# Characteristics of Administrators and Quality of Care in Ontario Care Facilities

by

Sean Keays

B.A. Sociology, McMaster University, 2001
B.A. Gerontology, McMaster University, 2002

PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

In the
Department of Gerontology



SIMON FRASER UNIVERSITY

Summer 2007

# APPROVAL

| | |
|---|---|
| **Name:** | **Sean Keays** |
| **Degree:** | **Master of Arts (Gerontology)** |
| **Title of Thesis:** | **Characteristics of Administrators and Quality of Care in Ontario Care Facilities** |

**Examining Committee:**

**Chair:** Dr. Habib Chaudhury, Assistant Professor
Gerontology Department, SFU

---

**Dr. Andrew V. Wister**
Senior Supervisor
Professor & Chair, Gerontology Department, SFU

---

**Dr. Gloria Gutman**
Supervisor
Professor, Gerontology Department, SFU

---

**Dr. Kelli Stajduhar**
External Examiner
Assistant Professor, School of Nursing and Centre on Aging, University of Victoria

**Date Defended/:** April 18, 2007

# STATEMENT OF ETHICS APPROVAL

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

(a) Human research ethics approval from the Simon Fraser University Office of Research Ethics,

or

(b) Advance approval of the animal care protocol from the University Animal Care Committee of Simon Fraser University;

or has conducted the research

(c) as a co-investigator, in a research project approved in advance,

or

(d) as a member of a course approved in advance for minimal risk human research, by the Office of Research Ethics.

A copy of the approval letter has been filed at the Theses Office of the University Library at the time of submission of this thesis or project.

The original application for approval and letter of approval are filed with the relevant offices. Inquiries may be directed to those authorities.

# Abstract

This exploratory study investigated administrator and facility predictors of quality of care (QOC) in care facilities (CF). Surveys were mailed to all 602 CF administrators in Ontario; half of whom responded. Quality was measured using the last certification inspection report obtained from the Ontario Ministry of Health and Long-Term Care public report on certified CF. Quality predictors were found using multiple regression analysis. Education and experience as an administrator in current position had a moderate positive influence on quality; however, a negative influence was found between salary and effort devoted to resident care. In addition, smaller facilities, facilities in less populated communities and administrators with a nursing background significantly affected quality in a positive manner. Recommendations for improving QOC in CF include increasing efforts to retain effective administrators, enhancing educational and training programs for administrators, building smaller CF with fewer beds, and renovating large facilities into multiple smaller facilities.

Keywords: Long Term Care Facility, Administrator, Quality of Care, Quantitative Research

# Dedication

I would like to dedicate this study to all the mentors that have been inspirational in guiding me closer towards my ambitions as I am forever grateful. Especially Dr. Andrew Wister and Dr. Carolyn Rosenthal whom I am forever grateful that you both believed in me and that you both gave me a chance to succeed as a scholar in my study of passion.

# Acknowledgements

This study is the result of contributions by many people whose help I am forever grateful and blessed to have on my side. I extend my sincere gratitude and appreciation to my supervisor Dr. Andrew Wister for his guidance, enthusiasm, encouragement and mentorship throughout this process and to Dr. Gloria Gutman for her direction and insight. As well, thank you to my family Brian, Suzanne, Mélise and Daniel for their unwavering support and for always believing in me. This would not have been possible without them. I would also like to thank Mr. Doug Rapelje for his support and insight.

# Table of Contents

# List of Figures



# List of Tables

# Chapter 1
# Introduction

Similar to other sectors of the health care system, long-term care (LTC) facilities have entered an extended period of change (Gordon, Grant and Stryker, 2003). Second in size only to hospitals, LTC is a multi-billion dollar industry in Canada with potential growth due to an increased rate of population aging. Currently, in Canada, people aged 65 years and older comprise approximately 13% of the total population and demographers project that by 2031 seniors will represent 20% of the entire population (Statistics Canada, 2005). The average age of those residing in LTC facilities is increasing alongside with a decrease in their physical and psychological health (Statistics Canada, 2005).

Paid staff in LTC facilities have an important influence on quality of care (Castle, 2001). Researchers have extensively examined the effect of nursing staff and care aids on the quality of resident care in LTC facilities as well as different models of care (Castle, 2001). However, little research has investigated the extent to which characteristics of LTC facility administrators make a difference in terms of residential care outcomes. This is surprising given that a large body of management research has determined that the characteristics of top mangers affect the success or failure of their firms (Lohrke, Bedeian and Palmer, 2004, and Weiner and Mahoney, 1981). For example, unsuccessful firms have been shown to be headed by weak chief executive officers (CEO) (Lohrke, Bedeian, and Palmer 2004, and Miller and Friesen, 1977). On the other hand,

strong CEOs have been shown to turn around failing organizations (Lohrke, Bedeian and Palmer 2004, and Whitney, 1987).

It is well known that administrators of LTC facilities have one of the most demanding positions in the health care field, and that it is likely that the quality of life of residents depends on their leadership skills and other characteristics (Allen, 2003). This exploratory study attempted to determine if characteristics of LTC facility administrators affect quality of care in LTC facilities, using a standardized measure of unmet standards/criteria collected by the Ministry of Health and LTC in Ontario. Specifically, the study examined preparatory skills (level of education attained, type of training, field of study, previous experience as an administrator of a LTC facility, years in current position and salary), performance related variables associated with LTC facility administrators (resident care, personnel management, financial management, marketing/public relations, physical resource management, governance, family relations, fundraising and other) and facility constraints or resource factors (ownership, size of the facility, facility age, affiliation and size of the community). The findings from this study will be valuable to researchers, practitioners, educators, policy makers and administrators of LTC facilities. For the purpose of this study, the administrator of a LTC facility was defined as the person identified in the Ministry of Health and Long Term Care as the administrator of their respected facility (see appendix 1).

## Defining Quality of Care

Quality of care is a difficult variable to measure. Until his death in 2000, Avedis Donabedian was at the forefront in defining quality in health care. Donabedian (1980; 1988) defined the components of quality in health care as comprising, on the one hand, the science and technology of health care, and on the other hand, the application of these same components. Quality of care attributes relate to efficacy, while their application has to do with effectiveness, efficiency, acceptability, legitimacy and equity (Duff, 1992).

There are many current indicators of quality of care. Traditional measures of quality have been linked to mortality and morbidity rates, rates of discharge from LTC facilities to less restrictive settings, and rates of readmission to acute hospitals. For residents who are typically prone to increased risk of morbidity and mortality, such measures may not be a true reflection of the type of care they receive in a LTC facility. For example, numerical counts reflecting the prevalence of certain medical conditions in a LTC facility, such as the number of residents with decubitus ulcers or urinary catheters, are subject to misinterpretation. Residents may have acquired these conditions prior to their admission to the facility. Input measures, such as the ratio of nursing staff to residents, have also been used as proxies for quality (Kane and Kane, 1988). However, most input measures only take into account the structural criteria in quality determination and they largely ignore the process and outcome criteria developed by Donabedian (Singh, 1997), which are discussed later in this chapter. Resident and family satisfaction are also key elements in determining the quality of care

provided (Bliesmer and Earle, 1993). However, satisfaction surveys based on residents' opinions alone have serious limitations with regard to accuracy of responses (Coll, 1993).

For the purpose of this study, poorer quality of care in LTC facilities was operationalized using the number of unmet standards/criteria reported in the Ontario MOH and LTC quality assurance measure. Unmet standards/criteria found during the compliancy advisors' inspections provide a reasonable measure of quality since they are based on standards, which have been uniformly defined and interpreted to minimize ambiguity (MOH and LTC, 2006). Further, trained multidisciplinary teams of surveyors are employed in the survey process to reduce subjectivity. The unmet standards/criteria assesses the facility's ability to meet Ontario MOH and LTC prescribed requirements.

## Historical Development of Care Facilities

The LTC facility industry has evolved and grown in response to the LTC needs of the elderly. LTC facilities are not a new phenomenon. They date as far back as Saint Helena (250-330 AD), who established and administered one of the first homes for the elderly, named 'gerokomion' (Gordon, Grant, and Stryker, 2003). From the 12$^{th}$ to the 15$^{th}$ centuries, nearly 700 shelters for the elderly, the destitute and pilgrims were built in England (Dainton, 1961). Before the mid 16$^{th}$ century, all of these facilities were associated with monasteries, but were administered by men appointed by the king and the local bishop (Freymann, 1980).

In 1834, the new Poor Law was established in Canada (Emodi, 1977). Public assistance became a privilege and the recipients of aid were prohibited from receiving as much as the lowest-paid workers within society. In 1917, the American College of Surgeons, of which Canada was an active member, developed the first minimum standards for hospitals (Shore, 1994). These breakthroughs led to the first on-site inspections of hospitals in Canada and the United States, where only 89 of 692 hospitals met the Minimum Standards requirements (Shore, 1994). In 1947, the "Homes for the Aged Act" was passed in Canada and following it, as the number of aged continued to increase, many homes for the aged were established (Shore, 1994). Canada began accreditation of LTC facilities in 1978 (Canadian Council on Health Facilities Accreditation, 1992). During this period, nursing homes and hospitals became technologically more sophisticated, education of health professionals became more complex and new health professions emerged.

The Canadian Council on Health Facilities Accreditation is a national organization that sets standards by which LTC homes are measured on a voluntary basis to evaluate their services and improve quality (Ontario Ministry of Health and Long-Term Care, 2006). Accreditation is a process that organizations use to evaluate their services and to improve the quality of their services. LTC homes apply for accreditation to the Canadian Council on Health Services Accreditation (CCHSA) based on a two-part process consisting of a self-assessment and a peer-assessment. Homes that meet the CCHSA standards

are granted a 3-year CCHSA Accreditation status (Ontario Ministry of Health and Long-Term Care, 2006).

## Aging Demographics and Long-Term Care

The proportion of the Canadian population age 65 and over is rapidly growing which will result in a heightened demand on the Canadian LTC system. This demand is expected to increase dramatically between the years 2011 and 2031, when baby boomers (those born between 1946 and 1964) enter their senior years (Wister, 2005). Presently, there are approximately 4 million persons 65 years or older residing in Canada which accounts for roughly 13 percent of the total population (Statistics Canada, 2005). It has been projected that by the year 2050 this figure will rise to 7 million or 20 percent of the total population (Statistics Canada, 2005).

Population aging has caused an increase in the demand for LTC services particularly in the 85+ group (Blumenthal and Their, 2003). The number of persons aged 85 and older, the fastest growing segment of the Canadian population, will nearly double in the next 20 years (Statistics Canada, 2005). It is in these later years of life that chronic health conditions become more prominent and dependency of older adults and need for care becomes much more common. While less than 1% of the population between the ages of 65 and 74 years are in residential care facilities, this percentage climbs to 20% for persons aged 85 years and older (Statistics Canada, 2005).

The increase in persons with dementia will also likely increase demand for LTC facilities. Currently, in Canada, it is estimated that there are 420,000

persons diagnosed with dementia, of whom 50 percent live in LTC facilities. It is projected that 750,000 will be diagnosed by 2031 (Alzheimer's Society of Canada, 2005).

## Recent Developments in Long-Term Care

Along with strategies to make the health care system more efficient, Canada has seen a pronounced decline in acute care overnight hospital stays (Evans, McGrail, Morgan, Barer and Herztman, 2001). The decline in inpatient days per capita is a result of both shortened average lengths of stay and an increased proportion of hospital cases receiving same day surgical care (McGrail, Evans, Barer, Sheps, Hertzman, and Kazanjian, 2001). This has led to an increase in elders with subacute conditions in alternative settings, including LTC facilities (Singh, 1997).

Today people moving into LTC facilities have higher acuity and disability levels, and LTC facilities typically provide more rehabilitative services and care for chronic conditions than they did previously (Allen, 2003). Therefore, the LTC administrator has a job that is in many respects similar to that of a general manager in a complex organization, one that necessitates understanding of administrative, social and clinical tasks.

Interestingly, Pratt (2002) reports that there has been a decrease in the number of skilled LTC facility administrators entering the profession. In addition, he estimates that an unusually high number of LTC facility administrators will be retiring over the next decade. Therefore, research into relationships between characteristics of administrators and quality of care for residents would be useful.

## The Role of Care Facility Administrators

Administrators of LTC facilities not only must oversee the treatment and rehabilitation aspects of care, but must also ensure the individual rights of each resident, their social and emotional well-being, and their quality of life (Singh, 1997). The LTC administrator has a 24-hour-a-day commitment that encompasses all the facets of managing a health care institution, a housing complex, and/or social services program. LTC facility administrators are typically called upon to perform a broader range of management tasks, and have a closer involvement with day-to-day operational details than, for instance, most hospital Chief Executive Officers (CEOs). It has been suggested that, in comparison to hospital administrators/ CEOs, the LTC facility administrator's ability to effectively carry out the primary management functions of planning, organizing, directing, controlling, and coordinating may be more central to the organization's success (Singh, 1997). Therefore, on a personal level, LTC facility administrators can have a direct impact on their staff, which may indirectly affect the lives of the residents.

# Chapter 2
# Literature Review

Dating back to 1983, there have been only a handful of studies which have investigated the influence that administrators have on the quality of care in LTC facilities, none of which have been conducted in Canada. Only a small number of studies have been identified that have administrators as the focus of analysis (Al-Assef, Taylor and Langston, 1992; Angelelli, Gifford, Petrisek, and Mor, 2001; Buhmeyer, 1983; Castle, 2001; Castle and Banaszak-Holl, 2003; Harrington, 1990; Rubin and Shuttlesworth, 1986; Schoon and Hayez, 1987; Schoon, Jones and Kittleson, 1993; Singh, 1997; Singh and Schwab, 1998; and Singh and Schwab, 2000). The limited amount of research regarding the top management in LTC is surprising given that they are frequently the focus of analysis in the management literature.

## Characteristics of Administrators

In 1997, Singh conducted a study of LTC facility administrators in North Carolina and found the typical administrator to be female, Caucasian, approximately 45 years old, to have a college education, approximately 9 years of experience as a LTC facility administrator, to have been employed in their position for 3 to 5 years, and to earn an annual salary and bonus of $40,000 to

$50,000 in United States dollars (USD). Singh (1997) found that LTC facility administrators spent more time on financial management than on elder care issues. Some noticeable sex-related differences among LTC facility administrators were found. Notably, men earned higher salaries than women reflecting more experience and supplemental responsibilities. Males generally administered larger facilities and there was a direct association between facility size and financial compensation.

Schoon and Hayez (1987) estimated the percentage of the workday devoted to performing tasks associated with five practice domains. It was found that 26 percent of the LTC facility administrator spent time in elder care (i.e. managing administration issues related to resident care), and 22 percent in personnel management. Administrators spent the least amount of time in public relations/marketing (10 percent). The study also showed that administrators considered the domains of financial management and laws/regulations/governing boards to be highly critical to the well-being of the elders residing in the LTC facility.

Buhmeyer (1983) investigated the relationship between sex, age, salary, education, community size and job satisfaction of administrators in South Carolina. The study was based on a survey to which 32 percent of the licensed LTC facility administrators of South Carolina had responded. Results showed a mean age of 43.5 years (SD=10.8) and mean education of 15.8 years (SD=2.2). In contrast to Singh's findings, in this study less than half (48.1 percent) of the respondents were females. The most frequently reported community size was

15,000 to 50,000. The study also reported, in similarity to the findings of Schoon and Hayez (1987), that men were more educated and earned higher salaries than women. Education and salary showed a weak positive correlation (r=.15).

## Training, Education and Quality

Little is known about the education, training, experience, and knowledge levels of LTC facility administrators in relation to quality of care (Harrington, 1990). Dating back to the 1960s there are a limited number of descriptive studies of LTC facility administrators (Al-Assef, Taylor, and Langston, 1992), and they are generally limited to specific regions of the United States (Schoon, Jones, and Kittleson, 1993). For instance, a study from Massachusetts found that 10% of the state's LTC administrators had no formal education, 20% had dropped out of high school and only 18% had completed college (Al-Assef, Taylor, and Langston, 1992). In addition, Al-Assaf, Taylor, and Langton, (1992) attempted to test the hypothesis that more education makes a better LTC facility administrator. These researchers concluded from the data they collected that education, sex, and age had virtually no direct effect on job preparedness of the respondents. Most studies are based on relatively low response rates (under 50%) that are likely to introduce biases into the results and reduce statistical power.

## Experience and Quality

Al-Assaf, Taylor, and Langston, (1992) found that years of experience had greater influence on preparedness as a LTC facility administrator than education. Limitations of this study included its low response rate – only 40% responded.

The study also excluded some key areas relevant to LTC facility administration in the United States, such as marketing/public relations, and laws/regulatory codes/governing boards.

Castle, and Banaszak-Holl, (2003) evaluated whether hours spent on the job by a LTC facility administrator had an effect on the quality of care. They examined 15,834 LTC facilities, comparing chain and freestanding facilities. The results indicated that quality indicators were associated with the number of full-time equivalent hours of administration in both chain and freestanding facilities. This study provides some evidence that the intensity of facility administration can have an important effect on the quality of care residents receive.

## Resources and Quality

Singh (1997) suggests that there is a direct association between constrained operational financing and lower quality. He also states that LTC facilities with poor elder care quality are likely to show more visible signs of shortage of supplies and equipment, and inferior environmental conditions, such as lack of cleanliness, maintenance and upkeep. This study provides some evidence that resources can play an important role in providing better quality in LTC facilities.

## Other Characteristics

Castle (2001) examined the association between administrator turnover and five resident characteristics. These characteristics included the proportion of residents who 1) were catheterized, 2) had pressure ulcers, 3) were given

psychoactive drugs, 4) were physically restrained, and 5) had a higher number of quality-of-care code violations than facilities with lower administrator turnover. The data were drawn from a survey of 420 chain and non-chain LTC facilities using the 1999 On-line Survey, Certification, and Reporting System (OSCAR) in the United States. Castle (2001) found the average annual turnover rate of administrators to be 43 percent. In both chain and non-chain facilities administrator turnover was associated with a higher than average proportion of residents who were catheterized, had pressure ulcers, and were given psychoactive drugs. The main difference between the two was that only non-chain facilities with more restrained elders were associated with higher administrator turnover. This study is important to this project since lower administrative turnover is an indicator of better quality.

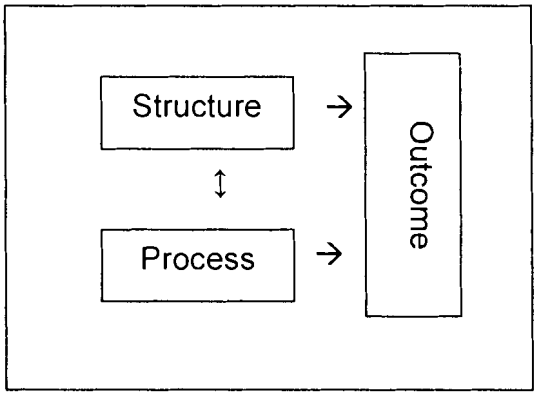
Rubin, and Shuttlesworth, (1986) identified low and high turnover groups, the low turnover group being those who stayed on a job for two years or longer. They also report that the rapid turnover rate among LTC facility administrators is around 50%. Their research shows the factors that are most predictive of turnover to include quality of care, adequate staffing and resources, and the administrator's opportunity to improve those conditions.

## Measuring Quality in Care Facilities

Selecting appropriate indicators of quality of care in LTC facilities is difficult. There is a great deal of controversy surrounding the conceptualization and measurement of this concept (Dimant, 1991, and Kane and Kane, 1988). The Ontario MOH and LTC has developed a quality assurance measure that

Ministry inspectors use to evaluate levels of quality in LTC facilities on a yearly basis (12 months). The information gained from applying this measure is publicly accessible. These data are ideal to assess whether a LTC facility is operating in compliance with the existing legislation, regulations, standards and policies relating to the care and the services that the home operators are required to provide to the residents in respect to the 18 sections in the LTC Program Manual. For the purpose of this study, poorer quality of care in LTC facilities was operationalized as facilities with a higher number of unmet standards/criteria reported in the Ontario MOH and LTC quality assurance measure. This measure reflects Donabedian's (1988) Tripartite Quality Assurance Model which encompasses structure, process, and outcome criteria for quality assessment (See Figure 1).

**Figure 1: Donabedian's Tripartite Quality Assurance Model**




According to Donabedian (1988) structure denotes the attributes of the facility in which care occurs. For the purpose of this study, structure was measured through material resources (such as equipment, money, and the facility), human resources (such as the number and qualification of staff), and

organizational structure (such as medical staff organization and methods of peer review). These attributes were evaluated in this study through the eighteen sections in the Ontario MOH and LTC program manual (See appendix 2 and 3). Each care facility was evaluated by a compliancy advisor. During these inspections the compliancy advisor evaluated whether the facility met the standards that the Ontario MOH and LTC set for each criterion outlined in the LTC Facility Program Manual. When a standard was not met, the care facility would receive an unmet standard demerit. In each of the 18 sections of the LTC Program Manual there are different criteria for material resources, human resources and organizational structure. When one of these resources is missing the facility will depend on another resource to fill the void. For example, if a facility's snow blower suddenly broke, it could be required to invest additional human resources to manually shovel their entrances or have staff repair the snow blower. On the other hand, they could also hire a snow removal company or purchase a new snow blower. This is one example of the many that could be given to illustrate how each of the 18 sections could encompass Donabedian's structure criteria. Peer review was reflected in the use of former LTC facility directors of nursing and/or administrators as compliancy inspectors. The facility outputs are captured in sections O (Environmental Services) and M (Facility Organization and Administration) of the Ontario MOH and LTC program manual (See appendix 2). Adequate equipment, money, staff and medical staff are reflected in the facility's number of unmet standards/criteria, reported in the Ontario MOH and LTC quality assurance measure.

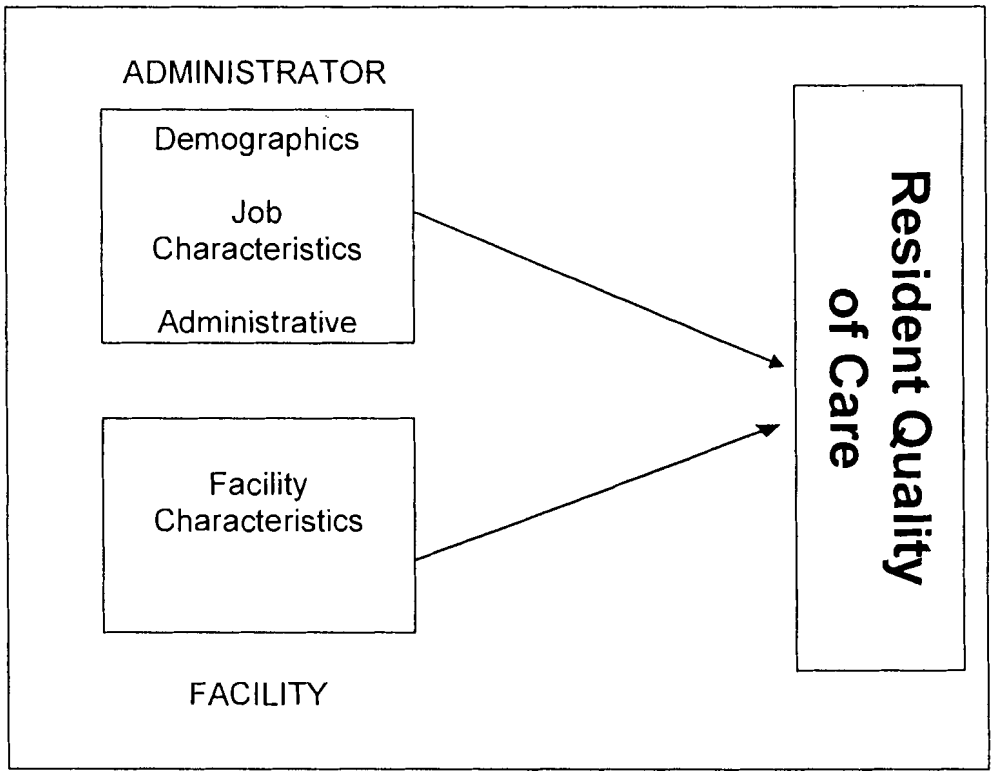
Process denotes what is actually done in giving and receiving care. It includes the residents' activities in seeking care, as well as the caregivers' activities in providing care. These attributes were evaluated in each of the eighteen sections in the Ontario MOH and LTC program manual. Similar to the snow blower example in the structure component of Donabedian's Tripartite Model, there are various examples that illustrate how the 18 Sections in the LTC Program Manual encompass Donabedian's process criteria.

Outcome denotes the effects of quality of care in the LTC facility. To measure outcome, this study tabulated each facility's aggregate number of unmet standards/criteria in the Ontario MOH and LTC inspection findings (See Appendix 4).

# Chapter 3
# Conceptual Framework

The conceptual framework of this study is shown in Figure 2 which posits that characteristics of the administrators of LTC facilities and the facility characteristics both influence resident quality of care.

**Figure 2: Relationship Between Administrator Characteristics, Facility Characteristics and Resident Quality of Care**



## Objectives of the Project

One objective of this study was to develop a profile of the LTC facility administrators currently practicing in Ontario such as their: age, sex, salary, education in nursing, education in commerce, job in previous ten years, experience as a LTC facility administrator, years in current facility, time spent in domains of practice such as: resident care, personnel management, marketing/public relations, physical resource management, laws/regulations/boards, family relations, fundraising, and total hours per week. A second objective was to describe and compare LTC facility characteristics such as: number of beds, facility age, community size, ownership, chain, number of short term beds, presence of a family council, and/or resident council, accredited, approved short stay beds and to provide a profile of the residents currently living in LTC facilities in Ontario such as: average age, sex ratio and case mix.

## Primary Objectives

The primary objectives, however were to:

A) Examine the relationship between administrator characteristics and LTC facility quality. Administrator's characteristics included: formal qualifications, experience, administrative stability as determined by years in current position, salary, and administrative effort in the domains of practice.

B) Examine the relationship between LTC facility characteristics and quality. LTC characteristics included: facility age, ownership, type of affiliation, number of licensed beds, and size of the community.

## Hypotheses

Level of Education Attained

It was hypothesized that there would be a positive relationship between administrators with higher levels of education and facility quality. Al-Assef, Taylor, and Langston (1992) hypothesized that level of education would be associated with more quality.

Type of Training

It was hypothesized that there would be a positive relationship between administrators with training in nursing and facility quality. Singh (1997) has supported this hypothesis in his study.

Years of Total Experience

It was hypothesized that higher levels of experience as an administrator of a care facility would be positively associated with quality. This was supported in the literature by findings from Al-Assef, Taylor, and Langston (1992) and Singh, (1997).

Years in Current Position

It was hypothesized that administrators with more years of experience at one facility would be associated with higher quality. The supporting literature for this hypothesis is Singh, (1997).

Salary

Salary, including bonuses, can function as an indicator of expertise. The assumption is that better qualified LTC facility administrators command a premium salary. Therefore, it was hypothesized that administrators with higher salaries would administer LTC facilities with fewer unmet standards.

Residential Care

It was hypothesized that there would be a positive association between administrators who spent more time in resident care and higher quality of care. This is supported by Singh (1997).

Size of Facility

It was hypothesized that a lower number of beds would be associated with higher levels of quality. This is supported by Thomas, (2003) and Thomas and Johansson, (2003).

Size of Community

It was hypothesized that facilities located in smaller communities would have fewer unmet standards. This is supported by Thomas, (2003) and Thomas and Johansson, (2003).

Affiliation/Chain

It was hypothesized that affiliated facilities would show higher levels of quality than independent facilities. This is supported in Singh (1997).

# Chapter 4
# Methodology

This study was an exploratory examination of the above objectives using two data sources: 1) a questionnaire that was mailed to administrators of each of the 602 LTC facilities that receive funding from the Ontario MOH and LTC (based on the April 2006 Ontario MOH and LTC list of certified LTC facilities in the Public Reporting on LTC Homes list) which asked respondents if they were the care facility administrator; and 2) information from the quality assurance measure that is used by the Ontario MOH and LTC to measure quality in the LTC facilities that they fund.

## Population: Ontario

The rationale for using Ontario administrators as the study population is that Ontario is the largest province in Canada with the most LTC facilities and it has publicly accessible data available on quality of care of its LTC facilities. The province of Ontario has a population of 12,589,823 people (Statistics Canada, 2001). Currently there are 1,527,960 people who are aged 65 years and older living in Ontario. They comprise 12.14% of the population (Statistics Canada, 2001). There are 602 licensed LTC facilities that are currently operating in Ontario (Ontario Ministry of Health and Long-Term Care, 2006).

## Instrument Development, Survey Procedure and Sample

Data pertaining to the LTC facility administrator characteristics and facility organizational characteristics were obtained through a direct mail questionnaire (See Appendix 1). The questionnaire was developed using information found in the LTC literature, consultation with one retired and one employed LTC facility administrator in Ontario, consultation with two Ontario compliancy advisors, and consultation with the two members of the supervisory committee associated with this study. After obtaining ethical approval, the questionnaire was mailed out, along with pre-addressed, postage paid return envelopes, a cover letter and a letter of support from Mr. Doug Rapelje to administrators of 602 LTC facilities in Ontario. Mr. Rapelje was chosen to write the letter of support because of his distinguished reputation as an LTC facility administrator and visibility in the field of gerontology throughout Ontario and Canada. Currently a member of the Gerontology Advisory Council for Veteran Affairs Canada, Mr. Rapelje is the former Director of the Social Services and Senior Citizens Department of the Regional Municipality of Niagara. He is also the Past Chairperson for the Ontario Advisory Council on Senior Citizens and served as a member of the National Advisory Council on Aging. Mr. Rapelje is a past President of the Ontario Association of Non-Profit Homes and Services and the Ontario Gerontology Association. Mr. Rapelje has served on the Board of the Canadian College of Health Service Executives and is a Fellow. He has also served on many local,

provincial and federal committees and task forces which dealt with senior issues and concerns.

The cover letter explained the purpose of the survey and indicated that participation was voluntary. A fax follow-up and a second questionnaire along with the cover letter and Mr. Rapelje's letter were faxed to administrators who did not reply to the first mail out. The first and second wave returned 226 and 76 replies respectively for a sample of 302 (50.2 percent) of the 602 LTC facility administrators in Ontario.

## Dependent Variable: Unmet Standards

Data from the latest public reporting on LTC facilities resulting from annual inspections conducted by the Ontario MOH and LTC served as the dependent variable representing quality. The Long-Term Care Facility Program Manual is the standard tool against which the Ontario MOH and LTC evaluates LTC facilities. It contains over 450 different criteria (Appendix 3) that are organized into 18 sections. Inspectors appointed by the Ontario MOH and LTC visit all LTC facilities at least once a year to verify whether the LTC facilities are in compliance with the existing legislation, regulations, standards, as well as policies relating to the care and the services that the LTC facility is required to provide to its residents. When compliancy advisors find that a LTC facility does not meet one or more of these requirements, they issue a "finding" of unmet standards/criteria to the operator of the home. A zero score indicates that there were no adverse findings for the specified standard or criterion.

There are also other measures used by the MOH and LTC. They include: 1) a citation under legislation that is issued when a LTC facility is in violation of the legislation or regulations that govern that home; 2) sanctions may be imposed if a LTC facility fails to comply with MOH and LTC; 3) and a verified concern is issued when a specific complaint is received by the MOH and LTC and a violation specifically related to that complaint proves to be real in that particular inspection. The rationale for using only the unmet standards/criteria as the dependent variable is that there are not enough citations, sanctions and verified concerns for analysis. Also, unmet standards/criteria are the only measure that examines all 453 criteria set be the MOH and LTC for inspection by the compliancy advisor. For example, sanctions were given only when unmet standard/criteria were not dealt with since the last inspection. Verified concerns were only issued based on complaints, which were rare. Citations under legislation were also rare.

## Independent Variables

### Demographic Characteristics

Sex and age of the administrator have been included in the descriptive results and as control variables. Sex is an interval variable with no missing cases. On the other hand, there were six missing cases in the age variable. Missing cases were recoded as the mean (49.5 years).

**Job Characteristics**

Level of Education Attained has been measured in an open question format then recoded into a three-category variable. There was one missing response and it was recoded in the mode (Bachelors Degree). This allowed the respondent to specify their exact educational credential(s).

Type of Training was ascertained in the same set of questions as level of education in an open question.

Total Years of Experience as an LTC facility administrator has been measured at the interval level. The one missing response was recoded in the mean (8.9).

Years in Current Position has been collected to measure turnover in employment. It was also used as an indicator of long-term commitment to the quality in the facility. There was one missing response and it was recoded into the mean (6.6). This may be related to 'Years of Total Experience', therefore both variables were analyzed separately.

Salary, including bonuses, can function as an indicator of expertise. The two missing responses were recoded into the mode (80K-89,999).

**Administrative Effort**

Average time spent per week in domain of practice (Resident care, Personnel management, Financial management, Marketing/public relations, Physical resource management, Laws/regulatory codes/governance, Family relations, Fundraising, and Other) has been measured as an interval variable where each administrator has been asked to record the actual number of hours

they spend in each domain of practice. Resident care had 8 missing responses and was recoded in its mean (10.9 hours) and all the other above mentioned variables had 9 missing variables that were all recoded in their respected means.

**Facility Characteristics**

With regards to facility characteristics facility age has been included to assemble the descriptive results and to be used as a control variable. Length that the Facility has been in Operation was measured in years. The five missing responses were recoded in the mean (30.7 years).

Size of Facility has been measured by the total number of licensed beds in a facility. The two missing responses were recoded in its mean (127.9 beds).

Size of Community in which the facility is located is an important variable, since it might suggest whether input resources, such as qualified personnel, are available with relative ease. It has been measured by asking administrators to select the most appropriate population size to describe the community their LTC facility is located in (0-2,499, 2,500-9,999, 10,000-44,999, 50,000-99,999, and 100,00 and over). These sizes were selected since they reflect what Statistics Canada (2005) defines as a village, town, small city, medium city, and large city respectfully. The missing responses were recoded in the mode (100,000 and over).

Sponsorship/Ownership identified each facility as public, private for-profit, private not-for-profit, or charitable not-for-profit. Sponsorship has been included to assemble the descriptive results and to be used as a control variable.

Sponsorship/Ownership is a variable with no missing cases. No recoding was required.

Affiliation/Chain distinguishes whether they were an independent facility or if they were affiliated with other facilities. There were no missing data, therefore no recoding was necessary.

# Chapter 5
# Results

## Descriptive Results

### Dependent Variable: Unmet Standards

Of the 302 facilities in the sample, 85 (28.1%) had no unmet standards, 69 (22.8%) had 1 or 2 unmet standards, 47 (15.6%) had 3 or 4 unmet standards, and 101 (33.4%) had 5 or more unmet standards. As seen in Table 1, the percentage distribution is very similar to that for all LTC facilities in Ontario. The mean number of unmet standards (4.2, s.d=6.2) is also similar to the provincial average (4.2, s.d=5.5).

**Table 1: Number and Percentage Distribution of Unmet Standards/Criteria, Sample and Population of LTC Facilities, Ontario, 2006**

| Number of Unmet Standards/Criteria | Sample LTC Facilities (n=302) | All LTC Facilities (n=602) |
|---|---|---|
| 0 | 85 (28.1%) | 170 (28.2%) |
| 1-2 | 69 (22.8%) | 136 (22.6%) |
| 3-4 | 47 (15.6%) | 99 (16.4%) |
| 5+ | 101 (33.4%) | 197 (32.8%) |

### Administrator Profile

As shown in Table 2, in the province as a whole, 69.9% of administrators are female. In the sample, females outnumber males by a ratio of 2.7 to 1 (females = 72.8 percent; males = 27.2 percent). In the sample, the average age

of administrators was 49.5 (s.d= 8.8); range = 27-74. As shown in Table 3, just over half (52.3%) of the administrators in the sample were under age 50. The socio-demographic findings with respect to sex and age were thus similar to those reported in earlier research. For example Singh (1997) found that the typical administrator was female and approximately 45 years old.

**Table 2: Sex of Sample and Population of Administrators, Ontario, 2006**

| | Sample (n=302) | | All LTC facilities (n=602) | |
|---|---|---|---|---|
| **Characteristics** | **N** | **%** | **N** | **%** |
| **Sex** | | | | |
| Female | 220 | 72.8 | 421 | 69.9 |
| Male | 82 | 27.2 | 181 | 30.1 |

With respect to education, 34.1 percent of the administrators in the sample had less than a bachelor's degree, 43 percent had a bachelor's degree and 22.8 percent had higher degrees. These results are consistent with the findings of earlier studies (Al-Assef, Taylor, and Langston, 1992, and Schoon, Jones, and Kittleson, 1993). The most frequently held diploma or degree was nursing, followed by business administration. In the United States, the order was reversed (Singh, 1997). The majority of administrators had one or more specialized certificates supplementing their main credentials. This was influenced by the MOH and LTC offering multiple administration certificates tailored specifically for administrators of LTC facilities and hospitals.

Nearly half of the sample (47.7%) had been practicing as administrators for less then six years. Almost a quarter (22.5%) was relatively new administrator having two or less years of experience. On the other hand, over one quarter of the administrators (25.8%) had fourteen or more years of experience (mean

years of experience = 9; s.d = 8.3 years; range = 0-40). These results reflect the findings of earlier studies (Al-Assef, Taylor and Langston, 1992, and Singh, 1997).

With respect to years of experience as the administrator in their current facility, 55.8 percent of the administrators had four years or less of experience at their respected facility, over 20 percent (20.3%) of the respondents had ten or more years of seniority as the administrator in their respective facility (mean years of experience in current facility = 6.6; s.d=7; and range = 0-39).

One-quarter (25.5%) of the administrators had been previously employed as a director of nursing in a LTC facility, while 19.9 percent had held a past job as a director of a LTC facility in the previous ten years. These results echo those found by Singh (1997).

The mode for annual salary and bonuses was between $80,000 and $89,999. As shown in Table 3, approximately one-third (36.8%) of the administrators earned less than $80,000 and 12.6 percent earned less then $70,000. On the other hand, nearly one-third (32.8%) earned $90,000 or more, and 19.2 percent earned $100,000 and over per year. These salaries are higher than the findings from earlier studies, and may be due to inflation and the currency being in Canadian as opposed to United States dollars.

**Table 3: Other Socio-demographic Characteristics of Sample of Administrators (n=302)**

| Characteristics | N | % |
|---|---|---|
| **Age in years** | | |
| <44 | 77 | 25.5 |
| 44-50 | 81 | 26.8 |
| 51-56 | 78 | 25.8 |
| 57+ | 66 | 21.9 |
| **Level of Education** | | |
| College or less | 103 | 34.1 |
| Bachelors | 130 | 43 |
| Masters + | 69 | 22.8 |
| **Type of Education** | | |
| Nursing | 139 | 46 |
| Business | 79 | 26.2 |
| **Certificate(s)** | | |
| ONASS | 54 | 17.9 |
| OLTCA | 32 | 10.6 |
| CHA | 27 | 8.9 |
| Other | 40 | 49.3 |
| 2+ | 149 | 13.2 |
| **Years of Experience** | | |
| 0-2.5 | 68 | 22.5 |
| 3-5.5 | 76 | 25.2 |
| 6-13 | 80 | 26.5 |
| 14+ | 78 | 25.8 |
| **Experience in Current Facility (in years)** | | |
| <2 | 67 | 22.2 |
| 2-3.5 | 71 | 23.5 |
| 4-8 | 90 | 29.8 |
| >8 | 74 | 24.5 |
| **Type of Job in Last 10 Years** | | |
| Director of Nursing | 77 | 25.5 |
| Director of LTC Facility | 60 | 19.9 |
| Other | 54 | 17.9 |
| 10+ as Admin. | 111 | 36.8 |
| **Salary** | | |
| <70K | 30 | 12.6 |
| 70K-79,999 | 73 | 24.2 |
| 80K-89,999 | 92 | 30.5 |
| 90K-99,999 | 41 | 13.6 |
| 100K+ | 58 | 19.2 |

## Administrative Effort in the Domains of Practice

As shown in Table 4, on average administrators reported spending the most time on a weekly basis in resident care (mean=10.9 hours) followed by personnel management/human resources functions (9 hours). Approximately the

same amount of time was spent in financial management (6.1 hours) and in marketing/public relations (6 hours). They spent less time in laws/regulations/boards (3.9 hours) and fundraising (3.6 hours). The least amount of time was spent in physical resource management (2.8 hours) and family relations (1 hour). These results are similar to those obtained by Schoon and Hayez (1987), except that administrators in this study were found to place greater emphasis on marketing/public relations and fundraising than on physical resource management and family relations.

**Table 4: Administrative Effort in Domains of Practice (n=302)**

| Domains of Practice | Mean Hours Per Week | S.D. | Range |
|---|---|---|---|
| Resident Care | 10.9 | 7.1 | 0-57 |
| Personnel/Human Resource Management | 9 | 6.2 | 0-60 |
| Financial Management | 6.1 | 3.9 | 0-25 |
| Marketing/Public Relations | 6.1 | 4 | 0-25 |
| Physical Resource Management | 2.8 | 2.7 | 0-20 |
| Laws/Regulations/Boards | 3.8 | 3.2 | 0-20 |
| Family Relations | 5.0 | 3.5 | 0-20 |
| Fundraising | 1.1 | 2.0 | 0-15 |
| Other | 3.6 | 6.1 | 0-50 |
| Total Hours Per Week | 45.5 | 12.9 | 9-100 |

## Facility Characteristics

The mean number of licensed beds per facility was 127.9 (s.d=74.9) compared with 123.8 (s.d=71.5) for the province as a whole. As shown in Table 5, nearly two-thirds (60.6%) had 100 beds or more. On the other hand, 17.5 percent of LTC facilities had 11 to 62 beds and roughly 22 percent (21.9%) had 63 to 99 beds. The majority of LTC facilities tended to be accredited (75.2%),

84.4 percent had a family council and 99.7 percent had a resident council. The majority (64.9%) did not have short term beds. As can be seen in Table 5, this is typical of the province as a whole. These findings indicate that the sample is representative of the population of facilities in Ontario.

**Table 5: Sample and Population Facility Characteristics, Ontario, 2006**

| | Sample LTC Facilities (n=302) | | All LTC Facilities (n=602) | |
|---|---|---|---|---|
| **Characteristics** | **N** | **%** | **N** | **%** |
| **Beds** | | | | |
| 11-62 | 53 | 17.5 | 121 | 20.1 |
| 63-99 | 66 | 21.9 | 135 | 22.4 |
| 100-150 | 89 | 29.5 | 172 | 28.6 |
| >150 | 94 | 31.1 | 174 | 28.9 |
| **Accreditation** | | | | |
| Yes | 227 | 75.2 | 458 | 76.1 |
| No | 75 | 24.8 | 144 | 23.9 |
| **Family Council** | | | | |
| Yes | 255 | 84.4 | 486 | 80.7 |
| No | 47 | 15.6 | 116 | 19.3 |
| **Resident Council** | | | | |
| Yes | 301 | 99.7 | 599 | 99.5 |
| No | 1 | 0.3 | 3 | 0.5 |
| **Approved Short Stay Beds** | | | | |
| Yes | 106 | 35.1 | 209 | 34.7 |
| No | 196 | 64.9 | 393 | 65.3 |

As shown in Table 6, of the 302 facilities in the sample, 59 (19.5%) were 40 years old and older, 72 (23.8%) were ten years old or less, and the mean age was 30.7 years (s.d=27.4 years). The most frequently reported community size served by the facilities was 100,000 and over. Most of the LTC facilities (63.2%) were privately owned (50.3% for profit, and 12.9% not-for-profit). Just over half (57.6%) were independently operated and 42.4 percent were part of multifacility chains. Publicly government-run facilities comprised 16.6 percent. Charity not-for-profit owned facilities totalled 16.9 percent. The proportion of ownership approximates the figures discussed in the literature.

**Table 6: Other Facility Characteristics, Sample Only (n=302)**

| Characteristics | N | % |
|---|---|---|
| **Facility Age in Years** | | |
| 0-10 | 72 | 23.8 |
| 11-29 | 74 | 24.5 |
| 30-39 | 97 | 32.1 |
| 40+ | 59 | 19.5 |
| **Community Population** | | |
| 0-2,499 | 22 | 7.3 |
| 2,500-9,999 | 54 | 17.9 |
| 10K – 44,999 | 52 | 17.2 |
| 50K – 99,999 | 38 | 12.6 |
| 100K + | 136 | 45 |
| **Ownership** | | |
| Public | 50 | 16.6 |
| Private for profit | 152 | 50.3 |
| Private n. f. profit | 39 | 12.9 |
| Charitable | 51 | 16.9 |
| Other | 10 | 3.3 |
| **Chain** | | |
| Yes | 174 | 57.6 |
| No | 128 | 42.4 |

## Resident Mix

As shown in Table 7, the average LTC facility in the sample had 4.2 percent of residents who were under 65 years old, 10.4 percent who were 65-74 years old, 34.9 percent who were 75-84 years old, and 50.5 percent who were 85 years old and older. On average, females comprised 71.9 percent of the residents and males comprised of 27.9 percent.

In Ontario, public funding is administered through a case mix index (CMI) formula that consists of seven different categories that ranges from A progressively through to G. Residents scoring higher ratings (i.e. E, F or G) are considered as needing higher levels of care. LTC facilities that serve a higher number of E, F and G residents would ultimately receive more public funding in comparison to those that cater to a population with a lower average CMI rating.

On average, the LTC facility in the sample had 0.3 percent of A residents, 6.5 percent of B residents, 5.7 percent of C residents, 9.9 percent of D residents, 24.8 percent of E residents, and 52.8 percent of F/G residents.

**Table 7: Resident Mix in Sample Facilities (n=302)**

| Characteristics | Mean % for LTC Facilities |
|---|---|
| **Age** | |
| <65 | 4.2 |
| 65 to 74 | 10.4 |
| 75 to 84 | 34.9 |
| 85+ | 50.5 |
| **Sex** | |
| Male | 27.9 |
| Female | 71.9 |
| **Case Mix Index** | |
| A | 0.3 |
| B | 6.5 |
| C | 5.7 |
| D | 9.9 |
| E | 24.8 |
| F/G | 52.8 |

## Bivariate Relationships

This section presents results of bivariate analyses performed to test the research question: to what extent are preparatory skills and behavioural factors associated with LTC facility administrators and facility resources associated with quality care of residents in care facilities? Bivariate analyses investigate the joint distribution of cases on two or more variables. The Kendall's tau c statistic presented in this study indicates the magnitude of the difference between the dependent and independent variables of interest. The level of significance is also presented. Correlations ranging from zero to .20 are considered to be weak associations, those between .20 and .40 are moderate, and those over .40 are

moderate to strong. Variables of interest in defining bivariate relationships are: (1) Socio-Demographic Characteristics: age and sex. (2) Qualification and Job Characteristics: education, nursing background, years experience as an administrator, years in current position, and salary. (3) Administration Effort: the average time an administrator spends each week in their various tasks. The tasks include resident care, personnel management, financial management, physical resource management, marketing/public relations, laws/regulatory codes/governance, family relations, fundraising, and other. (4) Facility Characteristics include: affiliation, facility age, number of beds in the facility, size of the community, and sponsorship/ownership. These variables were chosen based on the review of literature.

For the purpose of conducting bivariate crosstabular analyses, the dependent variable (Unmet Standards/Criteria) was recoded from its original form to include the three missing variables into the mean (4.2), and the values were grouped into four categories (0, 1-2, 3-4, 5+). Recoding of the independent variables will be explained throughout this section associated with each analysis. Negative relationships indicate fewer unmet standards (associated with better quality) and positive relationships saw more unmet standards (associated with lower quality). Finally, relationships that were found to be not significant will not be explained.

**Length of Employment in Current Position**

It was hypothesized that higher amount of experience as an administrator in a current LTC facility position would be associated with fewer unmet

standards. The one missing value was recoded into the mode, and the variable was recoded into four categories (<2, 2-3.5, 4-8, and >8). The data showed that there was a statistically significant inverse relationship (Tau B = -.14, p<.05) between unmet standards and the amount of experience as an administrator in a current LTC facility position.

**Table 8: Unmet Standards by Years of Experience as Administrator in Current LTC Facility**

| # of US | <2 yrs (%) | 2-3.5 yrs (%) | 4-8 yrs (%) | >8 yrs (%) | Total |
|---|---|---|---|---|---|
| 0 | 13 (19.4) | 16 (22.5) | 27 (30) | 29 (39.2) | 85 (28.2) |
| 1-2 | 11 (16.4) | 23 (32.4) | 22 (24.4) | 13 (17.6) | 69 (22.9) |
| 3-4 | 13 (19.4) | 10 (14.1) | 11 (12.2) | 13 (17.6) | 47 (15.6) |
| 5+ | 30 (44.8) | 22 (31) | 30 (33.3) | 19 (25.7) | 101 (33.3) |
| Total | 67 (100) | 71 (100) | 90 (100) | 74 (100) | 302 (100) |

Kendall Tau B = -.14 p<.01
a Not assuming the null hypothesis.
b Using the asymptotic standard error assuming the null hypothesis.
SM = Symmetric Measure
US = Unmet Standards

## Nursing Background

It was hypothesized that administrators with a background in nursing would be associated with fewer unmet standards. The one missing value was recoded into the mode (no) for the nursing background variable. There was a weak positive relationship (Tau C = .15, p<.05) between unmet standards and not having a nursing background.

**Table 9: Unmet Standards by Nursing Background**

| # of US | Yes (%) | No (%) | Total (%) |
|---|---|---|---|
| 0 | 43 (30.9) | 42 (25.8) | 85 (28.2) |
| 1-2 | 38 (27.3) | 31 (19.0) | 69 (22.9) |
| 3-4 | 22 (15.8) | 25 (15.3) | 47 (15.6) |
| 5+ | 36 (25.9) | 65 (39.9) | 101 (33.4) |
| Total | 139 (100) | 163 (100) | 302 (100) |

Kendall Tau-b = .15, p<.05
a) Not assuming the null hypothesis.
b) Using the asymptotic standard error assuming the null hypothesis.

## Size of Community

It was hypothesized that small community size would be associated with fewer unmet standards. The one missing value was recoded into the mode (100,000+) for the size of community variable. There was a moderate positive relationship (Tau B = .187, p<.001) between unmet standards and the size of the community.

**Table 10: Unmet Standards by Size of the Community**

| # of US | <2,500 (%) | 2,500-9,999 (%) | 10K-44,999 (%) | 45K-99,999 (%) | 100K+ (%) | Total (%) |
|---|---|---|---|---|---|---|
| 0 | 11 (50) | 18 (33.3) | 17 (32.7) | 13 (35.1) | 26 (19) | 85 (28.2) |
| 1-2 | 9 (40.9) | 12 (22.2) | 10 (19.2) | 7 (18.9) | 31 (22.6) | 69 (22.9) |
| 3-4 | 1 (4.6) | 9 (16.7) | 10 (19.2) | 5 (13.5) | 22 (16.1) | 47 (15.6) |
| 5+ | 1 (4.6) | 15 (27.8) | 15 (28.9) | 12 ( 32.4) | 58 (42.3) | 101 (33.4) |
| Total | 22 (100) | 54 (100) | 52 (100) | 37 (100) | 137 (100) | 302 (100) |

Kendall Tau-c = .19, p<.001
a) Not assuming the null hypothesis.
b) Using the asymptotic standard error assuming the null hypothesis.

## Number of Beds

The relationship between the number of beds and unmet standards was also explored. The only change made to the number of beds in a facility variable was recoding the two missing values into the mode (100-150 beds). The data

showed that there was a moderate positive relationship (Tau C = .20, p<.001) between the variable number of beds and unmet standards.

**Table 11: Unmet Standards by Number of Beds**

| # of US | 0-62 Beds (%) | 63-99 Beds (%) | 100-150 Beds (%) | >150 Beds (%) | Total (%) |
|---|---|---|---|---|---|
| 0 | 21 (39.6) | 24 (36.4) | 25 (28.1) | 15 (16) | 85 (28.2) |
| 1-2 | 14 (26.4) | 12 (18.2) | 24 (27) | 19 (20.2) | 69 (22.9) |
| 3-4 | 9 (17) | 9 (13.6) | 13 (14.6) | 16 (17) | 47 (15.6) |
| 5+ | 9 (17) | 21 (31.8) | 27 (30.3) | 44 (46.8) | 101 (33.4) |
| Total | 53 (100) | 66 (100) | 89 (100) | 94 (100) | 302 (100) |

Kendall Tau-c = .20, p<.001
a) Not assuming the null hypothesis.
b) Using the asymptotic standard error assuming the null hypothesis.
Linear Regression Analysis

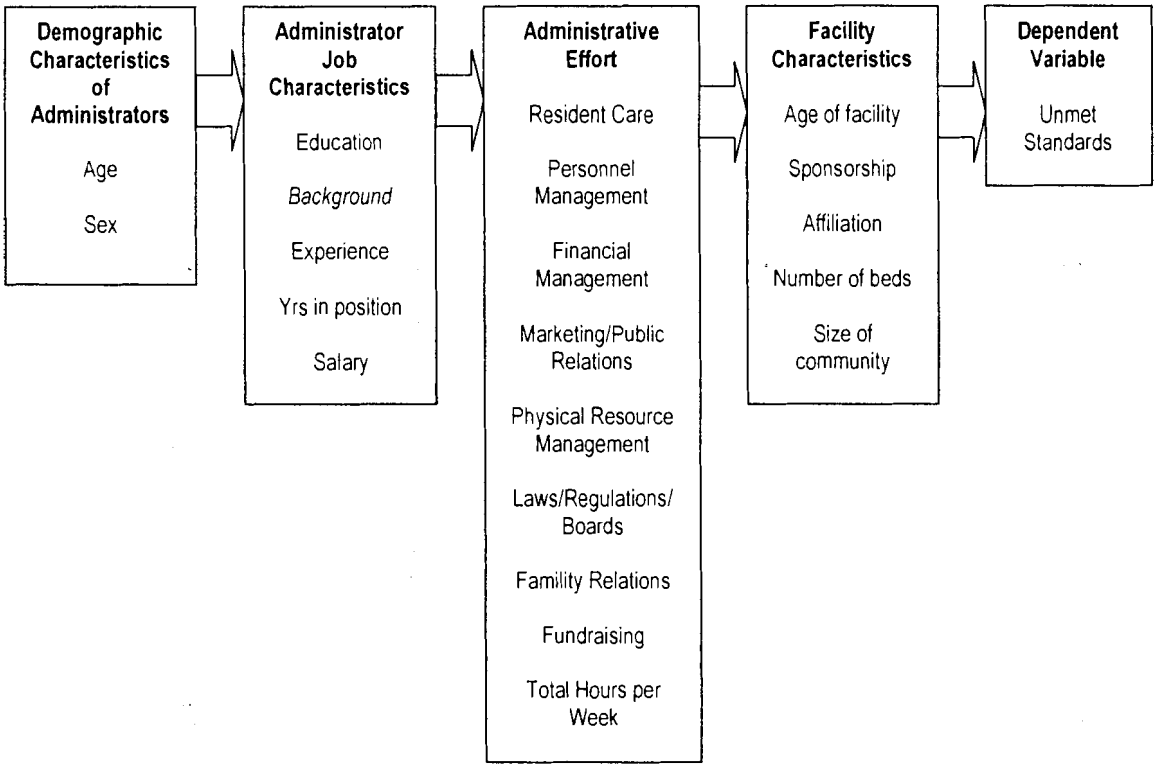
The dependent variable in this study, unmet standards, is an interval scale that ranges from zero to forty two. Therefore, ordinary least squares (OLS) was the most suitable technique to test the independent effects of each explanatory variable on the dependent variable, while statistically controlling for all other variables in the model. OLS statistics provide a mathematical description of the relationship between variables and allow for inferences to be made about the value of the dependent variable for various values of the independent variables in the models (Babbie, 1995). The OLS statistics presented include R, R Square, F Change, and the level of significance. The hierarchal model was used to test each independent variable and their respected blocks. Negative coefficients indicate fewer unmet standards. Hence, variables with negative beta coefficients indicate higher quality of performance.

## Hierarchical Modeling

This exploratory study splits the independent variables into four blocks: demographic characteristics of administrators; administrative characteristics; administrative effort; and facility characteristics. The rationale for separating the variables into these blocks is that: age and sex are immutable characteristics while education, background experience, years in position, and salary are all indicators of an administrator's training or remuneration. On the other hand, time spent in resident care, personnel management, financial management, marketing/public relations, physical resource management, laws/regulations/boards, facility relations, fundraising and total hours per week are all related to the current administrative effort. Finally, age of facility, sponsorship, affiliation, number of beds, and size of community are all related to facility characteristics.

The rationale to justify the order is related to the sequence of events and the conceptual model. The demographic block is first, since these variables chronologically come before education, background and experience. These, in turn, set the stage for administrative effort. Facility characteristics are measured last due to it being hypothesized that they would have less impact than the administrator characteristics. The following figure demonstrates these blocks in their hierarchical order:

**Figure 3: Analytical Model**




It should be noted that colinearity was indicated by a Pearson correlation of over .7 between: Experience and Years in Current Position (r=.75); and Financial Management and Marketing/Public Relations (r=.99) (See appendix 4). Due to the significant overlap, Experience and Marketing/Public Relations were excluded when conducting the linear regression analysis. In addition, only the $R_2$ Change associated with Model 2 is statistically significant. When examining the model summary in table 11 Models 2 ($R_2$=.06, p<.05), 3 ($R_2$=.10, p<.01) and 4 ($R_2$=.13, p<.01) are found to be statistically significant.

**Table 12: Model Summary**

| Model | R | R2 | Sig. F Change | Model Sig. |
|---|---|---|---|---|
| 1 | .061 | .004 | .574 | .574 |
| 2 | .243 | .059 | .005 | .012 |
| 3 | .318 | .101 | .108 | .009 |
| 4 | .360 | .129 | .105 | .005 |

Model 1: Socio demographics

Model 1 was not statistically significant, so no associations are interpreted.

Model 2: Administrator Characteristics

Within Model 2, main effects were found for the following four variables: Education 1, Education 2, Years in Current Position, and Salary.

The 'Education' variable had eight missing values that were recoded into the mode (BA). Less than college and college were effect coded into college or less and, MA and PhD were effect coded into MA or more. Next, college or less was made the reference category to create variable Education 1 and Education 2. Education 1 compared MA with those who had less then a BA education and Education 2 compared BA with those who had less then a BA. A moderate inverse relationship was found between both Education 1 and Education 2 with Unmet Standards ($b=-2.8$, $SE=1.1$, $p<.05$) and ($b=-1.8$, $SE=0.84$, $p<.05$), respectively, lending support to the hypothesis that a lower number of unmet standards is associated with administrators who have higher levels of education (when controlling for all other variables in Model 2).

The 'years in current facility' variable had one missing value that was recoded into the mean (7 years). A weak inverse association was found between Years in Current Position and Unmet Standards ($b=-.16$, $S.E.=0.05$, $p<.01$). This

supports the hypothesis that administrators who have been employed at the facility for longer periods of time have fewer unmet standards associated with their facility.

For the salary variable, the seven missing values were recoded into the mode (80K-89,999). A weak positive relationship was found between Salary and Unmet Standards (b=.35, S.E.=.16, $p<.05$), suggesting that administrators with higher salaries are associated with more unmet standards. This finding may be explained by the fact that smaller facilities with fewer beds are associated with better quality, and these tend to have administrators with smaller salaries.

Model 3: Administrative Effort

Model 3 added: Education, Years in Current Position, Salary, and Time Spent in Resident Care. The only missing value change made to the time spent in resident care variable was recoding the eight missing values into the mean (10.9 hours). A weak positive association was found between Time Spent in Resident Care and Unmet Standards (b=.12, SE=.05, $p<.05$), suggesting that administrators that spend more time in resident care services are associated with facilities with more unmet standards.

Model 4: Facility Characteristics

Model 4 was statistically significant, however none of the associations resulted in statistically significant criterions.

**Table 13: Coefficient Standardized**

| Model | Independent Variables | B | Standard Error | Beta | Signifi-cance |
|---|---|---|---|---|---|
| 1 | (Constant) | 4.027 | 1.631 | | .014 |
| | Age | .391 | .315 | .072 | .216 |
| | Sex | -.427 | .773 | -.032 | .581 |
| 2 | (Constant) | 2.102 | 3.214 | | .514 |
| | Age | .664 | .339 | .122 | .051 |
| | Sex | -.465 | .875 | -.035 | .596 |
| | Education MA Dummy | -2.758 | 1.112 | -.195 | .014 |
| | Education BA Dummy | -1.788 | .838 | -.149 | .034 |
| | Years Experience in Current Job | -.156 | .053 | -.183 | .003 |
| | RN/RPN | 1.382 | .773 | .116 | .075 |
| | Bachelor in Commerce | .283 | .930 | .021 | .761 |
| | Salary | .351 | .162 | .133 | .031 |
| 3 | (Constant) | .877 | 3.464 | | .800 |
| | Age | .616 | .343 | .113 | .074 |
| | Sex | -.791 | .883 | -.059 | .371 |
| | Education MA Dummy | -2.606 | 1.120 | -.184 | .021 |
| | Education BA Dummy | -1.812 | .841 | -.151 | .032 |
| | Years Experience in Current Job | -.151 | .053 | -.177 | .005 |
| | RN/RPN | 1.416 | .776 | .119 | .069 |
| | Bachelor in Commerce | .588 | .935 | .043 | .530 |
| | Salary | .371 | .167 | .140 | .027 |
| | Time in (T.I.) Resident Care | .124 | .052 | .148 | .018 |
| | T.I. Personnel Mgmt. | -.096 | .059 | -.099 | .103 |
| | T.I. Financial Mgmt. | .111 | .092 | .073 | .229 |
| | T.I. Physical Resource Mgmt. | -.119 | .132 | -.053 | .368 |
| | T.I. Laws/Regs/ Board | .047 | .112 | .026 | .673 |
| | T.I. Family Relations | .062 | .102 | .036 | .546 |
| | T.I. Fundraising | -.219 | .177 | -.073 | .216 |
| | T.I. Other | .030 | .060 | .030 | .619 |
| 4 | (Constant) | -1.945 | 3.878 | | .616 |
| | Age | .481 | .347 | .088 | .166 |
| | Sex | -.569 | .887 | -.043 | .521 |
| | Education MA Dummy | -2.868 | 1.120 | -.202 | .011 |
| | Education BA Dummy | -1.889 | .836 | -.157 | .025 |
| | Years Experience in Current Job | -.143 | .055 | -.169 | .009 |
| | RN/RPN | 1.282 | .776 | .107 | .100 |
| | Bachelor in Commerce | .789 | .935 | .058 | .399 |
| | Salary | .203 | .176 | .077 | .249 |

| Model | Independent Variables | B | Standard Error | Beta | Signifi-cance |
|---|---|---|---|---|---|
| | Resident Care | .127 | .052 | .151 | .015 |
| | Personnel Mgmt. | -.092 | .059 | -.095 | .119 |
| | Financial Mgmt. | .087 | .093 | .058 | .347 |
| | Physical Resource Mgmt. | -.072 | .133 | -.032 | .587 |
| | Laws/Regs./Board | .040 | .113 | .022 | .721 |
| | Family Relations | .040 | .103 | .023 | .696 |
| | Fundraising | -.239 | .184 | -.079 | .194 |
| | Other | .015 | .060 | .015 | .800 |
| | Chain | -.052 | .350 | -.009 | .882 |
| | Facility Age | .018 | .013 | .083 | .180 |
| | Number of Beds | .010 | .005 | .124 | .070 |
| | Size of Community | .328 | .281 | .076 | .244 |
| | Accreditation | .367 | .818 | .027 | .654 |

a) Dependent Variable: Unmet Standards

# Chapter 6
# Discussion

This exploratory study has attempted to investigate whether a set of administrator and facility characteristics predict quality of care in LTC facilities. Four of the eight hypotheses were supported at the bivariate level of analysis, and four hypotheses were supported in the linear regression analyses. Since different hypotheses were supported for the bivariate and multivariate analyses, these analyses will be discussed separately, but emphasis is placed on the latter. The discussion begins with a summary of the research questions and the main findings. Next, the managerial and policy implications of this research are presented, followed by the limitations of the research, and directions for future research.

## Research Issues and Main Findings

Earlier research has focused on a relatively small number of variables in predicting quality of care in LTC facilities. These variables have tended to be related to facility organization and structure (e.g. ownership, affiliation), facility size, and certain aspects of patient mix. Previous studies thus provided only a limited view of potential determinants of quality in LTC facilities. They do not provide any information on factors associated with the characteristics of the

administrators. Since administrators play a vital leadership role in LTC facilities, it was thought to be important to investigate whether differences in their characteristics predicted quality of care. Eight hypotheses were tested in this study. These hypotheses are guided by Donabedian's (1988) Tripartite Quality Assurance Model that encompasses structure, process and outcome criteria for quality assessment. Structure denotes the attributes of the LTC facility in which care occurs. The attributes indirectly measured in this study included material resources (such as equipment, money, and the facility), human resources (such as the number and qualification of staff), and organizational structure (such as medical staff organization and methods of peer review). These attributes were encompassed in the eighteen sections outlined in the Ontario MOH and LTC program manual (See appendix 2). Peer review was operationalized as the fact that results obtained using the Ontario MOH and LTC quality assurance measure were gathered by compliancy advisors who in the past had been LTC facility registered nurses, directors of nursing and/or administrators of an LTC facility. The facility outputs were measured in sections O (Environmental Services) and M (Facility Organization and Administration) of the Ontario MOH and LTC program manual (See appendix 2). Adequate equipment, money, staff and medical staff was measured by the facility's number of unmet standards, reported in the Ontario MOH and LTC quality assurance measure. Process denotes what is actually done in giving and receiving care (Donabedian, 1988). It includes the residents' activities in seeking care, carrying it out as well as the caregivers' activities in providing care. These attributes were evaluated in all of the eighteen

sections outlined in the Ontario MOH and LTC program manual. Outcome denotes the effects of quality of care in the LTC facility (Donabedian, 1988). To measure outcome, this study examined the number of unmet standards reported in the Ontario MOH and LTC quality assurance measure (See Appendix 4). This study limited those data to information from a questionnaire sent out to each of 602 administrators of LTC facilities registered by the Ontario Ministry of Health and Long-Term Care. These were completed and returned by 302 administrators. The information gained from the Ontario Ministry of Health and LTC Quality Assurance Measure was ideal to assess whether a LTC facility is operating in compliance with the existing legislation, regulations, standards and policies relating to the care and the services that the home operators are required to provide to the residents in respect to the 18 sections in the LTC Program Manual. This method of measuring quality reflects Donabedian's well accepted Tripartite Quality Assurance Model because the Ontario MOH and LTC quality assurance measure reports on his three criterions for quality assessment.

There were two levels of analysis that were conducted in this study: bivariate and ordinary least squares regression (OLS). Bivariate analyses investigate the joint distribution of cases on two or more variables. The Kendall's tau c statistic presented in this study indicates the magnitude of the difference between the dependent and independent variables of interest when these involve ordinal level of measurement in the uneven rows and columns. The level of significance is also presented. Correlations ranging from zero to .20 are weak associations, those between .20 and .40 are moderate, and those over .40 are

moderate to strong. On the other hand, OLS statistics provide a mathematical description of the relationship between variables and allows for inferences to be made about the values of the dependent variable for varied values of the independent variables in the models (Babbie, 1995). The OLS statistics presented in this study include R, R Square, F Change, and the level of significance.

**Bivariate**

The first hypothesis that was supported at the bivariate level was the number of years in their current position as an administrator and the number of unmet standards associated with that facility. The hypothesis stated that administrators with more years as an administrator at one facility would be associated with higher quality. The findings support the hypothesis and are consistent with the previous findings obtained by Al-Assef, Taylor and Langston, (1992), in showing that years of experience as an administrator in a LTC facility is associated with higher quality of care. Other work that looks at similar associations relates to administrator turnover rates (Castle, 2001), where it was found that facilities with longer administrator retention rates tend to operate at higher levels of quality for their residents and staff.

The second hypothesis that was supported at the bivariate level was the relationship between administrators with a background in nursing and the number of unmet standards. The relationship between these variables was weak and in the expected direction. This suggests that administrators with a background in nursing were associated with better quality of care for residents in

their care facility. This finding was similar to Singh (1997). It is not clear, however, whether the nursing education factor relates to actual curriculum covered or whether it is capturing other elements such as philosophies that are embedded in nursing training or a selection effect whereby persons selecting nursing tend to be more compassion.

The third hypothesis that was supported at the bivariate level was the relationship between the number of beds and the number of unmet standards. The hypothesis stated that LTC facilities with a lower number of beds would be associated with higher levels of quality. This was based in part on the literature that suggests that smaller facilities would have better quality (Thomas, 2003 and Thomas and Johansson, 2003). This is because smaller facilities act as communities where staff and residents become more familiar and aware of each other as opposed to larger facilities that are sometimes based on a more detached method of operating. Similar to a small community where it is easier to establish a reputation, it is suggested that smaller facilities build the same rapport with staff and residents (Thomas, 2003).

The fourth hypothesis stated that LTC facilities situated in smaller communities would be associated with fewer unmet standards. This was supported at the bivariate level. A practice that does not support this finding is that in Ontario the majority of larger care facilities are situated in communities with a population of 100,000 and over (Ontario Ministry of Health and Long-Term Care, 2006). The reason larger communities tend to have larger facilities is due to the idea behind 'Smart Growth' (Currant and Tomalty, 2003). 'Smart Growth' is

defined as: "with the right land-use, development and public finance strategies, developers and communities can enhance the quality of life in communities, preserve ecological integrity, and save infrastructure and other costs over the long term" (Currant and Tomalty, 2003). The way that facility size is related to this concept is that larger facilities maximize the efficiency of land use, preserves ecological integrity, and reduce costs and infrastructure. In addition, they allow more people to stay in the proximity to denser areas. One method that can allow facilities in larger communities to stay economically viable would be to transform one large facility into multiple small facilities. Thereafter, future studies could test whether multiple smaller facilities imbedded in one large facility or property can offer higher quality of resident care that meets the 'Smart Growth' philosophy.

No support was found for the hypothesis that affiliated LTC facilities would be positively associated with less unmet standards. There are several possible explanations for this finding. First, affiliated facilities in Ontario can be managed with a systematic type of philosophy. For instance, affiliated facilities can encourage smaller facilities under their umbrella to operate with similar procedures and methods used by their more populated facilities. Second, affiliated facilities often share resources with each other so that quality is balanced throughout each of their facilities, thus making higher quality of care facilities help take on burdens of weaker facilities. Finally, higher administrator turnover rates may occur with affiliated facilities due to promotions or vacancies within the franchise. The three other hypotheses related to education in nursing,

time spent in residential care and salary, were not statistically significant at the bivariate level, but they were statistically significant at the multivariate level.

**Ordinary Least Squares Regression**

In order to further explore the predictors of quality, multivariate analyses was conducted. Four of the eight hypotheses tested at the multivariate level were supported. First, a relationship was found between the administrator's level of education and the number of unmet standards. The relationship between these variables was moderate and in the expected direction after statistically controlling for the other variables. This suggests that the level of education attained by the administrator was associated with better quality of care for residents in their care facility. Next, a weak inverse association was found between Years in Current Position and Unmet Standards. This suggests that administrators who have been employed at their facility for longer periods of time have fewer unmet standards associated with their facility.

The two remaining statistically significant associations were found to be in the opposite direction of the original hypotheses. There was a weak negative association between salary and number of unmet standards, where administrators with smaller salaries administered facilities with fewer unmet standards. This finding is consistent with the previous finding that facilities with fewer beds tend to have a lower number of unmet standards. Another finding that received weak negative support, and which was inconsistent with the original hypothesis, was administrators who spend a greater amount of time in residential care were associated with more unmet needs. One possible explanation is that

administrators of care facilities with a high number of unmet standards may spend more time in residential care in order to fix problems of quality. The hypotheses associated with size of community, number of beds, and affiliation were all found to be not statistically significant at the multivariate level, and therefore did not receive support.

### Summary of Bivariate and OLS Regression Analyses

Altogether five of the eight independent variables examined were found to be positively associated with quality, two had a negative relationship and one was not supported (See table 14).

**Table 14:** Summary of Significant Findings from Bivariate and Multivariate Analyses

| | **Fewer Unmet Standards** |
|---|---|
| **Bivariate** | → More years experience at ones facility<br>→ Nursing background<br>→ Smaller number of beds<br>→ Smaller community |
| **Multivariate** | → More education<br>→ More years experience at ones facility<br>→ Salary less<br>→ Less time spent in resident care |

## Implications of Findings for the LTC Industry

When hiring, boards of directors may find it helpful to compare managerial applicants against the average profile in terms of education, experience and other qualifications. However, administrative profiles do not automatically contribute to the achievement of desired quality. There remains a need to seek individuals with a profile that is associated with the attainment of higher quality of care in LTC facilities. Identification of such a profile should be useful not only

when hiring, but also for training and developing administrators who would be well prepared to respond to new challenges in the changing environment of health care delivery.

Administrative effort appears to be concentrated in the domains of resident care and personnel management. Although the area of resident care requires appropriate administrative attention, extra effort in this domain from the administrator seems to have a negative impact on the delivery of quality of care. This is inconsistent with results based on Singh's (1997) research. Future research is needed to clarify these contradictory findings.

The relationship between length of employment and LTC performance appears to be a clear indicator for quality of care. Management should more precisely determine why LTC facility administrators leave, and implement programs to retain well performing administrators. Such programs should not only be a matter of salary, but more importantly, they should focus on training and building on experience.

Finally, other provinces should adopt a similar model to Ontario's MOH and LTC process of inspecting LTC facilities through compliancy advisors and making the results publicly accessible. This would allow prospective residents and their families the opportunity to evaluate LTC facilities before moving in and it would give researchers easier access to this information. These data would allow researchers to compare findings on quality and LTC across provinces and at the national level, as well.

## Policy Implications

Pursuit of better patient care in LTC facilities through emphasis on hiring an administrator with nursing training is a well guided policy, since general levels of nursing background seem to be related with quality. Some of the relationships seem to suggest that hiring administrators with more education results in better quality of care. These preliminary findings may have implications for institutions of higher education to develop appropriate graduate level programs for aspiring LTC administrators. In addition, it is recommended that these programs collaborate with nursing departments in order to add coursework and training to their curriculum that emphasises on nursing. Finally, the projected accelerated growth of the elderly population in Ontario (and other provinces) would require planning for the delivery and funding of adequate LTC services.

## Limitations of the Study

The study has some limitations. First, it relied on a sample from only one province and only half of the eligible administrators chose to participate in the study. Some of the information on the survey was probably estimated by the respondents. Accuracy of the information reported on the survey was not verified. There were also a small number of missing values in the data set.

Measurement of performance was based on cross-sectional data and used a single measure. Since quality of patient care is dynamic in nature, results based on cross-sectional measurement are likely to have some biases. Also, the study may not have included all major predictors. Since the study was exploratory in nature, it is possible that all confounding factors were not

statistically controlled. Some variables appearing in the model may be spurious, since any study of a phenomenon as broad as quality of care would have inherent limitations on the number of variables that can be studied at one time. Finally, validity of the measure for quality may be questionable, although the results were consistent with other studies. Also, the unmet standards measure capturing quality used in this study is a standardized measure throughout the province and is therefore likely reliable.

## Recommendations for Future Research

Findings in this research are considered preliminary. Instead of providing conclusive answers to previously unanswered questions, these findings point the direction for future research on the leadership role of LTC administrators in the delivery of quality resident care. There is a need to more precisely define and measure quality of care in LTC facilities. Longitudinal measures would provide more robust results. Subsequent research could also examine the types of unmet standards and how they affect quality of care. Future research on LTC administrators should focus on the problem of turnover. It is important to know not only the extent of the phenomenon, but also the reasons why administrators leave. Such findings could help develop retention strategies to maximize organizational stability. Research could continue in finding other factors that may have an influence on the quality of care in LTC facilities. Additional research could also focus on the characteristics of the director of care. Furthermore, future research on LTC administrators should focus on whether spending time in resident care management is associated with fixing problems in quality of care.

Such findings could help develop practices and strategies that improve quality in LTC. Finally, future research in LTC can explore whether it is economically viable for larger facilities to transform one large facility into multiple smaller facilities and whether this change improves on quality of care.

# Chapter 7
# Summary and Conclusion

The objective of this exploratory study was to determine if characteristics of LTC facility administrators affect quality of care in LTC facilities. Specifically, the study examined preparatory skills (e.g. level of education attained, type of training, field of study, previous experience as an administrator of a LTC facility, years in current position and salary), performance related variables (e.g. resident care, personnel management, financial management, marketing/public relations, physical resource management, governance, family relations, fundraising and other) associated with LTC facility administrators, and facility constraints or resource factors (e.g. ownership, size of the facility, facility age, affiliation and size of the community). Eight hypotheses were developed based on literature regarding administrators of LTC facilities and quality of care.

This study can be briefly summarized as follows:

Chapter 1 introduced the importance of research into whether the characteristics of LTC administrators affect on quality of care in LTC facilities. It defined quality of care by using the number of unmet standards reported in the Ontario MOH and LTC quality assurance measure. It described the aging demographics and their affect on LTC. Next, it reviewed the historical

development of care facilities and concluded by describing the administrators role and their impact in their organization.

Chapter 2 reviewed the relevant LTC administrator literature. This review clearly indicated a lack of literature regarding top management in LTC. Specific areas that were reviewed included the characteristics of administrators in terms of training and education, experience, resources, turnover, and quality. Finally, this review introduced and described Donabedian's (1980) Tripartite Quality Assurance Model which encompasses structure, process, and outcome criteria for quality assessment.

Chapter 3 outlined the study's conceptual framework which posited how the administrator and the facility's characteristics could influence the quality of care provided. This chapter also identified the three objectives of the study which included to:

i) Produce a profile of the: a) LTC facility administrators practicing in Ontario; b) LTC facilities in Ontario; and c) Ontario resident mix characteristics.

ii) Evaluate the relationships between administrator characteristics and LTC facility quality.

iii) Evaluate the relationship between LTC characteristics and quality.

Chapter 4 outlined the method of investigation of support for the eight hypotheses in this study. A description of the sample, independent, and dependent variables was provided, as was the strategy for managing missing data.

Chapter 5 presented the descriptive results and the results of bivariate and multivariate analyses. The categories found in the descriptive results include administrator profile; administrator effort in the domains of practice; facility characteristics; and resident mix. The main findings of this study at the bivariate level were 1) more years of experience as an administrator at their current facility was weakly associated with less unmet standards, 2) nursing background was weakly associated with less unmet standards, 3) smaller communities were moderately associated with less unmet standards, 4) smaller number of beds was moderately associated with less unmet standards. The relationship between unmet standards and education, affiliation with other facilities, time spent in resident care, and salary was not statistically significant. Findings at the multivariate level were 1) more education was moderately associated with less unmet standards, 2) more years experience as administrator in their current facility was weakly associated with less unmet standards, 3) lower salary was weakly associated with less unmet standards, 4) less time spent in residential care was weakly associated with less unmet standards. The relationship between unmet standards and number of beds, size of community, affiliation with other facilities, and nursing background were not statistically significant.

Chapter 6 presented the implications of this research with particular emphasis on those for the LTC industry and for policy. In describing the limitations of the research it was recognized that the sample came from one province and barely exceeded a 50 percent response rate of the total population. Some of the information from the survey was probably estimated by the

respondents and accuracy of some of the information could not be ascertained. Furthermore, measurements on performance were based on cross-sectional data which are likely to have some biases and since the study is exploratory in nature, confounding factors were not always controlled for. Moreover, some variables appearing in the model may be artefacts since any study of a phenomenon as broad as quality would have inherent limitations on the number of variables that can be studied at one time. It is hoped that future researchers will take these limitations into consideration when investigating the characteristics administrators have on quality of care in their respected LTC facility.

# Appendices

# Appendix 1: Survey of Care Facility Administrators and Cover Letter

## 1. Demographics

1.1 Year of birth: 19____

1.2 Sex: ☐ Male ☐ Female

## 2. Job Characteristics and Education Attainment

2.1 Education attained: (List degree(s) + type)

| Degree(s) | Type |
|---|---|
| e.g. B.Com | Health Administration |
| | |
| | |
| | |
| | |
| | |
| | |

2.3 Certificates or Diplomas

| | |
|---|---|
| E.g. ONASS | LTC Administrator Certificate |
| | |
| | |
| | |

2.4 Your current position is: ☐ Care facility administrator ☐Other (Specify) _____

2.5 Total years of experience as a care facility administrator _____ years

2.6 Years in present administrative position _____ years

2.7 **Last position(s) over the past 10 years.**

| | |
|---|---|
| E.g. Director of Nursing | Care facility |
| | |
| | |
| | |

2.8 Current compensation (salary plus bonus per year in Canadian Dollar)

☐ <$60,000 ☐ $60,000 - $69,999 ☐ $70,000 - $79,999

☐ $80,000 - $89,999 ☐ $90,000 - $99,999 ☐ **$100,000 +**

## 3. Administrative Effort

3.1 On average how much time do you spend per week in the following activities in your facility?

| Activities | Number of hours |
|---|---|
| Resident care | |

Examples of resident care includes: consultations with the Medical Director, Director of Nursing, rounds throughout the facility to talk to the patients and staff while observing for cleanliness and grooming of residents, presence of odours, patient privacy and dignity, infection control practices, staff's responsiveness to patients' call for assistance, etc.

| | |
|---|---|
| Personnel management/Human Resources | |
| Financial management | |
| Marketing/public relations | |
| Physical-resource management (Purchasing, inventory, equipment) | |
| Laws, regulatory codes and governing boards | |
| Family relations | |
| Fundraising | |
| Other (Please Specify) | |

## 4. Facility Characteristics

4.1 How long has the facility been in operation _____ years?

4.2 Primary Sponsorship/ownership (Check one):

Public ☐ Private for-profit ☐ Private not-for-profit ☐ Charitable ☐ Other ☐

4.3 Is this facility part of a chain or another organization?

If yes, specify: _____

4.4 Size of community: (Check one)

☐ <2,499 ☐ 2,500-9,999 ☐ 10,000-44,999

☐ 45,000 – 99,999 ☐ 100,000+ ☐ Indian Reserve

## 5. Resident Mix

5.1 Age: Under 65 _____% 65-74 _____ % 75-84_____% 85+_____% (Total = 100%)

5.2 Sex: Female _____% Male _____% (Total = 100%)

5.3 Resident Case Mix Index: A_____% B_____% C_____%

D_____% E_____% F/G_____% (Total = 100%)

SIMON FRASER
UNIVERSITY
AT HARBOUR CENTRE

**Department of Gerontology**
**Gerontology Research Centre**
515 West Hastings Street, Suite #2800
Vancouver, British Columbia
Canada V6B 5K3

June 14, 2006

Name and address of the
Administrator and their
long term care facility

Dear Name of administrator reported in Ontario Ministry of Health and Long Term Care facility list:

I am inviting you to participate in a research project to study characteristics of administrators and their affect on quality of care in long-term care facilities. Along with this letter is a short questionnaire that asks a variety of questions about your preparatory skills (e.g. level of education attained) and performance related variables (e.g. personnel management) associated with long-term care facility administrators. I am asking you to look over the questionnaire and, if you choose to do so, complete it and send it back to me in the pre-paid return postage envelope provided in this package. It should take you about 10 minutes to complete.

The results of this project will be for my Masters in Arts Thesis Project. Through your participation I hope to understand if key characteristics of long-term care (LTC) facility administrators affect quality of care in LTC facilities. I hope that the results of the survey will be useful to administrators of LTC facilities, researchers, practitioners, educators, policy makers and I hope to share my results by publishing them in a scientific journal and presenting them as paper presentations at national and international conferences. You can obtain these results by e-mailing skeays@sfu.ca.

The study design consists of exploratory research using two data sources: 1) a survey that will be mailed out to administrators of each of the 624 LTC facilities that receive funding from the Ontario Ministry of Health and LTC (MOHLTC); and 2) publicly accessible data from the quality assurance measure that is used by the Ontario MOHLTC to measure quality in the LTC facilities that they fund, which can be found at: http://publicreporting.ltchomes.net/english/index.htm.

The data will be collected anonymously with each questionnaire being coded and confidentiality will be protected in a password secure electronic document. I promise not to share any information that identifies you or your facility with anyone outside my research group. You should not put your name on the questionnaire or provide a return address on the envelope to guarantee that your submission is kept completely confidential.

Your decision to complete and return this questionnaire will be interpreted as an indication of your agreement to participate. In no way does this waive your legal rights nor release the investigators, or involved institutions from their legal and professional responsibilities. Participation in this study is voluntary and you are free to withdraw from the study at any time.

If you have any questions or concerns about completing the questionnaire or about being in this study, you may contact me at 778-371-9520 or at skeays@sfu.ca. This project has been approved by the Office of the Research Ethics at Simon Fraser University, Burnaby, British Columbia. Any concerns or complaints can be addressed by contacting the Chair of the Department of Gerontology, Dr. Andrew Wister at wister@sfu.ca.

Thank you for considering this request. I look forward to hearing from you in the near future.

Yours Sincerely,

Sean Keays
MA Candidate, President, Canadian Association on Gerontology Student Connection – Connexion Étudiante and Chair, Gerontology Graduate Caucus Simon Fraser University

## Appendix 2: 18 Sections in the Long-Term Care Program Manual

**A) Resident Safeguards** refer to the promotion and support of the residents' rights, autonomy and decision-making, including proper use of physical restraints and the establishment of Residents' Councils. The section includes requirements related to the admission agreement, information related to the accommodation, care, services, programs, and goods that will be provided to the resident. It also outlines the obligation of the resident with respect to their responsibilities to pay for services rendered and their option of purchasing other services that may be available to them in the home. This section contains 2 standards and 46 supporting criteria.

**B) Resident Care and Services** refer to the assessment, planning, implementing, monitoring, evaluating and documentation of each resident's needs for care and services. This section contains 5 broad standards and 76 supporting criteria.

**C) Nursing Services** refer to those required to support the provision of nursing and personal care to all residents of the home consistent with professional standards of nursing practice. This section has 1 standard and 20 supporting criterion.

**D) Staff Education** refers to education for all employees, including new, existing and agency staff. This includes the orientation for new staff, including agency staff, where appropriate, and the ongoing education of staff in accordance with their learning needs. This section has 2 standards and 16 supporting criteria.

**E) Recreation and Leisure Services** refer to the provision of age-appropriate activities and programs that are based on and are responsive to the respective abilities of individual residents, their respective strengths, needs, interest and their former lifestyle. This section has 1 standard and 12 supporting criterion.

**F) Social Work Services** refer to those that should be provided either as an organized program or be made accessible in an effort to meet the residents' psychosocial needs. This section has 1 standard and 1 supporting criterion.

**G) Spiritual and Religious Programs** refer to programs that are required to respond to the spiritual and religious needs and interests of the residents. This section has 1 standard and 6 supporting criterion.

**H) Therapy Services** refer to those that may be provided by qualified therapists employed by the home or by therapy services accessed through contractual arrangements. This section has 1 standard and 9 supporting criterion.

**I) Volunteer Services** refer to those programs provided by people on a volunteer basis in support of the residents and the home. This section has 1 standard and 5 supporting criterion.

**J) Dental Services** are those that should be coordinated and provided within the home, or for which arrangements should be made outside the home, in a manner as to meet the dental care needs of residents. This section has 1 standard and 4 supporting criterion.

**K) Foot Care Services** refer to those that should be coordinated within the home or by arrangements made to access foot care services to meet residents' foot care needs. In other words, a qualified staff may provide these services to residents and/or external foot care providers may do so through contractual arrangements with the home operator. This section has 1 standard and 6 criterion.

**L) Other Approved Programs** are those that the home may organize to respond to other residents' needs and/or preferences. This section has 1 standard and 3 supporting criterion.

**M) Facility Organization and Administration** refers to the organization of the home as a whole and each of its programs and services. This section includes Quality and Risk Management programs, and the provision of an organized system for records, including collection, access, storage, retention and destruction of health records. The section contains 4 broad standards and 56 supporting criteria.

**N) Medical Services** refer to those provided to meet residents' medical needs and are consistent with the professional standards of medical practice. This section has 1 standard and 17 supporting criterion.

**O) Environmental Services** refer to those that provide a safe, comfortable, clean and well-maintained environment for residents, staff and visitors. This section contains 4 standards and 82 supporting criteria. This section includes general management of waste, pests, water, and temperatures (air and water); and the management of the maintenance, housekeeping and laundry services within the home.

**P) Dietary Services** refer to those that are organized to provide nutritious, safe and acceptable food to residents. This section has 1 standard and 38 supporting criterion.

**Q) Diagnostic Services** refer to those that are to be arranged to meet the residents' needs as ordered by the residents' physicians. This section has 1 standard and 1 supporting criterion.

**R) Pharmacy Services** refer to those that are organized to meet the residents' needs. This section includes the pharmacy service, pharmacy review process, prescription ordering and transcribing of physicians' orders, dispensing of medications by the pharmacy, drug records, drug storage, drug disposal and reporting of medication errors and/or adverse drug reactions. This section has 8 standards and 28 supporting criteria.

## Appendix 3: Long-Term Care Facility Program Manual

| Criteria | Criteria Description |
|---|---|
| A1 | THERE SHALL BE MECHANISMS IN PLACE TO PROMOTE AND SUPPORT RESIDENTS' RIGHTS, AUTONOMY, AND DECISION-MAKING. |
| A1.1 | Residents/representatives shall be encouraged and supported to participate in the planning and evaluation of programs and services |
| A1.2 | Residents/representatives shall be informed of opportunities to participate in their own interdisciplinary care conferences. |
| A1.3 | Residents and/or their representatives shall be encouraged to participate in the assessment, planning, provision and evaluation of the resident's care. |
| A1.4 | Residents shall have access to and an explanation of their plan of care and shall receive assistance, where necessary, to read and understand the record. |
| A1.5 | With the consent of the resident, the resident's representative shall have access to, and an explanation of the resident's plan of care and shall receive assistance to read and understand the record. |
| A1.6 | Residents shall be informed of advocacy/support agencies, available to them, which can assist them in promoting their rights. |
| A1.7 | Residents shall be assisted in accessing advocacy/support agencies according to their requests. |
| A1.8 | The residents' Bill of Rights shall be posted in large print in both English and French, in locations in the facility easily accessible to residents/representatives. |
| A1.9 | Residents and their representatives shall receive a copy of the Bill of Rights on admission. French-speaking residents shall receive a copy in the French language if they request it. |
| A1.10 | The facility shall have policies for the following:<br>• promotion of residents' rights;<br>• what constitutes resident abuse;<br>• how to prevent abuse;<br>• actions to be taken in all instances of alleged abuse, including notification of the family/ representative, police and Ministry staff;<br>• for those instances where abuse has been confirmed, resources available to assist the abused resident and the person responsible for the abuse. |

| | Criteria Description |
|---|---|
| | Residents' rights which shall be fully respected and promoted include, but are not limited to the following rights contained in the Long-Term Care Statute Law Amendment Act, 1993 (Bill 101): |

| | |
|---|---|
| A1.11(1) | Every resident has the right to be treated with courtesy and respect and in a way that fully recognizes the resident's dignity and individuality and to be free from mental and physical abuse. |
| A1.11(2) | Every resident has the right to be properly sheltered, fed, clothed, groomed and cared for in a manner consistent with his or her needs. |
| A1.11(3) | Every resident has the right to be told who is responsible for and who is providing the resident's direct care. |
| A1.11(4) | Every resident has the right to be afforded privacy in treatment and in caring for his or her personal needs. |
| A1.11(5) | Every resident has the right to keep in his or her room and display personal possessions, pictures and furnishings in keeping with safety requirements and other residents' rights. |
| A1.11(6) | Every resident has the right, i. to be informed of his or her medical condition, treatment and proposed course of treatment; ii. to give or refuse consent to treatment, including medication, in accordance with the law and to be informed of the consequences of giving or refusing consent; iii. to have the opportunity to participate fully in making any decision and obtaining an independent medical opinion concerning any aspect of his or her care, including any decision concerning his or her admission, discharge or transfer to or from a home; and iv. to have his or her medical records kept confidential in accordance with the law. |
| A1.11(7) | Every resident has the right to receive reactivation and assistance towards independence consistent with his or her requirements |
| A1.11(8) | Every resident who is being considered for restraints has the right to be fully informed about the procedures and the consequences of receiving or refusing them. |
| A1.11(9) | Every resident has the right to communicate in confidence, to receive visitors of his or her choice and to consult in private with any person without interference. |
| A1.11(10) | Every resident whose death is likely to be imminent has the right to have members of the resident's family present twenty-four hours per day. |
| A1.11(11) | Every resident has the right to designate a person to receive information concerning any transfer or emergency hospitalization of the resident and where a person is so designated to have that person so informed forthwith. |

| Criteria | Criteria Description | |
|---|---|---|
| | A1.11(12) | Every resident has the right to exercise the rights of a citizen and to raise concerns or recommend changes in policies and services on behalf of himself or herself or others to the residents' council, home staff, government officials or any other person inside or outside the home, without fear of restraint, interference, coercion, discrimination or reprisal. |
| | A1.11(13) | Every resident has the right to form friendships, to enjoy relationships and to participate in the residents' council |
| | A1.11(14) | Every resident has the right to meet privately with his or her spouse in a room that assures privacy and where both spouses are residents in the same home, they have a right to share a room according to their wishes, if an appropriate room is available. |
| | A1.11(15) | Every resident has a right to pursue social, cultural, religious and other interests, to develop his or her potential and to be given reasonable provisions by the home to accommodate these pursuits. |
| | A1.11(16) | Every resident has the right to be informed in writing of any law, rule or policy affecting the operation of the home and of the procedures for initiating complaints |
| | A1.11(17) | Every resident has the right to manage his or her own financial affairs where the resident is able to do so, and where the resident's financial affairs are managed by the home, to receive a quarterly accounting of any transactions undertaken on his or her behalf and to be assured that the resident's property is managed solely on the resident's behalf. |
| | A1.11(18) | Every resident has the right to live in a safe and clean environment. |
| | A1.11(19) | Every resident has the right to be given access to protected areas outside the home in order to enjoy outdoor activity, unless the physical setting makes this impossible |
| A1.12 | A resident shall not be restrained unless there is an identified risk of injury to him or others. Other alternatives have been considered and have been found to b ineffective. | |
| A1.13 | The decision to continue the use of a restraint as well as the type of restraint shall be re-evaluated prior to each application on an ongoing basis. | |
| A1.14 | A physical restraint may be applied to a resident on the direction of a RN where there is an immediate risk of injury to him or others. The rationale for the use of the restraint shall be documented. A physician's verbal order shall be obtained within 12 hrs of the restraint application and documented, and the resident's care plan shall be revised. | |
| A1.15 | The use of a physical restraint may be continued only on the written order of a physician who is attending the resident. The type of restraint, and orders for application shall be documented on the resident's record and reviewed at least quarterly following the interdisciplinary team conference. | |

| Criteria | Criteria Description |
|---|---|
| A1.16 | Where it is considered necessary to restrain a resident, the least restrictive measures shall always be used. |
| A1.17 | A restraint in use shall be applied to a resident according to manufacturers' specifications and facility policy. |
| A1.18 | Restraint use shall be documented for the period it is in use. At a minimum, there shall be a record of the time of application and removal as well as the resident's response |
| A1.19 | Minimum interventions for physically restrained residents shall include but not be limited to, hourly checks to monitor the resident's safety, comfort and position of the restraint and the release of the restraint and repositioning every two hours when the resident is awake.(See B3.40, B3.41, B3.44). |
| A1.20 | When a restrained resident is sleeping, minimum interventions shall include but not be limited to hourly checks to monitor the resident's safety, comfort, and the position of the restraint. (See B3.40, B3.41, B3.44). |
| A1.21 | Residents shall be given the opportunity and support to establish and maintain an organized residents' council. |
| A1.22 | Family members or other individuals from the community may attend residents' council meetings by invitation of the residents' council. |
| A1.23 | Suggestions and complaints from the residents' council shall be documented, investigated and responded to in writing by the administrator of the facility within 21 days. |
| A1.24 | Residents shall be informed of the results of residents' council meetings along with feedback from the administrator, (e.g., by posting of the minutes in a location easily accessible to residents and their representatives, with residents' council consent). |
| A1.25 | Where residents do not choose to have or are unable to participate in such a council, the facility shall call an annual general meeting for residents and their representatives, to which members of the community are invited to attend. The purpose of the meeting is to provide an opportunity for residents/families/representatives to express suggestions or concerns and for the facility to report to the residents regarding the status of services in the facility. |
| B1. | EACH RESIDENT'S NEEDS FOR CARE AND SERVICES SHALL BE DETERMINED WITH THE RESIDENT/REPRESENTATIVE THROUGH AN INTERDISCIPLINARY ASSESSMENT PROCESS. |
| B1.1 | Each resident/representative shall be encouraged and supported to participate in the resident's assessment process. |
| B1.2 | The assessment process shall include determining the resident's preferences, strengths, social and personal resources, interests, health status, needs, extent of independent functioning, type and amount of support required, and decisions regarding the type of care and/or interventions, including advance directives or substitute decisions. |

| Criteria | Criteria Description |
|---|---|
| B1.3 | Building on previous information, medical and nursing assessments shall be completed within 7 days of admission. |
| B1.4 | Assessments by the other members of the facility's interdisciplinary care team shall be completed within 21 days of each resident's admission. |
| B1.5 | The interdisciplinary team shall assess each resident's need for referral to physicians with specialist knowledge or other external consultants. |
| B1.6 | Each resident's care and service needs shall be reassessed at least quarterly and whenever there is a change in the resident's health status, needs or abilities.(See B2.6). |
| B2 | EACH RESIDENT'S CARE AND SERVICES SHALL BE PLANNED WITH THE RESIDENT/REPRESENTATIVE THROUGH AN INTERDISCIPLINARY PLANNING PROCESS |
| B2.1 | A written plan of care shall be initiated for each new resident within 24 hours of admission. |
| B2.2 | The initial plan of care shall provide sufficient information to assist staff to give safe care, including but not limited to: safety/security risks:<br>· the extent of independence in activities of daily living and type of assistance needed<br>· medication, treatment and diet orders. |
| B2.3 | An organized, documented interdisciplinary team conference shall be held with the resident/ representative, if they are able and wish to attend, within six weeks following admission, to review and further develop the written plan of care |
| B2.4 | Each resident's plan of care shall reflect his/her current strengths, abilities, preferences, needs, goals, safety/security risks, and decisions including advance directives provided by the resident or any substitute decisions provided by the lawfully authorized person. The plan of care shall give clear directions to staff providing care. |
| B2.5 | Each resident's plan of care shall be accessible to the members of the health care team who provide care and services to residents. Pertinent information, including changes in the resident's condition, shall be communicated to staff providing care. |
| B2.6 | Each resident's plan of care shall be reviewed and where necessary revised, at least quarterly, by the physician, nursing staff, the dietician or food service supervisor, and other care team members as appropriate. |
| B2.7 | An organized, documented interdisciplinary care team conference shall be held annually with the resident/representative, if they are able and wish to attend, to reassess the resident's care and service needs, and to review and revise the plan of care. |

| Criteria | Criteria Description |
|---|---|
| B3. | EACH RESIDENT SHALL RECEIVE CARE AND SERVICES CONSISTENT WITH HIS/HER PLAN OF CARE AND WITH RESIDENTS' RIGHTS OUTLINED IN THE BILL OF RIGHTS. |
| B3.1 | Each resident shall be encouraged to have his/her room reflect his/her personal style, cultural context and preferences with pictures, possessions and furnishings (in keeping with safety requirements and other residents' rights) |
| B3.2 | Each resident's responses to situations and life events shall be recognized and community resources contacted as required. |
| B3.3 | Each resident shall be assisted in arranging for available counselling and bereavement support, according to his/her needs and preferences. |
| B3.4 | Each resident shall be supported and assisted in maintaining his/her desired involvement with family, friends and others in the community. |
| B3.5 | Each resident shall be supported in maintaining his/her desired cultural observances, practices and affiliations and in maintaining desired links with his/her cultural community. |
| B3.6 | Available resources shall be accessed, if required, to assist non-English-speaking residents to communicate with others and to assist staff to communicate with these residents. |
| B3.7 | Opportunities shall be provided for each resident to plan, initiate, facilitate and participate in his/her own leisure, entertainment, recreational and educational opportunities, as desired by the resident. |
| B3.8 | Support/assistance shall be provided as needed to assist each resident to prepare for and attend recreation and leisure activities of his/her choice. |
| B3.9 | Each resident shall be supported and assisted in maintaining his/her preferred spiritual and religious observances, practices and affiliations. |
| B3.10 | Each resident shall have access to/be assisted in arranging for available spiritual and religious resources, according to his/her needs and preferences. |
| B3.11 | Support/assistance shall be provided as needed to assist each resident to prepare for and attend spiritual and religious activities of his/her choice. |
| B3.12 | Each resident's physical environment and care programming shall promote his/her orientation to time, place, person and event |
| B3.13 | Each resident shall have opportunities and assistance to participate in programs which are appropriate to his/her cognitive status, interests and preferences, both within the facility and in the community. |
| B3.14 | Opportunities shall be provided for each resident to access resources such as newspapers, books, radios, and television. |
| B3.15 | Information and assistance shall be provided to assist each resident to participate in learning opportunities of their choice, both within the facility and in the community. |

| Criteria | Criteria Description |
|---|---|
| B3.16 | Each resident's environment shall be maintained to minimize safety and security risks. Action shall be taken to protect each resident from identified potentially hazardous substances, conditions and equipment. |
| B3.17 | Risks to each resident's health and safety shall be identified and addressed in ways that consider his/her choice, freedom of movement, dignity and respect, in keeping with other residents' rights. |
| B3.18 | Each resident shall be offered support and assistance to enable him/her to communicate and to be as independent as possible |
| B3.19 | Referrals shall be made as required for assessments of each resident's sensory function and communication, as authorized by the resident/representative. |
| B3.20 | Arrangements shall be made for acquiring mechanical aids to enhance sensory function and communication, when payment is authorized by the resident/ representative |
| B3.21 | Each resident's sensory and communication aids, e.g. eye glasses and hearing aids, shall be cared for, cleaned, and accessible to him/her. |
| B3.22 | Arrangements shall be made for repair of sensory and communication aids when payment is authorized by the resident/representative. |
| B3.23 | Each resident shall receive nutritional care according to his/her assessed needs and measures shall be taken to identify and address problems related to nutrition |
| B3.24 | Each resident's height shall be recorded on admission and his/her weight shall be measured and recorded on admission and subsequently at least monthly. Changes in weight shall be evaluated and action shall be taken as required. |
| B3.25 | The food and fluid intake of each resident who is identified at nutritional risk shall be monitored and steps shall be taken to address problems. |
| B3.26 | Each resident with needs for assistance shall be professionally assessed and shall be provided with special utensils/assistive devices as required. |
| B3.27 | Each resident shall be offered desired portions of safe, palatable, nutritious, appealing food and fluids in sufficient quantity to meet his/her nutritional needs. |
| B3.28 | Each resident shall have opportunities to select his/her choice of food at meals from available menus. |
| B3.29 | Each resident shall be provided sufficient fluids to maintain proper hydration |
| B3.30 | Food and beverages shall be given to each resident at a temperature and in a manner that promotes comfort and safety. |
| B3.31 | Sufficient time shall be given to allow each resident to eat at his/her own pace. |

| Criteria | Criteria Description |
|---|---|
| B3.32 | Each resident shall receive encouragement, supervision and assistance with food and fluid intake to promote his/her safety, comfort and independence in eating. |
| B3.33 | Each resident who requires assistance or supervision with meals shall be positioned to allow appropriate socialization and proper feeding techniques. |
| B3.34 | Texture-modified foods served shall not be stirred together, unless requested by the resident. |
| B3.35 | Individualized oral care shall be provided to maintain tissue integrity and to observe for problems |
| B3.36 | Each resident's mouth, teeth and/or dentures shall be cleaned twice daily or more frequently as required, with assistance provided according to the resident's ability to manage his/her own care |
| B3.37 | Each resident's dentures shall be labelled, cleaned and accessible to the resident. |
| B3.38 | Each resident shall receive nail care to promote and maintain skin integrity and to promote comfort and mobility. |
| B3.39 | Residents' routine personal care and bathing by nursing staff, under the supervision of a registered nurse or registered practical nurse, shall include inspection of the feet and trimming of the nails (with the exception of residents who require special attention, such as those with diabetes, peripheral vascular disease).Any changes or concerns observed shall be reported.(See K1.3, 1.4, 1.5). |
| B3.40 | Each resident shall receive skin care to relieve pressure, promote and maintain skin integrity and to promote comfort and mobility. Residents who are unable to reposition themselves (including any resident who is restrained) shall be repositioned at least every two hours.(See A1.19, A1.20) |
| B3.41 | Each resident who has altered skin integrity shall receive skin care measures to promote healing, minimize discomfort and prevent deterioration. |
| B3.42 | Skin care supplies and devices shall be available as required to relieve pressure and promote healing. |
| B3.43 | The treatment protocol/plan is consistently carried out as ordered by the physician/nurse |
| B3.44 | Each resident's physical environment, positioning, health treatment and care routines shall promote his/her comfort, rest and sleep. Disruptions to each resident's sleep shall be minimized. (See A1.19. A1.20, B3.40, B3.41) |
| B3.45 | Each resident who experiences pain/discomfort shall receive care to manage the pain/discomfort |
| B3.46 | Each resident's individual desired bedtime routines shall be encouraged and promoted, in keeping with other residents' rights |

| Criteria | Criteria Description |
|---|---|
| B3.47 | An adequate supply of positioning aids is readily available to meet the comfort needs of residents. |
| B3.48 | Measures shall be taken to promote each resident's normal bowel and bladder function. |
| B3.49 | Steps shall be taken to identify where possible and address factors which may impede each resident's continence. |
| B3.50 | Each resident who is incontinent shall have an individualized program of continence care. |
| B3.51 | Continence care products that meet residents' needs for comfort and dignity shall be available at no charge to each resident requiring them. |
| B3.52 | Each resident's hygiene and grooming care shall meet his/her needs and shall consider his/her preferences whenever possible. |
| B3.53 | Each resident shall receive supervision/assistance and services which promote independence, maintain or improve function in activities of daily living, according to his/her assessed abilities, wishes and preferences |
| B3.54 | Each resident shall receive supervision/assistance and services which promote mobility (i.e. transfers, ambulation, endurance), according to his/her assessed abilities, wishes and preferences |
| B3.55 | Each resident's environment shall promote independence in activities of daily living |
| B3.56 | Each resident shall be instructed in the use of his/her assistive devices, and shall be supported in using them. |
| B4 | THERE SHALL BE ONGOING MONITORING AND EVALUATION OF EACH RESIDENT'S CARE, SERVICES, AND CARE OUTCOMES. |
| B4.1 | Changes in each resident's condition, as well as any other significant information, shall be promptly reported to the staff member in charge of the resident's care. |
| B4.2 | Each resident/representative shall be encouraged and supported to participate in the evaluation of the resident's plan of care and outcomes of care and services. |
| B4.3 | Each resident's care and services shall be modified in response to the resident's changing needs, wishes and preferences. |
| B5 | ALL SIGNIFICANT INFORMATION ABOUT EACH RESIDENT SHALL BE DOCUMENTED IN HIS/HER RECORD. |
| B5.1 | Documentation in each resident's health record shall include the identification of his/her needs and wishes for care and services and the plan of care to address the identified needs. |
| B5.2 | The care and services provided to each resident shall be documented in the resident's record according to facility policies and procedures. |

| Criteria | Criteria Description |
|---|---|
| B5.3 | The evaluation of care and services and care outcomes shall be documented in each resident's health record. |
| B5.4 | All documentation in the resident's health record shall be: · current<br>· complete<br>· accurate<br>· legible<br>· written by the person who made the observation or who provided or supervised the care or treatment<br>· written as close to the time of the event as possible<br>· written in chronological order<br>· permanently recorded<br>· identified by the date, time, signature and status of the person documenting the entry. |
| C1. | THERE SHALL BE AN ORGANIZED PROGRAM OF NURSING SERVICES TO MEET RESIDENTS' NURSING AND PERSONAL CARE NEEDS, CONSISTENT WITH THE PROFESSIONAL STANDARDS OF PRACTICE OF THE COLLEGE OF NURSES OF ONTARIO |
| C1.1 | There shall be a director of nursing responsible for managing nursing services |
| C1.2 | Qualifications of new directors of nursing shall include: A General Registered Nurse with a current certificate of competence with the College of Nurses of Ontario, and Post-R.N. education in gerontology or 3 years relevant experience in working with persons in long-term care, (including diploma or certificate courses such as those offered at community colleges), and Post-R.N. education in management or a minimum of 3 years relevant experience in management. |
| C1.3 | All Registered Nurses and Registered Practical Nurses who provide care to residents in the facility shall have a current certificate of competence with the College of Nurses of Ontario. |
| C1.4 | Registered Practical Nurses who are on staff and are currently responsible for the administration of medications to residents, and who have previously been approved by the Ministry (applies to Homes for the Aged), or who have had administrative approval by the facility (applies to Nursing Homes only) may continue to administer medications All new Registered Practical Nursing staff who will be administering medications to residents shall have completed the following: A Registered Nursing Assistant/Registered Practical Nurse program which contains a Medication Administration course as part of the core program.(Note: This is available in community colleges in Ontario);or A Registered Nursing Assistant/Registered Practical Nurse Medication Administration Certificate program provided in Ontario since 1985;or A Medication Administration Certificate course provided out of province and which has been evaluated by the facility's Director of Nursing to determine if the content is equivalent to the course content offered in the Ontario Community College Registered Nursing Assistant/Registered Practical Nurse Medication Administration Certificate program. |

| Criteria | Criteria Description |
|---|---|
| C1.5 | The director of nursing shall work the required number of hours per week in the capacity of director of nursing. Required minimum director of nursing hours dedicated to the direction of nursing services are: · Fewer than 20 beds: 4on-site hours/week<br>· 20-29 beds:8on-site hours/week<br>· 30-39 beds:16 on-site hours/week<br>· 40-65 beds:24 on-site hours/week<br>· 66-80 beds:32 on-site hours/week<br>· More than 80 beds: 40 hours or the facility maximum full-time hours. |
| C1.6 | There shall be a registered nurse on duty at all times in addition to the director of nursing. |
| C1.7 | Where a registered nurse is not on duty, there shall be a registered nurse on call at all times, who is a regular member of the nursing staff. |
| C1.8 | The allocated funding shall be used to provide numbers and levels of nursing staff to provide the treatments and personal care required by the residents. |
| C1.9 | The 24-hour staffing pattern on each unit shall be consistent with the care and safety needs of residents, with adjustments made as required. |
| C1.10 | Staff assignments for resident care shall be in place and regularly reviewed. |
| C1.11 | Time schedules shall be maintained which indicate the names of nursing staff and hours worked each day. |
| C1.12 | Assignment of unit clerks shall be dedicated to nursing services, with specified hours on resident care units for unit-related duties. |
| C1.13 | Self-administration of medications by residents shall be permitted when specifically ordered by the physician in consultation with the care team. |
| C1.14 | Medications, prescription and approved non-prescription drugs and biologicals may be administered to residents only by physicians, dentists, registered nurses and registered practical nurses (who meet the requirements of C1.5), according to their respective standards of practice. |
| C1.15 | Medications shall be administered only from properly labelled containers. |
| C1.16 | Residents shall be correctly identified prior to receiving medications and treatments. |
| C1.17 | Each resident shall receive medication and treatment as ordered by the physician, unless the resident refuses. |
| C1.18 | For every medication administered, there shall be a record which includes date, time, dose and route where applicable, signed by the person who gave the medication. |
| C1.19 | Each resident's response to medications and treatments shall be monitored and evaluated and changes shall be made as required. |
| C1.20 | Each resident's response to PRN medications and treatments shall be monitored, evaluated and documented. |

| Criteria | Criteria Description |
|---|---|
| D.1. | THERE SHALL BE AN ORGANIZED ORIENTATION PROGRAM THAT RESPONDS TO THE LEARNING NEEDS OF NEW STAFF. |
| D.1.1 | All new staff, including part-time staff, shall attend an organized, facility-wide general orientation program that responds to the learning needs of new staff. |
| D.1.2 | All new staff, including part-time staff, shall attend a department-specific orientation program, which addresses the responsibilities of their position. |
| D.1.3 | Agency staff shall receive task-specific orientation in order to provide safe care to the residents |
| D.1.4 | Staff shall have opportunities to evaluate the content and process of the orientation program. |
| D.1.5 | Orientation programs shall be reviewed and revised annually or more frequently in order to reflect the changing needs of the resident population and the learning needs of new staff. |
| D1.6 | There shall be a system in place for those providing general orientation and department specific orientation to document the information they have provided to each new employee. Each employee shall acknowledge by signature the information they have received |
| D1.7 | There shall be a system in place to document the attendance of staff at all in-service programs |
| D2. | THERE SHALL BE AN ORGANIZED INSERVICE EDUCATION PROGRAM THAT RESPONDS TO THE ASSESSED LEARNING NEEDS OF STAFF |
| D2.1 | The in-service education program shall take into account those factors which the residents indicate are important to their quality of life and which affect their care. |
| D2.2 | All in-service education programs shall be planned, designed and the evaluation method determined by the staff member coordinating staff development, in collaboration with department managers. |
| D2.3 | Staff on all shifts shall have access to in-service education opportunities. |
| D2.4 | Staff shall have opportunities to evaluate the content, delivery and effectiveness of in-service sessions, which they attend. |
| D2.5 | The in-service education program shall be evaluated annually to determine if learning objectives are met and staff develop skills and increase knowledge to meet residents' needs. |
| D2.6 | There shall be a minimum of ten in-service education programs delivered annually which are based on the assessed learning needs of staff. |

| Criteria | Criteria Description |
|---|---|
| D2.7 | In addition to other legislated requirements, in-service education programs designed to improve the quality of care and services shall be provided for all staff annually, including but not limited to: · Quality of life issues for residents<br>· Infection control practices<br>· Understanding residents with cognitive impairment and responding to disruptive behaviour<br>· Facility and resident emergency procedures. |
| D2.8 | There shall be a staff member responsible for coordinating orientation and ongoing in-service education for facility staff. |
| D2.9 | The person responsible for coordinating staff orientation and in-service education shall be qualified by education and experience for the responsibilities of the position. |
| E1 | THERE SHALL BE RECREATION AND LEISURE SERVICES ORGANIZED TO PROVIDE AGE-APPROPRIATE RECREATION, LEISURE, AND EDUCATION OPPORTUNITIES BASED ON AND RESPONSIVE TO THE ABILITIES, STRENGTHS, NEEDS, INTERESTS AND FORMER LIFESTYLE OF THE RESIDENTS. |
| E1.1 | The variety and scope of recreational programming shall be planned with residents/representatives. |
| E1.2 | Each recreation and leisure program shall be clearly defined by a program description, which outlines the purpose, goals and objectives of the program. |
| E1.3 | Information about recreation programs and services shall be readily available to residents, their representatives and others who are interested. |
| E1.4 | Assistance or adaptations shall be provided to facilitate residents' participation in activities they wish to attend. |
| E1.5 | Small group programs and individualized activities shall be provided for those residents who are not interested or are not able to participate in larger groups. |
| E1.6 | Residents shall be provided opportunities and assistance to participate in social and community programs, which are compatible with their interests and abilities, both within the facility and in the community. |
| E1.7 | Activities shall be offered during evenings and weekends. |
| E1.8 | Activities and trips shall be provided outside the facility. |
| E1.9 | There shall be a staff member responsible for managing recreation and leisure services |
| E1.10 | The person responsible for managing recreation and leisure services shall be qualified by education and experience for the responsibilities of the position |
| E1.11 | The staff who provide recreation and leisure programs shall be qualified by education and/or experience for the responsibilities of their position. |

| Criteria | Criteria Description |
|---|---|
| E1.12 | Staffing requirements to provide activities for recreation/restorative care programs shall be: a minimum of 40 hours (or the facility maximum full-time hours) for each 60 residents. |
| F1. | THERE SHALL BE AN ORGANIZED PROGRAM OF SOCIAL WORK SERVICES, OR ARRANGEMENTS ARE MADE TO ACCESS AVAILABLE SOCIAL WORK SERVICES TO MEET RESIDENTS' PSYCHOSOCIAL NEEDS. |
| F1.1 | There shall be a staff member responsible for coordinating social work services. |
| G1. | THERE SHALL BE AN ORGANIZED SPIRITUAL AND RELIGIOUS CARE PROGRAM TO RESPOND TO THE SPIRITUAL AND RELIGIOUS NEEDS AND INTERESTS OF THE RESIDENTS |
| G1.1 | Residents' preferred spiritual and/or religious observances, practices, and affiliations shall be supported, while respecting the rights of others. |
| G1.2 | Arrangements shall be made to provide for regular worship services. |
| G1.3 | Efforts shall be made to arrange for spiritual counselling and one-to-one visitation, according to the resident's wishes. |
| G1.4 | Mechanisms shall be in place to support and facilitate residents' participation in the facility's spiritual and/or religious programs |
| G1.5 | Arrangements shall be made to facilitate spiritual and religious care for the hearing and visually impaired, where resources are available |
| G1.6 | There shall be a staff member responsible for coordinating the spiritual and religious care program. |
| H1. | THERE SHALL BE AN ORGANIZED PROGRAM OF THERAPY SERVICES OR ARRANGEMENTS SHALL BE MADE TO ACCESS AVAILABLE THERAPY SERVICES TO MEET RESIDENTS' IDENTIFIED THERAPY NEEDS |
| H1.1 | There shall be provisions for individualized therapy services. |
| H1.2 | If group programming is provided, it shall be based on the assessed needs of the residents participating. |
| H1.3 | There shall be a process in place to coordinate and integrate therapy services interventions with residents' nursing and personal care activities. |
| H1.4 | Aids and equipment shall be arranged for through relevant assistive devices programs to meet the residents' needs, when payment is authorized by the resident/representative. |
| H1.5 | Staff shall be instructed in the safe and correct use of therapeutic equipment and adaptive aids. |
| H1.6 | Residents and representatives shall receive instruction about the use of equipment and adaptive aids. |

| Criteria | Criteria Description |
|---|---|
| H1.7 | There shall be a staff member responsible for coordinating therapy services. |
| H1.8 | Facility staff members who assist in the provision of therapy services to individual residents shall be instructed and receive direction from licensed therapists. |
| H1.9 | The relationship between the therapist and staff who assist in the provision of therapy services shall be clearly defined. |
| I1. | THERE SHALL BE AN ORGANIZED PROGRAM OF VOLUNTEER SERVICES. |
| I1.1 | There shall be a current written description of each volunteer function to provide clear direction about the scope of volunteers' functions and responsibilities |
| I1.2 | Volunteer services shall respond to residents' interests and shall be consistent with the residents' strengths, needs and preferences. |
| I1.3 | Residents shall be involved in planning and evaluating services of volunteers. |
| I1.4 | All new volunteers shall receive an orientation to the facility and emergency procedures. |
| I1.5 | There shall be a staff member responsible for coordinating and integrating volunteer services into programs and services of the facility. |
| J1. | THERE SHALL BE A COORDINATED PROGRAM OF DENTAL SERVICES, OR ARRANGEMENTS SHALL BE MADE TO ACCESS DENTAL SERVICES TO MEET RESIDENTS' DENTAL CARE NEEDS. |
| J1.1 | New residents shall have an oral assessment on admission as part of the admission medical and nursing assessments. |
| J1.2 | When residents require dental treatment or other services not provided by the facility, assistance shall be provided to arrange for referral to a dentist or other dental personnel of the resident's choice, when payment is authorized by the resident/representative. |
| J1.3 | A dental assessment, preventive services (scaling and cleaning, and an assessment to ensure that dentures are properly fitted) shall be offered annually or as required by qualified dental personnel, on a fee-for-service basis. |
| J1.4 | Arrangements shall be made to provide emergency dental services for residents as required, when payment is authorized by the resident/representative. |
| K1. | THERE SHALL BE AN ORGANIZED PROGRAM OF FOOT CARE SERVICES, OR ARRANGEMENTS ARE MADE TO ACCESS FOOT CARE SERVICES TO MEET RESIDENTS' NEEDS |
| K1.1 | New residents shall have an assessment of their foot care needs on admission as part of the admission medical and nursing assessments. |
| K1.2 | Residents' foot care needs shall be reassessed at least every three months or more |

| Criteria | Criteria Description |
|---|---|
| | often as required by residents' needs. |
| K1.3 | Residents shall be provided basic nursing foot care at least every three months by a registered nurse or registered practical nurse. Basic foot care shall include the following non-invasive measures: assessment, identification of infection, injury or other problems, and care of the nails and skin. |
| K1.4 | Advanced nursing foot care shall be provided only by registered nurses or registered practical nurses that are qualified in advanced nursing skills in foot care. |
| L1 | OTHER PROGRAMS/SERVICES PROVIDED BY THE FACILITY SHALL BE ORGANIZED TO PROVIDE SERVICES TO RESPOND TO RESIDENTS' IDENTIFIED NEEDS/ PREFERENCES. |
| L1.1 | Each program shall be developed based on residents' identified needs or preferences |
| L1.2 | Residents/representatives shall be encouraged and supported to participate in determining the types of other programs and services provided by the facility |
| L1.3 | Residents/representatives shall be encouraged to participate in the planning and evaluation of all other programs and services provided by the facility. |
| M1 | THE PROGRAMS AND RESOURCES OF THE FACILITY SHALL BE ORGANIZED TO EFFECTIVELY MANAGE THE FACILITY AND EACH OF ITS PROGRAMS AND SERVICES, IN KEEPING WITH MINISTRY ACTS, REGULATIONS, POLICIES AND DIRECTIVES |
| M1.1 | There shall be a statement of mission and a resident-focused service philosophy, which guides the operation of the facility. |
| M1.2 | An organizational chart shall be developed to represent the structure of the organization and the reporting relationships. The organizational chart shall be updated as changes occur. |
| M1.3 | Long-term goals and short-term objectives shall be developed to support the facility's mission statement |
| M1.4 | The facility's goals and objectives shall be developed with staff, resident and family input, and approved by the board/owner/governing body. |
| M1.5 | There shall be written goals and objectives for each program and service area which are consistent with the facility's goals and objectives and which support the mission of the facility. |
| M1.6 | Current policies and procedures, consistent with Ministry policies and directives, shall be in place to guide the management and service delivery of each program and service. |
| M1.7 | Policies and procedures shall be kept current and available to all staff. |
| M1.8 | Opportunities for interdisciplinary and interdepartmental communication and coordination shall be in place and regularly evaluated. |

| Criteria | Criteria Description |
|---|---|
| M1.9 | The board/owner/governing body shall be responsible for the appropriate expenditure of financial resources and for meeting all the provincial financial requirements as outlined in the service agreement |
| M1.10 | When services are contracted, there shall be written agreements between the facility and the contracted services, detailing the service expectations to meet the standards and criteria. |
| M1.11 | There shall be a designated administrator, accountable to the board/owner/governing body with overall responsibility and authority for the day-to-day operation of the facility |
| M1.12 | Required minimum on-site hours of administrator time are: Fewer than 65 beds: 16 on-site hours/week;<br>66 to 99 beds: 24 on-site hours/week;100 or more beds: 40 hours or the facility maximum full-time hours. |
| M1.13 | Qualifications of a new administrator shall include: Education in management and/or 3 years relevant experience in management, and Education in health or social services or 3 years relevant experience in long-term care. |
| M1.14 | Staffing needs for the facility shall be evaluated according to program and service requirements |
| M1.15 | Staffing shall be provided according to the approved staffing plan in the service agreement. |
| M1.16 | Staff shall be allocated according to residents' care needs, facility design and resources |
| M1.17 | Written job descriptions detailing responsibilities and scope of function shall be available for all staff positions. |
| M1.18 | The facility's policies, procedures, and work routines shall be followed in the provision of care and services. Staff shall be re-instructed when required. |
| M1.19 | Supplies and equipment shall be provided and shall be readily available for use to support safe and effective care and services to residents, including but not limited to:· Privacy screens which provide complete privacy, according to applicable legislation· Bedroom furnishings such as beds with adjustable bed rails and firm, comfortable mattresses with waterproof covers; bedside tables, comfortable easy chairs, and where a resident is confined to bed, a bed with an adjustable head and foot· Supplies and equipment for social, recreation and physical activities· Supplies and equipment for social, recreation and physical activities· Medical supplies and nursing equipment for the care of residents, including the prevention or care of skin disorders, continence care, infection control and sterile procedures· Medical devices, such as catheters and colostomy and ileostomy devices· Assistive devices for enabling residents to feed themselves· Assistive devices for enabling residents to feed themselves· Supplies and equipment for personal hygiene and grooming, such as skin care lotions and powders, shampoos, soap, deodorant, toothpaste, toothbrushes, denture cups and cleansers, toilet tissue, facial tissue, hair brushes, combs, razors/shavers, shaving cream, feminine hygiene products, and self-help devices. |

| Criteria | Criteria Description |
|---|---|
| M1.20 | Supplies and equipment shall be maintained in good condition. |
| M2. | THERE SHALL BE A COMPREHENSIVE, COORDINATED, FACILITY-WIDE PROGRAM FOR MONITORING, EVALUATING AND IMPROVING THE QUALITY OF ACCOMMODATION, CARE, SERVICES, PROGRAMS AND GOODS PROVIDED BY THE FACILITY. |
| M2.1 | There shall be regular formal and informal mechanisms to monitor resident and family satisfaction with the quality of accommodation, care, services, programs and goods provided by the facility |
| M2.2 | Each program and service within the facility shall be included in the program for monitoring, evaluating and improving quality. |
| M2.3 | Staff from all programs and services shall be involved in activities associated with monitoring, evaluating and improving quality. |
| M2.4 | There shall be clearly assigned responsibilities for activities to monitor, evaluate and improve quality |
| M2.5 | All activities and components of the program to monitor, evaluate and improve quality shall be documented |
| M2.6 | A regular report of activities to monitor, evaluate and improve quality shall be provided to the board/owner/governing body. |
| M2.7 | The board/owner/governing body shall provide feedback and respond to the issues raised by the activities to monitor, evaluate and improve quality. |
| M3. | THERE SHALL BE COORDINATED RISK MANAGEMENT ACTIVITIES DESIGNED TO REDUCE AND CONTROL ACTUAL OR POTENTIAL RISKS TO THE SAFETY, SECURITY, WELFARE AND HEALTH OF INDIVIDUALS OR TO THE SAFETY AND SECURITY OF THE FACILITY. |
| M3.1 | There shall be an identified staff member designated to be in charge of the facility at all times. |
| M3.2 | Staff shall be informed of who to notify in case of an emergency in the facility. Names and telephone numbers for emergency services shall be readily available to staff. |
| M3.3 | Safety systems shall be in place and policies, procedures and practices shall be implemented to identify and minimize hazards to residents, staff and visitors |
| M3.4 | The resident call system and door alarms (as required by applicable legislation) shall be maintained in working order. |
| M3.5 | Records shall be maintained for resident safety and security, employee occupational health and safety, and facility safety |
| M3.6 | Staff shall be instructed in the safe use of all equipment used in their job responsibilities |

| Criteria | Criteria Description |
|---|---|
| M3.7 | Unusual occurrences shall be reported according to Ministry policy. |
| M3.8 | A designated senior staff member shall be in charge of evacuation procedures. |
| M3.9 | There shall be a system to readily identify each resident in the facility (e.g. photo identification, identification bracelets). |
| M3.10 | There shall be written contingency plans for handling internal disasters (including missing residents, bomb threats, fires, loss of essential services, service disruption). |
| M3.11 | Written contingency plans shall be developed in consultation with local and municipal emergency planning groups |
| M3.12 | Contingency plans for handling internal disasters shall be rehearsed on a regular basis and at a minimum, every three years. |
| M3.13 | The fire plan shall be reviewed annually. |
| M3.14 | Monthly fire drills shall be held on all shifts and staff attendance documented. |
| M3.15 | All facility staff shall receive instruction in fire safety procedures annually. |
| M3.16 | All volunteers and residents shall be provided opportunities to receive instruction about fire safety procedures. |
| M3.17 | There shall be written contingency plans for the operation of the facility under the conditions of external disaster (including weather-related, community, and environmental disasters). |
| M3.18 | Emergency plans shall be developed in consultation with local and municipal emergency planning groups. |
| M3.19 | There shall be an organized program of infection control, coordinated by a multidisciplinary committee which meets regularly and which is chaired by a designated health care professional with expertise/interest in infection control. |
| M3.20 | A designated infection control practitioner on staff shall be a member of the infection control committee and shall be responsible for the surveillance and outbreak management activities of the infection control program. |
| M3.21 | The infection control program shall include sanitation practices, surveillance and outbreak management protocols, facility policies and procedures, other legislated requirements, and education and consultation to support the policies and procedures. |
| M3.22 | There shall be an ongoing program of surveillance to determine the presence of infections. Each resident admitted to a LTC facility shall be screened for tuberculosis within 14 days of admission. |
| M3.24 | All staff shall participate in the facility-wide infection control program and shall be made aware of and practise measures to prevent or minimize the spread of infection |

| Criteria | Criteria Description |
|---|---|
| M3.24 | A contingency plan and policies and procedures shall be developed and implemented in the event of a suspected or confirmed outbreak. |
| M3.25 | There shall be a process to facilitate early communication of an outbreak, within the facility and to external agencies. |
| M3.26 | Specific policies relating to infection control and outbreak control shall be developed for each department and all personnel shall be instructed and supervised in implementing the policies. |
| M4. | THERE SHALL BE AN ORGANIZED SYSTEM OF RECORDS MANAGEMENT WHICH INCLUDES THE COMPONENTS OF COLLECTION, ACCESS, STORAGE, RETENTION AND DESTRUCTION OF RECORDS. |
| M4.1 | There shall be written policies and procedures for all aspects of: · Collection of information<br>· Completeness of the record<br>· Maintaining records<br>· Confidentiality of information including any applicable FIPPA requirements<br>· Access by the interdisciplinary care team<br>· Access by residents to their own records. |
| M4.2 | Members of the interdisciplinary care team shall have access to residents' records as needed in providing care. |
| M4.3 | When residents are transferred to hospital, any relevant information required for their continuing safe care shall be transferred at the same time, unless prohibited by other legislative requirements. |
| N1. | MEDICAL SERVICES SHALL BE ORGANIZED TO MEET RESIDENTS' MEDICAL NEEDS, INCLUDING ASSESSMENT, PLANNING AND PROVISION OF RESIDENTS' INDIVIDUALIZED MEDICAL CARE, CONSISTENT WITH PROFESSIONAL STANDARDS OF PRACTICE |
| N1.1 | Medical services shall be provided through the appointment of a medical director, licensed by the College of Physicians and Surgeons of Ontario. |
| N1.2 | The medical director shall be appointed by the board/owner/governing body on the recommendation of the administrator. |
| N1.3 | There shall be a contract/written agreement between the facility and the medical director, which specifies the term of the appointment and addresses the position responsibilities. |
| N1.4 | Prior to reappointment of the medical director, the administrator shall conduct a review to determine that he/she is meeting the terms of the agreement. |
| N1.5 | The medical director shall be accountable to the administrator and responsible for the development, implementation, and evaluation of medical services. |
| N1.6 | The medical director shall provide advice when requested, to the board/owner/governing body on matters pertaining to medical care and services. |

| Criteria | Criteria Description |
|---|---|
| N1.7 | The medical director shall provide advice to the administrator in the areas of developing, implementing, and evaluating services and policies. |
| N1.8 | The medical director shall have the responsibility, accountability and authority to monitor and evaluate the medical care and services provided by physicians and to take action when standards are not met. |
| N1.9 | All attending physicians who are given privileges to provide medical care to residents in the facility shall be licensed by the College of Physicians and Surgeons of Ontario. |
| N1.10 | All attending physicians shall be appointed by the administrator, on the advice of the medical director. |
| N1.11 | Attending physicians shall be accountable to the medical director for meeting the facility policies and standards of medical care. |
| N1.12 | The contract/written agreement between the facility and each attending physician shall identify the term of the appointment and the responsibilities of the position. |
| N1.13 | Prior to reappointment of the attending physicians, the administrator, in consultation with the medical director, shall conduct a review to determine that they are meeting the terms of the agreement. |
| N1.14 | Attending physicians shall assess, plan, implement and evaluate their residents' medical care and participate in the interdisciplinary approach to care. |
| N1.15 | Attending physicians shall document on the resident health record on each visit, to maintain continuity and ongoing evaluation. |
| N1.16 | Attending physicians shall arrange for 24-hour medical coverage for residents for whom they provide medical care. These arrangements shall be communicated to facility staff. |
| N1.17 | All medical care and services provided by physicians in Long-Term Care facilities, shall be subject to peer assessment by the College of Physicians and Surgeons of Ontario, on a random basis, according to College procedures. |
| O1 | ENVIRONMENTAL SERVICES SHALL BE ORGANIZED TO PROVIDE A SAFE, COMFORTABLE, CLEAN, WELL-MAINTAINED ENVIRONMENT FOR RESIDENTS, STAFF AND VISITORS. |
| O1.1 | There shall be a staff member responsible for managing maintenance services. |
| O1.2 | There shall be a staff member responsible for managing housekeeping services. |
| O1.3 | There shall be a staff member responsible for managing laundry services. |
| O1.4 | There shall be an organized program for waste management. |
| O1.5 | Disposal of dry and wet garbage, including sharps and biological waste, shall be done in a recognized, approved manner. |

| Criteria | Criteria Description |
|---|---|
| 01.6 | Every waste storage station located within or adjacent to the long-term care facility shall be constructed to keep out insects, rodents, birds and other animals, and shall be in a location which is easily accessible for any waste collection vehicles. |
| 01.7 | Every waste storage station shall be emptied and cleaned at least weekly, or more often as required. |
| 01.8 | Where there is a private sewage and waste disposal system, measures shall be taken to maintain the system. |
| 01.9 | Measures are implemented to control pests. |
| 01.10 | There shall be an organized program of pest control, which is under the direction of a licensed pest control operator. |
| 01.11 | A record of visits and action taken is kept on file at the facility. |
| 01.12 | A supply of potable water at sufficient pressure shall be provided to serve all areas of the building. |
| 01.13 | The water supply serving the facility shall be free of offensive odours and free of minerals which can damage the plumbing system or stain fixtures and equipment. |
| 01.14 | Where there is a private water supply that is chemically treated (e.g. chlorinator or other such treatment system), the chemical residual shall be checked on a daily basis and a record shall be kept on file at the facility. |
| 01.15 | Where there is a private water supply, drinking water samples shall be analyzed at least four times each year (on a seasonal basis), to ensure safe drinking water. |
| 01.16 | Where hoses have been attached to water lines, a back-flow prevention device shall be installed |
| 01.17 | The temperature of the water serving all bathtubs, showers, and hand basins used by residents shall not exceed 49 degrees Celsius, and shall be controlled by a device, inaccessible to residents, that regulates the temperature |
| 01.18 | Hot water temperature shall be monitored daily at the source and once per shift in random locations where residents have access to hot water. |
| 01.19 | Immediate action shall be taken where water temperatures exceed 49 degrees Celsius. |
| 01.20 | The temperature of the hot water serving all bathtubs and showers used by residents shall be maintained at a temperature not below 40 degrees Celsius. |
| 01.21 | The facility shall be maintained at a minimum temperature of 22 degrees Celsius. |
| 01.22 | Designated smoking areas shall be enclosed and separated from the rest of the facility and provided with an exhaust vent to the exterior. Minimum ventilation rates shall be according to the Tobacco Control Act, 1994. |

| Criteria | Criteria Description |
|---|---|
| 01.23 | At least once a year the heating equipment shall be serviced by qualified personnel and the chimneys shall be inspected and cleaned if necessary. |
| 01.24 | At least once a year air conditioning and air exchange systems shall be serviced by qualified personnel. |
| 02. | THE FACILITY INCLUDING FURNISHINGS AND EQUIPMENT SHALL BE MAINTAINED. |
| 02.1 | The maintenance program shall provide for routine, preventive, and remedial maintenance. |
| 02.2 | Maintenance services shall provide 24-hour emergency coverage. |
| 02.3 | An established schedule of preventive maintenance procedures shall be followed and completion of work shall be documented. |
| 02.4 | Plant and environmental control systems shall be maintained in good operating order. |
| 02.5 | All electrical appliances shall be Canadian Standards Association approved. |
| 02.6 | The exterior of the building, walkways and outside areas shall be kept in good repair and free of debris. |
| 02.7 | All entrances, exits, exterior stairwells and walkways shall be kept clear and unobstructed. |
| 02.8 | Outside furniture shall be maintained in good repair, safe for resident use. |
| 02.9 | Flooring shall be composed of a smooth, tight, impervious, non-slippery material that is maintained free of cracks, breaks and open seams. |
| 02.10 | Carpets shall be maintained in good repair, free of open seams, tears and buckling. |
| 02.11 | Walls, ceilings and doors shall be maintained in good repair. |
| 02.12 | All furnishings and equipment shall be maintained in good repair and safe for use. |
| 02.13 | The surface of toilet and bathing fixtures shall be maintained smooth and free of cracks. |
| 02.14 | All grab bars shall be securely fastened. |
| 02.15 | All faucets installed for resident use shall be clearly identified and easy to use. |
| 02.16 | Protective guards shall be placed around and over all radiators and heating devices. |

| Criteria | Criteria Description |
|---|---|
| 03 | THE FACILITY, INCLUDING FURNISHINGS AND EQUIPMENT, SHALL BE KEPT CLEAN. |
| 03.1 | The housekeeping program shall provide for routine, preventive and remedial housekeeping. |
| 03.2 | Work routines that include cleaning frequencies and schedules of cleaning shall be established and followed. |
| 03.3 | The cleaning of the facility shall include but not be limited to:· Resident bedrooms, including floors, furnishings, wall areas, contact surfaces such as door knobs and grab bars.<br>· Resident personal furnishings and mementos.<br>· Resident common areas (lounges, dining room and activity areas) including floors, furnishings, wall areas.<br>· Resident washrooms and bathing facilities, including floors, toilets, sinks, tubs, showers and whirlpools, and contact surfaces such as grab bars, handrails, door knobs, etc.<br>· Hydrotherapy unit (whirlpools) cleaning shall include the disinfecting of the recirculation lines, jets and turbines on a daily basis or more frequently as indicated by policy or type of resident condition (i.e. skin breakdown) since these units can be sources of nosocomial infections.<br>· Hydrotherapy units, tubs, shower chairs and lift chairs shall be cleaned with a germicidal cleaner between resident use.· The following service areas shall be included in the list of areas to be cleaned:<br>· laundry areas<br>· utility rooms, storage rooms<br>· kitchen areas<br>· kitchenettes<br>· corridors/entrances/stairways<br>· elevators<br>· garbage rooms<br>· staff lounges, dining rooms, locker rooms<br>· offices<br>· maintenance rooms |
| 03.4 | Action shall be taken promptly to identify and address incidents of offensive odour. |
| 03.5 | Each housekeeping cart shall be designed and constructed to allow it to be easily cleaned and maintained |
| 03.6 | Each housekeeping cart shall be equipped with a locked compartment for storage of hazardous substances and each cart is locked at all times when not attended. |
| 03.7 | The janitor's closet door shall be equipped with a locking device and shall be locked at all times when unattended. |
| 03.8 | All chemicals shall be stored in labelled containers, which are kept inaccessible to residents. |
| 03.9 | All chemicals shall be decanted in a protected area using the required safety equipment. |

| Criteria | Criteria Description |
|---|---|
| 04 | LAUNDRY SERVICES SHALL BE ORGANIZED TO MEET THE LINEN AND PERSONAL CLOTHING NEEDS OF RESIDENTS. |
| 04.1 | Policies and procedures, work routines, schedules, and frequencies shall be followed for collection, transporting, sorting, processing, and delivery of linen and residents' personal clothing. |
| 04.2 | The facility shall provide labels as well as a service that labels all resident clothing, without additional cost to the resident. |
| 04.3 | Clothing shall be clearly labelled in a manner that respects residents' dignity. |
| 04.4 | he facility shall provide a service for mending and ironing of residents' clothing, on a fee-for-service basis when payment is authorized by the resident/ representative. |
| 04.5 | Dry cleaning services shall be available to residents on a fee-for-service basis when payment is authorized by the resident/representative. |
| 04.6 | There shall be a system to communicate to residents/ representatives, resident needs for clothing purchase or repair, as applicable. |
| 04.7 | There shall be a system in place to sort clothing for machine washing and dry cleaning. |
| 04.8 | There shall be an effective system in place to collect soiled personal clothing and return clean clothing to residents' rooms within forty-eight hours of pick-up. |
| 04.9 | There shall be a system in place to notify staff when families assume the responsibility for laundering residents' personal clothing. |
| 04.10 | There shall be a system to regularly check for misplaced or unlabelled articles. |
| 04.11 | There shall be a system in place to follow up and take action on all reports of lost clothing. |
| 04.12 | Space for storage of personal clothing is provided and available to residents in their rooms. |
| 04.13 | There shall be supply of clean linen (including sheets, pillow cases, blankets, towels, bibs, and continence care supplies), sufficient to meet the residents' needs, readily available for use. |
| 04.14 | Linen shall be maintained in a good state of repair and free of stains. |
| 04.15 | Residents' bed linen shall be clean and free of odours. Bed linen shall be changed at least weekly and more frequently as required. |
| 04.16 | There shall be clean towels and face cloths, sufficient to meet residents' needs, provided to each resident at least daily. |
| 04.17 | Clean linen shall be stored on resident care units, readily available to staff. |

| Criteria | Criteria Description |
|---|---|
| O4.18 | A supply of linen shall always be available for emergencies. |
| O4.19 | A system shall be in place to inspect and discard worn linen and to detect linen requiring repair. |
| O4.20 | Clean and soiled linen shall be kept separate at all times. |
| O4.21 | Separate laundry carts shall be used for pick up of soiled linen, and the distribution of clean linen. |
| O4.22 | Soiled linen shall be placed into laundry bags or carts at the point of service. |
| O4.23 | There shall be regular collection of soiled linen from the units in a manner that limits the possibility of infection, controls odours and maintains aesthetic conditions. |
| O4.24 | Soiled linen shall be taken to the soiled storage or laundry area in covered bins or closed bags. |
| O4.25 | All soiled linen shall be bagged before entering a laundry chute. |
| O4.26 | Continence care supplies shall be laundered separately from other laundry |
| O4.27 | There are procedures for clearly identifying, handling and washing linen used by residents who have communicable diseases or infections requiring precautions. |
| O4.28 | The laundry area shall be locked when not in use. |
| O4.29 | Where laundry services are conducted in-house, equipment shall be provided and maintained to meet the linen and personal clothing needs, and to support safe laundry handling. |
| O4.30 | Where the laundry service is provided in-house, industrial washers and dryers shall be provided to meet the laundry services needs. |
| O4.31 | The clean and soiled work areas of the laundry room shall be separate and clearly defined in a manner that minimizes microbial contamination. |
| O4.32 | The laundry room shall have a hand wash basin equipped with hot and cold running water, single-service towels and dispensed liquid soap. |
| O4.33 | All carts/bins used for laundry services shall be in good repair, of a material that is easily cleaned, and clearly labelled "clean" or "soiled". |
| P1. | THERE SHALL BE AN ORGANIZED PROGRAM OF DIETARY SERVICES TO RESPOND TO RESIDENTS' NUTRITIONAL CARE NEEDS AND TO PROVIDE SAFE, PERSONALLY ACCEPTABLE, NUTRITIOUS FOOD TO RESIDENTS. |
| P1.1 | Menus shall be developed in consultation with residents |
| P1.2 | Menus shall be planned to meet dietetic practice guidelines and shall be reviewed by the dietician. |

| Criteria | Criteria Description |
|---|---|
| P1.3 | There shall be an established menu cycle for both regular and therapeutic diets, including texture modifications and snacks. |
| P1.4 | Each day each resident shall be provided with a variety of foods, including at least the following: · Grain Products: five servings of whole grain or enriched bread and cereals; · Vegetables and Fruits: five 125 ml servings of vegetables, fruits and/or fruit juices; · Milk products: adults - 500 ml; and · Meat and Alternatives: Two servings weighing 50 to 100 grams cooked weight of meat containing 7 grams of protein for each 30 gram serving, or the equivalent grams of protein in alternatives. |
| P1.5 | The menu plan shall provide nutrients, calories and fluids based on recommended dietary allowances that provide for daily amounts to meet current Recommended Nutrient Intake (RNI) as determined by Health and Welfare Canada and adjusted for the facility residents' age, sex, weight, physical activity, physiological function and therapeutic needs. |
| P1.6 | All menus, including alternative choices, for the whole of the current week shall be dated and posted in advance of the current week for reference by persons serving food. |
| P1.7 | Menus shall be communicated to the residents |
| P1.8 | The planned alternative menu choices for entrées, vegetables, and desserts shall be provided, prepared and served at the same time as the first choice. |
| P1.9 | Menu substitutions shall be of comparable nutritional value. |
| P1.10 | Any change to a meal shall be marked on the production menu before the preparation of the meal is commenced. |
| P1.11 | Facility staff involved in food preparation or service shall participate in a food safety awareness program, offered by the board of health. |
| P1.12 | Food shall be obtained from regulated and approved sources, with any exceptions approved by the registered dietician |
| P1.13 | All food shall be stored and maintained in a manner that: · prevents contamination or spoilage, · prevents food-borne illness, · retains maximum nutritive value and food quality, and · enhances effective food production. |
| P1.14 | Food shall be prepared and served following standardized food service practices in a manner that: · preserves nutritive value, flavour, colour, texture, appearance and palatability, · prevents contamination or spoilage, · prevents food-borne illness, · retains maximum nutritive value, and · enhances effective food production. |

| Criteria | Criteria Description |
|---|---|
| P1.15 | Residents shall be involved in planning times of meal service, in keeping with the following requirements (unless a survey of all residents demonstrates the majority currently seek alternative meal times): · A full breakfast shall be available to residents up to at least 0830 hours.<br>· The evening meal shall not be served before 1700 hours. |
| P1.16 | A minimum of three meals shall be offered to each resident daily. |
| P1.17 | Beverages shall be offered to all residents at meals, between meals and at bedtime, unless contraindicated in individual residents' plans of care. |
| P1.18 | Snacks shall be offered to all residents at mid-afternoon and at bedtime, unless contraindicated in individual residents' plans of care. |
| P1.19 | All residents shall be provided supervision during meals. |
| P1.20 | Residents shall be served meals in the dining room unless their needs are better met in another location, according to the residents' plans of care. |
| P1.21 | Meals shall be served one course at a time, unless individual residents request otherwise. |
| P1.22 | The portion size for menu items shall be posted for serving staff and followed unless otherwise specified by the residents' requirements. |
| P1.23 | Hot foods shall be served to residents at a minimum of 60°C and cold foods shall be served at a maximum of 5°C, excluding tube feedings. |
| P1.24 | To provide a pleasurable dining experience, meals shall be served in an unhurried manner, in comfortable dining areas equipped to meet the meal service requirements of residents. |
| P1.25 | Delivery of a meal to residents requiring assistance in eating shall occur no more than five minutes in advance of assistance being provided. |
| P1.26 | Minced and puréed items shall be provided after there has been a nutritional assessment. |
| P1.27 | Dietary services shall be organized to provide nutritional care according to residents' needs, consistent with their plans of care. |
| P1.28 | Nutritional care shall be provided consistent with the current Ontario Dietetic Association/Ontario Hospital Association Nutritional Care Manual and dietetic professional standards. |

| Criteria | Criteria Description |
|---|---|
| P1.29 | The nutritional care program shall include: · Screening to identify nutritional risk; · Nutritional assessments and identification of interventions on residents' plans of care; · Reassessment of care plans based on residents' changing needs; and · Interpreting and individualizing of residents' regular, modified and therapeutic diets and supplemental feedings, as well as other aspects of the care plan that impact dietary services. |
| P1.30 | The current manual approved by the Ontario Dietetic Association shall be readily available in the facility. |
| P1.31 | When enteral feedings are provided, a comprehensive program shall be in place which includes but is not limited to:· Assessment and interdisciplinary care team review to determine the resident's clinical condition and expressed wishes demonstrate the use of enteral feedings is reasonable, · Provision of care in a manner that minimizes risk, · Efforts to restore normal feeding function if possible, and · Training of staff in enteral feeding. |
| P1.32 | There shall be a registered dietician employed to be on duty in the facility on a regularly scheduled basis. |
| P1.33 | Staffing requirements for the registered dietician shall be: a minimum of 15 minutes per resident per month. |
| P1.34 | The dietician shall be registered with the Ontario Dietetic Association. |
| P1.35 | There shall be a food service supervisor on staff, employed to be on duty in the facility on a regularly scheduled basis. |
| P1.36 | Staffing requirements for qualified food service supervisors shall be a minimum of 8 hours per week per 30 meal days. |
| P1.37 | The food service supervisor shall be eligible for membership in Ontario Food Service Supervisors Association (OFSSA). |
| P1.38 | Staffing requirements for food handlers shall be: a minimum of 0.4 hours per day per meal day. |
| Q1 | THE FACILITY SHALL MAKE ARRANGEMENTS FOR DIAGNOSTIC SERVICES TO MEET RESIDENTS' NEEDS AS ORDERED BY THE RESIDENTS' PHYSICIANS. |
| Q1.1 | There shall be a process in place to coordinate diagnostic services provided on-site with resident care activities and routines in order to provide for residents' privacy and convenience. |

| Criteria | Criteria Description |
|---|---|
| R1 | THERE SHALL BE AN ORGANIZED PROGRAM FOR THE PROVISION OF PHARMACY SERVICE TO MEET THE RESIDENTS' IDENTIFIED NEEDS |
| R1.1 | There shall be a pharmacist registered with the Ontario College of Pharmacists to provide clinical pharmacy services to the facility. |
| R1.2 | A pharmacy accredited by the Ontario College of Pharmacists shall be retained to provide the drugs and drug products to the facility. Drugs may also be provided by a non-accredited pharmacy service owned and operated by a municipality or hospital |
| R1.3 | There shall be a written contract(s) between the facility and those responsible for providing pharmacy service. (Exception: a pharmacy service that is owned and operated by a municipality or hospital having financial and legal responsibility for the facility.) |
| R1.4 | The contract shall specify the pharmaceutical service expectations that may include but not be limited to:· The administrative and clinical relationships of the pharmacist with the facility and in the case of two separate services, then the relationships between both;<br>· The method of communication established between the facility and the pharmacist;<br>· Quality management expectations for pharmaceutical service, including but not limited to drug storage, prescribing and distribution systems, and corresponding documentation required by the facility;<br>· Participation in the interdisciplinary review process for the direction of the facility's pharmacy program and service;<br>· Providing accurate and safe acquisition and dispensing of medications for each resident within a mutually agreed upon time, in accordance with resident needs, legislation and Ministry policies and procedures;<br>· Reviewing the residents' profile prior to dispensing prescriptions, and communicating and resolving any concerns with the attending physician, and a process for notifying the facility of any change in physician orders. · Providing clinical consultation within a mutually agreed upon time on residents' pharmacotherapy and other drug-related matters, including participating when requested in the development, implementation, and review of residents' individual care plans (either in person or through a written report to the interdisciplinary care team) and in response to identified resident needs.<br>· Documenting all clinical consultations concerning a specific resident's therapy on the resident's health record;<br>· Reporting any irregularities or concerns about drug ordering or administration to the administrator, physician, or the director of nursing;<br>· Preparing and reviewing a record of the drug regimen for the residents' quarterly review;<br>· Maintaining a complete medication profile for each resident<br>· Providing a complete medication administration record (MAR) for each resident Implementing programs designed to improve residents' pharmacotherapy, such as a drug utilization review, drug compression;<br>· Providing educational seminars related to pharmacy and therapeutics for medical and nursing staff;<br>· Providing necessary information and education about the specific medications that are administered, to the professional staff who administer medications and to residents, as required;<br>· Drug destruction within the facility according to applicable legislation and facility policy. |

| Criteria | Criteria Description |
|---|---|
| R1.5 | Access to pharmacy service shall be available on a 24 hour basis seven days a week. |
| R1.6 | Drug reference materials, the pharmacy's telephone number, the pharmacy policy and procedure manual, antidote information, and the telephone number of the regional poison control centre shall be available at each nursing unit. |
| R2. | THERE SHALL BE AN ORGANIZED INTERDISCIPLINARY REVIEW PROCESS FOR DIRECTING THE FACILITY'S PHARMACY PROGRAM AND SERVICE. |
| R2.1 | The pharmacist shall participate in the interdisciplinary review process for the direction of the facility's pharmacy program and service. |
| R2.2 | The review process shall include but not be limited to: · Documenting findings of the review and actions on a quarterly basis;<br>· Reviewing the Quality and Risk Management program as it relates to pharmacy services with a focus on improving residents' pharmacotherapy. |
| R2.3 | Current written policies and procedures shall be in place for all aspects of pharmacy service. |
| R3. | THE PRESCRIPTION ORDERING AND TRANSMISSION OF ORDERS SHALL SUPPORT THE SAFE PROVISION OF DRUGS TO RESIDENTS. |
| R3.1 | All prescriptions shall be written and shall be signed by the physician. |
| R3.2 | Prescriptions shall specify at least the resident's name, date, medication name, strength, form, quantity, frequency and route of administration (application area if topical), and be signed by the physician. |
| R3.3 | There shall be a system in place for safe, accurate and timely transmission of all prescription orders. |
| R3.4 | All telephone prescription orders shall be given by the prescriber and shall be received and documented in the facility by registered nursing staff or the pharmacist. |
| R3.5 | The prescriber or the attending physician shall sign the documented telephone order in accordance with established facility policy. |
| R3.6 | A written copy of all prescriptions or duplicate prescription order sheets signed by the prescriber shall be sent to the pharmacist |
| R3.7 | All medication orders telephoned to the pharmacy shall be given only to the pharmacist. |
| R3.8 | There shall be a quarterly, or more frequent as needed, documented review of each resident's medications, signed by the physician. |
| R3.9 | Following the quarterly medication review, the quarterly medication review record shall be included in the resident's health record and a copy shall be returned to the pharmacy. |

| Criteria | Criteria Description |
|---|---|
| R4. | THE PHARMACY SERVICE SHALL PROVIDE FOR THE ACCURATE, SAFE DISPENSING OF PRESCRIPTION DRUGS AND BIOLOGICALS TO MEET RESIDENTS' IDENTIFIED MEDICATION REQUIREMENTS. |
| R4.1 | Dispensing shall be carried out by a pharmacist, physician or dentist in all but exceptional circumstances, where the registered nurse may dispense, according to established policies and procedures. (Refer to Resident Leaves of Absence policy) |
| R4.2 | All drugs and biologicals for individual residents shall be labelled with a prescription number, the resident's name, date, medication's name, strength, form, manufacturer, quantity, directions for use, a valid expiration date (if for PRN use), the prescriber's name, the name, owner, address, and telephone number of the dispensing pharmacy and with appropriate accessory and cautionary instructions. |
| R5. | A SYSTEM OF RECORDS FOR RECEIPT AND DISPOSITION OF ALL DRUGS RECEIVED BY THE FACILITY SHALL BE MAINTAINED IN SUFFICIENT DETAIL TO ENABLE ACCURATE TRACKING, RECONCILIATION, AND AUDITING, IN ACCORDANCE WITH APPLICABLE LEGISLATION. |
| R6. | ALL DRUGS AND BIOLOGICALS SHALL BE STORED UNDER PROPER CONDITIONS OF SANITATION, TEMPERATURE, LIGHT, HUMIDITY AND SECURITY. |
| R6.1 | All drugs and biologicals shall be stored inconveniently located, locked drug cabinets or storerooms. |
| R6.2 | Narcotic and controlled drugs shall be stored in a separately locked, permanently affixed compartment within the general drug cabinet or storeroom. |
| R6.3 | Every drug cabinet or storeroom shall be kept locked at all times and only the registered nursing staff and the pharmacist may have access to the keys. |
| R6.4 | A medication administration system facilitating monitoring (Monitored Dosage System), such as unit dose/blister pack shall be in use for all medications except liquids or other forms of medication which require dispensing in an alternative suitable system. |
| R7. | DISPOSAL OF DRUGS SHALL BE IN ACCORDANCE WITH ESTABLISHED MINISTRY POLICY. |
| R7.1 | Discontinued, unused, expired, recalled, deteriorated, unlabelled drugs and containers with worn, illegible, damaged, incomplete or missing labels shall be removed from current medication supplies. |
| R7.2 | Drugs shall be destroyed and removed from the facility according to applicable legislation and established Ministry policies and guidelines. |

| Criteria | Criteria Description |
|---|---|
| R8. | THERE SHALL BE A SYSTEM FOR IMMEDIATE REPORTING OF EACH MEDICATION ERROR AND ADVERSE DRUG REACTION, WITH SPECIFIC FOLLOW-UP ACTION TO BE TAKEN. |
| R8.1 | All medication errors and adverse drug reactions shall be reported promptly to the director of nursing, prescriber, and pharmacist according to established policy and procedure and specific follow-up action shall be taken. |
| R8.2 | The description of a medication error or adverse drug reaction shall be recorded in the resident's clinical record immediately after the report is made. |
| R8.3 | Any adverse drug reaction shall be recorded in the resident's medication profile and reported to the pharmacist who will report to the Canadian Adverse Drug Reaction Monitoring Program. |

## Appendix 4: Home Profile Example

DOUGLAS H. RAPELJE LODGE (WELLAND)
277 PLYMOUTH ROAD Welland L3B 6E3
Tel: 905-714-7428 Fax: 905-714-7423

- Local Health Integration Network HAMILTON NIAGARA HALDIMAND BRANT (HNHB)
- Health Region Central-South ‣ CCAC Niagara Service Area: Niagara
- Administrator MR TOM HUNTER
- Operator THE REGIONAL MUNICIPALITY OF NIAGARA
  PETER PARTINGTON Operator/Board Chair REGIONAL CHAIR
- Type of Operator Municipal ‣ Management Firm
- Home Structure *A visit to the home is highly encouraged.* Home with approximately **120** beds.
- Approved Short-Stay Beds Yes
- Residents' Council Yes
- Family Council Yes
- CCHSA Accreditation Yes
- Home Designated Under French Language Services Act No

# Appendix 5: Correlational Table

**Correlations**

| | | Sex | Agesm | educ1 | educ2 | NRPNs | xperienc OLS | niontyOL | alaryOL | RCOLS | PMOLS | MOLS | rketingO | PROLS | awsOLS | FROLS | undOLS | therOL | acilityAg OLS | edsOL | ommunit OLS | wnership | Chain |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sex | Pearson Co | 1 | -.080 | -.116* | -.266* | -.429* | -.175* | -.181* | -.236* | .087 | -.026 | .075 | .083 | -.021 | .001 | .001 | -.022 | -.013 | -.054 | -.207* | -.159* | -.043 | -.094 |
| | Sig. (2-taile | | .165 | .044 | .000 | .000 | .002 | .002 | .000 | .132 | .652 | .193 | .149 | .716 | .993 | .986 | .698 | .824 | .353 | .000 | .006 | .452 | .103 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| Agesm | Pearson Co | -.080 | 1 | -.061 | -.022 | -.061 | .499* | .374* | .197* | .014 | -.150* | -.091 | -.093 | .021 | .028 | -.134* | .070 | .126* | .099 | .136* | .130* | .128 | .156* |
| | Sig. (2-taile | .165 | | .289 | .700 | .291 | .000 | .000 | .001 | .805 | .009 | .113 | .108 | .720 | .626 | .020 | .229 | .029 | .086 | .018 | .024 | .026 | .007 |
| | N | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 | 301 |
| educ1 | Pearson Co | -.116* | -.061 | 1 | .625* | .159* | -.039 | -.046 | .023 | -.046 | -.052 | .013 | .032 | .017 | -.003 | -.020 | -.064 | .045 | -.035 | .022 | .042 | -.045 | -.028 |
| | Sig. (2-taile | .044 | .289 | | .000 | .006 | .504 | .426 | .691 | .428 | .365 | .828 | .579 | .764 | .960 | .735 | .266 | .437 | .543 | .707 | .463 | .436 | .623 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| educ2 | Pearson Co | -.266* | -.022 | .625* | 1 | .289* | -.074 | -.069 | .248* | -.093 | -.094 | -.037 | -.043 | -.052 | .077 | -.074 | .025 | .156* | .074 | .210* | .158* | .101 | .122* |
| | Sig. (2-taile | .000 | .700 | .000 | | .000 | .197 | .231 | .000 | .105 | .104 | .519 | .461 | .367 | .182 | .198 | .659 | .007 | .199 | .000 | .006 | .079 | .034 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| RNRPNs | Pearson Co | -.429* | -.061 | .159* | .289* | 1 | .094 | .086 | .124* | -.117* | .003 | .068 | .062 | .043 | .002 | .054 | -.025 | .028 | .049 | .168* | .138* | -.015 | .080 |
| | Sig. (2-taile | .000 | .291 | .006 | .000 | | .104 | .134 | .031 | .042 | .959 | .236 | .282 | .459 | .975 | .350 | .671 | .622 | .399 | .003 | .017 | .801 | .168 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| Experien | Pearson Co | -.175* | .499* | -.039 | -.074 | .094 | 1 | .745* | .123* | .009 | -.094 | .039 | .042 | .020 | -.027 | -.092 | .063 | .010 | .177* | .082 | .088 | .055 | .148* |
| | Sig. (2-taile | .002 | .000 | .504 | .197 | .104 | | .000 | .033 | .870 | .104 | .503 | .465 | .732 | .640 | .112 | .276 | .862 | .002 | .155 | .126 | .342 | .010 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| Seniority( | Pearson Co | -.181* | .374* | -.046 | -.069 | .086 | .745* | 1 | .101 | -.060 | -.115* | .010 | .012 | .032 | -.068 | -.108 | .064 | .042 | .208* | .003 | -.074 | .023 | .212* |
| | Sig. (2-taile | .002 | .000 | .426 | .231 | .134 | .000 | | .079 | .298 | .046 | .865 | .831 | .581 | .242 | .062 | .266 | .465 | .000 | .959 | .198 | .692 | .000 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| SalaryOL | Pearson Co | -.236* | .197* | .023 | .248* | .124* | .123* | .101 | 1 | -.105 | -.055 | -.003 | -.002 | -.143* | .155* | -.122* | .155* | .171* | .226* | .394* | .266* | .131 | .128* |
| | Sig. (2-taile | .000 | .001 | .691 | .000 | .031 | .033 | .079 | | .069 | .339 | .954 | .967 | .013 | .007 | .034 | .007 | .003 | .000 | .000 | .000 | .023 | .026 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| RCOLS | Pearson Co | .087 | .014 | -.046 | -.093 | -.117* | .009 | -.060 | -.105 | 1 | -.053 | -.210* | -.209* | -.016 | -.205* | .013 | -.099 | -.260* | -.193* | -.064 | .014 | -.047 | .016 |
| | Sig. (2-taile | .132 | .805 | .428 | .105 | .042 | .870 | .298 | .069 | | .356 | .000 | .000 | .783 | .000 | .816 | .087 | .000 | .001 | .265 | .808 | .416 | .786 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| PMOLS | Pearson Co | -.026 | -.150* | -.052 | -.094 | .003 | -.094 | -.115* | -.055 | -.053 | 1 | .092 | .091 | .147* | -.131* | .218* | -.002 | -.165* | -.021 | -.031 | -.099 | -.080 | -.093 |
| | Sig. (2-taile | .652 | .009 | .365 | .104 | .959 | .104 | .046 | .339 | .356 | | .111 | .114 | .011 | .022 | .000 | .966 | .004 | .722 | .589 | .087 | .165 | .106 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| FMOLS | Pearson Co | .075 | -.091 | .013 | -.037 | .068 | .039 | .010 | -.003 | -.210* | .092 | 1 | .992* | .108 | -.087 | .086 | .152* | -.059 | .095 | .003 | .066 | -.035 | -.144* |
| | Sig. (2-taile | .193 | .113 | .828 | .519 | .236 | .503 | .865 | .954 | .000 | .111 | | .000 | .060 | .131 | .137 | .008 | .304 | .098 | .957 | .256 | .543 | .012 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| Marketing | Pearson Co | .083 | -.093 | .032 | -.043 | .062 | .042 | .012 | -.002 | -.209* | .091 | .992* | 1 | .106 | -.088 | .085 | .151* | -.060 | .092 | -.023 | .056 | -.045 | -.144* |
| | Sig. (2-taile | .149 | .108 | .579 | .461 | .282 | .465 | .831 | .967 | .000 | .114 | .000 | | .067 | .129 | .140 | .009 | .295 | .109 | .697 | .328 | .433 | .012 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| PROLS | Pearson Co | -.021 | .021 | .017 | -.052 | .043 | .020 | .032 | -.143* | -.016 | .147* | .108 | .106 | 1 | .078 | .115* | -.037 | -.073 | -.103 | -.106 | -.117* | -.074 | -.068 |
| | Sig. (2-taile | .716 | .720 | .764 | .367 | .459 | .732 | .581 | .013 | .783 | .011 | .060 | .067 | | .178 | .045 | .517 | .207 | .073 | .067 | .043 | .202 | .239 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| LawsOLS | Pearson Co | .001 | .028 | -.003 | .077 | .002 | -.027 | -.068 | .155* | -.205* | -.131* | -.087 | -.088 | .078 | 1 | .070 | .153* | .147* | .148* | .047 | .042 | .124 | .063 |
| | Sig. (2-taile | .993 | .626 | .960 | .182 | .975 | .640 | .242 | .007 | .000 | .022 | .131 | .129 | .178 | | .222 | .008 | .011 | .010 | .414 | .469 | .031 | .274 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| FROLS | Pearson Co | .001 | -.134* | -.020 | -.074 | .054 | -.092 | -.108 | -.122* | .013 | .218* | .086 | .085 | .115* | .070 | 1 | .061 | -.055 | -.115* | .067 | .010 | -.041 | -.036 |
| | Sig. (2-taile | .986 | .020 | .735 | .198 | .350 | .112 | .062 | .034 | .816 | .000 | .137 | .140 | .045 | .222 | | .288 | .338 | .046 | .246 | .858 | .475 | .533 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| FundOLS | Pearson Co | -.022 | .070 | -.064 | .025 | -.025 | .063 | .064 | .155* | -.099 | -.002 | .152* | .151* | -.037 | .153* | .061 | 1 | .021 | .205* | .067 | .009 | .279 | .049 |
| | Sig. (2-taile | .698 | .229 | .266 | .659 | .671 | .276 | .266 | .007 | .087 | .966 | .008 | .009 | .517 | .008 | .288 | | .717 | .000 | .247 | .875 | .000 | .398 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| OtherOLS | Pearson Co | -.013 | .126* | .045 | .156* | .028 | .010 | .042 | .171* | -.260* | -.165* | -.059 | -.060 | -.073 | .147* | -.055 | .021 | 1 | .138* | .155* | .063 | .037 | -.006 |
| | Sig. (2-taile | .824 | .029 | .437 | .007 | .622 | .862 | .465 | .003 | .000 | .004 | .304 | .295 | .207 | .011 | .338 | .717 | | .016 | .007 | .277 | .525 | .910 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| FacilityAg | Pearson Co | -.054 | .099 | -.035 | .074 | .049 | .177* | .208* | .226* | -.193* | -.021 | .095 | .092 | -.103 | .148* | -.115* | .205* | .138* | 1 | .161* | .002 | .034 | .128* |
| | Sig. (2-taile | .353 | .086 | .543 | .199 | .399 | .002 | .000 | .000 | .001 | .722 | .098 | .109 | .073 | .010 | .046 | .000 | .016 | | .005 | .969 | .557 | .026 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| BedsOLS | Pearson Co | -.207* | .136* | .022 | .210* | .168* | .082 | .003 | .394* | -.064 | -.031 | .003 | -.023 | -.106 | .047 | .067 | .067 | .155* | .161* | 1 | .446* | -.016 | -.042 |
| | Sig. (2-taile | .000 | .018 | .707 | .000 | .003 | .155 | .959 | .000 | .265 | .589 | .957 | .697 | .067 | .414 | .246 | .247 | .007 | .005 | | .000 | .783 | .468 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| Communi | Pearson Co | -.159* | .130* | .042 | .158* | .138* | .088 | -.074 | .266* | .014 | -.099 | .066 | .056 | -.117* | .042 | .010 | .009 | .063 | .002 | .446* | 1 | .057 | -.033 |
| | Sig. (2-taile | .006 | .024 | .463 | .006 | .017 | .126 | .198 | .000 | .808 | .087 | .256 | .328 | .043 | .469 | .858 | .875 | .277 | .969 | .000 | | .322 | .565 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| Ownershi | Pearson Co | -.043 | .128* | -.045 | .101 | -.015 | .055 | .023 | .131* | -.047 | -.080 | -.035 | -.045 | -.074 | .124* | -.041 | .279* | .037 | .034 | -.016 | .057 | 1 | .310* |
| | Sig. (2-taile | .452 | .026 | .436 | .079 | .801 | .342 | .692 | .023 | .416 | .165 | .543 | .433 | .202 | .031 | .475 | .000 | .525 | .557 | .783 | .322 | | .000 |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |
| Chain | Pearson Co | -.094 | .156* | -.028 | .122* | .080 | .148* | .212* | .128* | .016 | -.093 | -.144* | -.144* | -.068 | .063 | -.036 | .049 | -.006 | .128* | -.042 | -.033 | .310* | 1 |
| | Sig. (2-taile | .103 | .007 | .623 | .034 | .168 | .010 | .000 | .026 | .786 | .106 | .012 | .012 | .239 | .274 | .533 | .398 | .910 | .026 | .468 | .565 | .000 | |
| | N | 302 | 301 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 | 302 |

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed)

# References


Al-Assaf, A.F.; Taylor, T.L.; and Langston, R. (1992). Management Preparedness Criteria: A Study of Nursing Home Administrators. Health Care Supervisor, 10(3).

Allen, James. E. "Nursing Home Administration." Fourth Edition. Springer Publishing Company, Inc., New York, New York, 2003.

Alzheimer's Society of Canada 2005 [Online] http://www.alzheimer.ca.

Angelelli, J., Gifford, D., Petrisek, A., and Mor, V. (2001). External threats and nursing home administrator turnover. Health Care Management Review, 26(3).

Armstrong, R., Brunelle, F.W.H., Angus, D.E., and Levac, G. (2001). The Changing Role of Canadian Healthcare CEOs: Results of a National Survey. Healthcare Management: Forum Supplement.

Babbie, E. (1995). The Practice of Social Research. Toronto: Wadsworth.

Bliesmer, M., and Earle, P. (1993). "Research Considerations: Nursing Home Quality Perceptions." Journal of Gerontological Nursing 19(6).

Blumenthal, David., and Their, S.O. (2003). Improving the Generation, Dissemination and Use of Management Research. Health Care Management Review, 28(4).

Buhmeyer, K.J. (1983). Job Satisfaction and Demographics of Nursing Home Administrators. Nursing Homes, 32(1).

Canadian Council of Health Facilities Accreditation (1992). Long-Term Care I Facilities (IPC-4). Ottawa, Ont.

Castle, Nicholas. G. (2001). Administrator Turnover and Quality of Care in Nursing Homes. Gerontologist, 41(6).

Castle, Nicholas. G and Banaszak-Holl, Jane. (2003). The Effect of Administrative Resources on Care in Nursing Homes. Journal of Applied Gerontology, 22(3).

Castle, Nicholas. G. (2003). Providing Outcomes Information to Nursing Homes: Can it Improve Quality of Care? Gerontologist. 43(4).

Chassin, M.R. (1998). The urgent need to improve health care quality. Institute of Medicine National Roundtable on Health Care Quality. The Journal of The American Medical Association, 280 (11), pp. 1000 – 5.

Coll, P.P. (1993). "Nursing Home Care in 2001." The Journal of Family Practice. 36(4).

Culley, J.M., and Courtney, Janet. (1994). Nursing in the Long-Term Care Facility. In Essentials of Long-Term Care Administration. Edited by Seth B. Goldsmith. Gaithersburg, Maryland: Aspen Publishers, Inc.

Currant, D., and Tomalty, R. (2003). Living it up. Alternatives Journal, 29 (3).

Dainton, C. (1961). The Story of England's Hospitals. Sprinfield, Illinois: Thomas. Duke Health. (1995, Summer). Durham, NC: Duke University Medical Center Publications.

Dean, K. (1986). Lay care in illness. Social Science and Medicine, 22, 275-285.

Dimant, J. (1991). From Quality Assurance to Quality Management in Long-Term Care. Quality Review Bulletin 17(7).

Donabedian, A. (1988). The Quality of Care: How Can It Be Assessed? Journal American Medical Association, 260(12).

Donabedian, A. (1980). Explorations in quality assessment and monitoring: Vol. 1. The definition of quality and approaches to its assessment. Ann Arbor, MI: Health Administration Press.

Duff, P. (1992). Quality assurance. Homing in on quality care. Nursing Standard, 6 (35 Suppl), pp. 4-6.

Emodi, B. (1977). A History of Long-Term Care Facilities for the Elderly in Canada (pp. 5-12). A.W. Cluff and P.J. Cluff, B.C. Canada.

Evans, Robert. G., McGrail, K.M., Morgan, S.T., Barer, M.L., and Herztman, C. (2001). Apocalypse No: Population aging and the future of health care systems. Canadian Journal on Aging. 20 (1).

Lohrke, F. T., Bedeian, A., G and Palmer, T. B., (2004). The role of top management teams in formulating and implementing turnaround strategies: a review and research agenda. International Journal of management Reviews 5/6(2).

Freymann, J.G. (1980). The American Health Care System: Its Genesis and Trajectory. Huntington, New York: Krieger.

Gordon, G. K., Grant, L. A., Stryker, R. (2003). Creative Long Term Care Administration. Fourth Edition. Springfield, Illinois: Charles C Thomas Publisher, Ltd.

Harrington, C. (1990). Educating and Licensing Nursing Home Administrators: Public Policy Issues. Gerontologist, 30(5).

Hofmann, P. B. (1977, Summer). The CEO as innovator and catalyst in resources management. Hospital Progress, 86–87.

Kane, R.A.; and Kane, R.L. (1988). Long-Term Care: Variations on a Quality Assurance Theme. Inquiry, 25(1).

McGrail. K.M., Evans, R.G., Barer, M.L., Sheps,S.B., Hertzman, C., and Kazanjian, A. (2001). The Quick and the Dead: 'Managing' Inpatient Care in British Columbia Hospitals, 1969-1995/96. Health Services Research, 36 (2).

Miller, D., & Friesen, P. H. (1977). Strategy, structure, CEO personality and performance in small firms. American Journal of Small Business, 10(3), 47–62.

Ontario Ministry of Health and Long-Term Care. 2006 [Online] http://publicreporting.ltchomes.net/english/index.htm

Pratt, John R. (2002). Management Skills for Tomorrow's Nursing Home Administrator. Nursing Homes, 42(3).

Rubin, A., and Shuttlesworth, G. E. (1986). Job Turnover Among Nursing Home Administrators: An Exploratory Study. The Journal of Long-Term Care Administration, 14(2).

Schoon, C.G., and Hayez, S.K. (1987). The Entry Level Role of Nursing Home Administrators. The Journal of Long-Term Care Administration, 15(3).

Schoon, C.G., Jones, J.P., and Kittleson, M.O. (1993). How Administrator Characteristics Correlate With Licensure Exam Performance. Nursing Homes, 42(3).

Shore, Herbert H. (1994). "History of Long-Term Care". In Essentials of Long-Term Care Administration. Edited by Seth B. Goldsmith. Gainhersburg, Maryland: Aspen Publishers, Inc.

Singh, D.A., Schwab, R.C. (2000). Predicting Turnover and Retention in Nursing Home Administrators: Management and Policy Implications. Gerontologist, 40(3): 310-19.

Singh, D.A., and Schwab, R.C. (1998). Retention of Administrators in Nursing Homes: What Can Management Do? Gerontologist, 38(3): 362-69.

Singh, D. A. (1997). "Nursing Home Administrators: Their Influence on Quality of Care". New York, New York: Garland Publishing, Inc.

Statistics Canada. 2001 [Online]. http://www.statcan.ca/start.html.

Statistics Canada. 2005 [Online]. http://www.statcan.ca/start.html.

Thomas, W.H. (2003). Evolution of Eden. Journal of Social Work in Long-Term Care, 2(1-2).

Thomas, W. H., and Johansson, C. (2003). Elderhood in Eden. Topics in Geriatric Rehabilitation, 19(4).

Weiner, N., & Mahoney, T. A. (1981). A model of corporate performance as a function of mental, organizational, and leadership influences. Academy of Management Journal, 24, 453–470.

Whitney, J. O. (1987). Taking charge: Management guide to troubled companies and turnarounds. Homewood, IL: Dow-Jones-Irwin.

Wister, A. V. (2005). Baby Boomer Health Dynamics: How Are We Aging? University of Toronto Press, Toronto, Ontario, Canada.

World Health Organization 2005 [Online] http://www.alz.co.uk/global/who.html.