



Special Issue: Workforce Issues in Long-Term Care: Research Article

# Nurse Practitioners Rising to the Challenge During the Coronavirus Disease 2019 Pandemic in Long-Term Care Homes

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# Abstract

**Background and Objectives:** There is an urgency to respond to the longstanding deficiencies in health human resources in the long-term care (LTC) home sector, which have been laid bare by the coronavirus disease 2019 (COVID-19) pandemic. Nurse practitioners (NPs) represent an efficient solution to human resource challenges. During the current pandemic, many Medical Directors in LTC homes worked virtually to reduce the risk of transmission. In contrast, NPs were present for inperson care. This study aims to understand the NPs' roles in optimizing resident care and supporting LTC staff during the pandemic.

**Research Design and Methods:** This exploratory qualitative study employed a phenomenological approach. A purposive sample of 14 NPs working in LTC homes in Ontario, Canada, was recruited. Data were generated using semistructured interviews and examined using thematic analysis.

**Results:** Four categories relating to the NPs' practices and experiences during the pandemic were identified: (a) containing the spread of COVID-19, (b) stepping in where needed, (c) supporting staff and families, and (d) establishing links between fragmented systems of care by acting as a liaison.

**Discussion and Implications:** The findings suggest that innovative models of care that include NPs in LTC homes are required moving forward. NPs embraced a multitude of roles in LTC homes, but the need to mitigate the spread of COVID-19 was central to how they prioritized their days. The pandemic clearly accentuated that NPs have a unique scope of practice, which positions them well to act as leaders and build capacity in LTC homes.

Keywords: COVID-19, Models of care, Nurse practitioners, Nursing homes

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#### **Background and Objectives**

The long-term care (LTC) sector was hit hard by the coronavirus disease 2019 (COVID-19) pandemic (Andrew et al., 2020), which illuminated the longstanding deficiencies in health human resources and the consequences of inaction (McGilton et al., 2020). Although the care needs of LTC home residents have increased over time, the staff complement required to provide high-quality care remains globally suboptimal (Hébert et al., 2019). In most countries, Canada included, primary care practitioners, such as family doctors and general practitioners, are responsible for the medical care of residents in LTC homes (Barker et al., 2018). However, many of these physicians have limited training in the care of older adults and limited on-site availability due to competing demands related to working at multiple places (Oliver et al., 2011; Swagerty & Rigler, 2000).

Nurse practitioners (NPs) represent a solution to the human resource concern. NPs begin as registered nurses and are advanced practice nurses who have extensive experience and graduate-level education that prepare them to comprehensively assess, diagnose, and treat residents living with chronic conditions, episodic acute challenges (Kaasalainen et al. 2010; Stolee et al., 2006), such as those presented by COVID-19, and use pharmacological and nonpharmacological modalities. They also mentor staff and engage with residents and family for care planning and shared decision making (Kilpatrick et al., 2020; Sangster-Gormley et al., 2013). NPs have a proven record of providing safe and cost-effective care, a reduction in polypharmacy, transfers to acute care (Kilpatrick et al., 2020; Tchouaket et al., 2020), and are well positioned to lead and respond to the complexity of care in LTC today.

NPs are present in a variety of settings in Australia, Canada, Finland, Ireland, New Zealand, the Netherlands, the United Kingdom, the United States, and 27 of the 39 countries in Europe, with considerable advancement, independence, and autonomy in clinical practice (Maier et al., 2018). The role and scope of practice of NPs in LTC homes have both evolved over the past decade, but vary notably by country (Abdallah, 2005; Tchouaket et al., 2020). For example, in the United States and Canada, NPs in LTC homes act as educators for residents, family, and staff, as well as clinicians, handling health history and assessment, diagnosis, and treatment (Abdallah, 2005; Tchouaket et al., 2020). During the current pandemic, Medical Directors in LTC homes in Ontario, Canada, were advised by their Medical Association to work virtually (Ministry of Health Ontario, 2020). This mandate aimed to reduce the risk of transmission, as these physicians typically work in multiple locations and see a variety of patients. This created challenges for staff attempting to access medical care for residents. In response, an emergency management act issued in March 2020 in Ontario enabled NPs to work as Medical Directors in LTC homes and to act as the Most

Responsible Provider (MRP; Government of Ontario, 2020). This study aims to understand the NPs' roles and responsibilities in optimizing the care for residents and in supporting staff in LTC during the pandemic.

### **Research Design and Methods**

#### Study Design and Participants

An exploratory qualitative design was used to investigate the role and responsibilities of NPs during the pandemic, as they are not yet well understood (Creswell, 2007). The study was guided by a phenomenological approach, useful in illuminating common and differing forms of experience (Brink & van der Walt, 2006). We employed telephone-based semistructured interviews to examine NPs' experiences in providing services during the COVID-19 pandemic. NPs were recruited via an e-mail sent by the Nurse Practitioner Association of Ontario (NPAO) to all its members with a summary of the study and inviting them to participate. NPs were eligible if they worked for at least 3 days per week in an LTC home that reported positive COVID-19 cases. Interested NPs contacted the research coordinator (RC [A. Krassikova]).

Fourteen NPs working in rural and urban LTC homes participated in the study; with this sample size, informational saturation was reached. The majority of NPs were women, with an average of 9 years of NP experience. Most worked full time and reported an increase in work hours throughout the pandemic. The number of positive COVID-19 resident cases within their LTC homes ranged from 1 to 170 per home with upwards of 60 deaths in some homes. The number of positive COVID-19 staff cases in respective LTC homes ranged from 0 to 90 per home with several staff deaths. In this study, we reached data saturation after 14 interviews, when information became repetitious from one interview to the next. We then stopped recruitment as the sample had yielded sufficiently rich data to obtain saturation. See Table 1 for a summary of the demographic and site-specific characteristics of the study participants.

#### Procedures

After obtaining approval from the University Health Network Research Ethics Board, written consent was obtained from participants and confidentiality was assured before each telephone interview conducted by the RC, A. Krassikova. A note-taker (NT; Lydia Yeung or Alexia Cumal) was on the line to keep track of the topics discussed. All interviews were audio-recorded, lasted 50 min on average, and took place between August and October 2020. Participants who completed the interview and demographic questionnaire received a \$50 gift card.

A semistructured interview method was used to encourage NPs to describe their experiences (Patton, 2001). Interviews were structured to help NPs to describe their

**Table 1.** Demographic and Site-Specific Characteristics ofStudy Participants

	n (%) or Mean (range)
Characteristics	
Participant characteristics	
Age (years)	45.46
Gender	
Men	3 (21%)
Women	11 (79%)
Years of work experience	9.3 (2-21)
Specialty	
Primary health care	8 (57%)
Adult	5 (36%)
Both	1 (7%)
Group	
Attending NP	8 (57%)
NP outreach team	6 (43%)
Site-specific characteristics	
Location of LTC home	
Rural	4 (29%)
Urban	10 (71%)
LTC home ownership	
For-profit	6 (43%)
Not-for-profit	8 (57%)
Beds in LTC home	182
	(62-302)
Resident COVID-19-positive cases	39.9 (1-170)
Resident deaths from COVID-19	12.4 (0-60)
Staff COVID-19-positive cases	23.4 (0-89)
Staff deaths from COVID-19	0.14 (0-2)
Presence of Canadian Armed Forces personnel ( <i>n</i> )	2

Notes: NP = nurse practitioner; LTC = long-term care; COVID-19 = coronavirus disease 2019. N = 14.

experiences before and during the pandemic, what they thought about their work as well as their actions; how they thought about their role and responsibilities; and how they enacted their roles. The open-ended nature of the interview questions allowed the nurses to specify the dimensions of their work that were most relevant to them. Interview questions were framed to keep NPs focused on the general topics while not guiding them in a particular direction, avoiding any assumptions about their responsibilities or how their work was done. The interview guide was pilot tested by A. Krassikova with an NP, who was not part of the study but had experience working in LTC homes, for content relevance and ease of application prior to data collection. The interview guide was then adapted by the Principal Investigator (Dr. K. McGilton) and A. Krassikova based on feedback provided by the NP. Interview guide with probing questions can be found in Supplementary Material.

#### Data Analysis

We employed an inductive thematic analysis strategy, adapted from Braun and Clarke (2006), divided into five

stages: familiarization with the data, generation of initial themes, identification of categories and subcategories, review of those categories and subcategories, and definition and naming of the categories and subcategories (Höbler et al., 2018).

We started preliminary data analysis after conducting the first interview, a strategy that allowed us to assess data saturation, that is, when no new information emerges during the data collection period (Strauss & Corbin, 1998). After each interview, the RC and NT debriefed, discussed emerging topics, and summarized them into a running document. From this running document, the analysis team identified 10 initial themes. Interviews were transcribed professionally and then reviewed and anonymized by the RC, using participant ID numbers to ensure confidentiality. Next, all data were exported into the qualitative data analysis software NVivo 12 by the RC and the analysts to organize and analyze the data.

A primary analyst (A. Krassikova) and a second analyst (S. Vellani/Lydia Yeung/Alexia Cumal/Nancy Zheng) systematically coded all transcripts independently into initial themes, then met weekly to discuss and reconcile discrepancies. Analysts used the already identified initial themes as a starting point for coding and generated additional themes as the coding process advanced. Next, the analysis team grouped these initial themes into subcategories and then into four broader categories. The full-research team met regularly to review these categories of analysis, with guidance from A. Escrig-Pinol, an experienced qualitative researcher. Once consensus was reached, the analysis team verified the coherence of categories and subcategories. First, they read all the collated extracts for each subcategory to ensure that data within subcategories cohered together meaningfully, while verifying also that there were clear distinctions between them (Braun & Clarke, 2006). This strategy allowed for some refinement of the subcategories, merging some and splitting others. Then, they checked the identified broader categories against the emerging topics running document to verify that the categories accurately represented the meanings apparent in the data set as a whole. Lastly, the research team used group discussion and a consensus approach for the generation of clear definitions and names for categories and subcategories (Braun & Clarke, 2006). Final categories and subcategories related to the NPs' practices and experiences during the pandemic can be found in Table 2. Further details and examples of each step of the thematic analysis are given in Supplementary Table 1.

Multiple steps were taken to ensure rigor at different stages of the research process. Trustworthiness and credibility were warranted by incorporating researcher triangulation; practicing reflexivity; establishing a detailed audit trail of documentation; conducting systematic peer debriefing; managing data systematically; and examining competing explanations (Lincoln & Guba, 1985; Patton, 2001). The Standards for Reporting Qualitative Research guidelines were followed (O'Brien et al., 2014).

## Results

Four categories related to the NPs' practices and experience during the pandemic were identified: (a) containing the spread of COVID-19, (b) stepping in where needed, (c) supporting staff and families, and (d) establishing links between fragmented systems of care (Table 2). While these categories appear discreet, the variety of strategies used by NPs to fulfill their roles overlap. All NPs expanded their responsibilities during the pandemic to provide additional support to management, staff, residents, and their families. The four categories are detailed below.

## Containing the Spread of COVID-19

The first category was characterized by the NP's description of attending to the multiple responsibilities in containing the spread of COVID-19 within the LTC homes. NPs talked about being involved in working with management within the homes to communicate the evolving COVID-19 recommendations from local health authorities and implement pandemic protocols such as resident cohorting and isolation plans, swabbing algorithms, and cleaning practices. As illustrated by one NP,

During the pandemic much of the [NP's] role has focused on support for infection prevention and control, interpretation of provincial legislation, its application to the long-term care home environment, creation of clinical policies that support alignment with those directives and guidance documents. (NP 07)

Some NPs also talked about the lack of pandemic preparedness within the homes and their response to this gap:

There were a lot of things we had to put into place very quickly, so those kinds of policies I did because there was just nobody [who] had time. (NP 13)

NPs participated in developing strategies to keep staff and others informed on best infection prevention and control (IPAC) measures, My role in infection control and prevention was modelling what was good practice in infection control. Being there with them, saying, "You touched your mask, you need to wash your hands," to say, "You need to be six feet apart; that's not far enough." Just sort of the reminding or listening to, talking to the experts at [hospital] and finding out how we could do things better. (NP 01)

NPs spent time educating staff on the appropriate use of personal protective equipment (PPE). They achieved this through the use of video-based teaching aides and posters, tailored and accessible for staff, regarding IPAC measures,

So, we had someone demonstrate on a video, how to effectively put on your PPE in an appropriate fashion, then we broke out into groups and everybody tried to put on their own ... The next one was, demonstrate what we're trying to achieve with residents ... what would require a surgical or procedural mask versus what would require an N95. (NP 7)

NPs also described their work as a conduit between staff and management to ensure that staff had the correct information, as many administrators were often called away for meetings or were not readily available. NPs made themselves available to facilitate staff's donning and doffing PPE, provide rolemodeling, and deliver in-the-moment education.

## Stepping in Where Needed

The second category was characterized by accounts of NPs describing how they were stepping up to support others during the pandemic. Most NPs worked in a collaborative model with physicians in LTC homes before the pandemic. However, during the pandemic, only four NPs reported working with physicians who visited the homes, with large variations in the amount of time spent on in-person assessments. The majority of physicians shifted to virtual visits. As a result, NPs were often the only clinical providers on-site, their workload

Category	Subcategories
Containing the spread of COVID-19	Attending to the multiple responsibilities to minimize the spread
	Developing strategies to manage the outbreak
Stepping in where needed	Filling in the missing pieces
	Working in multiple roles
Supporting staff and families	Being available/present/relational
	Updating practices
	Providing emotional support to staff in distress
Establishing links between fragmented systems of care	Creating policies/strategies to build links
	Developing relationships with external partners

 Table 2. Categories and Subcategories Related to the Nurse Practitioners' Practices and Experiences During the COVID-19

 Pandemic

increased, and in collaboration with the nursing staff, they provided care to more residents whose conditions were deteriorating, involving advance care planning, discussing goals of care, and ensuring a dignified death. As one NP described it,

I was acting as the MRP [Most Responsible Provider], I was making all the decisions, treating all the residents. (NP 11)

The skills and expertise of the NPs who were trained in the care of complex adults were especially required. Their skills were best described by an NP:

I was evaluating every single resident. And the doctors stopped coming in, so I was essentially their eyes and ears. As soon as I saw someone starting declining, I would call the families, start having the comfort care discussion, asking about what level of care are we doing. (NP 1)

NPs also stepped in to provide care due to the limited supply of registered nurses in LTC homes and shortages of both regulated and unregulated staff within the home because of COVID-19 and demonstrated the importance of teamwork. These duties included administering medications, providing treatments to residents, assisting at mealtimes, and during personal care.

I would say I was a PSW [Personal Support Worker] through that outbreak, [and] I functioned as an RN [Registered Nurse], because I would write my orders and process my orders. And worked as an NP and covered the doc piece as well. And then we didn't have physiotherapists or dietitians or social workers, or Chaplains in the home either, because we were absolutely shut down. So, I feel like I functioned as a physiotherapist and a dietitian ... you just did it all. (NP 6)

Specialized consult teams that were developed prepandemic to support residents' responsive actions, such as agitation or aggression, were also asked to work virtually, thus the coordination of treatments and resources to ensure the well-being of residents fell to NPs. While many of the NPs had expertise working with persons with responsive actions, NPs still observed an unfortunate increase in suicidal ideation, loneliness, and depression during the pandemic. The NPs spent a large majority of their time with staff, introducing interventions to minimize residents' responsive actions by encouraging nonpharmacological interventions, and making direct referrals to specialists like geriatric psychiatrists, using virtual means when required.

## Supporting Staff and Families

The third category spoke to the supporting aspect of the NP role during the pandemic. NPs talked about providing

emotional support to staff who were often overworked and anxious about contracting the virus themselves. NPs helped to reduce the fears of staff through education, rolemodeling, and discrediting misconceptions about COVID-19. NPs described the time spent building relationships with staff which yielded a better work environment and could lead to better resident outcomes.

I would do a little huddle every morning, tell them where we're at, how many cases do we have so they would know from us and not from the news, or anybody else. And then just answer their questions ... But it was just to be there, answer the questions. I would do rounds multiple times a day on every unit just to make sure everybody was OK and support them where it was needed. (NP 3)

NPs expressed the need to provide continuing education and mentorship to staff to improve resident care. As staff got sick or resigned, several new staff came into the homes. One NP observed:

A lot of new staff were hired; I would say like 75% of the nurses that I communicated with were new to the home and new to nursing as well ... I did provide some basic nursing education when I was there. For example, providing education on how to do wound care. (NP 10)

During the pandemic, some staff members expressed their worries about conducting comprehensive assessments, as they had not dealt with such acute and medically complex COVID-19 residents before. NPs spent time at the bedside mentoring nursing staff to enhance their skills, competencies, and confidence and provided guidance on end-of-life care, which NPs felt enhanced resident outcomes.

Almost all NPs mentioned the need to provide emotional support to the staff who were experiencing distress due to the loss of residents, who, for many, felt like family members. Actively listening to staffs' concerns and finding resources from the community to help staff deal with their grief and trauma became an important responsibility for NPs. Furthermore, NPs extended their work hours and were on-call to staff 24/7 via text to address concerns, both medical and nonmedical.

And I did more mental health in those first four weeks with staff, than I've ever done before. I felt that was my main job ... Because we did, we lost 30% of our workforce as well ... I had an RN live with me for a while so that she wouldn't quit. (NP 6)

NPs spent a large part of their day supporting the residents' families and care partners who were not permitted in the homes. NPs actively collaborated with LTC home staff to keep families informed of the residents' statuses, update plans of care, and provide general education on COVID-19.

I made the phone call to tell the family members that their resident, their loved one had tested positive. It was usually almost—not every case, but in most cases, followed with tears and a degree of panic. And so, again, you kind of put your counsellor hat on, talk them through it. And then the most important thing I think was just regular communication with the families every day in some cases three times a day for people who got really sick. (NP 5)

The frequency of contact with families ranged from multiple times a day to several times a week, depending on the situation. In one case, an NP worked with a local technology company to provide the homes with devices such as cell phones and iPads to communicate with residents' care partners. Maintaining relationships between residents and their families was a focus of NPs' work.

# Establishing Links Between Fragmented Systems of Care

The fourth category was characterized by the NPs acting as a liaison between health care systems, as the pandemic accentuated their fragmentation. NPs described collaborating with LTC homes and acute care on creating policies, strategies, and algorithms to establish links between the LTC, acute care hospitals, and emergency departments (EDs). Importantly, NPs built capacity within the homes in response to the local Ministry of Health directive to avoid residents' transfers to acute care, in order to not overwhelm the health care system and reduce exposure of residents to the virus. Some strategies to avoid ED transfers included the use of in-house ultrasounds to diagnose deep vein thrombosis, establishing agreements with acute ambulatory care units and paramedic services. Restrictions on moving residents to EDs were addressed by the NPs through virtual consultations with the ED physicians. For the homes that went into crisis, NPs also oversaw the decanting of residents into acute care and their repatriation back into the homes.

Basically, the hospitals were telling us no, they weren't going to take them. I'd phone the emergency docs and say this is my situation, what would you do? ... And mostly they were helpful in advising us what to do at the home, but they would say no, don't send them. (NP 13)

The NPs also developed solutions to work with external partners.

I developed a flow sheet, a consultation flow sheet ... around how to consult with a geriatrician, geriatric psychiatrist, internal medicine, palliative care and emergency, so that any physician or nurse practitioner providing care in long-term care or retirement home had access to a quick little flow sheet. (NP 9) NPs described developing unique solutions with LTC home managers and external partners and many NPs expressed hope in maintaining these relationships postpandemic.

## **Discussion and Implications**

Most residents of today's LTC homes are frail, have multiple chronic health conditions, and are in the mid to advanced stages of dementia, all of which lead to unpredictable and complex care which requires knowledgeable assessments and interventions by qualified health care providers. The arrival of COVID-19 underlines the importance of having on-site clinicians available to provide expert assessments, care, and timely follow-up, as well as the ability to work collaboratively with staff to deliver the care that was planned.

One solution hidden in plain site is NPs. The results of this study demonstrated that in many circumstances NPs found themselves in the role of the MRP in the home, as most physicians were providing virtual care off-site, and that NPs were highly effective in delivering pandemic care. NPs have a track record of providing quality care in LTC homes prior to the pandemic, and this study highlights the additional contributions that they are making during COVID-19. The findings accentuate that due to NPs' expanded scopes of practice and leadership abilities, they are able to build capacity within LTC homes and contribute to positive outcomes. The results of the study provide evidence that NPs make a significant impact within the homes with a focus on building and maintaining relationships with all stakeholders.

NPs embraced many roles in the homes, but the need to mitigate the spread of COVID-19 was central to how they structured their days. They went to work in chaotic conditions and prioritized to balance the needs of staff, administrators, residents, and families, all the while keeping up with rapidly changing IPAC recommendations. As such, NPs helped develop policies on PPE practices, were responsible for the continuous education and training of IPAC, and ultimately integrated best evidence into practice by demonstrating these practices to staff.

Previous experiences by physicians and nurses in acute care facilities during the COVID-19 crisis focused on conducting comprehensive assessments, rapid recognition and response to clinical deterioration, symptomatic care, psychological support, and prevention of multiple potential complications (Liu et al., 2020). However, our findings are unique, in that, despite requiring the same intensity of care, responsibility in LTC homes was mainly placed on NPs, the staff, and external partners that NPs integrated within the home. As many of the residents with and without COVID-19 were critical, NPs provided education to nursing staff on methods of conducting comprehensive assessments and monitoring for signs and symptoms of deterioration. NPs also collaborated with LTC staff and external partners to address social isolation and created nonpharmacological solutions to avoid chemically restraining residents, a method which increased during the pandemic. They recognized the need for coordinating responses to increase residents' access to families, activities, and one-to-one time with staff. To support their care, NPs utilized their previous relationships with partners to establish evidence-informed practices related to virtual care to ensure specialists could be contacted efficiently when the need arose. The NPs were often the only consistent clinical provider in these homes and were also a lifeline to many families by providing them with up-to-date information on their relatives. As noted in previous research and reaffirmed in this study, NPs were autonomous and collaborative team members who enhanced the accessibility and quality of care offered in the homes. They acted as a resource for staff who were challenged to meet the needs of residents with increasingly complex needs (Martin-Misener et al., 2015), often playing the lead role as a primary care provider (Tchouaket et al., 2020). The results of this study have several implications for the role of NPs in LTC homes globally. NPs work only in several countries and they enact their role differently (International Council of Nurses Nurse Practitioner/Advance Practice Nurse Network, 2018). Although the International Council of Nurses has developed an internationally accepted definition of the NP role and its competencies, there is a lack of consensus on requirements for NP education and clinical training (Chavez et al., 2018). More comprehensive graduate programs focused on LTC need to be developed to educate NPs to enable them to work effectively, given the complexity of the residents, families, and lack of staff present in the homes. Barriers to enabling the full scope of practice for NPs need to be removed, such as expanding their practice to include the ordering of Computer Tomography (CT) scans, Magnetic Resonance Imaging (MRI), point-of-care tests, mental health forms, and hearing aids in Ontario, Canada.

To fully integrate NPs into LTC homes, the administration must acknowledge NPs' roles and scope of practice and communicate them to their staff, physicians, and external partners (Kilpatrick et al., 2019). In addition, recommendations on the best models for NPs in LTC require further exploration. In Ontario, some NPs are hired by the homes (Attending NPs) or employed by acute care facilities (NP-Led Outreach Teams), with varying responsibilities. There may be no single model for how NPs are organized within LTC systems globally, but further consideration is required, moving forward. Planning and provision to address the NPs' role in LTC homes must respond to the increased complexity of LTC residents and their families and the multiple roles of NPs, including supporting staff, management, and building and maintaining links between health systems.

NPs are experiencing significant emotional distress during COVID-19 with workloads that are untenable. These working conditions are unsustainable and, as such, an optimal ratio of NPs to residents needs to be identified, with the NPAO currently advocating for 1 NP to 100 residents (NPAO, 2020). Given all the roles NPs fulfill in the homes and the complexity of the residents, this may be a good metric to aspire to, but further research is required to affirm this recommendation.

Although this study provides new contributions to the literature surrounding LTC homes, limitations should be noted. The study is exploratory, and its findings are not necessarily transferable to other countries. However, the NPs who participated in this study worked in homes that were geographically distributed across all of Ontario, were in a mix of not-for-profit and private homes, and worked in homes with a range from 60 to 300 residents. We did not compare the experiences of NPs in homes with variations in the number of residents and/or staff with COVID-19. However, the NPs' roles and responsibilities were consistent throughout the interviews and most NPs spoke about the high stress levels working in the LTC homes despite the numbers of individuals affected, as they were always on guard in case further spread happened.

In summary, during the pandemic, a group of international experts recommended the need to better protect and support the frail and vulnerable adults residing in LTC homes, their relatives, and the workforce (McGilton et al., 2020). The current research demonstrated that NPs rose to the challenge of working in LTC and made contributions to promote the best resident care during COVID-19. LTC homes globally should include NPs to facilitate the support of staff, families, and residents, to assist administrators in managing future crises, and to provide the best possible outcomes for all stakeholders. An investment must be made to educate NPs to work in LTC and create dedicated funding to support NP positions in LTC homes globally.

## **Supplementary Material**

Supplementary data are available at The Gerontologist online.

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#### **Conflict of Interest**

None declared.

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## **Author Contributions**

All authors (K. McGilton, A. Krassikova, V. Boscart, S. Sidani, A. Iaboni, S. Vellani, and A. Escrig-Pinol) contributed to study conceptualization, design, data analysis, interpretation, and writing. K. McGilton, S. Vellani, and A. Krassikova also contributed to data collection and verified the underlying data. All authors had access to the data.

## References

- Abdallah, L. M. (2005). EverCare nurse practitioner practice activities: Similarities and differences across five sites. *Journal of the American Academy of Nurse Practitioners*, 17(9), 355–362. doi:10.1111/j.1745-7599.2005.00063.x
- Andrew, M., Searle, S. D., McElhaney, J. E., McNeil, S. A., Clarke, B., Rockwood, K., & Kelvin, D. J. (2020). COVID-19, frailty and long-term care: Implications for policy and practice. *Journal of Infection in Developing Countries*, 14(5), 428–432. doi:10.3855/jidc.13003
- Barker, R. O., Craig, D., Spiers, G., Kunonga, P., & Hanratty, B. (2018). Who should deliver primary care in long-term care facilities to optimize resident outcomes? A systematic review. *Journal of the American Medical Directors Association*, 19(12), 1069–1079. doi:10.1016/j.jamda.2018.07.006
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi: 10.1191/1478088706qp0630a
- Brink, H., van der Walt, C., & Van Rensburg, G. (2006). Fundamentals of research methodology for the health care professionals. Juta and Company Ltd.
- Chavez, K. S., Dwyer, A. A., & Ramelet, A. S. (2018). International practice settings, interventions and outcomes of nurse practitioners in geriatric care: A scoping review. *International Journal of Nursing Studies*, 78, 61–75. doi:10.1016/j.ijnurstu.2017.09.010
- Creswell, J. W. (2007). Qualitative inquiry & research design. Sage Publications.
- Government of Ontario. (2020). Emergency Management and Civil Protection Act, R.S.O. 1990, c E. 9. 2020. https://www.canlii. org/en/on/laws/stat/rso-1990-c-e9/latest/rso-1990-c-e9.html
- Hébert, P. C., Morinville, A., Costa, A., Heckman, G., & Hirdes, J. (2019). Regional variations of care in home care and long-term care: A retrospective cohort study. *CMAJ Open*, 19, E341–E350. doi:10.9778/cmajo.20180086
- Höbler, F., Argueta-Warden, X., Rodríguez-Monforte, M., Escrig-Pinol, A., Wittich, W., & McGilton, K. S. (2018). Exploring the sensory screening experiences of nurses working in long-term care homes with residents who have dementia: A qualitative study. *BMC Geriatrics*, 18(1), 235. doi:10.1186/s12877-018-0917-x
- International Council of Nurses [ICN] Nurse Practitioner/Advance Practice Nurse Network. (2018). *Country specific practice profiles*. https://international.aanp.org/Practice/Profiles
- Kaasalainen, S., Martin-Misener, R., Carter, N., Dicenso, A., Donald, F., & Baxter, P. (2010). The nurse practitioner role in pain

management in long-term care. Journal of Advanced Nursing, 66(3), 542–551. doi:10.1111/j.1365-2648.2009.05206.x

- Kilpatrick, K., Jabbour, M., Tchouaket, É., Acorn, M., Donald, F., & Hains, S. (2019). Implementing primary healthcare nurse practitioners in long-term care teams: A qualitative descriptive study. *Journal of Advanced Nursing*, 75(6), 1306–1315. doi:10.1111/jan.13962
- Kilpatrick, K., Tchouaket, É., Jabbour, M., & Hains, S. (2020). A mixed methods quality improvement study to implement nurse practitioner roles and improve care for residents in long-term care facilities. *BMC Nursing*, 19, 6. doi:10.1186/s12912-019-0395-2
- Lincoln, Y. S., Guba, E. G. (1985). *Naturalistic injury*. Sage Publications.
- Liu, Q., Luo, D., Haase, J. E., Guo, Q., Wang, X. Q., Liu, S., Xia, L., Liu, Z., Yang, J., & Yang, B. X. (2020). The experiences of health-care providers during the COVID-19 crisis in China: A qualitative study. *The Lancet. Global Health*, 8(6), e790– e798. doi:10.1016/S2214-109X(20)30204-7
- Maier, C. B., Batenburg, R., Birch, S., Zander, B., Elliott, R., & Busse, R. (2018). Health workforce planning: Which countries include nurse practitioners and physician assistants and to what effect? *Health Policy (Amsterdam, Netherlands)*, 122(10), 1085– 1092. doi:10.1016/j.healthpol.2018.07.016
- Martin-Misener, R., Donald, F., Wickson-Griffiths, A., Akhtar-Danesh, N., Ploeg, J., Brazil, K., Kaasalainen, S., McAiney, C., Carter, N., Schindel Martin, L., Sangster-Gormley, E., & Taniguchi, A. (2015). A mixed methods study of the work patterns of full-time nurse practitioners in nursing homes. *Journal of Clinical Nursing*, 24(9–10), 1327–1337. doi:10.1111/ jocn.12741
- McGilton, K. S., Escrig-Pinol, A., Gordon, A., Chu, C. H., Zúñiga, F., Sanchez, M. G., Boscart, V., Meyer, J., Corazzini, K. N., Jacinto, A. F., Spilsbury, K., Backman, A., Scales, K., Fagertun, A., Wu, B., Edvardsson, D., Lepore, M. J., Leung, A. Y. M., Siegel, E. O., ... Bowers, B. (2020). Uncovering the devaluation of nursing home staff during COVID-19: Are we fuelling the next health care crisis? *Journal of the American Medical Directors Association*, 21(7), 962–965. doi:10.1016/j. jamda.2020.06.010
- Ministry of Health Ontario. (2020). COVID-19 guidance: Primary care providers in a community setting. https://www. ontariofamilyphysicians.ca/tools-resources/timely-trending/ novel-coronavirus-2019-ncov/primary-care-covid-19guidance-2020-03-20.pdf
- Nurse Practitioners' Association of Ontario. (2020, August 17). NPAO response to LTC staffing study. https://npao.org/ npao-response-to-ltc-staffing-study/
- O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine*, 89(9), 1245–1251. doi:10.1097/ACM.000000000000388
- Oliver, D., Emili, A., Chan, D., & Taniguchi, A. (2011). Education in long-term care for family medicine residents: Description of an integrated program. *Canadian Family Physician*, 57(8), e288–e291.
- Patton, M. Q. (2001) *Qualitative research & evaluation methods*. Sage Publications.
- Sangster-Gormley, E., Carter, N., Donald, F., Misener, R. M., Ploeg, J., Kaasalainen, S., McAiney, C., Martin, L. S., Taniguchi, A., Akhtar-Danesh, N., & Wickson-Griffiths, A. (2013). A value-added benefit

of nurse practitioners in long-term care settings: Increased nursing staff's ability to care for residents. *Nursing Leadership (Toronto, Ont.)*, **26**(3), 24–37. doi:10.12927/cjnl.2013.23552

- Stolee, P., Hillier, L. M., Esbaugh, J., Griffiths, N., & Borrie, M. J. (2006). Examining the nurse practitioner role in long-term care: Evaluation of a pilot project in Canada. *Journal of Gerontological Nursing*, 32(10), 28–36. doi:10.3928/00989134-20061001-05
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Sage.

- Swagerty, D. L. Jr, & Rigler, S. (2000). The physician's role in directing long-term care. Understanding the rules is important for protecting your patients and your practice. *Postgraduate Medicine*, 107(2), 217–8, 221. doi:10.3810/ pgm.2000.02.901
- Tchouaket, É., Kilpatrick, K., & Jabbour, M. (2020). Effectiveness for introducing nurse practitioners in six long-term care facilities in Québec, Canada: A cost-savings analysis. Nursing Outlook, 68(5), 611–625. doi:10.1016/j. outlook.2020.06.002