



An Analysis of Long-Term Care Home Inspection Reports and Responsive Behaviours

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Abstract

Concern about residential long-term care quality and safety is a critical issue in developed countries internationally, often fueled by media scandals exposing riveting accounts of resident-to-resident aggression/responsive behaviours. These scandals raise questions about standards of care set through long-term care regulation. Using a participatory action research approach and document analysis method, we analyzed incidents related to responsive behaviours documented in three types of public version inspection reports posted for 535 Ontario, Canada long-term care homes from 2016 through 2018. Creation of an Individual Home Data Collection and Analysis Tool facilitated data collation and descriptive statistical analysis of seven long-term care service areas in the province of Ontario. Results highlight several combined service areas differences between for-profit and not-for-profit home documentation related to responsive behaviours in (a) resident quality inspection means; (b) total complaint and critical incident proportions and means; (c) total enforcement actions proportions; and (d) enforcement penalties. We discovered that documented evidence of incidents related to responsive behaviours was instead represented by other sections of the legislation. The highest proportion of enforcement actions related to responsive behaviours involved no follow-up by inspectors and only four enforcement penalties over three years. Recommendations include revision of the inspection report judgement matrix tool to produce separate enforcement actions specific to responsive behaviours. We submit that attending to this will contribute to protecting long-term care residents from harm and improving their quality of care through more effective connection of long-term care regulation to responsive behaviour care management.

Keywords Inspection · Long-term care homes · Older adults · Regulation · Responsive behaviours

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Introduction

Population ageing is an unparalleled worldwide demographic megatrend in both developed and developing countries (United Nations, 2019). During this time, the proportion of adults aged 65 years and older is projected to increase from 9 to 16% of the world's population, resulting in one in six people representing this age cohort (United Nations, 2019).

One consequence of this megatrend (United Nations, 2019) is concern about managing these older adults' anticipated health care needs, including residential long-term care, referred to hereafter with the acronym LTC (World Health Organization, 2020). Many countries in Europe, North America, Asia, and Australasia implement regulation as one approach toward organizational achievement and maintenance of statutory minimum standards of LTC provision (Furness, 2009; Mor et al., 2014; O'Dwyer, 2015; Weiner, 2014).

Regulation functions to “reassur[e] the public that they are receiving services of a certain standard of care” (O'Farrell et al., 2014, p. 194). Regulation has thereby become linked to LTC quality (Bowblis & Lucas, 2012; Furness, 2009; Mor et al., 2014; O'Dwyer, 2015; Worden & Challis, 2006). Internationally, policy and decision makers grapple with how best to assure high quality residential LTC (Lloyd et al., 2014; Mor et al., 2014; Weiner, 2014) because “for people who use long-term care services, the quality of the care they receive is critically important, and in some cases can be the difference between life and death” (Weiner, 2014, p. xxiii).

However, scholars in the field of regulation caution that establishment of regulatory standards may not necessarily assure quality care provision (Bowblis & Lucas, 2012; Furness, 2009; Gil, 2019; O'Dwyer, 2015; O'Farrell et al., 2014; Weiner, 2014, p. xvii). Long before the global pandemic LTC tragedy unfolded, public trust in regulation as an assurance of residential LTC safety was eroded by increasing international media reports exposing shocking deficiencies in meeting minimum standards of residential LTC (Butler & Drakeford, 2005; Lloyd et al., 2014; Mor et al., 2014).

Members of LTC advocacy organizations, including Concerned Friends,¹ are also alarmed by these media reports. Since 2004, a prime Concerned Friends responsibility is reviewing and disseminating an analysis of all Ontario LTC home public version inspection reports to effect policy change and improved residential quality of care, through representation on the Ontario Ministry of Health Ministry of Long-Term Care Quality Inspection Advisory Committee. In 2007, enactment of revised LTC legislation (Ontario eLaws, 2021a, b) introduced a new and complex inspection program. Members of Concerned Friends recognized their need to develop and pilot needed report revisions, beginning with one prioritized care issue.

The purpose of this article is to answer the following research question by describing “*What is the state of Ontario LTC home compliance with legislation concerning incidents of resident-to-resident aggression, or responsive behaviours?*”

¹ Concerned Friends (2023) is a registered non-profit charitable organization, whose mission is to raise the quality of Long-term care through public education and individual and systemic advocacy work.

through an analysis of public version LTC home inspection reports. First, the study context is established through (a) defining responsive behaviours, (b) explaining the rationale for the focus on responsive behaviours as the aforementioned prioritized care quality issue and (c) presenting an overview of the Ontario LTC home inspection program. Following a subsequent account of the study design and methods, the results are presented and discussed. The article concludes with recommendations for strengthening the connection between care for residents with responsive behaviours and Ontario LTC home inspection/regulation.

Study Context

Defining Responsive Behaviours

An early focus of the sparse body of research investigating responsive behaviours was incidence and prevalence measurement (Castle, 2012; Ferrah et al., 2015; McDonald et al., 2015; Rosen et al., 2008). But determination of incidence and prevalence was complicated by challenges associated with defining resident-to-resident aggression (Ferrah et al., 2015; McDonald et al., 2015; Ramirez et al., 2013). Responsive behaviours are associated with behavioural and psychological symptoms of dementia, the most common of which is aggression (Ontario Long Term Care Association, 2016). These symptoms may be manifest as “being verbally or physically abusive, socially disruptive, or resisting care and assistance....irritable outbursts, pushing or hitting” (Ontario Long Term Care Association, 2016, p. 7). A scoping review of the literature discerned multiple terms used to explain what is meant by resident-to-resident aggression including: (1) “abuse”; (2) “aggression”; (3) “elder mistreatment”; (4) “relational aggression”; (5) “violence”; (6) “violent incidents”; and (7) “non-staff abuse” (McDonald et al., 2015, p. 2).

Many of those terms evoke notions of intentional abuse/violent behaviour but “in most cases this is not true aggression, but a response to something in the person’s environment” (Ontario Long Term Care Association, 2016, p. 7). The term ‘responsive behaviours,’ incorporated in the Ontario LTC home legislation, refers to the diverse challenging behaviours that people with dementia may experience as a result of unmet needs or situations that may be “frustrating, frightening, or confusing to a person” (Alzheimer Society of Ontario, Alzheimer Knowledge Exchange, and Behavioural Supports Ontario, 2013; Government of Ontario, 2011, p. 2–33; Ontario eLaws, 2021a, b).

Rationale for Focus on Responsive Behaviours

A seminal report on the lack of and need for addressing safety in Canadian long-term care settings first identified “examining aggressive resident behaviour and related adverse events” as a gap in research and a national LTC safety priority (Rust et al., 2008, p. 5; Wagner & Rust, 2008). Since then, scholars publishing on the topic agree that such aggression remains widespread, underreported, and understudied (Botngård

et al., 2020; Caspi, 2018; Castle, 2012; Ferrah et al., 2015; McDonald et al., 2015; Rosen et al., 2008).

The profile of Ontario LTC home residents further informed rationale for the study focus on responsive behaviours. A total of 109,410 older adults, almost 55% of whom are 85 years of age and older, and approximately 67% of whom are women, reside in LTC homes in Ontario (Canadian Institute for Health Information, 2020). Since the 2010 adoption of the ‘Aging at Home’ policy, implementation of more stringent LTC home admission criteria has resulted in increasingly complex resident care needs (Ontario Long Term Care Association, 2019). Among residents assessed during 2019–2020: (a) 63.2% were diagnosed with dementia, (b) 33.6% were experiencing severe cognitive impairment, and (c) 43.9% exhibited some aggressive behavior (Canadian Institute for Health Information, 2020). These estimates are concerning because recent research supports that adverse events involving LTC home resident-to-resident aggression hold the potential for serious negative outcomes for the older adults involved, such as lacerations, bruises, fractures (Botngård et al., 2020; Castle, 2012; DeBois et al., 2020; Ferrah et al., 2015; McDonald et al., 2015; Rosen et al., 2008), and sometimes death (Caspi, 2018; DeBois et al., 2020; Murphy et al., 2017).

A report of an exploratory pilot study examined incidents associated with confrontations among LTC residents living with dementia that resulted in death (Caspi, 2018). From 1988 to 2017, the highest proportion (48%, $n = 51/105$) of examined incidents in six countries occurred in Canada (Caspi, 2018). Of those 51 deaths, the highest number ($n = 37$) happened in the province of Ontario (Caspi, 2018). The urgency of understanding more about how such events are managed informed the decision of members of Concerned Friends to select responsive behaviours as the prioritized care quality issue on which to conduct this analysis of public version Ontario LTC home inspection reports.

Ontario Long-term Care Quality Inspection Program

Since 2010, the *Long-term Care Homes Act* (2007) and *Ontario Regulation 79/10* govern LTC in Ontario (Ontario eLaws, 2021a, b). Compliance with this legislation is tracked and enforced through the LTC Quality Inspection Program (Office of the Auditor General of Ontario, 2015a; Ontario Ministry of Health Ministry of Long-term Care, 2019; Ontario Ministry of Long-Term Care, 2020). A comparison study of LTC regulation among six countries, (Canada, the United States, Germany, Norway, Sweden, & England), determined that Ontario, Canada is one of two jurisdictions that applies the most deterrence-based, standardized inspection process (Choinière et al., 2016) to prevent adverse events that compromise the safety of LTC home residents and staff (Rust et al., 2008; Wagner & Rust, 2008).

Inspection Types Several types of inspections are conducted all of which are unannounced. Inspection reports representing resident quality inspections, complaints, and critical incidents were reviewed in this study (Ontario Ministry of Health Ministry of Long-Term Care,

2019; Ontario Ministry of Long-Term Care, 2020). The annual frequency of resident quality inspections, also known as ‘comprehensive’ inspections, began in 2015 (Office of the Auditor General of Ontario, 2015a) but was temporarily discontinued in 2018. Complaints may be initiated by residents, their family members and/or members of the public (Office of the Auditor General of Ontario, 2015a; Ontario Ministry of Long-Term Care, 2020, 2021). Critical incident inspections arise from mandatory reports submitted to the ministry by LTC home administrators when critical incidents occur, such as unexpected/sudden death or abuse (Office of the Auditor General of Ontario, 2015a).

Inspection Process Inspections follow a two stage sequence. The first stage entails interviews with a selected sample of residents, their family members and staff involved in their care, observations of care, and review of health records (Office of the Auditor General of Ontario, 2015a). After analyzing Stage One findings with the aid of standardized algorithms, Stage Two entails more in-depth analysis guided by 31 inspection protocols (Office of the Auditor General of Ontario, 2015a). The protocols are divided into three categories: (1) inspector initiated, (2) home-related, and (c) resident related (Office of the Auditor General of Ontario, 2015a). The five mandatory inspector initiated inspection protocols must be conducted in all resident quality inspections in either Stage One or Stage Two (Office of the Auditor General of Ontario, 2015a).

The responsive behaviours protocol falls within the resident related category (Office of the Auditor General of Ontario, 2015a). The inspection protocols each correspond to specific sections of the LTC home legislation (Ministry of Health and Long Term Care, 2010). Legislation sections concerning responsive behaviours address care requirements (Section 53), prevention of altercations and other interactions between residents (Section 54) and minimizing risk of harm through established procedures and interventions (Section 55) (Government of Ontario, 2011; Ministry of Health and Long Term Care, 2010; Ontario Ministry of Health Ministry of Long-Term Care, 2019, Ontario eLaws, 2021a, b).

Inspection Findings and Enforcement Inspector decision making regarding inspection findings is guided by a computer assisted judgement matrix tool (Ministry of Health and Long Term Care, 2010; Ontario Ministry of Long-Term Care, 2020). On completion of each inspection, standardized reports are generated that summarize findings and specify required enforcement actions arising from the findings (Ministry of Health and Long Term Care, 2010; Office of the Auditor General of Ontario, 2015a; Ontario Ministry of Long-Term Care, 2021). These actions may include a (a) written notification; (b) voluntary plan of correction; (c) compliance order; (d) work and activity order; and/or director’s orders (Office of the Auditor General of Ontario, 2015a). Written notification and voluntary plans of correction are managed internally by the LTC home (Office of the Auditor General of Ontario, 2015a; Ontario Ministry of Long-Term Care, 2020). Compliance orders and director’s orders specify actions that LTC home administrators must take within specified time frames to address areas of non-compliance and these require inspector follow-up (Office of the Auditor General of Ontario, 2015a). Enforcement penalties include cease of admission orders, financial penalties; mandatory management orders; interim manager orders; and license revocation (Office of the Auditor General of Ontario, 2015a).

Report Dissemination Two types of inspection documents are disseminated following each inspection. The licensee version, sent to the LTC home operator, contains all information related to the inspection (Ontario eLaws, 2021a, b). Personal and personal health information is redacted from the public version, to comply with privacy legislation and preserve resident anonymity (Ontario eLaws, 2021a, b). Ontario LTC legislation mandates public version inspection report posting on the Ontario Ministry of Health Ministry of Long Term Care website, distribution to each LTC home Resident and Family Councils, and posting in an accessible location in every LTC home (Ontario Ministry of Health Ministry of Long-Term Care, 2019; Ontario eLaws, 2021a, b). A copy of the public version of every inspection report is also sent to diverse stakeholders, including Concerned Friends.

Research Ethics Board Exemption We received a Letter of Exemption from the University of Windsor Research Ethics Board in keeping with the Canadian Tri-Council Policy Statement on Ethical Conduct of Research with Humans - TCPS2 2014 Section 2.2 guidelines for research conducted solely with publicly available documents (Canadian Institutes of Health Research, National Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council, 2014).

Study Design

Methodology: Participatory Action Research

Participatory action research is the overall methodology guiding this study (Kemmis & McTaggart, 2005). This methodology defines research as a social process in which all research team members collaborate as equal co-participants (Kemmis & McTaggart, 2005). In this study, all [blinded organization] research team members are equal co-participants, serving as an advisory committee that provided input and feedback on the study design, data collection, data analysis, and manuscript development. Engagement of all Concerned Friends members was facilitated by representation of their Board of Directors and each of the main organizational committees (Research, Review, and Communication) on the research advisory committee.

The focus of participatory action research is social problems or practices that are of interest to local communities, investigating “concrete, and particular practices of particular people in particular places” (Kemmis & McTaggart, 2005, p. 564). The organization members’ interest determined the selection of responsive behaviours as this reported study focus. The practice to be investigated was compliance with sections of the Ontario LTC home legislation related to responsive behaviours.

Participatory action research aims to determine ways to change practices having ineffective/unjust consequences for those affected by them (Kemmis & McTaggart, 2005). The recommendations resulting from the conduct of this study hold implications for improving accountability for LTC home compliance with legislation related to responsive behaviours, thereby leading to more effective responsive behaviour care management.

Method: Document Analysis

Data collection and analysis were guided by document analysis, a research method defined as a “systematic procedure to analyze documentary evidence and answer specific research questions” (Gross, 2018, p. 2/7). The following discussion explains how this method was applied to answer the research question “*What is the state of Ontario LTC home compliance with legislation concerning incidents of resident-to-resident aggression, or responsive behaviours?*”

Data Collection

Types of Data The method categorizes data sources as belonging to one of two types, either primary or secondary (Gross, 2018). Primary source data may be distinguished as “first hand accounts of an event or occurrence,” such as meeting minutes (Gross, 2018, pp. 2–3/7). Secondary source data are characterized by “analysis of primary sources and interpretation of the construct of interest...for the purpose of sharing the interpretation with a wider audience and ...often published in the public domain” (Gross, 2018, p. 3/7).

We submit that the public version of the LTC home inspection reports represents secondary source data. During inspections, each inspector analyzes primary sources of information (through interviews with residents, family and staff; review of patient care documentation; observation of care provision in each LTC home); interprets inspection findings using a computer assisted judgement matrix tool; and generates and disseminates a public version of the inspection reports to earlier described stakeholders (Office of the Auditor General of Ontario, 2015a; Ontario Ministry of Health Ministry of Long-Term Care, 2019; Ontario Ministry of Long-Term Care, 2020).

Use of formal reports as data is supported in literature on resident-to resident aggression/violence (Caspi, 2018; Castle, 2012; DeBois et al., 2020; Ferrah et al., 2015; Gil, 2019; McDonald et al., 2015; Murphy et al., 2017). Types of data reported in studies of resident-to-resident aggression resulting in death are: (a) publicly available media reports (Caspi, 2018); (b) coroner reports (Murphy et al., 2017); and (c) reports of violent deaths (DeBois et al., 2020). Further, LTC inspection reports have been analyzed to determine six measures of care quality in the United Kingdom (Worden & Challis, 2006), and investigate the extent to which the LTC home monitoring system in Portugal controls quality of care related to institutional violence (Gil, 2019).

Data Sources Data may be retrieved from diverse forms of repositories, such as libraries or archives (Gross, 2018). Examples of such repositories reported in studies of resident-to-resident aggression resulting in death are a national on-line coronial information system (Murphy et al., 2017); and an on-line National Violent Death Reporting System (DeBois et al., 2020). We located data for our study through the on-line repository of reports on Ontario LTC homes website (Ontario Ministry of Health Ministry of Long-Term Care, 2008).

Inclusion Criteria The type, age, and geographical representativeness of documents are key inclusion criteria noted in the document analysis literature (Gross, 2018, p. 4/7). In our study, three types of public version inspection reports for years 2016 through 2018 were reviewed. These included resident quality inspections, critical incident and complaint reports that were posted on-line for 535 of the 628 LTC homes in the province of Ontario (Ministry of Health and Long Term Care, 2018). Subsequently, we focused on the sub-sample of those reports that related to responsive behaviours (see “[Study Results](#)”).

Exclusion Criteria Exclusion criteria assist with shaping and reducing the number and types of documents included in the final document analysis sample (Gross, 2018). Excluded in our study were: (a) all reports from LTC homes that ceased operating between 2016 and 2018; (b) resident quality inspections that occurred in 2015 but were posted on-line in 2016; and (c) follow-up inspection reports.

Data Organization and Management Creating a systematic method of organizing and managing large numbers of documents is essential when conducting document analysis (Gross, 2018). First we familiarized ourselves with the standardized format of the three types of sampled inspection report documents. Subsequently we developed an Individual Home Data Collection and Analysis Tool (see Fig. 1) to ensure systematic and consistent data collection.

Data collection categories are referred to as ““demographics”” in document analysis (Gross, 2018, p. 4/7). Identifying and capturing vital ““demographics”” in a table is recommended to enable sorting sampled documents according to those categories; determine how documents are inter-related; and assess their representativeness within the document sample (Gross, 2018, p. 4/7). The categories presented on page one of our data collection tool represent LTC home characteristics featured on each on-line LTC home profile.² For example, we recorded each home name, service area, number of beds, accreditation status, geographical service area in the province of Ontario, and home type (for-profit or not-for-profit). These data collection categories enabled statistical description of provincial, within service area, and to a lesser extent, between service area results (see “[Study Results](#)”). Recording total numbers of completed inspections for each year of study provided a context for descriptive statistical comparison of completed inspection containing documentation related to responsive behaviours.

We created a shared file to record our decisions to adjust the data collection tool to better identify and account for ““demographics”” (Gross, 2018, p. 4/7), as our review progressed. Three revisions to the form were necessary, with any previously completed reviews redone using each revised form each time.

² The Ontario Ministry of Health Ministry of Long-Term Care public version Reports on Long-Term Care Homes are located at <http://publicreporting.ltchomes.net/en-ca/default.aspx>

Home Name: _____

Accreditation: Yes No **# Beds:** _____

Service Area

- Central East London Sudbury
- Central West Ottawa Toronto
- Hamilton

Type of home

- For-profit Not-for-profit Not specified
- Municipal
- Charitable
- Private
- Other _____

Completed Inspections (record numbers; if none enter “0”)

Inspection Report Type	2016	2017	2018
Resident Quality Inspection			
Complaint			
Critical Incident			
Total			

Completed Inspections with Documentation Related to Responsive Behaviours (record numbers; if none enter ‘0’)

Inspection Report Type	2016	2017	2018
Resident Quality Inspection			
Complaint			
Critical Incident			
Total			

Completed Inspections with Responsive Behaviours Displaced by other sections of the LTC legislation

Inspection Report Type	2016	2017	2018
Resident Quality Inspection			
Complaint			
Critical Incident			
Total			

Nature of Responsive Behaviours: Resident Quality Inspection Reports (Yes, No, ?, # where relevant)

Description	2016	2017	2018
Resident-resident			
Injuries to resident			
Verbal (V)			
Physical (P)			
Combination (V/P)			
Sexual			
Other			

Nature of Responsive Behaviours: Complaint Reports

Description	2016	2017	2018
Resident – resident			

Fig. 1 Individual Home Data Collection and Analysis Tool

Injuries to resident			
Verbal (V)			
Physical (P)			
Combination (V/P)			
Sexual			
Other			

Nature of Responsive Behaviours: Critical Incident Reports

Characteristics	2016	2017	2018
Resident – resident			
Injuries to resident			
Verbal (V)			
Physical (P)			
Combination (V/P)			
Sexual			
Other			

Actions with Documentation Related to Responsive Behaviours

Type of Action	2016	2017	2018
Written Notification			
Voluntary Plan of Correction			
Work and Activity Order			
Compliance Order			
Director Referral			
Total			

Comments About Actions to Resolve Non-Compliances

Penalties Associated with Actions with Documentation Related to Responsive Behaviours

Penalty	2016	2017	2018
Financial			
Cease of Admissions			
Mandatory Management Order			
Revocation of License Order			
Interim Manager Order			
Other			

Connection between Inspection Report Responsive Behaviour Documentation and LTC Legislation

Responsive Behaviour Legislation Connection	2016	2017	2018
Documentation of harmful resident-to-resident interactions in report (Yes, No)			
Resident-to-resident “altercation” documented in report (Yes, No)			
LTC Section # referenced in Action (specific #, None)			

Fig. 1 (continued)

Data Analysis

We partnered with a Data Librarian to build a database and manage the data. Data were collected from July 2018 to June 2019. Using Adobe Acrobat Pro software (Adobe, 2021), SJ and LdW collated all the completed Individual Home Data

Collection and Analysis Tool documents in an Excel file. RR completed the descriptive statistical analysis at three levels: (1) individual home, (2) each of seven geographical service areas, and (3) province wide. Descriptive statistics are used as an analysis tool when the aim is to explore and describe a phenomenon (Salkind, 2017) thereby aligning with the aim of this study to determine the state of Ontario LTC home compliance with legislation concerning incidents of resident-to-resident aggression, or responsive behaviours.

The initial Excel file housed all the raw data. Other subsequent analysis output Excel files contained summary tables of the data according to the earlier discussed individual home data collection tool categories. Multiple measures were calculated. In the following presentation of study results, we discuss those measures relevant to responsive behaviours, the focus of this article.

Study Results

We present these results as a means of answering the research question “*what is the state of compliance with legislation concerning incidents of resident-to-resident aggression, or responsive behaviours?*”, beginning with an examination of resident quality inspections. Results discussed are represented in bolded font in each of the corresponding tables.

Resident Quality Inspection Reports with Documentation Related to Responsive Behaviours

A total of 1339 resident quality inspection reports representing seven geographical service areas in Ontario during 2016, 2017, and 2018 were reviewed. Approximately 22.3% of those total reports contained documentation of incidents related to responsive behaviours (298/1339). To facilitate meaningful comparison between service areas with unequal numbers of LTC homes, we calculated the mean, or average number of resident quality inspections containing documentation of responsive behaviours during the three study years, for each service area, and the combined service areas (see Table 1). The combined service areas mean of such reports was 99.3. A difference in combined service areas mean was noted between for-profit and not-for-profit LTC homes. A higher combined service areas mean was evident in for-profit (61.3) compared to not-for-profit homes (37.7). Differences among service areas were also noted, ranging from a low of 3 (Ottawa) to a high of 30.7 (Hamilton) average number of resident quality inspection reports containing documentation of incidents related to responsive behaviours. Within service area analysis showed that the Hamilton service area mean over the three study years for for-profit homes (20.7) was slightly greater than double that for not-for-profit homes (10.0).

Table 1 Resident Quality Inspection Reports with Documentation Related to Responsive Behaviours^a

	2016	2017	2018	Total	<i>M</i>
Central East					
For profit	9 (53%)	8 (67%)	1 (50%)	18	6.0
Not for profit	8 (47%)	4 (33%)	1 (50%)	13	4.3
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	17 (100%)	12 (100%)	2 (100%)	31	10.3
Central West					
For profit	14 (61%)	23 (72%)	11 (79%)	48	16.0
Not for profit	9 (39%)	9 (28%)	3 (21%)	21	7.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	23 (100%)	32 (100%)	14 (100%)	69	23.0
Hamilton					
For profit	33 (61%)	21 (81%)	8 (67%)	62	20.7
Not for profit	21 (39%)	5 (19%)	4 (33%)	30	10.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	54 (100%)	26 (100%)	12 (100%)	92	30.7
London					
For profit	6 (67%)	4 (67%)	6 (75%)	16	5.3
Not for profit	3 (33%)	2 (33%)	2 (25%)	7	2.3
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0.0
Sub-total	9 (100%)	6 (100%)	8 (100%)	23	7.7
Ottawa					
For profit	1 (50%)	2 (40%)	0 (0%)	3	1.0
Not for profit	1 (50%)	3 (60%)	2 (100%)	6	2.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	2 (100%)	5 (100%)	2 (100%)	9	3.0
Sudbury					
For profit	6 (32%)	4 (40)	5 (63%)	15	5.0
Not for profit	12 (63%)	6 (60%)	3 (37%)	21	7.0
Not specified	1 (5%)	0 (0%)	0 (0%)	1	0.3
Sub-total	19 (100%)	10 (100%)	8 (100%)	37	12.3
Toronto					
For profit	12 (67%)	6 (50%)	4 (57%)	22	7.3
Not for profit	6 (33%)	6 (50%)	3 (43%)	15	5.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	18 (100%)	12 (100%)	7 (100%)	37	12.3
Combined Service Areas					
For profit	81 (57%)	68 (66%)	35 (66%)	184	61.3
Not for profit	60 (42%)	35 (34%)	18 (34%)	113	37.7
Not specified ^a	1 (0%)	0 (0%)	0 (0%)	1	0.3
Total	142 (99%)	103 (100%)	53 (100%)	298	99.3

^aHome type was not specified in one sampled LTC home profile

Critical Incident and Complaint Inspection Reports with Documentation Related to Responsive Behaviours

While collecting data, we discovered that sometimes critical incident and complaint inspections were merged with resident quality inspections. It was not possible for us to consistently distinguish the incidents related to those merged reports, thereby interfering with data extraction. In this study, critical incident and complaint inspection reports containing documentation of incidents related to responsive behaviours that were posted separately from resident quality inspections were analyzed. Table 2 presents an overview of the results concerning those reports.

A combined service areas total of 264 critical incident and complaint inspection reports containing documentation of incidents related to responsive behaviours from 2016 to 2018 were reviewed. A difference between for-profit and not-for-profit LTC homes was noted (see Table 2). Of the total incidents, the proportion among for-profit homes (67%, $n = 177/264$) was more than double that among not-for-profit homes (32.6%, $n = 86/264$).

To facilitate meaningful comparison among service areas with unequal numbers of LTC homes, we calculated the mean, or average number of critical incident and complaint inspection reports containing documentation of incidents related to responsive behaviours during the three study years, for each service area, and the combined service areas (see Table 2). The combined service areas mean of critical incident and complaint inspection reports that contained documentation of incidents related to responsive behaviours from 2016 to 2018 was 88. A difference in combined service areas mean was noted between for-profit and not-for-profit LTC homes. The combined service areas mean of such reports among for-profit homes (59) was more than double that of not-for-profit homes (28.7). Differences among service areas were also noted, with means of critical incident and complaint inspection reports that contained documentation of incidents related to responsive behaviours during the three study years ranging from a low of 5.3 (Central East), to a high of 21.3 (Sudbury).

Enforcement Actions with Documentation Related to Responsive Behaviours

Review of inspection reports revealed a combined service areas total of 1152 enforcement actions documented by inspectors from 2016 to 2018, related to responsive behaviours (see Table 3). Of those total actions, the highest percentages were written notices (789/1152; 68.4%) and voluntary plans of correction (268/1152; 23.3%). More serious actions, including compliance orders (87/1152; 7.6%) and director's orders (8/1152; 0.7%), represented much smaller percentages of the total actions respectively. No work and activity orders were requested over the three study years.

The highest proportions of actions with documentation related to responsive behaviours among both for-profit and not-for-profit homes respectively were written notices (488/717; 294/425) and voluntary plans of correction (159/717; 106/425),

Table 2 Complaint and Critical Incident Inspection Reports with Documentation Related to Responsive Behaviours, 2016 to 2018^a

	Inspections			Total	<i>M</i>
	2016	2017	2018		
Central East					
For profit	7 (77.8%)	1 (50%)	2 (40%)	10	3.3
Not for profit	2 (22.2%)	1 (50%)	3 (60%)	6	2.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	9 (100%)	2 (100%)	5 (100%)	16	5.3
Central West					
For profit	8 (88.9%)	17 (94.4%)	18 (62.9%)	43	14.3
Not for profit	1 (11.1%)	1 (5.6%)	8 (30.8%)	10	3.3
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	9 (100%)	18 (100%)	26 (100%)	53	17.7
Hamilton					
For profit	6 (85.7%)	7 (87.5%)	16 (94.1%)	29	9.7
Not for profit	1 (14.3%)	1 (12.5%)	1 (5.9%)	3	1.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0.0
Sub-total	7 (100%)	8 (100%)	17 (100%)	32	10.7
London					
For profit	8 (72.7%)	14 (82.4%)	1 (33.3%)	23	7.7
Not for profit	3 (27.3%)	3 (17.6%)	2 (66.7%)	8	2.7
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	11 (100%)	17 (100%)	3 (100%)	31	10.3
Ottawa					
For profit	4 (50%)	5 (55.6%)	0 (0%)	9	3.0
Not for profit	4 (50%)	4 (44.4%)	2 (100%)	10	3.3
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	8 (100%)	9 (100%)	2 (100%)	19	6.3
Sudbury					
For profit	11 (57.9%)	12 (62.3%)	15 (57.7%)	38	12.7
Not for profit	7 (36.8%)	7 (36.8%)	11 (42.3%)	25	8.3
Not specified	1 (5.3)	0 (0%)	0 (0%)	1	0.3
Sub-total	19 (100%)	19 (100%)	26 (100%)	64	21.3
Toronto					
For profit	10 (66.7%)	13 (43.3%)	2 (50%)	25	8.3
Not for profit	5 (33.3%)	17 (56.7%)	2 (50%)	24	8.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	15 (100%)	30 (100%)	4 (100%)	49	16.3
Combined Service Areas					
For profit	54 (69.2%)	69 (67%)	54 (65.1%)	177	59.0
Not for profit	23 (29.5%)	34 (33%)	29 (34.9%)	86	28.7
Not specified ^a	1 (1.3%)	0 (0%)	0 (0%)	1	0.3
Total	78 (100%)	103 (100%)	83 (100%)	264	88.0

^aHome type was not specified in one sampled LTC home profile

Table 3 Enforcement Actions with Documentation Related to Responsive Behaviours^{a,b}

	Written Notices				Voluntary Plan of Correction				Compliance Order				Director's Order			
	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	
Central West																
For profit	18 (75%)	51 (86.4%)	35 (76.1%)	4 (57.1%)	16 (80%)	9 (69.2%)	4 (100%)	9 (100%)	8 (80%)	0 (0%)	1 (100%)	1 (100%)	0 (0%)	1 (100%)	1 (100%)	
Not for profit	6 (25%)	8 (13.6%)	11 (23.9%)	3 (42.9%)	4 (20%)	4 (30.8%)	0 (0%)	0 (0%)	2 (20%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
Not specified	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
Sub-total	24 (100%)	59 (100%)	46 (100%)	7 (100%)	20 (100%)	13 (100%)	4 (100%)	9 (100%)	10 (100%)	0 (0%)	1 (100%)	1 (100%)	0 (0%)	1 (100%)	1 (100%)	
Stubbury																
For profit	69 (51.5%)	43 (50.6%)	52 (59.1%)	23 (52.3%)	13 (43.3%)	13 (56.5%)	11 (55%)	7 (77.8%)	8 (61.5%)	2 (100%)	0 (0%)	2 (66.7%)	2 (100%)	0 (0%)	2 (66.7%)	
Not for profit	60 (44.8%)	42 (49.4%)	34 (38.6%)	19 (43.2%)	17 (56.7%)	9 (39.1%)	9 (45%)	2 (22.2%)	5 (38.5%)	0 (0%)	1 (100%)	1 (33.3%)	0 (0%)	1 (100%)	1 (33.3%)	
Not specified	5 (3.7%)	0 (0%)	2 (2.3%)	2 (4.5%)	0 (0%)	1 (4.3%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
Sub-total	134 (100%)	85 (100%)	88 (100%)	44 (100%)	30 (100%)	23 (100%)	20 (100%)	9 (100%)	13 (100%)	2 (100%)	1 (100%)	3 (100%)	2 (100%)	1 (100%)	3 (100%)	
Combined Service Areas																
For profit	200 (60.4%)	170 (63.2%)	118 (62.4%)	73 (61.9%)	52 (55.9%)	34 (59.6%)	20 (66.7%)	26 (86.7%)	18 (66.7%)	2 (100%)	2 (100%)	3 (75%)	2 (100%)	1 (50%)	3 (75%)	
Not for profit	126 (38.1%)	99 (36.8%)	69 (36.5%)	43 (36.4%)	41 (44.1%)	22 (38.6%)	10 (33.3%)	4 (13.3%)	9 (33.3%)	0 (0%)	0 (0%)	1 (25%)	0 (0%)	1 (50%)	1 (25%)	
Not specified ^b	5 (1.5%)	0 (0%)	2 (1.1%)	2 (1.7%)	0 (0%)	1 (1.8%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
Total	331 (100%)	269 (100%)	189 (100%)	118 (100%)	93 (100%)	57 (100%)	30 (100%)	30 (100%)	27 (100%)	2 (100%)	2 (100%)	4 (100%)	2 (100%)	2 (100%)	4 (100%)	

^aNo work and activity orders were issued^bHome type was not specified in one sampled LTC home profile

with much smaller proportions of compliance orders (64/717; 23/425) and director's orders (6/717; 2/425) respectively.

Differences were noted between combined service areas for-profit and not-for-profit homes. A greater proportion of the combined service areas total actions with documentation related to responsive behaviours was evident in for-profit home inspection reports (62.2%, $n = 717/1152$) compared to those of not-for-profit homes (36.9%, $n = 425/1152$). Six of the eight director's orders related to responsive behaviours occurred in for-profit LTC homes.

Between service area analysis demonstrated the highest proportion of total actions with documentation related to responsive behaviours in Sudbury (39.2% $n = 452/1152$). The Sudbury service area also demonstrated the highest proportion of the total of each type of action: written notices (38.9% $n = 307/789$), voluntary plans of correction (36.2% $n = 97/268$), compliance orders (48.3% $n = 42/87$) and director's orders (75% $n = 6/8$). Further, with the exception of a 2017 director's order total tie with Central West, ($n = 1$ each), the Sudbury service area consistently tallied the highest number of required actions with documentation related to responsive behaviours in each study year.

Within service area analysis further disclosed a higher proportion of total actions with documentation related to responsive behaviours among for profit (53.8%, $n = 243/452$) than not-for-profit homes (44%, $n = 199/452$) in the Sudbury service area. From 2016 to 2018, four of the six director's orders with documentation related to responsive behaviours were issued to for-profit homes in the Sudbury service area.

Enforcement Penalties with Documentation Related to Responsive Behaviours

From 2016 to 2018, the analysis revealed a total of four penalties related to responsive behaviours, all issued to for-profit homes in the Sudbury service area (see Table 4). The penalties consisted of three cease of admissions and one mandatory

Table 4 Enforcement Penalties with Documentation Related to Responsive Behaviours^a

	Cease of Admissions			Mandatory Management Order		
	2016	2017	2018	2016	2017	2018
Sudbury						
For profit	0	1	2	0	1	0
Not for profit	0	0	0	0	0	0
Not specified	0	0	0	0	0	0
Sub-total	0	1	2	0	1	0
Combined Service Areas						
For profit	0	1	2	0	1	0
Not for profit	0	0	0	0	0	0
Not specified	0	0	0	0	0	0
Total	0	1	2	0	1	0

^aHome type was not specified in one sampled LTC home profile

management orders that were linked to non-compliances with legislation related to responsive behaviours. No financial, revocation of license, or interim management order penalties resulting from non-compliances related to responsive behaviours were issued in any of the service areas during the three study years.

Displacement of Responsive Behaviour Legislation Citation

During our analysis, we discovered documentation of incidents that obviously stated language and descriptions of incidents that fit with the LTC home regulation Sections 53, 54, and 55, specific to responsive behaviours (Ontario eLaws, 2021a, b). Yet when that documentation was subsequently repeated within the report as rationale supporting enforcement of the regulation through actions and/or penalties, other sections of the legislation displaced Sections 53, 54, and/or 55 (Ontario eLaws, 2021a, b). These results are presented first with an exemplar from a report, so that readers may grasp what is meant, followed by a brief statistical summary.

Exemplar The following example of documentation related to an incident of responsive behaviours resulted in a director’s order. Section 19 (1) Duty to protect from abuse (Ontario eLaws, 2021a, b) frames the director referral text. Although an altercation resulting in harm to a resident is obviously described, reference to Section 54 (prevention of altercations and other interactions), and Section 55 (minimizing risk of harm) of the LTC Home Act is missing (Ontario eLaws, 2021a, b). Rationale for the added emphasis with bolded text will be discussed shortly (see “Discussion”).

*“WN [Written Notice] #1 The Licensee has failed to comply with LTCHA, 2007,s.19. **Duty to protect** [emphasis added]*

Specifically failed to comply with the following:

*s.19.(1) Every licensee of a Long-term care home shall **protect residents from abuse by anyone** [emphasis added] and shall ensure that residents are not neglected by the licensee or staff. 2007, c.8, s.19 (1)*

*“The licensee of the Long-term care home failed to protect resident #(blinded) from abuse by residen t#(blinded)...both residents were **walking in the lounge area when the altercation occurred.** [emphasis added] Resident #(blinded) grabbed resident #(blinded) then proceeded to **forcefully push** [emphasis added] resident #(blinded), causing them to **fall to the floor.**”*

*“The home failed to protect resident #(blinded) from resident # (blinded) **responsive behaviours** [emphasis added] and as a result they **sustained an injury and significant change to their health status** [emphasis added]....the decision to issue this compliance order was based on the previous history of non-compliance with an issued compliance order, as well as the severity, which was actual harm to residents.”³*

³ The complete report is located at <http://publicreporting.ltchomes.net/en-ca/File.aspx?RecID=14668&FacilityID=20176>

Statistical Summary A total of 1041 inspection reports representing seven geographical service areas in Ontario during 2016, 2017, and 2018 contained documentation related to responsive behaviours that was displaced by other sections of the Ontario LTC Home legislation (Ontario eLaws, 2021a, b). Of this total, a higher proportion was evident among for-profit homes (58.2%, $n = 606/1041$) compared to not-for-profit homes [41.7%, $n = 434/1041$] (see Table 5).

To facilitate meaningful comparison between service areas with unequal numbers of LTC homes, we calculated the mean, or average number of inspection reports wherein documentation related to responsive behaviours was displaced during the three study years, for each service area, and the combined service areas (see Table 5). The combined service areas mean of such reports was 347. A difference in combined service areas mean was noted between for-profit and not-for-profit LTC homes, with a higher combined service areas mean evident in for-profit (202) compared to not-for-profit homes (144.6). Differences among the service area means were also noted, ranging from a low of 31 (Hamilton) to a high of 75 (Sudbury). Within service area mean analysis indicated that the London service area demonstrated the greatest difference between for-profit homes mean (40.3) compared to not-for-profit homes mean (6.7) during the three study years.

Discussion

Our study results contribute to the sparse body of research investigating residential long-term care regulation and resident care. Earlier work in the United Kingdom analyzed six domains reflecting care processes within announced local authority and health inspection reports, from 2001 to 2002, to develop six measures of quality of care (Worden & Challis, 2006). The “best” measure was “the number of negative comments recorded about a home” (Worden & Challis, 2006 p. 40). Indicators that were predictive of fewer negative comments about a home, or higher quality were: (1) “belonging to a ‘group or chain’”; (2) “higher staffing levels”; (3) “less than 40 beds in size”; (4) “greater coverage of domains on assessment documents”; and (5) “use of assessment information for other purposes” (Worden & Challis, 2006, p. 40).

More recent mixed method research examined 3685 complaints of institutional violence involving older adults living in residential care, that were automatically registered in a national database and responded to by national social security inspection services in Portugal (Gil, 2019). That study focus was further explained as elder mistreatment, abuse, and neglect (Gil, 2019). Severe care deficiencies were most frequently associated with non-licensed nursing homes that have proliferated because not-for-profit homes lack enough beds, and for-profit homes are too expensive for many families in Portugal (Gil, 2019).

Through analysis of resident quality, complaint, and critical incident inspection reports, our study results contribute to this body of knowledge through describing the state of compliance with Ontario, Canada LTC legislation concerning incidents of resident-to-resident aggression, or responsive behaviours, from 2016 to 2018 (Alzheimer Society of Ontario, Alzheimer Knowledge Exchange,

Table 5 Inspection Reports with Responsive Behaviour Legislation Citation Displaced^a

	Inspections			Total	<i>M</i>
	2016	2017	2018		
Central East					
For profit	36 (50%)	51(75%)	18 (64.3%)	105	35.0
Not for profit	36 (50%)	17 (25%)	10 (35.7%)	63	21.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	72 (100%)	68 (100%)	28 (100%)	168	56.0
Central West					
For profit	25 (61%)	44 (56.4%)	23 (79.3%)	92	30.6
Not for profit	16 (39%)	34 (43.6%)	6 (20.7%)	56	18.6
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	41 (100%)	78 (100%)	29 (100%)	148	49.3
Hamilton					
For profit	25 (56.8%)	14 (42.4%)	9 (56.3%)	48	16.0
Not for profit	19 (43.2%)	19 (57.6%)	7 (43.8%)	45	15.0
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	44 (100%)	33 (100%)	16 (100%)	93	31.0
London					
For profit	38 (80.9%)	28 (80%)	55 (93.2%)	121	40.3
Not for profit	9 (19.1%)	7 (20%)	4 (6.8%)	20	6.7
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	47 (100%)	35 (100%)	59 (100%)	141	47.0
Ottawa					
For profit	35 (67.3%)	31 (59.6%)	6 (26.1%)	72	24.0
Not for profit	17 (32.7%)	21 (40.4%)	17 (73.9%)	55	18.3
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	52 (100%)	52 (100%)	23 (100%)	127	42.3
Sudbury					
For profit	77 (72.6%)	11 (16.4%)	21 (40.4%)	109	36.3
Not for profit	29 (27.4%)	56 (83.6%)	30 (57.7%)	115	38.3
Not specified	0 (0%)	0 (0%)	1(1.9%)	1	0.3
Sub-total	106 (100%)	67 (100%)	52 (100%)	225	75.0
Toronto					
For profit	29 (37.2%)	11 (40.7%)	19 (55.9%)	59	19.6
Not for profit	49 (62.8%)	16 (59.3%)	15 (44.1%)	80	26.6
Not specified	0 (0%)	0 (0%)	0 (0%)	0	0
Sub-total	78 (100%)	27 (100%)	34 (100%)	139	46.3
Combined Service Areas					
For profit	265 (60.2%)	190 (52.8%)	151 (62.7%)	606	202.0
Not for profit	175 (39.8%)	170 (47.2%)	89 (36.9%)	434	144.6
Not specified	0 (0%)	0 (0%)	1 (0.4%)	1	0.3
Total	440 (100%)	360 (100%)	241	1041	347.0

^aHome type was not specified in one sampled LTC home profile

and Behavioural Supports Ontario, 2013; Government of Ontario, 2011; Ontario eLaws, 2021a, b).

One main ‘demographic’ (Gross, 2018, p. 4/7) shaping our study results is comparison of for-profit with not-for-profit home type. In summary, combined service areas differences between for-profit and not-for-profit home documentation related to responsive behaviours were evident in (a) the resident quality inspection means (61.3 vs 37.7); (b) total complaint and critical incident proportions (67%, $n = 177/264$ vs 32.6%, $n = 86/264$) and means (59 vs 28.7); (c) total actions proportions (62.2%, $n = 717/1152$ vs 36.9%, $n = 425/1152$); (d) penalties (100%, $n = 4$ vs 0); and (e) displacement of responsive behaviour legislation citation proportions (58.2%, $n = 606/1041$ vs 41.7%, $n = 434/1041$) and means (202 vs 144.6). Further, within service area differences between for-profit and not-for-profit home documentation related to responsive behaviours revealed (a) the Hamilton service area resident quality inspection for-profit homes mean (20.7) was double that for not-for-profit homes (10.0); and (b) the London service area demonstrated the greatest difference in displacement of responsive behaviour legislation citation mean between for-profit (40.3) compared to not-for-profit homes (6.7) during the three study years.

The quality of care delivered in for-profit LTC homes is a highly contentious issue internationally (Armstrong et al., 2016; Comondore et al., 2009). The “best” quality indicator derived using data from local authority and health services inspection reports was “total number of negative comments about a LTC home,” with fewer negative comments indicating higher quality care (Worden & Challis, 2006, p. 40). A systematic review and meta-analysis of quality of care in for-profit compared to not-for-profit nursing homes in the United States and Canada identified four key measures of care quality, one of which was “deficiencies in governmental regulatory assessments” (Comondore et al., 2009, p. 1/15). Although that measure was not statistically significant, fewer such deficiencies were associated with not-for-profit nursing homes (Comondore et al., 2009, p. 1/15). Armstrong and colleagues (2016) propose and justify that higher proportions of verified complaints about care delivered in Canadian for-profit, compared to not-for-profit LTC homes threaten the quality of care and security of residents. Lastly, the majority of non-compliances with standards of long-term residential care concerning elder mistreatment, abuse, and neglect in Portugal were evident in for-profit nursing homes (Gil, 2019).

The research on quality of residential LTC in for-profit nursing homes supports the importance of our results for raising questions about the quality of responsive behaviour care management in for-profit LTC homes during the study years. In contrast, our results also showed that the highest within service area mean of critical incident and complaint inspection reports that contained documentation of incidents related to responsive behaviours during the three study years occurred in Sudbury (see Table 2), a service area with a higher proportion of not-for-profit compared to for-profit homes. One explanation for this is a provincial backlog of 2800 critical incident and complaint inspections reported by the Office of the Auditor General of Ontario (2015b) that may have contributed to relative underreporting in other service areas.

A second main ‘demographic’ (Gross, 2018, p. 4/7) shaping our study results is geographical service area. Several study results highlight the Sudbury service area.

In summary, concerning inspection reports containing documentation related to responsive behaviours, these include: (a) the highest within service area mean of critical incident and complaint inspection reports; (b) the highest proportion of the total of each type of action for two of the study years; and (c) although small in number ($n = 4$), all penalties issued among all service areas from 2016 to 2018.

Other research in the field of resident-to resident aggression/violence used the geographical criterion of urban/rural home location (Botngård et al., 2020; Murphy et al., 2017) to report results. For instance, a survey of nursing staff employed in 100 Norwegian nursing homes discovered that slightly higher proportions of recollected incidents involving verbal, physical, material, and sexual aggression occurred in homes situated in suburban/urban, rather than rural locations (Botngård et al., 2020). Similarly, a study of LTC home resident deaths reported in an Australian national coronial information system from 2000 to 2013 found that incidents of resident-to-resident aggression resulting in death most commonly occurred in metropolitan areas (Murphy et al., 2017).

Our discovery of the aforementioned differences noted in the Sudbury service area informs a knowledge gap and call for further research concerning the association between nursing home location and resident-to-resident aggression (Botngård et al., 2020, p. 8/10). For the Sudbury service area is geographically located in sparsely populated northern Ontario, encompassing nine districts (NorthEasthealthline.ca, 2021). This may potentially contribute to staffing shortages, a persistent and well documented LTC quality issue (Armstrong et al., 2016; Banerjee & Armstrong, 2015; Caspi, 2018; Comondore et al., 2009; Harrington et al., 2014). Moreover, fewer resources may be available to support LTC home staff with responsive behaviour care management in these remote northern Ontario locations.

Our study results regarding enforcement actions and penalties support explanations offered by scholars in the field of LTC regulation. The highest proportion of total actions with documentation concerning responsive behaviours were written notices and voluntary plans of correction, both requiring no follow-up by inspectors (Office of the Auditor General of Ontario, 2015a). Very few compliance orders or director's orders related to responsive behaviours were issued. The scant number of penalties with documentation concerning responsive behaviours, a remarkable four in three years, consisted of cease of admission and mandatory management orders. No financial penalties or nursing home closures directives were issued. Weiner (2014, p. xxiii) offers the following explanation: "The inability to separate nursing homes from their residents is a major constraint on the willingness of regulators to impose tough sanctions on poor-quality facilities." Also, financial penalties and LTC home closure negatively affect the residents, through relocation disruption and diversion of funds away from care provision (Harrington et al., 2014; Weiner, 2014).

Our discovery of the displacement of documentation of incidents that obviously state language and descriptions that fit with the LTC home regulation specific to responsive behaviours (Sections 53, 54, and 55) with other regulation sections, such as Section 19 Duty to Protect (Ontario eLaws, 2021a, b), holds implications for prevention and care management of responsive behaviours. It is not our intent to dispute the importance of protecting residents from abuse. Rather, we suggest that issuing

concurrent separate actions specifically related to responsive behaviours is critical because not doing so may paradoxically place residents at greater risk of harm.

Recalling the exemplar presented earlier, the bolded language emphasized an altercation that occurred in a lounge area that involved forceful pushing, injury, and significant change to health status of the injured older adult. These emphasized words are significant in light of other research findings in the field of resident-to-resident aggression. For pushing is the most common type of resident-to-resident aggression resulting in death reported in a (a) national retrospective cohort study on the frequency and nature of deaths from resident-to-resident aggression in Australia [14/28 incidents, 50%] (Murphy et al., 2017, p. 2606); (b) multi-state analysis of data sourced from the National Violent Death Reporting System in the United States [64/101 cases, 63.4%] (DeBois et al., 2020, p. 1072); and (c) review of media reports of resident-to-resident incidents in dementia in North America [44/99 incidents, 44%, p. 291] (Caspi, 2018). Resident-to-resident aggression most commonly occurred in communal living areas such as lounges (DeBois et al., 2020; Ferrah et al., 2015; Murphy et al., 2017). Lastly, circumstances of resident-to-resident aggression resulting in death are associated with a diagnosis of dementia (Caspi, 2018; DeBois et al., 2020; Murphy et al., 2017). The number of cases of resident-to-resident aggression in circumstances where both exhibitor and recipient were diagnosed with dementia (52/101, 51.5%) was 13 times higher than the number in circumstances with only an exhibitor living with that diagnosis (4/101, 4%) (DeBois et al., 2020). This is disquieting in light of the earlier discussed proportion of older adults with dementia living in Ontario LTC homes.

Study Limitations

Several limitations to this study are evident. Our sample represented three types of inspection reports from 535 Ontario LTC homes, approximately 85% of the total LTC homes for each of the three study years. Unequal numbers of homes in each service area interfered with inferential statistical comparison of the results across the service areas. The backlog of critical incident and complaint inspections (Office of the Auditor General of Ontario, 2015b) and a temporary discontinuation of resident quality inspections in 2018 may have reduced the quality and breadth of sampled documentation. Redaction and language used in the public version inspection reports interfered with discerning and accurately reporting gender and the nature of responsive behaviours. Variation in documentation of incidents among the service areas created challenges for distinguishing some incident circumstances that were reported in other research, such as location of incident, whether or not staff were present, and whether or not responsive behaviour plans of care were in place (Caspi, 2018; DeBois et al., 2020; Ferrah et al., 2015; Murphy et al., 2017).

Conclusions

The study results and limitations provide direction for additional inquiry. For example, research on the association of other LTC home characteristics associated with geographical contexts and health care system resources may lead to identifying additional reasons for differences between for-profit and not-for profit nursing homes noted in the current study results. Behavioural Supports Ontario assists Ontario LTC homes with responsive behaviour care management through three types of service models (Grouchy et al., 2017). Further research on modifications to the service models that accommodate specific service area characteristics may foster LTC home compliance with responsive behaviour legislation. Research is also needed to fill a gap in the literature on the views and experiences of long-term care home inspectors, as well as human resource issues associated with the earlier discussed backlog of complaint and critical incident inspections.

The language embedded in the Ontario LTC Homes Act sections builds a bridge between (non)compliance with LTC legislation and direction for improving responsive behaviour prevention and care management. We recommend clear reference in inspection reports to Sections 53, 54 and 55 (Ontario eLaws, 2021a, b), aligned with corresponding actions and/or penalties that entail greater accountability for responsive behaviour care requirements, prevention of altercations, and minimizing risk of harm. Review and revision of the judgement matrix tool used to generate the inspection reports (Ministry of Health and Long Term Care, 2010; Ontario Ministry of Long-Term Care, 2020) may assist with this recommendation. Revision and standardization of documentation of incidents related to responsive behaviours across service areas is also suggested. We submit that attending to these recommendations and suggestions will contribute to protecting residents from harm and improving the quality of their care, through more effective connection of long-term care regulation to responsive behaviour care management.

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Availability of Data and Material The complete data file is available on request.

Code Availability Not applicable.

Declarations

Ethics Approval Not applicable. A Letter of Exemption was received from the University of Windsor Research Ethics Board because publicly available reports were analyzed.

Conflicts of Interest The authors declare they have no conflicts of interest.

Informed Consent Informed consent did not apply to this study. Publicly posted redacted documents were sampled and analyzed primarily in statistical aggregate form. The single exemplar is quoted from a redacted publicly posted document that uses numbers to distinguish two people and describes observed actions.

Ethical Treatment of Experimental Subjects (Animal and Human) The study sample consisted of publicly posted documents. No animal or human subjects took part in the study.

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