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Changing An Unacceptable Reality:

Enabling Nursing Knowledge for Quality Resident Outcomes in Ontario's Long Term Care Homes

FINAL REPORT
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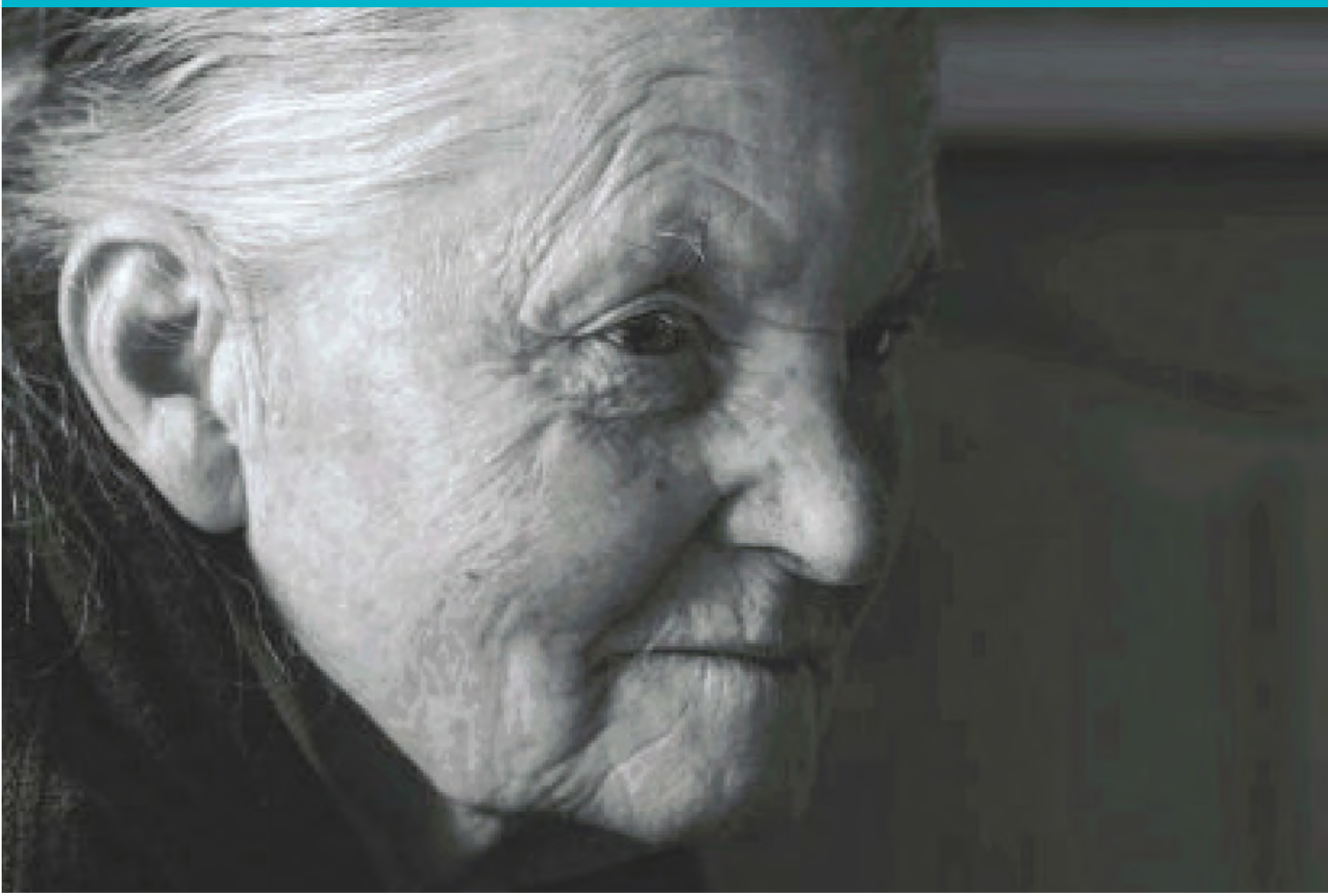

RPNAO

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Acknowledgements

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Table 1 – Advisory Panel Members

Name	Role / affiliation
Karen McDonald, RN	Faculty, School of Health & Wellness, Georgian College
Anne McKenzie, RPN	Care Coordinator, St. Elizabeth Healthcare President RPNAO
Michael Scarello, RN	Program Coordinator (Clinical) Practical Nursing Program Confederation College (Thunder Bay, ON)
Dawn Serrick, RPN	LTC / Brampton Holland Christian Homes/Assistant Director of Tenant Care
Karen Baker Stephens, RPN	Gerontological Nursing Association of Ontario; membership co-chair Baywoods Place LTC resident services coordinator; staff educator
Megan Hiltz, RN	Gerontological Nursing Association of Ontario; president-elect Providence Care Mental Health Services
Mary Wheeler, RN	donnerwheeler/ family member

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Project Executive Summary

Long Term Care in Ontario

In Ontario, there are 76,982 Long Term Care (LTC) beds across 627 LTC homes (Ontario Long Term Care Association [OLTCA], 2016). Since 2010, only people with high or very high needs, based on MAPLe scores (Method for Assigning Priority Levels) are eligible for admission to LTC homes. Considered within these high-level ratings are individuals with complex problems in multiple areas of functioning, including physical and cognitive impairments and challenging behaviours (OLTCA, 2016).

More than 85% of LTC residents are classified as requiring high levels of care, including constant supervision, assistance with personal care such as dressing, eating or toileting, and management of comorbidities (OLTCA, 2015). In addition to the complex physical care needs, approximately 73% of residents have some form of cognitive impairment (Sharkey, 2008). The proportion of LTC residents with Alzheimer's and other dementias has grown to 62% (from 56% in 2011), with 46% of residents exhibiting some form of aggressive behaviours, and 41% of residents needing monitoring for acute medical conditions (OLTCA, 2016).

Nursing in Long Term Care

The RPN is the predominant regulated nursing role involved in the direct provision of resident care. Thirty-one percent (31%, 15,451) of all RPNs in Ontario report being employed in LTC compared to 8.3% (9,345) of all RNs (College of Nurses of Ontario [CNO], 2016). Generally, RPNs have accountability for providing direct resident care, with the RN having accountability for planning and coordinating care (McClosky, Donovan, Stewart & Donovan, 2015).

As evidenced in the literature, nurses in LTC experience and struggle with the increasingly complex resident care needs, resource constraints, and an augmented workload, which collectively result in high degrees of moral distress and job dissatisfaction (Pijl-Zieber et al., 2008; Anderson, Taha, & Hosier, 2009; Spenceley et al., 2014; Havaei, MacPhee & Dahinten, 2016;). Heavy workloads and rushed work environments did not promote collaboration or adequate time for nursing assessment and team meetings to discuss resident care (Sharkey, 2008). Medication administration accounts for much of nursing care hours with reports ranging from 20 to 40% of time spent on this aspect of care alone (Thomson et al., 2009; Munyisia, Yu, & Hailey, 2011; Qian, Yu, Hailey, & Wang, 2015)

Optimizing Holistic Resident Care

Understanding and administering to the whole person has been linked to better outcomes in LTC for older adults (Anderson et al., 2009). To provide individualized, holistic, resident-centered care, nurses must be able to draw upon and apply not only their scientific knowledge but also their knowledge from humanistic nursing theories that place the emphasis on the nurse–resident relationship and the importance of knowing the whole person (Phelan & McCormick, 2016; Williams,

Project Executive Summary

In direct response to member feedback, RPNAO mounted a study to capture the voice of nurses, both RPNs and registered nurses (RNs) who provide direct care, to identify the factors that may work in synergy to enable the application of nursing-specific knowledge.

Hadjistavropoulos, Ghandehari, Malloy, Hunter, & Martin, 2016). The increasingly complex care needs of those in LTC and the associated workload have resulted in care driven by physical and medical needs at the expense of emotional and psychosocial needs (Anderson et al., 2009). Additionally, the associated higher levels of workload have resulted in nurses describing inadequate time for ongoing assessments of residents, review of care plans, and documentation (Schnelle, Simmons, Harrington, Cadogan, Garcia & Jensen, 2004; Zúñiga et al., 2015), thereby creating barriers to the optimal application of their nursing-specific knowledge in planning and evaluating resident care.

Purpose of the Study

While published reports describing a range of factors that inhibit optimal resident care and nursing satisfaction are evident as stated above the paucity of literature specific to resident outcomes represented a gap in the evidence. Therefore, the purpose of the study was to address the following research questions:

1. What are the enablers and barriers to the provision of optimal resident care in Ontario's LTC homes?
2. What are the impacts of these factors on nurse and resident outcomes?

Design and Sample

This study was guided by an advisory panel of RPNs and RNs from LTC in direct practice and administrative roles, and a RN with direct experience in a LTC home as a family member.
A non-experimental, descriptive research design was used for this study, specifically a survey among a targeted sample of RPNs and RNs employed in direct practice roles in LTC homes. To optimize stakeholder engagement, the nurse sample would be drawn from the Local Health Integrated Networks (LHINs) in Ontario that contained 50 or more LTC homes. This resulted in the five following LHINS included in the study: South West; Hamilton/Niagara/Brantford; Central East; Champlain; and North East. Collectively, there were 342 LTC homes within these LHINs, representing 55% of all LTC homes in Ontario as well as representing distinct geographical regions across the province of Ontario.
The nurse sample was obtained via a request to the College of Nurses of Ontario (CNO) database from the five LHINs identified and from nurses who, in their license renewal process, indicated a willingness to be contacted for research purposes. This the list obtained from the CNO included 3,870 potential respondents of which 69% (n = 2,659) were RPNs and 31% (n = 1,211) were RNs.

Measurement

The survey consisted of 42 items, including participant demographics (e.g., professional designation, years of experience, and educational preparation); information about their place of employment (e.g., number of residents, unit size, staffing); and care delivery processes (e.g., model of care, access to members of interprofessional team). The survey provided the option for participants to include the name of the LTC home where they were currently employed.
Selected items from previously published instruments were used for such variables as moral distress, nursing teamwork, job satisfaction, organizational support and nurse-perceived quality of care with space made available for optional commentary.
Resident outcome data were obtained from the Canadian Institute for Health Information (CIHI), which annually collects and reports on clinical, administrative, and resource utilization outcomes from LTC homes in Canada. Nine resident quality of care indicators are publicly reported via the "Your Health System" representing 2015-2016 data and available through the CIHI website (www.cihi.ca). Based on the scope of the study, the five most

In order to optimize the contribution, nurses require supportive leadership that advocates for the organizational supports required for the application of their specific nursing knowledge to effect optimal nurse and resident outcomes.

relevant resident quality care indicators were selected: restraint use; worsened pressure ulcer; falls in the past 30 days; improved physical functioning; and worsened physical functioning.

Results

Characteristics of Survey Respondents

A final response rate of 17% (n = 657) was included for analysis. Sixty-five percent (65%; n = 429) of the respondents were RPNs, and the remaining 34% (n = 226) were RNs.

LTC Home and CIHI Resident Care Quality Indicators

The majority (51%) of the LTC homes were large (129 beds or more), followed by 32% medium (65-128 beds), and 15% small (64 beds or less). The mean number of residents per unit within the LTC home was 36. Four hundred and sixty-eight (468; 71%) respondents included the name of their LTC home in the survey. Upon review, 199 distinct LTC homes were identified with individual survey responses ranging from 2–9 for each LTC home. Analysis of each of this study's five selected quality indicators revealed that most (42-78%) of the LTC homes were in line with the provincial average, with three indicators needing improvement: 24% of LTC homes were below the provincial average in use of restraints (i.e., higher results for use of restraints); 30% of LTC homes were below the provincial average for improved physical functioning (i.e., lower results for improved physical condition); and 32% of LTC homes were below the provincial average for worsened physical functioning (i.e., higher results for worsened physical condition). Based on CIHI definitions provided for all reported indicators, below average results are deemed as being less desirable.

Nursing care: Direct and indirect care.

For regulated nursing staff, the mean number of residents was 36, which coincides with the average number of residents per unit as reported earlier. The range of residents per assignment differed between the RN and RPN, in that the RPN assignment ranged from 20 to 45 residents while the RN assignment ranged from 25 to 80 residents. The wide range in the RN assignment could reflect an RN role providing coverage for more than one

unit. The mean number of residents in a PSW assignment was 10, with a range from 7 to 15. Nurses provided a rank ordering of the various direct and indirect care activities based on the amount of time spent on the activities. Direct care activities were defined as those that occurred in the presence of the resident/family, while indirect care activities occurred out of view of the resident/ family yet were still in support of resident care.

For direct care, ranking revealed that the greatest amount of time was spent administering medication, followed by implementing treatments, providing assessment/ongoing monitoring, providing emotional support, and lastly, providing personal care. Indirect care ranking revealed that the greatest amount of time was spent on routine documentation followed by change of shift report, transcription of orders, updating plans of care, and interprofessional team meetings.

Teamwork and collaboration.

Based on a four-point scale (1 = strongly disagree to 4 = strongly agree), nurses reported good teamwork between nurses and physicians (M = 3.1, SD = .62), PSWs (M = 3.0, SD = .57), nurse practitioners (M = 2.8, SD = .87), other members of the team (M = 2.9, SD = .66), and that team members understood the roles and responsibilities of each other (M = 3.0, SD = .55).

Organizational support.

Based on a four-point scale (1 = strongly disagree to 4 = strongly agree), nurses also reported a lack of organizational supports for items such as adequate support services to allow nurses time to spend with the residents (M = 1.9, SD = .76), enough nurses to provide quality care (M = 1.7, SD = .76), nursing ability to control own practice (M = 2.3, SD = .79) and having the freedom to make important resident care and work related decisions (M = 2.7, SD = .73). This was also reflected in comments provided such as: "We had a DOC who would reprimand people for sending someone to the hospital. I feel I have to assess and based on my knowledge, decide if it is appropriate or not".

Nurse-perceived quality of care.

A similar four-point scale was provided for nurses' perceptions of the quality of care (1 = poor to 4 = excellent). Nurses reported that the quality of care provided to the residents is generally good (M=3.0, SD = .73), but 28% of nurses felt that the quality of care has deteriorated over the past year as compared to 56% who felt the care remained the same, with only 16% who felt the care had improved.

Impacts on the Nurse

Moral distress.

Using a five-point scale (1 = never to 5 = always), nurses reported high moral distress related to having to rush care of the residents due to lack of time (M = 4.0, SD = .88), seeing care suffer because there are not enough staff to do the work (M = 3.7, SD = .95), seeing poor care due to poor communication between staff members (M = 2.8, SD = .96), inconsistent application of the plan of care (M = 2.7, SD = .97), and lack of staff with the knowledge and skills to provide specialized care such as dementia care (M = 2.7, SD = .97).

Job satisfaction.

Based on a four-point scale (1 = strongly disagree to 4 = strongly agree), nurses reported an overall high sense of personal satisfaction (M = 3.5, SD = .64) and were generally satisfied with their job (M = 3.0, SD = .63) and the kind of work that they do (M = 3.0, SD = .63). They received satisfaction in the recognition of the positive impact their role can have on residents (M = 3.5, SD = .57), the need to use high levels of critical thinking (M = 3.3, SD = .62), complex skills (M = 3.1, SD = .72), and that

they have the opportunity to use their nursing-specific knowledge every day (M = 3.3, SD = .64).

Impact on Residents: An Emerging Explanatory Framework

When considering the information in its entirety, a story begins to unfold regarding the numerous factors that limit the ability of regulated nursing staff to utilize the depth and breadth of their nursing-specific knowledge in the provision of individualized resident care. For example, regulated staff—predominantly RPNs—are the sole regulated care providers for approximately 36 residents, with most of their time spent on medication administration and treatments. Correlational analysis revealed that medication administration was negatively associated with the ability to provide emotional support (r = -0.468) and ongoing resident assessment (r = -0.374). The availability of adequate support services to enable nurses to spend time with the residents was positively associated with having enough time and opportunity to discuss resident care with other nurses (r = 0.507) but also negatively associated with having to rush the care of residents due to lack of time (r = -0.527). If nurses must rush care due to lack of time and resources, this does not allow nurses to conduct timely and regular assessments to determine whether the resident's physical condition is improving or worsening and the consequences on the resident's overall quality of life. Organizational support had a positive effect on teamwork (r = 0.491) and nurse-perceived quality of care (r = 0.396). Conversely, the lack of organizational support contributed (negatively) to very high degrees of moral distress (r = -0.622). The ability to use their nursing-specific knowledge every day was positively associated with job satisfaction (r = 0.441).

Specific to resident quality of care, there was a statistically significant relationship between nurse-perceived quality of care and resident worsened physical functioning (χ 2 (2) = 9.130 p < .010). Regression analysis of main study variables revealed that organizational support and moral distress accounted for 23% of the variance in nurse-perceived quality of care.

Discussion

The results of this study gave voice to the experience of nurses and what they perceive to be the enablers and barriers to the provision of optimal resident care. They perceive low levels of organizational support and high degrees of moral distress, which corroborates the existing evidence described previously. Despite these findings, nurses reported high levels of teamwork and job satisfaction. Although nurses reported that overall the quality of resident care was high, they paradoxically reported a deterioration of quality over the past year

Throughout both the quantitative and qualitative data were the issues of insufficient time, inadequate staffing, and the lack of strong organizational support and leadership and the perceived link between these factors and resident care. The impact of staffing and workload created a significant barrier to having time available to spend with the residents and time for ongoing assessment and evaluation for changes to the resident plan of care. The inability of nurses to conduct regular and thorough assessment of resident status may act as a barrier to early identification of factors that may contribute to resident worsened physical functioning.

Background

Long Term Care in Ontario

In Ontario, there are 76,982 LTC beds across 627 LTC homes (Ontario Long Term Care Association [OLTCA], 2016). Since 2010, only people with high or very high needs, based on MAPLe scores (Method for Assigning Priority Levels) are eligible for admission to LTC homes. Considered within these high-level ratings are individuals with complex problems in multiple areas of functioning, including physical and cognitive impairments and challenging behaviours (OLTCA, 2016).

More than 85% of LTC residents are classified as requiring high levels of care, including constant supervision; assistance with personal care such as dressing, eating or toileting; and management of comorbidities (OLTCA, 2015). In addition to the complex physical care needs, approximately 73% of residents have some form of cognitive impairment (Sharkey, 2008). The proportion of LTC residents with Alzheimer's and other dementias has grown to 62% (from 56% in 2011), with 46% of residents exhibiting some form of aggressive behaviours, and 41% of residents needing monitoring for acute medical conditions (OLTCA, 2016).

The LTC homes are operated by various companies or municipalities and, as licensed facilities, are expected to fulfil the mandated stipulations within the legislation and regulations of the Long-Term Care Homes Act (2007), with eligibility and placement of individuals is determined by case managers. Within the LTC homes, direct care is provided by teams of regulated nursing staff, such as RPNs, RNs, and nurse practitioners (RN/EC), and by unregulated care providers (e.g., PSWs). Eighty percent (80%) of the personal care is provided by the unregulated care providers (Estabrooks, Squires, Carelton, Cummings, & Norton, 2015) who take direction from the regulated nurses as determined by the nursing care plan.

The Long Term Care Homes Act (2007) stipulates the requirements for initial resident assessments and the development of and the ongoing re-assessment of the resident plan of care. As specified in the act, the initial resident plan of care is to be developed within 21 days of admission and includes information drawn from 23 different assessments. Once implemented, the plan of care for each resident is to be re-assessed at least every six months.

As the professional association representing RPNs in Ontario, RPNAO undertook this study in direct response to the expressed concerns and sense of frustration experienced by their members who practice in LTC homes in Ontario.

Nursing in Long Term Care

The RPN is the predominant regulated nursing role involved in the direct provision of resident care. Thirty-one percent (31%, 15,451) of all RPNs in Ontario report being employed in LTC compared to 8.3% (9,345) of all RNs (College of Nurses of Ontario [CNO], 2016). Generally, RPNs have accountability for providing direct resident care, with the RN having accountability for planning and coordinating care (McClosky, Donovan, Stewart & Donovan, 2015). In Ontario, the RPN is akin to the licenced practical nurse (LPN) designation in other Canadian provinces.

As evidenced in the literature, nurses in LTC experience and struggle with the increasingly complex resident care needs, resource constraints, and an augmented workload, which collectively result in high degrees of moral distress and job dissatisfaction (Anderson, Taha, & Hosier, 2009; Havaei, MacPhee & Dahinten, 2016; Pijl-Zieber et al., 2008; Spenceley et al., 2014). Heavy workloads and rushed work environments did not promote collaboration or adequate time for nursing assessment and team meetings to discuss resident care (Sharkey, 2008). Medication administration accounts for the majority of nursing care hours with reports ranging from 20 to 40% of time spent on this aspect of care alone (Munyisia, Yu, & Hailey, 2011; Qian, Yu, Hailey, & Wang, 2015; Thomson et al., 2009)

The focus on compliance with Ministry of Health and Long Term Care compliance standards could be a significant driver of organizational priorities, which can result in an emphasis on compliance-related activities, further limiting the provision of individualized resident care.

Optimizing Holistic Resident Care

Understanding and administering to the whole person has been linked to better outcomes in LTC for older adults (Anderson et al., 2009). In order to provide individualized, resident-centered care, nurses must be able to draw upon and apply not only their scientific knowledge but also their knowledge from humanistic nursing theories that place the emphasis on the nurse–resident relationship and the importance of knowing the whole person (Phelan & McCormick, 2016; Williams, Hadjistavropoulos, Ghandehari, Malloy, Hunter, & Martin, 2016). The increasingly complex care needs of those in LTC and the associated workload have resulted in care driven by physical and medical needs at the expense of emotional and psychosocial needs (Anderson et al., 2009). Additionally, the associated higher levels of workload have resulted in nurses claiming inadequate time for ongoing assessments of residents, review of care plans, and documentation (Zúñiga, Ausserhofer, Hamers, Engberg, Simon, & Schwendimann, 2015), thereby creating barriers to the optimal application of their nursing-specific knowledge in planning and evaluating resident care.

Organizational factors such as access to empowerment structures such as having

For the purpose of this study, nursing-specific knowledge is defined as knowledge obtained through basic nursing education, ongoing professional development, and professional experience.

In order for residents to fully benefit from the full depth and breadth of nursing knowledge, nurses need to be able to apply the art of nursing along with the science.

sufficient time to provide care; the ability to adapt care as required, rather than following rigid routines; access to education to support care needs; and adequate staffing was linked to the provision of individualized resident plans of care and the quality of care (Caspar & O'Rouke, 2008; Zúñiga et al., 2015).

Purpose of the Study

As the professional association representing RPNs in Ontario, RPNAO undertook this study in direct response to the expressed concerns and sense of frustration experienced by their members who practice in LTC homes in Ontario. RPNs expressed frustration that the increasingly complex care needs and workload intensity and the lack of adequate staffing inhibited them from providing holistic resident care.

While published reports describing a range of factors that inhibit optimal resident care and nursing satisfaction are evident, as stated above the paucity of literature specific to resident outcomes represented a gap in the evidence.

Therefore, the purpose of the study was to address the following research questions:

1. What are the enablers and barriers to the provision of optimal resident care in Ontario's LTC homes?

2. What are the impacts of these factors on nurse and resident outcomes?

Design and Sample

A non-experimental, descriptive research design was used for this study, specifically a survey among a targeted sample of RPNs and RNs employed in direct practice roles in LTC homes. To optimize stakeholder engagement, the nurse sample would be drawn from the Local Health Integrated Networks (LHINs) in Ontario that contained 50 or more LTC homes. This resulted in the five following LHINS included in the study: South West, Hamilton / Niagara / Brantford, Central East, Champlain, and North East. Collectively, there were 342 LTC homes within these LHINs, representing 55% of all LTC homes in Ontario as well as representing distinct geographical regions across the province of Ontario.

Methods

Design and Sample

This study was guided by an advisory panel (see acknowledgments) of RPNs, RNs from LTC in direct practice, administrative roles, and a RN with direct experience as a family member in LTC.

Donabedian's (1966) long-established Quality Framework served as a useful conceptual model to guide the study. This framework recognizes the various factors that can affect quality, specifically structure (e.g., type of facility, characteristics of staff); processes (e.g., models of care, communication mechanisms); and outcomes (e.g., nurse and resident outcomes). Figure 1 displays the delineation of variables pertinent to this study.

STRUCTURE	PROCESS	OUTCOME
Facility characteristics: Number of beds Number of residents/unit Resident assignment **Nurse characteristics:** Education preparation Years of experience/ nurse Years of experience / LTC	**Model of care delivery** **Interprofessional team** Role of PSW Role of RPN Role of RN Role of NP Role of Allied Health Professionals Role of MD **Consultation processes**	**Resident outcomes (CIHI)*** 1. Falls in the last 30 days 2. Worsened pressure ulcers 3. Restraint use 4. Improved or worsened physical functioning **Nurse outcomes:** 1. Job satisfaction 2. Moral distress 3. Nurse perceived quality of care

Figure 1. Donabedian framework / variable studies.
Note. LTC – Long Term Care; PSW – personal support worker; RPN – registered practical nurse; RN – registered nurse; NP – nurse practitioner

The survey consisted of 42 items, including participant demographics; information about their place of employment; and care delivery processes.

The nurse sample was obtained via a request to the College of Nurses of Ontario (CNO) database from the five LHINs identified and from nurses who, in their license renewal process, indicated a willingness to be contacted for research purposes. This resulted in 3,870 potential respondents of which 69% (n = 2,659) were RPNs and 31% (n = 1,211) were RNs.

Data Collection

The sample of nurses was first approached via regular mail using the contact information provided by the CNO. The initial mailing contained information about the study and directions for accessing the online survey. A reminder notice was sent 3 weeks later and included a hardcopy of the survey with a self-addressed, stamped return envelope to optimize participation.

Measurement

The survey consisted of 42 items (see Appendix A), including participant demographics (e.g., professional designation, years of experience, and educational preparation); information about their place of employment (e.g., number of residents, unit size, staffing); and care delivery processes (e.g., model of care, access to members of interprofessional team). The survey also invited the participants to include the name of the LTC home where they were currently employed. Selected items from previously published instruments were used for specific variables of interest such as moral distress (Spenceley, et al, 2015,); nursing teamwork (Kalisch, Lee, & Salas, 2010); job satisfaction (Hackman & Oldman, 1976); and organizational support and nurse-perceived quality of care (Aiken, Clarke, & Sloan, 2002), with space made available for optional commentary.

The eight members of the advisory group were invited to review the survey items, comment on the relevance and clarity of the items and where necessary, to provide suggestions for improvement. All items were retained, with no suggestions for changes to the wording.

Resident outcome data were obtained from the Canadian Institute for Health Information (CIHI), which annually collects and reports on clinical, administrative, and resource utilization outcomes from LTC homes in Canada. Nine indicators are publicly reported via the "Your Health System" representing 2015-2016 data and available through the CIHI website (www.cihi.ca). Based on the scope of the study, the five most relevant resident quality care indicators selected were : restraint use, worsened pressure ulcer, falls in the past 30 days, improved physical functioning, and worsened physical functioning.

See Table 2 for definitions of the resident care quality indicators.

Table 2 – Definition of CIHI Resident Care Quality Indicators

INDICATOR	DESCRIPTION
Worsened pressure ulcer	The number of LTC residents whose stage two to four pressure ulcer had worsened since the previous assessment. Pressure ulcers can happen when a resident sits or lies in the same position for a long period of time. Immobility may be due to many physical and psychological factors, neurological diseases like Alzheimer's and improper nutrition or hydration. Careful monitoring is required to ensure good quality of care
Restraint use	The number of LTC residents who are in daily physical restraints. Restraints are sometimes used to manage behaviours or to prevent falls. There are many potential physical and psychological risks associated with applying physical restraints to older adults, and such use raises concerns about safety and quality of care.
Falls in last 30 days	The number of LTC residents who fell in the 30 days leading up to the date of their quarterly clinical assessment. Falls are the leading cause of injury for seniors and contribute to a significant burden on the health care system. Residents are at a higher risk of falling if they have a history of falls or are taking certain medications. Preventing falls increases the safety and quality of care of residents
Improved physical functioning	The number of LTC residents who improved or remained independent in transferring on and off surfaces (such as beds, chairs and toilets), moving around in bed and walking around the home. Being independent or showing an improvement in these activities of daily living may indicate an improvement in overall health status and provide a sense of autonomy for the resident.
Worsened physical functioning	The number of LTC residents who worsened or remained completely dependent in transferring on and off surfaces (such as beds, chairs and toilets), moving around in bed and walking around the home. An increased level of dependence on others to assist with transferring and locomotion may indicate deterioration in the overall health status of a resident.

From "Long-Term-Care Home Quality Inspection Program: 2015 Annual Report of the Office of the Auditor General of Ontario," by Ministry of Health and Long Term Care, 2015, p. 396. Copyright n.d. Ministry of Health and Long Term Care.

Data Analysis

Statistical analyses were conducted using SPSS for Windows 22.0 (http://www-03.ibm.com/software/products/en/spss-statistics). Descriptive statistics were generated for each study variable, with x^2 tests of independence conducted for demographic variables to determine the presence of statistically significant differences among the variables. A variety of univariate, bivariate, and multivariate analyses were computed between and among all relevant variables.

To enhance the clarity of the findings, total scores were generated for items relating to the following subsections of the survey: job satisfaction, moral distress, organizational support, and teamwork. Dichotomous variables (e.g., higher vs lower group scores) were also created for job satisfaction, moral distress, organizational support, team work, and quality of care.

Each of the five resident outcomes at the facility level was coded based on the 2015–2016 CIHI data describing whether the resident outcome was below the provincial average, at par, or above the provincial average using a numerical score of 1, 2, or 3 respectively. An overall score for each LTC home was calculated based on the combined score for the five resident outcomes, with possible scores ranging from a low of 5 to a high of 15. Based on the overall score, the individual LTC homes were recoded as being below average, average, or above average for the five resident outcomes during that reporting period.

Qualitative data were analyzed independently by the researchers (SL and JR) using conventional content analysis methods (Vaismoradi, Turunen, & Bondas, 2013) for coding and identifying themes. Any discrepancies between the researchers was resolved through consensus. Exemplars from the written commentary were selected to illustrate the main themes identified.

Ethical Considerations

This study was funded by Registered Practical Nurses Association of Ontario (RPNAO) in direct response to feedback expressed by its members providing resident care in LTC homes across Ontario. The funder did not have any direct involvement in the design, execution, or analysis of reporting of the study. The letter of information and consent specified that participants had the option of including the name of their LTC home and that this information may be used to compare the overall nurse survey results to overall LTC home resident outcomes, as publicly reported by CIHI. The data would be managed in an aggregate manner without the use of personal or organisational identifiers. Ethical approval for the study was granted by the Georgian College Research Ethics Board.

Results

In total, 734 completed surveys were returned resulting in a 19% response rate. Use of the electronic version of the study was undertaken by 41%, and 59% of the respondents opted for the hard copy. There were no statistically significant differences identified in the item responses of those surveys received online versus those in the paper format following the reminder notice. Respondents who indicated they were in management and "other" roles (e.g., supervisor, coordinator, educator) were excluded, as the inclusion criterion was limited to only nurses indicating that their role was direct care. This resulted in a final response rate of 17% (n= 657) included for analysis.

Sixty-five percent (65%; n = 429) of the respondents were RPNs, and the remaining 34% (n = 226) were RNs. In terms of educational preparation, 56% of the RPNs reported having a certificate, and 40% were prepared at the diploma level. Most RNs (68%) reported being diploma prepared, and 32% had baccalaureate preparation.

There was consistent distribution between the years of experience in the two classifications of nurses with 30% in early career (less than 10 years), 37% in mid-career (11-25 years), and 33% in late career (greater than 25 years). When compared to the years of experience in LTC, however, 45% of respondents were early career followed by 38% in mid-career, and 16% in late career.

The majority (51%) of the LTC homes were large (129 beds or more), followed by 32% medium (65-128 beds), and 15% small (64 beds or less). The mean number of residents per unit within the LTC home was 36.
Four hundred and sixty-eight (468; 71%) respondents included the name of their LTC home in the survey. Upon review, 199 distinct LTC homes were identified with individual survey responses ranging from 2–9 for each LTC home.

Analysis of each of this study's five selected quality indicators revealed that most (78%) of the LTC homes were in line with the provincial average, with three indicators showing opportunities for improvement: 24% of LTC homes were below the provincial average in use of restraints (i.e., higher results for use of restraints); 30% of LTC homes were below the provincial average for improved physical functioning (i.e., lower results for improved physical condition); and 32% of LTC homes were below the provincial average for worsened physical functioning (i.e., higher results for worsened physical condition). Based on CIHI definitions provided for all reported indicators, below average results are deemed as being less desirable. Table 3 displays the data regarding LTC homes in this sample and their ranking per the CIHI indicators.

Table 3 – Percentage of LTC Homes (*N*=199) per the Study's Five Selected CIHI Indicators

	FALLS WITHIN 30 DAYS (%)	WORSENED PRESSURE ULCER (%)	USE OF RESTRAINTS (%)	IMPROVED PHYSICAL FUNCTIONING (%)	WORSENED PHYSICAL FUNCTIONING (%)
Below provincial average	18	13	24	30	32
At the provincial average	63	78	42	55	61
Above provincial average	19	9	34	15	7

Nursing Care: Nurses provided a rank ordering of the various direct and indirect care activities based on the amount of time spent on the activities. Direct care activities were defined as those that occurred in the presence of the resident/family, while indirect care activities occurred out of view of the resident/family yet were still in support of resident care. For direct care ranking revealed that the greatest amount of time was spent administering medication, followed by conducting treatments, providing assessment/ongoing monitoring, providing emotional support, and lastly, providing personal care. Indirect care ranking revealed that the greatest amount of time was spent on routine documentation followed by change of shift report, transcription of orders, plans of care updating, and interprofessional team meetings. There were some differences noted in the rank ordering between RPNs and RNs that would be consistent with their respective roles in resident care (see Table 4).

Qualitative comments revealed that lack of time related to workload was a source of moral distress: "The main barrier in long term care right now is time. Time to provide good care and do proper assessments and monitoring of ill and high-risk residents"; "In reality, I feel like all I do is give pills. This is very sad"; "It's more like putting out fires. More time would allow for regular planned reviews to update the plan of care and involve the family."

Table 4 – Ranking of Direct and Indirect Care

DIRECT CARE ACTIVITIES

	Assessment**	Administration of medication	Personal care	Treatments and/or administration of medication	Emotional support
RPN	3	1	5	2	4
RN	1	1	5	2/3*	4

INDIRECT CARE ACTIVITIES

	Change of shift report**	Transcription of orders**	Routine documentation	Updating resident plans of care	Interprofessional team meetings
RPN	2	3	1	4	5
RN	5***	2	1	4	5

*Almost equally ranked as 2 (n = 77) and 3 (n = 75)

** Statistically significant difference in responses of RPN and RN

*** Most common ranking but wide variability, not distinctly ranked #5

Organizational Support. Based on a four-point scale (1 = strongly disagree to 4 = strongly agree), nurses also reported a lack of organizational supports for items such as adequate support services to allow nurses time to spend with the residents (M = 1.9, SD = .76), enough nurses to provide quality care (M = 1.7, SD = .76), nursing ability to control own practice (M = 2.3, SD = .79) and having the freedom to make important resident care and work related decisions (M = 2.7, SD = .73). This was also reflected in comments provided such as:

"We had a DOC who would reprimand people for sending someone to the hospital. I feel I have to assess and based on my knowledge, decide if it is appropriate or not"; "The LTC facility I work for does not fully recognize all the skills within the RPN scope. As an RPN all nursing judgment is passed by the RN and the final decision is made by them even if the RPN is not agreement."

Nurse-Perceived Quality of Care. A similar four-point scale was provided for nurses' perceptions of the quality of care (1 = poor to 4 = excellent). Nurses reported that the quality of care provided to the residents is generally good (M=3.0, SD = .73), but 28% of nurses felt that the quality of care has deteriorated over the past year as compared to 56% who felt the care remained the same, with only 16% who felt the care had improved (see Table 5).

Table 5 – Nurse Perceived Quality of Care

	In general, how would you describe the quality of care delivered to your residents?	How would you describe the quality of resident care delivered on your last shift?	Over the past year, would you say that overall, the quality of care has…	How likely is it that your role significantly affects the lives and well-being of the residents?
	1 = Poor – 4 = Excellent	1 = Poor – 4 = Excellent	1 = Deteriorated, 2 = Remained the same, 3 = Improved	1 = Not at all, 2 = Moderately, 3 = Highly
Mean (SD)	3.0 (.733)	3.1 (.682)	1.9 (.657)	2.75 (.450)

Note. SD = standard deviation

Provision of Resident Care. Seventy-one percent (71%) of nurses stated that resident-centered care was the model of care delivery in place, followed by team nursing (7.8%) and functional or task oriented (6.3%). Although resident-centered care was the most frequently cited model of care, comments indicated that the lack of time and staffing resulted in care delivery that is more task oriented:

"The care is supposed to be client centred but it is more task oriented I believe due to time and staffing restrictions"; "In theory it is resident-centered care; in reality, it is mostly functional/task oriented"; and "Many appear to follow a task based model, I have been working to advocate for a resident centred care that is enhanced by developing the nursing team."

Nurses described the number of residents in a typical day shift assignment for RNs, RPNs, and PSWs. The RPN is the predominant regulated nursing role involved in the direct provision of nursing care. While each resident has a PSW assigned to provide basic care, a nurse, typically an RPN, is assigned to provide the nursing care required (e.g., medications, treatments, and required assessments).

For regulated nursing staff, the mean number of residents was 36, which coincides with the average number of residents per unit as reported earlier. The range of residents per assignment differed between the RN and RPN, in that the RPN assignment ranged from 20 to 45 residents while

> "The care is supposed to be client centred but it is more task oriented I believe due to time and staffing restrictions"; "In theory it is resident-centered care; in reality it is mostly functional/task oriented"; and "Many appear to follow a task based model, I have been working to advocate for a resident centred care that is enhanced by developing the nursing team."

The RPN is the predominant regulated nursing role involved in the direct provision of resident care.

the RN assignment ranged from 25 to 80 residents. The wide range in the RN assignment could reflect an RN role providing coverage for more than one unit. The mean number of residents in a PSW assignment was 10, with a range from 7 to 15.

Resident assignments were most often determined by geographic location within the unit (40%), followed by residents' clinical status (28%), and the availability of staff (13%). The frequency of when resident assignments were determined also varied among the responses: each shift (36%); daily (17%); and weekly (11%). Content analysis of the "other, please describe" option also revealed written notations of monthly, rarely, and never.

The survey also included a question as to whether there were any scenarios in which the resident assignment would be transferred from a PSW to a nurse (RPN or RN). Although only 33% responded "yes," content analysis of the 117 comments indicated that regulated staff would assume the resident assignment in the following scenarios: change in resident status; monitoring required due to a recent fall; palliative care residents; and complex care needs such a suctioning, subcutaneous infusion, and/or dressings. For those that replied "no" to a change in assignment from unregulated to regulated staff, the most frequently stated comments were regarding lack of RPNs/RNs to assume care or that a change in status would prompt resident transfer to an acute care facility.

Teamwork and Collaboration. Although the clear majority of nurses reported having access to physicians (88%) and allied health professionals (84%), just 51% reported having access to nurse practitioners, with collaboration occurring through regular onsite visits by the various members of the interprofessional team. Based on a four-point scale (1 = strongly disagree to 4 = strongly agree), nurses reported good teamwork between nurses and physicians (M = 3.1, SD = .62), PSWs (M = 3.0, SD = .57), nurse practitioners (M = 2.8, SD = .87), other members of the team (M = 2.9, SD = .66), and that team members understood the roles and responsibilities of each other (M = 3.0, SD = .55)

Although the overall mean scores indicated elevated levels of teamwork, results of independent t-tests revealed a statistically significant difference (p = .001) in the responses of RPNs compared to RNs. RPN mean scores were lower for these teamwork items, with the exception of teamwork between nurses and PSWs, where the RPN mean scores were higher than that of the RNs.

Team Consultation. Nurses reported daily interactions with the PSW (83%), the resident (77%), the RPN (75%), and the RN (66%). Other members of the team were accessed in the event of changes to the resident status such as physicians (67%), family members (54%), allied

health professionals (52%), and nurse practitioners (49%). Based on a four-point scale (1 = strongly disagree to 4 = strongly agree), nurses reported that team members readily share ideas and information with one another (M = 3.0, SD = .56), that the change of shift report contains the necessary information to care for residents (M = 3.0, SD = .55), and when there are changes in resident status, there is a plan to address the situation (M = 3.0, SD = .54). There were lower levels of agreement regarding having enough time and opportunity to discuss resident care with other nurses (M = 2.3, SD = .73).

Nurses reported an overall high sense of personal satisfaction and were generally satisfied with their job and the kind of work that they do.

When describing the input into the resident plan of care, the roles deemed as being very much or completely involved were the RPN (87%), followed by the RN (80%), family members (69%), allied health professionals (68%), PSWs (66%), the resident (66%), and the physician (46%). Results of independent t-tests revealed a statistically significant difference (p = .001) in the responses of RPNs as compared to RNs, with the RPNs' mean scores higher when describing RPN and PSW input into care, and RNs mean scores higher when describing RN input into the plan of care.

Moral distress. Using a five-point scale (1 = never to 5 = always), nurses reported high moral distress related to having to rush care of the residents due to lack of time (M = 4.0, SD = .88), seeing care suffer because there are not enough staff to do the work (M = 3.7, SD = .95), seeing poor care due to poor communication between staff members (M = 2.8, SD = .96), inconsistent application of the plan of care (M = 2.7, SD = .97), and lack of staff with the knowledge and skills to provide specialized care such as dementia care (M = 2.7, SD = .97).

Job satisfaction. Based on a four-point scale (1 = strongly disagree to 4 = strongly agree), nurses reported an overall high sense of personal satisfaction (M = 3.5, SD = .64) and were generally satisfied with their job (M = 3.0, SD = .63) and the kind of work that they do (M = 3.0, SD = .63). They received satisfaction in the recognition of the positive impact their role can have on residents (M = 3.5, SD = .57), the need to use high levels of critical thinking (M = 3.3, SD = .62), complex skills (M = 3.1, SD = .72), and that they have the opportunity to use their nursing-specific knowledge every day (M = 3.3, SD = .64). This overall high level of job satisfaction was also reflected in the lower mean scores related to intention to leave (M = 2.1, SD = .90).

The following section depicts the main themes derived from content analysis of nurses' description of the enablers and barriers to utilizing their nursing-specific knowledge and the benefits to resident care. Relevant exemplars have been selected to illustrate the main themes.

Using My Nursing Knowledge. Nurses were asked to describe the typical situations when they can apply their nursing specific knowledge. Three main themes emerged: rendering resident care, providing leadership, and collaborating with others. The typical resident care scenarios described included when there was a change in resident status or when the resident care needs required specialized knowledge (e.g., dementia care, diabetes). Other scenarios specific to resident care included when conducting initial and ongoing assessments of the resident; applying knowledge and critical thinking when solving complex resident care problems; addressing increased complexity of resident care needs through the development of the resident plan of care; and documenting resident care and status. The following is an exemplar that reflects all of these areas in action:

'The typical situation when I feel that I can actively apply my nursing specific knowledge is when I am able to tailor a care plan that caters to the resident's specific healthcare/nursing needs. For example, if I notice that Mr. X a dementia resident, who no longer has the ability to communicate his needs or ambulate unassisted is falling out of his chair for several days right after lunch. After some assessment, I was able to conclude that Mr.X, not having the ability to communicate his need to go to the bathroom, was attempting to go on his own resulting in the falls. After care-planning Mr.X's need to be toileted each day after lunch, his daily falls after lunch stopped"

Nursing knowledge was used in leadership capacities such as daily coordination of care, determining resident assignments, and making care decisions. When assigned to informal leadership roles, such as charge nurse, nursing knowledge was used when addressing more complex scenarios involving residents and/or family:

"My role is that of leader, and as such, daily, I co-ordinate with both the resident and PSWs about the care decisions for the greater good for the resident. I assess, make decisions, consult with my team including Dietary, OT, PT, MD and the RN."

Nursing knowledge was used in leadership capacities such as daily coordination of care, determining resident assignments, and making care decisions.

Another said, "On a daily basis one of my duties is to read the online report for the 120 residents under my care, if there is documentation on a high risk issue (diabetes, wound care, infection control) and family concerns of complaints, I review my concerns with the RPN's and PSWs or if it is required, I step in and do an assessment and follow through with MD or family."

Nurses described many scenarios where they regularly shared their nursing knowledge when interacting with members of the team, residents and family: "I usually share nursing knowledge with PSWs when I do shift report, teach them the rational of special care such as CHF, Diabetes and Dementia"; "With families when they are feeling sad. When they are going through the grieving process and with residents going through the grieving process . . . to give them optimum nursing care"; "Based on the continuity of care, I work closely with the PSWs and guide care plans to reflect individuals' specific needs and build a nursing team"; and finally,

"When a resident health status has suffered and needing to do a health assessment on them to determine if going to the hospital for further treatment is a benefit for them. Giving the on call physician a history of the resident and when sharing my findings and needing an opinion from another staff member."

Barriers and Enablers to the Use of Nursing Knowledge. By far the greatest barriers stated were those related to the lack of time due to increased workload: "The main barrier in long term care right now is time. Time to provide good care and do proper assessments and monitoring of ill and high risk residents"; "Time constraints - if time allowed, could do more comprehensive assessments, follow-ups and documentation and provide more emotional support to residents (work on unit with 49 residents)"; "Time, time for proper resident assessments, reviewing resident history, time to engage family, time to engage the resident themselves . . . paperwork has become the focus"; 'In reality, I feel like all I do is give pills. This is very sad"; and finally, "Rather than approaching resident care proactively . . . it's more like putting out fires. More time would allow for regular planned reviews . . . to update plan of care and involve the family."

Additionally, organizational policies and practices that limited scope of practice and decision making were also described: "We had a DOC who would reprimand people for sending someone to the hospital. I feel I have to assess and based on my knowledge, decide if it is appropriate or not." Others said, "The LTC facility I work for does not fully recognize all the skills within the RPN scope. As an RPN all nursing judgment is passed by the RN and the final decision is made by them even if the RPN is not in agreement."

"Authoritarian management that refuse to acknowledge front-line workers have the greatest amount of knowledge about residents. Management also exhibits a much greater concern about money spent than about quality of care, and treats these as separate and distinct failing to acknowledge that financial concerns and quality of care are symbiotic in planning for best outcomes."

"I used to be satisfied . . . but the new DOC has implemented a very negative cost saving measure that makes me want to quit working here. After tons of staff layoffs and hour reductions, now they give each resident only 1 incontinent brief per 8 hours. The PSWs are allowed one diaper/resident/shift and that is a disgrace!"

The enablers most commonly described were effective teamwork, and personal attributes such

as experience and confidence: "I am very resident and team focused, I offer my assistance and support whenever possible. As such I am often the 'go to' person for knowledge when on shift"; "My years of experience and respect from my fellow staff allows me to apply my nursing specific knowledge for best practice"; and "My critical thinking and strong personality enable me to go toe to toe at times with management . . . in order to provide the best pt centered quality care every resident/person deserves."

Still others said,

"My mouth... Confidence in saying what I know and willing to also listen to another side.... and someone who is receptive to listen. Sometimes people do not want to listen, but I have learned to let them go...Unless it affects a resident, then they have no choice but to listen as I listen as well. Usually things do work out for the benefit of our residents."

"I feel my years of experiences in long term care and my overall experiences in nursing have shaped my level of comfort in my ability to be a positive team member in long term care for the residents I care for."

"Teamwork: when there are staff on who work together and communicate well, there is often a better allocation of time and more effective use of time, so that I can spend more time with the resident in need to make informed decisions."

Contribution of Nursing-Specific Knowledge to Resident Care. The final question on the survey asked nurses to describe, in their opinion, how nursing-specific knowledge contributes to resident-centered care. Overwhelmingly, nurses stated that their nursing knowledge provided the residents with the best possible care by recognizing the unique and increasingly complex needs of each resident and developing an individualized resident plan of care: "With the elderly coming into long-term care with medical issues that are growing more and more complex every day, the need for nursing specific knowledge is now so much more important to ensure that LTC residents get quality care"; "Contributes having the capacity to anticipate and recognize changes in health status, and by being able to adjust the plan of care, implementing and evaluating it"; "My judgment and decisions impact how a resident increases or decreases independence, if the resident is respected in terms of what care they would like to receive, and if the safety and wellbeing of the resident is maintained."

Others responded,

"I believe it enables the nurse to have a better stance behind our residents and their needs. It allows us to see the 'whole picture' and be able to implement a better plan of care for each of our residents."

"To give excellent care one had to be aware of all aspects of the residents' needs. Physical, emotional, spiritual, family relationships, peer relationships, just to name a few. I feel as an RPN my nursing skills and experiences contributes positive outcomes for my residents and the care I provide."

"An awareness of what is 'normal' for any resident is crucial to determining when a change in condition requires an intervention and what is the most appropriate intervention. Also, recognizing potential for improvement and implementing plans and goals is a nursing function. Advocacy based on individual needs recognized based on nursing specific knowledge also contributes."

Although nurses clearly see the positive impacts that their nursing knowledge can have for the residents in their care, this also creates some degree of moral distress due to external factors that limit nurses' ability to provide the type of resident care they feel is deserved.

Although nurses clearly see the positive impacts that their nursing knowledge can have for the residents in their care, this also creates some degree of moral distress due to external factors that limit nurses' ability to provide the type of resident care they feel is deserved. The following is an exemplar of this moral distress:

"It doesn't, simply put. The reality is, although I love nursing and I love long-term-care nursing specifically, there are not enough hours in the shift, not enough staff to do the job well, there are limited resources and inadequate funding to ensure resident-centered care. I consider myself to be a good nurse, strong in knowledge and interpersonal skills. I work well with PSWs and

When considering the information in its entirety, a story begins to unfold regarding the various factors that limit the ability of regulated nursing staff to utilize the depth and breadth of their nursing-specific knowledge in the provision of individualized resident care.

assist them to ease their work-load whenever I can. I often hear from co-workers and residents and family members that I "make a difference" in their lives, but I always go home after my shift feeling it still was not enough. I have the nursing specific knowledge, but I lack the staff and resources to have my knowledge impact the care adequately! I do the job to the utmost of my ability, but am discouraged. Inadequate resources impact the individual care each resident deserves. I am passionate about LTC nursing, but the system is failing staff and residents alike."

Impact on Residents: An Emerging Explanatory Framework

When considering the information in its entirety, a story begins to unfold regarding the various factors that limit the ability of regulated nursing staff to utilize the full extent of their nursing-specific knowledge in the provision of individualized resident care. For example, regulated staff—predominantly RPNs—are the sole regulated care providers for approximately 36 residents with most of their time spent on medication administration and treatments. Correlational analysis revealed that medication administration was negatively associated with the ability to provide emotional support ($r = -0.468$) and ongoing resident assessment ($r = -0.374$).

The availability of adequate support services to enable nurses to spend time with the residents was positively associated with having enough time and opportunity to discuss resident care with other nurses ($r = 0.507$) but also negatively associated with having to rush the care of residents due to lack of time ($r = -0.527$). If nurses must rush care due to lack of time and resources, this does not allow nurses to conduct timely and regular assessments to determine whether the resident's physical condition is improving or worsening and the consequences on the resident's overall quality of life. Organizational support had a positive effect on teamwork ($r = 0.491$) and nurse-perceived quality of care ($r = 0.396$). Conversely, the lack of organizational support contributed (negatively) to very high degrees of moral distress ($r = -0.622$). The ability to use their nursing-specific knowledge every day was positively associated with job satisfaction ($r = 0.441$).

Chi-square analyses of independence were calculated for the main study variables (e.g., moral distress, job satisfaction, organizational support, and nurse-perceived quality of care) and the CIHI resident quality of care indicators. Specific to resident quality of care, there was a statistically significant relationship between nurse-perceived quality of care and resident worsened physical functioning ($\chi (2) = 9.130$ $p < .010$). This result is of particular relevance as the definition of worsened physical functioning may be indicative of deterioration or decompensation in the overall health status of a resident (per CIHI definition, Table 2). Regression analysis of main study variables revealed that organizational support and moral distress accounted for 23% of the variance in nurse-perceived quality of care.

Discussion

The results of this study gave voice to the experience of nurses and what they perceive to be the enablers and barriers to the provision of optimal resident care. They perceive low levels of organizational support and high degrees of moral distress, which corroborates the existing evidence described previously.

Despite these findings, nurses reported high levels of teamwork and job satisfaction. Although nurses reported that overall the quality of resident care was high, they paradoxically reported a deterioration of quality over the past year.

Throughout both the quantitative and qualitative data were the issues of insufficient time, inadequate staffing, and the lack of strong organizational support and leadership and the perceived link between these factors and resident care. The impact of staffing and workload created a significant barrier to having time available to spend with the residents and time for ongoing assessment and evaluation for changes to the resident plan of care. The inability of nurses to conduct regular and thorough assessment of resident status may act as a barrier to early identification of factors that may contribute to resident worsened physical functioning.

Implications for Practice

The increased complexity of resident care needs requires nursing care that requires optimal utilization of the nurse's knowledge, judgement, and skill. There is a need to acknowledge that although all residents have their basic care needs provided by a PSW, every resident also has care needs that require nursing intervention and interaction. To provide high-quality, individualized resident care, residents deserve adequate access to nurses (RPNs and RNs) and PSWs. As the predominate regulated nursing role in the provision of resident care, RPNs play a key leadership role at the point of care and, along with their RN colleagues, need to acknowledge and embrace their significant contribution and advocate in order to conduct regular reconnaissance of their residents and make their nursing knowledge of the resident evident (Dahlke and Fox, 2015). As identified in previous studies, the significant amount of time required for the administration of medications and treatments affords little time left for managing the increasing complex care requirements. Nurses were clear in describing their need to advocate for practice that is based both on scientific knowledge but also human-centered care.

Implications for Leadership

The results here demonstrate the relationship between poor organizational supports and high degrees of moral distress. Those in leadership roles play a critical role in advocating for the organizational supports, both human and material, required to provide high-quality, safe, and individualized resident care. Additionally, nurses deserve a supportive working environment that optimize their scope of nursing practice and role satisfaction. The results of this study reveal that a lack of these supports contributes to care that is driven by the magnitude of tasks, rather than enabling nurses to apply the range of their nursing knowledge, judgement, and skills to optimize the full scope of their respective roles.

Implications for Education

The study findings reinforce the need for specialized education for all staff in the areas of gerontology, dementia, and behaviour management. Nursing leaders within LTC need to support staff access to educational opportunities and clearly articulate the expectation for the transfer of new knowledge into the attitudes, skills, and staff performance that support a high-quality and safe resident care environment (Donner, 2012).

Of interest in this study was the degree to which nurses were able to use their nursing-specific knowledge as a key resource in the provision of high-quality resident care.

Additionally, entry to practice nursing curricula, especially within practical nursing programs, should include dedicated content in the areas of gerontology, dementia, and behaviour management. Continuing education programs in the broad areas and issues of gerontology should be accessible to both RPNs and RNs to enable optimal intraprofessional collaboration and high-quality, individualized resident care.

Implications for Policy

In both the quantitative and qualitative findings, adequate staffing was linked to the availability of time for executing comprehensive and holistic resident care. The findings of this study are supported by previous recommendations (Sharkey, 2008; Donner, 2012) regarding increasing nursing care time to allow for assessment, monitoring, and planning individualized care. This was reinforced in the Ontario Long Term Care Association of Ontario (OLTCA) 2018 budget submission: More care. Better care (OLTCA, 2017).

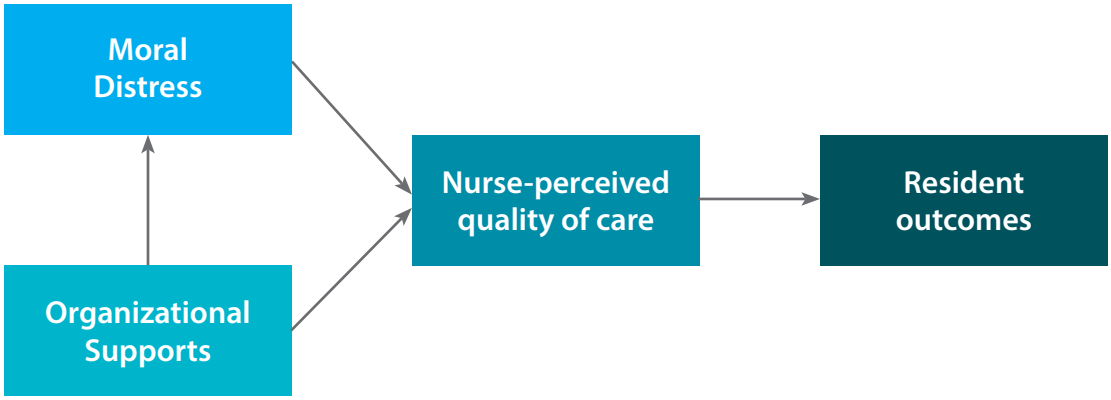
RPNs are the predominant provider of direct nursing care, and this study identified that, on average, the RPN assignment is 36 residents and that most of their work is consumed by the administration of medications and treatments to residents with a growing level of acuity and complexity, leaving little time for the individualized resident-centered care. Enhancing the number of regulated staff is defensible considering the findings of this study. Enhancing the number of RPNs and RNs would allow for timely and ongoing assessments of residents, provision of holistic resident care, and the ability to adequately provide support and consultation to PSWs to monitor and evaluate resident care. Enhancing access to RNs would enable timely consultation and collaboration within the nursing intraprofessional team and the extended interprofessional team.

Implications for Research

Due to the increasing complexity of care and the growing elderly population, further research is required to understand the depths and demands of care needs, care delivery, the context for care, and the supports required to provide high-quality, evidence-based elder care (Sinha, 2012).

Specific to the outcomes of this study, ongoing research is warranted to test the observed relationships among this study's key variables

Figure 2. – Proposed Research Model.



Limitations

The main limitation of this study is the low response rate. The response rate may have been improved using multiple reminders, but given time and feasibility constraints, only one reminder was issued. Low response rates can also lead to concerns regarding a non-response error (bias). According to Dillman (2007), non-response error occurs when those who did not reply to the survey differ from those who replied to the survey, and they may differ in a way that is relevant to the study. One method to assess the potential impact of non-response bias is to compare key demographic variables of the respondents and non-respondents (MacDonald, Newburn-Cook, Schopflocher, & Richter, 2009). The study sample was compared with the available demographic information of nurses who practice in LTC homes (CNO, 2016); this study's sample was found to be similar in characteristics to those at the provincial level.

Other factors may have contributed to the low response rate but could not be quantified, such as changed addresses, non-interest, or concern that participation may negatively impact their employment or license (despite explicit statements regarding confidentiality). Concerns of this latter consideration may be the reason behind the 29% of the sample who did not indicate the name of their LTC home. Only five of the 12 provincial LHINs were sampled. While the selected LHINs were deemed representative, there may have been a different level of response in the other regions. Of note is that almost half (45%) of the respondents were categorized as "early career" and while not considered a serious response bias, the findings should be taken within this observation.

Relevant items from existing instruments were selected for this survey. Psychometric testing has yet to be conducted. Additionally, there is the potential for biases associated with self-report, specifically the potential for social desirability, which may have been a factor in the high mean scores for items related to nurse-perceived quality of care.

Conclusions

Although the challenges experienced by nurses in LTC have been described in previous studies, this is the first known study that considered factors that influence nurses' ability to apply their full depth and breadth of knowledge in the delivery of high-quality resident care and assimilated findings with nationally-recognized LTC resident indicators.

The issues of complex care needs, increased workload, and the resulting moral distress experienced by nurses is not unique to the LTC sector. Organizational support was a key factor that influenced both nursing and clinical outcomes. As such, both the survey and the findings from this study may be applicable to a wide range of practice settings and sectors. Future research is suggested to deepen the understanding of the interplay among these elements.

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Appendix A: Survey Items

The aim of this study is to gain a better understanding of the enablers and barriers to nursing knowledge utilization in the provision of resident care. The goal is to identify any best practices and/or strategies for optimizing nursing specific knowledge in resident care. For the purposes of this study, nursing specific knowledge is knowledge obtained through basic nursing education, ongoing education and experience.

In appreciation for your contribution to this important topic, we are pleased to offer a certificate or participation to include as an example of meeting your reflection practice requirement for the College of Nurses of Ontario.

To obtain the certificate, go to www.releveconsulting.com

The following items will let us know a bit about yourself and your nursing experience.
No personal information is required.

1. What is your professional designation?

○ Registered Practical Nurse (RPN)

○ Registered Nurse (RN)

○ Registered Nurse (EC)/Nurse Practitioner

2. What is your primary role?

○ Direct provision of resident care (e.g. Staff nurse, NP)

○ Management or administration (e.g. no direct provision of care)

○ Other (please specify) [add rule to type in]

3. Your number of years of experience in Nursing _____

4. Your number of years of experience in Long Term Care _____

5. What is your highest level of nursing education? _____

○ RPN Certificate

○ RPN Diploma

○ RN Diploma

○ RN Baccalaureate degree

○ Graduate degree (e.g. Master degree or PhD)

6. Please describe any additional education completed or underway (e.g. certificates, courses,.....)

Please answer the following items (Questions 7-19), thinking about the LTC home where you practice/work THE MOST OFTEN. All information will remain confidential and the reports will never identify any specific LTC home by name.

7. What is the approximate total number of beds in your LTC Home? _____

8. What is the approximate number of residents per unit? _____

9. Recognizing there is a difference in assignments from shift to shift - as a point of reference, what is the number of residents in a typical day shift assignment for a PSW/ personal support worker? _____

10. Recognizing there is a difference in assignments from shift to shift - as a point of reference, what is the number of residents in a typical day shift assignment for a RPN?

11. Recognizing there is a difference in assignments from shift to shift - as a point of reference, what is the number of residents in a typical day shift assignment for a RN?

12. Do you have reasonable access to a Nurse Practitioner, regarding resident care?

○ Yes ○ No ○ Not sure

Comments _____

_____

13. If Yes to #12 above - How do you access the Nurse Practitioner (NP)?

○ The NPs are directly associated with the TLC home

○ The NPs are available via outreach services

○ Not sure

14. Do you have reasonable access to Physician(s) regarding resident care?

○ Yes ○ No ○ Not sure

Comments _____

_____

15. If Yes to #14 - How do you access the Physcian(s)?

○ They are onsite regularly

○ By consult only

○ Not sure

16. Do you have reasonable access to Allied Health Professionals (e.g. Physiotherapist, Occupational Therapist, Dietitian, Recreational Therapist)?

○ Yes ○ No ○ Not sure

Comments _____

_____

17. If Yes to #16 - How do you access the Allied Health Professionals?

○ They are employees of the LTC Home; onsite regularly

○ By consult only

○ Not sure

18. Which of the following best describes the location of your LTC Home?

○ Urban area ○ Rural area ○ Other (please specify) _____

9. "What is the name of your LTC Home (optional).

Note: All information will remain confidential and the results will never identify you or your LTC home by name. This information may be used to compare the overall survey results to overall LTC home resident outcomes, which are publicly reported by Canadian Institute of Health Information and can be accessed via https://www.cihi.ca/en/types-of-care/community-care/residential-care.

_____

Please answer the following questions thinking about the resident care unit where you practice/work most often.

20. Is there a specific model of care delivery in place on your unit?

○ Yes ○ No ○ Not sure

21. If Yes to #20 - Which of the following best describes the model of care delivery

○ Resident Centered Care

○ Team Nursing

○ Functional/Task oriented

○ Not sure

○ Other (please specify) _____

22. For each of the individuals/roles options below, please describe their degree of input into the resident plan of care

	Not at all	Very rarely	Occasionally	Very much so	Completely
RN	O	O	O	O	O
RP	O	O	O	O	O
PSW	O	O	O	O	O
Nurse Practitioner (NP)	O	O	O	O	O
Physician	O	O	O	O	O
Allied Health *(e.g. Physiotherapist, Occupational Therapist, Dietitian, Recreational Therapist)*	O	O	O	O	O
Resident	O	O	O	O	O
Family	O	O	O	O	O

23. If you were working on a typical day shift - please rank order the following direct care activities (e.g. resident centered activities that occur in the presence of the resident/family) based on the amount of time spent on the activities - with #1 being what you do the most as so on…

_____ Assessment (ongoing monitoring of resident status) O N/A

_____ Administration of medications O N/A

_____ Personal Care O N/A

_____ Treatments and/or Administration of medications O N/A

_____ Emotional support O N/A

24. If you were working on a typical day shift - please rank the following indirect care activities (e.g. resident centered activities that occur out of view of the resident/family and are done in preparation for or in the completion of direct care) based on the amount of time spent on the activities - with #1 being what you do the most and so on…

_____ Change of shift report O N/A

_____ Transcription of orders O N/A

_____ Routine documentation O N/A

_____ Updating resident plans of care O N/A

_____ Interprofessional team meetings/consultations O N/A

25. How often are the resident assignments reviewed?

O Each shift O Daily O Weekly O Other (please specify) _____

26. How are resident assignments determined?

- ○ Geographically (e.g. rooms/beds closest to each other)
- ○ Based on resident status and/or care needs
- ○ Staffing…who is on that shift
- ○ Other (please specify) _____

27. Are there scenarios in which the assigned care provider would be changed from a PSW to a Nurse (e.g. RN or RPN)?

○ Yes ○ No ○ Not sure

28. If Yes to #27 - Please describe the types of scenarios are involved…and how does the change in assignment occur?

Please note: When describing the scenario, please do not include any information that may allow for the identification of residents (e.g. name, room number, or any other specific health information).

_____

29. Please indicate your level of agreement with the statements below using the options provided:

	Strongly Disagree	Disagree	Agree	Strongly Agree
There are adequate support services to allow me to spend time with my residents	○	○	○	○
Nursing has the ability to control our own practice	○	○	○	○
There is enough time and opportunity to discuss resident care with other nurses	○	○	○	○
Nurses and other members of team have good working relationships	○	○	○	○
There are enough nurses to provide quality resident care	○	○	○	○
I have the freedom to make important resident care and work decisions	○	○	○	○
I am not placed in a position of having to do things that are against my nursing judgement	○	○	○	○
There is a good teamwork between nurses and doctors	○	○	○	○
There is good teamwork between nurses and Nurse Practitioners (PNs)	○	○	○	○
Resident assignments foster continuity of care	○	○	○	○

30. With your team in mind - Indicate your level of agreement of the following statements, using the response provided

	Strongly Disagree	Disagree	Agree	Strongly Agree
The change of shift report contains the information needed to care for the residents	○	○	○	○
Team members understand the role and responsibilities of each other	○	○	○	○
When changes in resident status occur during the shift, there is a plan to deal with these changes	○	○	○	○
Nurses and Personal Support Workers (PSWs) work well together	○	○	○	○
Team members readily share ideas and information with each other	○	○	○	○

31. Please choose the response option that best describes how frequently you interact with those listed below for the specific purpose of planning or decision making regarding resident care:

	Never	Rarely	Resident reviews only	In the event of changes in resident status	Daily or each shift
RN	○	○	○	○	○
RPN	○	○	○	○	○
PSW	○	○	○	○	○
Nurse Practitioner (NP)	○	○	○	○	○
Physician	○	○	○	○	○
Allied Health *(e.g. Physiotherapist, Occupational Therapist, Dietitian, Recreational Therapist)*	○	○	○	○	○
Resident	○	○	○	○	○
Family	○	○	○	○	○

32. Please describe the typical situation(s) when you feel that you can actively apply your nursing specific knowledge. As a reminder, for the purposes of this study, nursing specific knowledge is defined as knowledge obtained through basic nursing education, ongoing education and experience. _____

_____

33. Please describe the typical situation(s) when you actively share your nursing specific knowledge with others. _____

_____

34. Are there barriers limiting your use of nursing specific knowledge?
if so - please describe: _____

_____

35. What enables you to apply your nursing specific knowledge?
Please describe: _____

_____

36. Describe how often you experience the following situations

	Never	Rarely	Sometimes	Often	Always
Seeing the care suffer because there are not enough staff to do the work	○	○	○	○	○
Having to rush the care of residents due to lack of time	○	○	○	○	○
Seeing poor care for residents because of poor communication between staff members	○	○	○	○	○
Seeing the care suffer for residents because staff lack the knowledge and skills they need to provide specialized care (e.g. dementia)	○	○	○	○	○
Seeing care suffer due to inconsistent application of the plan of care	○	○	○	○	○

37. In general, how would you describe the quality of nursing care delivered to your residents?

○ Poor ○ Fair ○ Good ○ Excellent

Comments _____

_____

38. How would you describe the quality of resident care delivered in your last shift?

○ Poor ○ Fair ○ Good ○ Excellent

39. Over the past year, would you say that overall, the quality of resident care has…

○ Deteriorated ○ Remained the same ○ Improved

Comments _____

_____

40. How likely is it that your role significantly affects the lives and well-being of the residents?

○ Not at all ○ Moderately ○ Highly

41. Please indicate your level of agreement with statements below using the scale provided

	Strongly Disagree	Disagree	Agree	Strongly Agree
This job requires me to use a number of complex skills	○	○	○	○
This job requires me to use a high level of critical thinking	○	○	○	○
This job is quite simple and repetitive	○	○	○	○
This job is one where the residents can be affected by how well the work gets done	○	○	○	○
The job gives me considerable opportunity for independence and freedom in how I do the work	○	○	○	○
Generally speaking, I am very satisfied with this job	○	○	○	○
I feel a great sense of personal satisfaction when I do this job well	○	○	○	○
I frequently think of quitting this job	○	○	○	○
I am generally satisfied with the kind of work I do in this job	○	○	○	○
In my role, I have the opportunity to use my nursing specific knowledge every day	○	○	○	○

42. In your opinion how does nursing specific knowledge contribute to resident centered care? _____

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