community.

This visualization can be expanded using the Mandala of Health, a model initially created by Canadian public health researchers and recently revised by others in the field of public health (Figure 2) (Hancock & Perkins, 1985; Hancock, 1993; Langmaid et al., 2020). In this depiction, health is seen as a combination of biophysical, social, economic and political environments (Hancock, 1993). Understanding the processes and structures that impact the individual (at the center of the model) and that is in turn impacted by that individual can bring in multi-level and multi-disciplinary solutions. This model is based on the recognition that no single solution addresses the ‘patterns of connection’ but that many can be brought in at various times and can interact with each other in a positive and complementary fashion (Hancock, 1993). Thus, using this model and mapping where community connectors exist, where they cross boundaries and how they support each other will create a holistic strategy to ensure older adults and their caregivers are supported with relevant information.

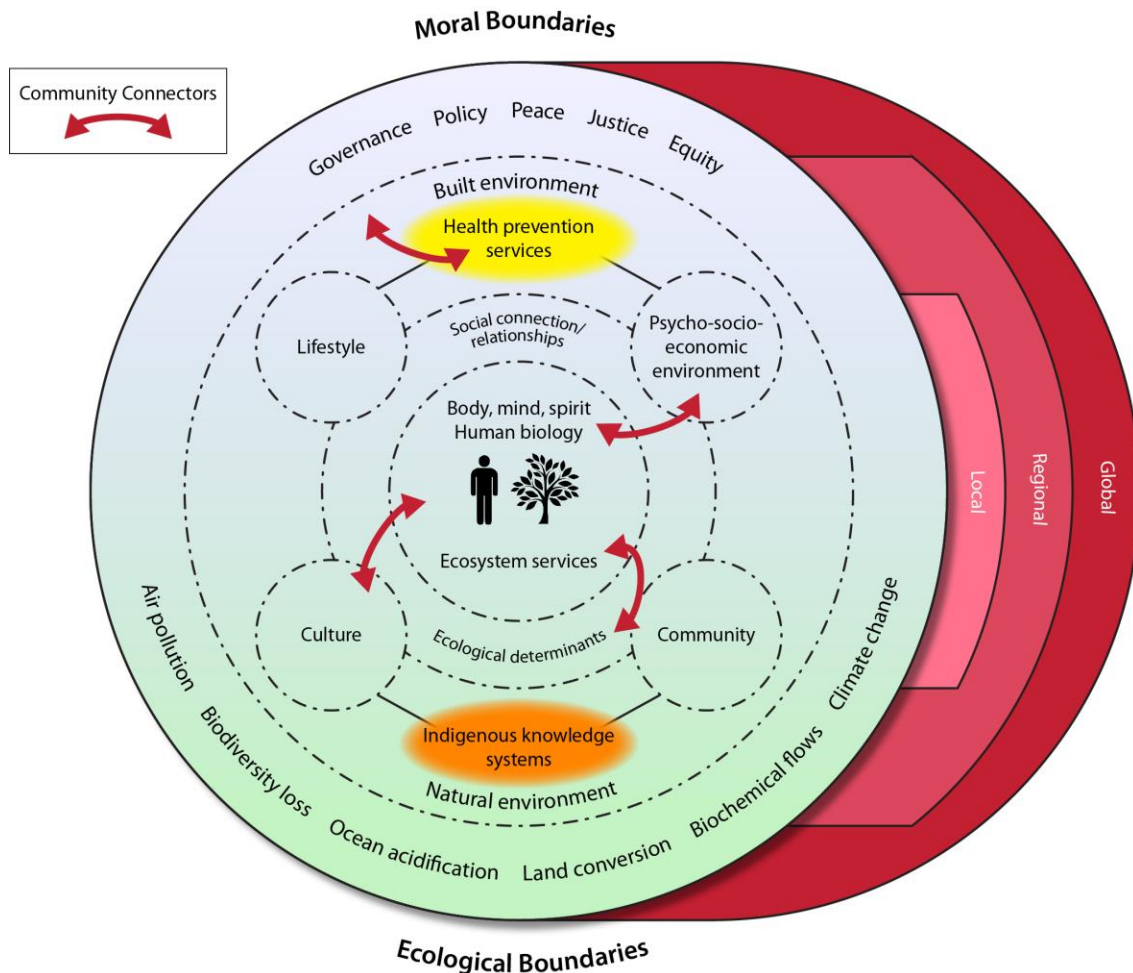


Figure 2 - Adapted from Langmaid et al., 2020, with depiction of where community connectors can operate at macro, meso and micro levels of the ecosystem.

It is important to note the role that organizations can have in this model. Community connector programs can be healthcare institutions and governmental departments, not just individuals who are community connectors (Boll et al., 2021; Drinkwater et al., 2019; Kimberlee, 2015; Wallace et al., 2018, 2019). One such example is social prescribing. In its simplest form, social prescribing involves clinicians connecting individuals to CBHSSs that have been shown to support health and well-being (Nowak & Mulligan, 2021, p. 88). Primary care practitioners are in a unique position to facilitate navigation, as a recent report indicated they spend a third of their time on patient concerns which are based in social issues that could be

better addressed by other practitioners (Alliance for Healthier communities, 2019). Employing community connectors as part of a healthcare strategy would help direct patients to appropriate supports to address social issues. It would also facilitate the Canada Health Act's accessibility to service provision, which is one of the five core principles of the Act (Government of Canada, 2018).

Maintaining the organic, ground level approach of some community connectors is also important. As many as 14.5% of Canadians, or 4.6 million people, do not have access to a primary care health professional (Statistics Canada, 2020). Furthermore, because of this shortage, the primary care practitioners who are available are in high demand. A recent survey in New Brunswick found that despite 86% of residents having a primary care practitioner, only 51% were able to make an appointment in five days or less (New Brunswick Health Council, 2020), leaving them to access either an emergency department or after-hours clinic for assistance. In emergency departments and after-hours clinics, care providers are under pressure and referring patients to a CBHSS may not be possible. Some individuals find accessing the healthcare system challenging as they do not feel "socio-culturally comfortable" due to cultural or language barriers, medical practices that are incongruous to their own, or due to previous poor interactions (Wallace et al., 2020; Mulligan, 2022). Community connectors who are embedded in the community have the skills to operate in both settings to cross boundaries between the healthcare institution the individual who is hardly reached by the service (Wallace et al., 2018, 2019, 2020).

Health is impacted at micro, meso and macro levels. Since 80% of health outcomes have been attributed to the social determinants of health, incorporating all levels of influence will result in a more holistic approach rather than simply focusing on increasing health expenditures. The Mandala of Health is a useful visual to understand the position of these influences and where they may have the most impact. The following 2 vignettes are based on 2 communities in the UK who have employed a network of community connectors. They have different funding models and employ different names and carry out different activities, but both have been found to have a positive impact on individuals and their local healthcare services.

In reading these, it is important to keep in mind that the UK has strong national social policy (visualized as the 'regional level' in the Mandala of Health) to ensure individuals are

connected to health and community services. For instance, the Department of Digital, Culture, Media and Sport, the Office of Civil Society and the Minister of Loneliness provide the Local Connections fund to assist small charities and organizations to develop programming to facilitate connection. They also launched a Connection Coalition Loneliness advice chatbot service on WhatsApp, which allows an individual to access information and resources from various national organizations, just to name a few larger-scale connection initiatives (Government of the UK, 2021). The National Lottery Community Fund also supports the development of community-based initiatives that support building strong relationships in and across communities, improving spaces and places and supporting people as early as possible to ensure they reach their full potential (National Lottery Commission, 2023). Community-based health initiatives have found greater uptake and success when actively supported and advocated for by national and political stakeholders (Bickerdike et al., 2017).

Community: Frome, UK (Abel et al., 2018, Health Connections Mendip, 2023).

Community connector organization: Health Connections Mendip

Population served: 28,559

Community connector titles: Health Connectors, Community connectors, Digital connectors, Hearing connectors, Green Community connectors, Planning Ahead connector, Fire Safety connector.

Summary of program: Connectors can be anyone from the community. Training sessions are approximately one hour and instruct individuals on how to identify community members in need of different types of information and provide guidance on how to discuss this information with absolutely anyone they may come in contact with. Health Connectors receive more in-depth training and their role is to meet with community members who have been referred to them by a healthcare practitioner on an individual basis. They then create a plan that addresses the specific needs of that individual and follow up to ensure the recommendations are useful, adjusting the plan as needed. This combined network of connectors incorporates both bringing networks to people (which is the role of the range of organic community connectors listed) as well as providing a place where people can go to access the network (the Health Connectors). All of these programs are supported by a core team at Health Connections Mendip who work out of the GP practice in Frome, operating on a meso level as a community connector.

Effectiveness: Upon the implementation of their many connectors and establishing a Health Connections Mendip online directory that houses an extensive list of local resources, Frome was found to have a 14% decrease in unplanned hospital admissions, resulting in a 20.8% reduction in healthcare expenditures. Comparatively, an adjacent community that did not have a connector program experienced a 28.5% increase in unplanned admissions.

Funding: The overall program is funded through the National Health Service, which is the UK's publicly funded health system.

Community: Liverpool, UK (Giebel et al, 2020; Sefton CVS, 2023).

Community connector organization: Sefton Council for Voluntary Service (CVS)

Population served: catchment area of approximately 200,000

Community connector titles: The organization itself is very much operating in a community connector role at the meso-level. They also have community connectors and community champions acting to bring awareness of CBHSSs.

Summary of program: Sefton CVS is a registered non-profit organization that provides governance and policy support for community organizations; oversees their community connector program; monitors community programs, identifies gaps in services and implements programs to address these gaps; is responsible for the maintenance of their community resource online directory. Community connectors with the Sefton CVS have many important tasks. These community connectors oversee champions, who are volunteers from the community who raise awareness of supports that exist locally. Champions also relay information obtained from community members to the community connectors regarding services that are important to residents. Community connectors can then bring forth this information to the Sefton CVS organization, where they may develop programs to address gaps in supports. Community connectors can also meet with community members on a one-on-one basis to develop a tailored plan to ensure that individual has access to relevant community supports. This multi-layered network of support ensures the network is both brought to its community members (through the use of champions) as well as an avenue where members can go to the network (known as community connectors in this program).

Effectiveness: Community members reported feeling empowered through this multi-layered strategy to take action themselves in effecting change in their health, to engage with community services and to reduce stigma related to being disconnected. They also reported decreasing their alcohol intake, having improved diet, feeling less lonely and having improved sleep patterns. Some participants became volunteers for community activities themselves. These all support a shift in healthcare from “what is the matter *with you*” to “what matters *to you*” (Morse et al., 2022).

Funding: This not-for-profit organization is responsible for accessing funding sources to be able to carry out their wide range of programming.

Online resources: Where the information is housed

The use of online directories and their effectiveness at strengthening community connector programs have thus far received little attention in the literature. Community connectors have been found to be effective at using social media to both spread the word about community resources as well as to gain information as to what exists (Wallace et al., 2021). However, an in-depth examination of what specific online resources are adopted, how effective those online resources are at providing information about local activities, and other aspects need

to be considered. Interestingly, an analysis on the sustainability of community websites (note, not of directories of community resources but rather of single community organizations) indicated it was essential that residents first know that the website exists (Norris & Freeman, 2006). Thus, for an online resource to be effective, it must be known to those who would benefit from its information, including community connectors who then proliferate the information in an in-person conversation with others.

A case study comparison of community connector programs revealed that these programs felt keeping a locally maintained directory was essential to their program even with the presence of overarching, national websites. They indicated that their community website could link to these broader resources. Housed within these community websites was information about daily activities, information on supports provided by organizations, as well as information targeted at strategies an individual could carry out independently, such as meditation or tips on creating healthy meals (Ouellet et al., 2022).

In Canada, the national 211 service has been instrumental in providing communities across the country with a place to access information regarding health and community resources. As of 2020, it can be accessed by residents in all provinces by telephone, chat, text or through the internet. The information housed in 211 is supported by service navigators who are trained professionals that can facilitate conversations to ensure recommendations are accurate and helpful. Personal information is not required, however a postal code is requested in order to ensure information provided is of resources that are locally available to the individual. This data is also tracked to monitor gaps in resources and can help government and other policy stakeholders to facilitate the development of future strategies (United Way, 2023). The information housed at 211 is not able to house daily activities and more grass roots programming but both community and 211 websites could complement each other to fully inform community connectors in their efforts of spreading information to older adults and their caregivers. caregivers.

Policy recommendations

First recommendation: The need for a local, centralized organization to ensure comprehensiveness and oversight in the connection approach.

Similarities in the strategies described in the vignettes can help inform Canada's approach as organizations move forward in improving access to information for health and community services. Both vignettes have a central organization responsible for:

- oversight of community connection programming which includes communication with individual community members, community level volunteers, mid-level community connectors acting within health and community organizations
- ensuring their community online website is kept up to date
- monitoring community programming to ensure it is responsive to local needs
- implementing programming to address gaps in health and community services.

Second recommendation: Funding needs to be in place to support the development of community resources

Both of the organizations in the vignettes operate using different funding structures and sources. The first operates within the healthcare system and is primarily funded through the NHS, whereas the second is a not-for-profit and seeks funding through a variety of channels. Regardless of which strategy is employed, it is important to ensure community resources are not underfunded and overprescribed (Morse et al., 2022). Community connector programs are only as successful as the resources available to them. A 'navigation to nowhere', in which connectors are active but suitable programs are not available to address community members' needs, would not be indicative of failure of the program but reflective of the broader context (Valaitis et al., 2017, Kimberlee et al., 2015; Abel et al., 2018; Weldrick & Grenier, 2018; Tadaka et al., 2016).

Some other funding strategies have attempted to mitigate this problem, such as funding for specific exercise programming or funding community support services that receive referrals from a healthcare professional (Morse et al., 2022). North Carolina has adopted a value-based payment strategy, incorporating whole-person health with the goal of "buying health" and supporting non-medical drivers rather than funding healthcare services alone. Included in this are

incentives for Medicaid plans to provide for 'healthy food boxes' or donating to a food pantry to increase its capacity (Wortman et al., 2020).

Third Recommendation: The need for a community website, housed and monitored by a community organization.

Older adults and their caregivers have reported being reluctant to trust information they find on the internet (Chaudhuri et al., 2013; Turner et al., 2018) leading them to seeking information from other people rather than the internet. The underlying goal of community connector programs is to ensure that residents that the connectors come in contact with will receive relevant information regarding health and community services. For community connectors to provide this information effectively, they need to have an access point where reliable, local and over-arching information is housed. Those responsible for community connector programs have indicated online community directories should house information about daily activities occurring locally as well as links to overarching national supports. They further noted these community directories are most useful when they include information about supports that are provided by organizations, as well as supportive activities that can be carried out independently by the individual (Ouellet et al., 2022).

Conclusion

As it has been suggested in the literature, a large portion of older adults and their caregivers seek information about health and community supports by asking other individuals. These may be formal sources, such as healthcare professionals, or informal, such as family and friends. By deploying a multi-level strategy of individuals who are able to be points of contact for relevant health and community services, older adults and their caregivers will be provided with greater opportunities to be able to access relevant and useful information. Community connector programs that operate as a central location for community connectors have been shown to be effective in ensuring a network of information can be both brought to individuals, as well as being a place individuals can turn to, to seek supports. As with many programs, funding is useful, in this case to ensure the infrastructure is there in the form of online community directories, as well as sufficient community supports.

References

Abel, J., Kingston, H., Scally, A., Hartnoll, J., Hannam, G., Thomson-Moore, A., & Kellehear, A. (2018). Reducing emergency hospital admissions: A population health complex intervention of an enhanced model of primary care and compassionate communities. *British Journal of General Practice*, 68(676), e803–e810. <https://doi.org/10.3399/bjgp18X699437>

Alderwick, H., Hutchings, A., Briggs, A., & Mays, N. (2021). The impacts of collaboration between local health care and non-health care organizations and factors shaping how they work: A systematic review of reviews. *BMC Public Health*, 21(1), 753. <https://doi.org/10.1186/s12889-021-10630-1>

Alliance for Healthier Communities (2019). Rx: Community – Social Prescribing in Ontario, Progress Report. <https://www.allianceon.org/Rx-Community-Social-Prescribing-In-Ontario>

Ayers, S. L., & Kronenfeld, J. J. (2007). Chronic illness and health-seeking information on the Internet. *Health*, 11(3), 327–347. <https://doi.org/10.1177/1363459307077547>

Bickerdike, L., Booth, A., Wilson, P. M., Farley, K., & Wright, K. (2017). Social prescribing: Less rhetoric and more reality. A systematic review of the evidence. *BMJ Open*, 7(4). <https://doi.org/10.1136/bmjopen-2016-013384>

Bagnasco, A., Hayter, M., Rossi, S., Zanini, M. P., Pellegrini, R., Aleo, G., Catania, G., & Sasso, L. (2020). Experiences of participating in intergenerational interventions in older people's care settings: A systematic review and meta-synthesis of qualitative literature. *Journal of Advanced Nursing*, 76(1), 22–33. <https://doi.org/10.1111/jan.14214>

Boll, A. M., Ensey, M. R., Bennett, K. A., O'Leary, M. P., Wise-Swanson, B. M., Verrall, A. M., Vitiello, M. V., Cochrane, B. B., & Phelan, E. A. (2021). A Feasibility Study of Primary Care

Liaisons: Linking Older Adults to Community Resources. *American Journal of Preventive Medicine*, 61(6), e305–e312. <https://doi.org/10.1016/j.amepre.2021.05.034>

Bolle, S., van Weert, J. C. M., Daams, J. G., Loos, E. F., de Haes, H. C. J. M., & Smets, E. M. A. (2015). Online Health Information Tool Effectiveness for Older Patients: A Systematic Review of the Literature. *Journal of Health Communication*, 20(9), 1067–1083. <https://doi.org/10.1080/10810730.2015.1018637>

CBC (2022). Earth's population reaches 8 billion milestone, but this upward trend may not continue for long. Accessed November 22, 2022. <https://www.cbc.ca/news/science/8-billion-global-population-1.6646018>

Chaudhuri, S., White, C., Thompson, H., & Demiris, G. (2013). Examining health information-seeking behaviours of older adults. *Computers, Informatics, Nursing: CIN*, 31(11), 547–553. <https://doi.org/10.1097/01.NCN.0000432131.92020.42>

Denton, M., Ploeg, J., Tindale, J., Hutchison, B., Brazil, K., Akhtar-Danesh, N., Lillie, J., & Millen Plenderleith, J. (2010). Would Older Adults Turn to Community Support Services for Help to Maintain Their Independence? *Journal of Applied Gerontology*, 29(5), 554–578. <https://doi.org/10.1177/0733464809345495>

Dickinson, A., & Wills, W. (2022). Meals on wheels services and the food security of older people. *Health & Social Care in the Community*, 30(6), 6707. <https://doi.org/10.1111/hsc.14092>

Drinkwater, C., Wildman, J., & Moffatt, S. (2019). Social prescribing. *BMJ*, 11285. <https://doi.org/10.1136/bmj.11285>

Felix, H. C., Ali, M., Bird, T. M., Cottoms, N., & Stewart, M. K. (2019). Are community health workers more effective in identifying persons in need of home and community-based long-term

services than standard-passive approaches. *Home Health Care Services Quarterly*, 38(3), 194–208. <https://doi.org/10.1080/01621424.2019.1604461>

Felix, H. C., Mays, G. P., Stewart, M. K., Cottoms, N., & Olson, M. (2011). Medicaid savings resulted when community health workers matched those with needs to home and community care. *Health Affairs*, 30(7), 1366–74. <https://doi.org/10.1377/hlthaff.2011.0150>

Felix, H.C., Stewart, M.K., Mays, G.P., Cottoms, N., Olson, M.K., & Sanderson, H. (2007). Linking Residents to Long-Term Care Services: First-Year Findings from the Community Connector Program Evaluation. *Progress in Community Health Partnerships: Research, Education, and Action* 1(4), 311-319. <https://doi.org/10.1353/cpr.2007.0043>.

Freedman, A., & Nicolle, J. (2020). Social isolation and loneliness: The new geriatric giants: Approach for primary care. *Canadian Family Physician*, 66(3), 176–182.

Gallagher, L. P., & Truglio-Londrigan, M. (2004). Community Support: Older Adults' Perceptions. *Clinical Nursing Research*, 13(1), 3–23. <https://doi.org/10.1177/1054773803259466>

Giebel, C., Hassan, S., Harvey, G., Devitt, C., Harper, L., & Simmill-Binning, C. (2020). Enabling middle-aged and older adults accessing community services to reduce social isolation: Community Connectors. *Health & Social Care in the Community*, 30(2), e461-e468. <https://doi.org/10.1111/hsc.13228>

Gong, N., Meng, Y., Hu, Q., Du, Q., Wu, X., Zou, W., Zhu, M., Chen, J., Luo, L., Cheng, Y., & Zhang, M. (2022). Obstacles to access to community care in urban senior-only households: a qualitative study. *BMC Geriatrics*, 22(1), 122–122. <https://doi.org/10.1186/s12877-022-02816-y>

Government of Canada. (2018). *Canada Health Act Annual Report 2016-2017—Canada.ca* (pp. 1–252) [Government policy strategy]. Government of Canada. <https://www.canada.ca/en/health->

canada/services/publications/health-system-services/canada-health-act-annual-report-2016-2017.html

Government of Canada (2021). Action for seniors report. Government of Canada. Accessed December 12, 2022. <https://www.canada.ca/en/employment-social-development/programs/seniors-action-report.html>

Government of Canada (2022). Charitable donors 2020. Accessed December 12, 2022. <https://www150.statcan.gc.ca/n1/daily-quotidien/220412/dq220412d-eng.htm>

Government of the UK (2021). Loneliness minister: “It’s more important than ever to take action”. Accessed Jan 11, 2023. <https://www.gov.uk/government/news/loneliness-minister-its-more-important-than-ever-to-take-action>

Hancock, T.; Perkins, F. (1985). The Mandala of Health: A Model of the Human Ecosystem. *Family & Community Health*, 8(3) 1–10. <https://doi.org/10.1097/00003727-198511000-00002>

Hancock, T. (1993). Health, human development and the community ecosystem: Three ecological models. *Health Promotion International*, 8(1), 41–47. <https://doi.org/10.1093/heapro/8.1.41>

Health Connections Mendip (2023). Let's connect: training. Accessed January 13, 2023. <https://healthconnectionsmentip.org/lets-connect/training/>

Hshieh, T. T., Yang, T., Gartaganis, S. L., Yue, J., & Inouye, S. K. (2018). Hospital Elder Life Program: Systematic Review and Meta-analysis of Effectiveness. *The American Journal of Geriatric Psychiatry*, 26(10), 1015–1033. <https://doi.org/10.1016/j.jagp.2018.06.007>

Jopling, K. (2020). *Promising Approaches Revisited: Effective action on loneliness in later life* (p. 104). What Works Centre For Wellbeing. https://www.campaigntoendloneliness.org/wp-content/uploads/Promising_Approaches_Revisited_FULL_REPORT.pdf

- Kim, H., Nakamura, C., & Zeng, Q. (2009). Assessment of Pictographs Developed Through a Participatory Design Process Using an Online Survey Tool. *Journal of Medical Internet Research*, 11(1), e1129. <https://doi.org/10.2196/jmir.1129>
- Kimberlee, R. (2015). What is social prescribing? *Advances in Social Sciences Research Journal*, 2(1), Article 1. <https://doi.org/10.14738/assrj.21.808>
- Langmaid, G., Patrick, R., Kingsley, J., & Lawson, J. (2020). Applying the Mandala of Health in the Anthropocene. *Health Promotion Journal of Australia*, 32(S2) 8–21. <https://doi.org/10.1002/hpja.434>
- Lynott, PatriciaP., & Merola, PamelaR. (2007). Improving the Attitudes of 4th Graders Toward Older People Through a Multidimensional Intergenerational Program. *Educational Gerontology*, 33(1), 63–74. <https://doi.org/10.1080/03601270600864041>
- May, M. L., & Contreras, R. B. (2007). Promotor(a)s, the organizations in which they work, and an emerging paradox: How organizational structure and scope impact promotor(a)s' work. *Health Policy*, 82(2), 153–166. <https://doi.org/10.1016/j.healthpol.2006.09.002>
- Montoro-Rodriguez, J., Kosloski, K., & Montgomery, R. J. V. (2003). Evaluating a Practice-Oriented Service Model to Increase the Use of Respite Services Among Minorities and Rural Caregivers. *The Gerontologist*, 43(6), 916–924. <https://doi.org/10.1093/geront/43.6.916>
- Morse, D. F., Sandhu, S., Mulligan, K., Tierney, S., Polley, M., ... Husk, K. (2022). Global developments in social prescribing. *BMJ Global Health*, 7(5), e008524. <https://doi.org/10.1136/bmjgh-2022-008524>
- Mulligan K. Strengthening community connections: the future of public health is at the neighbourhood scale [Internet]. Toronto (ON): University of Toronto, DallaLana School of Public Health; 2022 [cited year mon day].35 p. Available from: <https://nccph.ca/projects/reports->

to-accompany-the-chief-public-health-officer-of-canadas-report-2021/strengthening-community-connections-the-future-of-public-health

Murayama, Y., Ohba, H., Yasunaga, M., Nonaka, K., Takeuchi, R., Nishi, M., Sakuma, N., Uchida, H., Shinkai, S., & Fujiwara, Y. (2015). The effect of intergenerational programs on the mental health of elderly adults. *Aging & Mental Health*, 19(4), 306-314.
<https://doi.org/10.1080/13607863.204.933309>

New Brunswick Health Council (2020). Access to primary health care in New Brunswick: Still a challenge. Accessed Dec 14, 2022. <https://nbhc.ca/all-publications/access-primary-health-care-new-brunswick-still-challenge>

National Lottery Commission (2023). The projects we fund. Accessed January 13, 2023. <https://www.tnlcommunityfund.org.uk/funding/thinking-of-applying-for-funding/projects-we-fund>

Norris, A., & Freeman, M. (2006). Community websites and what makes them sustainable: evidence from Australia. Research online, University of Wollongong.
<https://ro.uow.edu.au/infopapers/2949/>

Nowak, D. D. & Mulligan, K. (2021). Social prescribing: A call to action. *Canadian Family Physician*, 67(2), 88-91. <https://doi.org/10.46747/cfp.670288>

OECD (2019). Promoting healthy aging; background report for the 2019 Japanese G20 presidency. Accessed December 15, 2022. P. 20. <https://www.oecd.org/g20/topics/global-health/G20-report-promoting-healthy-ageing.pdf>

Ouellet, L., deMolitor, R., Kealey, L., & Banerjee, A. (2022). Connector programs as a promising means of addressing social isolation and loneliness among older adults: a review of the evidence. Accessed January 13, 2023. <https://www.stu.ca/media/stu/site-assets/images/faculty-pages/Community-Connector-KS-Report.pdf>

Pennant, M., Davenport, C., Bayliss, S., Greenheld, W., Marshall, T., & Hyde, C. (2010). Community programs for the prevention of cardiovascular disease: A systematic review. *American Journal of Epidemiology*, 172(5), 501–516. <https://doi.org/10.1093/aje/kwq171>

Ploeg, J., Denton, M., Hutchinson, B., McAiney, C., Moore, A. M., Brazil, K., Tindale, J., & Lam, A. (2017). Primary care physicians' perspectives on facilitating older patients' access to community support services. *Canadian Family Physician*, 63(1), e31–e42.

Ploeg, J., Denton, M., Hutchison, B., McAiney, C., Moore, A., Brazil, K., Tindale, J., Wu, A., & Lam, A. (2016). Primary Health Care Providers' Perspectives: Facilitating Older Patients' Access to Community Support Services. *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement*, 35(4), 499–512. <https://doi.org/10.1017/S0714980816000568>

Ploeg, J., Denton, M., Tindale, J., Hutchison, B., Brazil, K., Akhtar-Danesh, N., Lillie, J., & Plenderleith, J. M. (2009). Older adults' awareness of community health and support services for dementia care. *Canadian Journal on Aging = La Revue Canadienne Du Vieillissement*, 28(4), 359–370. <https://doi.org/10.1017/S0714980809990195>

Sacks, E., Morrow, M., Story, W. T., Shelley, K. D., Shanklin, D., Rahimtoola, M., Rosales, A., Ibe, O., & Sarriot, E. (2019). Beyond the building blocks: Integrating community roles into health systems frameworks to achieve health for all. *BMJ Global Health*, 3(Suppl 3), e001384. <https://doi.org/10.1136/bmjgh-2018-001384>

Sefton CVS (2023). Supporting local communities. Accessed January 2023. <https://seftoncv.org.uk>

Statistics Canada (2020). Primary health providers, 2019. Accessed December 14, 2022. <https://www150.statcan.gc.ca/n1/pub/82-625-x/2020001/article/00004-eng.htm>

Statistics Canada (2022). In the midst of high job vacancies and historically low unemployment, Canada faces record retirements from an aging labour force: number of seniors aged 65 and older grows six times faster than children 0-14. Government of Canada. Accessed December 12, 2022. <https://www150.statcan.gc.ca/n1/daily-quotidien/220427/dq220427a-eng.htm>

Strain, L., & Blandford, A. (2016). Community-Based Services for the Taking but Few Takers: Reasons for Nonuse - Laurel A. Strain, Audrey A. Blandford, 2002. *Journal of Applied Gerontology*, 21(2), 220-235. <https://doi.org/10.1177/07364802021002006>

Tadaka, E., Kono, A., Ito, E., Kanaya, Y., Dai, Y., Imamatsu, Y., & Itoi, W. (2016). Development of a community's self-efficacy scale for preventing social isolation among community-dwelling older people (Mimamori Scale). *BMC Public Health*, 16, 1198. <https://doi.org/10.1186/s12889-016-3857-4>

Tindale, J., Denton, M., Ploeg, J., Lillie, J., Hutchison, B., Brazil, K., Akhtar-Danesh, N., & Plenderleith, J. (2011). Social determinants of older adults' awareness of community support services in Hamilton, Ontario. *Health & Social Care in the Community*, 19(6), 661–672. <https://doi.org/10.1111/j.1365-2524.2011.01013.x>

Townsend, Chen, & Wuthrich. (2021). Barriers and facilitators to social participation in older adults: a systematic literature review. *Clinical Gerontologist*, 44(4), 359–380. <https://doi.org/10.1080/07317115.2020.1863890>

Turner, A. M., Osterhage, K. P., Taylor, J. O., Hartzler, A. L., & Demiris, G. (2018). A Closer Look at Health Information Seeking by Older Adults and Involved Family and Friends: Design Considerations for Health Information Technologies. *AMIA Annual Symposium Proceedings, 2018*, 1036–1045.

United Nations (2022). World population to reach 8 billion on November 15, 2022. Accessed November 22, 2022. <https://www.un.org/en/desa/world-population-reach-8-billion-15->

Weldrick, R., & Grenier, A. (2018). Social Isolation in Later Life: Extending the Conversation. *Canadian Journal on Aging*, 37(1), 76–83. <https://doi.org/10.1017/S07149808170005X>

Willis, K., Collyer, F., Lewis, S., Gabe, J., Flaherty, I., & Calnan, M. (2016). Knowledge matters: Producing and using knowledge to navigate healthcare systems. *Health Sociology Review*, 25(2), 202–216. <https://doi.org/10.1080/14461242.2016.1170624>

World Health Organization (2020). Basic documents: forty-ninth edition (including amendments adopted up to 31 May 2019). Geneva: World Health Organization; 2020. [cited 2022 May 19] Licence: CC BY-NC-SA 3.0 IGO. Available from https://apps.who.int/gb/bd/pdf_files/BD_49th-en.pdf#page=6

World Health Organization (2021). Ageing and Health. 2021 [cited 2022 May 19]. Available from <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>.

World Health Organization (2022). Age-Friendly Environments. 2022. [cited 2022 May 19]. Available from <https://www.who.int/teams/social-determinants-of-health/demographic-change-and-healthy-ageing/age-friendly-environments>.

Wortman, Z., Tilson, E. C., & Cohen, M. K. (2020). Buying health for North Carolinians: addressing nonmedical drivers of health at scale. *Health Affairs*, 39(4), 649–654. <https://doi.org/10.1377/hlthaff.2019.01583>