Court File No. __________

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N :

ONTARIO HEALTH COALITION AND ADVOCACY CENTRE FOR THE ELDERLY

Applicants

- and -

HIS MAJESTY THE KING IN RIGHT OF ONTARIO AS REPRESENTED BY THE ATTORNEY GENERAL OF ONTARIO, THE MINISTER OF HEALTH, and THE MINISTER OF LONG-TERM CARE

Respondents

AFFIDAVIT OF DR. AMIT ARYA
(Sworn March 23, 2023)

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1. I, Dr. Amit Arya, of the City of Mississauga in the Province of Ontario Make Oath and Say as follows:

A. QUALIFICATIONS AND EXPERIENCE

2. My name is Dr. Amit Arya and I am a palliative care physician who works in acute care hospitals, outpatient clinics, long-term care, and home care. I am the Palliative Care Lead at Kensington Gardens long-term care home (LTC) in Toronto and also a palliative care physician at the Freeman Centre for the Advancement of Palliative Care at North York General Hospital. I serve as Lecturer for the Department of Family and Community Medicine at the University of Toronto and as Assistant Clinical Professor for the Department of Family Medicine at McMaster University. I have held leadership roles at

the national, provincial and local levels. I received the 2020 Award of Excellence in Social Responsibility from the Department of Family and Community Medicine, University of Toronto and also an Award of Excellence from the Ontario College of Family Physicians in 2022.

3. A copy of my *curriculum vitae* is attached as **Exhibit A** to this affidavit.

B. MANDATE

4. I have been retained by the Ontario Health Coalition and the Advocacy Centre for the Elderly to give evidence in the above-noted proceeding. In particular, I have been asked to assess and, where pertinent, to provide my opinion with respect to the nature, effects and impacts of the *More Beds, Better Care Act*, which amends the *Fixing Long-Term Care Act*, and the *Health Care Consent Act*, and the regulations enacted pursuant to those amendments, which I refer to collectively as "Bill 7". In particular, I have been asked to address the following issues:

   a. the clinical characteristics and service needs of hospital patients who become designated as needing "alternate level of care" (ALC), in particular those waiting in hospital for admission to LTC, and the capacity of the current health care system, from home to institutional care, to meet their needs;

   b. how Bill 7 will, or is likely to, affect the health and well-being of ALC patients and their ability to access the health services and institutional care they require; and

c. the measures that could be implemented to better meet the health care needs of this patient cohort, and the effects of such initiatives on the capacity of hospitals to meet the needs of the communities they serve.

C. THE ALC PATIENT COHORT

5. Many of the ALC patients that I assess are people who are elderly and are living with a moderately advanced or advanced life-limiting illness that is incurable and progressive. These patients do not require immediate acute care, but certainly require palliative care, help with symptom management, psychosocial support for both them and their families, as well as care planning. Many ALC patients will have suffered a significant functional decline in hospital due to the acute medical event which caused their admission to hospital. When this functional decline in hospital is combined with their underlying progressive and incurable life-limiting illness, they will not recover in function, and cannot return home.

6. Data from 2017/2018 indicates that Ontario's ALC crisis is driven to a large degree by patients who are approaching end-of-life. According to a report by Quinn et. al.,[1] a significant number of ALC patients, including those who are awaiting LTC, are in the last 90 days of life.

7. Clearly, many ALC patients would benefit from palliative care, even prior to approaching their last 90 days of life. Palliative care is specialized care which supports people who

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[1] Kieran Quinn, Sarina Isenberg & James Downar, *Expensive Endings: Reining In the High Cost of End-of-Life Care in Canada* (October 2021: CD Howe Institute, Toronto), available online: https://www.cdhowe.org/sites/default/files/2021-10/Commentary_608.pdf (accessed 8 February 2023).

are living with a complex or serious illness, often a terminal illness, to improve quality of life and relieve symptoms. It can and should be initiated prior to the end-of-life as suffering does not just start at end-of-life. More and more, palliative care is being provided to individuals concurrently with treatment of a disease. Palliative care also specializes in assisting with advance care planning and goals of care conversations, to ensure that patients and families can make informed decisions which are appropriate for their stage of illness and in line with their wishes[2],[3]. The vast majority of ALC patients who are awaiting LTC suffer from incurable non-cancer conditions (e.g. advanced lung disease, congestive heart failure, dementia, or frailty) and have a limited life expectancy. Compared to those with cancer, this group of patients often faces significant barriers in accessing a hospice, a palliative care unit (PCU) or home palliative care services. These services are usually restricted for people in the last 3 months of life or shorter. The prognosis of non-cancer illnesses is much more challenging, which leads to a concern that a non-cancer patient may not be appropriate for admission to a hospice or PCU, because they may stabilize in one of these settings and end up living longer.

8. In consequence, many of these non-cancer ALC patients will be transferred to an LTC home instead.

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[2] https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/palliative-care/framework-palliative-care-canada.html#p1.1 (accessed 23 March 2023)

[3] https://www.virtualhospice.ca/en_US/Main+Site+Navigation/Home/For+Professionals/For+Professionals/The+Exchange/Current/The+Bow+Tie+Model+of+21st+Century+Palliative+Care.aspx (accessed 23 March 2023)

D. SELECTING A LTC HOME

9. Recent reporting states that Ontario has nearly 40,000 individuals seeking placement in a LTC home.[4] Approximately 5,600 patients are designated as ALC in acute care,[5] and a sizeable proportion of these are awaiting a long-term care bed. With the assistance of an inter-professional team in hospital, ALC patients and their families are generally asked to choose up to five LTC homes in order to support discharge from acute care. In my direct clinical experience, as well as that of my colleagues, there are several factors which influence the choice of LTC homes made by patients and families.

(i) The importance of proximity to family caregivers

10. Previous published data reveals that LTC residents in Ontario received an average of 2.77 hours of direct hands on care per day from healthcare staff (e.g. RNs, RPNs and PSWs)[6]. Currently, LTC homes receive funding to provide 3 hours and 15 minutes of direct care per day per resident on average across the province, and the government recently announced a further $1.25 billion investment to try and achieve the target of 3 hours and 42 minutes of direct daily care per resident on average across the province. However, this still falls short compared to recommendations in the recently published National Long-Term Care Standards which state that all LTC residents should receive a

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[4] Katherine DeClerq, "Wait list for long-term care beds in Ontario nearly doubled in 10 years, OLTCA says", *CTV* News (13 January 2023), online: https://toronto.ctvnews.ca/wait-list-for-long-term-care-beds-in-ontario-nearly-doubled-in-10-years-oltca-says-1.6229216.

[5] Karen Howlett, "New national long-term care standards unveiled, but Ottawa not planning to make them mandatory", *The Globe and Mail* (31 January 2023), online: https://www.theglobeandmail.com/canada/article-new-national-long-term-care-standards-unveiled-but-ottawa-not-planning/.

[6] Hsu, Amy T et al. "Staffing in Ontario's Long-Term Care Homes: Differences by Profit Status and Chain Ownership" (2016) 35:2 *Canadian Journal on Aging* 175.

minimum, not a province wide average, of 4.1 hours of direct hands on care per day.[7] In some circumstances, this gap in care is filled by unpaid caregivers, who are usually family members. The support of family caregivers is not just critical for the resident receiving it, but it also frees up overworked staff to care for other residents who do not have the benefit of support from their families. In addition, short staffing does not allow enough time for healthcare staff to provide companionship and emotional support, which is essential to easing the high prevalence of social isolation and loneliness for LTC residents;[8] in itself, a major health risk.

11. Therefore, proximity to family and community (which often will include members of their religious institution, social club, or neighbours) is often a key factor for most people in choosing a LTC home. Not only does this allow a resident to be visited by people they know, love or feel close to, it also makes it easier for family caregivers to assist with a variety of care duties which may be direct (e.g. assistance with feeding, helping manage the resident's behaviours) or indirect (e.g. shopping for personal items for the resident, advocating for the resident, and helping the resident with financial affairs).

12. Our recent research study (led by Dr. Amy Hsu) showed that greater than 90% of visits from family caregivers last over one hour, and over 50% of spouses visit LTC on a daily

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[7] Health Standards Organization, *CAN/HSO 21001:2023 - Long-Term Care Services* (2023), available online: https://healthstandards.org/standard/long-term-care-services-can-hso21001-2023-e/.

[8] J Simard & L Volicer, "Loneliness and Isolation in Long-term Care and the COVID-19 Pandemic" (July 2020) 21(7) *J Am Med Dir Assoc* 966.

basis.[9] Spouses are often elderly themselves. Family caregivers often assist with time consuming tasks such as helping a resident participating in leisure activities, sitting with the resident, going for a walk outside the LTC home, assisting during mealtimes and accompanying and/or driving the resident to appointments. Over 90% of family caregivers also provide social and emotional support to the residents.

13. In my clinical experience, family caregivers also provide critical assistance to aid with the transition to living in LTC. Initially, LTC home staff may not know a resident well and so family caregivers are especially crucial to providing help and assistance in order to familiarize staff with the needs of a resident, which may be critical to such matters as getting a new resident to eat or to take their medications.

14. Placing a resident in a home that may be as far as 70 km away in the southern parts of the province or 150 km away in northern Ontario, as is permitted under Bill 7, will often isolate such residents from the necessary care provided by family. In the case of elderly spouses, it may make it all but impossible to visit, except occasionally.

(ii) Language, Religion and Culture

15. Language, religious, and cultural considerations are often also important for patients and their families in choosing a LTC care home. Unfortunately, culturally-specific homes,

[9] Alice Menard, et al, "Variations in caregiving patterns of spouses/partners and adult children of long-term care home residents in Ontario, Canada" (2023) draft manuscript, pending journal submission, attached as **Exhibit B** to this affidavit.

estimated to account for only 8% of all LTC homes in Ontario,[10] tend to have longer wait lists.[11]

16. In this context, when allophone LTC residents are admitted into an LTC home which is not specialized to provide culturally specific care, proximity to allow regular and frequent access for family caregivers and community members becomes even more important to ensure resident safety and wellbeing.

17. A recent study by Tanuseputro et. al. demonstrated how language disconcordance is associated with increased mortality and adverse outcomes for frail patients.[12]

(iii) Variability of care between LTC homes

18. Prior to the pandemic, it was well established that there was significant variability between LTC homes. Previous research has revealed that residents in for-profit LTC homes had a 10% higher risk of death and a 25% higher risk of hospitalization.[13] On the whole, for-profit homes were twice as likely to be in the lowest-performing 20% of LTC homes.

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[10] Sarah Dziedzic, "Why Ontario needs more culturally sensitive long-term care homes", *TVO* (19 July 2016), online: https://www.tvo.org/article/why-ontario-needs-more-culturally-sensitive-long-article-care-homes.

[11] Michelle Meiklejohn, "Long waits for Toronto-area nursing homes geared to cultural groups reflect need for more of them, report says", *CBC News* (25 July 2021), online: https://www.cbc.ca/news/health/cultural-nursing-homes-demand-greater-toronto-area-1.6113593

[12] Emily Seale, et al, "Patient–physician language concordance and quality and safety outcomes among frail home care recipients admitted to hospital in Ontario, Canada" (July 2022) 194 (26) *CMAJ* E899.

[13] P Tanuseputro, M Chalifoux, C Bennett, A Gruneir, SE Bronskill, P Walker & D Manuel, "Hospitalization and Mortality Rates in Long-Term Care Facilities: Does For-Profit Status Matter?" (October 2015) 16(10) *J Am Med Dir Assoc* 874.

19. The COVID-19 pandemic exacerbated poor outcomes in for-profit LTC homes. For-profit LTC facilities were more likely to have extensive COVID-19 outbreaks and had higher mortality from COVID-19.[14] The humanitarian tragedy in for-profit LTC has been widely reported in the media.

20. Thus, it should come as no surprise that two thirds of people on the wait list for LTC would prefer to live in a not-for-profit or municipal LTC home.[15] This is in spite of the fact that for-profit LTC homes account for the majority of LTC homes in Ontario.

21. However, whatever controversy surrounds the role of for profit LTC, there is no doubt that the quality of resident care varies considerably across Ontario, and that the reputation of certain homes for providing higher quality care accounts for the very long wait lists of those waiting to be admitted to such homes.

22. It is also important to appreciate that even the best LTC homes in the province struggle to reliably provide quality resident care because public funding for the system, as is widely

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[14] Nathan M. Stall, Aaron Jones, Kevin A. Brown, Paula A. Rochon & Andrew P. Costa, "For-profit long-term care homes and the risk of COVID-19 outbreaks and resident deaths" (August 2020) 193(33) *CMAJ* C946;
Ed Tubb, Kenyon Wallace & Brandon Kennedy, "For-profit nursing homes in Ontario say ownership has nothing to do with their higher COVID-19 death rates. A Star analysis finds that's not the case" *Toronto Star* (26 February 2021), online: https://www.thestar.com/business/2021/02/26/for-profit-nursing-homes-say-ownership-has-nothing-to-do-with-their-higher-covid-19-death-rates-a-star-analysis-finds-thats-not-the-case.html.
[15] Lisa Levin, "Ontarians have a clear preference for not-for-profit long-term care. Let's act on it" *Toronto Star* (18 October 2021), online: https://www.thestar.com/opinion/contributors/2021/10/18/ontarians-have-a-clear-preference-for-not-for-profit-long-term-care-lets-act-on-it.html.

acknowledged, falls far short of what is required to properly and safely care for a resident population of ever-increasing acuity and complexity.[16]

23. As a palliative care doctor, one measure of the significant variability across LTC homes in Ontario that I am particularly familiar with concerns provision of end-of-life (EOL) care. Our recent research study, led by Dr. Peter Tanuseputro, looked at variations in prescribing rates for symptom management medications at EOL in LTC.[17] Prescribing these medications should be the standard of care for ensuring the comfort of LTC residents at EOL.

24. Our results showed that the top quintile of LTC facilities prescribed injectable comfort medications for 83% of residents at EOL. In contrast, the bottom quintile prescribed these medications for barely 38% of residents at EOL. Prescribing rates of comfort medications are inversely correlated with the probability of transferring residents to hospital at EOL. Low-prescribing LTC facilities transfer up to 30% of their residents to acute care for EOL care. High-prescribing LTC facilities transfer approximately 10% of their residents to acute care for their EOL care. This gap accounts for thousands of acute care transfers annually. Prescribing rates of comfort medications appear to be correlated with other aspects of quality of care as well, and data shows that in 2020, low-prescribing LTC facilities were substantially more likely than high-prescribing facilities to have a COVID

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[16] Ryan Ng, et al, "Increasing Complexity of New Nursing Home Residents in Ontario, Canada: A Serial Cross-Sectional Study" (2020) 68 *J Am Geriatr Soc* 1293.

[17] Peter Tanuseputro, et al, "Variations in prescribing rates of subcutaneous palliative medications among long-term care residents at their end of life" (2023) Draft Manuscript, pending journal submission, attached as **Exhibit C** to this affidavit

outbreak (73% vs. 50%), and also spent more than twice as much time on outbreak (78 days vs. 31 days).

E. IMPACTS OF BILL 7

(i) Bill 7 and Informed Consent

25. Bill 7 fundamentally undermines the right of ALC patients, or their substitute decision makers (SDM) to provide informed consent to medical treatment and care.

26. Bill 7 provides new means for 'persuading' ALC patients to accept placements in a LTC care home they have not chosen, or do not wish to be placed in. These will often be homes that are less likely to accord with patient, family, and SDM preferences for homes that provide higher quality care, proximity to family and community, and compatibility with their language, religion and culture.

27. Thus, an ALC patient is to be presented with two options. The first is to willingly participate in the process of applying for admission to a LTC home other than ones they have already chosen or prefer. The other is to decline to do so, in which case, and without their consent, a placement coordinator employed by Home and Community Care Support Services (HCCSS) will identify homes to which an application for admission will be made, and with which the patients personal health information will be shared. When their admission to a home is secured, and without having any right of review or appeal from the process, the patient must agree to be transferred to residence in that LTC home or pay a mandatory charge of $400 for every day the patient remains in hospital.

28. The coercive effect of being presented with such options deprives the patient or their SDM of the right to informed consent in choosing how and where their health care needs will be met.

29. The Bill also presents physicians like me with a very problematic ethical dilemma. My role is always to inform a patient or their SDM of the best options for LTC, as well as LTC placement options which may be suboptimal. In some cases, this may mean advising against a LTC home that in my opinion would be less likely to properly provide adequate care. Therefore, when deciding whether to accept a proffered admission to such a home, a patient or their SDM may be in the impossible position of knowing that if they accept the advice of their physician and decline, onerous financial consequences may follow.

30. To further exacerbate these problems, my understanding is that under Bill 7, physicians have been accorded new authority and responsibilities, which involve responding to requests from a placement co-ordinator to conduct an assessment of a patient "for the purpose of determining the ALC patients eligibility for admission to a long-term care home" that is to be based "solely on a review of the existing hospital records relating to the patient."

31. The only recourse for a physician facing the prospect of having their ethical obligation to ensure a patient's care seriously compromised, will be to not designate a patient ALC in the first place, or to remove the ALC designation when the outcome presents the patient with options which are potentially harmful.

32. In simple terms, Bill 7 fundamentally undermines the hard work that front-line health workers, like myself, do on a day-to-day basis to work together with patients, families and SDM to help them understand and make an informed choice about the best option for them post hospital discharge.

33. In the absence of an accounting by HCCSS, which employs the placement co-ordinators responsible for finding beds for ALC patients, it is impossible to know which homes these patients are being transferred to under Bill 7. What we do know is that the homes with the best reputation typically have wait lists that are years long, while others have lists a fraction of that length. It is therefore reasonable to expect that the new powers accorded by Bill 7 will be used to transfer ALC patients to homes that relatively few have chosen, and that often have the worst record of resident care and safety. These are homes which are more likely to be run by for-profit LTC corporations where, as noted, there is a significantly higher risk of death and a 25% higher risk of re- hospitalization.[18]

34. Equally if not more important, will be the location of the home chosen and its proximity to the family and friends of the ALC patient. I have described the importance of such supports for many LTC residents, including the indirect benefit to residents without family caregiver supports. A home that is located too far from family and friends will deprive LTC residents of support that is critical to their well-being and safety, and deprive the LTC home itself of a valuable asset.

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[18] P Tanuseputro, M Chalifoux, C Bennett, A Gruneir, SE Bronskill, P Walker & D Manuel, "Hospitalization and Mortality Rates in Long-Term Care Facilities: Does For-Profit Status Matter?" (October 2015) 16(10) *J Am Med Dir Assoc* 874.

35. Similar harms can follow when an ALC patient is transferred to a home where they will have difficulty communicating with staff or other residents due to a language barrier and may share little in common with other residents in terms of their cultural or religious values.

36. In summary, overriding the preferences of an ALC patient or their SDM will be more likely to result in placement into a LTC home with a poor record of resident care, far away from the oversight, care and support of family and other community members. The inevitable result of this would be increased risk of suffering and possible hastening of death for the LTC resident.

F. RE-ADMISSIONS TO HOSPITAL

37. Yet another consequence of placing ALC patients in poorer quality LTC homes that are more often ill-equipped to provide EOL care is to actually increase the risk of their re-hospitalization and therefore defeat the ostensible purpose of Bill 7.

38. For example, an LTC nurse who is unfamiliar with a resident or working while short staffed may be more likely to send a resident experiencing distress to the hospital. In my clinical experience, this often occurs without a thorough discussion of the harms and benefits of anticipated hospital care, and sometimes even if a resident or their SDM has previously expressed a wish not to return to hospital. In my clinical practice it is not uncommon for LTC residents to experience hospital transfers which are inappropriate, even multiple times a year.

39. Transfer back to hospital is also common for an LTC resident at EOL. Statistics from the Canadian Institute of Health Information (CIHI) indicate that 21% of LTC residents are transferred from LTC to hospital for palliative care.[19] Another previous study showed that among LTC residents with dementia in the last 30 days of life, 1 in 10 visited an emergency department, 1 in 5 were hospitalized and 1 in 7 died in acute care.[20] In this study, some of the harms of hospital transfer for LTC residents at the EOL were examined, and the results revealed that 1 in 10 residents received life-threatening critical care, while 1 in 4 were physically restrained. There is no doubt that an emergency room is not an ideal setting to provide EOL care or to make sure that a LTC resident is comfortable with optimal symptom control.

G. ALTERNATIVE SOLUTIONS TO HELP ACUTE CARE HOSPITALS

(i) Greater investments in home care, including home palliative care

40. 96% of seniors want to age in their own homes.[21] 87% of Canadians wish to die in their own homes.[22] A greater investment in home care would allow some ALC patients to be discharged back home, and also prevent some patients from ending up in the hospital in the first place. However, staffing levels for home care health workers such as nurses and

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[19] Canadian Institute for Health Information, *Access to Palliative Care in Canada* (2018: CIHI, 2018), available online: https://www.cihi.ca/sites/default/files/document/access-palliative-care-2018-en-web.pdf.
[20] Stall NM, et al, "Sex-Specific Differences in End-of-Life Burdensome Interventions and Antibiotic Therapy in Nursing Home Residents With Advanced Dementia" (August 2019) 2(8) *JAMA Netw Open* e199557.
[21] Samir Sinha, "Almost 100 per cent of Older Canadians Surveyed Plan to Live Independently in their Own Homes, But Is This Even Possible?" *National Institute on Ageing* (13 October 2020), online: https://www.nia-ryerson.ca/commentary-posts/2020/9/22/almost-100-per-cent-of-older-canadians-surveyed-plan-to-live-independently-in-their-own-homes-but-is-this-even-possible.
[22] DK Heyland, P Dodek, G Rocker, et al, "What matters most in end-of-life care: perceptions of seriously ill patients and their family members" (2006) 174(5) *CMAJ* 627.

PSWs remain low and there has been little effort to recruit and retain more staff in this sector. In addition, only a fraction of the Ontario's governments promised homecare funding has been paid out, resulting in many homecare agencies having to cut services[23]. In my opinion, greater investments in home care are necessary for these and other reasons, including to relieve the need to accommodate ALC patients in hospital. This should include providing front-line health workers with fair wages and benefits and reducing wage disparities between health workers in acute-care and those in home care. Health workers in the home care sector should also be compensated fairly to travel between homes.

41. The Ontario government should be commended for recently reopening applications for physicians to be on call for their home palliative care patients. This funding will allow more physician groups to support home palliative care patients and prevent unnecessary hospital admission, but this funding must be provided on an ongoing basis. Given the significant shortage of family doctors, efforts should also be made to hire more nurse practitioners to work in home and community care settings.

42. All of these measures would, in my opinion, held considerably in reducing the admission of older patients to hospital, and therefore reduce the number of ALC patients, as well as allowing a greater number of ALC patients to be discharged to their homes.

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[23]https://ottawacitizen.com/news/local-news/struggling-home-care-agencies-forced-to-cut-services-as-they-wait-for-promised-provincial-funding

(ii) Invest in hospice care

43. As per the report from Quinn et. al., a significant proportion of EOL ALC patients are awaiting hospice and PCU care. This cohort of patients accounts for 23.7% of EOL ALC days.[24] In fact, Ontario has a significant shortage of hospice/PCU beds overall, with only 2 per 100,000 population, compared with 4.2 per 100,000 in the United Kingdom. In addition, existing hospices are significantly underfunded. Funding from the government does not cover operating costs, which means that hospices have to fundraise 44% of their funding themselves.[25]

44. The consequence of underfunding and under-resourcing hospice care means that people remain in acute care at substantially higher costs. A residential hospice bed costs $439 per day to operate vs. $1,100 per day for an acute care bed[26]. At this time, hospices are also discouraged from admitting patients who have a longer or uncertain prognoses, especially those who are suffering from non-cancer illnesses. With increased funding, they could broaden acceptance criteria to include these patients more, a measure that would also help to relieve ALC pressures on hospitals.

(iii) Improve care, including palliative care, for those who live in long-term care

45. The vast majority of residents are admitted to LTC with advanced life-limiting illnesses such as end-stage dementia, frailty, heart and lung disease, with the median survival after

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[24] Kieran Quinn, Sarina Isenberg & James Downar, *Expensive Endings: Reining In the High Cost of End-of-Life Care in Canada* (October 2021: CD Howe Institute, Toronto), available online: https://www.cdhowe.org/sites/default/files/2021-10/Commentary_608.pdf (accessed 8 February 2023).

[25] Canadian Hospital Palliative Care Association, "Hospice Palliative Care Facts" (2013), online http://hpco.ca/qhpcco/ (accessed 8 February 2023).

[26] https://www.thestar.com/opinion/contributors/2023/02/28/hospice-residences-alleviate-intense-pressure-on-health-care-system.html

admission to LTC being just 18 months.[27] Yet according to CIHI, just 6% of LTC residents have documentation of receiving palliative care in the last year of life.[28] About 1/5th of residents are transferred to acute care hospitals for palliative care needs.

46. For most residents, a palliative care approach should be considered upon admission to LTC, as the suffering associated with a life-limiting illness doesn't just start at the EOL. But in my clinical experience, many LTC facilities still think of palliative care exclusively as EOL care, only reserved for the last days or weeks. In addition, the palliative care approach is often mistaken for a plan of giving up on life-prolonging treatments. In fact, palliative care can be integrated together with life-prolonging treatments, where appropriate. For example, a resident who is receiving antibiotics to prolong life can also receive medications such as opioids to relieve pain or shortness of breath.

47. Furthermore, many residents and their SDMs in LTC do not receive timely goals of care conversations. Goals of care conversations help residents and their SDM clarify what they value most and help their treating clinicians formulate a plan of care around residents' preferences and wishes. Residents' preferences and wishes vary from individual to individual and fluctuate depending on the circumstance; for example, a resident may chose to focus on some life-prolonging measures when they are mobile, and

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[27] P Tanuseputro, M Chalifoux, C Bennett, A Gruneir, SE Bronskill, P Walker & D Manuel, "Hospitalization and Mortality Rates in Long-Term Care Facilities: Does For-Profit Status Matter?" (October 2015) 16(10) *J Am Med Dir Assoc* 874.
[28] Canadian Institute for Health Information, *Access to Palliative Care in Canada* (2018: CIHI, 2018), available online: https://www.cihi.ca/sites/default/files/document/access-palliative-care-2018-en-web.pdf.

more on comfort if they are weaker and bedbound. Every resident should have a goals of care discussion with their physician or nurse practitioner upon admission to LTC, during an annual review, as well as times of transition (e.g. changes in functional status, acute medical events, hospital transfers, or when approaching end-of-life).

48. Needless to say, insufficient training in palliative care in LTC, coupled with structural issues like short staffing, contributes significantly to unnecessary hospitalizations for LTC residents.

49. By ensuring appropriate training and educational standards of front-line health workers, we can help to improve quality of life for LTC residents. In addition, through virtual care or in person support, the government can improve access to palliative care specialist clinicians. These interventions, and many others which can improve palliative care in LTC,[29] will also reduce the need for hospitalization for LTC residents. One previous study showed that only 1 in 8 LTC residents saw a palliative care physician in the year prior to death. Those who did were 50% less likely to be transferred to the hospital or emergency department.[30]

H. THE MYTH OF THE BED BLOCKER

50. Finally, I want to comment on the not uncommon and very unfortunate perception that it is somehow the fault of ALC patients that they are occupying acute care hospital beds

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[29] Amit Arya, "Palliative care has been lacking for decades in long-term care" *Policy Options* (16 July 2020), online: https://policyoptions.irpp.org/magazines/july-2020/palliative-care-has-been-lacking-for-decades-in-long-term-care/.

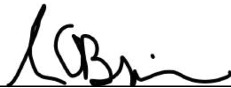
[30] Stall NM, et al, "Sex-Specific Differences in End-of-Life Burdensome Interventions and Antibiotic Therapy in Nursing Home Residents With Advanced Dementia" (August 2019) 2(8) *JAMA Netw Open* e199557.

that are needed by others. In fact, these patients find themselves in this circumstance very much against their wishes. Many want to return home, and often can't understand why they cannot do so. Most others are anxious to leave the hospital for a LTC home they have chosen. In light of long wait lists for a chosen home, virtually all patients are willing, when the options are compassionately explained to them, to compromise by applying for placement in LTC homes with shorter wait lists. It is only on very rare occasions that I see patients or SDMs who, at least at first, are unwilling to accept something other than their preferred choices. But even in these cases, patient and compassionate discussion about what is ultimately in the patient's best interest will create the trust necessary for them to accept the wisdom of such compromise.

51. I make this affidavit for the purpose of providing evidence in the above noted proceeding having been apprised of and understand my obligation as an expert witness. I have signed and attached hereto an acknowledgment of my duty in this respect.

AFFIRMED BEFORE ME by Dr. Amit Arya of the City of Mississauga, in the Province of Ontario on March 23, 2023 in accordance with O. Reg. 431/20 Administering Oath or Declaration Remotely.

DR. AMIT ARYA



Commissioner for taking affidavits

Amanda Marie O'Brien, a Commissioner etc.
Province of Ontario, for Goldblatt Partners
LLP, Barristers & Solicitors
Expires November 15, 2024

Court File No. __________

ONTARIO
SUPERIOR COURT OF JUSTICE

BETWEEN:

ONTARIO HEALTH COALITION AND ADVOCACY CENTRE FOR THE ELDERLY

Applicants

- and -

HIS MAJESTY THE KING IN RIGHT OF ONTARIO AS REPRESENTED BY THE ATTORNEY GENERAL OF ONTARIO, THE MINISTER OF HEALTH, and THE MINISTER OF LONG-TERM CARE

Respondents

ACKNOWLEDGMENT OF EXPERT'S DUTY

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1. My name is Dr. Amit Arya. I live in the City of Mississauga, in the Province of Ontario.

2. I have been engaged by or on behalf of the Lawyers for the Applicants to provide evidence in relation to the above-noted court proceeding.

3. I acknowledge that it is my duty to provide evidence in relation to this proceeding as follows:

   a. to provide opinion evidence that is fair, objective and non-partisan;

   b. to provide opinion evidence that is related only to matters that are within my area of expertise; and

   c. to provide such additional assistance as the court may reasonably require, to determine a matter in issue.

4. I acknowledge that the duty referred to above prevails over any obligation which I may owe to any party by whom or on whose behalf I am engaged.

March 23, 2023

DR. AMIT ARYA

This is **Exhibit “A”** referred to in the Affidavit of **Dr. Amit Arya**, sworn this 23 day of March, 2023, in accordance with O. Reg 431/20, Administering Oath or Declaration Remotely.

____

A Commissioner for taking Affidavits etc.(*or as may be*) (pursuant to O. Reg 431/20)

Amanda Marie O'Brien, a Commissioner etc.
Province of Ontario, for Goldblatt Partners
LLP, Barristers & Solicitors
Expires November 15, 2024

AMIT ARYA, B.Sc., MD, CCFP (PC), FCFP
Palliative Care Physician

A. Date Curriculum Vitae is Prepared: 2023 02 14

B. Biographical Information

Primary Office	North York General Hospital 4001 Leslie Street Toronto, Ontario, Canada M2K 1E1
Telephone	416-756-6000
Cell phone	647-271-6466
Fax	416-756-6024
Email	amit.arya@nygh.on.ca

1. EDUCATION

Degrees

July 2003 - June 2005
Postgraduate training in Family Medicine
University of Alberta, Misericordia Hospital Site-Edmonton, Alberta

September 1999 - May 2003
Doctor of medicine (M.D.)
University of British Columbia- Vancouver, British Columbia

September 1994 - August 1999
Bachelor of Science (B.Sc. with co-op)
Simon Fraser University- Burnaby, British Columbia

Postgraduate, Research and Specialty Training

February 2017 - February 2018
William Osler Health System: Brampton Civic Hospital
Completed Voluntary CPSO approved Scope of Practice Change Training Program in Palliative Medicine

Qualifications, Certifications and Licenses

1. September 2020 - present. Member, Canadian Doctors for Medicare
2. October 2019 - present. Certificate in Added Competence, Palliative Care, Advanced Competence Verification Route, College of Family Physicians of Canada (CFPC)
3. April 2019 - present. Member, Pan-Canadian Palliative Care Research Collaborative (PCPCRC)
4. September 2018 - present. Member, Public Health Palliative Care International (PHPCI)
5. February 2018 - present. Associate member, Canadian Hospice Palliative Care Association (CHPCA)
6. February 2018 - present. Member, Hospice Palliative Care Ontario (HPCO)

7. October 2017 - present. Member, Canadian Point of Care Ultrasound Society (CPOCUS)
8. October 2017 - present. Member, Canadian Society of Physician Leaders (CSPL)
9. June 2017 - present. Member, Multinational Association of Supportive Care in Cancer (MASCC)
10. April 2017 - present. Member, OMA Section of Palliative Medicine (GP focused practice designation)
11. March 2017 - present. Member, European Association For Palliative Care (EAPC)
12. March 2016 - present. Member, Canadian Society of Palliative Care Physicians (CSPCP)
13. 2016 - present. Fellowship in the College of Family Physicians of Canada
14. 2006 - present. Member, College of Physicians and Surgeons of Ontario
15. 2005 - present. Certification in Family Medicine, College of Family Physicians of Canada
16. 2003 - present. Licentiate of the Medical Council of Canada

2. EMPLOYMENT

Current Appointments

April 2021- present
Palliative Care Physician, Freeman Centre for the Advancement of Palliative Care, North York General Hospital

- Active Staff, Division of Palliative Care, cross appointed to Department of Family & Community Medicine and Department of Medicine
- Working as part of Inpatient Palliative Care Team (as Most Responsible Physician & Consultant) in the Supportive Care Clinic, and also the Geriatric Supportive Care Outreach Program to serve homebound patients

February 2021- present
Palliative Care Lead, Kensington Gardens Long-Term Care Facility, Kensington Health

- Leading development of a shared care, consultative model of palliative care in long-term care working together with primary care physicians, nurse practitioners and LTC administration
-

October 2017- present. Lecturer, Division of Palliative Care, Department of Family & Community Medicine, University of Toronto

December 2016 - present. Associate Clinical Professor (Adjunct), Division of Palliative Care, Department of Family Medicine, Faculty of Health Sciences, McMaster University

Previous Appointments

October 2015 - March 2021
Palliative Care Consultant, William Osler Health Centre (Brampton Civic Hospital site)

- Active Staff, Division of Supportive and Palliative Care, Department of Family Medicine
- Working in Acute Palliative Care Unit, Supportive & Palliative Care Clinic, Palliative Medicine Consult Team & outpatient community visits including hospice, long-term-care, retirement homes & patient homes

March 2016- February 2017

Medical Director of the Retirement Home & Long Term Care Physician, Schlegel Villages (Village of Humber Heights, Etobicoke)

- Providing a leadership role and coordinating overall care for residents, including patients in retirement apartments, assisted care, memory care, long-term care
- Improving quality of life for all residents using skills in geriatrics, psychotherapy and palliative medicine with a focus on pain and symptom management.

April 2006 - February 2017
Family Physician, Community MD (Brampton, Ontario)

- Providing comprehensive primary care in a Family Health Team
- Areas of focus consisting of Geriatrics, Palliative care, Psychotherapy and Diabetes Management

3. HONOURS AND CAREER AWARDS

NATIONAL

1. Award of Excellence, College of Family Physicians of Canada- July 2022

PROVINCIAL/ REGIONAL

1. Changemaker, Toronto Star, Toronto, Ontario, Canada- November 2021
2. Award of Excellence in Social Responsibility, Department of Family and Community Medicine, University of Toronto- April 2020
3. Diversity, Equity and Inclusion Change Champion, William Osler Health System- recognized by senior management for voluntary service to the Diversity Advisory Council on November 29th, 2018

LOCAL

1. Heroes in the Home Caregiver Award, Central West LHIN- presented on November 15th, 2018
2. 2016 Community Preceptor Teaching Award (Osler Clinical Education Campus) from McMaster University (Mac-CARE)- presented October 2017

Administrative Activities

1. November 2021- present. Board Member (Member-at large), Canadian Doctors for Medicare
2. October 2021 - present. Palliative Long-term Care Community of Practice Echo series (co-chair)
3. October 2021-March 2022. Member of the Advisory Committee for a project on the Financialization of Housing, Office of the Federal Housing Advocate, Canadian Human Rights Commission.
4. July 2020 - February 2021. Medical Education Lead, Division of Palliative Care, William Osler Health System
5. June 2020 - present. Chair, Member Interest Group in Palliative Care, College of Family Physicians of Canada

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6. May 2020 - November 2021. Ontario Health Coalition Board Member and part of the Long-Term Care Committee
7. March 2020 - February 2021. COVID-19 Long-Term Care Rapid Action Team, Palliative Care Lead, William Osler Health System, Brampton, Ontario
8. December 2019 - March 2022. Long-term care (LTC) Resource Development & Implementation Task Group, Canadian Hospice and Palliative Care Association (CHPCA)
9. June 2019 - present. Research Lead, Canadian Society of Palliative Care Physicians (CSPCP)
10. May 2019 - present. Director-at-large, Canadian Society of Palliative Care Physicians (CSPCP)
11. December 2018 - December 2019. POCUS 101 Scientific Planning Committee, Continuing Health Sciences Education, McMaster University
12. November 2018 - May 2019. Organizing committee, Palliative Care Education Day- Technology in Palliative Care, Brampton Civic Hospital, William Osler Health System
13. November 2018 - March 2021. PALL-LTC project lead: developing a consultative shared care Palliative Care programme in LTC (long-term-care) (in collaboration with the Central West Palliative Care Network)
14. October 2018 - September 2021. Choosing Wisely Committee for Palliative Care (Chair from February 2020 to September 2021)
15. May 2018 - May 2020. Organizing committee for educational rounds, Division of Supportive and Palliative Care, William Osler Health System
16. January 2018 -March 2021 PALL-POCUS Project lead: Developing use of point-of-care ultrasound (POCUS) in the palliative care population via education and research
17. July 2017 - March 2020. Long Term Care Home Working Group, Central West Palliative Care Network.
18. June 2017 - December 2020. Physician Representative, Diversity Advisory Council, William Osler Health System.

Peer Review Activities

August 2017- March 2020	Current Oncology
April 2019	Pallium Canada, LEAP Oncology Module
August 2019	Pallium Canada, LEAP Hospital Module
August 2019	Pallium Canada, LEAP Emergency Department Module
October 2019	Division of Palliative Care Research & Scholarly Project Fund 2019-2020, Department of Family Medicine, McMaster University
November 2019	Yorkshire Cancer Research Award Applications, 2019 Funding Round, United Kingdom
August 2021	2021 Palliative Medicine Resident Research Award, Canadian Society of Palliative Care Physicians

Innovations and Development in Teaching and Education

1. October 10th, 2023- Serious Illness Conversations Lecture, ProComp Sessions, Faculty of Health Sciences, McMaster University
2. April 12th, 2023- LEAP Hospital Co-Facilitator, North York General Hospital, Toronto

CONFIDENTIAL DOCUMENT

3. September 2022-present. Subject Matter Expert, Culturally Responsive Palliative Care in Long-Term Care eLearning Development modules, Bruyere Research Institute, Ontario Centres for Long-Term Care
4. September 20th, 2022 - Serious Illness Conversations Lecture, ProComp Sessions, Faculty of Health Sciences, McMaster University
5. August 7th, 2022- Completed training for “Coach” level facilitation, Pallium Canada
6. July 7th & 14th, 2022- LEAP Long-Term Care Co-facilitator, Pallium Canada (online webinar)
7. April 2022-present. Member of the Capstone Advisory Committee for Masters of Health Science Capstone Project in Translational Research by Eric Rotgaus: “A COVID-19 Pandemic Case Study: Effect on direct communication between caregivers and residents in LTC facilities in Canada. Mitigating the impact on care delivery in LTC facilities during instances of systemic societal stress.” Translational Research Program, Temerty Faculty of Medicine, University of Toronto
8. February 2022-present. Canadian Doctors for Medicare, Mentorship Program, mentor
9. September 21st, 2021 - Serious Illness Conversations Lecture, ProComp Sessions, Faculty of Health Sciences, McMaster University
10. March 24th, 2021- Essential Conversations in Long-Term Care. Special Teaching session for nurse practitioners in Central West LHIN & Central LHIN
11. November 11th, 2020 - Goals of Care Virtual Patient Care Session Facilitator, Faculty of Health Sciences, McMaster University
12. October 6th, 2020 - Serious Illness Conversations Lecture, ProComp Sessions, Faculty of Health Sciences, McMaster University
13. September 2020 - August 2021 University of Toronto, Faculty of Medicine’s Office of Inclusion and Diversity, Diversity Mentorship Program, mentor
14. April 2020 - LEAP Online Scientific Planning Committee, Pallium Canada
15. April 2020- Subject Matter Expert and Content Development Co-Lead for LEAP COVID-19 Modules, Pallium Canada
16. February 2020 - present- Subject Matter Expert for LEAP Core Content Renewal, Pallium Canada
17. January 13th, 2020 - LEAP-Renal Co-Facilitator, St. Joseph’s Health Centre, Toronto, Ontario
18. November 7th, 2019 - co-facilitated a seminar on methadone for Palliative Care Postgraduate Trainees, Department of Family & Community Medicine, University of Toronto (with Dr. Marnie Howe)
19. October 16th, 2019 - co-facilitated “Hillary’s Heart”- a module developed to teach 3rd year University of Toronto medical students about palliative care
20. September 4th, 2019 - co-facilitated “Hillary’s Heart” a module developed to teach 3rd year University of Toronto medical students about palliative care
21. January 11th, 2019 - co-facilitated a seminar on palliative care for immigrant populations with Dr. Michael Bonares, a palliative care fellow. Presented at academic half day at the Department of Family & Community Medicine, University of Toronto.
22. February 28th & March 1st, 2019 - LEAP-LTC Co-Facilitator, Pallium Canada, Brampton Ontario, sponsored by the Central West Palliative Care Network
23. November 26th & 27th, 2018 - LEAP CORE Co-Facilitator, Pallium Canada, Brampton Civic Hospital, William Osler Health System- co-sponsored by the Central West Palliative Care Network
24. September 15th, 2018 - reviewer, Nausea/Vomiting Algorithm, Cancer Care Ontario
25. September 5th, 2018 - co-facilitated “Hillary’s Heart” a module developed to teach 3rd year University of Toronto medical students about palliative care

26. March 5th & 8th, 2018 - LEAP CORE Co-Facilitator, Pallium Canada, Oakville, Ontario, co-sponsored by Mississauga Halton LHIN
27. January 31st & February 1st, 2018 LEAP- LTC Co-Facilitator, Pallium Canada, Brampton Ontario, co-sponsored by Central West Palliative Care Network & the Region of Peel
28. January 2018 - Content Creator, Optimizing Patient ouTcomes IN pancreatic cancer (OPT-IN), International Centre for Professional Development in Health & Medicine, Montreal, Quebec, Canada

C. Academic History

RESEARCH AWARDS

Grants, Contracts and Clinical Trials

Peer-Reviewed Grants (Funded)

1. Isenberg SR. (NPA). Co-PA: Hsu A. Co-applicants: **Arya A**, Bennett C, Buchman S, Howard M, Kendall C, Klinger C, Lamanna M, Manuel D, Marshall D, Ponka D, Scott M, Seow H, Sinnarajah A, Tanuseputro P, Thavorn K, Webber C. Collaborators: Bryant D, Cargill DC, Cooper D, Downar J, Drok R, Lachance J, Lovell J, Oikonen K, Petersen L, Roberts B, Spencley M, Wilkes K, Yaternick W. *Building system capacity for home visits for patients near the end of life: A mixed methods study.* Dates: March 2023-February 2026 Submitted to: CIHR Project Grant: Fall 2022. Amount: $443,701.
2. Cadell, S. (NPA), Co-PA: Wright DK & Macdonald ME. Co-applicants: Aoun S. **Arya A,** Breen L, Cherblanc J, Dosani N, Guthrie D, Kortes-Miller K, Sequeira L, Sinclair R. Collaborators: Anthony K, Boudreau C, Prince H. Thompson M. *Grief and grief support needs in Canada.* Canadian Institutes of Health Research (CIHR) Project Grant (submitted September 2022). Dates: April 2023-March 2026. Amount: $191,251.
3. Hoben M. (NPA), Co-PA: Estabrooks C, Jarrett P. Co-applicants:**Arya A**, Aubrecht K, Banerjee S, Beeber A, Chamberlain S, Devkota R, Doupe M, Hughes L, Keefe J, Kelly C, Kobayashi K, O'Rourke H, Ristau M, Salma J, Shrestha S, Stajduhar K. Collaborators: Andrews G, Barahona R, Bianowski C, Boyle A, Cook H, Crawford E, DeJong C, Elliott-Lopez V, Fortunat K, Fox S, Jones S, Justice O, Kostyk P, Lowe M, MacBean C, Magalhaes S, Maisey S, McCracken B, McInnis L, Nadeau S, Neilson K, Prescott K, Risling E, Schalm C, Sethi V, Stevens S, Stewart J, Stockall T, Tamblyn Watts L, Taylor K, Trinidad G, Wasilewski B, Whitenect B, Woo L. *Counting What Counts: Assessing Quality of Life and its Health and Social Determinants Among Long-Term Care Residents with Dementia*. CIHR Project Grant: Dates: April 01, 2022 - March 31, 2025. Amount: $600,524
4. Tanuseputro P., Webber C., Isenberg SR., Downar J, Milani C, Qureshi D, Kobewka D, Hsu A, Lau J, Seow H, Sinnarajah A, Hannon B, Boyd H, **Arya A**. *Reporting and improving on physician prescribing rates for end-of-life symptom control in long-term care.* The College of Famly Physicians of Canada COVID-19 Pandemic Response & Impact Grant Program (Co-RIG Phase II). Dates: 2021-2023. Amount: $219,876 (*Co-investigator*)
5. Hsu, A., Presseau J., Manuel, D., Tanuseputro P., Robert B., Stacey D., Lessard L., Thavorn K., **Arya, A.**, Carrington, A., Donskov, M., Hampel, C., Orosz, Z., Fung, C., Grzeszczuk, A., Abdul Hai, K.

Implementation and Evaluation of a Mortality-Risk Prognostication Tool to Enhance Goals of Care Discussions in Long-Term Care Homes. Canadian Institutes of Health Research, Implementation Science Teams: Teams Strengthening Pandemic Preparedness in Long-Term Care Funding Opportunity. Dates: 2020-2023. Amount: $150,000 (*Co-investigator*)

6. Kaasalainen, S., McCloskey, R., Wickson-Griffiths, A., Neil-Sztramko, S., Baxter, S. (PIs); Dobbins, M., Boamah, S., Durepos, P., Hunter, PV., Markle-Reid, M., McCleary, L., Sussman, T., Siu, H., **Arya, A**., Holroyd-Leduc, J., Thompson, G., Venturato, L. *Implementing and Scaling Up the Palliative Care Toolkit in Long-Term Care During COVID*. Canadian Institutes of Health Research, Implementation Science Teams: Teams Strengthening Pandemic Preparedness in Long-Term Care Funding Opportunity, Dates: 2020-2023. Amount: $149,998 (*Co-investigator*)
7. **Amit Arya**, Aditya Nidumolu, Michelle Howard, Sheelagh Willett, Aleksandra Grzeszczuk, Lorand Kristof, John Davey, Naheed Dosani, Ravi Bhargava, Martin Chasen. *Rationale for Specialist Palliative Care Consultations Among Family Physicians Working in Long-term care.* Department of Family Medicine- Pilot Project Funding: McMaster University. Dates: 2019-2020. Amount: $4,905.60. *(Primary-investigator)*
8. Naheed Dosani, **Amit Arya**, Ravi Bhargava, Gurwinder Gill, Martin Chasen, Sukhjeet Dhillon, Bonnie Keating.*Perceptions of Palliative Care in the South Asian Community.* Department of Family Medicine- Pilot Project Funding: McMaster University. Dates: 2017-2018. Amount: $4,967 (Co-investigator)

D. Publications

1. PEER-REVIEWED PUBLICATIONS

Amit Arya, Sandy Buchman, Bruno Gagnon, James Downar. "Pandemic Palliative Care: Beyond Ventilators and Saving Lives." Canadian Medical Association Journal, early-released March 31st, 2020. doi: 10.1503/cmaj.200465

Naheed Dosani, Ravi Bhargava, **Amit Arya**, Celeste Pang, Achal Sharma, Martin Chasen. Perceptions of palliative care in a South Asian community: findings from an observational study. *BMC Palliat Care* 19, 141 (2020). https://doi.org/10.1186/s12904-020-00646-6

James Downar, **Amit Arya,** Kaitlyn Boese, Genevieve Lalumière, Ghislain Bercier, Shannon Leduc, Jill Rice, Valerie Charbonneau. A clinical response team providing support to long-term care homes with COVID-19 outbreaks in Eastern Ontario- a cohort study. Canadian Geriatrics Journal. https://cgjonline.ca/index.php/cgj/article/view/561

Amit Arya, Roddy Davey, Achal Sharma, Naheed Dosani, Dilnoor Grewal, Aysha Afzal, Ravi Bhargava, Martin Chasen. Utilization of Point-of-Care Ultrasound in a Specialist Palliative Care Team Across Multiple Care Settings: A Retrospective Chart Review. Palliative Medicine Reports.Nov 2022. 229-234. http://doi.org/10.1089/pmr.2021.0067

Other Publications

Finding the Right Balance: An Evidence-Informed Guidance Document to Support the Re-Opening of Canadian Long-Term Care Homes to Family Caregivers and Visitors during the COVID-19 Pandemic. Toronto, ON: National Institute on Ageing Guidance Document. July 15th, 2020 (expert reviewer)

Care of Residents in Long-Term Care Homes During the COVID-19 Pandemic- Interim Guidance. Public Health Agency of Canada. July 17th, 2020. (reviewer and contributor)

Canadian Society of Palliative Care Physicians Key Messages: Embedding a Palliative Approach to Care in Long-Term Care Facilities. March 2022 (lead author)

Home Care for Older Adults During the COVID-19 Pandemic: Lessons from the Netherlands, Denmark, and Germany, to Strengthen and Expand Homecare in Canada. CanCOVID Issue Note, March 25th, 2022 (consultant)

Ontario COVID-19 Drugs and Biologics Clinical Practice Guidelines Working Group, Ontario COVID-19 Congregate Care Working Group and LTC+. Therapeutic management of residents of long-term care homes with COVID-19. *Ontario COVID-19 Science Advisory Table*. 2022; Version 1.0. https://doi.org/10.47326/ocsat.tm-ltch.2022.1.0 April 22nd, 2022 (co-author)

Health Human Resources in Long-Term Care: Ten Global Insights About How to Increase and Stabilize the Long-Term Care Workforce in Canada. CanCOVID Issue Note, June 15th, 2022 (consultant)

3. NON-PEER-REVIEWED PUBLICATIONS

Jose Pereira**, Amit Arya,** James Downar, Patty Rice, Susan MacDonald, Ed Osborne, Salmaan Kanji, Bob Sauls. Shortages of Palliative Care Medicines in Canada during the COVID-19 Pandemic: Gambling with Suffering. Healthcare Quarterly 23(4) January 2021 : 17-22.doi:10.12927/hcq.2020.26398.

James Downar, **Amit Arya,** Genevieve Lalumiere, Ghislain Bercier, Shannon Leduc, Valerie Charbonneau. Practice Innovations: Rapid Deployment of Palliative Care in Clinical Response Teams to Support Long-Term Care Facilities: the Community Paramedic Perspective. Canadian Paramedicine, 44 (1): 9-14.

Opinion Pieces

1. January 14th, 2023. Something really, really must be done: an urgent plea for the Canada Disability Benefit to become law in 2023. The Toronto Star (with Naheed Dosani and Birgit Umaigba)
2. September 29th, 2022. Ontario’s hospitals are facing a crisis. Investing in palliative care is a vital solution. The Toronto Star (with Stephen Singh and Nadine Persaud)
3. August 31st, 2022. Forcing seniors into long-term care is not the solution to the hospital crisis. The Globe and Mail (with Samir Sinha)

4. August 30th, 2022. Spending more on private for-profit healthcare will not solve Ontario's crisis. Investing in our public healthcare system, will. The Toronto Star (with Naheed Dosani and Bernard Ho)
5. July 6th, 2022. How do we "fix" Canadian healthcare? Not by forcing people to pay. The Toronto Star (with Katie Arnup)
6. February 18th, 2022. Convoy protests have hurt truck drivers fighting against wage theft, precarious work, and misclassification. The Toronto Star (with Dilpreet Singh and Navi Aujla)
7. November 9th, 2021. More than 3,800 dead, nurses quitting and inhumane conditions: Ontario's long-term care system is broken. The Toronto Star (with Birgit Umaigba, Gaibrie Stephen and Naheed Dosani).
8. September 17th, 2021. After 15,000 deaths in long-term care across Canada, here's an analysis of what parties are promising this election. The Hamilton Spectator. (with Andriy Katyukha and Naheed Dosani)
9. September 16th, 2021. Climate change puts Canada's seniors at risk. The Globe and Mail (with Samantha Green)
10. September 15th, 2021. How can we start to make Canada's long-term care homes about care, not profit? Policy Options (with Jackie Brown and Andrew Longhurst)
11. August 13th, 2021. We must protect long-term care residents from another tragedy, this time fuelled by the Delta Variants. The Toronto Star (with Kashif Pirzada and Victor Leung).
12. July 21st, 2021. Yes, vaccines should be mandatory for health-care workers. Here's a compassionate and equitable way to make that happen. The Toronto Star (with Sabina Vohra-Miller, Birgit Umaigba and Naheed Dosani)
13. April 20th, 2021. Besides COVID-19 vaccines, we need to fix long-standing poor working conditions in Ontario. Here are some solutions. The Toronto Star (with Amanpreet Brar, Gaibrie Stephen Stephen, and Naheed Dosani)
14. December 29th, 2020. "As doctors who work in long-term care homes and serve marginalized populations, we believe it's well past time to end for-profit care." The Toronto Star (with Naheed Dosani, Andrew Boozary, and Silvy Mathew)
15. August 27th, 2020. "Preparing nursing homes for a second wave starts with staffing." The Toronto Star (with Vivian Stamatopoulos and Amina Jabbar)
16. July 16th, 2020. "Palliative Care has been lacking for decades in long-term care." Policy Options.
17. April 26th, 2020- "COVID-19 rips bandage off the open wound that is our nursing home system." CBC Health News.
18. April 13th, 2020- "The coronavirus palliative care crisis." Macleans Magazine (with Naheed Dosani)
19. June 5th, 2019- "When CPR causes harm and suffering." Published on healthydebate.ca

E. Presentations and Special Lectures

Oral Paper Presentations

1. Ménard A, Podinic I, Hossain S, Conklin J, **Arya A**, Archibald D, Elliott J, Kothari A, Stolee P, Sveistrup H, Mohammadi Dehcheshmeh M, Hsu AT. Adult-children and spouse/partner caregivers to nursing home residents: how do they differ in their pattern of caregiving? 6th International Conference on Evidence-based Policy in Long-term Care (ILPN). London, England. September 7-10, 2022.

2. Webber C, Milani C, Clarke A, Isenberg SR, Downar J, Kobewka D, Hsu AT, Lau J, Sinnarajah A, Simon J, Boese K, **Arya A**, Roberts R, Turcotte L, Howard M, Maxwell C, Tanuseputro P. Using linked administrative data to evaluate and improve the quality of end-of-life care in nursing homes. *International Population Data Linkage Network (IPDLN) Conference 2022.* Edinburgh, Scotland. September 7th-9th, 2022.
3. Milani C, Webber C, Clarke A, Isenberg SR, Downar J, Kobewka D, Hsu AT, Lau J, Sinnarajah A, Simon J, Boese K, **Arya A**, Roberts R, Turcotte L, Howard M, Maxwell C, Robert B, Tanuseputro P. The Impact of the COVID-19 Pandemic on End-of-Life Prescribing in Ontario Nursing Homes. *International Population Data Linkage Network (IPDLN) Conference 2022.* Edinburgh, Scotland. September 7th-9th, 2022.
4. **Amit Arya,** Roddy Davey, Humaira Saeed, Naheed Dosani. "Don't Tell Mom." Developing Cultural Humility and Safety in Palliative Care. 23rd International Congress on Palliative Care; Montreal, Quebec, October 13th-16th, 2020 (cancelled due to COVID-19 pandemic)
5. **Amit Arya,** Madelaine Baetz-Dougan, John Davey, Naheed Dosani, Michelle Howard, Martin Chasen. Patient Characteristics, Satisfaction, and Healthcare Utilization Following Point-of-care Ultrasound (POCUS) and Associated Interventions in a Tertiary Palliative Medicine Service." 23rd International Congress on Palliative Care; Montreal, Quebec, October 13th-16th, 2020 (cancelled due to COVID-19 pandemic)
6. **Amit Arya,** Madelaine Baetz-Dougan, John Davey, Naheed Dosani, Michelle Howard, Martin Chasen. Patient Characteristics, Satisfaction, and Healthcare Utilization Following Point-of-care Ultrasound (POCUS) and Associated Interventions in a Tertiary Palliative Medicine Service." Hospice & Palliative Care Ontario Annual Conference; Richmond Hill, Ontario, April 27th, 2020
7. Ravi Bhargava, John Davey, Martin Chasen, **Amit Arya**, Deepanjali Kaushik; Achal Sharma. Role of nutritional supplement Ensure Protein Max on calorie and protein intake, appetite and body weight in patients with advanced cancer receiving chemotherapy. Multinational Association of Supportive Care in Cancer MASCC/ISOO, San Francisco, USA, June 2019
8. **Amit Arya**, John Davey, Naheed Dosani, Martin Chasen. "The Future is Now! Emerging Technological Trends in Palliative Care." Hospice & Palliative Care Ontario Annual Conference; Toronto, Ontario, April 28th, 2019
9. John Davey, Martin Chasen, Ravi Bhargava, **Amit Arya**, Deepanjali Kaushik, Achal Sharma. Role of Ensure Protein Max on calorie and protein intake, appetite and body weight in patients with advanced cancer receiving chemotherapy. Hospice Palliative Care Ontario Annual Conference; Toronto, Ontario, April 28 - 30, 2019
10. John Davey, Martin Chasen, Ravi Bhargava, Naheed Dosani, **Amit Arya**, Shayda Ziai, Henry Conter, Deepanjali Kaushik, Achal Sharma, Shannon Farley. The Modified Palliative Rehabilitation Programme: Enhancing Functioning, Appetite and Quality of Life in Patients with Cancer. Hospice Palliative Care Ontario Annual Conference; Toronto, Ontario, April 28 - 30, 2019

Research Posters

1. Isenberg SR, Milani C, Roberts R, Webber C, Downar J, Bush S, Simon J, **Amit A**, Boese K, Lynch D, Tanuseputro P. A qualitative exploration of the prescribing of medications at the end-of-life in long-term

care (LTC) homes before and during the COVID-19 pandemic. *Hospice Palliative Care Ontario (HPCO) Conference 2023.* Toronto*,* Ontario June 11-13 2023.

2. Creighton, R., Esfandiari, N., Zhou, P., Butters, A., Khera, G., Thommandram, D., Thrower, C., DeKock, I., Mirhosseini, M., **Arya, A**., Downar, J., Myslik, F., & Klinger, C. (2021). Availability and Impact of Point of Care Ultrasound (POCUS) in North America: 'The Road Ahead' from a Scoping Review of the Literature [Abstract]. Proceedings of the virtual 2021 Canadian Hospice Palliative Care Conference
3. **Amit Arya**, Martin Chasen, John Davey, Naheed Dosani, Shayda Ziai, Herman Yeung, Jennifer Kagan, Amanda Rosenblum, Megan Rachielson & Jessica Seegobin. "Point of Care Ultrasound (POCUS) in a Tertiary Palliative Medicine Service." Advanced Learning in Palliative Medicine 2019; Calgary, Alberta, May 24th, 2019

1. **Amit Arya**, John Davey, Naheed Dosani, Jessica Seegobin, Megan Rachielson and Martin Chasen. "Is a Palliative Approach to Care Provided for Patients Arriving from Long-Term Care Facilities in the Emergency Department?" Barrie Rose Research Day in Palliative Medicine, University of Toronto, May 6th, 2019
2. **Amit Arya**, John Davey, Naheed Dosani, Jessica Seegobin, Megan Rachielson and Martin Chasen. "Is a Palliative Approach to Care Provided for Patients Arriving from Long-Term Care Facilities in the Emergency Department?" Ontario Long Term Care Clinicians (OLTCC) Annual Conference 2018: Practical Pearls in Long Term Care; Toronto, Ontario, October 20-21, 2018. Poster #8
3. **Amit Arya**, Martin Chasen, John Davey, Naheed Dosani, Shayda Ziai, Herman Yeung, Jennifer Kagan, Amanda Rosenblum, Megan Rachielson & Jessica Seegobin. "Point of Care Ultrasound (POCUS) in a Tertiary Palliative Medicine Service." William Osler Health System Summer Student Research Program; Brampton, Ontario, August 21, 2018
4. Naheed Dosani, Martin Chasen, Ravi Bhargava, Sukhjeet Dhillon, Gurwinder Gill, **Amit Arya**, Bonnie Keating, Celeste Pang. "Perceptions of Palliative Care in the South Asian Community". Hospice Palliative Care Ontario Annual Conference; Toronto, Ontario, April 22 - 24, 2018 (awarded *Best Poster* at the conference)

Invited Lectures and Presentations

NATIONAL & INTERNATIONAL

1. Naheed Dosani, Holly Prince, **Amit Arya.** The Teresa Dellar Community Seminar: Health care inequities and social justice. Invited panelist, the McGill International Congress on Palliative Care. October 19th, 2022.
2. **Amit Arya,** Naheed Dosani. Diversity & Inclusion in the Long-Term Care Setting. Long-term Care Community of Practice Series, Project Echo, Pallium Canada. September 8th, 2022.
3. **Amit Arya**, Trevor Morey. "Inspiring Compassionate Palliative Care Advocacy Through Equity, Diversity & Inclusion." Advanced Learning in Palliative Medicine Annual Conference, May 7th, 2022.
4. Cheryl Louzado, Omisoore Dryden, **Amit Arya.** How can cancer care in Canada ensure broader inclusivity of all populations and better address healthy equity, racism and palliative care? Invited panelist, Canadian Association of Medical Oncologists 2022 Hybrid Annual Scientific Meeting, April 28th, 2022.
5. **Amit Arya.** Culturally safe palliative care. Pediatric Palliative Care Community of Practice Series, Project Echo. April 20th, 2022.
6. **Amit Arya,** Tamara Daly, Andrew Longhurst. What should the future of long-term care look like in Canada? Moderator and Panelist, Canadian Doctors for Medicare 2022 Better Medicare Series, February 17th, 2022.
7. **Amit Arya,** Janany Nemallan. The Palliative Approach as Part of the Continuum of Care. Long-term Care Community of Practice Series, Project Echo, Pallium Canada. January 13th, 2022.
8. **Amit Arya,** Kali Barrett, Allison McGeer, Stefan Baral. The COVID debates: Be it resolved that the COVID-19 vaccine should be mandatory for all health workers. Hosted by Healthy Debate and the Department of Medicine, University of Toronto, November 29th, 2021.
9. Linda Moss, Jennifer Baumbusch, **Amit Arya**, Janice Kaffer. "Who knows? Essential Care Partners do." Canadian Patient Safety Week Webinar organized by Healthcare Excellence Canada, October 27th, 2021
10. **Amit Arya,** Nadine Persaud. The double pandemic in long-term care: The COVID-19 crisis is a palliative care crisis. Invited panelist, webinar series by Canadian Virtual Hospice, October 20th, 2021
11. **Amit Arya**. The COVID-19 crisis in LTC: A crisis of decision making. Keynote Presentation, The 6th Annual Clinical Decision Making Conference, organized by the Hamilton Academy of Medicine, Choosing Wisely Canada and the McMaster University Resource Stewardship Interest Group, October 16th, 2021
12. **Amit Arya,** Benjamin Leis, Karen Born, Cindy Dumba. Time to talk: Encouraging serious illness conversations. Invited panelist, Choosing Wisely Canada National Meeting, May 12th, 2021.
13. **Amit Arya,** Sharleen Stewart. Responding to the crisis in long-term care. Invited panelist, Progress Summit 2021 Part 2. Building a caring economy to speed recovery, organized by the Broadbent Institute, April 29th, 2021
14. **Amit Arya,** Tamara Sussman, Cherie Kok. Transforming the landscape of long-term care: what has COVID-19 taught us? Invited panelist, webinar series by Canadian Virtual Hospice, March 10th, 2021
15. **Amit Arya,** Benjamin Leis. "Time to Talk: Encouraging Serious Illness Conversations." Choosing Wisely Canada speaker series in collaboration with the Canadian Medical Association, March 10th, 2021

16. **Amit Arya**, Aveksha Ellaurie. “Aging in Place: Development of a Shared Care Consultative Model of Palliative care in Long-Term Care Facilities.” Advanced Learning in Palliative Medicine Annual Conference, February 27th, 2021
17. **Amit Arya,** Pat Armstrong, Eric Hanna, Ashley Verduyn. “Enhancing Relationships in the Landscape of Long-Term Care.” November 24th, 2020. Health Law in Canada Journal & IHPME (University of Toronto)
18. **Amit Arya,** Daniel Vincent, Frank Mysilik, Noush Mirhosseini. “PoCUS in Palliative Care- An Interactive Case Based Workshop.” 23rd International Congress on Palliative Care; Montreal, Quebec, October 13th-16th, 2020 (cancelled due to COVID-19 pandemic)
19. Naheed Dosani, Fanny Cheng, Ravi Bhargava, **Amit Arya,** Martin Chasen. **“**Connecting Care at Home: An Introduction to the Provision of Virtual Palliative Care in Communities.” 23rd International Congress on Palliative Care; Montreal, Quebec, October 13th-16th, 2020 (cancelled due to COVID-19 pandemic)
20. Rami Shami**,** Naheed Dosani, Alissa Tedesco, **Amit Arya.** “A Trauma-Informed Approach to Palliative Care.” 23rd International Congress on Palliative Care; Montreal, Quebec, October 13th-16th, 2020 (cancelled due to COVID-19 pandemic)
21. **Amit Arya.** Advance Care Planning & Goals of Care Discussions during the COVID-19 Pandemic. Webinar hosted by Choosing Wisely Canada, May 6th, 2020
22. **Amit Arya,** Robert Benoit, Michael MacFadden, Sharon Kassalainen. Palliative Approach to Care in Long Term Care During COVID-19. Moderator and Panelist for Webinar Hosted by Pallium Canada. April 27th, 2020.
23. **Amit Arya**, Edward Osborne, James Downar, Susan MacDonald. Shortage of Palliative Medications During COVID. Panelist for Webinar Hosted by Pallium Canada. April 15th, 2020.
24. **Amit Arya,** David Henderson, Anna Voeux, Anne Boyle, Charlie Chen. Panelist, CSPCP Members Discussion- Palliative Care During the COVID-19 Pandemic. April 15th, 2020.
25. **Amit Arya.** Palliative Care During the COVID-19 Pandemic. Webinar for the Canadian Society of Palliative Care Physicians, April 2nd and 8th, 2020.
26. **Amit Arya,** Roddy Davey. “Don’t tell Mom. Developing Cultural Competency in Goals of Care Discussions.” Canadian Hospice Palliative Care Conference, *Embracing Partnerships Towards a Shared Vision*, Ottawa, Ontario, September 19th, 2019.
27. **Amit Arya**. “Don’t tell Mom. Developing Cultural Competency in Goals of Care Discussions.” Advanced Learning in Palliative Medicine Annual Conference, Calgary, Alberta, May 24th, 2019
28. James Downar, Frank Mysilik, **Amit Arya,** Jennifer Hughes, Brian Buchanan. Pre-Conference POCUS Workshop, co-instructor and presenter. Advanced Learning in Palliative Medicine Annual Conference, Calgary, Alberta, May 22nd, 2019.
29. **Amit Arya.** The Lantern Project, a group of dieticians working in aged care facilities in Australia. “Nutritional issues in LTC patients- a Palliative Care Approach”- webinar to a group of dieticians in Australia, September 2nd, 2016.

PROVINCIAL

1. Nadine Persaud, **Amit Arya**, Naheed Dosani. “Is it time to rethink the philosophy of hospice care in Ontario?? A focus on hospice residence admission criteria.” Hospice Palliative Care Ontario Annual Conference June 11th-13th, 2023.

2. Madelaine Ritts, Nadine Persaud, **Amit Arya**, Naheed Dosani. “Working conditions determine the conditions of palliative care: How decent work is essential to the delivery of hospice and palliative care.” Hospice Palliative Care Ontario Annual Conference June 11th-13th, 2023.
3. **Amit Arya.** “Improving goals of care conversations in long-term care.” Invited speaker, Victoria Division of Family Practice & South Island Division of Family Practice Long-term Care initiative learning series, September 22nd, 2022
1. **Amit Arya,** Nadine Persaud.”Specialist Palliative Care in Long-Term Care.” Keynote Presentation, Annual General Meeting for the Palliative Care Nurses Interest Group, Registered Nurses Association of Ontario, June 11th, 2022
2. **Amit Arya.** “Avoiding emergency department visits for patients receiving a palliative approach to care.” Nurse Practitioners' Association of Ontario LTC and Palliative Care Virtual Conference, May 27th, 2022.
3. **Amit Arya,** Naheed Dosani. “Inspiring Compassionate Palliative Care Advocacy Through Equity, Diversity & Inclusion.” Hospice Palliative Care Ontario Annual Conference, April 25th, 2022.
4. Nadine Persaud, **Amit Arya,** Naheed Dosani. Specialist Palliative Care in Long-Term Care: A Pilot Project. Hospice Palliative Care Ontario Annual Conference, April 25th, 2022.
5. **Amit Arya,** Nadine Persaud, Naheed Dosani. Adopting a Specialist Palliative Care Program in Your Home. 2022 AdvantAGE Ontario Virtual Convention. April 20th, 2022.
6. **Amit Arya.** “How can we actually fix LTC during the COVID-19 crisis.” Keynote speaker, Ontario Medical Students Association Day of Action, April 16th, 2022.
7. **Amit Arya.** Invited panelist, Virtual Unifor Ontario Regional Council. March 10th, 2022.
8. Presented in front of the Standing Committee on the Legislative Assembly on Bill 37, as part of Public Hearings for **Bill 37, Providing More Care, protecting Seniors, and Building More Beds Act**- November 25th, 2021
9. Naheed Dosani, **Amit Arya.** “Inspiring compassionate health care & palliative care advocacy through equity, diversity and inclusion.” Invited panelist, Ontario Medical Association EPR Seminar Series. October 22nd, 2021
10. **Amit Arya.** “How do we fix our eldercare system after the COVID-19 crisis?” Plenary Speaker, Council of Agencies Serving South Asians (CASSA) Annual Health Equity Summit, September 23rd, 2021.
11. **Amit Arya**, Nora Loreto & Megan Linton. Abolish Long-Term Care. Invited Panelist for the Disability Justice Network of Ontario, August 5th, 2021.
12. **Amit Arya**. “Palliative Care in Long-Term Care: COVID-19 and Beyond.” 2021 Virtual Convention AdvantAGE Ontario, May 5th, 2021.
13. Nadine Persaud, Rami Shami, **Amit Arya,** Naheed Dosani. “Trauma-Informed Palliative Care: A Focus on COVID-19 through the Blending of Multiple Lenses.” Hospice Palliative Care Ontario Annual Conference, April 19th, 2021.
14. **Amit Arya**. “Palliative Care in Long-Term Care: COVID-19 and Beyond.” Hospice Palliative Care Ontario Annual Conference, April 18th, 2021.
15. **Amit Arya,** James Downar. “Rapid Deployment of Palliative Care Teams to Support Long-Term Care Facilities during the COVID-19 Pandemic.” Hospice Palliative Care Ontario Annual Conference, April 18th, 2021.
16. **Amit Arya,** Samir Sinha. “COVID19 Vaccines and the Elderly.” Invited panelist for townhall for the South Asian Health Network, March 9th, 2021

17. **Amit Arya,** Naheed Dosani. "Supporting COVID-19 Long-Term Care Rapid Response Teams" Ontario Hospital Association, February 11th, 2021.
18. **Amit Arya,** Naheed Dosani. Palliative Care in LTC: COVID-19 and beyond. Ontario College of Family Physicians Annual Conference. Family Medicine Summit 2021, January 30th, 2021.
19. **Amit Arya,** Vivian Stamatapoulos, Natalie Mehra. Closing Plenary, Lessons from the First Wave. Ontario Health Coalition Annual Health Action Virtual Assembly, October 24th, 2020.
20. **Amit Arya,** John Davey. "Don't Tell Mom: Developing Culturally Safe Palliative Care in LTC Facilities." Ontario Long-Term Care Clinicians Virtual Conference, October 16th, 2020.
21. **Amit Arya.** "Palliative Care in LTC: COVID19 and beyond." Keynote presentation, Nurse Practitioners' Association of Ontario LTC and Palliative Care Virtual Conference, May 29th, 2020.
22. **Amit Arya,** James Downar. "Pandemic Palliative Care" Keynote presentation, Ontario Medical Association Section Section of Palliative Medicine Annual General Meeting, April 26th, 2020.
23. **Amit Arya,** Naheed Dosani, Sandy Buchman, James Downar, Leah Steinberg. Keynote presentation: COVID-19 Panel. Hospice Palliative Care Annual Conference, Richmond Hill, Ontario, April 29th, 2020.
24. **Amit Arya,** Naheed Dosani, Bonnie Keating, Martin Chasen. "The future is now: Technological Innovations in Palliative Care." Department of Family and Community Medicine 2020 Conference, Toronto, Ontario, April 24th, 2020 (cancelled due to COVID-19 pandemic)
25. **Amit Arya**, Naheed Dosani, Roddy Davey, Humaira Saeed. "Don't tell Mom. Developing Cultural Humility and Safety in Palliative Care." Hospice Palliative Care Annual Conference, Richmond Hill, Ontario, April 29th, 2020
26. Rami Shami, Naheed Dosani, **Amit Arya,** Alissa Tedesco. "The Trauma Informed Approach to Hospice Palliative Care" Hospice Palliative Care Annual Conference, Richmond Hill, Ontario, April 27th, 2020
27. Naheed Dosani, Fanny Cheng, **Amit Arya**, Ravi Bhargava, Bonnie Keating. "Connecting Care at Home: An Introduction to the Provision of Virtual Palliative Care in our Communities." Hospice Palliative Care Annual Care Conference, Richmond Hill, Ontario, April 28th, 2020
28. **Amit Arya**, Roddy Davey. "Don't tell Mom." Developing Cultural Competency in Advance Care Planning & Goals of Care Discussions" Annual Scientific Assembly, Ontario College of Family Physicians, Toronto, Ontario, November 29th, 2019.
29. **Amit Arya**. "Considering Culture: Delivering Effective and Appropriate Palliative Care." AdvantAge Ontario Webinar, Palliative and End of Life Care Webinar Series- presented to 30 not-for-profit LTC homes in Ontario, September 5th, 2019.
30. **Amit Arya**, Roddy Davey. "Full Code or DNR: An Approach to Discussion about End of Life Decision Making." Ontario Long Term Care Clinicians Conference 2018- Practical Pearls in Long-Term Care. Toronto, Ontario, October 21st, 2018
31. **Amit Arya**, Roddy Davey. "Full Code or DNR? An Approach to Goals of Care Discussions in a Larger Cultural Context" Hospice Palliative Care Ontario Annual Conference, Richmond Hill, Ontario, April 22nd, 2018.

LOCAL

1. **Amit Arya.** It's time to demand change: Canada's long-term care system is broken. So what are some solutions? Markham Family Health Team Global Health Learning Lunches, September 7th, 2022
2. **Amit Arya.** Bringing Palliative Care and End of Life Care into Long Term Care Homes. 2022 Sinai Health/UHN Geriatrics Institute Education Day. June 14th, 2022.
3. **Amit Arya,** Naheed Dosani. Inspiring compassionate health care advocacy through equity, diversity and inclusion. North York General Hospital Medicine Rounds. February 15th, 2022.
4. **Amit Arya**, Hari Priya Akula, Padmaja Sreeram. COVID-19 Vaccination: Expert Recommendations and Debunking Common Myths. Virtual webinar for the South Asian Community sponsored by The Ontario Konkani Association and the Sringeri Vidya Bharati Foundation. February 6th, 2022.
5. Shawna Novak, Onye Nnorom, **Amit Arya**. "The infosphere as a social determinant of health-rebuilding trust through solidarity." Invited panelist, 14th annual Dalla Lana School of Public Health Student Led Conference: The new normal: Takeaways on Health Misinformation During a Pandemic, November 13th, 2021.
6. **Amit Arya,** Naheed Dosani. Inspiring compassionate palliative care advocacy through EDI. Invited panelist for event hosted by the Division of Palliative Care, Department of Family & Community Medicine, University of Toronto, June 24th, 2021
7. **Amit Arya,** Sandy Shaw. Advocating as Medical students. Panelist for event hosted by MacMed Political Advocacy Committee, March 19th, 2021
8. **Amit Arya,** Amanda Li, Ashley Verduyn. COVID-19 & the Long-Term Care Crisis: Perspectives from the frontlines of Palliative Care. Grand Rounds, Division of Palliative Care, University of Toronto, March 11th, 2021
9. **Amit Arya.** Palliative Care in LTC: COVID19 and Beyond. Northwestern Ontario Palliative Care Online Summit 2020: A Palliative Approach to Care in Our New Normal. Lakehead University, October 21st, 2020.
10. **Amit Arya,** Naheed Dosani, Holly Prince. Developing Cultural Safety and Humility in Palliative Care. Northwestern Ontario Palliative Care Online Summit 2020: A Palliative Approach to Care in Our New Normal. Lakehead University, October 21st, 2020.
11. **Amit Arya**. Palliative Care Through the COVID-19 Pandemic and Beyond. Palliative Care Grand Rounds, co-sponsored by The Department of Family Medicine, Schulich School of Medicine and Dentistry, Western University; the Citywide Department of Family Medicine, London Health Sciences Centre; and St. Joseph's Health Care London.
12. Adhor Mir, Alex Farag, **Amit Arya**. The Role of Palliative Care in a COVID-19 Pandemic. April 1st, 2020. Division of Palliative Care Journal Club, McMaster University.
13. **Amit Arya.** End-of-life-care for a Patient Dying of COVID-19 Respiratory Failure. March 27th, 2020, William Osler Health System, Ontario. (Presentation for Emergency Department Staff).
14. **Amit Arya**. "Palliative Care During a Viral Pandemic." Division of Supportive & Palliative Care Journal Club, Brampton Civic Hospital, William Osler Health System, Ontario, March 11th, 2020
15. **Amit Arya.** Morbidity & Mortality Rounds, Division of Supportive & Palliative Care, William Osler Health System, Brampton Civic Hospital, December 19th, 2019
16. **Amit Arya**, Roddy Davey. "Point of Care Ultrasound in Palliative Care." Research plenary session at Palliative Care Education Day- "Technology in Palliative Care." William Osler Health System, Brampton Civic Hospital, May 16th, 2019.

17. **Amit Arya,** Roddy Davey. "A Pilot Project of Palliative Care in LTC." Research plenary session at Palliative Care Education Day- "Technology in Palliative Care." William Osler Health System, Brampton Civic Hospital, May 16th, 2019
18. **Amit Arya**, Roddy Davey. "Full Code or DNR: An approach to Discussion in a Larger Cultural Context." Central West Palliative Care Network Annual Conference 2018, Brampton, Ontario, November 14th, 2018
19. **Amit Arya.** "Let's make Brampton a Compassionate Community!" Division of Supportive & Palliative Care Journal Club, Brampton Civic Hospital, William Osler Health System, Brampton, Ontario, September 13th, 2018
20. **Amit Arya**, Naheed Dosani, Roddy Davey. "Communication Strategies in Palliative Care: A group discussion of ASCO Guidelines." Division of Palliative Medicine Journal Club, Brampton Civic Hospital, Ontario, January 25th, 2018.
21. **Amit Arya,** James Downar. "CPR- Advanced Statistics and Ethical Dilemmas." Medicine Grand Rounds, William Osler Health System. Brampton, Ontario, October 12th, 2017
22. **Amit Arya.** "Palliative Care for the ALS Patient." Division of Palliative Medicine Journal Club, Brampton Civic Hospital, Ontario, September 14th, 2017
23. **Amit Arya.** "Lymphedema Management in Palliative Care" Division of Palliative Medicine Journal Club, Brampton Civic Hospital, Ontario, March 9th, 2017

Selected Media

1. February 4th, 2023- A national strategy on aging? Health leaders are asking Trudeau to heed their call. Quoted by Moira Welsh in the Toronto Star.
2. January 31st, 2023- New national standards for long-term care unveiled. Interviewed by Heather Yourex-West for Global National.
3. January 17th, 2023- Innovation or privatization? The debate to save a healthcare system in crisis. Interviewed by Tina Yazdani for CityNews Toronto
4. January 16th, 2023- U of T community responds to travel restrictions for passengers from China, Hong Kong, Macao. Quoted by Georgia Kelly in The Varsity (University of Toronto Student Newspaper)
5. December 7th, 2022- Ontario family doctors letting patients go as caseloads become unmanageable. Interviewed by Tina Yazdani for CP24.
6. November 10th, 2022- Palliative care: what to know and why it matters. Interviewed by Pamela Diggins for CP24
7. November 10th, 2022- Ontario ER wait times getting worse, patients waiting up to 45 hours: leaked report. Interviewed by Michael Ranger and Tina Yazdani for CityNews Toronto
8. October 19th, 2022- The Plan to Stay Open: Relief for our beleaguered health-care system or a move to further privatization? Quoted in a Healthy Debate article by Maddi Dellplain
9. October 8th, 2022- COVID outbreaks rise in Ontario long-term care homes just as weather is turning cooler. Quoted in a Toronto Star article by Kenyon Wallace and Andrew Bailey
10. September 25th, 2022- Is the COVID pandemic over? Stakes high as debate over "the end" heats up. Quoted in a Toronto Star article by Kenyon Wallace and Megan Ogilvie

CONFIDENTIAL DOCUMENT

11. September 21st, 2022- Bill 7 does not fix the root cause of our problems- home care. Interviewed on CBC Canada Tonight by Ginella Massa.
12. September 20th, 2022- Interviewed on the Waiting Room Revolution Podcast
13. September 16th, 2022- Ford government to move hospital patients to long-term care, but proactive inspections still on hold. Quoted in a Press Progress article by Mitchell Thompson.
14. August 31st, 2022- Ontario's Bill 7 is a distraction from the real problems of our healthcare system. Interviewed for CBC News Network by Suhana Meherchand.
15. August 26th, 2022- Can Ontario force hospital patients into long-term care homes? It's complicated. Quoted in a CBC Toronto article by Laura McQuillan
16. August 25th, 2022- Concerns about Ontario's long-term care legislation. Interviewed for CTV Your Morning by Anne-Marie Mediwake.
17. August 23rd, 2022- Huge bill possible if patient doesn't go to LTC. Interviewed for CityNews Toronto by Cynthia Mulligan
18. August 20th, 2022- Ontario's health minister lays out 5-point strategy to bolster province's health-care system. Interviewed for CBC News Network by Natasha Fatah
19. August 18th, 2022- Private clinic surgeries, temporary LTCs part of Ontario's health system plan. Interviewed for CBC The National by Kris Reyes
20. August 4th, 2022- Current state of long-term care. Interviewed for CTV Your Morning by Anne-Marie Mediwake.
21. August 1st, 2022- COVID outbreaks continue in long-term care homes. Interviewed for CityNews Toronto by Cynthia Mulligan
22. July 11th, 2022- Omicron deadlier for Ontario seniors than previous two waves combined. Quoted in a Toronto Star article by Kenyon Wallace, Megan Ogilvie, and May Warren
23. July 8th, 2022- Ontario facing 7th wave of COVID-19; Doctors recommend getting booster. Interviewed for CBC News Network by Hannah Thibedeau
24. July 6th, 2022- With COVID vaccines losing effectiveness, what does it mean to be "fully vaccinated?" Quoted in a Toronto Star article by Raisa Patel
25. June 8th, 2022- Ontario is lifting nearly all of its remaining mask mandates. Interviewed for CTV Your Morning by Anne-Marie Mediwake.
26. June 8th, 2022- Fini le masque obligatoire dans le métro et les hôpitaux en Ontario, mais pas les foyers. Quoted in a Radio-Canada article by Maud Cucchi
27. May 28th, 2022- Ontario Votes 2022: Seniors, left to manage COVID-19 on their own, ignored by party platforms. Quoted in a Hamilton Spectator article by Joanna Frketich and Grant LaFleche
28. May 13th, 2022- What it takes to keep long-term care residents safe during the sixth wave. Quoted in a Toronto Star article by Ben Cohen
29. April 27th, 2022- New census data shows Canada's working age is older than it's ever been. Interviewed for CBC Canada Tonight by Ginella Massa
30. April 8th, 2022- Precarious work, unfair wage, not enough sick days: What experts say is exacerbating the COVID-19 pandemic. Quoted in a Toronto Star article by Jenna Moon and Olivia Bowden
31. March 24th, 2022- How we talk about the pandemic still matters. Quoted in a Refinery29 article by Molly Longman
32. March 17th, 2022- What can Ontario learn from Europe's spring COVID spike? Quoted in a Toronto Star article by Kenyon Wallace and May Warren

33. March 10th, 2022- Ontario's disability rights organizations call on the province to keep mandatory masks in place. Interviewed for Global News by Marianne Dimain
34. February 16th, 2022- Doctors decry Ford's vaccine remarks. Interviewed for CityNews Toronto by Cynthia Mulligan
35. January 28th, 2022- How many lives have COVID vaccines saved? The number tells us a lot. Quoted in a Toronto Star article by Kenyon Wallace and Ed Tubb
36. January 20th, 2022- How a rise in long-haul COVID-19 symptoms could be a "mass disabling event."- interviewed for CTV Your Morning by Anne-Marie Mediwake
37. January 17th, 2022- "The system is so broken": What it's like in long-term care right now. Quoted in a Chatelaine article by Nora Loreto
38. January 15th, 2022- Home care crisis. Dr. Arya says the system has almost collapsed, placing immense burden on families. Interviewed for CBC News Network by Natasha Fatah
39. January 14th, 2022- Ontario long-term care beleaguered by COVID-19 outbreaks, mass staff shortages. Interviewed for CBC The National by Ellen Mauro
40. January 10th, 2022- "Canadians with disabilities fell through the cracks in the pandemic response. Here's what needs to change as Omicron surges." Quoted in a Toronto Star article by Angelyn Francis
41. January 8th, 2022- "Omicron variant's rapid spread in Canada highlighting divide between the "rich and poor," experts say." Quoted in a Canadian press article
42. January 5th, 2022- "Omicron is only now hitting seniors. Here's why this may spell more trouble for Ontario hospitals." Quoted in a Toronto Star Article by Kenyon Wallace and Ed Tubb
43. January 1st, 2022- "Battle for inclusivity continues in 2022" Interviewed by Angie Seth on CTV National News, Realities of Racism panel
44. December 30th, 2021. "It's hard to say if he'll even remember me": LTC homes locked down. CityNews Toronto, interviewed by Caryn Ceolin.
45. December 30th, 2021. Ontarians waiting on back-to-school plan amid unprecedented COVID spread. Global News Radio 900 CHML, interviewed by Bill Kelly.
46. December 30th, 2021. "Please just leave us alone": Doctors and medical experts seeing "disturbing rise" in personal attacks. Mentioned in a Brampton Guardian article by Alexandra Heck
47. December 29th, 2021- Some COVID-19 positive health staff could keep working. Interviewed for Global News News at 0530 in Toronto
48. December 29th, 2021- On this Omicron New Year's Eve, take it outside, experts say: "The risk isn't zero with an outdoor gathering, but it's much, much less." Mentioned in a Toronto Star Article by Ben Cohen
49. December 29th, 2021- Thousands in Ontario long-term care need COVID boosters. Interviewed by Kelly Cutrara for Global News AM 640
50. December 28th, 2021- What to do if you have taken a PCR test and have positive results. Interviewed by Akshay Tandon on CTV National News
51. December 24th, 2021- Ontario reports 5,790 COVID-19 cases. Interviewed by Jennifer Burke on CTV National News
52. December 23rd, 2021- Thousands of long-term care residents, workers need COVID-19 booster shots. Mentioned in a Toronto Star article by Isabel Teotonio.
53. December 21st, 2021- Experts urge B.C. to make third doses more widely available. Mentioned in a CHEK news article by Nicholas Pescod.
54. December 20th, 2021- COVID-19 daily news. Interviewed by Jennifer Burke on CTV National News.

55. December 20th, 2021- Omicron renews pandemic threat on long-term care residents and staff. Interviewed by Jamie Mauracher for Global National News.
56. December 19th, 2021- Canadian provinces grapple with rising COVID-19 cases. Interviewed by David Akin for Global National News.
57. December 18th, 2021- LCBO runs out of rapid tests. Interviewed by Angie Seth on CTV National News.
58. December, 15th, 2021- Why Ontario experts fear Omicron could cause another deadly wave in long-term care. Mentioned in Toronto Star article by Kenyon Wallace.
59. December 14th, 2021- Ontario announces new safety measures for long-term care homes. Interviewed by Shauna Hunt for City News Toronto.
60. December 14th, 2021- Ontario government moves to speed boosters amid Omicron spread. Interviewed by Jeff McArthur for Global News AM 640.
61. December 10th, 2021- Kindergarten kids perform Christmas songs outside LTC facility. Interviewed for CBC Toronto.
62. December 9th, 2021- Millions of unused rapid COVID-19 tests prompt calls for greater access to free swabs across Canada. Mentioned in a Global News Article by Andrew Russell and Mike Le Couteur.
63. December 9th, 2021- With Omicron on our doorstep, officials are calling on the province to #FreeTheRATs. Interviewed by Kelly Cutrara on Global News AM 640
64. December 8th, 2021- #FreeTheRATs: Voices calling for the use of more rapid tests growing louder. Mentioned in a Medical Post article by Vanessa Milne.
65. December 7th, 2021- Twitter account hopes to be like Vaccine Hunters- but for COVID-19 rapid testing. Mentioned in a CBC Kitchener-Waterloo news article by Paula Duhatschek.
66. December 7th, 2021- Why isn't it easy to get a rapid test in Ontario? Interviewed on CBC Metro Morning as well as CBC Ontario Morning, CBC Kitchener, CBC, London, CBC Sudbury, CBC Thunder Bay & CBC Windsor
67. December 3rd, 2021- Ontario offering loan guarantees for not-for-profit LTC projects. Global News Radio 900 CHML, interviewed by Bill Kelly.
68. November 30th, 2021- Ontario will need to turn to public health measures to protect it's hospitals from patient surges amid staffing shortages. Interviewed on CP24 Tonight by Reshmi Nair.
69. November 29th, 2021- Dr. Amit Arya specializes in easing the suffering of those with serious illnesses. Now, he's fighting to improve long-term care. Special feature in the Toronto Star as part of their "Changemaker" series, written by Ethan Rotberg
70. November 17th, 2021- "Cruel public health policy for the holidays:" Ontario's decision to allow pharmacy COVID-19 testing for symptomatic individuals sparks backlash. Featured in a Yahoo News article by Elisabetta Bianchini
71. November 16th, 2021- Doug Ford is about to let for-profit long-term care companies raise prices on private rooms. Mentioned in a Press Progress News article.
72. November 16th, 2021- Ontario LTC staff must have 1st COVID vaccine shot to attend work. Interviewed by Arlene Bynon for the Jeff McArthur show, Global News AM 640.
73. November 15th, 2021- What impact will the vaccine mandate have for LTC? Interviewed by Reshmi Nair and Jamie Gutfreund on CP24 tonight
74. November 10th, 2021- Doctors facing death threats. Interviewed on Fightback with Libby Znaimer on Zoomer Radio
75. November 10th, 2021- The many faces of burnout in health care. Interviewed on Raw Talk Podcast for the University of Toronto

76. November 4th, 2021 - Ontario and Quebec won't impose vaccine mandates on health care workers. Interviewed on CBC Morning Live by Heather Hiscox.
77. November 3rd, 2021- "Public policy gut punch for patients, families": Ontario government slammed for not requiring hospital workers to take COVID-19 vaccine. Featured in a Yahoo News article by Elisabetta Bianchini
78. October 29th, 2021- Ontario introduces new bill for long-term care. Interviewed on CFRA 580 News Talk Radio by Kristey Cameron
79. October 28th, 2021- Ontario to introduce long-term care standards today. Interviewed on Global News Radio by Jeff McArthur.
80. October 24th, 2021- Ford government mandate empowers hospitals, long-term care homes to 'deny' health workers N95 masks. Featured in a Press Progress news article.
81. October 19th, 2021- Ontario's premier says he's looking for "hard working" immigrants to fill the labour gap. Interviewed by Evan Soloman on CTV Power Play.
82. October 11th, 2021- Health care staffing shortage looming in Ontario. Interviewed by Caryn Lieberman on Global News Toronto.
83. October 8th, 2021- Proposed changes to Ontario's long-term care home act. Interviewed on CTV Your Morning.
84. October 8th, 2021- Hamilton LTC says some workers quit after vaccines became mandatory. Featured in a Hamilton Spectator article by Maria Iqbal.
85. October 2nd, 2021- Expert on COVID-19 rapid testing in Ontario schools. Interviewed by Angie Seth on CTV National News
86. October 1st, 2021- Grieving family reacts to LTC vaccine mandate. Interviewed by Colin D'Mello on CTV National News
87. September 28th, 2021- Should vaccines be mandatory in long-term care. Interviewed by Reshmi Nair on CP24 tonight
88. September 25th, 2021- Vaccination should be mandatory to work in hospitals, LTC homes. Interviewed by Jeff McArthur for Global News Radio
89. September 22nd, 2021- Scathing new report on Hamilton's Grace Villa nursing home. Interviewed by Kelly Botelho for CHCH news.
90. September 16th, 2021- Brampton, a COVID-19 hotspot, has not received its fair share of health care resources. Interviewed on Global News National.
91. September 13th, 2021. Horwath pushes Ford to reconvene the legislature to stop hospital protests. Global News Radio 900 CHML, interviewed by Bill Kelly.
92. September 13th, 2021- COVID-19 hospital protests "a morale blow" to Canada's exhausted health workers. Featured in a Global News Article by Ahmar Khan and Aaron D'Andrea.
93. September 10th, 2021- Horwath pushes Ford to reconvene legislature to stop hospital protests. Featured in a CBC Hamilton article by Saira Peesker.
94. September 7th, 2021- Parties' plans for long-term care don't inspire experts. Featured in an ipolitics article by Charlie Pinkerton
95. September 4th, 2021- Rallies may not have sent the right message. Mentioned in a Brandon Sun article
96. September 3rd, 2021- "The ultimate selfishness"- Doctors grow frustrated as anti-vaxxers protest hospitals. Interviewed by Camille Bains for the Canadian Press

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97. September 2nd, 2021- “I don’t understand how a place of worship is any less important”: Religious leaders ask to be included in Ontario’s vaccine certificate. Featured in a Toronto Star article by Irelyne Lavery.
98. August 29th, 2021- What should an Ontario vaccine certificate look like? Interviewed for CityNews Toronto by Shauna Hunt
99. August 26th, 2021- LTC operators’ vaccine mandates a “great move.” Interviewed on CP24 tonight by Reshmi Nair
100. August 24th, 2021- Invited to speak at a press conference on ending for-profit LTC with NDP leader Jagmeet Singh
101. August 24th, 2021- Toronto Police announce mandatory COVID-19 vaccines. Mentioned in a Toronto Sun article by Liz Braun.
102. August 21st, 2021- OMA report finds increased burnout among doctors. Interviewed by Maleeha Shiekh for CityNews Toronto
103. August 21st, 2021- Peel’s strategy for the Delta variant: targeting ‘cold spots’ of low vaccination uptake. Featured in a Toronto Star Article by Olivia Bowden.
104. August 17th, 2021- Mandatory vaccinations for health workers. Interviewed on CP24 tonight by Reshmi Nair.
105. August 11th, 2021- Many long-term care residents still without air conditioning. Interviewed on CityNews Toronto by Michelle LePage and Caryn Ceolin
106. August 9th, 2021- Experts say 4th wave of COVID-19 has already started in Ontario. Mentioned in a blogTo article by Lauren O’Neil
107. August 9th, 2021- Your right to know others’ vaccination status. Interviewed for CityNews Toronto by Mark McAllister.
108. August 4th, 2021- “Completely inexcusable”: Doctors slam Alberta government’s decision to lift health restrictions as COVID cases surge. Featured in a Press Progress Article.
109. July 28th, 2021- “It’s changed how I live my life”: Grace Villa worker still recovering months after COVID landed her in ICU. Featured in a Hamilton Spectator Article by Maria Iqbal.
110. July 26th, 2021- “A judgement-free space”: Doctors man the phones to encourage the unvaccinated to get the jab. Featured in a Toronto Star Article by Olivia Bowden.
111. July 19th, 2021- Hamilton long-term care homes launch in-house vaccine pilot. Interviewed for the Hamilton Spectator by Maria Iqbal
112. July 15th, 2021- Hamilton reports 9 new COVID-19 cases as restrictions ease in long-term care homes. Featured in a Global News article by Don Mitchell.
113. July 15th, 2021- Fully vaxxed Ontarians won’t need COVID test to enter LTC homes. Global News Radio 900 CHML, interviewed by Bill Kelly.
114. July 15th, 2021- It’s time to mandate COVID-19 vaccinations for long-term care workers- with pay, time off to get vaccinated. 640 Toronto’s morning show, interviewed by Peter Shurman
115. July 5th, 2021- Barriers still preventing long-term care workers from getting vaccinated. Interviewed by Shauna Hunt for CityNews Toronto.
116. June 18th, 2021- LTC homes still have no AC. Interviewed by Bill Kelly for Global News Radio 900 CHML.
117. June 17th, 2021- Despite Ford’s pledge, new Ontario LTC homes not required to install air conditioning in residents’ rooms. Featured in a Globe and Mail Article by Karen Howlett.
118. June 6th, 2021- Ontario accelerates second dose rollout. Interviewed by Andrea Bain for CTV National News.

119. June 2nd, 2021- Ford tells tale about a kid named Arthur to explain his reopening decisions. Featured in a DailyHive article by Megan Devlin
120. May 27th, 2021- Who should get the second dose in Ontario first? Interviewed by Reshmi Nair and Nick Dixon for CP24 tonight
121. May 27th, 2021- “We should not be seeing any of these cases coming into hospital.” Should we be giving seniors their second doses sooner? Interviewed on CFRA 580 News Talk Radio by Kristey Cameron
122. May 27th, 2021- Outbreaks in seniors homes may continue despite vaccines, experts say, but risks to residents are low. Featured in a Hamilton Spectator article by Maria Iqbal.
123. May 26th, 2021- Fully-vaccinated Ontario long-term care resident tests positive for COVID-19. Interviewed for CTV News Toronto by Natalie Johnson.
124. May 26th, 2021- Last summer, Ford promised air conditioning in long-term care home rooms. That hasn’t happened. Interviewed for CBC Toronto by Samantha Beattie.
125. May 25th, 2021- Pressure mounts to start second doses of COVID-19 vaccine. Interviewed by Shauna Hunt for CityNews Toronto.
126. May 20th, 2021- Mother says systemic inequities in Peel Region’s health care to blame for son’s COVID-19 death. Interviewed by Loveen Gill for Omni television
127. May 18th, 2021- Ontario’s hotspot vaccine strategy has ended- but Toronto and York Region stick with their own versions. Featured in a Toronto Star article by Olivia Bowden.
128. May 17th, 2021- Military reports: LTC residents died of neglect. Interviewed on CTV National News by Marcia MacMillan
129. May 15th, 2021- Looking into long-term care facilities. Interviewed by Charles Adler on Charles Adler tonight.
130. May 9th, 2021- COVID news of the day. Interviewed by Andrea Bain for CTV National News.
131. May 7th, 2021- What you need to know about COVID-19 vaccines. Interviewed by Noor Javed in Hindi/Urdu as part of Vaccine Talk, an initiative by the Toronto Star to provide vaccine information in multiple languages.
132. May 6th, 2021- Canada’s long-term care homes were in a crisis before the pandemic, experts say. Interviewed for CTV’s The Social.
133. May 4th, 2021- As Ontario long-term care homes cautiously open up, residents ‘embrace the sun.’ Interviewed for CBC News Toronto by Samantha Beattie.
134. May 3rd, 2021- Is Ontario’s response to the LTC report enough? Interviewed by Reshmi Nair and Nick Dixon for CP24 tonight.
135. May 3rd, 2021- Dr. Amit Arya on 1st press conference since the independent LTC report. Interviewed on Global News 640 Toronto by Jeff McArthur
136. May 1st, 2021- “I think that she failed.” After the death of 13-year-old Emily Viegas, a ripple of grief and anger has spread across one of Ontario’s hardest COVID-19-hit regions. Featured in a Toronto Star article by Wendy Gillis, Alyshah Hasham and Ben Cohen
137. May 1st, 2021- Save Peel rally demands support for frontline workers in the region. Interviewed for Focus Punjabi, Omni Television
138. May 1st, 2021- Residents gather to demand the Ford government do more to support Peel Region. Interviewed by Melissa Nakhavoly for CityNews Toronto
139. April 30th, 2021- Ontario LTC commission delivers final report. Interviewed by Angie Seth for CTV National News

140. April 28th, 2021- Ontario's long-term care sector wasn't ready or equipped for COVID-19: report. Interviewed for CBC News Network by Andrew Nichols
141. April 23rd, 2021- This is an opportunity to fix our broken system. Interviewed on CTV National News by Angie Seth
142. April 27th, 2021- "I'm second-guessing everything": In Brampton, a 13-year-old's death from COVID-19 leaves parents reeling and afraid. Featured in a Toronto Star article by Ben Cohen.
143. April 26th, 2021- "A horrific moment": COVID claims Brampton girl. Interviewed by Reshmi Nair and Nick Dixon on CP24 tonight.
144. April 23rd, 2021- Peel Region begins ordering workplaces with COVID-19 outbreaks to close as new measures take effect in Peel, Toronto. Featured in a Toronto Star article by Sara Mojtehedzadeh, Olivia Bowden, Maira Sarrouh
145. April 22nd, 2021- Ontario hospitals transfer patients to long-term care to free up beds for COVID patients. Featured in a Globe and Mail Article by Karen Howlett.
146. April 22nd, 2021- Toronto MD thnks pilot vaccine program should have gone to another hot zone, not Kingston. Interviewed by Ladna Mohamed for Global News National.
147. April 21st, 2021- Ontario hospitals transferring patients in need of beds to long-term care homes. Interviewed on Global News 640 AM Toronto by Mike Stafford.
148. April 20th, 2021- Calls for Ontario Premier to resign. Interviewed on Global News Radio 900 CHML, by Bill Kelly.
149. April 20th, 2021- Ontario ignored its own Science Table's advice on several COVID-19 vaccine hotspot postal codes. Featured in a Toronto Star article by May Warren, Kenyon Wallace and Cameron Tulk.
150. April 16th, 2021- Doctors 'horrified' by modelling data. Interviewed by Shauna Hunt for CityNews Toronto.
151. April 15th, 2021- Overburdened hospitals to transfer patients to long-term care homes. Interviewed by Tina Yazdani and Cici Fan for CityNews Toronto
152. April 13th, 2021- Seniors still facing obstacles as they try to get COVID-19 vaccine. Interviewed by Maleeha Sheikh for CityNews Toronto.
153. April 13th, 2021- They were supposed to be vaccinated. So, why are Ontario's seniors still getting the worst of COVID-19? Interviewed by Kenyon Wallace and Ed Tubb for the Toronto Star.
154. April 12th, 2021- Patients are 'exhausted' and 'exasperated,' medical experts say after a year under COVID-19. Interviewed by Conrad Collaco for CBC Hamilton.
155. April 11th, 2021- Family doctors should be in charge of the vaccine rollout. Interviewed on CFRA 580 News Talk Radio by Kristey Cameron
156. April 7th, 2021- Canada could have avoided the deadly third wave but politics got in the way. Featured in a Vice News Article by Anya Zoledziowski.
157. April 6th, 2021- Vaccination no-shows: Why are thousands of appointments going unfilled? Featured on CTV National News by Genevieve Beauchemin
158. April 5th, 2021- Vaccine prioritization: Should provinces prioritize essential workers? Interviewed by Evan Soloman on CTV PowerPlay
159. April 5th, 2021- "No one should die because they go to work." Interviewed on CTV Ottawa by Matt Skube
160. April 4th, 2021- "A new pandemic": Experts urge province to vaccinate essential workers as hospitals reach capacity. Featured in a CBC News article by Sabrina Jonas.

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161. April 3rd, 2021- Should vaccines be redirected to Canada's COVID-19 hotspots? Interviewed on CBC News Network by John Northcott
162. April 3rd, 2021- Toronto is struggling to fill vaccine appointments for seniors. Why Ontario's rollout is missing people in COVID-19 hotspots. Featured in a Toronto Star Article by Olivia Bowden.
163. March 31st, 2021- Essential workers bearing brunt of third wave. Interviewed on CityNews Toronto by Shauna Hunt
164. March 30th, 2021- Ontario seniors stuck inside long-term care want to be let out. Featured on CityNews Toronto by Tina Yazdani.
165. March 30th, 2021- Many long-term care residents have not left their room for over a year. Featured in a Toronto Sun Article by Liz Braun.
166. March 30th, 2021- "It's beyond appalling." Ontario long-term care residents plead for release from COVID-19 confinement. Featured in a Canadian Press Article by Colin Perkel.
167. March 29th, 2021- Target Hotspots in Vaccine Rollout: Doctors. Interviewed on CityNews Toronto by Shauna Hunt
168. March 27th, 2021- Doctors warn young Canadians. Interviewed on CTV National News by Akshay Tandon.
169. March 26th, 2021- Senior care costs and demand will nearly double in the next decade. Featured in a CMAJ News article by Diana Duong
170. March 25th, 2021- Elder Costs Set to Spike. Interviewed on CTV National News by Todd Van der Heyden.
171. March 24th, 2021- Calls for Ontario to ease restrictions in LTC. Global News Radio 900 CHML, interviewed by Bill Kelly.
172. March 23rd, 2021- Housebound seniors worried they'll be forgotten in vaccine drive. Interviewed on CityNews Toronto by Cynthia Mulligan
173. March 22nd, 2021- 'Inequitable distribution of vaccines in Ontario.' Interviewed on CP24 tonight by Reshmi Nair
174. March 22nd, 2021- 'Ending for-profit LTC.' Interviewed on Global News Radio by Jeff McArthur.
175. March 22nd, 2021- 'They are imprisoned:' Advocates call on Ontario to ease COVID-19 restrictions in LTC homes. Featured in Global News by Caryn Lieberman
176. March 20th, 2021- "Restaurants reopening despite rising cases." Interviewed by Akshay Tandon on CTV National News.
177. March 20th, 2021- "Too early to ease restrictions." Interviewed by John Northcott on CBC News Network..
178. March 13th, 2021- COVID-19 Daily News. Interviewed by Andrea Bain on CTV National News.
179. March 11th, 2021- Featured in COVID Signpost 365 report by the Canadian Urban Institute
180. March 10th, 2021- Man who runs Ontario long-term care home without a single case of COVID-19 being called a hero. Interviewed on CTV Toronto by John Musselman
181. March 8th, 2021- 'It's a disaster': Trust in LTC at an all-time low. Featured in a CTV News Article by Brooke Taylor.
182. March 7th, 2021- A pandemic of grief: One year of grief in Canada during COVID-19. Featured in a video by the Canadian Grief Alliance.
183. March 4th, 2021- Canada Proud is Spreading Misinformation Claiming COVID-19 Vaccines will be Distributed According to Skin Colour. Featured in Press Progress Article
184. February 28th, 2021- Pushing for National Standards in LTC. Interviewed by Angie Seth on CTV National News

185. February 25th, 2021- It's time to care about Ontario's caregivers. Featured in a NowToronto article by Julia Mastroianni
186. February 25th, 2021- Province Way too Late in Coming to the Table with PSW plan. Featured in Toronto Sun Article by Sue-Ann Levy
187. February 24th, 2021- PSWs in Ontario LTCs. Interviewed on Global News Radio by Jeff McArthur.
188. February 22nd, 2021- Commission sur les foyers : des témoignages très attendus cette semaine. Interviewed for Radio Canada, ICI Toronto by Camille Feireisen
189. February 17th, 2021- Toronto Vaccine Rollout and Vaccinating Residents over 80. Interviewed by Zoomer Radio by Jane Brown
190. February 15th, 2021- Local MPP holds virtual townhall on congregate care. Featured in an article by Gord Bacon on iheartradio AM 800 news.
191. February 14th, 2021- Solidarity with Niagara Top Doctor facing Online Threats. Interviewed by Tina Yazdani, CityNews Toronto
192. February 12th, 2021- Interviewed on the LTC Chronicles Podcast on Palliative care and LTC
193. February 12th, 2021- Families of elderly people still waiting for the COVID-19 vaccine. Interviewed by Lorenda Reddekopp, CBC Toronto.
194. February 11th, 2021- Most of LTC residents vaccinated but 936 died waiting. Featured in Toronto Sun Article by Sue-Ann Levy
195. February 9th, 2021- More Vaccine Queue Jumpers. Global News Radio 900 CHML, interviewed by Bill Kelly.
196. February 9th, 2021- Who has been vaccinated against COVID in Hamilton? Featured in Hamilton Spectator Article by Joanna Frketich
197. February 9th, 2021- The Anatomy of an Outbreak: How COVID-19 wrecked havoc at Grace Villa. Featured in a Hamilton Spectator Article by Maria Iqbal
198. February 6th, 2021- Doc claims province 'bungled' vaccine rollout for seniors. Featured in Toronto Sun Article by Sue-Ann Levy
199. February 5th, 2021- Advocates livid over $42M for LTC home security guards. Featured in Toronto Sun Article by Sue-Ann Levy
200. February 4th, 2021- 66 Residents have died at Roberta Place Long-Term Care Home. Interviewed by Citynews Toronto, Tina Yazdani
201. January 31st, 2021- 'They've failed Ontarians': Doctors highlight mistakes and missteps of Ontario's COVID-19 response. Featured in a Yahoo News article by Ahmar Khan
202. January 30th, 2021- Is it time to end for-profit long-term care in Ontario? Featured in a commentary on Global News by Bill Kelly.
203. January 29th, 2021- Voices of LTC and seniors advocates grow louder daily. Featured in a Toronto Sun Article by Sue-Ann Levy
204. January 28th, 2021- Voices of Long Term Care calls for accountability as COVID deaths rise. Orillia Matters. Featured in an Orillia Matters article by Shawn Gibson.
205. January 27th, 2021- Grace Villa Operator 'saddened' workers felt they lacked resources. Interviewed for the Hamilton Spectator by Maria Iqbal
206. January 26th, 2021- Experts' Scathing Letter Decries 'Humanitarian Crisis' in Ontario Care Homes. Featured in a Huffington Post Article by Emma Paling.
207. January 26th, 2021- Long-term care homes are in a 'humanitarian crisis': Ontario doctors. CBC Morning Live. Interviewed by Heather Hiscox.

208. January 25th, 2021- Ministry inspectors flagged an Ontario long-term care home before a COVID-19 outbreak killed over 40 people. Interviewed for Press Progress.
209. January 22nd, 2021- Vaccinating all LTC homes. Interviewed on Global News Radio by Jeff McArthur.
210. January 22nd, 2021- COVID-19 vaccine delay doesn't take away from Ontario's failures. Interviewed by Marcia MacMillan, CTV News Network.
211. January 21st, 2021- COVID-19 variant suspected behind deadly Barrie LTC outbreak. Interviewed by Citynews Toronto, Shauna Hunt.
212. January 21st, 2021- Ontario criticized for delaying vaccine rollout for nursing-home residents. Interviewed on CBC News: The National by David Common.
213. January 21st, 2021- Canadian health officials take different tack to vaccinate wary care home workers. Featured in a Reuters article by Allison Martell.
214. January 20th, 2021- Palliative care doctor says Ontario's vaccine rollout in long-term care has been 'atrocious.' CBC Hamilton, interviewed by Conrad Collaco
215. January 19th, 2021- Ontario Completes First Round of Long-Term Care Vaccinations in Seven Regions. Featured in a Queen's Park Briefing Article by Sneh Duggal
216. January 16th, 2021- Uptake for the COVID-19 vaccine has been high among Toronto's long-term care home residents. For staff, not so much. Featured in a Toronto Star article by May Warren.
217. January 14th, 2021- Ontario's vaccine rollout in LTC homes under fire. Featured in Toronto Sun Article by Sue-Ann Levy
218. January 13th, 2021- Daughter struggles to get information on mom in long-term care home. Featured in Toronto Sun Article by Sue-Ann Levy.
219. January 10th, 2021- Cedarvale Lodge gets Moderna Vaccine as caregiver tests positive. Featured in Georgina Post Article by Mike Anderson.
220. January 8th, 2021- Paramedics alarmed by conditions inside home with Ontario's worst LTC outbreak. Featured in Globe and Mail Article by Karen Howlett.
221. January 7th, 2021- 'White supremacy is as Canadian as maple syrup': #AsACanadian trend reveals Canada is not immune to U.S. Capitol-type attacks. Featured in Yahoo News Canada Article by Elisabetta Bianchini.
222. January 6th, 2021- The LTC crisis and the vaccine rollout. Global News Radio 900 CHML, interviewed by Scott Thompson.
223. January 5th, 2021- Interviewed on CBC Kitchener, London, Sudbury, Thunder Bay & Windsor about the COVID-19 vaccine rollout and LTC homes
224. January 4th, 2021- MDs point to staffing as COVID-19 rips through Ontario's nursing homes. Featured in Toronto Star Article by Kenyon Wallace and Patty Winsa
225. December 29th, 2020- COVID-19 long-term care crisis. Interviewed on CTV National News by Angie Seth
226. December 29th, 2020- Backlash after Ontario scales back COVID-19 vaccinations over Christmas Holidays. Global News Radio 900 CHML, interviewed by Rick Zamperin
227. December 26th, 2020- Big for-profit long-term care companies paid out more than $170 million to investors through Ontario's deadly first wave. Featured in a Toronto Star Article by Kenyon Wallace, Ed Tubb and Marco Oved.
228. December 24th, 2020- "A Preventable Tragedy." Palliative Care Doctor Dr. Amit Arya says we've failed long-term care residents. Interviewed on CBC Metro Morning by Jill Dempsey

229. December 24th, 2020- Long-Term Care Crisis and Tenderhome Care Outbreak. Interviewed on Zoomer Radio by Libby Znaimer
230. December 24th, 2020- Ontario nursing home battling COVID-19 outbreak. Interviewed on CBC News Network by Jacqueline Hansen
231. December 21st, 2020- Will we ever learn? After a catastrophic first wave, COVID-19 is pummelling long-term care homes again. Featured in a National Post article by Sharon Kirkey
232. December 19th, 2020- CTV news
233. December 8th, 2020- “As Long-Term Care Crisis Continues, Now is Not the Time for Political Brownie Points: Physician.” Interviewed by Amanda Lang on Bloomberg News Now
234. December 7th, 2020- interviewed by Libby Znaimer
235. December 7th, 2020- Ontario Hasn’t Inspected 98% of LTC homes during the pandemic. Global News Radio 900 CHML, interviewed by Bill Kelly.
236. December 7th, 2020- Ontario inspected only 2% of LTC homes. Global News Radio AM 640, interviewed by Mike Stafford
237. December 2nd, 2020- The stigma of nursing homes. Global News Radio AM 640, interviewed by Sheba Siddiqui as part of the series “Care Gone Wrong? Inside Ontario’s Nursing Homes.”
238. December 1st, 2020- Ottawa give $1B to LTC. Global News Radio AM 640, interviewed by Greg Brady
239. November 26th, 2020- COVID-19 Outbreak in Thunder Bay Long-Term Care Home. Interviewed on CBC Thunder Bay by Amy Hadley
240. November 25th, 2020- Long-Term Care’s Second Wave of COVID-19. Invited panelist on TVO’s “The Agenda” with Steve Paikin alongside Dr. Samir Sinha, Sharleen Stewart and Donna Duncan
241. November 24th, 2020- Why this lockdown might not work, plus the growing battle inside Ontario long-term-care homes: 5 charts that show the state of the pandemic. Mentioned in an article by Kenyon Wallace and Patty Winsa
242. November 20th, 2020- The State of Canada’s Long-Term Care Homes in the Second Wave. Interviewed on Global National News by Abigail Bimman
243. November 17th, 2020- Long-term care deaths rising. Interviews on CHCH News by Nicole Martin
244. November 17th, 2020- COVID cases are ‘exploding’ in long-term care in retirement homes. Mentioned in a Hamilton Spectator article by Joanna Frketich and Maria Iqbal
245. November 16th, 2020- COVID-19 and For-Profit LTC? Interviewed on CTV’s Your Morning by Ben Mulroney
246. November 13th, 2020- Does medical professionalism have a dark side? How codes of conduct and dress can reflect and reinforce biases? Mentioned in an article by Wendy Glauser in CMAJ news.
247. November 13th, 2020- For-profit long-term-care homes once again seng significantly worse outcomes in Ontario’s second wave, Star analysis finds. Mentioned in a Toronto Star article by Ed Tubb, Kenyon Wallace, Marco Oved.
248. November 12th, 2020- How Ontaro’s Long Term Care Homes Became Houses of Horror. Mentioned in a Toronto Life article by Jason McBride
249. November 1st, 2020- Protecting Long-Term Care Residents. CTV National News, interviewed by Angie Seth
250. October 28th, 2020- Time to Care Act. Global News Radio AM 640, interviewed by Supriya Dwivedi and Greg Brady
251. October 23rd, 2020- Long-Term Care Homes Update: the results of a CBC Marketplace investigation. Global News Radio AM 640, interviewed by Jeff McArthur

252. October 16th, 2020- Are long-term care homes ready for a second wave of COVID-19? Global News Radio AM 640, interviewed by Jeff McArthur.
253. October 16th, 2020- It's April all over again. A look at the numbers shows Ontario could be on the brink of another long-term-care catastrophe. Mentioned in a Toronto Star article by Kenyon Wallace.
254. October 15th, 2020- COVID-19 hotspot in Ottawa. Interviewed for CTV National News.
255. October 13th, 2020- COVID-19 outbreaks are hitting nursing homes again- Can we avoid another catastrophe? Featured in a National Post article by Sharon Kirkey
256. October 9th, 2020- COVID-19 devastated nursing homes- here are safer, more cost-effective options. Mentioned in an article in the Marketplace by Meera Jagganathan.
257. October 9th, 2020- Ontario's Patient Ombudsman report about the first wave of COVID19 in LTC facilities. Interviewed on CBC Ontario Morning by Julianne Hazelwood.
258. October 9th, 2020- Ontario's Patient Ombudsman report about the first wave of COVID19 in LTC facilities. Interviewed on CBC Ontario Morning by Ismaila Alfa.
259. October 8th, 2020- More COVID-19 restrictions are coming, says Ontario's top doctor. Cynthia Mulligan with how his alarming message comes amid a rise in cases and calls for major changes at long-term care homes. Featured on CityNews Toronto.
260. October 8th, 2020- Need for PSWs, long-term care home workers immediate- OHC. Mentioned in an article in the Timmins Daily Press by PJ Wilson.
261. October 8th, 2020- Ontario Health Coalition long-term care Day of Action. Invited Speaker for Press Conference.
262. September 30th, 2020- Long-term Care Restrictions cause ongoing grief for residents and family. Interviewed on CBC Metro Morning by Ismaila Alfa.
263. September 30th, 2020- Discussion about long-term care homes and the second wave, along with visitor restrictions. Interviewed on Global News AM 640 The Morning Show by Supriya Dwivedi and Greg Brady
264. September 21st, 2020- Are Long-Term Care Homes Ready for a Second Wave? Interviewed on CTV's Your Morning by Ben Mulroney
265. September 21st, 2020- Doctor Warns Some Canadian Long-Term Care Homes Not Ready for Second Wave. Featured in CTV News Article by Brooklyn Neustaeter
266. September 21st, 2020- "Profit over People": the Business of Canada's For-Profit Long-Term Care Sector Called Into Question. Featured in an article in Yahoo Finance by Stephanie Hughes
267. September 3rd, 2020- Why we need to talk about Advance Care Planning. Featured in Choosing Wisely Canada digital magazine, Perspectives.
268. July 31st, 2020- New report finds Ontario's Long-Term Care Industry going through staffing crisis. Interviewed on Global News AM 640 The Morning Show by Supriya Dwivedi.
269. June 23rd, 2020- Featured on Faces of COVID. Featured on Healthy Debate as part of a special series.
270. June 19th, 2020- Daughter critical of prison-like Long Term Care rules says she's a partner in care-giving- not a "visitor". Interviewed on CBC Metro Morning by Ismaila Alfa.
271. June 18th, 2020- "Visitors return to Ontario nursing homes with restrictions." Featured on CBC The National
272. June 9th, 2020- "'It is inhumane': Daughter kept from dying mother's bedside because of limits on long-term care visitors." Mentioned in an article in the Ottawa Citizen by Elizabeth Payne.
273. June 3rd, 2020- Interviewed by Laurel Gillespie, Director of Advance Care Planning Canada on the Speak Up Podcast

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274. May 20th, 2020- “How shoring up hospitals for COVID-19 contributed to Canada’s long-term care crisis.” Mentioned in an article in the Globe and Mail by Kelly Grant and Tu Thanh Ha.
275. May 11th, 2020- “Pandemic Palliative Care: Building Capacity to Manage COVID-19.” Featured in an article in the Hospital News by Donna Harris
276. April 29th, 2020- Interviewed on CBC radio Metro Morning by David Common on advance care planning during the COVID19 pandemic. “Front line physician makes 'advanced care plan' for himself in case of incapacity.”
277. April 28th, 2020- “Long-term care home staff, residents, struggling with restrictive COVID-19 polcies.” Featured in an article in the Globe and Mail by Carly Weeks
278. April 21st, 2020- “Palliative Care During the Pandemic.” Invited panelist on TVO’s “The Agenda” with Steve Paikin alongside Dr. Naheed Dosani
279. April 20th, 2020- “COVID-19 pandemic prompts changes to palliative care.” Featured in an article on healio.com.
280. April 20th, 2020- guidelines on palliative care during COVID-19 were featured in an opinion piece in the Hamilton Spectator “We must also mobilize for those who will die” written by Christina Sinding.
281. March 31st, 2020- Interviewed with Dr. James Downar on CMAJ Podcasts on optimization of palliative care during the COVID-19 pandemic. “Palliative Care During a Pandemic.’
282. July 9th, 2019- Interviewed on Metro Morning CBC radio by Matt Galloway on palliative care & medical education. “This doctor says palliative care matters-- and should be taught more in medical school.”
283. December 2018- Featured on “Osler High 5”, a monthly update to all William Osler Health System Staff. This feature was recognition for the “Heroes in the Home” award from Central West Local Health Integration Network.
284. December 2018- Featured on social media as part of “Humans in Health Care.” Twitter: @humansinhcare
285. June 27th, 2016. “Promotion of Palliative Care in the South Asian Population” TV Interview on “Your Health” on Channel Y by host Dr. Harpeet Bajaj
286. February 11th, 2015- Interview on PTC Punjabi TV, discussion regarding promotion of Community based Palliative Care for the South Asian Population

This is **Exhibit "B"** referred to in the Affidavit of **Dr. Amit Arya**, sworn this 23 day of March, 2023, in accordance with O. Reg 431/20, Administering Oath or Declaration Remotely.

A Commissioner for taking Affidavits etc.(*or as may be*) (pursuant to O. Reg 431/20)

Amanda Marie O'Brien, a Commissioner etc.
Province of Ontario, for Goldblatt Partners
LLP, Barristers & Solicitors
Expires November 15, 2024

Title: Variations in caregiving patterns of spouses/partners and adult children of long-term care home residents in Ontario, Canada

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Abstract

Background and Objectives: Family involvement in care often continues after an individual moves into a long-term care (LTC) home. This study describes how spouses/partners and adult children of LTC residents differ in their patterns of caregiving.

Research Design and Methods: The study sample included 191 spouses/partners and adult-children in Ontario, Canada, who cared for an LTC home resident before the coronavirus (COVID-19) pandemic. Eligible caregivers completed an online survey administered between April 8 and June 11, 2021, which captured the frequency of their visits and the tasks undertaken prior to the pandemic.

Results: The mean age of spouses/partners (n=32, 56% female and 44% male) was 76 years (SD=7.7) and adult children (n=159, 86% female and 14% male) had a mean age of 62 years (SD=7.9). Most participants were married or in a common-law union (n=27, 82% spouses/partners and n=113, 74% adult children) and primarily Caucasian (n=30, 94% and n=140, 91%, respectively). Spouses/partners often visited during mealtimes (n=17, 53%) while adult children tended to visit outside of mealtimes (n=101, 64%). Direct care tasks, such as assistance with feeding and managing the resident's behaviors, were more likely to be performed by spouses/partners, while tasks related to instrumental activities (e.g., help with financial affairs) were more likely to be performed by adult children.

Discussion and Implications: Findings from this survey highlighted caregiving tasks undertaken by spouses/partners and adult children to residents in LTC homes, and the importance of their role to the care and quality of life of residents.

Keywords: Family; caregivers; long-term care; care management; social support

Translational significance

Unpaid care provided by the family is often believed to cease after an individual moves into a long-term care (LTC) home. This has led to a lack of understanding of what caregiving in LTC entails. This study generated a better understanding of caregiving tasks undertaken by spouses/partners and adult children to residents in LTC homes and underscored their important role in a resident's care. These findings can guide the types of training and resources unpaid family caregivers may need to support residents safely and effectively and contribute to the development of a framework for understanding unpaid caregiving in LTC.

Background

Long-term care (LTC) homes, also known as nursing homes or care homes in some jurisdictions, provide around-the-clock residential nursing care and support for frail and, typically, older individuals who are unable to maintain independent living. Over the course of the global pandemic caused by SARS-CoV-2 (COVID-19), several public health measures intended to limit viral transmission and its impact on the frail population living in LTC homes were introduced, including visitation restrictions. These measures were intended to protect LTC residents, given this population's susceptibility to more severe outcomes from COVID-19. Many countries had high rates of COVID-19 mortality in LTC (Declercq et al., 2020) and, sadly, in earlier waves of the pandemic, Canada had a higher proportion of deaths in LTC due to COVID-19 than other OECD countries (Canadian Institute for Health Information (CIHI), 2020).

Unfortunately, visitation restrictions resulted in increased loneliness and social isolation, as well as deteriorating physical and mental health among residents receiving care in this setting (Savage et al., 2021). Many jurisdictions limited visits to essential visitors. For example, Ontario defined essential visitors as including "caregivers" (i.e., a category of visitor that includes important family members and friends who support and help to meet a resident's needs) and people visiting very ill residents for compassionate reasons (Government of Ontario, n.d.-a).

One challenge identified in a scoping review of the implementation of visitation restrictions was the lack of a standard definition for what constitutes an "essential" visitor or care partner, which led to inconsistent operationalization of restrictions across homes and jurisdictions (Palubiski et al., 2022). This also highlighted a gap in existing literature regarding the role of unpaid caregivers to residents in LTC homes and the tasks they take on.

A better understanding of the time that spouses/partners and adult children spend on various personal care activities in LTC homes is necessary to facilitate a productive collaborative working relationship between formal care providers and family caregivers who wish to be involved in the care of the resident. For example, such knowledge can support strategies and programs that LTC homes can adopt to ensure family caregivers have access to appropriate training and resources to perform care-related tasks safely and effectively.

In this paper, we describe the care contributions of spouses/partners and adult children who are caregivers to residents in LTC homes in Ontario, Canada. Specifically, we report the frequency of their visits and the care tasks that they perform.

Methods

Study design

We developed and administered a cross-sectional online survey between April 8 and June 11, 2021. The survey (Appendix A) comprised items capturing visitation frequency, duration of a typical visit, involvement in hands-on care activities, transportation activities, care management, and skilled care tasks undertaken by spouses/partners and adult children of residents in LTC homes in Ontario, Canada. The research protocol was approved by the Bruyère Research Ethics Board (Protocol #M16-21-002).

Survey development

To develop our online survey, we conducted a literature review focused on the role and experiences of caregivers to older adults in residential care settings. This review ultimately

identified a knowledge gap of the time spent and care tasks undertaken by caregivers and how this may differ depending on the nature of their relationship to the resident. Given this gap, we drew on items from the Family Involvement Questionnaire–Long-Term Care developed by Fast, Houlihan, and Buchanan to capture the frequency of family members' involvement in their relatives' care by way of visiting, inquiring about, and advocating for their family members (Fast et al., 2019). We incorporated items such as participating in social activities, sharing meals, and managing finances (Fast et al., 2019), into our survey and added questions to expand on the provision of direct and indirect care tasks. Direct as well as indirect care tasks were primarily informed by the research of Keating, Fast, Dosman and Eales (Keating et al., 2001), who examined services provided by informal and formal caregivers to older adults in residential care settings in Alberta, Canada. Our final survey also included caregiving concepts and tasks identified in prior research that are relevant to the Ontario context (Cohen et al., 2014; Fast et al., 2019; Keating et al., 2001; Reid et al., 2007; Tsai et al., 2012).

We pilot-tested our survey with an unpaid adult-child caregiver. We used the think-aloud method (Ericsson & Simon, 1984) to identify questions that lacked clarity or were not applicable to the context of LTC in Ontario. The caregiver's comments were reviewed by two of the study's authors (AM & ATH) and pertinent changes were made to the survey. We also measured the time required to complete each section of the survey and removed items or tasks that were perceived as less relevant to the Ontario context to minimize response burden. The final survey was implemented in Microsoft Forms.

Participant recruitment and data collection

Participants were recruited through a weekly electronic newsletter distributed by Family Councils Ontario, a non-profit organization in Ontario that seeks to improve the long-term care experience (*About Family Councils Ontario*, n.d.). Recruitment was also facilitated by the Ontario Caregiver Organization, which supports over 3.3 million caregivers in Ontario (*Ontario Caregiver*, n.d.); as well as the Ontario Health Coalition whose mandate is to protect and improve the public healthcare system (Ontario Health Coalition, n.d.). Finally, we directly approached, via email, 22 LTC homes that the lead author had collaborated with on previous research projects to advertise this project within their facilities; of these, 6 agreed to distribute the survey to family members and designated care partners of residents in their facility. In total, we received responses from 191 individuals. The average completion time was 88.4 minutes.

While no exclusion criteria were applied in our recruitment, for the purposes of this paper, our main interest was in comparing the responses provided by spouses/partners and the adult children of residents in LTC homes. A third category of respondents, collectively labelled as 'other', included individuals who are parents, siblings, friends, and other extended relatives of residents in LTC homes (n=14). The small sample size precluded us from conducting an in-depth analysis on this group.

Statistical analysis

We examined the frequency of responses to each survey item, stratifying the results by whether the respondent was a spouse/partner or adult-child caregiver. Given our small sample size, we used Fisher's exact test to compare differences between the two groups on all categorical

variables and Welch's t-test for age, which was specified as a continuous variable. SAS 9.4 was used to perform all analyses (*SAS*, 2013). A p-value of less than 0.10 was considered statistically significant (Dahiru, 2008).

Results

Characteristics of caregivers

Participants included 32 spouses/partners (17%) and 159 adult children (83%) of residents in LTC homes. A summary of the sociodemographic characteristics of both caregiver groups is presented in Table 1. The mean age was 75.8 years (standard deviation [SD]=7.7) for spouse/partner caregivers and 61.6 years (SD=7.9) for adult-child caregivers ($p < .0001$). All spouses/partners and 86% of adult children indicated that they were the power of attorney for personal care or the substitute decision-maker for the resident ($p=0.03$). Most respondents were Caucasian (94% of spouses/partners and 91% of adult children, $p=0.54$) and married or in a common-law union (82% of spouses/partners and 74% of adult children, $p=0.26$). Most spouse/partner caregivers (53%) and many adult-child caregivers (42%) did not have a university degree or had a certificate below a bachelor's degree ($p=0.70$). Most spouses/partners (81%) and approximately half of the adult children (52%) were unemployed or retired ($p=0.01$). Spouses/partners, given their age and employment status, were less likely to have a total household income above $100,000 compared to adult children (34% vs. 42%, $p=0.72$).

All spouses/partners (100%) and most adult children (93%) tended to visit on a weekly or daily basis ($p=0.22$); however, spouses/partners were more likely to visit daily than adult children (59% vs. 26%, $p < .0001$, respectively) who were more likely to visit weekly. Both groups reported

visiting residents for more than one hour at a time (100% of spouses/partners vs. 89.3% of adult-children, p=0.53). Results related to frequency and duration of typical caregiver visits are presented in Table 2.

Care tasks

Many care tasks were widely performed by both spouses/partners and adult children, as displayed in Figure 1. Nearly all caregivers provided social and emotional support to the residents (97% vs. 91%, p=0.87), were involved in leisure activities with the resident (97% vs. 93%, p=0.75), and monitored the resident's care (91% vs. 95%, p=0.33). Many also provided direct hands-on care (91% vs. 81%, p=0.42) and were engaged in medical care-related tasks, such as arranging (75% vs. 82%, p=0.23) and accompanying the resident to medical appointments (75% vs. 82%, p=1.0). Caregivers also provided indirect care to LTC home residents, such as shopping for personal items for the resident (88% vs. 93%, p=0.268), advocating for the resident (84% vs. 91%, p=0.25), and helping the resident with financial affairs (78% vs. 87%, p=0.30).

Spouses/partners

Spouses/partners were more likely to engage in direct care tasks than adult children (Figure 2). For example, they were more likely to provide assistance during mealtimes (75% of spouses/partners vs. 64% of adult children, p=0.42). Spouses/partners were also more likely to help manage the resident's physical health care needs, such as observing the resident for adverse reactions to medication (81% vs. 43%, p<.0001) and helping the care team manage the resident's behaviors toward other residents or staff (56% vs. 33%, p=0.04).

Adult children

Adult children were more likely to engage in indirect care tasks (Figure 2), such as reading to the resident and/or helping them keep up with current events (spouse/partner: 66% vs. adult children: 79%, p=0.15), and sitting with or going on a walk with the resident outside of the LTC home (78% vs. 87%, p=0.34). However, they were also involved in some direct care tasks, such as helping the resident to use the washroom (31% vs. 46%, p= 0.28).

Time dedicated to care tasks

Figure 3 displays the tasks requiring at least 45 minutes per visit, which may explain the duration of typical visits by caregivers; 100% of spouses/partners and 89% of adult children had typical visits that were over one hour in length (Table 2). Tasks that tend to take over 45 minutes mostly fall into two broad categories: (1) providing social-emotional support to the resident (e.g., participating with the resident in leisure activities, sitting with or going on a walk with the resident outside of the LTC home); and (2) indirect care tasks, such as accompanying (59% vs. 59%, p=0.90) and/or driving the resident to medical appointments (41% vs. 48%, p=0.49), and helping the resident with financial (28% vs. 30%, p=0.11) and legal affairs (25% vs. 23%, p= 0.54).

Spouses/partners

Spouses/partners were more likely than adult children to spend upwards of 45 minutes assisting the resident during mealtimes (47% vs. 25%, p=0.01), watching the resident for adverse reactions to medication (19% vs. 10%, p= 0.34), helping the care team manage the resident's behaviors towards other residents or staff (13% vs. 5%, p= 0.27), and helping the resident to dress or undress (16% vs. 6%, p= 0.16). See Figure 4.

Adult children

Adult children were more likely to spend upwards of 45 minutes driving the resident to places for medical appointments, errands, or leisure (spouse/partner: 41% vs. adult children: 48%, p=0.49), and shopping for medical supplies (6% vs. 15%, p=0.41).

Discussion

In this study, we highlighted the involvement of unpaid caregivers in the care of LTC home residents. We observed notable differences in caregiving patterns based on their relationship to the resident. Direct care tasks, particularly those related to health and function (e.g., feeding, physical health, medication), were more likely to be performed by spouses/partners. Indirect care tasks and those related to instrumental activities of daily living (e.g., transportation, legal affairs, shopping) were more likely to be performed by adult children. Social-emotional support was equally likely to be provided by both groups. Both groups reported visiting residents for more than one hour at a time, with spouses/partners more likely to spend upwards of 45 minutes on direct care tasks (e.g., dressing, managing behaviors, mealtime assistance) during a typical visit, while adult children were more likely to spend upwards of 45 minutes on indirect care tasks that are often performed outside of the LTC home (e.g., appointments, errands, leisure).

Many spouses/partners and most adult-child participants of this survey were women, which aligns with prior research demonstrating that women spend more time on care provision and often carry out more care tasks than men. Furthermore, adult-child caregivers are more likely to provide care to children and older parents simultaneously (there were 72% and 81%, respectively, in our cohort comparing spouses/partners and adult children), which could potentially explain their involvement in more indirect as opposed to direct care tasks. Many women experience a double-burden effect as a result of providing care to both a parent and a child, while also balancing

employment (F. Chen et al., 2018; L. Chen et al., 2020). In the case of our survey, adult children were more likely to be employed than spouses/partners. The combination of these three roles is often correlated with negative outcomes, such as emotional distress, and negative impacts on personal life as a result of time-squeeze (Evans et al., 2016). This gender difference is critical to considerations for the types of supports that caregivers to LTC residents may need, as women may disproportionately bear greater mental and physical strain as well as greater caregiving burden and psychological distress than men (Sharma et al., 2016). Nonetheless, 43.8% of our participants identified as men which is greater than the Canadian statistic indicating that 23% of caregivers in Canada are men (Government of Canada, 2020). This said, 64.7% of residents in LTC in Canada are female (Government of Canada, 2021) and thus this may explain why male spouses of residents have a larger role of caregiving in this sector. Male involvement in caregiving is not well studied. Efforts should be made to study gender differences in caregiving and the differing needs of caregivers based on their gender.

Our findings also revealed the critical role of unpaid caregivers to the well-being and care of residents in LTC. Prior to the pandemic, nearly all caregivers included in this study supported the residents' care on a weekly, if not daily, basis and often for several hours in duration, leading to a quite significant increase in time dedicated to hands-on care for residents. Furthermore, they bring a wealth of knowledge to LTC homes from having cared for the resident prior to their entrance into LTC. With persistent staffing challenges in this sector, the presence of family members and other care partners to the residents, offer a constant source of support (Hung et al., 2022; McGarry et al., 2020). Given this dependence on the unpaid labor of caregivers, notably women, it may be helpful for them to have access to education and resources as residents' health and healthcare needs evolve over time. This could resemble training for feeding a resident with

dementia experiencing dysphagia and recognizing signs of choking, given spouses/partners' involvement around mealtime. Some adult children may also appreciate access to resources related to financial planning and legal assistance provided by community-based organizations.

Our findings also serve to inform the types of support and resources that may be needed to enable spouses/partners and adult children to continue providing care to residents in their preferred capacity, while also focusing on their own wellbeing to avoid burnout. For instance, LTC homes and organizations could use these results to better tailor resources to the tasks that these caregiver groups perform and support positive, collaborative relationships between residents' families and LTC home staff. Other community-based organizations established to support family caregivers could use these results to tailor their peer support and toolkits to the needs of each caregiver group while creating public awareness of the importance of and challenges faced by caregivers. For example, in the setting of our study, supports for caregivers can be found through the Ontario Caregiver Organization, including webinars on caregiver wellbeing, advance care planning, financial and legal tips as well as caregiver skills and development. The Ontario Caregiver Organization also offers five caregiver toolkits dedicated to supporting caregivers caring for individuals of all ages, as well as counselling, e-learning modules, podcasts and more ("Toolkits For Caregivers," n.d.).

Strengths and Limitations

Findings from this cross-sectional survey fill an existing knowledge gap about the role of unpaid family caregivers in LTC homes. However, given that our study was limited to the province of Ontario and recruited through a non-randomized sample, the findings may have limited generalizability. To assess this, we compared the baseline characteristics of respondents to our

survey to those who responded to a recent survey administered by the Office of the Seniors Advocate in British Columbia, Canada (*Staying Apart to Stay Safe: The Impact of Visit Restrictions on Long-Term Care and Assisted Living Survey – Seniors Advocate*, n.d.). We found similarities in both caregiver attributes and visit characteristics, which may indicate that our results could be generalized to caregivers in other Canadian jurisdictions. That said, the use of an online survey may be susceptible to self-selection bias as this mode of data collection required participants to be computer literate and have access to the internet to participate (Andrade, 2020). This could explain the small number of older adult participants. Furthermore, we acknowledge a possible underrepresentation of individuals whose first language is not French or English.

Conclusion

The findings of this survey provide insights into the care contributions of family caregivers of LTC home residents, which included care tasks related to health and function (e.g., feeding, physical health, medication), care tasks related to instrumental activities (e.g., transportation, legal affairs, shopping) and social-emotional support. These observations have implications for our understanding of the roles and definition of essential caregivers to residents in LTC homes, as well as the types of training and support they may need to ensure they can continue to care for residents safely and effectively, even in the context of a global pandemic.

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Conflicts of interest

None reported.

Authors 'contributions

None. All authors read and approved the final manuscript.

Ethics approval and consent to participate

This study has been approved by the Bruyère Continuing Care Research Ethics Board (Protocol #M16-21-002). Caregivers signed a consent form prior to answering our survey.

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Table 1. Sociodemographic characteristics of caregivers to residents in Ontario long-term care homes

	Adult-children (n=159) *n(%)*	Spouse/partner (n=32) *n(%)*	p-value
Power of Attorney			
Yes (1)	137 (86.2)	32 (100)	0.0287
No (0)	22 (13.8)	0	
Self-rated health			
Poor to Good (0)	60 (37.7)	20 (62.5)	0.0112
Very good to Excellent (1)	99 (62.3)	12 (37.5)	
Missing	0	0	
Age			
26-49	9 (5.7)	0	
50-59	54 (34.0)	0	
60-69	79 (49.7)	7 (21.2)	
70-79	17 (10.7)	16 (48.5)	
≥80	0	10 (30.3)	
Average age (SD):	61.57 (7.93)	76 (7.7)	<0.0001
Gender			
Man	23 (14.5)	14 (43.8)	0.001
Woman	136 (85.5)	18 (56.2)	
Race/ethnicity			
Caucasian (1)	140 (90.9)	30 (93.8)	0.5372
Other (0)	14 (9.1)	2 (6.3)	
Landed immigrant			
Yes	14 (8.9)	9 (28.1)	0.0055
No	144 (91.1)	23 (71.9)	
Marital status			
Married/common-law	113 (74.3)	27 (81.8)	0.2628
Single/never married	39 (25.7)	5 (15.6)	
Number of dependents or living children			
0-1	126 (81.3)	23 (71.9)	0.234
2+	29 (18.7)	9 (28.1)	
Highest level of education completed			
Below a bachelor's degree	65 (41.7)	17 (53.1)	0.6952
Above a bachelor's degree	91 (58.3)	15 (46.9)	
Total household income in 2019			
<$99,999	62 (40.0)	14 (43.8)	0.7182
>$100,000	67 (42.1)	11 (34.4)	
Missing	30 (18.9)	7 (21.9)	
Employment status (prior to the COVID-19 pandemic)			
Employed	73 (45.9)	6 (18.8)	0.0071
Unemployed (includes temp	82 (51.6)	26 (81.3)	
Missing	4 (2.5)	0	
Hours per week spent working (prior to the COVID-19 pandemic)			
Less than 30 hours	84 (52.8)	29 (90.6)	0.0002
More than 30 hours	67 (42.1)	3 (9.4)	
Missing	8 (5.0)	0	

Table 2. Frequency and duration of typical visits by caregivers

Visit frequency	Adult-children (n=159) *n(%)*	Spouse/partner (n=32) *n(%)*	p-value
A few times a year/Monthly	11 (6.9)	0	
Weekly/Daily	148 (93.1)	32 (100)	0.2161
Missing	0	0	
Day of visitation			
Weekends or weekdays	116 (73.0)	31 (96.9)	
Both weekends and weekdays	41 (25.8)	1 (3.1)	0.0041
Missing	2 (1.3)	0	
Time of day for visitation			
Mealtimes (morning+lunch, afternoon+supper, evenings+dinner)	57 (35.9)	17 (53.1)	
Non-mealtimes (morning/no lunch, afternoon, no schedule)	101 (63.5)	15 (46.9)	0.3314
Missing	1 (0.6)	0	
Length of visits			
<1 hour (1)	15 (9.4)	0	
>1 hour (0)	142 (89.3)	32 (100)	0.53
Missing	1 (0.6)	0	
Method of transportation to long-term care home			
Drive	141 (88.7)	32 (100)	0.0454
Other (ex. walking, public transit, biking)	15 (9.4)	0	
Missing	3 (1.9)	0	
Second relative or friend helps provide care			
No	21 (13.2)	7 (21.9)	0.4025
Yes	137 (86.1)	25 (78.1)	
Missing	1 (0.6)	0	
Frequency at which second relative or friend helps provide care			
A few times a year/Monthly	60 (37.7)	12 (37.5)	
Weekly/Daily	80 (50.3)	15 (46.9)	0.599
Missing	19 (12.0)	5 (15.6)	

Figure 1. Tasks performed by spouses/partners and adult children of residents in Ontario long-term care homes

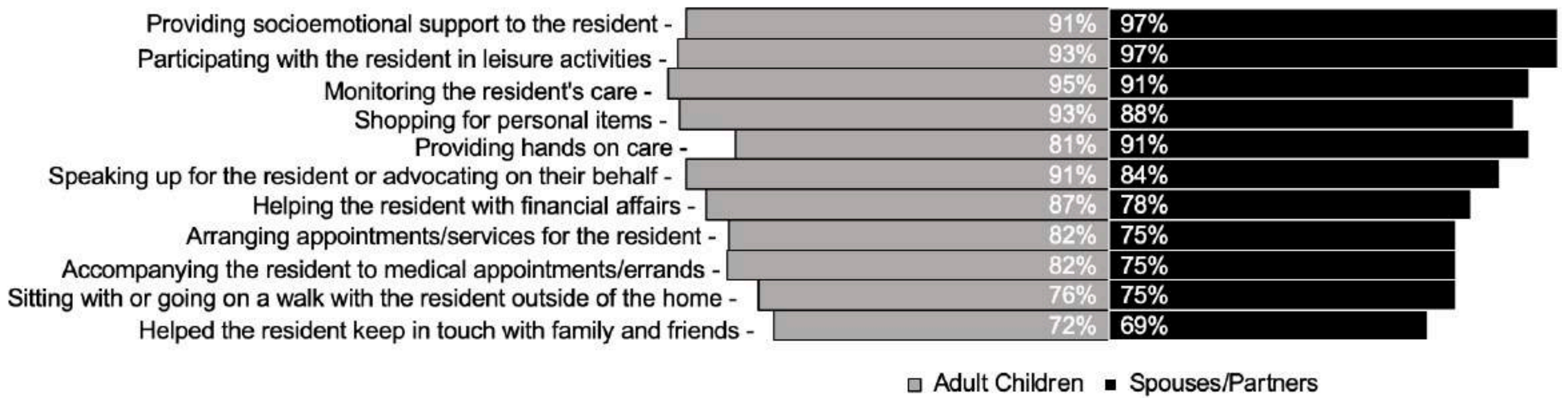


Figure 2. Differences in the provision of care by spouses/partners and adult children of residents in Ontario long-term care homes

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Reading to the resident/keeping up with current events

Helping the resident take their medication

Helping manage the resident's physical health

Sitting with/walking with the resident outside the home

Assisting the resident at mealtimes

Planning/participating in social activities with the resident

Helping the resident to use the washroom or go to the toilet

Helping the care team manage the resident's behaviours

Watching the resident for adverse reactions to medication

Spouses/Partners Adult Children

Figure 3. Tasks requiring a minimum of 45 minutes in a typical visit by spouses/partners and adult children of residents in Ontario long-term care homes

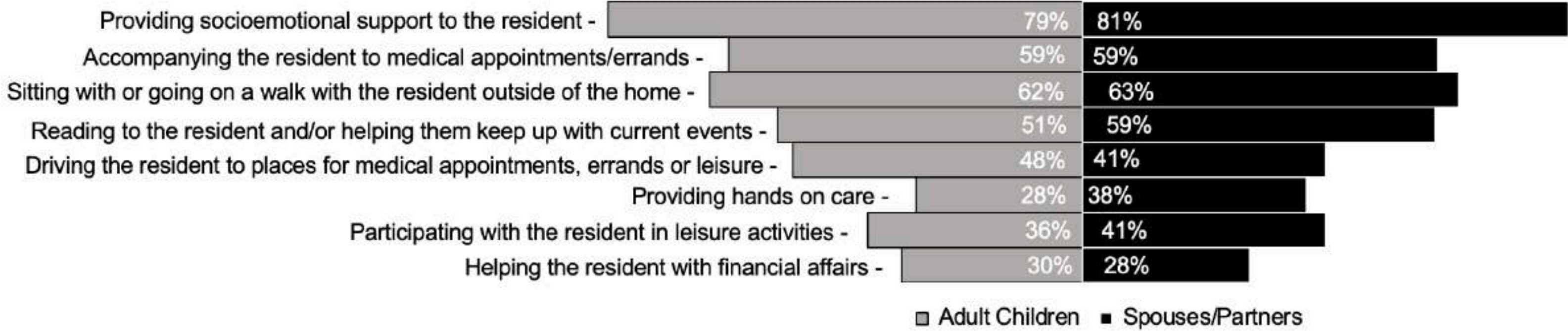
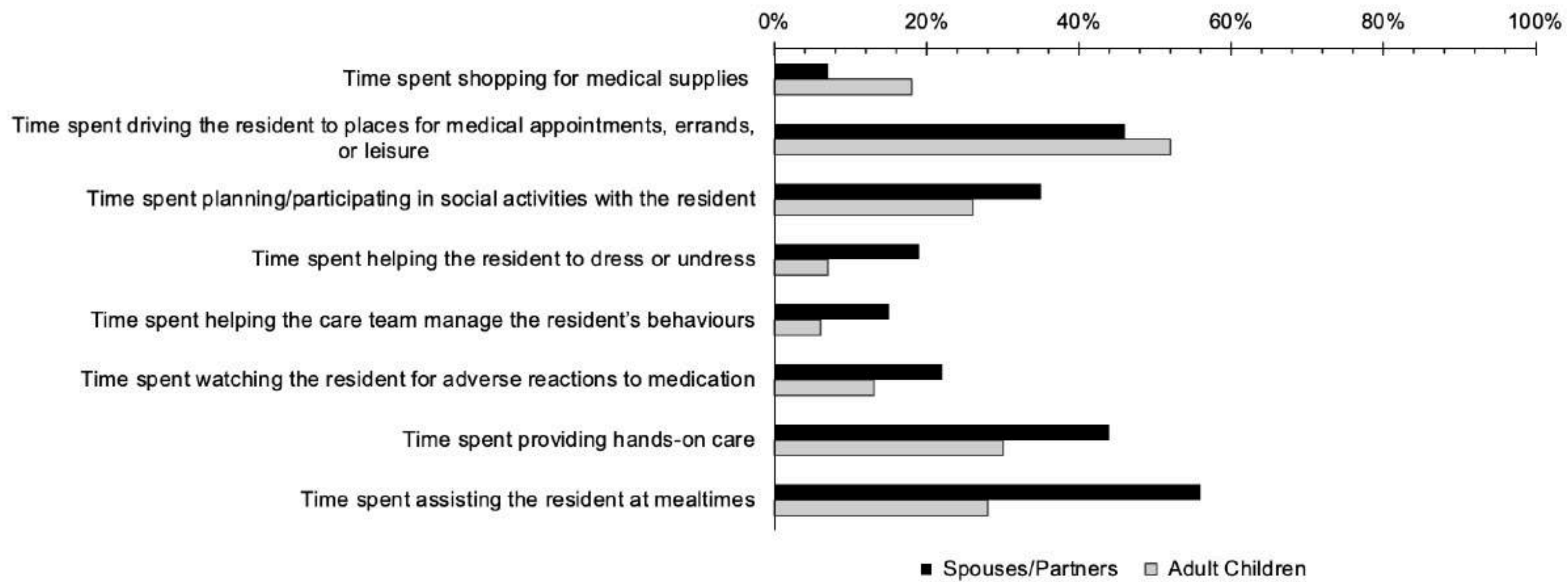


Figure 4. Differences in time spent on care tasks by spouses/partners and adult children of residents in Ontario long-term care homes



This is **Exhibit "C"** referred to in the Affidavit of **Dr. Amit Arya**, sworn this 23 day of March, 2023, in accordance with O. Reg 431/20, Administering Oath or Declaration Remotely.

A Commissioner for taking Affidavits etc.(*or as may be*) (pursuant to O. Reg 431/20)

Amanda Marie O'Brien, a Commissioner etc.
Province of Ontario, for Goldblatt Partners
LLP, Barristers & Solicitors
Expires November 15, 2024

Variations in Prescribing Rate of Subcutaneous Palliative Medications among Long-term Care Residents at their End of life

Original Study

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ABSTRACT

Objective: To describe the variation in prescribing rates of subcutaneous medications commonly used for symptom relief at the end of life among long-term care (LTC) residents.

Methods: We conducted a retrospective cohort study of decedent residents in all 626 publicly funded LTC homes in Ontario, Canada between January 17, 2017 and March 17, 2020. A list of commonly prescribed end-of-life subcutaneous comfort medications was created by conducting a literature review and consulting palliative care experts across the province. Prescription records were used to determine whether a resident was prescribed one of these medications in their last 14 days of life. Prescribing rates among all decedent residents within each LTC home were calculated and homes were ranked into quintiles (lowest to highest prescribing rate). We described resident and home characteristics across each quintile.

Results: We identified 67,627 decedent residents, among which 55,029 (81.4%) died in LTC. Among those dying in LTC, 64.8% were prescribed at least one subcutaneous comfort medication in their last 14 days of life. Opioids were the most prescribed medication (62.7%), followed by antimuscarinics or anticholinergics (31.2%), benzodiazepines (20.3%), and antipsychotics (19.1%). Homes in the lowest quintile prescribed subcutaneous medications to 37.6% of their residents on average, and transferred 30.1% of their residents to an external facility for end-of-life care. For homes in the highest quintile of prescribing rates, the average prescribing rate was 87.6%, and 12.4% of residents were transferred to an external facility for end-of-life care. for end-of-life care. Homes with low prescribing rates were more likely to be located in urban settings and had greater bed sizes (150+ beds), with overrepresentation of residents who did not speak an official language and those admitted from acute care. Regional variation in prescribing was substantial, ranging from 44.4% to 73.0%.

Interpretation: LTC homes in Ontario demonstrate large variability in rates of prescribing end-of-life subcutaneous comfort medications. While future work may elucidate the predictors and causes of this variability, low rates of prescribing were consistent with increased utilization of acute care for end-of-life care. , Administrative data on the prescribing rates of comfort medications in LTC can provide valuable insight into the systemic delivery of end of life care.

Introduction

As the population ages, the number of older adults who can no longer reside independently at home is expected to increase, resulting in[i] an expected rise in the need for long-term care (LTC). LTC homes, or "nursing" homes provide 24-hour care from nurses, personal support workers, and other health care providers. LTC residents often have progressive, incurable illnesses, and as a result, an expected median survival of 18 months after admission[2]. As such, LTC homes must be prepared to offer palliative care and address the physical, psychological and spiritual needs of their residents as death approaches.

Common end-of-life care concerns among residents and their family caregivers is the desire to control pain and other physical symptoms (e.g., shortness of breath, agitation, secretions) that arise at the time of death (PMID: 16505458), along with the desire to avoid unnecessary transfers to acute care facilities [Ref]. In LTC homes, end-of-life symptom control is the responsibility of a multi-disciplinary team that includes a physician with the ability to prescribe comfort medications, and nursing staff who would assess residents for signs of discomfort and administer treatments appropriately. Typical comfort orders would include opioids for pain and dyspnea, antipsychotics for restlessness and agitation, antimuscarinic agents for secretions, and benzodiazepines for refractory symptoms. These medications must often be administered parenterally via the subcutaneous route, as residents typically lose the ability to swallow medications near the end of life. Little is known about the extent to which such subcutaneous medications are prescribed in LTC homes, and how prescribing rates relate to transfers to acute care facilities at the end of life. Using linked health administrative databases, we sought to identify the variations in prescribing rates of end-of-life subcutaneous medications, and rates of transfer to hospital at the end of life among residents in Ontario's 626 LTC homes. Given the

lack of standard palliative care training and monitoring for physicians in LTC homes, we hypothesized that there would be a large variation in prescribing and transfer rates across homes – signaling opportunities to intervene to improve the quality of end-of-life care in this vulnerable population.

Methods

Study Design

We conducted a retrospective cohort study to examine the prescribing rates of subcutaneous medications for end-of-life symptom control among residents who died in LTC homes in Ontario. We used individually linked data that is routinely collected in the process of delivering services covered by the provincial public health insurance. This includes all LTC services, physician services, and medications in LTC. This data is held and analyzed at ICES (formerly the Institute for Clinical Evaluative Sciences), an independent, nonprofit research institute whose legal status under Ontario's health information privacy law allows it to collect and analyze health care and demographic data, without the need to obtain consent, for health system evaluation and improvement.

Population and Setting

We captured all deaths in LTC homes between January 17, 2017 to March 17, 2020 (i.e., prior to the onset of the COVID-19 pandemic) in Ontario, Canada, through the Registered Persons Database. Residents of LTC homes were identified using the Canadian Continuing Care Reporting System (CCRS). The CCRS in Ontario collects information on all LTC residents using the validated Resident Assessment Instrument Minimum Data Set (RAI-MDS).(20, 22)

Assessments are done by health care staff at entry and are repeated every three months and following significant health status changes.

Deaths in and out of LTC homes

Only residents who died in LTC homes were eligible for measurement of prescribing rates in LTC. Thus, we excluded residents who were transferred and died outside of a LTC home. Death outside of LTC home was captured if a resident was discharged from the CCRS and died as captured in the Registered Persons Database without being re-admitted in the CCRS.

Outcome – Rates of prescribing of subcutaneous medications

We created a list of subcutaneous medications used for symptom control at the end of life. This list was curated from LTC and palliative care physician experts from across the province. We also reviewed reports that contained lists of palliative care medications. This draft list was then circulated and revised by clinicians in the Ontario Palliative Care Network (ref). Each medication was then matched to their Drug Identification Numbers (DINs). All medications in LTC – including the subcutaneous medications in our list – are funded through the Ontario Drug Benefit (ODB). We examined the proportion of residents in each of the 626 LTC homes in Ontario that were prescribed at least one of these subcutaneous end-of-life comfort medications in the last 14 days of life.

Creation of Quintiles of Prescribing

This proportion of residents in each LTC home who were prescribed at least one of the subcutaneous medications in the final list were measured in our study period. Homes were ranked according to prescribing rate and grouped into quintiles. The rates within each of these

quintiles were then measured for any medication and for individual medications and medication group.

Characteristics of residents and homes across quintiles

Within each quintile, we described the proportion of homes that were in an urban vs. rural setting using the postal code captured in the CCRS, as well as the home size. Residents within each of the homes in each quintile were then described in terms of sociodemographic variables (i.e., age, sex, marital status, living arrangement prior to LTC entry, language spoken) and clinical variables (i.e., where they were admitted from and what chronic conditions they had) as captured by the CCRS.

Stability of Quintiles and Prescribing Rates

We performed several sensitivity tests to examine the stability of prescribing rates. First, we broke down the study period into two equal periods, early study period (Jan 1, 2017-Jul 31 2018 (inclusive) and late study period (Aug 1, 2018- Mar 17 2020, inclusive) and examined movement of LTC homes across the prescribing quintiles. Second, we examined rates of prescribing in the last 14, 30, 90, and 180 days of life. While medications are typically prescribed on a weekly basis, we did so to examine the possibility that medications were prescribed earlier in the dying process in anticipation of future needs and thus not captured in our primary analysis. Finally, we examined variations of prescribing rates across the 14 Local Health Integration Networks (LHINs) that existed in Ontario to coordinate care within each region.

Results

Characteristics of Decedent Cohort and LTC homes

We captured 69,447 deaths in 626 LTC homes in our study period (Table 1). About 4 in 5 deaths (80.5%) occurred in the LTC home, with most of the remaining deaths occurring in an acute care hospital. Residents overall were older (47.5% >90 years), predominantly female (66.3%), spoke English (83.1%), were identified as having dementia (60.4%), and commonly admitted to the LTC home from an acute care hospital (44.6%) (Table 2). Most LTC homes were in an urban setting (78%) and half had >150 beds. (Table 2).

Rates of prescribing across LTC homes

Overall, almost two-thirds of residents (64.8%) were prescribed at least one subcutaneous comfort medication in the last 2 weeks of life (Table 1). Opioids were the most prescribed medication (62.7% of residents), with hydromorphone the most common choice (52.1% of residents). Antimuscarinic agents (31.2% of all residents), benzodiazepines (20.4%) and antipsychotics (19.3%) were the next three most prescribed classes of medications. Medications specifically for nausea and vomiting and pulmonary edema were uncommonly prescribed (≤ 2%).

Prescribing rates across quintiles of homes: The rate of prescribing at least 1 subcutaneous medication in the last 14 days of life ranged from 37.3% in the bottom quintile (125 homes with 8,720deaths) to 82.5% in the top quintile (126 homes with 13,633 deaths) (Table 1). In each quintile, opioids were the most common medication prescribed to those who were prescribed at least 1 medication. Comparing the top to bottom prescribing quintile, there was more than a 6-fold difference in prescribing rates for benzodiazepines, and about a 4-fold difference for anti-psychotics and excess secretion medications.

Deaths in LTC Homes: While more than 4 in 5 residents (80.5%) died in LTC, there was a substantially higher proportion of deaths outside of the LTC home in the lowest prescribing

quintile (29.0% dying outside of LTC) compared to the highest prescribing quintile (15.2% dying outside of LTC). Residents who died outside their LTC home were not included in the primary analysis of prescribing rates; however, if we measured residents dying outside of LTC as not being prescribed any subcutaneous medications in the LTC home, the overall prescribing rate would be 26.3% in the lowest prescribing homes and 72.6% in the highest prescribing homes.

Stability of Quintiles: Dividing our study period into two periods, 109 of 121 homes (90.1%) that were classified in the lowest quintile in the early period were also classified in the lowest or second lowest quintile in the late period (Table 3). Similarly, 87 of 125 homes (68.6%) of homes classified in the highest prescribing quintile in the early period were in the highest or second highest prescribing quintile in the late period. The Kappa for overall agreement of prescribing quintile placement across the two study periods was 0.4, representing a moderate agreement.

Variation across health regions: Out of the 14 LHINs, Toronto Central – at the heart of a dense, urban downtown core that is the location of many acute care hospitals– was the only region with a prescribing rate below 50% (44.3%). Two adjacent urban/suburban regions (Central West and Central LHINs) had the second and third lowest prescribing rates at 50.5% and 54.9%, respectively. In contrast, four regions had prescribing rates of over 70%, including some urban/subsurban and rural regions. Consistent with the findings in the lower prescribing quintiles, the three regions with the lowest prescribing rates also had the highest proportion of deaths outside of LTC. Specifically, Toronto Central, Central West and Central LHINs had transfer rates of 26.2%, 29.7% and 27.2%, respectively. Conversely, the four regions with prescribing rates over 70% had transfer rates below 16%.

Characteristics of residents and LTC homes across prescribing quintiles

Characteristics of residents across quintiles: Residents across the quintiles were fairly similar in age, sex and the presence of chronic conditions (Table 2). The proportion in the top prescribing quintile that were widowed or unmarried was slightly lower compared to the bottom prescribing quintile. Notably, the proportion of allophones (those who do not speak English or French, the two official languages in Canada) in the bottom quintile (34.4%) was much greater than in the top quintile (6.5%). Residents in the top quintile were also less likely to have been admitted to the LTC home from acute care and were more often admitted from another residential care service (e.g., retirement home).

Characteristics of LTC homes across quintiles: LTC homes in the bottom prescribing quintiles were more likely to be larger (47.2% with 150+ beds) and in urban settings (84.82%) compared to the other quintiles. The top prescribing LTC homes, for example, had 35.79% of their homes with 150+ beds and 75.4% of their homes in urban settings.

Sensitivity analyses

A series of sensitivity analyses were conducted to test the robustness of the study findings. First, the end-of-life observation window was extended from 14 days prior to death to 30 days, 90 days and 180 days prior (Table 4a). The overall prescribing rates increased minimally (~5%) from 14 days to 180 days prior to death. Second, oral formulations of end-of-life symptom management medications were added to the analysis (in addition to subcutaneous formulations) to determine whether oral prescriptions were used in place of subcutaneous medications in some homes (Table 4b). There were no significant changes (all <2%) in the prescribing rates of any

medication. Lastly, to test the stability of the LTC home prescribing quintiles, we limited the analyses to homes that had a minimum of 1, 5, and 10 deaths (Table 4c). The mean prescribing rate in all quintiles changed minimally.

Discussion

Despite the role of subcutaneous medications for symptom control in those who are dying (refs), only 2 in 3 LTC residents were prescribed at least one such medication. Importantly, there was more than a 2-fold difference in prescribing rates in the top quintile of prescribing homes versus the bottom quintile of homes. These findings highlight large, systematic differences in prescribing practices for medications that should be the standard of care for ensuring the comfort of residents at the end of life. Low-prescribing LTC homes also transferred residents to die in acute care hospitals more than twice as often as high-prescribing homes; this further suggests that low prescribing rates may indicate homes that are less comfortable and equipped to provide end-of-life care. Our findings suggest that prescribing rates of comfort medications at the end of life could be a useful proxy for access to and quality of end-of-life care in LTC homes using routinely collected data.

Variations in care quality across LTC homes have been shown previously, with many studies focusing on differences across home characteristics. For example, studies have highlighted potential deficiencies in for-profit homes compared to non-for-profit homes (refs), including a study in Ontario showing higher rates of death and hospitalizations in for-profit homes (ref – JAMDA Tanuseputro et al). Deficiencies in care in the LTC sector have garnered increased attention during the COVID-19 pandemic in Canada, as outbreaks and staffing crises have prompted the creation of regional clinical response teams (PMID: 35747407) and even the

involvement of the military (ref). The present study was born from a request from the Ontario palliative care community at the start of the pandemic to identify homes that may require supports such as palliative care consultations, additional staffing, further palliative care training and re-deployment of hospital-based staff to the community. Our data, which were collected pre-pandemic, suggest that we might be able to identify homes in need of help with end-of-life care, or those at most risk during a future crisis.

More work is needed before we can adopt end-of-life comfort medication prescribing rates as an indicator of quality care in the LTC sector. This includes the need to estimate the proportion of residents that truly require parenteral comfort medications prior to death (i.e., for benchmarking the ideal/acceptable prescribing rate in homes). We are also studying home-, prescriber-, and resident-level sources of variation – to help identify the root causes of low and high prescribing rates. Such work would also be helpful in identifying appropriate variables to adjust for indicator development. For example, some of the factors associated with low prescribing rates, including not speaking one of Canada's official languages or residence in larger and urban homes, suggest that cultural or structural inequity may be relevant. Additionally, qualitative studies are ongoing to determine the acceptability of the indicator to frontline providers and family caregivers, and to understand some of the underlying barriers and facilitators to prescribing subcutaneous comfort medications at the end-of-life. Finally, interventions to improve the rates of appropriate prescribing – including the use of standardized order sets and additional training and support from palliative care – need to be implemented and evaluated.

The main limitation of this study is that it does not study the nuances and narratives of why certain characteristics are associated with low prescribing. Another limitation is that we

studied prescribed medications only; we did not have data on whether the prescribed medications were actually administered and whether they were effective for relieving symptoms. Nevertheless, since prescribing is the essential first step in pharmacological symptom control, prescribing rates represent the most accessible proxy of the quality of end-of-life care across all LTC-homes in the province of Ontario. There are also potential interventions (as stated above) to address low prescribing rates.

Given the limited life expectancy and high level of frailty and advanced illness among LTC residents, a palliative approach to care is important to ensure comfort and quality of life. LTC residents are among the most vulnerable population in society, often not having a voice due to high levels of both cognitive and functional impairment.[ii] To ensure that residents receive quality end-of-life care – including medications that ensure comfort – routinely-collected data during the dying period may provide insights at a system level about which residents and LTC homes require additional intervention. Measures such as this could help give residents the means to ensure that they are not dying with unrecognized suffering.

The prescribing of medications in a typical subcutaneous symptom management kit increases the chances of a good quality death. It can be thought of as a proxy of good palliative care delivery as it signals that death was anticipated (i.e., decline in status was noticed by the nurse, personal support worker, physician, and/or family) and that the practitioners had the expertise to provide appropriate subcutaneous medications.

Tables & Figures

Table 1. Rates of prescribing of subcutaneous symptom relief medications in the last 14 days of life among long-term care (LTC) residents in Ontario, January 1, 2017 to March 17, 2020. Homes were grouped into quintiles of prescribing rates of 1+ medication for all decedent residents within the study period.

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5	All homes
Number of homes	126	124	124	130	122	626
All deaths (n)	12,329	11,814	12,941	16,213	14,780	67,627
Deaths in LTC, n (%)	8,624 (69.9)	9,368 (79.3)	10,389 (80.3)	13,707 (84.5)	12,941 (87.6)	55,029 (81.4)
Transfer & died outside LTC*, n (%)	3,705 (30.1)	2,446 (20.7)	2,102 (19.7)	2,506 (15.5)	1,839 (12.4)	12,598 (18.6)
All medications (% residents)	37.6	59.8	69.1	74.8	82.9	64.8
Opioids	35.9	57.2	66.9	72.6	81.2	62.7
Morphine	6.9	12	13.4	9.8	15.2	11.4
Hydromorphone	29.5	46.2	54.4	63.7	67.1	52.2
Pain (non-opioid)	0.1	0.3	0.2	0.2	0.3	0.2
Dexamethasone	0.1	0.3	0.2	0.2	0.3	0.2
Benzodiazepines	5.6	14.7	21.5	25.5	34.5	20.3
Lorazepam	2.4	6.4	8.1	6.7	7.6	6.2
Midazolam	3.3	8.8	14	19.4	27.7	14.6
Antipsychotics	7.4	15.6	21.9	21.8	29.1	19.1
Haloperidol	6.6	11.4	16	14.3	17.8	13.2
Methotrimeprazine	1.2	5.2	7.8	9.3	14.2	7.5
Sedatives	0.1	0	0.1	0	0.1	0.1
Phenobarbital	0.1	0	0.1	0	0.1	0.1
Excess respiratory secretions	11.2	25.2	34.5	37.7	47.6	31.2
Scopolamine	9.6	21	30.2	33.3	40.3	26.8
Glycopyrrolate	1.7	4.4	4.6	4.9	8.7	4.8

Pulmonary edema	0.2	0.4	0.5	0.8	1.6	0.7
Furosemide	0.2	0.4	0.5	0.8	1.6	0.7
Nausea/vomiting	0.3	1.1	1.1	1.2	2	1.2
Metoclopramide	0.3	1.1	1.1	1.2	2	1.2

*Not included in subsequent analyses

Table 2. Resident and long-term care (LTC) home characteristics broken down by quintiles of prescribing rates of subcutaneous symptom relief medications in residents in 626 LTC homes in Ontario, January 1, 2017 to March 17, 2020

	Quintile 1	**Quintile 2**	**Quintile 3**	**Quintile 4**	**Quintile 5**	**All homes**
Characteristics n (%)	n=8,624	n=9,368	n=10,389	n=13,707	n=12,941	n=55,029
Age (years)						
65-69	173 (2.0%)	191 (2.0%)	205 (2.0%)	252 (1.8%)	233 (1.8%)	1,054 (1.9%)
70-79	889 (10.3%)	1,107 (11.8%)	1,219 (11.7%)	1,578 (11.5%)	1,518 (11.7%)	6,311 (11.5%)
80-89	3,232 (37.5%)	3,716 (39.7%)	4,094 (39.4%)	5,344 (39.0%)	5,093 (39.4%)	21,479 (39.0%)
90+	4,330 (50.2%)	4,354 (46.5%)	4,871 (46.9%)	6,533 (47.7%)	6,097 (47.1%)	26,185 (47.6%)
Sex						
Female	5,798 (67.2%)	6,173 (65.9%)	6,958 (67.0%)	9,110 (66.5%)	8,456 (65.3%)	36,495 (66.3%)
Male	2,826 (32.8%)	3,195 (34.1%)	3,431 (33.0%)	4,597 (33.5%)	4,485 (34.7%)	18,534 (33.7%)
Marital status						
Missing	4,840 (56.1%)	5,719 (61.0%)	6,314 (60.8%)	8,667 (63.2%)	8,082 (62.5%)	33,622 (61.1%)
Married	931 (10.8%)	1,011 (10.8%)	1,101 (10.6%)	1,412 (10.3%)	1,344 (10.4%)	5,799 (10.5%)
Never married	276 (3.2%)	204 (2.2%)	213 (2.1%)	244 (1.8%)	247 (1.9%)	1,184 (2.2%)
Separated	308 (3.6%)	271 (2.9%)	286 (2.8%)	366 (2.7%)	357 (2.8)	1,588 (2.9%)
Widowed	2,269 (26.3%)	2,163 (23.1%)	2,475 (23.8%)	3,018 (22.0%)	2,911 (22.5%)	12,836 (23.3%)
Primary language						
English	5,417 (62.8%)	7,618 (81.3%)	9,122 (87.8%)	12,033 (87.8%)	11,523 (89.0%)	45,713 (83.1%)
French	129 (1.5%)	375 (4.0%)	379 (3.6%)	551 (4.0%)	535 (4.1%)	1,969 (3.6%)
Other	2,973 (34.5%)	1,347 (14.4%)	814 (7.8%)	1,032 (7.5%)	831 (6.4%)	6,997 (12.7%)
Admitted from						
Inpatient acute care	4,814 (55.8%)	4,453 (47.5%)	4,750 (45.7%)	5,595 (40.8%)	4,924 (38.0%)	24,536 (44.6%)
Inpatient other						
Residential care	463 (5.4%)	731 (7.8%)	723 (7.0%)	927 (6.8%)	939 (7.3%)	3,783 (6.9%)
Home care	1,437 (16.7%)	1,991 (21.3%)	2,574 (24.8%)	3,586 (26.2%)	3,878 (30.0%)	13,466 (24.5%)
Private home	494 (5.7%)	611 (6.5%)	672 (6.5%)	1,095 (8.0%)	992 (7.7%)	3,864 (7.0%)
Other	1,389 (16.1%)	1,494 (15.9%)	1,644 (15.8%)	2,437 (17.8%)	2,165 (16.7%)	9,129 (16.6%)

	27 (0.3%)	88 (0.9%)	26 (0.3%)	67 (0.5%)	43 (0.3%)	251 (0.5%)
Chronic conditions						
Alzheimer's disease						
Missing	4,725 (54.8%)	5,639 (60.2%)	6,244 (60.1%)	8,569 (62.5)	8,024 (62.0%)	33,201 (60.3%)
No	3,327 (38.6%)	3,143 (33.6%)	3,442 (33.1%)	4,246 (31.0%)	4,068 (31.4%)	18,226 (33.1%)
Yes	572 (6.6%)	586 (6.3%)	703 (6.8%)	892 (6.5%)	849 (6.6%)	3,602 (6.5%)
Dementia (non-Alzheimer's)						
No	3,395 (39.4%)	3,702 (39.5%)	4,063 (39.1%)	5,429 (39.6%)	5,163 (39.9%)	21,752 (39.5%)
Yes	5,229 (60.6%)	5,666 (60.5%)	6,326 (60.9%)	8,278 (60.4%)	7,778 (60.1%)	33,277 (60.5%)
Cancer						
Missing	4,725 (54.8%)	5,639 (60.2%)	6,244 (60.1%)	8,569 (62.5%)	8,024 (62.0%)	33,201 (60.3%)
No	3,372 (39.1%)	3,233 (34.5%)	3,540 (34.1%)	4,369 (31.9%)	3,945 (30.5%)	17,730 (32.2%)
Yes	527 (6.1%)	496 (5.3%)	605 (5.8%)	769 (5.6%)	972 (7.5%)	4,098 (7.4%)
Heart failure						
Missing	4,725 (54.8%)	5,639 (60.2%)	6,244 (60.1%)	8,569 (62.5%)	8,024 (62.0%)	33,201 (60.3%)
No	3,247 (37.7%)	3,065 (32.7%)	3,324 (32.0%)	4,149 (30.3%)	3.945 (30.5%)	17,730 (32.2%)
Yes	652 (7.6%)	664 (7.1%)	821 (7.9%)	989 (7.2%)	972 (7.5%)	4,098 (7.4%)
Rurality of facility						
Rural	498 (5.8%)	1,465 (15.6%)	1,973 (19.0%)	1,682 (12.3%)	2,135 (16.5%)	7,753 (14.1%)
Urban	8,126 (94.2%)	7,903 (84.4%)	8,416 (81.0%)	12,025 (87.7%)	10,806 (83.5%)	47,276 (85.9%)
Size (# of Ministry designated beds)						
1-49	360 (4.2%)	276 (2.9%)	350 (3.4%)	241 (1.8%)	333 (2.6%)	1,560 (2.8%)
50-99	1,331 (15.4%)	2,987 (31.9%)	2,522 (24.3%)	2,330 (17.0%)	2,099 (16.2%)	11,269 (20.5%)
100-149	1,140 (13.2%)	2,520 (26.9%)	3,576 (34.4%)	3,302 (24.1%)	3,663 (28.3%)	14,201 (25.8%)
150+	5,793 (67.2%)	3,585 (38.3%)	3,941 (37.9%)	7,834 (57.2%)	6,846 (52.9%)	27,999 (50.9%)

Table 3. Cross-tabulation of quintile stability (number of homes) by dividing the study period into 2 distinct periods – early period (January 1st 2017 to August 31st 2018) and late period (September 1st 2018 to March 17th 2020).

	Early period Quintile 1	**Early period Quintile 2**	**Early period Quintile 3**	**Early period Quintile 4**	**Early period Quintile 5**

Late period Quintile 1	82	29	6	4	5
Late period Quintile 2	23	22	30	16	18
Late period Quintile 3	8	29	30	38	15
Late period Quintile 4	3	18	38	38	34
Late period Quintile 5	6	14	19	30	53

Table 4a. Sensitivity analysis: Proportion of residents who received at least one prescription across various end-of-life time windows for capturing prescriptions (14 days, 30 days, 90 days, and 180 days)

	14 days	**30 days**	**90 days**	**180 days**
Died in LTC	37,669 (67.4%)	38,782 (67.6%)	39,761 (71.1%)	40,189 (71.9%)
Died in acute care	432 (3.7%)	584 (5.1%)	785 (6.8%)	920 (8.0%)
Died in ED	100 (7.1%)	109 (7.7%)	123 (8.7%)	137 (9.7%)
Total	**38,201 (55.5%)**	**39,475 (57.3%)**	**40,669 (59.1%)**	**41,246 (59.9%)**

Table 4b. Sensitivity analysis: Mean prescribing rates for subcutaneous medications vs. subcutaneous and oral medications

Medication class	**Subcutaneous medications only**	**Subcutaneous & oral medications**
Opioids	30,092 (63.7%)	30,419 (64.4%)
Pain (non-opioid)	111 (0.2%)	453 (1.0%)
Benzodiazepines	9,913 (21.0%)	13,857 (29.3%)
Antipsychotics	8,660 (18.3%)	8,885 (18.8%)
Sedatives	13 (0.0%)	15 (0.0%)
Excess respiratory secretions	15,224 (32.2%)	17,048 (36.1%)

Pulmonary edema	364 (0.8%)	371 (0.8%)
Nausea/vomiting	533 (1.1%)	533 (1.1%)

Table 4c. Sensitivity analysis: Mean percent of residents receiving 1+ prescription across LTC home prescribing quintiles, when limiting to only homes with differing minimum number of deaths during the study period

	≥1 death (n =)	**≥5 deaths**	**≥10 deaths**
Q1	37.56 (11.7)	38.01 (11.3)	39.13 (10.5)
Q2	59.80 (3.6)	59.86 (3.6)	60.37 (3.6)
Q3	69.14 (1.9)	69.19 (1.9)	69.48 (1.9)
Q4	74.81(1.7)	74.85 (1.7)	74.96 (1.6)
Q5	82.87 (4.1)	82.87 (4.1)	82.73 (3.8)

Mean (SD)

Statements

Conflict of interests: none.
Submission declaration: The work described has not been published previously. It is not under consideration for publication elsewhere. This publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and, if accepted, it will not be published elsewhere including electronically in the same form, in English or in any other language, without the written consent of the copyright-holder.
Contributors: PT was the lead author; the other authors were involved with all stages in the conceptualization and editing of this article. This includes design and conception or analysis and interpretation of the data, drafting or revising for intellectual content, and final approval of the version submitted for publication. PT is the guarantor and affirms that the manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned have been explained. All authors, external and internal, had full access to all of the data (including statistical reports and tables) in the study and can take responsibility for the integrity of the data and the accuracy of the data analysis.
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Ethics: This study has been approved by the research ethics board at ICES, at Sunnybrook Health Sciences Centre in Toronto, Ontario.
Data Sharing: Using encrypted health card numbers as unique identifiers, records of health care use and costs were linked across various administrative databases. No written consent was obtained; all data were encrypted using health card numbers as unique identifiers. Thus all records used were de-identified and anonymized. All data were housed and analyzed at ICES, a prescribed entity for the purposes of section 45 Ontario's Personal Health Information Privacy Act.
STROBE checklist: This study has been reported according to the STROBE checklist for observational studies. More details of this process can be requested from the corresponding author.

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ONTARIO HEALTH COALITION AND ADVOCACY CENTRE FOR THE ELDERLY

Applicants

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HIS MAJESTY THE KING IN RIGHT OF ONTARIO AS REPRESENTED BY THE ATTORNEY GENERAL OF ONTARIO, THE MINISTER OF HEALTH, and THE MINISTER OF LONG-TERM CARE

Respondents

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