EVIDENCE SYNTHESIS BRIEFING NOTE

TOPIC: IMPACTS ON QUADRUPLE-AIM METRICS OF LONG-TERM CARE FACILITY VISITOR RESTRICTIONS

Information finalized as of September 24, 2020.[a] This Briefing Note was completed by the Research, Analysis, and Evaluation Branch (Ministry of Health) in collaboration with members of the COVID-19 Evidence Synthesis Network. Please refer to the Methods section for further information.

Purpose: This note examines the risk of COVID-19 transmission in long-term care facilities (LTCFs) and the impacts on quadruple-aim metrics of visitor restrictions in LTCFs based on public health measures, the state of the pandemic, and alternative communication modalities.

Key Findings:

- **Risk of Transmission**: Overall, the scientific evidence linking visitors' and caregivers' presence in LTCFs to COVID-19 infection rates in LTCFs is limited.
- **Visitor Restrictions**: Limited evidence was found relating directly to the quadruple aim, except in terms of health-related benefits of public health measures (e.g., preventing transmission of COVID-19).
  - No Visitors with No Exceptions: Sweden and South Korea restrict visitors in LTCFs.
  - Limited Visitors with Specific Exceptions: Research evidence highlights the importance of restricting visitors to protect LTCF residents, while also noting the importance of visitors to residents' well-being, particularly for those nearing end-of life or in other compassionate care circumstances. British Columbia, Quebec, China, Germany, and Italy adjust LTCF visitor policies based on the state of the pandemic in the local community. In Spain and Singapore, residents can designate a limited number of visitors. Several Canadian provinces limit designated visitors to between one and five, and Yukon does not permit general visitors but permits two pre-identified visitors in cases where the resident is nearing the end-of-life or has special needs.
  - Public Health Measures: Scientific evidence and jurisdictional experience suggest measures such as: limiting the number of visitors, maintaining visitor logs, screening visitors for temperature and symptoms, daily cleaning of frequently touched surfaces and weekly deep cleans, personal protective equipment for staff, masks for visitors, contact tracing, and immediate stop of visitors should COVID-19 be confirmed within a LTCF.
- **Alternative Communication Modalities**: Evidence on measures to mitigate any potential harms associated with LTCF visitor restrictions was identified for video and audio calls. Many Canadian provinces offer alternatives for visitors on an institutional basis, except in Nova Scotia where LTCFs across the province are providing virtual options (e.g., video calls) for visits. Outdoor visitor limits differ by province (e.g., two-five visitors in Alberta).

Analysis for Ontario: Effective September 9, 2020, there are visitation restrictions for: 1) essential visitors including caregivers, support workers, and those providing essential services (e.g., any number of support workers may visit, but there is a maximum of two caregivers per resident at a time, or one caregiver per resident during an outbreak); and 2) general visitors (e.g., a maximum of two general visitors per resident are permitted if the resident is not self-isolating or symptomatic and when there is no outbreak). Accompanying public health measures for all visitors include verbally attesting to testing negative for COVID-19 within the previous two weeks, sanitizing hands upon arrival and departure, wearing a mask during the entire visit, and maintaining physical distance.

Implementation Implications: There is limited scientific evidence linking visitors to COVID-19 infection rates in LTCFs, however, many international and Canadian jurisdictions are restricting numbers of visitors along with implementing public health measures and alternative communication modalities (e.g., outdoor visiting).

[a] This briefing note includes current available evidence as of the noted date. It is not intended to be an exhaustive analysis, and other relevant findings may have been reported since completion.

Supporting Evidence

Table 1 below summarizes the scientific evidence and jurisdictional experiences regarding the risk of COVID-19 transmission in LTCF and the impacts on quadruple-aim[b] metrics of visitor restrictions and exceptions in LTCFs based on public health measures, the state of the pandemic, and alternative communication modalities. In terms of jurisdictional experience, information is presented on all Canadian provinces and territories, Australia, China, Germany, Italy, the Netherlands, Singapore, South Korea, Spain, Sweden, Switzerland, the United Kingdom (UK), and the United States (US). The following framework was used to organize the findings:

- **Rate of Transmission**: Rate of transmission of COVID-19.
- **Visitor Restrictions and Exceptions**: No visitors, no exceptions; limited visitors with specific exceptions (e.g., end of life, language barriers); and other restrictions.
- **Accompanying Public Health Measures**: Institutional and in the community (but only when intersecting with visitor policies for institutions).
- **Alternative Communication Modalities**: Video calls, telephone calls, and others.
- **Quadruple Aim Metrics**:
    - Health-related benefits to patients, families, and caregivers of visitors (e.g., reduced infections in facility or in community, reduced delirium);
    - Health-related harms to patients, families, and caregivers from restriction of visitors (e.g., worsened mental health);
    - Experiences of patients, families, and caregivers (e.g., help with care and support, help with translation, less worry, less sedatives/constraints);
    - Experiences of providers (e.g., many stressful calls with families); and
    - Per capita costs or resource consumption more generally (e.g., reduced personal protective equipment [PPE] consumptions, staffing and iPad constrains, reduced sedative use).

Additional details are provided in the Appendix as follows: Table 2 (for key findings from highly relevant evidence documents on transmission risk and visitor policies), Table 3 (for visitor restrictions in LTCFs in Canadian provinces and territories), Table 4 (for visitor restrictions in LTCFs in other countries), Table 5 (for information on the psychological and social effects of COVID-19 on LTCF residents), Table 6 (for information on the psychological and social effects of COVID-19 on LTCF residents with dementia), Table 7 (for best practices to support LTCF staff during COVID-19), and Table 8 (for literature on concerns of LTCF staff during COVID-19).

[b] The four objectives of the Quadruple Aim are: 1) improving the patient and caregiver experience; 2) improving health of populations; 3) reducing the per capita cost of health care; and 4) improving the work life of providers (Ontario.ca, 2020).

Table 1: Scientific Evidence and Jurisdictional Experiences Regarding the Risk of COVID-19 Transmission in LTCFs and the Impacts on Quadruple-Aim Metrics of Visitor Restrictions/Exceptions in LTCFs

Scientific Evidence	• **Risk of Transmission of COVID-19**: Limited sources provided evidence about rates of transmission attributable to visitors including overall transmission rates in LTCFs.[1] For example: ○ A systematic review (June 26, 2020) noted that outbreak investigations in LTCFs found COVID-19 incidence rates between 0.0% and 72% among residents and between 1.5% and 64% among staff.[2] ○ Two studies (June 2 and August 17, 2020) yielded conflicting results regarding COVID-19 outbreaks in LTCFs in Ontario and the US. In Ontario, the for-profit status of LTCFs was associated with the extent of COVID-19 outbreaks and the number of deaths, with key factors including older design standards and chain ownership. In contrast, in the US, nursing homes that were not part of a chain were in urban locations and had a greater percentage of African-American residents with an increased probability of COVID-19 infections.[3] ○ One study (July 2020) from the Netherlands noted no new cases of COVID-19 three weeks following the re-opening of 26 nursing homes to visitors with designated guidance. However, the results of this study must be interpreted with caution due to the short time frame and the multitude of factors that could impact COVID-19 transmission risk from visitors in LTC (e.g., prevalence in the community, precautions taken during visits).[4] • **Visitor Restrictions**: Limited information was found relating directly to the quadruple aim, except for findings relating to the health-related benefits of public health measures (e.g., preventing transmission of COVID-19).[5] ○ No Visitors with No Exceptions: No information identified. ○ Limited Visitors with Specific Exceptions: Guidelines (May 29, April, and July 2020), a rapid review (no date provided), and a study (March 18, 2020) highlighted the importance of restricting visitors to protect LTCF residents, while also noting the importance of visitors to residents' well-being, particularly for those nearing end-of life or in other compassionate care circumstances.[6,7] ▪ A rapid review (September 2020) found there is a lack of published research on the psychological and social implications of COVID-19-related isolation measures for residents of LTCFs. Existing research on the effects of isolation in older adults in general has shown that isolation is associated with anxiety, depression, cognitive decline, malnourishment, and increased loneliness. Isolation and loneliness are associated with cognitive decline, the progression of Alzheimer's disease, and an increased risk for developing dementia.[8,c] • **Visitor Restrictions and Accompanying Public Health Measures**: ○ Two guidelines (March 21 and June 2, 2020) noted the importance of adjusting LTCF visitor policies based on the active number of COVID-19 cases, trends in local areas, and availability of PPE and testing supplies.[9] ○ Infection Control Measures: Four rapid reviews (September 2, 2020; March 16, 2020; no date provided for two) and one study (April 3, 2020) found the following infection control measures had been put in place in LTCFs: ▪ Limiting the number of visitors; ▪ Maintaining visitor logs;

[c] These associations do not necessarily indicate causation. Resources included in this CADTH report were not critically appraised for their quality (CADTH B, 2020).

	▪ Screening visitors for temperature and symptoms; ▪ Daily cleaning of frequently touched surfaces and weekly deep cleans; ▪ PPE wearing for staff and masks for visitors; ▪ Diagnostic testing in the case of suspected exposure; ▪ Contact tracing for confirmed cases; and ▪ Immediate shut down of visitors should a case of COVID-19 be confirmed within the facility.[10] ○ Relationship between Policy Responses and Deaths: An analysis (June 2020) comparing Canada to 16 other countries[d] found that countries that implemented LTCF visitor restrictions as part of their policy response had fewer COVID-19 deaths in LTCFs compared to those that did not. The addition of further policy responses in LTCFs (e.g., surge staffing, PPE funding, isolation wards, infection control training and audit) led to even further decreases in COVID-19-related deaths in LTCFs. However, there are limitations to these findings, such as differences in adherence to and implementation of policies, multiple interventions bundled together in different "levels" of policy responses, differences in the baseline prevalence of COVID-19 across countries and regions, and differences in reporting practices.[11] ○ Best Practices for Supporting Staff: A rapid review (September 2020) noted that multiple measures are essential to support staff in re-opening processes of LTCFs during the pandemic: ▪ The most prominently recommended measures included adequate PPE and resources, adequate staffing levels, adequate training of infection prevention and control (IPC) protocols, access to IPC specialty teams on site, access to relevant medical staff, financial incentives to limit work between facilities, and policies to promote and enforce sick leave. Employing these strategies, as well as regularly monitoring staff well-being and having transparent communication about COVID-19 updates, supports LTCF staff in continuing their role in a meaningful way, even as visitor restrictions are relaxed. ▪ Potential options to improve LTCF environments include investing in electronic devices to streamline visitation protocols and investing in infrastructure (e.g., isolation rooms, separate bathrooms) to support outbreak preparedness.[12,e] • **Alternative Communication Modalities**: Evidence on measures that can be put in place to mitigate any potential harms associated with LTCF visitor restrictions was identified for video and audio calls, and other communication guidance: ○ A World Health Organization guidance (March 21, 2020) noted that where visitors to LTCFs have been reduced, alternatives to in-person visiting should be explored such as support video and audio calls with family members. ○ A study (June 4, 2020) found that inpatient palliative care electronic meetings were feasible and acceptable during the COVID-19 pandemic.[13] ○ A rapid review (March 31, 2020) advised that those working in LTCFs should plan for frequent communication between residents, caregivers, friends, volunteers, and community organizations providing support and should speak to residents about their preferred means of communicating with friends and family, offering user assistance as needed.[14]
International Scan	• **No Visitors with No Exceptions**: ○ In Sweden, there is an ongoing ban on visits to LTCFs, however, as of August 31, 2020, consultations were taking place to develop a program to assess how exemptions can be made.

[d] The 16 countries included in the analysis were: Australia, Austria, Belgium, France, Germany, Hungary, Ireland, Israel, Italy, the Netherlands, Norway, Portugal, Slovenia, Spain, the UK, and the US (CADTH C, 2020).
[e] Resources included in this report were not critically appraised for their quality (CADTH A, 2020).

	○ In South Korea, entry of visitors at senior care facilities is restricted.[15] • **Limited Visitors and Accompanying Public Health Measures**: ○ China, Germany, and Italy adjust LTCF visitor policies based on the state of the pandemic in the local community: ▪ In China, nursing homes in medium- and high-risk regions are not allowing visitors. ▪ In Germany, where active COVID-19 cases are present, visitors are not allowed except for relatives of persons at the end of life. ▪ In Italy, allowing external visitors of LTCFs is up to the discretion of the Clinical Director of each organization. ○ In Switzerland, while visits are permitted to LTCFs, they are not recommended; those that wish to visit may set up an arrangement to do so with the individual facility. LTCFs differ in terms of precautions, rules of conduct, and visiting times permitted. ○ In both Spain and Singapore, a staged approach is being used where residents are allowed to designate a limited number of visitors. ○ Common public health practices in place to help mitigate the potential risks of visitors include: ▪ Maintaining physical distance (Germany); ▪ Washing or disinfecting hands upon entry and exit (Germany and Singapore); ▪ Putting in place physical barriers in visiting spaces between residents and their families (i.e., plexiglass or alternative) (Germany); ▪ Requiring residents to designate select visitor(s) (Singapore); ▪ Screening of visitors for symptoms prior to entry (Singapore); ▪ Time limits on visits (Singapore); and ▪ Requiring appointment times for visitors (Singapore).[16] • **Alternative Communication Modalities**: No examples identified.
Canadian Scan	• **No Visitors with No Exceptions**: No examples identified. • **Limited Visitors with Specific Exceptions**: ○ In Canada, the Yukon has the strictest visitor policies in place, whereby general visitors are not permitted, though two pre-identified visitors are permitted in cases where the resident is nearing the end-of-life or has special needs. ○ Alberta, Manitoba, Ontario, Newfoundland and Labrador, Nunavut, and Prince Edward Island (PEI) are limiting the number of designated visitors to between one and five. ▪ In Nunavut, there is a requirement that the visitors are immediate family which includes grandchildren and great-grandchildren. ▪ In PEI, all residents are allowed to identify three “partners in care”. One of the selected individuals will be able to visit the resident at all times of the day. Overnight stays may be permitted if the visitor follows infection control protocols. Patients may also leave the facility if they will have limited contact with others. ○ British Columbia and Quebec adjust LTCF visitor policies based on the state of the pandemic in the local community: ▪ In British Columbia, social visits are currently allowed in LTCFs, however social visits are no longer permitted if a COVID-19 outbreak is declared within the LTCF or community rates rise significantly. ▪ In Quebec, the government relaxed restrictions related to visitors given the reduction in community cases, but these may be tightened should there be a resurgence of COVID-19 cases.[17]

	• **Public Health Measures**: Common public health practices in place to help mitigate the potential risks of visitors include: ○ Designating one (or two) individuals to be visitors (British Columbia, Ontario, New Brunswick, and Yukon); ○ Washing or disinfecting hands upon entry and exit (British Columbia, Ontario, and Northwest Territories); ○ Assigning social areas to see visitors within the facilities (British Columbia); ○ Maintaining physical distance (British Columbia, Ontario, Yukon, and Northwest Territories); ○ Wearing a mask or other PPE during visit (Ontario, Yukon, and Northwest Territories); ○ Scheduling a visit in advance (Ontario and New Brunswick); and ○ Limiting the number of visitors at a given time and on a given day (New Brunswick).[18] • **Alternative Communication Modalities**: Many provinces have put in place alternatives to visitors on an institutional basis, however, in Nova Scotia, LTCFs across the province are providing virtual options for visits including video calls. In addition, many other provinces are recommending that visitors make use of outdoor space and are increasing visitor limits outdoors as long as physical distancing guidelines are followed. Visitor limits for outdoors differ by province; for example, in Alberta, between two and five visitors are allowed.[19]
Ontario Scan	• **No Visitors, with No Exceptions**: No examples identified. • **Limited Visitors**: Effective September 9, 2020, there are distinct visitation restrictions for: 1) essential visitors including caregivers, support workers, and those providing essential services (e.g., food delivery, inspector maintenances, health care service providers, or individuals visiting palliative residents); and 2) general visitors (e.g., who provide non-essential services, or for social reasons such as family members or friends not involved in direct care). Restrictions for *essential visitors* include: ○ Any number of support workers may visit. ○ Maximum of two caregivers (at least 18 years of age and designated by the resident and/or decision-makers) per resident at a time, or one caregiver per resident during an outbreak or if the resident is self-isolating or symptomatic at a LTCF during an outbreak. ○ A caregiver may not visit any other resident for 14 days after visiting another resident who is self-isolating, symptomatic, or there is an outbreak at the LTCF.[20] • A maximum of two *general visitors* per resident are permitted if the resident is not self-isolating or symptomatic and when there is no outbreak (visitors under the age of 14 years of age should be accompanied by an adult).[21] • **Public Health Measures**: Accompanying public health measures for essential and general visitors include verbally attesting to testing negative for COVID-19 within the previous two weeks, sanitizing hands upon arrival and departure, wearing a mask during the entire visit, and maintaining physical distance (at least two metres). During outbreaks, essential visitors must be screened and wear PPE during the visit (in addition to the measures).[22] ○ LTCFs do not require restrictions for length or frequency of visits by essential visitors; however, general visitors may be required to schedule visits in advance and limit the length or frequency of the visit.[23] ○ LTCFs may temporarily prohibit a visitor due to repeated violations to visiting policies.[24] • **Alternative Communication Modalities**: No information was identified.

Methods

The COVID-19 Evidence Synthesis Network is comprised of groups specializing in evidence synthesis and knowledge translation. The group has committed to provide their expertise to provide high-quality, relevant, and timely synthesized research evidence about COVID-19 to inform decision makers as the pandemic continues. The following members of the Network provided evidence synthesis products that were used to develop this Evidence Synthesis Briefing Note:

- Waddell K, Wilson MG, Moat KA, Wang Q, Gauvin FP, Ahmad A, Alam S, Bhuiya A, Tchakerian N, Lavis JN. (September 24, 2020). COVID-19 rapid evidence profile #19: What is the risk of transmission of COVID-19 in hospital and long-term care settings, and the impacts of hospital-visitor policies? *Hamilton: McMaster Health Forum*.
- Canadian Agency for Drugs and Technologies in Health (CADTH) A. (September 2020). CADTH Implementation Support & Knowledge Mobilization Summary: Synopsis of the Evidence on Best Practices for Supporting Staff and Mitigating Concerns during Re-Opening of Long-Term Care Homes.
- Canadian Agency for Drugs and Technologies in Health (CADTH) B. (September 2020). CADTH Implementation Support & Knowledge Mobilization Summary: Psychological and Social Effects/Implications of Isolation for Long-Term Care Residents: Synopsis of Reference Search Results.
- Canadian Agency for Drugs and Technologies in Health (CADTH) C. (September 2020). CADTH Implementation Support & Knowledge Mobilization Summary: COVID-19 Infection Risk Related to Visitors in Long-Term Care.

For more information, please contact the Research, Analysis and Evaluation Branch (Ministry of Health).

APPENDIX

Table 2: Key Findings from Highly Relevant Evidence Documents on Long-Term Care Facility (LTCF) Transmission Risk and Visitor Policies[25,f]

Questions	Key findings related to long-term care homes
Risk of transmission (question 1)	*Key findings from full systematic reviews* • Outbreak investigations in long-term care facilities found COVID-19 incidence rates of between 0.0% and 72% among residents and between 1.5% and 64% among staff (AMSTAR rating 6/10; literature last searched 26 June 2020) *Key findings from primary studies* • An analysis of profit status of all long-term care homes in Ontario, Canada and outbreaks in them (including the extent of outbreaks and number of deaths from COVID-19) found that for-profit status is associated with the extent of a COVID-19 outbreak and the number of deaths among residents, but not the likelihood of an outbreak occurring (published 17 August 2020) • Older design standards and chain ownership explained most of the differences between for-profit and not-for-profit long-term care homes (published 17 August 2020) • Nursing homes with an increased probability of having a COVID-19 infection in the U.S. include those that are larger, in urban locations, with a greater percentage of African-American residents, and those that are not part of a chain of facilities (published 2 June 2020) • High-quality ratings, prior infection violations, dependency on Medicaid funding and status of ownership were not found to be associated with having at least one COVID-19 case among U.S. nursing homes (published 2 June 2020)
Visitor restrictions (and exceptions) **in general and in priority settings (question 2)**	**No visitors, no exceptions** • No findings from highly relevant evidence documents were identified **Limited visitors with specific exceptions (e.g., end-of-life, ICU, labour and language barriers)** *Key findings from guidelines developed using a robust process* • Visiting for patients with dementia who are distressed or patients who are approaching the end of life should be considered as early as possible, which requires that personal protective equipment be made available for visitors following national guidance (Scottish Intercollegiate Guidelines Network; last updated 29 May 2020) • Ethical frameworks and principles should be applied to the issue of family presence at the time of death during the COVID-19 pandemic (Scottish Academy of Medical Royal Colleges, the Royal College of Physicians of Edinburgh, Marie Curie and Scottish Care; last updated April 2020)

[f] Waddell et al (2020) appraised the methodological quality of full systematic reviews and rapid reviews using AMSTAR. Note that quality appraisal scores for rapid reviews are often lower because of the methodological shortcuts that need to be taken to accommodate compressed timeframes. AMSTAR rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to delivery, financial or governance arrangements within health systems or to broader social systems.

Questions	Key findings related to long-term care homes
	Key findings from rapid reviews • Effectiveness of infection-control measures is dependent on combinations of strategies and visitors should be temporarily restricted to only emergency or critical cases (AMSTAR rating 1/9; literature search date not provided) *Key findings from primary studies* • Long-term care facilities should take proactive steps to protect the health of staff and residents, through restricted visitation except in compassionate care circumstances, early recognition of potentially infected patients and appropriate infection-prevention and control measures (published 18 March 2020) **Other types of restrictions** • No findings from highly relevant evidence documents were identified
Visitor restrictions that are adjusted based on the public-health measures that are in place within the institution to mitigate the potential risks of visitors (e.g., screening at entry; adherence to mask wearing and physical distancing) **and/or based on the state of the pandemic in the local community** (e.g., low rate of new infection) **or adherence to public-health measures** (e.g., mark and physical distancing) **(question 3)**	**Public-health measures based on the state of the pandemic in the local community** *Key findings from guidelines developed using a robust process* • The decision to allow general visitation in aging services is dependent on many factors, including: local and state government mandates; active COVID-19 cases and trends in the local area; and available personal protective equipment and testing supplies (ECRI Guidelines Trust; last updated 2 June 2020) • In areas where COVID-19 transmission has been documented, access to visitors in long-term care facilities should be restricted and avoided as much as possible (WHO technical guidance; last updated 21 March 2020) **Public-health measures that are in place within the institution to mitigate the potential risks of visitors** *Key findings from rapid reviews* • Many countries are easing restrictions on visitor policies using general recommendations which include: limiting the number of visitors; maintaining visitor logs; screening visitors; maintaining physical distancing when visiting; implementing strict hand hygiene measures among visitors; and in the case of COVID-19 being confirmed within the facility immediately stopping visitation (AMSTAR 2/9; literature last searched 2 September 2020) • Hand hygiene facilities should be provided throughout the facility alongside daily cleaning of frequently touched surfaces and weekly deep cleans of the institution should be completed (AMSTAR rating 1/9; literature search date not provided) • Public-health measures to avoid secondary transmission include hand hygiene practices, disinfecting surfaces, diagnostic testing to confirm cases, respiratory hygiene and cough etiquette, providing cleaning supplies to residents, education of staff and/or residence, consulting or notifying health professionals, appropriate ventilation practices, and cohorting residents (AMSTAR rating 7/9; published 16 March 2020) • Infection-control measures employed at a long-term care facility included screening and regularly testing all staff, residents and visitors, contact tracing for confirmed cases of COVID-19, additional training for staff on infection control and use of PPE, and reviews of environmental cleaning and disinfection practices (AMSTAR rating 6/9; literature search date not provided) *Key findings from primary studies* • Once a COVID-19 case is identified in a long-term care facility, facilities need to implement a broad range of strategies to reduce transmission, including restricting resident-to-resident interactions, universal face-mask use, and use of PPE for the care of all residents, and if testing capacity is available, additional testing should be used to detect cases and inform additional prevention strategies such as forming resident cohorts (published 3 April 2020)

Questions	Key findings related to long-term care homes
Measures that can be put in place to mitigate any potential harms associated with visitor restrictions (e.g., alternative communication modalities such as iPad 'visits') **(question 4)**	**Video calls** *Key findings from guidelines developed using a robust process* • Where visitors to long-term care facilities have been reduced, alternatives to in-person visiting should be explored such as support video and audio calls with family members (WHO technical guidance; last updated 21 March 2020) **Telephone calls** • No findings from highly relevant evidence documents were identified **Other** *Key findings from rapid reviews* • Those working in long-term care facilities should plan for frequent communication between residents, caregivers, friends, volunteers and community organizations providing support and should speak to residents about their preferred means of communicating with friends and family, offering user assistance as needed (AMSTAR 2/9; published 31 March 2020) *Key findings from primary studies* • Inpatient palliative care electronic family meetings were found to be feasible and acceptable during the COVID-19 pandemic (published 4 June 2020)

Table 3: Visitor Restrictions in Long-Term Care Facility (LTCF) in Canadian Provinces and Territories[26]

Province/Territory	Visitor Restrictions
British Columbia	• The Ministry of Health of British Columbia has released their visitation policy for long-term care. These guidelines permit both essential and social visits, though certain restrictions still apply. ○ Essential visits are still permitted. ○ Social visits are restricted to one designated individual (whether a family member or friend). Visitors must arrange their own appointment beforehand, wear masks, adhere to the appropriate hand hygiene and physical distancing measures, and stay within the assigned "socializing" areas. • If a COVID-19 outbreak is declared, social visits will no longer be permitted at long-term care facilities.
Alberta	• On 12 August 2020, Alberta Health Services updated their guidance on patient visitation regulations in long-term care settings. ○ Guidelines are structured based on two distinct categories, which include visits from a: 1) Designated Family/Support Person; and 2) visitor. ○ A Designated Family/Support Person is a classified as an individual (e.g., family member or friend) who is involved in the ongoing care and support of a patient, while a visitor is not directly involved with the patient's needs but temporarily visits to "socialize". • Restrictions in long-term care settings vary based on indoor or outdoor settings: ○ Up to two Family/Support Persons can be designated for indoor visits, while up to a maximum of five individuals (including the resident) may engage in outdoor visits. ○ Under certain circumstances—such as palliative care or legal matters—rare exceptions may apply (e.g., allowing additional visitors and having up to three individuals for indoor visits).
Saskatchewan	• The following visitor restrictions have been implemented across all Saskatchewan Health Authority facilities, including long-term care. • A maximum of two individuals (e.g., family members) can be designated as support persons. Though, it is worth noting that only one may accompany the patient or resident in the facility at a given time. • Patients in palliative, pediatric, maternal services, or intensive care units may be permitted to have two individuals present at a given time as long as physical distancing can be practiced. • Additional support persons can be designated in the case of palliative or end-of-life patients. • Several health and safety measures are in place for visitors, including: pre-screening for symptoms; performing temperature checks; practicing appropriate hand hygiene techniques; and wearing medical grade masks. • Outdoor visits are recommended as an alternative option to indoor visits; these gatherings may consists of a larger number of visitors as long as public health protocols can be maintained.
Manitoba	• In addition, Shared Health (Manitoba) has released guidance on visitor restrictions for long-term care settings. ○ Key features from this document consist of the following: 1) each resident is able to designate two caregivers who will help provide regular support for their needs; and 2) permitting visitors to interact with residents (limits on these gatherings will vary depending on community rates of COVID-19 transmission and available outdoor space). • Also, specific regulations may vary depending on the severity of COVID-19 transmission in the community (i.e. care levels are classified as critical, restricted, or caution; and each one of these stages has its own set of visitor restrictions).
Ontario	• Effective 9 September, 2020, there are distinct visitation restrictions for: 1) essential visitors include caregivers, support workers, and those providing essential services (e.g., food delivery, inspector maintenances, health care service providers, or individuals visiting palliative residents); 2) and general visitors (e.g., who provide non-essential services, or for social reasons such as family members or friends not involved in direct care). Restrictions for essential visitors include: ○ Any number of support workers may visit;

Province/Territory	Visitor Restrictions
	○ Maximum of two caregivers (at least 18 years of age and designated by the resident and/or decision-makers) per resident at a time, or one caregiver per resident during an outbreak or if the resident is self-isolating or symptomatic a long-term care home during an outbreak; and ○ A caregiver may not visit any other resident for 14 days after visiting another resident who is self-isolating, symptomatic, or there is an outbreak at the long-term care home. • A maximum of two *general visitors* per resident are permitted if the resident is not self-isolating or symptomatic and when there is no outbreak (visitors under the age of 14 years of age should be accompanied by an adult). • Accompanying public health measures for essential and general visitors include verbally attesting to testing negative for COVID-19 within the previous two weeks, sanitizing hands upon arrival and departure, wearing a mask during the entire visit, and maintaining physical distance (at least two metres). During outbreaks, essential visitors must be screened and wear PPE during the visit (in addition to the measures). • Long-term care homes do not require restrictions for length or frequency of visits by essential visitors; however, general visitors may be required to schedule visits in advance and limit the length or frequency of the visit. • Long-term care homes may temporarily prohibit a visitor due to repeated violations to visiting policies.
Quebec	• On 18 June 2020, the government relaxed restrictions regarding visitations in long-term care facilities based on the epidemiological situation that prevailed, but these measures could be tightened if a resurgence of COVID-19.
New Brunswick	• Residents are permitted to family or friend visits with proper public health measures (e.g., physical distancing, wear a mask, proper hand hygiene, self-screen question before entering the facility). • As of 25 August 2020, specific guidance and public health measures are available for visitors at nursing homes and adult residential facilities, including: ○ Indoor or outdoor visits with family or friends (two visitors at a time while maintaining physical distancing); ○ Designated support persons, which can include but not limited to a family member, friend, companion, support worker (up to two support persons per resident); ○ Offsite passes for residents (overnight and weekend); ○ Virtual (e.g., video calls, phone calls, remote scheduling support); and ○ General visitors (maximum visitors equivalent to 20% of residents within a facility) visits to patients in palliative care.
Nova Scotia	No information identified.
Prince Edward Island	• Within the context of long-term care homes, all residents are allowed to identify three "partners in care". One of the selected individuals will be able to visit the resident at all times of the day. ○ Overnight stays may be permitted if the visitor follows infection control protocols. ○ Patients may also leave the facility if they will have limited contact with others.
Newfoundland and Labrador	• General visiting to all acute care, long-term care homes, personal care homes, community care homes and assisted living facilities is not permitted currently. ○ Acute care patients and long-term care residents are permitted to identify up a support person and five designated visitors. Designated visitors from outside the province must follow self-isolation requirements. ○ Only two visitors are allowed to attend a day. ○ Homes may determine whether a resident has indoor, window or outdoor visits. They may also determine the length, frequency, and location of visits.
Yukon	• While general visits are not permitted in long-term care homes, residents can have indoor visits with two pre-identified general visitors. ○ LTC residents (who are near the end-of-life or have special needs which require the presence of a visitor) can identify a designated essential visitor for indoor or outdoor visits. Designated essential visitors can also be from outside the territory. ○ No more than three people are allowed for outdoor visits.

Province/Territory	Visitor Restrictions
	○ Overnight or extended visits are not recommended. • A maximum of one consistent visitor is allowed in hospitals for all admitted patients, including those in the obstetrics department, intensive care unit or the emergency department. ○ A maximum of two visitors at a time, with a limit of five consistent visitors, is allowed for hospital patients nearing the end-of-life.
Northwest Territories	• Long-term care residents are allowed to have one essential visitor above the age of 18 if the territory is in Phase 2 of their COVID-19 plan. Only five visitors are allowed to be in a long-term facility at a time. ○ Visitors who have travelled to see a long-term care resident will be exempt from self-isolation and will work with staff to develop an infection control plan for visiting. ○ Visitors will be screened and asked to take precautions, such as wearing a mask and physically distancing, during their visit.
Nunavut	• As of June 29th, 2020, the Department of Health Services in Nunavut announced that Continuing Care Centres and Elders' Homes will be allowing visitors. Residents are only allowed to have a maximum of two visitors and can only be immediate family members, including grandchildren and great-grandchildren.

Table 4: Visitor Restrictions in Long-Term Care Facilities (LTCFs) in Other Countries[27]

Country	Visitor restrictions
China	• National Health Commission of China issued the health protection guidelines in key places and units during COVID-19 epidemic on 20 July 2020. ○ For nursing home and mental health institutions in low-risk regions, following strategies should be considered: ▪ conducting temperature for visitors at the entrance ▪ visitors should wear masks ▪ limiting number of visitors, restricting area and frequency of visits ▪ registering visitors and implementing appointment management when necessary ○ For nursing home and mental health institutions in medium- and high-risk regions: ▪ not allowing visitors ▪ encouraging video calls • Medical institutions should intensify management over wards and forbid visits to patients by their family members or friends unless necessary.
Germany	• Regulation and recommendations around care homes visitors have been put in place across federal states in Germany. ○ For most states, ban of visitors maintained and visitation can be allowed for relatives of a person at the end of their life. ○ Social contacts should be maintained as far as possible via telecommunication. ○ Visitors with symptoms of a cold or who are a contact person to someone with COVID-19 should stay away. ○ In the case where visitors are allowed, every visitor (name, date of visitor, name of resident visited) should be registered. Visits should be minimal and there should be a time limit. ○ Visitors must adhere to protective measures that involve maintaining a distance of at least 1.5-2 metres from the resident, must wear a protective gown and mouth-nose protection and disinfect their hands when leaving the resident's room. • From 6 May 2020, people at hospitals and nursing homes, as well as facilities for the elderly and the disabled may once again receive visitors, as long as there are no active COVID-19 cases ○ Older people and people with pre-existing conditions are being urged to avoid direct contact with others. ○ Distance should be maintained, or barriers should be erected between residents and visitors. ○ Wearing a non-medical face mask (community mask) is generally required. ○ Family members can generally stay in contact via regular (video) calls or via the internet.
Italy	• The Italian government required care homes to suspend visitations on 9 March 2020. • As of 26 April 2020, external visitors of care homes can be accepted upon the decision by the Clinical Director of each organization.
Singapore	• Face-to-face visitations at residential facilities for the elderly (including nursing homes, welfare homes, sheltered homes and adult disability homes) will resume when the second phase of reopening the economy starts (from 19 June 2020). ○ All nursing homes need additional precautionary measures to protect their residents, such as setting aside dedicated visitation areas or safe distancing precautions. ○ Each resident will be allowed a total of two designated visitors, and only one may visit each day, with each visit limited to 30 minutes. ○ Visitors will be screened prior to entry and should not visit if unwell. ○ The total number of visitors allowed each day in a home will also be capped through appointments. ○ Caregivers are encouraged to work with the nursing homes to make appointments in advance. • In Phase 1, face-to-face visits were suspended in nursing homes, and following strategies should be considered: ○ Facilitating interactions via phone and video calls allowing face-to-face visits in exceptional circumstances (e.g., critically ill).

Country	Visitor restrictions
South Korea	• Entry of visitors at senior care facilities is restricted. ○ A family member, relative, or caregiver who has respiratory symptoms or feels unwell should avoid visiting the elderly and persons in high-risk groups.
Spain	• A staged approach is being applied in Spain based on case counts, those regions that are in stage one are not currently permitting visitors to visit those in LTCFs. • Those jurisdictions that have moved forward into stage two are permitting visitors to long-term care facilities.
Sweden	• The Government of Sweden introduced a clear rule for the whole country on April 1 2020, placing a ban on any visits to care homes for older people. This is a nationwide decision, but the operators of such homes may grant exemptions from the ban on an individual basis. • The Government extended the ban on visits to care homes for older people to August 31 2020. The government is consulting with the National Board of Health and Welfare to develop a program for assessing how exemptions can be made from the ban on visits.
Switzerland	• The Swiss Federal Office of Public Health recommends reducing visits to retirement homes and nursing homes, however visits inside and outside these homes can be arranged. They ask visitors to contact the facilities directly for more information on special precautions, rules of conduct and visiting times. • One facility called the Kreuzlingen Nursing Care Center is choosing to support residents in communicating with relatives via Skype or Facetime Calls. This allows their residents to discuss end of life plans with their loved ones while still maintaining proper distancing measures. This facility also wrote to relatives encouraging them to discuss covid-19 and the potential health consequences that could arise due to the disease.

Table 5: Information from Canadian and International Non-Peer-Reviewed Articles and Guidance Documents on the Psychological and Social Effects of Isolation on Long-Term Care (LTC) Residents [28,g]

Title of Document	Type of Resource / Jurisdiction	Key Messages
Covid-19 special issue risk, response, and resilience in an aging covid-19 world	Special Research Report – Simon Fraser University Gerontology Research Centre (Canada)	• One of the articles in this special research report discusses loneliness and depression among residents of LTC facilities. It suggests that these issues are commonly experienced by residents but could be worsened by visitation restrictions such as those implemented as COVID-19 infection and prevention control measures. ○ (Title of article in this report: *Lifting the Curtain on Long-Term Care in the Face of COVID-19: Sobering realities and a time for reform)*
Social Isolation—the Other COVID-19 Threat in Nursing Homes	Journal article, opinion (US)	• This *JAMA* article states that staff working in US LTC facilities have reported an increase in anxiety and depression among residents since strict isolation measures have been put in place. ○ According to one geriatric psychiatrist interviewed by the journal, there has been a significant increase in requests from LTC providers for antidepressants, antipsychotics, anxiolytics since the beginning of the pandemic. ○ In increase in failure to thrive has been reported among LTC residents who have been socially isolated as a result of the pandemic. This appears to have resulted in residents refusing to eat, losing weight, and dying sooner that they would have otherwise. ○ The medical director of two nursing homes states that some LTC residents have become less interactive during her visits to their rooms, at times sleeping while she tried to speak with them, which she suggests is a result of the loss of stimulation from visits and group activities.
Competing Crises: COVID-19 Countermeasures and Social Isolation among Older Adults in Long Term Care	Journal article, editorial (Canada)	• This *Journal of Advanced Nursing* editorial cites research that suggests a correlation between social isolation and anxiety, depression, and cognitive decline. It also refers to a reported increase in the rate of suicide among LTC residents since COVID-19-related social isolation measures have been implemented.
Long-term social distancing during COVID-19: A social isolation crisis among seniors?	Letter to the editor (Canada)	• This letter to the *CMAJ* discusses social isolation due to COVID-19 in the context of seniors (including those in residential facilities) and cites research that shows there is a strong association between social isolation and depression, anxiety, and suicidal ideation.
COVID-19 and the Fears of Italian Senior Citizens	Journal article, commentary (Italy)	• This commentary in the International Journal of Environmental Research and Public Health suggests that the already high rate of loneliness in LTC facilities in Italy probably worsened as a result of COVID-19-related social isolation measures.
Social isolation and loneliness among	Journal article, commentary	• This commentary in *Global Health Research and Policy* cites research demonstrating that social isolation and loneliness are major risk factors that have been linked with poor mental health status including depression, anxiety, poorer cognitive functioning, and increased

g Resources included in this table were not critically appraised for their quality (CADTH B, 2020)

Title of Document	Type of Resource / Jurisdiction	Key Messages
older adults in the context of COVID-19: a global challenge	(US)	risk of Alzheimer's disease. It also cites evidence that social isolation is associated with an approximately 50% increased risk of developing dementia in older adults. ○ It argues that, while restrictions are necessary in LTC facilities to control the spread of COVID-19, the corresponding social isolation and loneliness that may result can have significant negative impacts on the mental health of residents.
Loneliness and Isolation in Long-term Care and the COVID-19 Pandemic	Journal article, editorial (Australia)	• The editorial published in *The Journal of Post-Acute and Long-Term Care Medicine* discusses the harms caused by loneliness in older adults. It cites research reporting that loneliness is related to an increased risk of depression, alcohol use disorder, suicidal thoughts, aggression, anxiety, and impulsivity. It also cites other studies that found loneliness to be a risk factor for cognitive decline and Alzheimer disease. ○ The editorial acknowledges that restrictions on group activities will help decrease spread of COVID-19 infection in LTC facilities but suggests they will also result in a significant increase in loneliness among residents.
Interim guidance: Care of residents in long term care homes during the COVID-19 pandemic	Health Canada Interim Guidance (Canada)	• This Health Canada Guidance acknowledges that measures to prevent and control transmission of COVID-19 will impact many aspects of resident care in LTC facilities, including psychosocial aspects of care. ○ The guidance states that the visitor restrictions put in place to prevent and control the transmission of COVID-19 in LTC facilities could be potentially distressing for residents.

Table 6: Information from Canadian and International Non-Peer-Reviewed Articles and Guidance Documents on the Psychological and Social Effects of Isolation on Long-Term Care (LTC) Residents with Dementia[29,h]

Title of Document	Type of Resource / Jurisdiction	Key Messages
Covid-19 special issue risk, response, and resilience in an aging covid-19 world	Special Research Report – Simon Fraser University Gerontology Research Centre (Canada)	• In one of the articles in this research report, it is mentioned that the majority of residents in care homes live with dementia. It suggests that these residents might become more anxious than others as a result of social isolation and a reduction in the number of social activities. ○ (Title of article in this report: *Lifting the Curtain on Long-Term Care in the Face of COVID-19: Sobering realities and a time for reform)*
Mitigating the Effects of a Pandemic: Facilitating Improved Nursing Home Care Delivery Through Technology	Journal article, editorial (US)	• According to this article published in *JMIR Aging*, the loneliness caused by social isolation can be particularly problematic for LTC residents with dementia because they are likely not to understand why their routines have been changed and regular activities have stopped. Social isolation measures also leave cognitively impaired residents without the calming effect of visitors.
Social Isolation—the Other COVID-19 Threat in Nursing Homes	Journal article, opinion (US)	• According to a medical director of two US LTC facilities interviewed for this *JAMA* article, since the beginning of the pandemic, social isolation is increasing residents' symptoms of dementia. ○ A senior advisor at the Institute for Healthcare Improvement, who was also interviewed for the article, states that, although communication with loved ones through a window or using video technology helped some residents feel connected, residents with dementia have been confused and frustrated by these interactions.
Breaking Social Isolation Amidst COVID-19: A Viewpoint on Improving Access to Technology in Long-Term Care Facilities	Letter to the editor (Canada)	• In this letter to the editor of the *Journal of the American Geriatrics Society*, a Quebec physician who has patients who are residents of LTC facilities states that he believes isolation can cause worsening dementia.
Interim guidance: Care of residents in long term care homes during the COVID-19 pandemic	Health Canada Interim Guidance (Canada)	• This guidance states that people living with dementia might not understand why their routines and environment have changed, which may cause anxiety and distress expressed through responsive behaviours, such as becoming aggressive toward staff and other residents.

[h] Resources included in this table were not critically appraised for their quality (CADTH B, 2020).

Title of Document	Type of Resource / Jurisdiction	Key Messages
Coronavirus disease (COVID-19) and people living with dementia: A guide for those looking after residents in Long-Term Care, Designated and Supportive Living	Guidance document (Alberta)	• According to this guidance from Alberta Health Services, many of the measures implemented to address COVID-19 in LTC facilities can be confusing and disorienting for residents with dementia, which can cause social isolation and loneliness, and then lead to or increase responsive behaviors or withdrawal. ○ The document cautions that persistent feelings of loneliness can cause depression, increase inflammatory response, and reduce the ability of the immune system to fight COVID-19. ○ It recommends that caregivers look out for symptoms of anxiety and depression, such as a significant change in mood (e.g., loneliness, grief, or depression) or a loss of interest in activities that were previously enjoyed. In residents with cognitive impairment, anxiety and depression might be expressed as agitation and aggression. Severe symptoms such as risk-taking behaviours or talk of suicide require immediate assessment and intervention.

Table 7: Information from Canadian and International Literature on Best Practices to Support Long-Term Care (LTC) Staff during the COVID-19 Pandemic[30,i]

This Table contains statements on measures to assist infection prevention and control (IPC) for staff, including education and training, staffing levels, PPE, and resources. Information in the Table is arranged by Canadian literature first in chronological order, followed by relevant international information in chronological order.

Author, Year, Jurisdiction	Type, Title of Document and Date	Key Messages
Measures to Support LTC Staff During Re-opening of LTC Facilities		
Verbeek et al., 2020 (Netherlands)	Article: Allowing Visitors Back in the Nursing Home During the COVID-19 Crisis: A Dutch National Study into First Experiences and Impact on Well-Being (July, 2020)	• A mixed methods cross-sectional study was conducted to assess the impact of re-opening 26 Dutch nursing homes following a national guideline. This included assessing how the guideline was applied in the local context, adherence to local protocols; and the impact on well-being of residents, their family caregivers, and staff. • Despite variation in supervision and certain IPC measures, all groups were generally compliant with local health authority guidelines. Allowing visitor into the nursing home was unanimously positive for all, with no new COVID-19 infections reported within three weeks of re-opening. • However, staff workloads had significantly increased given the preparation required to plan visits, register visitors, and supervise meetings. Several nursing homes had designated staff, a coordinator, or mobile hosts responsible for the organization of visits, screening visitors, communicating risks to the resident, and documenting all information in the patient file. Respondents reported that the protocol for visits was at times stressful. Both visitors and staff were worried about the risk of infection. Some staff expressed worries about their own health, or the health of their spouse. • Digital solutions are warranted to streamline planning and administration processes when organizing visits and make process more efficient.
Centers for Medicare & Medicaid Services, 2020 (US)	Guidance: Nursing Home Reopening Recommendations for State and Local Officials (May 18, 2020)	• This guideline provides recommendations for phased re-opening of LTC homes in the US. This guideline states that there are multiple factors that need to be considered prior to lifting visitor restrictions. These factors include COVID-19 prevalence within and outside of the LTC home, adequate staffing, adequate testing (e.g., the facility should have capacity for all nursing home staff to receive a single baseline COVID-19 test, with re-testing of all staff continuing every week) adequate PPE, and capacity at local hospitals for potential transfers. See report for further details of recommendations.

[i] Resources included in this table were not critically appraised for their quality (CADTH B, 2020).

Author, Year, Jurisdiction	Type, Title of Document and Date	Key Messages
Measures to Support LTC Staff During the COVID-19 Pandemic in General		
Ontario Ministry of Health, 2020 (Ontario)	Government Document: Directive #3 for Long-Term Care Homes under the Long-Term Care Homes Act, 2007 (2020)	This directive outlines a number of precautions and procedures that should be implemented by LTC homes in Ontario during the COVD-19 pandemic. Measures include screening and assessment, adequate PPE, limiting work locations, cohorting, outbreak preparedness, diagnostic testing, and guidance on new admissions, re-admissions, resident absences, food and product deliveries, case management, and isolation procedures.
Canadian Press, 2020 (Quebec)	Newspaper article: How one Montreal long-term care home managed to keep COVID-19 away (August 2, 2020)	• This newspaper article by Canadian Press describes the success story of a Montreal LTC home that managed to keep COVID-19 from entering the facility, despite the high infection rate in Quebec. The LTC facility followed basic IPC protocols and had three advantages that others did not: ○ A skilled infection-control team on site; ○ Access to epidemiologists and specialists for questions; and ○ Full-time staff positions to limit staff from working in multiple facilities, which avoided staff shortages and prevented transmission between facilities.
Government of Canada, 2020 (Canada)	Interim guidance: Care of residents in long term care homes during the COVID-19 pandemic (July 17. 2020)	• Provides recommendations relative to LTC homes, including supporting LTC staff by providing training, IPC education, PPE, on site IPC specialists and leaders, adequate staffing, and transparency regarding the chain of accountability. The guidance recommends that consideration be given to increasing the number of full-time positions to avoid staff incentives to work in multiple facilities, which may leave them vulnerable, and at risk for transmitting COVID-19 between facilities.
Harrington, 2020 (Nova Scotia)	Special Report: Staffing Standards for Nova Scotia Nursing Homes (June 2020)	• This document focuses on the need for evidence-based staffing levels in LTC facilities, especially during the pandemic. The report identifies and recommends minimum nurse staffing to resident ratio based on best available evidence. *See: Table 2, Nursing Home Minimum Nurse Staffing Ratios and Hours Per Resident Day, page 26.*
Rios et al., 2020 (Ontario)	Rapid Review: Preventing the transmission of Coronavirus (COVID-19) in older adults aged 60 years and above living in long term care (April 30, 2020)	• This rapid review examined ways to control and manage COVID-19, SARS, or MERS in adults 60 years or above living in LTC facilities. The rapid review identified seven pieces of evidence (one ongoing trial, one observational study, two policy guidelines, and three clinical practice guidelines [CPG]). The primary study found that the first-line of defense is prevention of virus entry into the facility; if this fails immediate response measures should be taken. • The identified guidelines recommended multiple measures to prevent the spread of infection during the pandemic including: ○ Surveillance and assessment;

Author, Year, Jurisdiction	Type, Title of Document and Date	Key Messages
	See: pages 6 to 9	○ Promoting and enforcing infection control measures (i.e., hand hygiene, masks); ○ Staff training and education; ○ Safe staffing ratios/levels; ○ Enforcing sick leave and adequate compensation; and ○ Policies to prevent movement within and between LTCFs. (see page 7 of the Rapid Review for more detail).
Weller et al., 2020 (Ontario)	Web Article: Lessons learned through a COVID-19 nursing home outbreak	• This report from the Registered Nurses Association Ontario provides insight into nurses' personal experiences working in LTCFs during the COVID-19 pandemic. The article emphasizes the importance of adequate staffing levels, teamwork, regular communication and updates to families (i.e., daily emails), and counselling support for mental health for nurses to feel safe returning to work. The article also emphasizes the importance of listening to staff concerns, education and training of staff, strict adherence to hand hygiene, regular monitoring of IPC techniques, and utilizing PPE for both staff and residents who are COVID-19 positive and/or cannot self- isolate (e.g., in the case of dementia).

Table 8: Information from the Canadian and International Literature regarding Concerns of Staff Working in Long-Term Care (LTC) during the COVID-19 Pandemic[31,j]

This Table contains statements about the perception of safety and challenges faced by staff working in LTC during the COVID-19 pandemic. Information in the Table is arranged by Canadian literature first in chronological order, followed by relevant international information in chronological order.

Author, Year, Jurisdiction	Type, Title of document, Date	Key Messages
Ontario Health Coalition, 2020 (Ontario)	Survey Report: Long-Term Care Staffing Survey Report (July 22, 2020)	• This summary of survey findings describes staffing levels and its impacts in Ontario LTCFs during the COVID-19 pandemic. Over 90% of LTCFs indicated that they were short staffed. Staffing levels are reported for non-profit, for-profits, and public LTC homes and its impact on staff's daily activities and tasks.
Embregts et al., 2020 (Canada)	Rapid Review: Impact of Infection Outbreak on Long-Term Care Staff: A Rapid Review on Psychological Well-Being	• This review provides insights about the potential impact of infection outbreaks on the psychological state of healthcare staff and explores suggestions to support and protect their psychological well-being. Care staff indicated they were afraid to be infected at work (e.g., through service users or visitors) or outside work, and consequently, to infect their family/children at home or other service users. Other emotional impacts included stress, tension between colleagues, confusion, and anxiety due to lack of IPC/disease education and training. Staff felt that facilities lacked the infrastructure to support isolation protocols (i.e., isolation rooms, separate bathrooms) contributing to concerns. Authors concluded that research into support for LTC staff during an infection outbreak is scarce, however adequate resources and materials, adequate education and training, as well as access to an infection control nurse or specialist was important for asking.
Alberta Health Services, 2020 (Alberta)	Guidance Document: Coronavirus disease (COVID-19) and people living with dementia: A guide for those looking after residents in Long-Term Care, Designated and Supportive Living (May 2020) See: Supporting Staff, page 9	• Alberta Health Services recommends regularly monitoring staff for well-being and ensuring timely, transparent communication of COVID-19 updates. Recommends infection prevention measures to ensure the safety of staff.
OECD, 2020	Policy Response: Workforce and safety in long-term care during the COVID-19 pandemic (June 22, 2020)	• The document outlines the struggles faced by LTC workers such as insufficient and inadequate staffing, poor working conditions and infrastructure, skills mismatch, poor integration with the rest of the health system, and poorly enforced safety standards. Certain OECD countries such as Australia, Spain, and Germany have increased financial support for staffing and resources in these institutions in response to the pandemic. The document describes solutions to improve working conditions, such as

[j] Resources included in this table were not critically appraised for their quality (CADTH B, 2020).

Author, Year, Jurisdiction	Type, Title of document, Date	Key Messages
		increasing wages and jobs, investing in infrastructure, adequate staff to patient ratios, providing suitable training for LTC staff, electronic devices to automate patient data registration and lastly better coordination with primary care.
Nyashanu et al., 2020 (United Kingdom)	Article: Exploring the challenges faced by frontline workers in health and social care amid the COVID-19 pandemic: experiences of frontline workers in the English Midlands region, UK (July 17, 2020)	• This research study included structured interviews with healthcare workers to understand their challenges and fears during the pandemic. The research study found that lack of pandemic preparedness, shortage of PPE and staff, delays in testing, evolving PPE guidance and challenges in enforcing social distancing and fulfilling IPC responsibilities were a few structural challenges faced by frontline healthcare workers in care homes during the COVID-19 pandemic. Further psychological impacts included anxiety and fear amongst staff, residents, and service users. This study emphasized the importance of pandemic control and management to provide direction instead of panic and fear among staff when a pandemic occurs.

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