

# Pain Management within the Long-term Care Setting: An Inquiry into Staff-perceived Contemporary Pain Management Practices

by

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A thesis  
presented to the University of Waterloo  
in fulfilment of the  
thesis requirement for the degree of  
Master of Science  
in  
Pharmacy

Waterloo, Ontario, Canada, 2014  
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## **AUTHOR'S DECLARATION**

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

## ABSTRACT

**Background:** Chronic pain is a frequent and undertreated ailment within the long-term care community (Herman et al, 2009). The likelihood of experiencing pain increases with age and failure to treat this condition may expose individuals to prolonged and unnecessary suffering (Ramage-Morin, 2008). Furthermore, undertreated pain can lead to a life of inactivity and a failure to carry out normal social and vocational roles which in term may result in higher rates of depression, anxiety and sleep disorders (Clark, 2000). The present study aimed to explore staff perceptions on current pain management within long-term care including insights to future needs in optimizing pain management. This work will contribute to the overall awareness surrounding possible reasons that current pain management within long-term care is viewed as suboptimal (Herman et al, 2009).

**Methods:** A qualitative, post-positivist grounded theory study was carried out in order to investigate staff-perceived strengths, weaknesses and barriers surrounding the topic of pain-management within the long-term care setting. Semi-structured interviews with 17 long-term care staff members from a variety of vocations were conducted with a focus on identifying and clarifying properties surrounding the notion that pain management is currently suboptimal. A focus group session was implemented as a method to further develop the emerging grounded theory.

**Results:** Nine themes surrounding pain management within the long-term care setting were identified in the present study. These themes gave rise to the core concept of creating an environment supportive of optimal pain management. The nine themes were integrated into the *theory of optimization of pain management within long-term care* through thematic interpretation. The focus group session further developed and confirmed themes identified throughout the one-on-one interviews as well as expanded the discussed theory.

**Discussion:** The developed *theory of optimization of pain management within the long-term care setting* provides a comprehensive overview of the current barriers facing adequate pain management as well as outlines future suggestions for improvement of managing pain within the long-term care setting.

## **ACKNOWLEDGEMENTS**

First of all, I would like to thank my supervisor Dr. Carlos Rojas-Fernandez for his untiring support throughout my Masters career. Without his guidance and continuously positive attitude this project would not have been possible.

I would also like to thank my thesis committee members, Dr. Sherry Dupuis and Dr. Feng Chang for their insight in helping to ensure the completion of thorough and comprehensive thesis. Their support was invaluable throughout the duration of this project.

I would like to thank Dr. Ramesh Zacharias, the principal investigator of this project, for initiating this exciting endeavour and for allowing me to take on his work as my Masters project. His dedication to the geriatric population and enthusiasm has been vital in inspiring the completion of this project.

I sincerely thank the healthcare workers who participated in this study. I appreciate their time and willingness to share personal experiences and recommendations for the sake of improving the care of institutionalized elderly adults.

I would like to thank Dr. Jonathan Blay, Associate Director of Research and Graduate Studies, for his persistent and patient support throughout my Masters career. I have greatly benefited from his wisdom and guidance.

Finally, I would like to recognize and thank Pfizer Canada and Purdue Pharma Canada for the financial support they have provided to this project.

## **DEDICATION**

I would like to dedicate this thesis to my parents, Robert and Jennifer Weber, my brother Matthew Weber and my husband Giovanni Mattucci.

To my family- thank you for your everlasting support and love. I could not have accomplished this, or any of my goals, without your interminable belief in me.

To Giovanni- thank you for loving me unconditionally and for supporting me through all of life's endeavors. You keep me grounded and make me a better person.

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# **CHAPTER 1: BACKGROUND & LITERATURE REVIEW**

## **1.1 THE AGING POPULATION AND RISE OF MORBIDITY**

The aging population is a well-documented point of concern within North American society. There is substantial and unequivocal evidence that the Canadian population is aging at a rate that is unsupportable by current healthcare infrastructure (Busby & Robson, 2013). According to Statistics Canada (2012) the fastest-growing age group is that of senior citizens (those aged >65 years). It was estimated that 5.0 million Canadians were 65 years of age or older in the year 2011(Statistics Canada, 2012). This number is expected to double over the next 25 years, and by the year 2051, approximately one in four Canadians is estimated to be over the age of 65 (Statistics Canada, 2012). These trends will continue for several decades due to lower fertility rates, increasing life expectancies and the baby boom generation entering into their senior years (Statistics Canada, 2012).

One of the primary reasons for concern is that increasing age is closely associated to an increase in morbidity. It is speculated that with growing age, there is an inevitable decline in physiology and an accumulation of health problems (Yancik et al., 2009). This leads to an increased complexity in the overall health status of older adults, the ability to manage comorbidities, and the ability to maintain a good quality of life (Yancik et al., 2009). Often, the increase in morbidity seen with age can be speculated to be based on pre-existing health problems. This is not always the case, hence, there are a number of diseases that will affect any person who lives long enough (Yancik et al., 2009). For example, arthritis, hypertension, cancer, diabetes, osteoporosis, and Alzheimer's disease are diseases that are closely associated with the aging process and often considered inevitable (Yancik et al., 2009). In recent years, it has also

become clear that pain in older people is a particular area of unmet need (Gagliese, 2009). The demand for appropriate geriatric pain management has grown along with the increasing number of aged individuals, which has led to an explosion in discussion and research on this topic (Gagliese, 2009). This explosion is reflected in the exponential increase of publications surrounding the topic of pain in the aged over the past decade (Gagliese, 2009). For example, when the terms pain management and aged were searched in CINAHL between the years of 1982 to 2000, only 462 articles returned while when the same search terms were searched between the years of 1982 to 2012 a total of 2,009 articles were returned.

## 1.2 PAIN IN THE AGED

The likelihood of experiencing pain increases with age, creating a major challenge to the North American health care system (Ramage-Morin, 2008). Persistent or chronic pain affects more than 50% of older persons living in the community and more than 80% of those who live in nursing homes. Prolonged suffering may lead individuals to a life of inactivity and a failure to carry out normal social and vocational roles which in term may result in higher rates of depression, anxiety and sleep disorders (Clark, 2000). Treating pain in older people can be challenging due to an increased number of co-morbidities, multiple aetiologies for pain, age related changes in physiology, and potential adverse drug events secondary to polypharmacy (Cavalieri, 2007).

In the long term-care setting, pain management appears to be suboptimal. Numerous studies have documented a high prevalence of undertreated pain within the long term-care setting which would indicate shortcomings in current pain management strategies (Ferrell, 1995; Stein & Ferrell, 1996; Slyk, 1999). Furthermore, in addition to being undertreated it has been noted pain

is often underreported and under recognized within the long-term care setting (Ferrell, 1995; Stein & Ferrell, 1996; Slyk, 1999). These shortcomings tend to be more prevalent in those individuals 85 years and older and/or those with cognitive impairment (Bernabei et al, 1998; Won et al. 1999). For example, Herman et al.'s (2009) study of pain management within the long-term care setting documented that 50% of residents who report daily pain only receive as needed analgesics, and 25% did not receive any pain medications at all. Furthermore, in a study conducted by Bernabei and colleagues (1998) examining older adults living in long-term care settings and undergoing cancer treatment, it was found that daily pain was present in 24% to 38% of the participants but approximately 26% of these individuals did not receive any analgesic medication. Similar findings were mentioned in Ferrell et al's (1990) study on pain management, which indicated that of the 51% long-term care residents who had daily intermittent pain only 15% received pain medication. This was despite the fact that 84% had physician's orders for as needed pain medication (Ferrell et al., 1990).

It is speculated that the challenges in addressing inadequate pain management may, in part, be due to the difficulties in treating pain in individuals with a high number of comorbidities. These complications include consideration of both physiological and psychological morbidities; and the combination of both which would further complicate the ability to deliver adequate care. In this manner, the notion of interdisciplinary pain management is raised as a method to address the complicated and multifaceted nature of pain in the elderly. Interdisciplinary pain management refers to care encompassing two or more disciplines that normally would be considered distinct (Gatchel et al., 2014). In interdisciplinary care teams professionals from diverse fields work together in a coordinated fashion to deliver optimal care (Besselaar & Heimeriks, 2001). This is distinguished from multidisciplinary care, as multidisciplinary care

includes professionals from diverse fields however does not mandate working together or the coordination of care (Besselaar & Heimeriks, 2001).

### 1.3 INTERDISCIPLINARY PAIN MANAGEMENT

The effectiveness of interdisciplinary treatment models have been demonstrated in various other health care settings (Leipzig et al., 1990; Tsukuda, 1990; Zeiss & Steffen, 1996). There seems to be no doubt in the ability of interdisciplinary models of care to be effective and therefore, they hold great potential for improving pain management practices. For example, various studies examining the efficacy of interdisciplinary pain management models have yielded results that demonstrate significant improvements in pain measures when compared to standard rehabilitation programs (Angst et al., 2006; Angst et. al., 2009; Kitahara et. al., 2006; Oslund et. al., 2009). However, most studies only examined the role of interdisciplinary care in outpatient clinics (Angst et al., 2006; Angst et al., 2009; Kitahara et al., 2006; Oslund et al.; 2009) and these studies were focused on pain treatment in specific conditions such as cardiovascular disease, diabetes and fibromyalgia rather than chronic pain in general (i.e., regardless of aetiology) (Angst et al., 2006; Angst et al., 2009; Kitahara et al., 2006; Oslund et al., 2009). The results of these studies are not necessarily generalizable to geriatric institutionalized care due to differing clinical organization, infrastructures, and patient characteristics.

### 1.4 REVIEW OF THE LITERATURE

A preliminary review of the literature suggests that interdisciplinary models of care may be advantageous in addressing pain within the long-term care setting. The literature has shed light on this problem via quantification of the prevalence of pain within the institutionalized geriatric

population. For these reasons it is of great interest to the author to determine what has been studied in terms of interdisciplinary pain management specifically for older adults living within long-term care facilities.

#### *1.4.1 Objectives*

A scoping review was carried out in an attempt to map out the literature surrounding geriatric pain management and illustrate current research activity pertinent to the discussed field. As is often a purpose of scoping reviews (Arksey & O'Malley, 2005), gaps in the evidence base were acknowledged thereby defining areas in need of further investigation.

#### *1.4.2 Methodological Framework*

Five databases were searched for relevant journal articles: MEDLINE (1950 to July 2013), EMBASE (1974 to July 2013), International Pharmaceutical abstracts (1970 to July 2013), PyschInfo (1840 to July 2013), and CINAHL (1981 to July 2013). Additionally, references of selected journal articles were reviewed for studies that may have been missed through database searches.

Three professional librarians were consulted in the development of search strategies. Topics were organized into four concepts: interdisciplinary, elderly, long-term care, and pain. Each concept was searched via a combination of keywords and subject headings specific to each database. The search strategy did not initially include the concept 'interdisciplinary', however, initial results yielded studies not pertaining to interdisciplinary pain management. It was therefore necessary to include 'interdisciplinary' as a concept to narrow results to more relevant literature. Refer to Appendix B for detailed search strategies.

Articles were selected if they met the following inclusion criteria:

- Study took place within a long-term care institution
- Study focused on pain as primary morbidity
- Article was written in English
- Studies involved an interdisciplinary care model

Articles were excluded if:

- Study took place in an outpatient setting
- Study focused on health care problems other than pain

Owing to a limited number of studies available, articles were not restricted based on the type of study, outcome measure(s), or participant characteristics.

#### *1.4.3 Results*

Initial searches yielded 68 journal articles from CINAHL, 134 from EMBASE, 86 from MEDLINE, 4 from IPA and 0 from PyschInfo. From a total of 290 journal articles, four were selected to be included in this review based on inclusion/exclusion criteria.

Tse et al. (2011) studied pain management by recruiting staff and residents from 10 nursing homes in and around the Hong Kong area. The study involved implementation of an integrated pain management program (IPMP) which addressed pain from physical and psychological perspectives. The intervention included physical training programs, multisensory stimulation therapy, art and craft activity, music therapy and other various non-pharmacological methods such as heat, cold, breathing exercises, and massage. To address staff members' knowledge regarding pain management, Tse et al. (2011) included training and educational programs for



caregivers and assessed the overall impact on residents. Interestingly, this notion included encouraging staff to participate in strengthening exercises themselves. Outcome measures included staff knowledge and attitudes regarding pain, self-reported pain intensity using the Cantonese Verbal Rating Scales (VRS) for the residents (0 being no pain and 10 being unimaginably, unthinkable pain), physical function, quality of life, and psychosocial well-being (subjective happiness scale). Tse and colleagues' (2011) study demonstrated that staff had a significantly better body of knowledge and improved attitudes surrounding pain management following the intervention. Pain intensity amongst the older residents decreased in the control and experimental group. In the control group, mean pain scores at baseline and endpoint were  $3.98 (\pm 2.13)$  and  $3.29 (\pm 2.24)$ , respectively ( $p < 0.05$ ) post-intervention, while a more profound decrease was observed in the experimental group with mean pain scores of  $4.19 (\pm 2.25)$  pre-intervention, and  $2.67 (\pm 2.08)$  ( $p < 0.05$ ) post-intervention. The experimental group also demonstrated a higher self-perception in happiness and life satisfaction and lower in loneliness and depression after implementation of the program.

Boorsma et al. (2011) performed a cluster randomized trial of 10 residential care facilities in the Netherlands. An interview was administered to residents by trained, blinded interviewers to assess baseline functional health, activities of daily living, depression, cognition, satisfaction with care, and use of medications. The intervention involved an adaptation of the principles of disease management and encompassed a multidisciplinary integrated care model. The intervention focused on identification and monitoring of functional disabilities caused by chronic disease, coordinating care and empowering the patients. Geriatric multidimensional assessments of all residents took place every three months in order to identify problem areas. This helped to guide individualized care planning in order to improve and maintain functional health status.

Additionally, care plans were discussed with residents, families, family physicians, and adapted to the personal wishes of residents. Patients with complex care needs had multidisciplinary meetings scheduled at least twice a year which involved input from nursing assistants, house managers, as well as optional consulting with a geriatrician or psychologist for the frailest residents with complex needs. Primary outcome measures included risk-adjusted quality-of-care indicators, process outcomes such as the number of residents who completed self-assessments, and the number of multidisciplinary meetings held. Boorsma's et al. (2011) team demonstrated that with a structured multidisciplinary approach (which provided opportunities for staff training and open communication on particular cases) the quality of care for residents improved. Intervention facilities had a significantly higher sum score of the 32 risk-adjusted quality-of-care indicators used as an outcome measure. Self-reported quality of life did not differ between residents, however, residents in the intervention group tended to be more positive about the quality of care over time. Staff expertise was felt to have increased after the introduction of the model.

Jones et al. (2004) attempted to address inadequate pain management in the nursing home setting by implementing a multifaceted educational and behavioural intervention in 6 nursing homes throughout the state of Colorado in the United States. Six homes received the intervention program, and 6 homes acted as control sites. Staff members were educated through four 30-minute interactive sessions over a six month period. Education included overviews of pain problems and assessments, pharmacological management of pain in the elderly, exploration of communication issues related to pain management within the nursing home, and an integrative class using case studies. In order to include physicians in the training process a 45 minute accredited continuing medical education (CME) session designed to refresh pain management

skills was offered. A pain resource binder was developed by the research team and made available to each study nursing home. Additionally, a 7 minute video about pain was produced and provided for use by residents and families. Finally, internal pain teams were arranged in each nursing home by selecting three members of staff to work with study investigators and function as “change agents” within their respective facilities. The pain team members played key roles in developing pain vital sign assessments and documentation methods and were also made available to other staff as consultants for complicated cases. Measurements were conducted using both qualitative and quantitative methods. A written pain survey was administered to staff within each nursing home, and a focus group was conducted to examine pain practices, staff knowledge, beliefs and perceived barriers to pain management. A small group of residents were sampled (20% of residents from participating nursing homes) to quantify reports of pain and their medical records were reviewed for any other pain-related information. This study produced no significant changes in the proportion of residents reporting pain within treatment homes. Over the three phases of the study a significant decrease in the percentage of residents reporting constant pain; 53%, 37%, and 35% respectively ( $p \leq 0.001$ ). Overall, residents in the implementation phase were 35% less likely to report constant pain. Prior to model implementation, staff knowledge was suboptimal but following the application of training initiatives there was some success in improvement of staff awareness surrounding pain and pain management techniques such as pain identification, pharmacological management, and proper documentation of resident pain.

Kaasalainen and colleagues (2012) conducted a before-and-after study of an interdisciplinary pain intervention designed for long-term care facilities. A pain protocol was developed based on best practices from the American Geriatrics Society (2009) and implemented in four long-term care centers were selected throughout southern Ontario. Trained nursing

students conducted medical record reviews of resident charts to characterize current pain documentation, pain assessment and treatment practices. A pain team was created and implemented in representative facilities. The pain team was composed of nursing home administrative members, family physicians, nursing staff, pharmacists, personal support workers and physiotherapists. The team was responsible for providing educational opportunities for other staff, hosted monthly meetings to address resident pain issues within their respective facilities, and served as a resource to answer last minute questions or provide immediate advice. Outcome measures included resident pain scores and staff opinions regarding pain related issues.

Interviews and a focus group were held one year after the study to gather information on barriers, facilitators and suggestions for the protocol. Kaasalainen's et al (2012) intervention slowed the rate of pain increase in the treatment group of residents. In the control group, pain increased quicker over the study period, though the findings did not reach statistical significance. For example, the mean change in pain scores (PACSLAC pain scale) for the intervention group was 0.16 ( $\pm$  3.86) while the mean change in the control group was 1.04 ( $\pm$  2.86) ( $p=$  0.13). In terms of staff behaviour there were numerous improvements in the clinical practice behaviours measured. Documentation of pain indicators was more frequent including completion of pain admission assessments and there was an increase in the use of standardized pain assessment tools in the intervention group. Staff attitudes in the intervention group produced more positive reports than the control group.

#### *1.4.4 Discussion*

The fact that only four studies were identified that fit the inclusion and exclusion criteria used in the presently discussed review indicates that a significant gap exists in the current body

of literature available regarding interdisciplinary pain management models for institutionalized older adults.

While Tse's et al. (2012) study did not initially seem to fit the criteria for an interdisciplinary model, it incorporated elements of physical and psychological treatments of pain. The intervention did not emphasize communication amongst various staff members, thus it did not meet all criteria for an interdisciplinary model. The demonstration of positive improvements in staff knowledge regarding pain and their attitudes on pain provided merit to this study; however, thus it was included in the present review. Overall, Tse and colleagues (2012) demonstrated that addressing pain through multiple perspectives (physical, social, psychological, spiritual), including the residents in the treatment process, and emphasizing the importance of self-care can bring about significant improvements in individual pain experiences. As noted above, a key component which this study lacked was that of interdisciplinary communication and its impact on the pain management process. Also noteworthy is the fact that this study only included residents who were able to physically tolerate exercise. This would exclude a large cohort of the long-term care population and almost certainly a population with a larger prevalence of pain.

Jones and colleagues (2004) developed a multifaceted pain intervention. The study essentially fit the criteria for an interdisciplinary model of care, as focus groups were held and a pain team was developed for consultation and discussion on difficult cases. Overall, the study demonstrated some benefit in terms of pain management practices; there was improved resource availability, enriched documentation of pain, and a decrease in the number of residents reporting constant pain. It should be noted that the study did not provide a detailed explanation of resident characteristics and participation. Furthermore, this study did not include multiple disciplines, was limited to the inclusion of namely nursing vocations and did not address the social and

psychological aspects of pain. A notable strength of this study was the inclusion of residents and their families in the care process, including the opportunity for them to participate in pain education activities. This proved to procure some benefit in the overall success of the intervention. These findings would indicate that staff populations are critical in the success of a treatment model and that placing emphasis on residents and their families is an important aspect for consideration in future studies.

Boorsma's et al. (2011) research brought about the notion of "multidisciplinary integrated care" which upon further review was decided by the authors to be synonymous with interdisciplinary care. Similar to Jones and colleagues (2004), Boorsma et al. (2011) also included participation of residents and their families, providing further grounds for the notion that participation in one's care is an essential factor in improving pain management in long-term care facilities. The lack of information provided regarding specific vocations involved in the study was a notable limitation. It is plausible that only nursing and medical staff were involved in this study, which further contributes to the gap in literature surrounding true interdisciplinary care models. For example, the inclusion of fitness, recreation, socio-psychological care is absent in this study and Jones' et al. (2004).

Kaasalainen's et al. (2012) results suggested that an interdisciplinary approach can reduce the rate at which pain increases. While this study suggested that an interdisciplinary approach to pain management was effective, the results were relatively unimpressive in that changes were very small in magnitude and not statistically significant. Although staff members were interviewed in this study, the interviews took place after the intervention was implemented in order to discuss staff-perceived benefits. Therefore, staff who were responsible for implementation and support of the intervention were not included in the development of the

actual model. For this reason, support from these individuals may not have been as ample as it could have been, thus contributing to a limitation in the possible benefits of the model. This is of interest to the current author as it would suggest that inclusion of staff in the development of a model may lead to more positive outcomes.

#### *1.4.5 Limitations of the Review*

Initially, when piloting the search strategy the remit produced a large number of irrelevant studies. At this time, professional librarians were consulted to optimise the search strategy. For this reason the review was strictly concentrated, which led to a significantly smaller remit which seemed to produce more relevant studies. It is possible, however, that in narrowing the search strategy relevant research may have been missed. In attempt to address this problem, references of the included studies were scanned for potentially pertinent studies. This process did not yield any additional studies relevant to the present literature review.

### 1.5 IMPLICATIONS FOR THE PRESENT STUDY

The reviewed literature provides a strong basis for concluding that addressing pain management through interdisciplinary care models holds some promise, especially in the institutionalized geriatric population. This has been previously established in other health care realms, and the four studies which were included would indicate this to be the case in the pain management setting (Tse et al., 2012; Boorsma et al., 2011; Jones et al., 2004; Kaasalainen et al.; 2012).

### *1.5.2 The need to improve pain management practices*

Although interdisciplinary pain management models may be more effective than regular medical care in some settings, there is a need for further research focusing on interdisciplinary pain management models in the institutionalized geriatric population. The paucity of studies in this area is apparent and leaves much to be desired in terms of improving care for the aged. In the absence of change, the current model of pain management will result in unnecessary suffering and poor quality of life for many elderly individuals living in institutionalized care settings (Clark, 2000).

More specifically, an interdisciplinary care model is needed which will include physical and psychological causes and implications of pain. Including relevant staff in this process is essential in order to address these issues in an efficacious manner. Indeed, attempts to change care processes without including key staff members (individuals who will be responsible for implementing change) will likely lead to transient changes, if any in these processes.



## **CHAPTER 2: STUDY RATIONALE & OBJECTIVES**

### **2.1 OVERALL PURPOSE**

There is a high prevalence of un- and/or undertreated pain in residents of long-term care facilities (Leone et al., 2009). There have also been several attempts to address pain through the development of novel pain management models, more recently with an increased focus on interdisciplinary care and alternative treatment regimens (Kaasalainen et al., 2012; Jones et al., 2004). The majority of these studies have failed to include formal caregivers in the development process, making it difficult to gauge long-term efficacy. This leaves a distinct gap in the body of knowledge on pain management models in the long-term care setting. Moreover, the ability of newly developed models to withstand the test of time has not been properly addressed.

The goal of the present study was to explore and characterize current staff-perceived strengths, barriers and future suggestions to achieve optimal pain management within long-term care. Furthermore, the present study aimed to identify key components and strategies necessary to achieve effective pain management.

### **2.2 THEORY GUIDING PRACTICE IN HEALTHCARE RESEARCH**

The popularity of qualitative research methods within the healthcare field has grown substantially over the past 20 years (Busaidi, 2008). The use of qualitative research methods allows for the implementation of evidence-based practice (Green, 2008). This is, in large, one of the key reasons for its popularity within the healthcare arena (Green, 2008).

It argues that empirical evidence alone is insufficient to direct practice, and that recourse to the explanatory and predictive capability of theory is essential to the design of both programs and evaluations (Green, 2008, p.125).

In this sense, the value of improving practice through the development of evidence-based theory lies in the assimilation of the perspectives of the healthcare providers who live the experiences which the researcher is interested in. However, the currently available body of literature regarding pain management practices within the long-term care setting seems to fall short of providing practical suggestions founded on evidence-based theory.

### 2.3 STUDY OBJECTIVES

- a) The importance of theory guiding practice has been widely acknowledged and utilized in modern day healthcare research (Green, 2008). In the present study the researcher attempted to develop a practical theory based on current strengths and weaknesses regarding pain management practices within long-term care settings, and what is needed to improve current shortcomings and improve pain management. The main objectives of the present study are: to delineate and understand staff-perceived strengths, weaknesses and barriers to current experiences of pain management practices within the long-term care setting.
- b) To identify and understand what is needed to attain optimal pain management practices, from an interdisciplinary perspective, for elderly individuals living within long-term care.

## CHAPTER 3: METHODS

### 3.1 EPISTEMOLOGY

Theory of knowledge, or epistemology, directs attention to the researcher's awareness of the phenomena of interest (Annells, 1996). Epistemology is concerned with the relationship between the knower and what is known and the fact that all researchers enter the field with previous experiences and have some knowledge of the research topic (DeRose, 2005). These elements will undoubtedly influence their interpretations of various interactions throughout the duration of study (DeRose, 2005). Simply put, how the researcher might approach each research situation is determined by all prior incidents and it is therefore important to disclose what some of these key incidences might be (Heath & Cowley, 2004). Disclosure of epistemological background serves to enrich the value of the study and deepen understanding of the resulting theories (Wertz et al., 2011). To illustrate the notion of epistemology, Daly (2007) states:

“When we ask about epistemology, we raise questions about what is knowable, how we can come to have knowledge, and what relationship we have (as researchers) with that which we are trying to grasp. (p. 21)

Of close correlation is the concept of paradigms. Annells (1996) denotes a paradigm as a set of views by which the world can be perceived. There are several key paradigms with which a researcher can carry out inquiry: positivism, post-positivism, interpretivism/constructivism, critical theory and post-modernism (Annells, 1996). It is important for the researcher to reveal from which paradigm they are approaching the phenomena as epistemological standpoints are the foundations upon which knowledge is shaped (DeRose, 2004). Without knowledge of epistemology and paradigms, understanding the rationale by which methodology is carried out and transitioned to theory is not possible (Wertz et al., 2011).

The post-positivist form of inquiry upholds the notion that while reality does indeed exist, it, however, cannot every fully be captured (Lincoln & Guba, 2000). This standpoint requires the researcher to be as objective as possible whilst recognizing that full objectivity is not likely possible (Annells, 1996). With these ideals at hand it is necessary that the researcher is cautious about making statements based on the data, thoroughly reflecting on the scenarios from which that data has risen (Daly, 2007). In this manner, the researcher is attempting to discover knowledge rather than produce it (Daly, 2007).

It is the post-positivist paradigm from which the presently discussed study was conducted. The researcher therefore, aimed to remain neutral and confront bias through reflection and careful consideration of the data in question. Furthermore, the researcher attempted to uphold Glaser and Strauss (1967)'s concept of grounded theory in which the researcher allows theory to materialize from the data rather than coercing data into the theory. In this sense, the researcher was concerned with staying as close to the data as possible. Staying close to the data was done by both careful representations of staff realities and incorporation of in-vivo language.

### 3.2 METHODOLOGICAL APPROACH

Grounded theory, one of the most popular and widely used qualitative research methods, aims to cultivate theory surrounding a specific phenomenon (Daly, 2007) within respective natural settings (Pope et al, 2000). Grounded theory has been one of the most celebrated qualitative methods, gaining much attention over the last 40 years as a reliable and effective methodology. With its growing popularity, it has been adapted into the realm of health care research. Here it has continued to flourish due to its pragmatic standpoint and popularity in

representing situational conditions which has been found to be thoroughly insightful in healthcare improvement (Corbin & Strauss, 1990).

Grounded theory is a qualitative research method that, when viewed in the post-positive paradigm, has the benefit of allowing the researcher to enter the data collection process without any preconceived notions (Glazer & Strauss, 1967). Grounded theory embodies the notion of symbolic interactionism, meaning that participants are recognized as humans with their own interpretations of incidents and the transient nature of data is recognized and considered throughout the study (Wertz et al., 2011). In this manner the researcher allows perceptions to emerge throughout the exploration of data rather than beginning the journey with a hypothesis guiding the investigation through a rigid set of procedures (Charmaz, 2006). The ultimate goal of grounded theory is the development of theory through consideration and close contemplation of the subsisted experiences of those living close to the phenomenon. In terms of healthcare research, grounded theory has shown merit in handling sensitive health matters as well as a successful means of carrying out educational research (Steil et al., 2010; Tavakol, et al., 2006). The growing intricacy of the Canadian health care system and increased diversity has led to both professionals and patients interacting in an increasingly complex manner (Pope et al, 2000). For this reason, using methods which aim to address lived experiences, such as grounded theory, are indispensable. Health care models cannot rely solely on what is thought to be superlative but rather on “what is” and how that can be moulded into an efficacious entity in its lived environment. For this reasons the choice to implement it in the discussed study was an obvious one.

Pain management is a particularly interesting case. To date, there are few, if any, reliable fixed quantifiable measures of pain, but rather pain rating scales which are subject to massive

administration bias. Pain management needs to be understood from a health systems and health model perspective which integrates the philosophies and understandings of currently practicing health care professionals. It is these individuals who are essential to fueling improvement and carrying out change within in the health care infrastructure. It would, therefore, be apparently reasonable to integrate them into the process.

### 3.3 STUDY PHASES

#### *3.3.1 Phase 1: Staff-Oriented Interviews*

The purpose of this phase was for the researcher to gain a well-rounded and thorough perspective of how pain management is managed within the long-term care setting. More specifically, this included staff perspectives on current standard operating procedures, specific practices, communication pathways and how well the system currently supports patients dealing with pain. Grounded theory methodology was employed in order to carry out one-on-one semi-structured interviews investigating current staff perceived barriers, challenges and strengths concerning current pain management practices.

#### *Sampling and Recruitment*

Recruitment for participation in the present study took place within a long-term care facility, representative of those belonging to a chain of privatized long-term care and nursing facilities spread throughout South-western Ontario. These facilities provide various levels of care dependent upon the needs of individual residents, ranging from independent living to nursing care. There were significant benefits of partnering with this particular chain of long-term care centres including on-site access to all types of expertise such as, nursing, physiotherapy, recreational therapy, pharmacy and occupational therapy. The specific facility chosen for the

present study was a 182 bed long-term care centre located in southwestern Ontario previously known to the researcher. This facility presented an ideal research setting as it provided easy access to a majority of the vocations of interest; if not already on-site they were available via contract work. The researcher was familiar with management allowing easy access to materials and familiarity with current documentation methods and on-site resources. This facility was representative of the discussed chain of long-term care centres in that the specific presence of staff (in terms of both number and profession), infrastructure and characteristics of resident population was reflective of all locations. The staff to resident ratio, structure of management and resource allotment is standardized across all centres belonging to the discussed chain.

The long-term care facility chosen as a representative facility does not currently adhere to an interdisciplinary model of care. However, they are undergoing a cultural change in order to move towards an interdisciplinary team approach. The current care provided, in theory, represents multidisciplinary care in that there are a variety of different vocations (i.e., nursing, physiotherapy, recreational therapy, massage therapy) that participate in care. The absence of interdisciplinary care lies in the fact that these professions do not regularly communicate or coordinate care.

Recruitment for the interview phase involved previously gained workplace knowledge of the long-term care setting. The researcher was formerly employed within the representative facility and therefore had practical knowledge of the roles and responsibilities of various staff members of this facility and furthermore had been involved in efforts to improve pain management practices. This allowed for recruitment to begin by targeting specific vocations already known to be involved in pain management both through the researchers own experience and further review of literature focusing on pain management studies.

Staff members were recruited by distribution of research study flyers as well as offering honorariums for participation. Recruitment was carried out using “purposeful sampling”; meaning that cases were selected with the intention that they would provide information rich data (Patton, 1990). In the current study this involved the inclusion of a variety of professionals working within the long-term care community, which would together provide a well-rounded picture of current circumstances in the facility. This process required theoretical sensitivity on the part of the researcher in order to hold a certain level of awareness regarding who the stakeholders were within the pain management realm. This allowed for selective sampling, targeting specific staff members based on vocation. Inclusion in the study was determined by the individuals’ specific roles and responsibilities within the long-term care setting in relation to pain management. The researcher sought to include personnel from each vocation represented within the representative facility including at least one of each of the following; chiropractor, kinesiologist, occupational therapist, personal care attendant (PCA), pharmacist, physician, physiotherapist, recreational therapist, registered massage therapist (RMT), registered nurse (RN), and registered practical nurse (RPN). Initially, until at least one of each the previously listed vocations was sampled, recruitment was on a first-come first-serve basis, as not all respondents could be included due to limited resources. Following this, repeated sampling of staff members representing the same vocation was carried out as needed, in order to fill in gaps within the emerging theory. This was carried out by way of theoretical sampling.

An important notion involved in the use of grounded theory is that of theoretical sampling. It is through this process that the researcher is able to fully immerse themselves in the research and gain a more in depth understanding of the phenomena in question (Daly, 2007). As Daly (2007) states, “theoretical sampling is directed by the incompleteness of our theoretical explanation and



involves sampling for certain kinds of events, that would shed light on these missing elements.” (p. 105). Theoretical sampling is conducted by strategic selecting participants who hold the potential to add depth to newly emerging theories (Pope et al, 2000). This mode of sampling allows for exploration and understanding of the themes that research cases reveal as well as helps to eradicate any cases which may be out of the norm (Daly, 2007). The process itself is unquestionably linked to the constant comparison method. It is the perpetual back and forth which creates the commonly referred to “research pendulum” metaphor frequently used in descriptions of grounded theory methodology (Lazaraton, 1995). The research pendulum created by theoretical sampling and constant comparison allows the researcher to scrutinize emerging patterns during the development of theory (Corbin & Strauss, 1990). Theoretical saturation refers to the point at which sampling and analysis no longer reveal new concepts, ideas, relationships concerning the phenomenon in question (Daly, 2007). The recognition that there are no longer newly emerging ideas relies heavily upon a sense of confidence from the researcher (Daly, 2007). At this point the researcher should be able to produce sufficient data to support the explanations (or theory) in question (Daly, 2007).

In order to foster theoretical sampling it is important to note that implementing the use of grounded theory dictates that there need not be a predetermined sample size (Daly, 2007). The sample size is flexible and is only determined once theoretical saturation has been attained (Pope et al, 2000).

In the present study, the sample size was not predetermined but rather implementation of purposeful sampling dictated a range of professionals to be interviewed. The specific professions initially included were determined based on theoretical sensitivity from the researcher and collaboration with a pain specialist currently working in the field. This was intended to ensure

the involvement of an array of pain management stakeholders in the study. It is important to note that theoretical sampling and saturation was slightly more challenging to reach, as participants were recruited from a variety of different expertise and therefore entered the study with substantially different realities.

#### *Data Collection Strategies:*

The interviews with long-term care staff members took place in the form of semi-structured, in-person consultations. According to Daly (2007), an interview is essentially a conversation with an agenda. The first purpose of these meetings was to explore various staff member's perspectives on current pain management strategies within the long-term care setting. It served as an opportunity for long-term care workers to share their personal opinions on currently used (if any) standard operating procedures, whether or not they felt these procedures were useful and overall barriers and strengths to optimal care. Some of the questions asked included: Describe any barriers that you see or perceive in the management of resident pain in this facility: what specific suggestions do you have related to the improvement of current pain management practices at your facility? Interviews were conducted in a private location to ensure confidentiality and in hopes that the participants would feel comfortable disclosing honest perspectives on current pain management models or practices. The second purpose was to allow participants to provide suggestions regarding how to improve pain management care in their workplaces. For example, participants were asked: What do you need to effectively support pain management in your practice? Interviews were audio recorded and on average lasted seventeen minutes. See Appendix E for detailed, semi-structured interview guide.

When using the semi-structured approach the researcher follows a set of guideline questions created prior to the interview (Charmaz, 2006). This guide serves to provide some organization to the meeting but also allows the interview to be flexible and follow a natural flow between the researcher and interviewee (Daly, 2007). Most often the guide is a set of general questions focused at the phenomenon of interest and is created with the intention of prompting additional questions as the interview progresses (Daly, 2007). The interview guide is meant to be amended as the study necessitates. Questions may be added, discarded or changed based on how data analysis progresses, and reveals need to sample other fragments of the phenomena at hand (Daly, 2007). The present study involved changing the interview guide several times as early interviews brought attention to several gaps in the theory which the researcher felt was important to supplement with further data (See Appendix F for sample transformation question).

### *3.3.2 Phase 2: Focus Group*

Following completion of the semi-structured interviews a focus group was organized. Focus groups are commonly used as a means to sample groups of individuals who share a commonality, such as being stakeholders on a particular issue (Daly, 2007). In the present study, the focus group was implemented as a method to develop themes and further substantiate the emerging theory. This initiated critical analysis of themes and prompted participants to expand on their thoughts. A group setting created the opportunity for discussion and group elaboration on key concepts. Patton (1990) describes the focus group as a sort of “group interview” in which the opportunity to obtain high quality data is presented in a social setting. This allows for individuals to share their opinions and thoughts in the context of other’s views fostering new lenses in which they may perceive reality (Patton, 1990). Daly (2007) states that:

Focus groups accentuate the ability of group discussion to facilitate the creation of depth within theory. The complex interactions amongst participants may serve to clarify issues or areas of superficiality in the presented themes. (p.158)

### *Sampling and Recruitment*

The focus group involved 12 participants from the representative facility whom of a majority had participated in the one-on-one interview phase. According to Daly (2007), focus groups including 7-8 participants are likely to present the most ideal environment for discussion. It is not uncommon, however, for this number to vary greatly. In the case of the current study in order to comprise a well-rounded staff presence, the researcher included 12 participants. This allowed for at least one participant per profession to be involved.

Recruitment was initiated via distribution of flyers within the previously described representative facility. Participants who were involved in the interview phase were also contacted directly and given the opportunity to participate in the focus group. If these individuals declined, recruitment was further targeted at members of the same vocation within the facility. This was done via advertising in particular departments via email and direct contact within the workplace. The goal was to have representatives who had participated in the one-on-one interview phase but due to the inability to prompt involvement from those individuals, some professions had to be supplemented with new participants. This was done in order to ensure at least one individual to represent each profession. The final group was comprised of ten individuals who participated in the one-on-one interviews and two new participants. The two new participants were included to ensure representation of professions in which previous participants declined to participate in the focus group.

## *Data Collection Strategies*

A focus group guide serves as a flexible referral point to help prompt questions and guide the conversation (Daly, 2007). The guide for the present study was created based on themes which arose during one-on-one interviews, including; staff members require on-going training in regards to pain management, opening up lines of communication amongst and between staff members, residents and family members, the need for guidelines surrounding the identification, assessment and management of pain, the need to implement an interdisciplinary team-based approach to pain management and the need to embrace resident-centered care. In order to ensure that the themes developed throughout the one-on-one interviews were in representative of current long-term care staff perspectives the focus group guide was created to further explore identified key concepts. Following introductions participants were presented with emerging themes and asked questions surrounding these topics. This was carried out in an attempt to clarify any discrepancies, deepen understanding, and fill in any major gaps in the theory. For example, in order to explore communication difficulties participants were asked the following question

Where do you think the biggest gaps are within communication pathways between staff when dealing with pain management and how can they best be improved?

In regards to problems with detection and assessment of pain, participants were asked;

What suggestions do you have to avoid the detection of pain being missed due to misrepresentation of behavioral problems?

In the present study, the focus group session took place over a 90 minute time period during which participants met face-to-face at the representative facility. Two moderators were present to guide the discussion. The session was audio recorded, transcribed and analyzed using grounded theory methodology.

## 3.4 ANALYSIS

### *3.4.1 Constant Comparative Method*

The constant comparative method is a necessary, structured and systematic process in carrying out a dependable grounded theory study, namely in approaching data analysis. This process of constant comparison involves the researcher harmonizing data collection and analysis (Wertz et al., 2011). This entails the analysis phase commencing shortly after data collection has begun and constantly reflecting the theories developed during early stages into that of later work and vice versa (Daly, 2007). It is this process which creates the cyclic manner of grounded theory methodology and allows theory to be formulated, enhanced and confirmed throughout the research process (Charmaz, 2006). This flip-flop of sampling and analysis continues onward until theoretical saturation is felt to have been reached.

### *3.4.2 Coding*

Analysis of all data collected in the discussed study was carried out using the Hierarchical Coding tethered to grounded theory methodology. The overall notion of grounded theory analysis is to examine “what is going on”, rather than looking for certain truth and unyielding facts (Glaser, 2004).

Hierarchical coding involves three essential phases; open coding, axial coding and selective coding (Glaser & Strauss, 1967; Corbin & Strauss, 1990).

The first step in moving through the stages of coding is to outline the path in which ideas regarding the phenomena in question are first brought about (Charmaz, 2006). This is accomplished through open coding which involves reviewing transcripts line by line and attaching codes to each event or abstract notion found within the data (Charmaz, 2006).

Secondly, the researcher reviews the open coding, identifying associations between early data sets and those collected during later stages of the research (Daly, 2007). This stage is called axial coding and involves categorizing initial codes based on their interrelationships (Daly, 2007). In the third stage of analysis the researcher aims to finalize the relationships between categories and decide upon a core concept to represent all theory developed throughout the research process (Daly, 2007). This is referred to as selective coding. In theory, this core concept should be appropriately supported by all properties of the data produced in the study.

The data analysis process for the present study began by reviewing each transcript several times. Following this, open coding was completed by hand using hard copies of transcripts and various coloured pens. Each line was considered and assigned a code that aimed to describe the key notion of that particular section of data.

Secondly, the researcher completed axial coding by inputting each code to an Excel file along with the respective in vivo quote supporting that code. During this process the codes were categorized into groups based on connections to each other and themes. Deductive and inductive reasoning were used to determine relationships and areas of similarity. Deduction refers to the premise that we enter the research world with that which we already know, and use this knowledge to identify gaps and the need for inquiry (Daly, 2007). In the present study, the research identified that there was a gap in the literature with regards to pain management within long-term care. More specifically, the fact that there was a lack of interdisciplinary pain management studies within the long-term care community. This became the starting point from which to begin this study and prompted the decision to interview long-term care personnel. Induction was used by exploring arising notions throughout interviews by adjusting interview questions with the goal of exploring and refining arising theories. It is this phase in which

theoretical sampling holds the most power, as relationships are supported or discouraged by further exploring the outlined relationships (Daly, 2007).

The final stage of analysis was selective coding. Strauss & Corbin (1998) describe this phase as the point at which the researcher “integrates and refines the theory”. It is in this phase that the researcher recognizes and outlines the core concept which acts as the groundwork for the theory. At this point, the core concept should be supported by a meshing of all notions that emerged throughout the study. At this time, the researcher finalized the relationships between all categories and concepts. In the present study, this concept was that of creating an environment supportive of optimal pain management.

### *3.4.3 Memo Writing*

Throughout the entire study, memo writing was used as an effective means to track the researcher’s thought process. Memo writing is a means of actively trailing the progression of a grounded theory study (Daly, 2007). Memos can take many forms and include everything from field notes taken during data collection to structured reflexive notes created during analysis (Daly, 2007). However, all forms of memo writing serve to illustrate the thinking process by which a researcher analyses their data, how they might view the phenomenon of interest, and the changes in their viewpoint that may take place throughout the study (Daly, 2007). One of many benefits of memo writing is that writing one’s thoughts can serve as a means to track and help prevent the researcher’s own preconceived notions from “muddying” the analysis process.

In the present study the researcher used two different types of memos to track their work. The first were field notes taken during one-on-one interviews and the focus group session. These were created by jotting down ideas prompted during data collection and key thoughts brought



about by the participants during the actual interviews or focus group session. Secondly, during analysis of transcripts the researcher created reflexive notes of her thought progression as a means to document the overall analytical process. In the end, the memos helped to illustrate and give meaning to the progression of raw data to theory.

## **CHAPTER 4: STAFF-ORIENTED INTERVIEWS & FOCUS GROUP**

### **4.1. INTRODUCTION**

The following chapter reviews the data collected and analyzed in the present study. The methodological steps discussed in the previous chapter were used by the researcher in an attempt to characterize current pain management practices within a representative long-term care facility. Staff-oriented interviews were used in an attempt to explore strengths, barriers and shortcomings to current pain management practices. The goal was to integrate perspectives of staff members from various vocational backgrounds in order to gain an understanding of the overall context of current pain management care within long-term care. The results of these interviews and subsequent focus group are presented the succeeding section.

### **4.2 FINDINGS AND INTERPRETATIONS: STAFF ORIENTED INTERVIEWS & FOCUS GROUP**

#### *4.2.1 Sample Characteristics*

Seventeen long-term care staff members participated in the presently discussed study. Three of these individuals were personal care attendants (PCAs), two were registered practical nurses, one a registered nurse, two medical doctors, one a pharmacist, two physiotherapists, one kinesiologist, two recreational therapists, one occupational therapist, one chiropractor and one registered massage therapist. The sample included twelve female participants and five males (See Table 1 for summary of interviews).

<b>Profession</b>	<b>Gender</b>	<b>Background/Experience</b>
Chiropractor	Female	Pain management clinic, consult in long-term care
Kinesiologist	Female	Sports rehabilitation clinic, 6 years long-term care
Occupational Therapist	Female	Community practice, contract long-term care
Personal Care Attendant	Female	Solely long-term care, present position
Personal Care Attendant	Female	Solely long-term care
Personal Care attendant	Female	Solely long-term care
Pharmacist	Male	Community pharmacy, long-term care
Physician	Male	Community family practice, retirement
Physician	Male	Community family practice, 12 years working with geriatric population
Physiotherapist	Female	Community clinic, contract long-term care
Physiotherapist	Male	Contract long-term care
Recreational Therapist	Female	Solely long-term care
Recreational Therapist	Male	Hospital, long-term care
Registered Massage Therapist	Female	Community clinic, consult in long-term care
Registered Practical Nurse	Female	8 years working in long-term care
Registered Practical Nurse	Female	Long-term care, personal
Registered Nurse	Female	Acute care, long-term care

Table 1. One-on-one staff-oriented interview sample characteristics

A focus group was held with several of the participants who were previously involved in the one-on-one interview phase. During the focus group session emerging themes were reviewed and discussion elaborating on properties of these theories was pursued. The intention was to clarify any ambiguous concepts, improve understanding of encompassed themes as well as seek out future recommendations for improvement of current pain management practices. Eleven participants, 7 females and 4 males were involved in the focus group session. Sample characteristics are detailed below in Table 2.

<b>Profession</b>	<b>Gender</b>	<b>Background/Experience</b>
Chiropractor	Female	Pain management clinic, consult in long-term care
Kinesiologist	Female	Sports rehabilitation clinic, 6 years long-term care
Occupational Therapist	Male	Community practice, contract long-term care
Physician	Male	Pain clinic, surgery, emergency, long-term care
Physician	Male	Family practice, geriatrics, long-term care
Physiotherapist	Female	Community clinic, contract long-term care
Pharmacist	Male	Community pharmacy, long-term care
Registered Massage Therapist	Female	Community clinic, consult in long-term care
Registered Nurse	Female	Acute care, long-term care
Registered Practical Nurse	Female	Long-term care, personal
Recreational Therapist	Female	Solely long-term care

Table 2. Focus group session sample characteristics

#### 4.2.2. *Characterization of Current Pain Management in Long-term Care: Key Factors*

Nine themes were identified and developed throughout the staff-oriented interview process. These themes serve to illustrate current care provider perceptions of pain management for older adults living within long-term care facilities. The following are five key themes which emerged during analysis of interview and focus group transcripts : 1) Providing on-going training in pain management for residents, family and staff; 2) Enhancing communication lines among and between professions, residents and family members; 3) Creating and implementing standard operating procedures for detecting, assessing and managing pain; 4) Implementing an interdisciplinary team approach; 5) Embracing resident-centered care. The key themes gave rise to the overarching notion of creating an environment supportive of optimal pain management practices. Focus group participants demonstrated consensus regarding the themes giving rise to the *theory of optimization of pain management within long-term care*. When questions were

proposed surrounding the concepts discussed in previous chapters, there was overall validation of these notions.

Additionally, there were several other concepts noted, albeit not frequently enough to delineate further into separate themes. These concepts included not having regular staff in each home area, economic barriers in the provision of resources and restrictions on staff's abilities to allocate additional time to care planning.

*Providing ongoing training/education on pain management for all staff, residents, and families*

The most ostensible of identified themes was that of the pronounced shortcomings in current staff members' knowledge on pain and pain management and limitations in training opportunities to address these shortcomings. In all interviews, participants identified the need to provide staff with ongoing training opportunities and support in handling difficult pain cases. Furthermore, it was suggested that consideration should be given to the notion of including residents and families in pain training efforts. The theme of providing on-going training to pain stakeholders encompasses the following properties: staff feeling the need for more training opportunities to address suboptimal possession of individual general insight on pain and pain assessment, not realizing other staff member's roles and responsibilities with regards to pain management, unawareness of existing protocols, needing to know about available resources for assistance with complicated pain management cases and including residents and families in pain management training efforts

In the subsequent excerpts several participants present the notion of on-going training for staff members to address current short-comings in pain and pain management knowledge. For

example, the following participant suggested that in-services surrounding pain management are necessary and that nursing staff depend on them:

They have to, just in-services help a lot so we should have some more of in-services about pain management for the PSW as well like not only for nurses but we, because we depend on them right. Yeah, so more education for PSWs or in-services [P005, RPN]

Another participant emphasized the importance of education for all staff members:

Education is, is big for sure and educating all of the disciplines, even like recreation as well, they spend significant amounts of time with residents and you know, it's good for them to spot things too. [P011, kinesiologist]

All seventeen staff members, in one manner or another, made the suggestion that there was a need to increase and improve the training opportunities available to staff members.

Furthermore, it was emphasized on several occasions that ALL staff should be included in training programs.

There appeared to be a recurrent request from participants for more resources to be available to them in terms of educational materials on pain management. The idea of improving the availability of training sessions for staff members would, conceivably, address the notion that staffs currently possess suboptimal knowledge on pain and pain management strategies. Upon further investigation of this notion, it became apparent that being provided with more resources and training opportunities would be a source of confidence for staff members and therefore a means for increasing the likeliness of caregivers advocating for residents in pain. . For example, one participant stated the following:

I think, I mean even just in general, I think I would benefit from learning more about pain really, really, especially, that, that type of pain. I mean I'm you know, I came from a physical therapy background, I'm a meathead, I only know a certain type of pain. So, I don't agree with wink, wink, nod nod, but yeah, I think education is definitely key to giving people the confidence to be able to speak up in front of you know, someone who

in theory knows more than you do. [P011, Kinesiologist]

One participant suggested that many front-line workers do not have a sense of confidence and in many incidences are not speaking up with regards to cases of pain:

Those people [front-line staff] don't have the confidence in themselves or are scared of their superiors in that way and then they're afraid to speak up on behalf of the residents. [P011, kinesiologist]

Furthermore, this participant also suggested that accountability is an equally important concept when considering pain management within long-term care:

Accountability, yeah, accountability for sure, accountability on all parts really, going down to the first individual who had this idea, hey, we should get this person looked at for pain so that they're not just sitting on the idea. Let the communication be open and give them the confidence to say something. [P011, kinesiologist]

Another participant suggested that training the PSWs to help with pain assessments would improve the current environment in which pain management is managed. In part, this is because the PSWs have the closest interaction with residents and are therefore more likely to produce an accurate reflection of the residents' experiences. This notion is illustrated in the following quote:

I think you know the PSWs need to be educated on how to do a pain assessment as well and then that form should be given to them you know at a time when they think you know, that person is actually exhibiting pain.. [P004, RPN]

Additionally, the idea that awareness surrounding co-workers roles in responsibilities with regards to pain management was identified as a current barrier within the representative facility. In the following verbatim quote, one staff member alluded to the fact that other professionals were not aware of the role their profession had in regards to pain management which further indicates the need for training:

They are not trained properly and they don't know the importance of physiotherapy pain management. [P009, physiotherapist]

Furthermore, participants brought about the notion that many staff members are not aware of any standard procedures within their facility. This was demonstrated by one individual who admits that they were not aware of standard operating procedures until attendance at a recent in-service.

I don't know much procedure before because I just last time get in-services we had pain management before we don't, we don't have any training at that, just our experience. [P008, PCA]

Interestingly, it was also suggested in multiple interviews that residents and their family members be included in education on pain management. It was apparent that numerous participants felt that this would aid in the overall improvement of pain management practices.

For example, one participant stated:

Because I think that, I find it was pretty helpful for to, to get to know the resident and then what needs to be done you know when it comes to pain management and of course more education awareness is good right, for both staff and resident. [P010, occupational therapist]

In relation to improvement of care, one participant clearly indicated that involving family would increase the overall ability to detect pain in the following statement:

Um, family members I don't know if we get enough input on them for pain because sometimes the family member, the residents will say that, tell the nurses they are not in pain but when the family members come they will tell them they're in pain. Sometimes it's a bit of a trust issue I think. [P016, pharmacist]

Another participant alluded to the idea that educating residents would empower and promote them to play a role in advocating for their own healthcare needs.



As well with the patient too if they don't understand what's going on, the more they can be educated about the process then they can sort of take some ownership as well for their own um, you know, healthcare absolutely. [P012, chiropractor]

An impressive suggestion was brought about by one participant regarding making pain education for residents a priority during admission procedures.

It would be nice if ah, when residents came into the nursing home or with the staff, part of the welcome package should include some time of pain information. I think a lot of times when people are welcomed to a nursing home it's , welcome to the nursing home, lunch is this time, dinner is this time, we have parties here, welcome. But really we should probably find a little more information on their well-being, explain pain is not normal, it's not a normal process of life no one should deserve to stay in pain, you should speak out [P016, pharmacist]

During the focus group session participants were asked questions regarding what training programs might need to be implemented in order to improve staff knowledge and furthermore the availability of educational opportunities. Relating the notions of the need to provide ongoing-education for staff members and improve the quality of pain assessment:

I think there is also a lack of understanding on how, like we have various tools, pain tool assessments. I think there is a lack of understanding on how to actually do pain assessment; I don't think everybody knows how to do a pain assessment. [FP011, RN]

Interestingly, one participant voiced concern surrounding delegating tasks to co-workers based on a fear of suboptimal education, a property that was not eminent in the one-on-one interviews:

But then there's that lack of education that and there's we don't know if it's going to be done right, when it was the registered staffs responsibility to have done that assessment [FP05 RPN]

Furthermore, one participant suggested increasing the training given to personal care attendants with the intention that these caregivers are able to contribute more to pain management:

So, if we have an increased skill level training at the PSW level for their assessment you get a higher respect level from the RPN. So the first thing seems to be coming from this conversation is we do need to train our PSWs to a higher level. [P08, physician]

Finally, when the group was asked to provide one word on what they felt was most important for future improvements to pain management practices, four participants chose education, which was the second most popular answer.

Overall, there was an outward consensus among all staff members interviewed that there was a lack in knowledge with regards to pain and furthermore there was a need to provide educational opportunities to improve the current body of knowledge on pain within long-term care. If these opportunities and resources were made available to the staff members there was an overall notion that care for residents in pain would be improved.

I think education is probably is number one, the more everyone is educated, the more... what's that old commercial, the more you know, star flies by. Yeah, we need um, education is always helpful with bringing something to the forefront of people's thought process as they work. Um, and I find especially with the job as it is, PSWs, nurses, yourself I mean sometimes you are so busy, if something like pain is not on the forefront of your minds, yeah, I just went to the class for pain last week, I'm still thinking about it, I'm looking for these signs, if it's not fresh in your mind, you're not going to spot it as quickly a you would say you know, a year down the line and we haven't had an educational session. [P011, kinesiologist]

*Enhancing communication lines among and between professions, residents and family members*

All seventeen participants identified the need to enhance communication as a significant element in optimizing current pain management practices. Participants identified several aspects of current communication practices within the long-term care setting influencing pain management practices. These features include relying on co-workers for accurate and insightful information, overlapping practices, segregation between on-site and contract staff members, feelings of not being respected or listened to by co-workers, lack of follow-up on treatment practices and patient progress and ensuring communication with residents is upheld.

Communication tended to be of great concern to some staff members as it was identified that caregivers, in particular those who did not have much hands-on time with residents, often rely on effective communication with front-line workers for the basis of their treatment. This notion of relying on information from co-workers was illustrated in the following statement:

I'm not around all the time and I don't do you know the moving, positioning myself, I sort of have to rely on staff to convey that um, you know, that concern to me. [P004, RPN]

In other cases, participants emphasized the need to be aware of other vocation's roles and responsibilities in order to gage their own involvement in the treatment process and prevent redundancies in care. This property integrates the notion of being aware of co-workers roles and responsibilities from the previously discussed theme of providing ongoing education for staff and residents. For example, the following participant stated

For pain management, I will have to consult with other team members like from nurses to ah, doctors to the physiotherapists to what interventions they are doing and what I can contribute when it comes to interventions. Because sometimes there might be a conflict because someone is providing this and that, so I have to consult with them first, review their chart or their history.... [P010, OT]

During several of the staff interviews segregation amongst professions was identified as a barrier to communication and furthermore, optimal pain management. A number of participants felt that occupations tended to cluster. For example, nurses did not communicate much outside of their own professional group. Furthermore, contract staff such as the physiotherapists, occupational therapists, and registered massage therapists felt isolated from the in-house staff. This presented two levels of separation leading to challenges in the flow of information necessary between professions: that between vocations and that between contract and in house staff. In all cases, this was identified as causing a barrier to the optimization of pain management as information between various departments is not always effectively conveyed. This results in some professions not receiving all of the information necessary to follow through on efficacious treatment practices, creating ignorance regarding their co-workers obligations in relation to pain management. Overall this was felt to be incredibly detrimental to optimal pain management practices. The following quote illustrates the segregation of vocations:

F: Can you describe to me any barriers that you perceive in the pain management of residents?

P: Lack of communication with the staff, mainly the frontline staff and ah, the nursing department... [P009, physiotherapist]

In regards to contract staff, one in house employee stated the following:

I don't, I don't, I don't find them as a presence on the floor that much, I think they are off in their section doing physio so and you know, communication with them is very like haphazard. [P001, physician]

It was also recognized that many staff members feel as though they are not being heard by their co-workers. In many cases it appears that some caregivers are facing difficulty in communicating concerns regarding pain in residents and furthermore difficulty instigating responses from their co-workers.

And I find there's always that struggle you know, because sometimes to prove your point to the physician. [P004, RPN]

Coming from me it wasn't always respected you know, as, as, that's my, that's a professional opinion I should say. So that, at first that was a huge barrier but um, and it shouldn't have to wait until I've you know, proven myself kind of thing. [P011, kinesiologist]

A key issue complicating the transmission of information was that of shift changes. It was identified that during shift change-over there is a substantial gap in conveying relevant and necessary information regarding the individualized pain management of residents.

I find it can be the most of an issue between shifts, at shift change, a lot of the information doesn't always get relayed to the next shift. [P011, kinesiologist]

Sometimes when we tell verbally, sometimes it's not communicated and if there is a rotation of staff they might not know that. [P013, physiotherapist]

Participants tended to allude to the notion that improvements are needed both in communication between vocations but also between contract staff and in-house staff. There was some emphasis on the need to respect the concerns of fellow co-workers as well as recognize the importance of including residents in discussion regarding their care; the notion of opening communication lines would address these matters.

The final suggestion made surrounding the topic of enhancing communication was that of ensuring staff members are communicating with resident's surrounding pain and pain management. Several participants suggested that staff often do not include residents in care planning and this may lead to difficulties in treatment regimes. For example;

“Communication is absolutely can be a big barrier, if it's not there then maybe things are not getting done...As well with the patient too if they don't understand what's going on, the more they can be educated about the process then they can sort of take some ownership as well for their own um, you know, healthcare.” [P012, chiropractor]

During the focus group session participants were asked about gaps in current communication pathways and the need to enhance communication among and between staff and residents. One participant elaborated on the concept of misinterpretations of perceptions of pain due to communication barriers in the following statement:

...So that could be information the PSWs ,who are often highly reliable because they are the ones in contact, that might have been passed onto the RPN, RN and to me and through that it gets watered down or modified. And I find experientially at least, um, very often that my perception, versus their perception, versus the patient's perception of the pain, there will be a variance there. [FP008, pharmacist]

This statement reflects the view that communication is suboptimal and further elaborates on the concept by giving a possible reason as to why information is misinterpreted or lost.

In summary, communication was identified as one of the fundamental areas in need of improvement. According to multiple participants in the present study, opening communication lines between and among staff and residents is a necessary step in order to improve the quality of pain management. Emphasis was placed on the need to improve communication between vocations but also between contract and in-house staff and furthermore, the need to respect the concerns of fellow co-workers and residents with regards to pain and pain management.

*Creating and implementing standard operating procedures for detecting, assessing and managing pain*

According to the perceptions of several participants, there were very few, if any, notable or effective standard operating procedures for handling pain. There were several key properties embodied in this theme including: an unawareness of current standard operating procedures, the need to implement clear guidelines on pain and pain management practices, the need to improve

assessment procedures, the need to improve the timing of responses to indications of pain, and creating clear follow-up procedures.

In some cases, participants were simply not aware of any established protocols, albeit they may have existed. It was indicated that this may have been more of a case of staff not recognizing protocols as being effective and therefore not necessitating attention. Several participants were very transparent about the fact that they were not aware of any standard operating procedures within their workplace in regards to pain management. For example:

In terms of documented protocols, I'm not aware of them if there are any... But sometimes I think [staff] either their trying to follow some protocol that doesn't even exist about you know, trying to get orders for these things. [P001, physician]

Another two participants identified that there were likely procedures in place but they did not know a considerable amount about them or did not have to deal with them first hand. The following statements illustrate these points respectively:

Procedures, we don't know much, give them pain relief, as the doctor or give them Tylenol first. [P008, PCA]

Well I know there is a lot of policy about staff handling of the medications, who dispenses, how they account for it, how they dispose it, how they store it. I'm sort of aware of the details of that although I don't deal with that on a regular basis. [P015, physician].

In one case a participant, although they were not clear about which protocols they were specifically referring to, was very clear in stating the current guidelines and policies for handling pain were flawed:

F: So would you say then you don't find the guidelines [in regards to pain] useful at all?  
P: It's wrong, absolutely wrong, it's not useful, it's, it's wrong. It doesn't capture, you really have to capture pain, that's not the way to do it. [P002, PCA]

Interestingly, in one interview a participant revealed that there were standard operating procedures however they felt that those who create and dictate these guidelines are not experienced in clinical practices. Therefore, they felt that those creating the protocols are not understanding of the true nature of the long-term care environment. This notion was suggested in the following statement:

Um, I find that there is a policy, but I find that people who are pushing for the policy to be implemented are ignorant of what they are looking for and what the outcome should be. I think it's just a piece of paper that needs to be done to prove to the Ministry that we are doing that because that's what you do in long-term care. [P002, PCA]

On this level, many participants emphasized that there needed to be clearer structure to the pain management system within their workplace. It was also identified that having more resources available to staff and clearer guidelines about how to handle pain in residents would be greatly beneficial in addressing the issue of a lack of structure. The following participant identified the need for structure while also indicating that it was not a matter of having or not having the properties but rather organizing them in a more prescribed manner:

I mean, I'd probably say, you know, you know I think it would be nice to have a better structure of options that nurses could use to help pain you know beyond the PRN Tylenol... But we have, I think we have the right pieces, I think we just kind of need to really do it in a more formalized centre. [P001, physician]

Similarly, the following participant identified that the components are there and are in some sense working but could be immensely improved with better infrastructure:

Now it's more um, we're working together but it definitely could be so much better, it could be so much more like a, more like a structure, the way of doing things. Like we would have a meetings and everybody is working together doing their, putting in their expertise. [P017, RMT]



During several interviews the quality of pain assessment was indicated to be insufficient. Participants felt that there were a number of issues contributing to this concept including inconsistency in the use of pain rating scales, the relatively high subjectivity of pain scales, questions surrounding staffs ability to administer an accurate pain scale and the need to require further attention to detail when assessing pain. A majority of these issues can be attributed to a lack of standard procedure and the need to provide a systematic approach to assessing indications of pain.

One of the most common tools in current pain management procedures is the pain rating scale. In the present study, the representative facility uses the ABBEY scale for cognitively intact residents and FACES for the cognitively impaired residents. See Appendix K for ABBEY and FACES scales, respectively. Some participants viewed these scales as standard protocol in terms of assessing pain but other staff members did not recognize the pain rating scales as an important and necessary resource.

I'll be honest, I don't use them personally and I don't think a lot of the staff here generally need to use them. I don't know if I've seen any pain scale in any chart in recent years. [P015, physician]

Others held the opinion that the pain scales were not accurately reflecting pain and that they were difficult to understand in terms of administration. The following two verbatim quotes illustrate these points respectively;

Sometimes they are not very accurate in their um, ABBEY pain scale, they just pick whatever they want to do it. They haven't seen appropriate expressions of the residents when they are sitting, when they are comfortable. [P009, physiotherapist]

And I, I don't think, even with you know, the FACES pain scale for, for you know the elderly that is non-verbal I find that it's hard for them sometimes to decipher even through the pictures you know, what really is you know, the most painful, what is really the least painful face. [P004, RPN]

Furthermore, the subjectivity of the currently used pain scales was brought up as a point of contention.

I guess you worry about the pain scales that there is going to be a lot of moment-to-moment fluctuation or a lot of variations depending on who's asking the question and how they are asked. [P015, physician]

Moreover, some participants held the belief that the quality of pain assessments currently being completed are deficient. For example, one participant suggested that perhaps more detail during pain assessments would be useful:

Yeah, like I told you they have to describe a little bit more in the, in the pain note like in the section of the pain if they write down something then they should describe more. And they should do their honest assessment on anything. [P009, physiotherapist]

In terms of recognizing and responding to indications of pain there seemed to be an overall uncertainty regarding the issue of standard operating procedures for such circumstances. For this reason, participants indicated a sense of discomfort with how pain is currently managed contributing to poor quality in assessments. In some cases participants even suggested that part of the problem with the apparent inefficiency was a matter of co-workers not doing their jobs. For example, one participant stated the following:

I guess the major problem is the person who is not doing their job like the way they are supposed to do it and the time they are supposed to do it. [P003, PCA]

The property of insufficient timing in responses to indications of pain was supported by several key issues identified by participants. The first being that nurses are not assessing potential pain cases quickly enough and therefore assessments are not reflecting the true nature of the case in question. Additionally, the timing of medication administration in relation to pain assessment is not reflecting the realistic circumstances in which pain manifests. Further

associated with this concept was the notion that many individuals felt that other care providers were not taking pain as seriously as they should.

And they don't understand the severity of pain and how urgent it is to deal with it right then when the resident is complaining about it. That's how you capture where the pain is located and you deal with it at that moment. [P002, PCA]

In this manner, participants felt that pain should be addressed much more quickly than is currently occurring:

But immediately they have to address pain of the resident we can't leave him alone and that's what we will do, we find the right professional who is responsible. [P007, recreational therapist]

Furthermore, the timing of medication dosing and administration of pain rating scales was recognized by members of staff as problematic. In part, this is due to the fact that nurses often adhere to a strict schedule and administer pain scales on their own time rather than when it is relevant to the resident. This has been thought to lead to inaccurate depictions of a resident's pain. For example, several participants described the following scenarios;

Um but they're doing, they have 8 hours to do their pain assessment, it's not based on a particular time, it's that they have 8 hours to do it. And they may capture a moment when the resident is sleeping and that's the only free moment to capture and do the pain assessment. So they will look at the resident sitting in the wheelchair sound asleep and say the resident looks fine, they are not in pain and will score them 0. [P002, PCA]

Because then you know, I just don't think it's accurate to sort of assess them about 3 or 4 hours later right? [P004, RPN]

Concerns surrounding the timing of responses to indications of pain were further expanded on with the notion of inconsistency. Some staff members noted that there was not only an issue about the amount of time it takes for pain to be addressed, but also the fact that the amount of time to response varied greatly between individuals.

Some nurses will go right away and check on the resident you know [but not all of them] but not all of them which is not good. [P003, PCA]

Of even more concern, was that one participant referred to the circumstance that sometimes several days may pass before some situations are addressed:

Um, but sometimes by the time you are prompting that assessment it's like, this person has been, it's something that should have happened maybe three days ago instead of now when I'm coming in to kind of look at the situation. [P006, RN]

One participant indicated that in order to address the problem of inadequate timing, members of staff need to consider flexibility in their schedule when dealing with pain.

These routines can be broken for flexible duties that require flexibility. [P014, recreational therapist]

The issue of follow-up was identified several times in regards to problems in current pain management practices. Participants felt that follow-up should be established as an important obligation in treatment modalities. According to results of the interviews there is currently no set process for how follow-up is communicated. There was an overwhelmingly apparent notion that without follow-up, team members did not know how to continue to support pain management in their workplace. They voiced desire to be included in follow-up and to have standard procedures for documenting and following up on treatment:

That kind of issue we need somebody to follow-up, like sometimes open area that's pain too okay, I report, I don't know what's being done, still nothing is said, what should I say. [P008, PCA]

The need to implement standard operating procedures for detecting, assessing and managing pain was also confirmed as a necessary component in optimizing pain management during the focus group session. The timing of responses to indications of pain was further confirmed as a

problematic area in current pain management practices. In the following statements, participants make the case that when pain is reported to nursing staff it should be addressed immediately and made a priority:

...Immediate response, because during my experience in long-term care, this time can be so long and people would develop severe pain. And you can prevent it or stop it at the beginning. [FP006, physiotherapist]

I think the [pain] assessment needs to be done right away, I don't think, I think it appears, the way we function as PSWs is we report something to the nurse and the nurse needs to realize at that moment, the fact that I came to you and I reported it you need to go back and assess it right away. If it was important enough for me to come to you need to take the time to stop whatever you are doing and take care of that. [FP009, recreational therapist]

The above statements were not countered but rather the group focused on discussion surrounding what strategies could be used to make this notion possible. Furthermore, when the group was asked to choose one word to describe what they felt the most important concept addressed in the discussion, five of twelve participants chose immediate responses to pain.

The property of suboptimal pain assessment was also elaborated on during the focus group session. Confirmation that current strategies for assessing and managing pain are inadequate occurred, however, the relationship between poor quality of managing pain and the themes of under-education and suboptimal communication was strengthened. For example together in the following excerpt, two participants illustrated the possibility of improved pain assessments through education:

FP005: I mean obviously there are different tools there that exist because some people aren't or some residents aren't able to describe so that's why I think there are different tools to do this. And there is not only one, I disagree, there is not only one way that you can do a pain assessment. [RPN]

FP011: Maybe if we as the workers, looking after, if we are able to be more educated on

as to the different types of assessment so that we understand, what, what to do with each individual. [RN]

In summary, the theme surrounding the topic of needing to implement standard operating procedures and pain management guidelines was developed by identifying a lack of awareness surrounding process, and/or a lack of buy-in to the effectiveness of currently suggested tools, the need to improve responses to indications of pain, and the need to incorporate follow-up procedures into pain management practices. In several cases, participants suggested that more structure was needed to support good pain management practices and that providing systematic tools and resources to call on would improve the current situation.

#### *Implementing an interdisciplinary team approach*

It became apparent that several participants did not feel respected by their co-workers and made the case that it was not unusual to not be heard or taken seriously when suggesting that a resident may be in pain. Some participants suggested the benefit of implementing a team approach to pain management and allowing opportunities in which care providers could speak out on topics surrounding pain management. In this sense, there would also be opportunity for inter-disciplinary communication and the fostering of awareness surrounding co-workers roles and responsibilities. Furthermore, this would increase inter-professional respect. These ideas gave rise to the notion of implementing an interdisciplinary team approach encompassed the properties of professions working as a team, respect amongst co-workers and having opportunities to interact with other professions, and understand their roles and responsibilities.

The following two participants' statements explicate the idea of professionals functioning in a more team-oriented manner:

I think opening up that line of communication is, is definitely good. Basically having everyone, like the true multidisciplinary model and sticking by it, so having, having these smaller meetings with everybody present and giving everyone of those aspects the opportunity to say something. And willingly listen to them, you know, make them feel that they are heard. [P011, kinesiologist]

It's more about the patient and how you can help, once you have more meetings and coming out as a whole team rather than an individual profession giving their own treatment. It is giving a treatment but not meeting a team and focus on, on the pain. [P013, physiotherapist]

In the following excerpt, one participant emphasized the importance of understanding co-workers professions as a means to improve the healthcare environment and mutual respect:

You know having opportunities just to shadow with people so you can kind of pick up a little bit more of what they do. Um, that becomes another thing to sometimes it's just not really knowing what these professions do, hopefully not making judgements on it before learning more about it. So a lot of times people have a tendency not to refer because they weren't really taught, what that profession does. [P012, chiropractor]

Along the lines of respecting one another's professions, it was also suggested there needs to be openness amongst vocations to consider alternative treatments. It was recommended in the following statement that maintaining an interdisciplinary approach would also serve to create openness and options for alternative treatments:

The doctor, making sure he, making sure he or she is open to um, you know, different ideas of pain management, o the multidisciplinary approach you know. [P011, kinesiologist]

There were two themes that became forerunners for elaboration during the focus group session, the first being that of *implementing an interdisciplinary team approach*. This was identified as a concept vital to future improvements and with group discussion, the properties encompassed by this theme was further delineated and developed. In terms of assuming an interdisciplinary team approach the following statement was made:

And I think another difficulty would be working within a team, sometimes the team professionals don't necessarily work together. So I find it's more of a clash and a tool which I think would work really well is obviously getting the team members working together. [FP011, RN]

Related to the notion of team work was the property of empowering all staff members which became a popular point of discussion during the focus group. A majority of participants felt that by empowering staff, fostering confidence and implementing active listening, a healthy team-based environment would follow, leading to optimal pain management. For example, one participant currently feels that they are unsure if they will be heard:

So I think one of the gaps is, is, is the lack of sense of empowerment, that if I see something, that if I say something somebody is actually going to listen to me. [FP008, physician]

Furthermore, in terms of future team work one participant suggested that a change in attitude towards certain staff members was needed:

I think there needs to be a cultural change in the attitude of the nurse towards responding to information given by the PSWs. I know there are time schedules for everything, but if we are changing our attitude to how we respond to a resident that needs to be one of the areas we make change. [FP009, recreational therapist]

The notion of working as a team has been emphasized both as an important concept on its own but is closely woven into previously themes discussed previously; most closely to that of suboptimal communication amongst staff members. Without efficient communication it is next to impossible to support a team approach and without a team approach communication will be negatively impacted.

Suggestions... it would improve again, if we work as a team and follow-ups are really very important. Like, if I do recommend something it's not only me who is going to



follow-up, it would be good if it's other team members especially you know, like the frontline staff. And then of course it's important to give them, or give me feedback as to how you know, the resident will follow or the family member. [P010, OT]

Furthermore, working as a team and interdisciplinary communication may help to address the complexities of working with the geriatric patient, which will be discussed in the following theme of embracing resident-centered care.

### *Embracing Resident-centered care*

An underlying concept seen throughout the present study was that of embodying a resident-centered approach to care. Encompassed in this approach are the following properties: involving family members in the care of their loved ones, being aware of the unique difficulties of working with the geriatric population and addressing whole persons, including the psychological implications of pain.

Particularly, when working in an institutionalized setting, families play a huge role in making decisions surrounding the healthcare needs of the resident. In this sense, participants emphasized that care plans must integrate family input however; currently this is not the case:

Um, family members I don't know if we get enough input on them for pain because sometimes the family member, the residents will say that, tell the nurse they are not in pain but when the family members come they will tell them they are in pain. [P016, pharmacist]

Furthermore, addressing the unique needs of the resident was indicated as being a key factor in reaching optimal pain management strategies. This theme is further related to the notion of interdisciplinary communication, which is necessary in order to effectively and sufficiently meet all aspects of the residents care.

There were several challenges identified in regards to working with a geriatric population. Due to an overwhelming number of co-morbidities, physical fragility and concerns of polypharmacy, the treatment of pain has been indicated to be severely complicated and difficult to manage. The complexity of the geriatric patient is illustrated in the following excerpt:

You know, a lot of times older folks have problems that are a lot like Swiss cheese, little bit of contributing multiple factors contributing and so we don't have a diagnosis but we always try and keep our minds open to possibilities. [P001, physician]

Physical fragility was identified in several interviews as one of the biggest difficulties in addressing physical pain in older adults. Participants acknowledged that treatments must be adjusted for the geriatric patient's physique and several identified the fact that this leads to mainly the use of very gentle treatments:

In the long-term care facility if they have pain, just let it go [referring to physical therapy], they're you know what, for one is not worth the fight, it's not worth making them angry and it's not worth injuring them more because they are a lot more fragile. [P011, kinesiologist]

So normally if we are doing type of treatments it's very gentle, ah, very soft kind of more manual therapies, little bit of massage type work, some stretching... not the same as the quicker, higher velocity type adjustments we would do with ah, you know, a stronger skeletal system like an adult let's say. [P012, chiropractor]

The increasing rate of cognitive impairment in the elderly population developed into the second major concern surrounding this theme. For example:

There is barriers, I guess um, certainly the cognitive pieces is a big barrier, it's a lot tougher to pick up on pain or can be tougher to pick up on pain when there is more moderate to advance dementias. [P015, physician]

This statement indicates that cognitive impairment leads to difficulties in identifying pain as it becomes confounded with communication lapses and behavioural issues. The following

statement supports this notion in the manner that often verbalization of pain is further inhibited by cognitive impairment:

A lot of ones who have dementia aren't able to verbalize they're in pain. [P016, pharmacist]

Polypharmacy, or the use of multiple medications, was also of concern to several participants. Polypharmacy poses several threats in the geriatric patient as adverse reactions and drug interactions are exponentially more common. One participant stated the following with regards to medication use in the elderly:

I have big concerns around polypharmacy with the, with the, with the older adults, it's something that's on my mind a lot. They have a lot of medications, lot of the time they take sedatives, they have a lot of medications that interact, they get constipated, it just, it really does create an avalanche of problems that could occur the moment you start something as simple as Tylenol 2 or Tylenol 3... [P001, physician]

The fear of polypharmacy also was indicated as a deterrent from the use of aggressive treatments.

Um, other barriers, you know just age and comorbidities and sensitivities to medications you know... do limit aggressive to pain control is a, relative barrier. [P015, physician]

The physical fragility, increasing presence of dementia and high levels of polypharmacy in geriatric patients were all factors identified in the increased difficulty of treating pain in long-term care residents. The combination of these key factors leads to difficulties in not only identifying pain but also treating it efficaciously.

The physical implications of pain are surely at the forefront of consideration during treatment of chronic pain. According to participants in the present study the social and psychological implications of pain are not. Several contributors brought this to the researcher's

attention with concerns for both the emotional needs of patients and consideration of the psychological impact of pain on resident's overall well-being. One participant stated the following in regards to the psychological aspect of pain:

I think most doctors tend to underestimate the psychosocial or the psychological burden of pain as opposed to physical burden. [P015, physician]

Other participants supported this notion by identifying the importance of focusing treatments in part on psychological pain and the psychological impacts of pain. For example;

Um, the other thing is as I just mentioned to you is about is a little bit more on the whole stress management side, cognitive behavioral therapist of some sort, um, you know, those, those types of things become massive to kind of deal with the fact that if you are having pain...So some kind of social worker or again therapist to kind of deal more with the stress of actually you know, going through the pain. [P012, chiropractor]

One participant expressed the view that caregivers need to be attentive of mental health needs and provide support respectively:

I find it is very important to give emotional support and pass on symptoms to other team leaders... [P014, recreational therapist]

There were a variety of suggestions as to how the psychological aspect of pain could be addressed, namely with the addition of various team members. Some participants made the suggestion of including several mental health care professionals in the following statements:

Um, I really think in some circumstances again, there's a lot of this kind of you know, therapy in some cases, like the cognitive behavioral, those types of things are, are absolutely critical for chronic pain and a lot of the management. [P012, chiropractor]

I mean it would be nice to get like maybe a psychiatrist, psychologist, um yeah involved yeah. [P07, recreational therapist]

Others leaned to addressing the more spiritual realm thought to be involved in pain and made the suggestion to involve spiritual leaders in pain management practices:

It is, and you could even look into spiritual um, aspects of pain and how it shapes better character when you learn to live with reality versus taking, ah, just taking pain killers... [P014, recreational therapist]

... just talk to them for a few minutes, or you know, sent the Chaplain in because I think they are having a spiritual crisis of some kind. [P011, kinesiologist]

One participant stated that being good listeners was necessary and in a sense being able to provide emotional feedback and support for residents experiencing pain.

I would say it's very important to be a good listener... I think it's very important to give emotional feedback and for resident to see he is in a caring environment. [P007, recreational therapist]

The second theme identified as a forerunner during the focus group session was that of *embracing resident-centered care*. The notion of embracing a resident-centered approach to pain management was an underlying thread throughout the one-on-one interviews, however, in the focus group setting this theme was more prominent. This notion involved considering residents' personal characteristics when assessing pain, listening to residents carefully and observing behavior. The following two statements illustrate this notion:

What I was going to say earlier was just where especially in our, in our patients who cannot tell you, so we are looking at the behaviors and the subtleties of that, your point. [FP008, physician]

So the first, how you would know the person is ah, in pain. If you are a good listener, if you have a good listening skills if the person is asking you for help, so you have to have good listening skills and stop to talk to the resident. Then you have to, if the person is not able to tell you anything you have to have a good observation skills by facial expression, body language if they are in pain, that's how we would know. [FP009, recreational therapist]

The concept that overall pain management must consider embracing resident-centered care as a means to tackle both the physical and the psychological aspects of pain management formed the foundation of this theme. This is particularly important when considering the geriatric

population as there are numerous complexities when working with these individuals. This gave rise to the perception that both physical and psychological aspects of pain are connected and are both vital to overall well-being. The conclusion drawn from this insight was that pain management could be improved by embracing a more resident-centered approach to pain management. The following statement from one participant is a well-stated summary of this notion:

I think its people tend to just focus on the physical, but it's definitely everything affects everything, the whole body it's all connected inside and out. [P017, RMT]

#### *4.2.3 The overarching notion of creating an environment supportive of optimal pain management*

Throughout the interview process the overwhelming impression that there is a need to create an environment within the long-term care setting that is supportive of optimal pain management materialized. Through delineating and relating the five themes previously discussed, the present study appeared to point to the key concept of needing to adapt a relationship-oriented environment, more supportive of optimal pain management strategies. There were several suggestions as to how to achieve these notions which were embodied within future suggestions and needs implied in the five concepts discussed earlier in this chapter.

Through the formation of mutual respect amongst practitioners, creating opportunities to empower staff, creating opportunities to communicate in a safe environment and focusing on specific resident needs, pain management may improve. This belief in creating a positive environment for pain management is reflected in the following statement:

They really need to slow thing down and I wonder what we could learn form that, like how to move this environment from being a task oriented environment to being a

relationship oriented environment. [P014, recreational therapist]

Finally, the idea of resident-centered care was emphasized as being crucial to maintaining an environment supportive of good pain management. The idea of flexibility, as stated in the following quotation, was suggested along with the belief that care must be focused on the resident's needs and abilities and not on what the caregiver thinks should be required:

Being more flexible and working within the resident's parameters and not yours. [P011, kinesiologist]

Overall, staff-oriented interviews presented several key findings in terms of the current short-comings in pain management practices as well as several suggestions for the improvement of future pain management within long-term care facilities. Unfortunately, it appears that there is a substantial gap in regards to the body of knowledge on pain management within the long-term care personnel. Increasing educational opportunities and creating occasions for discussion appeared to be the most fundamental method suggested for combating this situation. Secondly, the current state of communication amongst staff members is in need of improvement. This was identified on two levels; between vocations and between in-house and contract staff. The timing and quality of responses to indications of pain is currently subpar and there is a need to improve the efficiency of responses to staff and resident's concerns. Currently, the psychological implications of pain are not considered in depth which leaves a huge gap in treatment possibilities. There are multiple difficulties in working with the geriatric population which present unique challenges in treatment possibilities. The current absence of standard operating procedures for detecting and handling pain make it difficult for staff to navigate through treatment and follow-up processes. Taken together, it was emphasized that creating a

relationship-oriented environment supportive of good pain management is necessary for future successes in the healthcare needs of older adults living in long-term care.

Although it appears the current system of pain management within long-term care faces several substantial challenges it was also apparent that there was a level of optimism and willingness amongst staff sufficient to impart change. Many suggestions were made that were both realistic and relatively straight-forward. This leaves the possibility for timely and sustainable future improvements.



## **CHAPTER 5: DISCUSSION, STRENGTHS, LIMITATIONS & CONCLUSIONS**

### **5.1 OVERALL DISCUSSION**

The present study aimed to examine current staff perspectives on pain management practices within long-term care facilities. More specifically, staff oriented interviews were targeted at exploring strengths, barriers and future suggestions surrounding the topic of pain management for older adults. Results of this study indicate that there is an overwhelming impression that current pain management practices are inefficient and ineffective at managing pain in institutionalized older adults. The findings highlight the urgent need for creating relationship-centered environments supportive of optimizing pain management for aged individuals living in long-term care. Furthermore, there was evidence of a substantial lack of support for those staff members expected to address cases of pain within the discussed facility and subsequently a need to create an environment more supportive of optimal pain management strategies. The key problem areas identified during individual interviews helped inform development of an optimal pain management environment which would seek to address the inadequacies within the current system. Areas requiring attention include educational opportunities for caregivers, residents and families surrounding pain and pain management practices, communication between and among staff members, residents and families, implementation of standard operating procedures, quality and timing of responses to indications of pain, embracing a team approach and embracing a resident-centered approach including the consideration of the social-psychological implications of pain. Complexities in working with the geriatric population present an unavoidable difficulty in reaching optimal pain management

however implementing an interdisciplinary team approach and considering resident-centered care may serve to better address this issue as well as many of the other barriers currently facing optimal pain management.

According to the currently available literature, the problem areas identified in this study are not unusual to the long-term care workplace. In Weissman and Matson's (1999) article on pain, the authors outline barriers to the management of pain in long-term care residents in which they demonstrated notions comparable to those of the present study. Specifically, Weissman and Matson (1999) identified the frailty of elderly patients, fear of polypharmacy along with associated adverse reactions and the undertraining of long-term care staff as barriers in reaching optimal pain management strategies. Furthermore, similarities in findings are not limited to comparison with Weissman and Matson's (1999) work but rather with a substantial amount of research which will be discussed in the following section. Finally, Weissman and Matson's (1999) discussion was published over ten years ago indicating that the difficulties surrounding geriatric pain management addressed currently have existed and continue to exist for some time now- a somewhat troubling circumstance.

*Providing on-going training in pain management for residents, family and staff*

The impression that long-term care staffs are undereducated in terms of pain management has been noted in several studies (Kaasalainen et al, 2012; Tse et al., 2011; Ferrell, 2004; Jones et al., 2004). In the current study, almost all participants indicated that they felt the need for more education surrounding the topic of pain and pain management. It was specified that with additional resources and training opportunities, resident's pain could be better managed by staff members. In one study it was indicated that lack of understanding of pain from both staff and

residents contributes to suboptimal pain management practices (Herr, 2002). In 2004, Fox and colleagues reported a qualitative study similar to the present study and noted that staff interviews revealed the need for more education as a necessity in improving current pain management practices (Fox et al., 2004). Likewise, Jones et al. (2004), Tarizan and Hoffman (2004) and Kaasalainen et al. (2012) all noted that a deficit in staff knowledge was a major contributor to current shortcomings in pain management practices. Furthermore, Jones and colleagues (2004) demonstrated that although implementing additional training opportunities did not seem to improve overall staff knowledge, there was a notable decrease in perceived barriers to pain management. Similarly, Kaasalainen et al.'s (2012) study implemented the use of onsite “champions”, who possessed additional knowledge on the topic of pain and were available for support and guidance regarding difficult cases. This project resulted in overall improved pain scores in residents of the facility (Kaasalainen et al., 2002). These studies support the finding that formal caregivers are often under-educated and the notion that providing additional training resources could be a key factor in improving current pain management strategies.

#### *Enhancing communication lines among and between professions, residents, and family members*

The second theme developed in the present study was that of inadequate communication amongst long-term care staff, a view which was shared amongst the majority of staff members who were interviewed. Most notable is the current gap in communication between various on-site vocations (i.e. nursing, physiotherapy, recreation) and between in-house and contract staff. Additionally, a critical component of this theme was comprised by the notion of follow-up. Several front-line staff members (namely personal care attendants) felt that they should be kept informed as to the status of a resident's pain and respective treatment progress. This communication is currently not occurring, and is likely to contribute to inefficient pain

management within the long-term care setting. In Herr's (2002) study, it was been found that there was a need to better report effectiveness of treatments and follow-up amongst all staff members. In a survey study with nursing home directors, Jeng and colleagues (2004) noted that there was a huge variability in how long-term care staff follow-up on pain management regimes. This variability was a contributor to an overall problematic system for handling pain (Jeng et al., 2004).

The existence of a communication barrier was a critical element acknowledged in several other studies. For example, Jones et al.'s (2004) study on pain management identified communication problems between personal care attendants and registered nursing staff. More specifically, the personal support workers detailed feeling that they were not being listened to by registered staff nor were they being included in follow up, leading to a sentiment of frustration within the workplace (Jones et al., 2004). This sentiment of frustration and lack of communication led to difficulties in efficiently managing pain. For example, nursing assistants sensed that nursing staff minimalized their contributions and were subsequently less empowered to advocate on the residents behalf. This was a commonality in the present study. However, Jones et al. (2004) also identified that there was a pattern of unregistered staff blaming registered staff for current short comings in pain management practices. This was not as clear in the present study, yet there were several interviews in which this notion was subtly implied. Herr (2002) also indicated that reporting from staff (primarily nurses to physicians) was an important component in supporting optimal pain management.

In the present study, improving communication amongst staff and providing feedback for all team members was suggested to be a necessity in improving current pain management practices. Several suggestions were made such as; providing communication tools, proper

documentation of progress and standard feedback procedures. Several studies have documented that improvement is seen when teams embody open and efficient communication processes (Boorsma et al., 2011, Kaasalainen et al., 2012).

*Creating and implementing standard operating procedures for detecting, assessing and managing pain*

The present study involved participants who were seemingly transparent when discussing the fact that they were unaware of or unfamiliar with standard operating procedures surrounding pain management. Participants indicated that there was very little consistency on the matter of pain management within the representative facility. The absence of standard operating procedures for detecting and managing pain gave rise to another significant barrier in current pain management practices within the discussed facility. The impact of having procedure to follow in attempt to improve patient care is not an uncommon subject in health systems research, let alone the pain management world. In the present study the main concern was feeling that, without staff being familiarized or trained on pain management procedures, there was disorganization and confusion in understanding how to measure indications of pain and how to follow through on treatment regimes. This apparently gives rise to an overall feeling of inadequate provision of care. In Jones' et al. (2004) study, the researchers identified that staff often have difficulty adhering to standard operating procedures which may have been the underlying case in the present study. Additionally, there were some cases of care providers identifying that they just did not have enough time or manpower to follow through on some of the standard procedures. This might indicate that, the currently recommended procedures are not perhaps reflecting the lived experiences of formal caregivers.

Kaasalainen and colleagues (2012) conducted a mixed methods study focusing on current pain management practices. The researchers demonstrated that the implementation of pain management standard operating procedures improved overall outcome measures (Kaasalainen et al., 2012). Similarly, in Hollenack's (2006) study the researchers suggested that implementing guidelines would help caregivers improve pain practices and follow through on efficacious treatment procedures. Tarizan & Hoffman's (2004) study also demonstrated that lack of standard protocols was a significant barrier in reaching optimal pain care.

The timing of responses to indications of pain was identified in the present study to be ineffective and not sufficiently swift. More specifically, it was felt by several staff members that responses to indications of pain needed to be swift in order to minimise suffering of residents and improve overall quality of life. Presently, when pain is brought to the attention of nursing staff, it can often take several days for registered staff to assess using a pain scale and act on the results. Jeng and colleagues (2004) conducted interviews with directors of nursing homes and found that only 46% of nursing staff assessed for pain in residents during their shift, and 55% stated that they only assessed for pain once every one to two months.

Interestingly, in Fox et al.'s (2004) study, the time to respond to identified potential pain was impacted by work-intensive procedures required to meet ministry standards of administering and documenting treatments. In this case, staff members were required to provide triple documentation which was felt to be incredibly time consuming and therefore delayed subsequent treatment (Fox et al., 2004). In contrast, in the present study it was observed that little structure exists regarding documentation, and in fact, staff requested a better documentation system, even if this would require a higher investment of time. It is apparent, however, that in order to

optimize pain management there is a need to manage cases of pain with timely, efficient, and appropriate responses whilst maintaining adequate documentation.

The quality of responses to pain was also addressed as being problematic and a barrier to reaching optimal pain management. In the present study, care providers felt that the quality of pain assessment, treatment and follow up was being held to be suboptimal. In Jeng et al.'s (2004) study, this concept was noted and attributed to a lack of consistency amongst staff in terms of how they measured, reported and responded to pain contributing to an overall low quality of pain management. In the present study inconsistency was similarly implied to contribute to poor responses to pain. Furthermore, the common use of pain rating scales was indicated as a point of contention by staff due to the relative subjectivity of these tools. The subjectivity of staff-administered pain rating scales is a common concept within healthcare and is a barrier that is difficult to address, as there are, at present, no other methods for measuring pain. This creates difficulty in adequately addressing pain as the measure of pain can vary greatly between different caregivers and subsequent treatment based on the results of these scales will also fluctuate.

#### *Implementing an interdisciplinary team approach*

In the present study, several participants suggested that embodying a more team-like approach would greatly improve current pain management practices. This concept involves the interplay of elements from several previously mentioned themes including but not limited to education and communication. Through a working understanding of co-worker's roles and responsibilities staff members would be more likely to carry out their own roles and duties with the most efficacious impact on the system as a whole. This would prevent redundancy in current roles and responsibilities and maximize the utilization of all caregiver skills. Additionally, by

improving communication between caregivers the ability to function as a team will also be implemented. Studies have demonstrated that groups working in high risk and intensive environments who function as a team tend to make fewer mistakes and furthermore are more resilient to stress (Clements et al., 2007). This would support the notion that if staff were to function better as a team, pain management should improve. Moreover, Clements and colleagues (2007) emphasized that teamwork would also lead to clarification of roles and responsibilities, improved responses, and better coordination of health services. Several other studies have emphasized team work as a necessity in the provision of healthcare (Barrett et al., 2001; Leggat, 2007).

Given the complexities of working with an older adult population, an interdisciplinary team approach is one way to address these complications. Furthermore, an interdisciplinary approach would serve to address both medical and non-medical aspects of pain.

#### *Embracing resident-centered care*

It is well known that with increasing age, there are a greater number of co-morbidities (Husebo et al., 2008). In addition, long term care residents tend to be frail, are commonly prescribed multiple medications which pose unique difficulties when treating pain in this population. In the presently discussed study it was suggested by numerous participants that treating pain was increasingly complex in this vulnerable population. Some caregivers expressed fear surrounding polypharmacy, physical fragility, cognitive deficits and difficulties addressing the etiology of pain due to multiple comorbidities as significant barriers in optimizing treatment.

Similar circumstances have been reported in several other studies. For example, Hollenack et al. (2006) reported that one of the barriers to pain management was that elderly individuals



presented with a large number of co-morbidities and tended to be slower in responding to pain assessments. Hollenack et al. (2006) identified that older adults are often reluctant to report pain, as they fear being labelled as bothersome or annoying, a notion also reported by Weiner & Rudy (2002). Additionally, Weiner noted that residents appeared to hold fears surrounding the use of narcotics, including fears of addiction and dependence which in some circumstances obstructed the ability to provide adequate pain treatments (Weiner & Rudy, 2002). Miller & LeLievre (1982) presented an interesting study showing that pain in the elderly is indeed more common, but suggested that another factor associated with treatment difficulties may be that elderly individuals have more time to contemplate and dwell on their physical condition. This may therefore increase the likelihood that they are focusing on pain more than the average person (Miller & LeLievre, 1982). Weissman & Matson (1999) discuss the reluctance caregivers to treat pain without understanding its underlying cause, which is increasingly difficult with high numbers of co-morbidities. This may in part contribute to the under treatment of chronic pain in the elderly, especially in those who are cognitively impaired (Weissman & Matson, 1999).

The notion that elderly patients present unique difficulties in treating pain is difficult to address as it is strongly embedded in physical changes and shifting physiology. This is further complicated by multiple comorbidities, often with no identifiable aetiology for some health problems. For this reason, pain management in the aged is complex and in order to achieve future improvement, proper training of health care providers is necessary. Not surprisingly participants in the present study did not have detailed suggestions for advancements surrounding this concept. However, one strategy for mitigating these problems is to ensure provision of access to specialized professionals who may have a clearer understanding of pain physiology and therefore a better awareness regarding possible treatments.

One of the most common suggestions from participants was to consider the social-psychological implications of undertreated pain on residents and conversely, the potential psychological causes of pain. Currently, it appears that there is a lack of attention to psychological factors involved in the management and causes of pain, as well as the influence of these factors on the perception of pain. This was major concern during interviews and several participants suggested the inclusion of cognitive behavioural therapists, social workers, and psychiatrists in future treatment models. Mansfield & Taylor (2012) demonstrated an association between depression and pain in nursing home residents, although whether pain increases depression or whether depression increases the perception of pain remains unclear. Millar's (1996) study indicated that the use of antidepressants and tranquilizers improved pain scores in residents. This suggested that mental distress may be a major factor in pain management for the elderly and should therefore be considered and appropriately managed. Furthermore, studies have demonstrated the efficacy of cognitive behavioural therapy for the treatment of pain (Morley et al., 1998). These facts would support the notion brought about in the present study that addressing psychological aspects of pain would be important in order to provide adequate pain management. In the present study, the lack of attention to psychological factors such as depression, anxiety and spirituality were addressed as a shortcoming. Therefore bringing about closer attention to mental health is an important component of future models. Based on the findings of Mansfield & Taylor (2012), Millar's (1996) and Morley et al. (1998), the suggestion by participants in the present study to include professionals to help address these issues such as therapists and psychiatrists hold merit in bringing about future improvements to pain management practices.

Related to the concept of addressing potential psychological implications was the notion that cognitive impairment generated much difficulty for some staff members in their ability to identify and quantify pain in residents. This concept is also closely tied to the previously discussed theme of working with the geriatric population due to the fact that incidences of pain increase significantly with age (Ramage-Morin, 2008). In the present study, staff found that behavioural problems associated with cognitive impairment often clouded the presence of pain. Kenefick (2004) illustrated the correlation between pain and cognitive impairment in a study which showed that an increased level of cognitive impairment was related to an increase in the severity of pain. In other studies cognitive impairment was identified as a major barrier in detecting pain and adhering to pain management strategies, namely medication administration (Jones et al., 2004). In Husebo's et al. (2008) study it was established that severely demented patients receiving opioids presented with higher pain intensity in comparison to non-demented patients. In addition to this, severely demented patients tended to receive less pain treatment overall (Husebo et al., 2008) Husebo et al. (2008) concluded that individuals with severe and mixed dementias were at a higher risk of suffering from undertreated pain (Husebo et al., 2008). These results support findings of the current study in that cognitive impairment presents a unique barrier in the management of pain. Furthermore, it is well documented that instances of dementias are much more prevalent in the long-term care community (Ebly et al., 1994).

There are numerous studies emphasizing the importance of resident-centred care and its ability to improve overall quality of care (Chenoweth, L et al., 2009; Edvardson D. & Innes, A., 2007; Stewart, M., 2001). Chenoweth et al. (2009) demonstrated this in a study comparing a person-approach to standard care model for falls prevention within long-term care residents. The implementation of a person-approached model decreased the number of falls seen in patients

indicating that a person-centred approached model may hold merit in improving health outcomes (Chenoweth et al., 2009). This notion would support the concept brought about by participants in the present study that embodying a resident-centred approach will lead to future improvements in pain management practices. The idea that caregivers need to be more attentive to the specific needs of individual persons was a key property in this notion. It appears that embodying the notion of resident-centred care involves embracing mutual respect, empathy and accountability on the part of the caregiver. Participants indicated that active listening and good observational skills are qualities in need of improvement by current caregivers in order to attain a resident-centred approach to care. According to Stewart (2001), a resident-centred approach to care involves putting the resident's needs at the forefront of the goals involved in providing care rather than focusing solely on medical and clinical objectives. In this sense, the participants of the present study have addressed these issues by indicating the need to listen to the resident and foster strong caregiver-patient relationships. In doing this, the participants have already begun to lay the foundations for future embodiment of resident-centred care.

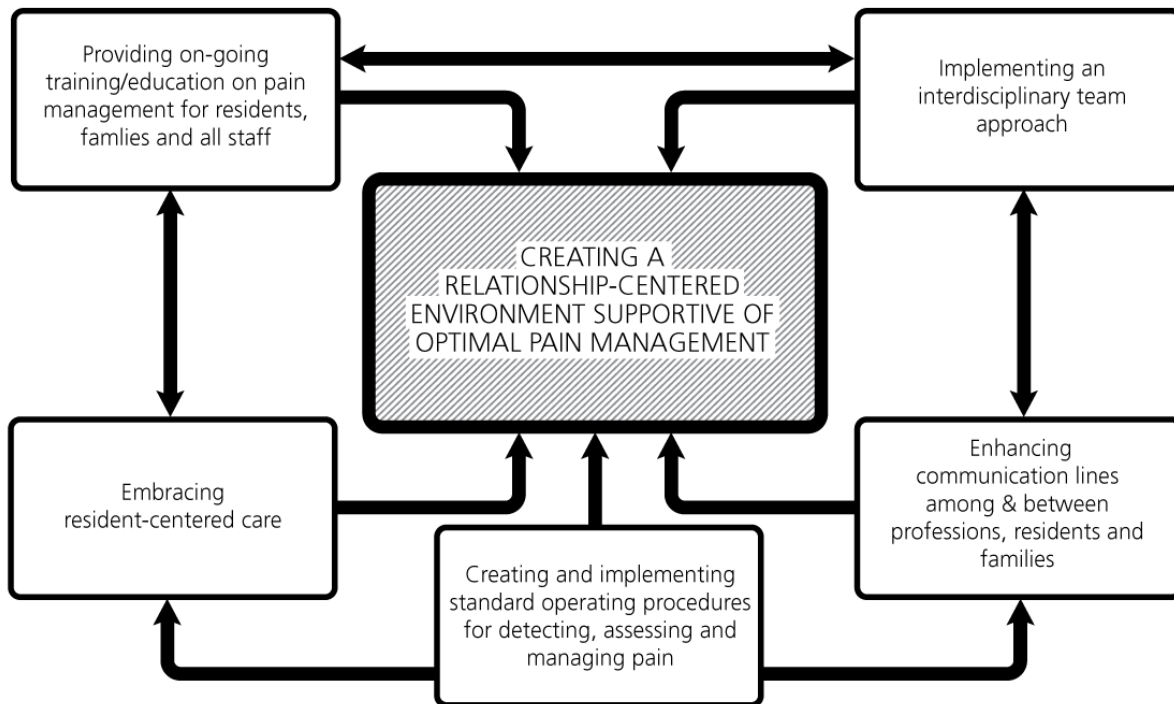
## 5.2 OVERARCHING CONCEPT AND THEORY FORMATION

The core concept of the theory of *optimizing pain management within long-term care* is that of creating a relationship-oriented environment supportive of optimal pain management.

Throughout the present study the notion existed that current pain management strategies are suboptimal and therefore the needs of elderly individuals living within long-term care are not being fully met. The identified shortcoming was founded on and delineated by the previously discussed themes of: 1) Providing on-going training in pain management for residents, family and staff; 2) Enhancing communication lines among and between professions, residents and family members; 3) Creating and implementing standard operating procedures for detecting,

assessing and managing pain; 4) Implementing an interdisciplinary team approach; 5) Embracing resident-centered care. Figure 1 below depicts the developed theory of optimizing pain management within long-term care.

Figure 1. The theory of optimizing pain management within long-term care



The previously discussed themes led to the overarching notion of creating a relationship-oriented environment supportive of good pain management practices. The five themes identified in the present study interact together and give rise to the need to create such an environment. Participants felt that by improving the identified deficits, the workplace environment would be further geared towards fostering good pain management practices. Factors such as improving educational opportunities, refining communication amongst vocations, implementing proper and efficient protocols for identifying, recording and following up on pain practices would play together to deepen the understanding of pain within the long-term care setting and improve the management of pain cases and subsequent follow up. Such an environment would serve to eliminate many of the commonly addressed barriers to pain management, thereby optimizing overall pain care for residents in long-term care centers. Fox's et al. (2004) study indicated that there is overall insensitivity to pain in residents, allowing for inadequate pain management strategies to continue. Improving the overall long-term care environment would perhaps lead to a greater sensitivity to resident's needs. Jones et al. (2004) indicated there was a lack of positive attitudes from staff members, again an issue that could be addressed by improving the workplace environment. Jones et al. (2004) further indicated means by which current long-term care environments could be improved, including knowing the residents, involving family in care practices, and demonstrating understanding, compassion and team work. Additionally, Herr (2002) indicates that one of the barriers in reaching optimal pain management strategies is that of large turnover in staff members. Improving the workplace environment may also serve to retain staff through improved working conditions such as feeling validated, respected and useful. The current study identified several team members who were disheartened and frustrated by current circumstances in the workplace. This was largely due to not being respected by their colleagues.

The feeling that the current state of affairs within the discussed facilities is not responsive to all staff members was indicated in several interviews as being a major problem in addressing pain.

There were several identified suggestions for modelling this “holy grail” of pain management environments. Through ensuring staff are armed with adequate resources, supportive team members (including management), a sense of empowerment may be eminent. Additionally, mutual understanding between staff, residents, and family is critical in order to create an environment of validation and trust. Empowerment of staff members and trust between caregiver and patient is hypothesized to create self-advocates in the patient and reactions from staff creating the key essence of optimal pain management.

#### *5.2.1 Current barriers to the optimization of pain management*

The main component of the discussed theory is that of current barriers preventing the optimization of pain management within the long-term care setting; the first being the under-education of care givers working within long-term care. Through one-on-one interviews it was found that staff felt under-educated on the topic of pain and pain management. This led to a privation in confidence when handling potential cases of pain deterring the overall ability of caregivers to advocate on behalf of residents in pain; this included speaking up and initiating action towards treatment. Secondly, it was indicated that communication amongst professions is not being embraced. This has led to complications in the transmission of information, surrounding pain in residents, between vocations. In an ideal treatment setting, transferrable information would be openly shared amongst nursing staff and other vocations. This is perhaps closely associated with under-training and a lack of knowledge regarding pain management. Furthermore, the timing and quality for which responses to indications of pain in residents is occurring has been identified as suboptimal. This in part, is also likely associated with the notion

of under-training on the topic of pain and pain management as well as a lack of open communication between staff members. Without proper communication an environment supportive of optimal pain management is not possible and therefore the optimization of pain management cannot occur. Finally, several participants indicated that currently, the social-psychological needs of resident's experiencing pain are not being considered. This presents a substantial gap in the overall care practices of residents in pain and, again, is likely in part due to the under-training of staff.

The identified barriers listed above are relatively straightforward to address. Participants relayed a willingness to participate in ongoing education on pain and pain management. This would address several of the identified problems and also present an opportunity for team exercises contributing to possible improvements in communication.

### *5.2.2 Unavoidable difficulties facing optimization of pain management*

The concept that working with the geriatric population presents unique difficulties in optimizing pain management establishes a distinctive barrier. The fact that the complexity of the geriatric patient is heavily imbedded in physiology creates a barrier inherent in nature and therefore not easily manipulated by health policy and systems. Participants voiced concern surrounding this concept, which is difficult to address, being a significant and unavoidable barrier in optimizing pain management practices. The main priority in addressing this barrier is simply consultation with different vocations in attempt to explore all avenues of cause and treatment. The notion of interdisciplinary communication may in part, contribute to mitigating this barrier.



### 5.2.3 Future needs

The need to work as a team was identified by participants as a key factor in improving future pain management within the long-term care setting. The ability to function as a team embraces the concepts of improving education, good communication and mutual respect of co-workers; all ideas that are embedded in previously discussed themes. Through improving teamwork, an environment supportive of optimal pain management will likely follow, resulting in the overall optimization of pain management practices.

Overall, the need to embody a resident-centered approach to care was inferred on several occasions throughout the present study. Careful and courteous considerations to the needs of the individual were identified by participants as pertinent to creating an environment supportive of optimal pain management. Again, this notion is closely related to several of the previously discussed themes. For example, the need to consider the social-psychological implications of pain was identified as a current shortcoming in present pain management practices.

## 5.3 STRENGTHS AND LIMITATIONS

The presently discussed research contributes to the body of knowledge on pain management models within long-term care facilities. On the whole, this study identified a number of gaps in the current system of managing of pain as well as pointed to possible strategies for mending these gaps. Furthermore, the developed theory of *optimizing pain management strategies in long-term care settings* provides framework for mitigating existing gaps as well as providing resources for long-term care staff to improve current pain management practices on the whole.

One of the main strengths of this study lies in the encompassment of numerous vocations involved in the care of residents residing in long-term care facilities. The sample involved

seventeen participants with a total of eleven different vocations, thereby maintaining a high level of heterogeneity in terms of the population sampled. This allowed for diverse perspectives on pain management, including those from all levels of care, to be integrated into the theory. The illustration of strengths, weaknesses and barriers within the long-term care setting were identified and explored from numerous lenses including physical, social-psychological and spiritual. This is an important consideration as previous studies focused on pain management from strictly a physical and medical standpoint. For example, perspectives from alternative practices such as registered massage therapy, chiropractic and recreational were included in this study in order to add another dimension to the predicament at hand.

Additionally, the conclusions of this study were drawn by those individuals who practice and manage pain on a daily basis. This adds a high level of credibility to the developed theory, as it has been created using evidence-based data. There was a high level of agreeability among various participants on the identified shortcomings to current pain management practices. This was indicative of consensus among all vocations in terms of where weaknesses exist and what can be done to bring about improvement. The validation and furthermore, agreeability gives a sense of confidence in the integrity of the results of this study.

The current research provides useful information regarding current issues related to pain management within long-term care facilities. The developed theory provides a good foundation for future improvements and research projects. Nevertheless, there are several limitations to the present study. First, the study was focused on one representative facility belonging to a chain of long-term care facilities and therefore the generalizability of the discussed results is limited. The discussed facilities have access to additional resources in comparison to government funded homes. This presents a huge benefit to the discussed facilities, which may not be easily

reproduced in other settings. In short, the currently discussed study was carried out in a privatized care setting and therefore resource allocation is very much different than that of government funded or semi-private care settings. On this subject, future research in this area should aim to sample a variety of nursing homes to ensure generalizability and enhance the usefulness of the developed theory.

There were several difficulties during the recruitment and sampling phases of the discussed study. Recruiting individuals to participate was, at times, challenging and required several rounds of promotion and advertising. The individuals responding to recruitment letters were often those with previous interaction with the researcher and therefore there is a high possibility of sampling bias. The individuals who agreed to participate may have been those who had a higher level of involvement with pain management, and therefore the perspectives reflected in this study may not have been those of general staff population. Secondly, there were several staff interviews in which language was a barrier. Communication during these interviews was somewhat trying and reaching mutual understanding of the study questions may have been compromised.

Finally, the current study focused primarily on staff member's perspectives regarding current pain management practices and the future optimization of pain management. Residents, and families within the discussed long-term care facility were not sampled due to time and resource limitations, the inclusion of resident and family opinions regarding their personal and medical care would have likely established a much more profound and enlightened theory. The current study is therefore biased towards staff members rather than residents. Future research should aim to include resident and family opinions on pain management practices. Having input from those who are the most important stakeholders would be ideal in terms of the accuracy of

both reflecting the current state of affairs and the best approaches for improving future care planning.

#### 5.4 CONCLUSIONS

The present study has provided evidence of shortcomings in current pain management practices within the long-term care setting. Furthermore, it has provided a framework for future directions of improvement. The idea of optimizing pain management in the long-term care setting was brought about through the overarching theory of creating environments that support optimal pain management. Additionally, this model included the identification of staff perceived barriers and weaknesses, which are ideal for the development and implementation of new best practices as there is a higher probability of future staff buy in. The current study addressed issues facing optimal pain management strategies and gave rise to the notion that currently several major barriers preventing the optimization of pain management exist. This study included a variety of vocations during sampling to ensure inclusion of all staff perspectives; however, future research should aim to include input from the residents whose needs are meant to be met by models of care. The present study's findings will contribute to improving the current practice of pain management within long-term care centres by informing policy makers and health-care providers of current gaps in the care system. Furthermore, it is hoped that the present study will lead care-givers to provide a more structured and nurturing environment supportive of optimal pain management practices for older adults living in institutionalized care settings.

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## **APPENDIX A**

UNIVERSITY OF WATERLOO  
OFFICE OF RESEARCH ETHICS

Request for Ethics Clearance of a Revision or Modification  
to an Ongoing Application to Conduct Research with Human Participants

Principal Investigator(s): Dr. Carlos Rojas-Fernandez  
Department: Pharmacy

ORE #: 17984  
Date of Full Ethics Clearance: April 24, 2012

Faculty Supervisor(s):  
Department:

Student Investigator: Haley Weber  
Department: Pharmacy

Title of Project: Development of an interdisciplinary pain management model for older adults living in long term care (Phase 1)

1. Previous Modifications Associated with this ORE 101 Application

Have you previously submitted an ORE 104 for this project? Yes [ ] No [ X ]

If Yes, please provide the clearance dates for each previous modification under this ORE 101.

2. Information Letter and Consent Form

Do the proposed revised procedures require any change(s) to the Information Letter-Consent Form currently in use  
Yes [ ] No [ X ]

If Yes, briefly describe these changes on the following table and attach a copy of the revised version of the Information Letter-Consent Form.

3. Summary of the Nature, Description and Rationale for Proposed Modifications

On the following summary table, describe the nature of each modification requested under the current ORE 104 and provide a rationale for each proposed change.

4. Revised ORE 101 Pages

Attach all pages from the ORE Form 101 that have been revised due to the proposed modification.

Signature of Principal & Co-Investigators

Signature of Faculty

Investigator(s):

Supervisor(s):

Signature of Student

Investigator(s):

Date:

08/01/2013

FOR OFFICE OF RESEARCH ETHICS USE ONLY

[ ] The current modification request to an ongoing project involving human participants has been reviewed and received ethics clearance as submitted.

[ ] The current modification request to an ongoing project involving human participants has been reviewed and requires revisions as outlined in the attached email.

Date:

[Redacted]

Director, Research Ethics

or

[Redacted]

Senior Manager, Research Ethics

or

[Redacted]

Manager, Research Ethics

## **APPENDIX B**

## SCOPING REVIEW: SEARCH STRATEGIES

Returns in brackets following each line.

### All Ovid MEDLINE(R) (1946 to 2013 April 26):

1. pain.tw. or exp pain/ or exp pain management/ (506738)
2. (Elder\$ or older or aged\$ or senior\$ or geriatric\$.tw. or exp aged/ (2558965)
3. (nursing facilit\$ or long term care\$ or residential home\$.tw. or nursing homes/ or exp long-term care/ or Homes for the Aged (51059)
4. 1 and 2 and 3 (30369)

### Embase (1974 to 2013 April 26):

1. (elder\$ or older or aged\$ or senior\$ or geriatric\$.tw. or exp aged/ (2636318)
2. (Nursing facilit\$ or long term care\$ or residential home\$ or nursing home\$.tw. or exp nursing home/ or exp old age home\$/ (62627)
3. pain.tw. or exp pain/ or exp pain management/ (951566)
4. 1 and 2 and 3 (1480)

### CINAHL(1981 to April 2013):

1. AU older adult OR AU elderly OR AU older OR AU geriatrics OR TI aged OR TI nursing home OR TI patients OR TI aged (160070)
2. AU nursing facility OR AU long term care OR AU residential home OR AU nursing homes OR TI long term care OR TI nursing home\$ (12,219)
3. AU pain OR TI pain (46,199)
4. 1 AND 2 AND 3 (149)

### International pharmaceutical abstracts (1970 to September 2012):

1. (Older adults or Elderly or Older or Older people or Geriatric\$.tw. or exp aged/ (13434)
2. (nursing facility or long term care or residential home).tw. or nursing homes/ or exp long-term care/ (2085)
3. Pain.tw. or exp Pain/ or exp Pain management/ (12791)
4. 1 and 2 and 3 (27)

### PyschInfo (all years to April 2013):

(Subject: (pain) OR Index Terms: (pain) OR Index Terms: (pain management)) AND (Subject: (nursing facility) OR Subject: (long-term care) OR Subject: (Residential home) OR Subject: (nursing homes) OR Index Terms: (long-term care) OR Index Terms: (nursing homes)) AND (Subject: (Older adults) OR Subject: (elderly) OR Subject: (Older) OR Subject: (Older people) OR Subject: (geriatrics) OR Index Terms: (aging) OR Index Terms: (aged) OR Index Terms: (elder care)) (49)

### INTERDISCIPLINARY CONCEPT INCLUDED:

#### CINAHL(1981 to April 2013):

( pain or (MH "Pain+") ) AND ( elder\* or aged\* or senior\* or geriatric\* or older\* or (MH "Aged+") ) AND ( nursing home\* or nursing facilit\* or long term care\* or home? for the aged\* or residential home\* or old age home\* or (MH "Nursing Homes+") or (MH "Long Term Care") ) AND ( interdisciplinary or multidisciplinary or crossdisciplinary or transdisciplinary or integrated care\* or integrated deliver\* or integrated health care\* or patient care team\* or medical care team\* or health team\* or (MH "Multidisciplinary Care Team+") or (MH "Health Care Delivery, Integrated") ) (68)



## **APPENDIX C**



## **SCHOOL OF PHARMACY University of Waterloo**

### **PARTICIPANTS NEEDED FOR RESEARCH IN PAIN MANAGEMENT IN THE ELDERLY**

We are looking for volunteers to take part in a study focusing on current practices in the area of pain management in the elderly.

As a participant in this study, you would be asked to participate in a confidential interview. The interview would involve questions regarding your experience with the management of pain in the elderly, opinions about current standards of practice and suggestions you may have about improving the management of pain in residents.

Your participation would involve 1 session of approximately 60 minutes. Reimbursement for your time will be provided.

For more information about this study, or to volunteer for this study, please contact:

Haley Weber

School of Pharmacy, University of Waterloo

at

519-888-4567 Ext. 21930 or

Email: [h3weber@uwaterloo.ca](mailto:h3weber@uwaterloo.ca)

This study has been reviewed by, and received ethics clearance through, the Office of Research Ethics, University of Waterloo.

## **APPENDIX D**



Date: \_\_\_\_\_

Dear \_\_\_\_\_,

This letter is an invitation to consider participating in a study I am conducting as part of my Master's degree in the Department of Pharmacy at the University of Waterloo under the supervision of Dr. Carlos-Rojas Fernandez and in collaboration with the \_\_\_\_\_ . This project is being funded in part by Pfizer Canada and Purdue Pharma Canada.

Chronic pain is one of the most underestimated health care problems in the world. The likelihood of experiencing chronic pain increases with age, creating a major burden on the North American health care system. Persistent or chronic pain affects more than 50% of older persons living in the community and more than 80% of those who live in nursing homes.

This study will focus on characterizing the current "usual care" model for pain management within the facility, exploring the roles that various health care professionals currently play in the management of pain in long term care settings, and identifying enabling factors and barriers to the optimal care of older people with pain. Several of the professions to be included in the study are physiotherapy, occupational therapy, kinesiology, medical including nursing, and recreational therapy. As a member of one of these professions, and as someone who is actively involved in pain management of long term care residents, I would like invite you to share your perspective on the various issues long term care faces when dealing with elderly who experience pain. The purpose of this study, therefore, is to collect data to be used in the development of an interdisciplinary pain management model for use in long-term care facilities. Additionally, a medical record review will take place to further detail current practices surrounding the pain management of residents.

Participation in this study is voluntary. It will involve an interview of approximately 30 minutes in length to take place in a mutually agreed upon location. You may decide not to volunteer or you may later decide to withdraw from this study at any time without any negative impact on your relationship with the facility or its administration. Your employer will not know whether or not you volunteered nor will they have access to any of the information shared during the interview. With your permission, the interview will be audio recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. Data collected during this study will be retained indefinitely in a locked office in my supervisor's lab at the University of Waterloo, School of Pharmacy. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at (519) 888-4567 ext.21390 or by email at h3weber@uwaterloo.ca. You can also contact my supervisor, Dr. Carlos-Rojas Fernandez at (519) 888-4567 ext.21326 or email carlos.rojas-fernandez@uwaterloo.ca.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes of this office at (519) 888-4567 Ext. 36005 or ssykes@uwaterloo.ca.

I hope that the results of my study will be of benefit to those organizations directly involved in the study, other voluntary recreation organizations not directly involved in the study, as well as to the broader research community.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours Sincerely,

Student Investigator

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### **CONSENT FORM**

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

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I have read the information presented in the information letter about a study being conducted by Haley Weber of the Department of Pharmacy at the University of Waterloo. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the Dr. Susan Sykes, Director, Office of Research Ethics at (519) 888-4567 ext. 36005.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

YES  NO

I agree to have my interview audio recorded.

YES  NO

I agree to the use of anonymous quotations in any thesis or publication that comes of this research.

YES  NO

Participant Name: \_\_\_\_\_ (Please print)

Participant Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_ (Please print)

Witness Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **APPENDIX E**



## IPM 2: Interdisciplinary Pain Management Interview Guideline

Date: \_\_\_\_\_

Participant ID: \_\_\_\_\_

Facility ID: \_\_\_\_\_

1. A.) Briefly describe any experience you have had working with the elderly in relation to pain management, prior to your position at this facility.

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- B.) Describe your current roles and responsibilities when dealing with residents who experience pain.

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- a.) What guidelines/SOPs for pain management, if any, does your facility have? How, if at all, do you use these guidelines in your practice? Probes if they do: Can you provide an example.
- b.) How have the guidelines been useful to you in your practice? How have they not been particularly useful?
- c.) Probe if they do not use guidelines, What keeps you from using the guidelines?

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- d.) If yes, do you find them useful? Explain:

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2. Describe any barriers that you see or perceive in the management of resident pain in this facility.

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3. What specific suggestions do you have related to the improvement of current pain management practices at your facility?

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4. Describe any enabling factors that you see or perceive in the management of resident pain in this facility (i.e., strengths). What do you need to effectively support pain management in your practice?

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5. Which other health care providers (give examples if necessary) at your facility do you interact with when dealing with the management of pain in residents?

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- a.) Probes if do have interactions: What is the nature of your interactions? How do you work together in dealing with pain management? Can you describe a team approach to pain management that really worked? What was it about the approach that made it effective? Can you describe a team approach that perhaps was as effective? Why do

you think it was not as effective? How might health care providers from different disciplines work better to support residents in pain management?

Probes if don't have interactions: Why do you think those interactions have not developed?

b.)

c.)

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## **APPENDIX F**

### Sample Question Transformation:

#### Original question #5

Which other health care providers (give examples if necessary) at your facility do you interact with when dealing with the management of pain in residents?

Probes if do have interactions: What is the nature of your interactions? How do you work together in dealing with pain management? Can you describe a team approach to pain management that really worked? What was it about the approach that made it effective? Can you describe a team approach that perhaps was as effective? Why do you think it was not as effective? How might health care providers from different disciplines work better to support residents in pain management?

Probes if don't have interactions: Why do you think those interactions have not developed?

#### Transformed question #5

Given your professional experience, how do you think different health care professions in the long-term care setting interact **more efficiently to improve overall pain management practices**?

Probes for properties to consider: communication, respect, follow-up

## **APPENDIX G**



## SCHOOL OF PHARMACY University of Waterloo

### PARTICIPANTS NEEDED FOR RESEARCH IN PAIN MANAGEMENT IN THE ELDERLY

We are looking for volunteers to take part in a study focusing on current practices in the area of pain management in the elderly.

As a participant in this study, you would be asked to participate in a **focus group session**. This session would involve a group discussion regarding management of pain in the elderly. Topics of interest include opinions about current standards of practice and suggestions you may have about future improvements in the management of pain in residents.

Your participation would involve 1 session of approximately 90 minutes. Reimbursement for your time will be provided.

For more information about this study, or to volunteer for this study, please contact:

Haley Weber

School of Pharmacy, University of Waterloo

at

519-888-4567 Ext. 21930 or

Email: [h3weber@uwaterloo.ca](mailto:h3weber@uwaterloo.ca)

This study has been reviewed by, and received ethics clearance through, the Office of Research Ethics, University of Waterloo.

## **APPENDIX H**



Date: \_\_\_\_\_

Dear \_\_\_\_\_,

This letter is an invitation to consider participating in a study I am conducting as part of my Master's degree in the Department of Pharmacy at the University of Waterloo under the supervision of Dr. Carlos-Rojas Fernandez and in collaboration with the \_\_\_\_\_ . This project is being funded in part by Pfizer Canada and Purdue Pharma Canada.

Chronic pain is one of the most underestimated health care problems in the world. The likelihood of experiencing chronic pain increases with age, creating a major burden on the North American health care system. Persistent or chronic pain affects more than 50% of older persons living in the community and more than 80% of those who live in nursing homes.

This study will focus on characterizing the current "usual care" model for pain management within the facility, exploring the roles that various health care professionals currently play in the management of pain in long term care settings, and identifying enabling factors and barriers to the optimal care of older people with pain. Several of the professions to be included in the study are physiotherapy, occupational therapy, kinesiology, medical including nursing, and recreational therapy. As a member of one of these professions, and as someone who is actively involved in pain management of long term care residents, I would like invite you to participate in focus group discussions involving dialogue on various issues long term care faces when dealing with elderly who experience pain. The purpose of this study, therefore, is to collect data to be used in the development of an interdisciplinary pain management model for use in long-term care facilities. Some of the themes that will be explored during this session include communication pathways between various staff, documentation of pain in residents and roles and responsibilities of various staff members when dealing with resident pain.

Participation in this study is voluntary. It will involve one focus group session of approximately 90 minutes in length, date and time to be decided. You may decide not to volunteer or you may later decide to withdraw from this study at any time without any negative impact on your relationship with the facility or its administration. Your employer will not know whether or not you volunteered nor will they have access to any of the information shared during the interview. With your permission, the sessions will be audio recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential. Your name will not appear in any thesis or report resulting from this study, however, with your permission anonymous quotations may be used. Data collected during this study will be retained indefinitely in a locked office in my supervisor's lab



at the University of Waterloo, School of Pharmacy. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at (519) 888-4567 ext.21390 or by email at h3weber@uwaterloo.ca. You can also contact my supervisor, Dr. Carlos-Rojas Fernandez at (519) 888-4567 ext.21326 or email carlos.rojas-fernandez@uwaterloo.ca.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes of this office at (519) 888-4567 Ext. 36005 or ssykes@uwaterloo.ca.

I hope that the results of my study will be of benefit to those organizations directly involved in the study, other voluntary recreation organizations not directly involved in the study, as well as to the broader research community.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours Sincerely,

Student Investigator

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### **CONSENT FORM**

By signing this consent form, you are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities.

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I have read the information presented in the information letter about a study being conducted by Haley Weber of the Department of Pharmacy at the University of Waterloo. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that the focus group sessions will be audio recorded to ensure an accurate recording of my input.

I am also aware that excerpts from the sessions may be included in the thesis and/or publications to come from this research, with the understanding that the quotations will be anonymous.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact the Dr. Susan Sykes, Director, Office of Research Ethics at (519) 888-4567 ext. 36005.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

YES  NO

I agree to have my interview audio recorded.

YES  NO

I agree to the use of anonymous quotations in any thesis or publication that comes of this research.

YES  NO

Participant Name: \_\_\_\_\_ (Please print)

Participant Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_ (Please print)

Witness Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## **APPENDIX I**



## IPM Focus Group Guide

### **Opening question (5 minutes):**

Tell us who you are, what you do professionally and how long you have been doing it for, and what you most enjoy doing when you're not working?

### **Introductory question (5 minutes):**

Describe your first encounter with a case of pain? It could be personally or professionally.

*topic of discussion introduced and people get to start thinking about their connection.. tell us how they see or understand the issue*

### **Transition questions (10 minutes):**

Describe your first experience with pain management. What were some of the difficulties (if any) you encountered? What were some of the most helpful tools?

*move the conversation into the key questions that drive the study, links between the introductory questions and the key questioning (becoming aware), set the stage for productive key questions, more depth than introductory questions about their experience and use of a product*

### **Key Questions: (50 minutes total)**

1. Where do you think the biggest gaps are within communication pathways between staff when dealing with pain management and how can they best be improved? (10 minutes)

***Probes:***

*What about documentation?*

*Is "availability" of or "access" to other key professionals a problem?*

2. What suggestions do you have to avoid the detection of pain being missed due to misrepresentation of behavioral problems? (10 minutes)

3. **Small group work (20 minutes):** Outline what you think an ideal pain management team within long-term care centres should encompass. Draw a flow diagram of how this team would function with regards to handling pain within this facility-start from "suspicion of pain in a resident" through to follow up on treatment.

***Probes:***

*Consider current shortcomings in pain management practiced and where these gaps need*

*to be filled in.*

*Consider the professionals that you think should be accessed.*

*Consider the individuals you would need to interact with for ideal pain management.*

4. What training programs (if any) do you think need to be implemented in order to allow for the development of the discussed (question 3) model?

***Probes:***

*Are there specific staff that should be targeted? (10 minutes)*

*10 to 20 minutes each, need pauses/probes, begin one third to half the way into the focus group*

**Ending Questions:**

1. All things considered, for you, what is the most important point of discussion from today's meeting? (10 minutes)

***GIVE SUMMARY OF MEETING***

2. Do you think this adequately captures what was said here today? (5 minutes)
3. Is there anything critical that you feel we have missed discussing today? (5 minutes)

*-reflect back on previous comments, critical to analysis 3 types: all things considered, summary question (following oral summary), final question (insurance question)*

## **APPENDIX J**



Dear \_\_\_\_\_,

I am writing to thank you for your contributions to my research during our meeting last week. It was indeed a pleasure meeting you.

This study focused on collecting information regarding current pain management procedures and opinions on these strategies, in your long term care facility. The first phase of my project, Development of an Interdisciplinary Pain Management Model for Older Adults Living in Long Term Care, is proceeding according to design, and in particular the phase including the review of current pain management strategies in your workplace is nearing completion. As you know I have already been through the major archival collections, and am now seeing a few more individuals such as yourself who can lend additional information and insights.

I want to reassure you that your identity will be kept confidential and aside from the investigators and other participants involved in this study, no one will have access to the content of the focus group session. Names have been removed from documentation and replaced with identification codes prior to secure storage. All records of the focus group will be secured indefinitely in my supervisor's office at the University of Waterloo, School of Pharmacy.

I hope you will get in touch with me if further thoughts occur to you about the subject of our group's conversation. As with all University of Waterloo projects involving human participants, this project was reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. Should you have any comments or concerns resulting from your participation in this study, please contact Dr. Susan Sykes, Director, Office of Research Ethics at 519-888-4567, Ext., 36005 or [ssykes@uwaterloo.ca](mailto:ssykes@uwaterloo.ca).

Should you have any further questions about the study, you can contact my supervisor Dr. Carlos Rojas-Fernandez at 519-888-4567 Ext. 21326 or [carlos.rojas-fernandez@uwaterloo.ca](mailto:carlos.rojas-fernandez@uwaterloo.ca).

I shall as promised, be sending you a typescript copy of the chapter for your comments.

Sincerely,

Haley Weber, Student Investigator  
University of Waterloo, School of Pharmacy  
519-546-6448  
[h3weber@uwaterloo.ca](mailto:h3weber@uwaterloo.ca)

## **APPENDIX K**



### Abbey Pain Scale

*For measurement of pain in people with dementia who cannot verbalise.*

**How to use scale :** While observing the resident, score questions 1 to 6.

**Name of resident :** .....

**Name and designation of person completing the scale :** .....

**Date :** ..... **Time :** .....

**Latest pain relief given was**.....**at**.....**hrs.**

- |   |    |   |
|---|----|---|
| <p><b>Q1. Vocalisation</b><br/>eg whimpering, groaning, crying<br/><i>Absent 0 Mild 1 Moderate 2 Severe 3</i></p>   | Q1 | <input style="width: 40px; height: 25px;" type="text"/> |
| <p><b>Q2. Facial expression</b><br/>eg looking tense, frowning, grimacing, looking frightened<br/><i>Absent 0 Mild 1 Moderate 2 Severe 3</i></p>  | Q2 | <input style="width: 40px; height: 25px;" type="text"/> |
| <p><b>Q3. Change in body language</b><br/>eg fidgeting, rocking, guarding part of body, withdrawn<br/><i>Absent 0 Mild 1 Moderate 2 Severe 3</i></p>                                    | Q3 | <input style="width: 40px; height: 25px;" type="text"/> |
| <p><b>Q4. Behavioural Change</b><br/>eg increased confusion, refusing to eat, alteration in usual patterns<br/><i>Absent 0 Mild 1 Moderate 2 Severe 3</i></p>                           | Q4 | <input style="width: 40px; height: 25px;" type="text"/> |
| <p><b>Q5. Physiological change</b><br/>eg temperature, pulse or blood pressure outside normal limits, perspiring, flushing or pallor<br/><i>Absent 0 Mild 1 Moderate 2 Severe 3</i></p> | Q5 | <input style="width: 40px; height: 25px;" type="text"/> |
| <p><b>Q6. Physical changes</b><br/>eg skin tears, pressure areas, arthritis, contractures, previous injuries<br/><i>Absent 0 Mild 1 Moderate 2 Severe 3</i></p>                         | Q6 | <input style="width: 40px; height: 25px;" type="text"/> |

**Add scores for 1 - 6 and record here** ➔ **Total Pain Score**

**Now tick the box that matches the Total Pain Score** ➔

0 - 2 No pain	3 - 7 Mild	8 - 13 Moderate	14 + Severe
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**Finally, tick the box which matches the type of pain** ➔

Chronic	Acute	Acute on Chronic
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Abbey, J; De Bellis, A; Piller, N; Esterman, A; Giles, L; Parker, D and Lowcay, B.  
Funded by the JH & JD Gunn Medical Research Foundation 1998 - 2002  
*(This document may be reproduced with this acknowledgement retained)*

## Wong-Baker FACES Pain Rating Scale



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