Canadian Clinical Guidelines on Social Isolation and Loneliness in Older Adults*

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ABSTRACT

Background

Preventing and addressing social isolation and loneliness among older adults is important because of the known associations with negative health outcomes. The Canadian Coalition for Seniors' Mental Health (CCSMH) took on the task of creating clinical guidelines.

Method

A multidisciplinary working group was established. The process was guided by an initial rapid scoping review of the literature focused on older adults. An adapted GRADE approach was utilized.

Results

CCSMH has produced first-ever clinical guidelines on social isolation and loneliness in older adults. Prevention, including recognition of risk factors and educational approaches focused on clinicians and students, is recommended. Targeted screening with validated tools is recommended. A comprehensive assessment is optimal to treat any underlying conditions and to identify contributing factors that may be responsive to psychosocial interventions. An individualized approach to interventions with shared decision-making is recommended. A variety of possible interventions include social prescribing, social activity, physical activity, psychological therapies, animal-assisted therapies and ownership, leisure skill development and activities, and the use of technology.

Conclusion

The problem of social isolation and loneliness is a "geriatric" giant that needs to be recognized and addressed. Because of its complexity, it will require the collective attention of many individuals and organizations working together at multiple levels of society, to raise awareness and find solutions. We recommend that health-care and social service providers use these guidelines as a comprehensive tool to identify, assess, and implement strategies to reduce the negative impact of social isolation and loneliness.

Key words: mental health, depression, social prescribing, social connection, social determinants of health

INTRODUCTION

Social isolation and loneliness have received growing attention as both social and medical problems. Loneliness can be defined as a distressing subjective feeling that accompanies the perception that one's social needs are not being met by the quantity or especially the quality of one's social relationships.(1) This definition emphasizes the significance of desired versus actual social connections. Social isolation can be defined as having few social relationships or infrequent social contact with others.(2) It is an objectively measurable state capturing the level and frequency of one's social interactions. Loneliness is often, but not always, associated with isolation.(3) That is, a person could be socially isolated but

*This paper is a summary of the Guidelines including all recommendations. The Guidelines were released on the CCSMH website on 28th February, 2024.

not lonely, and a person may experience feelings of loneliness despite being socially connected.

Prevalence rates for social isolation and loneliness can vary significantly depending on the methods used.[4] The latest Canadian estimates from the National Institutes on Aging (NIA) 2022 survey of adults over age 50 found that up to 58% have experienced some degree of loneliness and that 41% are at risk of social isolation.[5] The Canadian Longitudinal Study on Aging (CLSA) data showed estimated relative increases in loneliness during the pandemic ranging between 33% and 67% depending on age or gender.[6]

There is an established body of evidence of the significant health impacts of social isolation and loneliness, particularly among older adults.[7,8,9] Indeed, due to this and possibly due to the universal experience of the COVID-19 pandemic, the issue of social isolation and loneliness across all age groups is receiving growing global attention from multiple perspectives. Recently the World Health Organization launched a Commission on Social Connection. The United Kingdom launched a national Campaign to End Loneliness and appointed a Minister for Loneliness in 2018.[10] The 2022 report by Canada's National Institute on Ageing presented six policy recommendations to help advance a national and collective approach.[7] In 2023, a report by the US Surgeon General argued that an epidemic of loneliness and isolation has been an underappreciated public health crisis that has harmed individual and societal health.[9]

Due to high prevalence rates, established health consequences, and growing calls for addressing and preventing isolation and loneliness, particularly in health-care settings, the Canadian Coalition for Senior's Mental Health (CCSMH) developed clinical guidelines for health-care and social service providers in the assessment and implementation of strategies to address this issue in older adults.[11]

METHODS

A Guideline Development Working Group was created to lead the process. Group membership was based on willingness to commit to the project, and possessing the required expertise. Ensuring diversity of members in age, gender, disciplinary background, and geographic distribution across Canada guided the final composition of the Guideline Development Working Group. Members volunteered to focus on one of the following: prevention, screening, assessment or interventions. Within these broad areas, they assumed leadership roles in assessing and creating recommendations to deal with specific topics. The primary target groups were health-care and social service professionals (HCSSPs).

This process was guided by an initial rapid scoping review of the literature focused on older adults that yielded 78 relevant documents including 38 systematic review papers. Subsequent searches of databases to identify additional relevant literature were carried out. Our literature review indicated that these guidelines are the first of their kind to be developed in Canada and internationally. We also utilized a systematic review and meta-analysis led by one of our working group members (P.H.) that was published shortly after our initial scoping review.[12] In addition, we carried out two national surveys in 2023 of both HCSSPs and older adults to gain additional perspective. A series of videoconferences were held to maintain progress, discuss emerging issues, refine recommendations, ensure consistency, and identify gaps.

A modified version of the Grading of Recommendations, Assessment, Development and Evaluation (GRADE) methodology was utilized to first assess the quality of the available evidence for each recommendation and then to assess its overall strength, which took into account additional factors such as the balance between benefit and harm, patient values and preferences, and whether this would be a wise use of the required resources for implementation (Box 1).[13] A separate category was created for recommendations that were not primarily based on empirical evidence but represented best clinical practice. They were categorized as Consensus recommendations. Members of the guideline Working Group voted on all recommendations. Following discussions, we reached 100% member consensus on each recommendation. Relevant experts were identified by the working group to provide external review for the guidelines. The committee then reviewed and incorporated the suggested changes.

RECOMMENDATIONS

#1. Knowledge of Risk Factors

Health-Care and Social Service Professionals (HCSSPs) should have knowledge of major risk factors for social isolation and loneliness to identify older adults who may be socially

BOX 1.
Scoring of the quality of evidence and strength of recommendation (based on GRADE approach)

Quality of Evidence

High: Further research is unlikely to change confidence in the estimate of effects

Medium: Further research is likely to have an important impact on the confidence in the estimate of effect and may change the estimate

Low: Further research is very likely to have an important impact on the confidence in the estimate of effect and may change the estimate

Strength of Recommendation

Strong: Indicates high confidence that desirable consequences of the proposed course of action outweigh the undesirable consequences (or vice versa)

Weak: Indicates that there is either a close balance between benefits and downsides (including adverse effects and burden of treatment), uncertainty regarding the magnitude of benefits and downsides, uncertainty or great variability in patients' values and preferences, or that the cost or burden of the proposed intervention may not be justified

Adapted from Guyatt *et al*.[13]

isolated or lonely, and to anticipate with their patients/clients any possible changes in their life circumstances that could put them at risk of social isolation and loneliness. [GRADE: Evidence: Moderate; Strength: Strong]

Risk and protective factors that are modifiable are of particular interest from a health promotion perspective; however, non-modifiable risk factors are also helpful for the identification of target groups of older adults. It is also worth noting that there may be bidirectional patterns between risk factors and isolation propensity. Furthermore, it is often the intersectionality or cumulative effects of multiple risk factors that result in greater levels of social isolation and loneliness. Risk factors and groups associated with social isolation and loneliness are listed in Box 2.

#2. Education and Training

Education regarding social isolation and loneliness in older adults should be part of the curriculum for students in health care and social services, as well as practicing HCSSPs. Education should include prevention, risk factors, screening, assessment, and interventions, as well as strategies to engage with their patients/clients, care partners, and the community. [Consensus]

#3. Agents of Change

HCSSPs should use their role, as agents of change, to help inform and educate patients/clients and the general public about the association between social isolation and loneliness and poor mental and physical health and to promote social connection. [Consensus]

Clinicians often develop a trusting relationship with patients/clients which provides an opportunity for education on prevention and health.[14] Holt-Lunstad & Perissinotto introduced the EAR framework—Educate, Assess and Respond—for addressing social isolation and loneliness.[15] They emphasized the importance of educating patients/clients, and how having education integrated into patient/client care can assist with taking appropriate actions to reduce the risk. The 2023 U.S. Surgeon General's report emphasized the need to create systems that enable and incentivize health-care providers to educate patients as part of preventative care, assess for social disconnection, and respond to patient's health-related social needs.[6] The report also encourages public education programs and awareness campaigns that are developed and led by health-care clinicians.

#4. Targeted Screening

HCSSPs should use targeted screening for those older adults who have risk factors for social isolation and loneliness. [Consensus]

There is insufficient evidence to recommend universal systematic screening for social isolation and loneliness in all older adults. As an alternative to universal screening, we recommend targeted screening of individuals with risk factors. Structural barriers in primary care (such as administrative and clinical workloads, multiple competing responsibilities) may contribute to under-screening or under-recognition of social isolation and loneliness in this setting rather than a lack of measurement tools or knowledge about the importance of these problems.[16]

#5. Screening Tools

When screening patients/clients, HCSSPs should use evidence-based screening tools to identify patients/clients who are socially isolated and/or lonely, to assess the severity of the problem, and to use in routine follow-up to determine whether the patient's/client's social situation has changed and whether interventions are effective. [GRADE: Evidence: Moderate; Strength: Strong]

Several options for screening tools are provided in the Guidelines including four measures of loneliness[17,18,19,20] and three measures of social isolation.[21,22,23,24,25] These tools are listed in Box 3, with details of two of the shortest tools in Table 1. HCSSPs should consider which of these tools could be useful in their practice setting. Of note, the CARED tool was developed for health and social service professionals to quickly determine if a person is socially isolated/lonely and should be referred to services.

BOX 2.
Risk factors and groups associated with social isolation and loneliness[a]

Advanced age Being female Race/Ethnicity/Indigenous/Culture Living alone Widowhood Low income, poverty or education Lack of affordable housing and shelter, poor neighborhood conditions; loss of community, urban, and home care options Episodic or lifelong physical health issues, including Alzheimer's disease or other dementias, frailty including loss of mobility, sensory loss (hearing and vision), multimorbidity	Episodic or lifelong mental health issues including depression, pandemic or other forms of anxiety, psychosis Poor health behaviours, including smoking, heavy drinking, sedentary lifestyle, obesity/poor nutrition Small or shrinking social network Challenges relating to technology use 2SLGBTQIA+ older adults Caregivers (especially spouses and non-kin) with a heavy intensity

[a]de Jong Gierveld *et al*.,[43] Kadowski & Wister,[6] Kirkland *et al*.[44]

#6. Health Records

When social isolation and loneliness is identified in older adults, it should be documented in the health record like other medical conditions and risk factors. Efforts should be made to collect data on social isolation and loneliness as important social determinants of health. Loneliness and social isolation may be considered "psychosocial vital signs" given their impact on health. [Consensus]

The Institute of Medicine weighed the evidence of various lifestyle factors and recommended the inclusion of social connection/isolation in all electronic health records.[26]

#7. Assessment

A thorough clinical assessment with a patient/client who is socially isolated and/or lonely should aim to explore the possible causes and identify any underlying health conditions that may be contributing factors. Other causes that may be contributing should also be identified adopting a biopsychosocial approach. A comprehensive assessment can guide the development of an appropriate management plan. The assessment may vary according to the health-care and social service professional's scope of practice. Key components of this assessment may include: medical history, social history (including cultural background, previous social exclusion, supports, interests), mental health, cognition, screening for substance use, environment and finances, recent life events, lifestyle factors, insight and motivation for change. [Consensus]

BOX 3. Recommended screening tools[a]

Tools Focused on Loneliness

Single item Loneliness (Radloff, 1977)[17]

UCLA 3-item Loneliness Scale (Hughes et al, 2004)[18]

UK Campaign to end Loneliness Scale (2015)[19]

de Jong-Gierveld & van Tilburg, 2006)[20]

Tools Focused Primarily on Social Isolation

CARED Social Isolation and Loneliness Referral Tool (Newall & Menec, 2023)[21]

Lubben Social Isolation Scale (Lubben, 2006)[22]

Structural Social Isolation Scale (Berkman & Syme, 1979[23]; Steptoe et al., 2013[24]; Newall & Menec, 2019[25])

[a]Details regarding these tools can be found at: https://ccsmh.ca/areas-of-focus/social-isolation-and-loneliness/clinical-guidelines/

#8. Intervention: Overall Approach

HCSSPs should apply several principles to help older patients/clients who are socially isolated and/or lonely including:

a. Ensure initially or concurrently that treatment is provided for any underlying medical conditions identified in their assessment;
b. Take an individualized approach, with shared decision-making;
c. Identify individuals' interests to determine interventions that may be the best fit, while appraising the individual and environmental resources available; and
d. Recognize the diversity within older adult populations and together with their patient/client consider the incorporation of their culture and lived experience.

HCSSPs should consider the following possible interventions for older adults: Social Prescribing, Social Activity, Physical Activity, Psychological Therapies, Animal-Assisted Therapies and Animal Ownership, Leisure Skill Development and Leisure Activities, Technology. Pharmacological therapy is not recommended except for treatment of an underlying disorder. It should be noted that there is some overlap between these intervention categories. [Consensus]

A variety of interventions for social isolation and loneliness have been studied at multiple levels of health care. These include interventions that are implemented in a group or individual setting, as well as interventions applied to community settings, long-term care homes, and public health systems.[5,27,28] Given the heterogeneous nature of social isolation and loneliness, the overall level of evidence remains low, but intervention is essential. As such, it is imperative that HCSSPs explore the individual, social, and systemic factors that contribute. One critical issue is that of a person's motivation to be socially connected. There are approaches, such as the Fountain of Health program,[29] that can assist

TABLE 1.
Examples of two brief screening tools

Scale	*Question(s)*	*Response Options*	*Scoring*
Single-Item Loneliness [17]	During the past week, how often have you felt lonely?	*Rarely or none of the time (e.g., less than 1 day)* *Sometimes or a little of the time (e.g., 1-2 days)* *Often or a moderate amount of time (e.g., 3-4 days)* *Almost all of the time (e.g., 5-7 days)*	Not lonely = rarely/none Lonely = sometimes or greater
UCLA Loneliness Scale [18]	How often do you feel that you lack companionship? How often do you feel left out? How often do you feel isolated from others?	*Hardly ever = 1* *Some of the time = 2* *Often = 3*	Total scores can range from 1-9. Higher scores = higher loneliness. Scores between 6-9 typically classified as lonely.

patients/clients in setting their own goals, which ideally are SMART (Specific, Measurable, Achievable, Realistic, and Time Related).

#9. Social Prescribing

a. Social prescribing should be considered to manage or alleviate social isolation and loneliness. This can include, for instance, connecting individual patients/clients with suitable organizations, programming or community resources that provide opportunities for social interaction and/or self-care. Social prescribing may also address the social determinants of health which are often key to improving health outcomes that may be impacted by social isolation or loneliness.
b. HCSSPs should consider a stepped-care approach to social prescribing, starting with the least intensive interventions. Regular review through a stepped-care approach can help determine whether other interventions are necessary, or whether recipients have been able to build or expand their capacity.
c. Link workers or system navigators can play an important role in assessing an individual's needs and connecting them with suitable organizations to build or foster greater social connection and reduce loneliness. In this way, they may support clinicians who may not have the same knowledge of resources.
d. Health and social service organizations should consider developing social prescribing strategies or teams, including designating a core team of staff to support implementing the strategy. Similarly, community organizations should consider developing relationships or partnerships with clinical organizations to share relevant social prescribing resources. [GRADE: Evidence: Moderate; Strength: Strong]

To help address social isolation and loneliness among older adults, HCSSPs may consider social prescribing: connecting clients with suitable organizations, resources or community activities. In essence, providers provide clients with a 'prescription' to connect with a group or resource, or to undertake a specific activity, with the goal of building or fostering greater social connections or reducing loneliness.[30,31] Pescheny *et al*. outline six models of social prescribing based on the type of staff involved in the program.[32] A stepped-care approach also facilitates assessing patient/client resilience, allowing for changes in interventions.[33]

#10. Social Activity

HCSSPs should support, encourage and empower individuals to engage at their optimal level of social activity. [GRADE: Evidence: Moderate; Strength: Strong]

Characteristics of effective services and interventions involving social activities include fostering empowerment of older adults, preserving their autonomy, supporting the development of significant relationships and activities, being personalized, and lasting at least six months.[34] HCSSPs should explore which social activities their patient/client has done previously, or is doing or could be doing according to personal and environmental resources and their interests.

#11. Physical Activity

HCSSPs should encourage their patients/clients to engage in group and/or individual physical activity as a means to reduce social isolation and loneliness and to improve their overall health. There is insufficient data to recommend a specific form of physical activity. HCSSPs are encouraged to have conversations with their patients/clients regarding opportunities for physical activity and active lifestyles. [GRADE: Evidence: Moderate; Strength: Strong]

While we cannot recommend a specific form of physical activity for social isolation and loneliness, we highlight available Canadian and World Health Organization (WHO) recommendations on physical activity for older adults for general health and wellbeing.[35,36] The Canadian Society for Exercise Physiology (CSEP) recommend a minimum of 150 minutes of moderate-vigorous aerobic physical activity per week, and muscle strengthening at least twice per week, whereas the WHO recommends multicomponent physical activity three or more days per week.[35,36] To our knowledge, no study discussed harms from physical activity, but this would likely be low in settings where activities can be adapted to the participant and supervised by a professional.

#12. Psychological Therapies

Psychological therapies should be considered for some older adults experiencing social isolation and/or loneliness. Psychological therapies include—but are not limited to—cognitive behavioural therapy, social cognitive therapy, reminiscence therapy, and mindfulness-based stress reduction. There is greater available evidence for psychological therapies in reducing loneliness compared to social isolation.[GRADE: Evidence: Moderate; Strength: Strong]

While potentially resource-intensive, there are important benefits beyond loneliness and social isolation, including the management of mood symptoms and coping strategies that have important implications on health. While there is a potential for virtually delivered platforms for psychological therapy, the importance of language, equitable access to technology, and technological literacy cannot be understated.

#13. Animal-Assisted Therapies and Ownership

Animal-assisted interventions and pet ownership may be helpful to some individuals although the evidence for this intervention is limited. [GRADE: Evidence: Low; Strength: Strong]

Animal-assisted interventions (AAIs), can be defined as all interventions of human-animal interactions.[38] Animal-assisted therapy is defined as the use of animals to "improve physical, social, emotional, or cognitive functioning" and is typically structured (e.g., trained animal handler and clear goals).[38,39]

#14. Leisure Skill Development and Activities

HCSSPs are encouraged to discuss leisure-skill development and activities as an opportunity for older adults to learn new

skills and engage in the local community. These activities and skills may include leisure education, art therapy, bibliotherapy, horticulture and nature-related interventions, and music therapy, amongst others. [GRADE: Evidence: Low; Strength: Weak]

#15. Technology

HCSSPs should intentionally engage with their patients/clients to further understand their access to and/or use of technology in their daily lives, and potential opportunities for using technology to reduce social isolation and loneliness. It is important to take into account the interest of the individual, their digital literacy, any sensory limitations, and financial capacity to access the internet and digital devices. [GRADE: Evidence: Moderate; Strength: Strong]

Prior to the pandemic, there was awareness of a growing digital divide[37] for those who had access to the internet and devices in their home, knew how to use the tools, versus those who were not digitally included. The pandemic exacerbated this social context, when people were forced to be in their homes and all public health information was being shared digitally. There is a growing movement to include digital inclusion as a "super social determinant of health" as it impacts almost all the other determinants.[40] An increased proportion of older adults are using technologies, and there are some educational or technical resources available to support them. Although studies evaluating the use of the Internet or social media have reported mixed results, some studies have found that online interventions may increase connection and decrease isolation, but others have shown no association. Further research is needed on the impact of technology aiming at reducing social isolation and loneliness in older adults, for example, on social robots. As part of the exploration of technology, it is important to also understand where there may be real and/or perceived barriers or concerns associated with technology, including Internet fraud and bullying.

#16. Pharmacological Therapy

HCSSPs should not use pharmacological agents as a treatment for social isolation and loneliness in older adults. Medication may be indicated if there is an underlying mental disorder or physical illness. [GRADE: Evidence: Low; Strength: Strong]

Previous studies examining the possible role of pharmacological agents for social isolation or loneliness have primarily been conducted in animals or in humans experiencing a mental health condition. The interventions have included allopregnanolone (ALLO) and oxytocin.[41,42] There is a paucity of studies in humans, and there is no convincing evidence that medication can alleviate loneliness per se. It should be noted that antidepressant medication can be very helpful for people who have an underlying depression or anxiety disorder.

#17. Reassessment

HCSSPs should take an individualized approach to the follow-up of social isolation and loneliness. We recommend HCSSPs reassess intervention efficacy and adherence, with a preference towards short-term follow-up. [Consensus]

A limited number of studies have serially reassessed participants following the completion of the intervention. Studies that repeated an assessment of social isolation and loneliness following intervention completion generally did so over months. As the sustainability of the effects of an intervention is uncertain, clinicians should reassess individuals to evaluate intervention efficacy and adherence.

DISCUSSION

These guidelines represent (to our knowledge) the first clinical recommendations developed for HCSSPs with regard to social isolation and loneliness. We note that they will be most helpful when implemented within a strong relational context between patients/clients and HCSSPs that includes open communication, trust, empathy, safety, and support. More can and should be offered by HCSSPs and their organizations to support older adults in preventing and/or managing the negative mental and physical health impacts of social isolation and loneliness. HCSSPs and their organizations need support to fulfill this role, not only from other HCSSPs but also from age-friendly organizations and communities.

The recommendations in these guidelines have been developed through an examination of existing literature and evidence; however, there is a lack of literature on clinical practice related to addressing social isolation and loneliness. These gaps in research and knowledge reflect many opportunities for future consideration by HCSSPs, their organizations, community-based senior services, the private sector, and all levels of government, including:

- National recognition that social isolation and loneliness is a "geriatric" giant and because of its complexity, will require the collective attention of many, working together, to raise awareness and find solutions. We recognize that other similar initiatives are emerging globally, such as in the UK, Japan, the Netherlands, and the USA, and that we can collaborate and learn from each other.
- Focused research to help understand the unique considerations of both social isolation and loneliness and the implications of each on the physical and mental health of older adults with particular emphasis on prevention and intervention.
- Specific investment in supporting programs and research focused on older adults from racialized groups, Indigenous, 2SLGTBQ+ communities, and diverse linguistic and cultural groups.
- Organizational policy, protocols, and practices that empower and support HCSSPs so they can actively fulfill their role as health partner with their patients/clients who may be at risk or already experiencing the mental and/or physical health impacts of social isolation and loneliness.
- Longitudinal monitoring of social isolation and loneliness, as separate but connected issues, in population surveys to evaluate trends and the impact of local, provincial, and national interventions.

CONCLUSION

In addition to empowering health-care and social services providers, these guidelines aim to inform public policy and the research agenda. We plan to update these guidelines as further research emerges to guide evidence-based practice.

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REFERENCES

1. Hawkley LC, Cacioppo JT. Loneliness matters: a theoretical and empirical review of consequences and mechanisms. *Ann Behav Med*. 2010 Oct 1;40(2):218–27.
2. Wu B. Social isolation and loneliness among older adults in the context of COVID-19: a global challenge. *Glob Health Res Policy*. 2020 Jun 5; 5(1):27.
3. Menec VH, Newall NE, Mackenzie CS, Shooshtari S, Nowicki S. Examining social isolation and loneliness in combination in relation to social support and psychological distress using Canadian Longitudinal Study of Aging (CLSA) data. *PLoS One*. 2020 Mar 23;15(3):e0230673. doi: 10.1371/journal.pone.0230673
4. Newall NE, Menec VH. A comparison of different definitions of social isolation using Canadian Longitudinal Study on Aging (CLSA) data. *Ageing Soc*. 2020 Dec;40(12):2671–94. doi:10.1017/S0144686X19000801
5. National Institute on Ageing. Perspectives on growing older in Canada: the 2023 NIA Aging in Canada Survey. Accessed 31st. March 2024: https://www.niageing.ca/2023-annual-survey
6. Kadowaki L, Wister A. Older adults and social isolation and loneliness during the COVID-19 pandemic: an integrated review of patterns, effects, and interventions. *Can J Aging*. 2023 Jun;42(2):199–216.
7. National Institute on Ageing. Understanding social isolation and loneliness among older Canadians and how to address it. 2022. Accessed 31st. March 2024: https://static1.squarespace.com/static/5c2fa7b03917eed9b5a436d8/t/637628e674654241f5624512/1668688106493/Social+Isolation+Report+-+FINAL2.pdf
8. National Academies of Science, Engineering and Medicine. Social isolation and loneliness in older adults—opportunities for the health care system. 2020. Accessed 31st. March 2024: https://nap.nationalacademies.org/catalog/25663/social-isolation-and-loneliness-in-older-adults-opportunities-for-the health care system
9. United Stated Government, Health and Human Services. Our epidemic of loneliness and isolation: the U.S. Surgeon General's Advisory on the Healing Effects of Social Connection and Community. Office of the U.S. Surgeon General, Washington, DC; 2023. Accessed 31st. March 2024: https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf
10. Wikipedia. Loneliness. Accessed 31st. March 2024: https://en.wikipedia.org/wiki/Loneliness
11. CCSMH/ Canadian clinical guidelines on social isolation and loneliness in older adults. Canadian Coalition for Seniors' Mental Health; 2024. Accessed 31st. March 2024: https://ccsmh.ca/wp-content/uploads/2024/02/DIGITAL-CCSMH-Clinical-Guidelines-SOCIAL-ISOLATION-eng_FINAL.pdf
12. Hoang P, King JA, Moore S, Moore K, Reich K, Sidhu H, *et al*. Interventions associated with reduced loneliness and social isolation in older adults: a systematic review and meta-analysis. *JAMA Netw Open*. 2022 Oct 3;5(10):e2236676. doi: 10.1001/jamanetworkopen.2022.36676
13. Guyatt GH, Oxman AD, Vist GE, Kunz R, Falck-Ytter Y, Alonso-Coello P, *et al*. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ*. 2008 Apr 24; 336(7650):924–26.
14. Thompson C, Halcomb E, Masso M. The contribution of primary care practitioners to interventions reducing loneliness and social isolation in older people—an integrative review. *Scand J Caring Sci*. 2023 Sep; 37(3):611–17.
15. Holt-Lunstad J, Perissinotto C. Social isolation and loneliness as medical issues. *New Engl J Med*. 2023 Jan 19;388(3):193–95.
16. Galvez-Hernandez P, González-de Paz L, Muntaner C. Primary care-based interventions addressing social isolation and loneliness in older people: a scoping review. *BMJ Open*. 2022 Feb 1; 12(2):e057729.
17. Radloff LS. A self-report depression scale for research in the general population. *Appl Psychol Measure*. 1977;1:385–401.
18. Hughes ME, Waite LJ, Hawkley LC, Cacioppo JT. A short scale for measuring loneliness in large surveys: results from two population-based studies. *Res Ageing*. 2004 Nov;26(6):655–72.
19. de Jong Gierveld J, Van Tilburg TG. A six-item scale for overall, emotional, and social loneliness. *Res Aging*. 2006 Sep 1; 28(5):582–98.
20. Campaign to End Loneliness. Measuring your impact on loneliness in later life. 2015. Accessed 31st. March 2024: https://www.campaigntoendloneliness.org/wp-content/uploads/Loneliness-Measurement-Guidance1.pdf
21. Newall N, Menec V. Targeting Isolation [Internet]. 2023. Accessed 31st. March 2024: https://www.targetingisolation.com/resources?pgid=lfttltf62-4d419a7d-2545-4aad-adbe-5d17261f7fb8

22. Lubben J, Blozik E, Gillman G, Iliffe S, von Rentln Kruse W, Beck JC, *et al*. Performance of an abbreviated version of the Lubben Social Network Scale among three European community-dwelling older adult populations. *Gerontologist*. 2006 Aug 1;46(4):503–13.
23. Berkman LF, Syme SL. Social networks, host resistance, and mortality: a nine-year follow-up study of Alameda County residents. *Am J Epidemiol*. 1979 Feb 1;109(2):186–204.
24. Menec VH, Newall NE, Mackenzie CS, Shooshtari S, Nowicki S. Examining individual and geographic factors associated with social isolation and loneliness using Canadian Longitudinal Study on Aging (CLSA) data. *PloS One*. 2019 Feb 1; 14(2):e0211143.
25. Steptoe A, Shankar A, Demakakos P, Wardle J. Social isolation, loneliness, and all-cause mortality in older men and women. *PNAS*. 2013 Apr 9;110(15):5797–801.
26. Matthews KA, Adler NE, Forrest CB, Stead WW. Collecting psychosocial "vital signs" in electronic health records: Why now? What are they? What's new for psychology? *Am Psychol*. 2016 Sep;71(6):497–504.
27. Elder K, Retrum J. Framework for Isolation in Adults Over 50. American Association of Retired Persons Foundation. 2012. Accessed 31st. March 2024: https://www.aarp.org/content/dam/aarp/aarp_foundation/2012_PDFs/AARP-Foundation-Isolation-Framework-Report.pdf
28. Donovan NJ, Blazer D. Social isolation and loneliness in older adults: review and commentary of a national academies report. *Am J Geriatr Psychiatry*. 2020 Dec 1;28(12):1233–44.
29. Gough A, Cassidy B, Rabheru K, Conn D, Canales DD, Cassidy KL. The Fountain of Health: effective health promotion knowledge transfer in individual primary care and group community-based formats. *Int Psychogeriatr*. 2019 Feb;31(2):173–80.
30. Kimberlee R. What is the value of social prescribing? *Adv Soc Sci Res J*. 2016;3(3):29–35.
31. Alliance for Healthier Communities. Rx: Community—Social Prescribing in Ontario, Progress Report June 2019. Accessed 31st. March 2024: https://www.allianceon.org/sites/default/files/documents/Rx-Community-Progress-Report-EN-June2019-web.pdf
32. Pescheny JV, Pappas Y, Randhawa G. Facilitators and barriers of implementing and delivering social prescribing services: a systematic review. *BMC Health Serv Res*. 2018 Dec;18(1):86.
33. Richards D, Bower P, Pagel C, Weaver A, Utley M, Cape J, *et al*. Delivering stepped care: an analysis of implementation in routine practice. *Implement Science*. 2012 Dec;7(3).
34. Raymond E, Sévigny A, Tourigny A, Vézina A, Verreault R, Guilbert A. On the track of evaluated programmes targeting the social participation of seniors: a typology proposal. *Ageing Soc*. 2013 Feb;33(2):267–96.
35. Canadian Society for Exercise Physiology. Canadian 24-hour movement guidelines for adults 65+: an integration of physical activity, sedentary behaviour, and sleep. 2020. Accessed 31st. March 2024: https://csep.ca/guidelines
36 World Health Organization. Physical activity. 2022. Accessed 31st. March 2024: https://www.who.int/news-room/fact-sheets/detail/physical-activity
37. Tomer A, Fishbane L, Siefer A, Callahan B. Digital prosperity: how broadband can deliver health and equity to all communities. Metropolitan Infrastructure Initiative: Brookings Institution; 2020. Accessed 31st. March 2024: https://www.brookings.edu/wp-content/uploads/2020/02/20200227_BrookingsMetro_Digital-Prosperity-Report-final.pdf
38. Matchock RL. Pet ownership and physical health. *Curr Opinion Psychiatry*. 2015 Sep 1;28(5):386–92.
39. American Psychological Association. Animal-assisted therapy [definition]. 2018. Accessed 31st. March 2024: https://dictionary.apa.org/animal-assisted-therapy
40. Sieck CJ, Sheon A, Ancker JS, Castek J, Callahan B, Siefer A. Digital inclusion as a social determinant of health. *NPJ Digital Med*. 2021;4(1):53.
41. Bartz JA, Zaki J, Bolger N, Ochsner KN. Social effects of oxytocin in humans: context and person matter. *Trends Cognit Sci*. 2011 Jul 1;15(7):301–09.
42. Cacioppo S, Cacioppo JT. Why may allopregnanolone help alleviate loneliness? *Med Hypotheses*. 2015 Dec 1;85(6):947–52.
43. de Jong Gierveld J, Keating N, Fast J. Determinants of loneliness among older adults in canada. *Can J Aging*. 2015 Jun;34(2):125–36.
44. Kirkland SA, Griffith LE, Oz UE, Thompson M, Wister A, Kadowaki L, *et al*. Increased prevalence of loneliness and associated risk factors during the COVID-19 pandemic: findings from the Canadian Longitudinal Study on Aging (CLSA). *BMC Public Health*. 2023 May 12;23(1):872. Available from https://doi.org/10.1186/s12889-023-15807-4

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