2013-04-29

Exploring Registered Nurses' Everyday Experiences of Telenursing Work: An Institutional Ethnography

Kamabu, Kakule Floribert

"… that is the institutionalization that we want to help subvert. Some of us will be activists, some of us will not. But we all have a social responsibility. Our responsibility is to make texts that express the standpoint of people and to help make them available to those who will use the work's subversive capacity in their own struggles."

(Marie Campbell & Frances Gregor, 2008, p. 128).

THE UNIVERSITY OF CALGARY

Exploring Registered Nurses' Everyday Experiences of Telenursing Work: An Institutional Ethnography

by

Kakule Floribert Kamabu

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTER OF NURSING

FACULTY OF NURSING

CALGARY, ALBERTA

APRIL, 2013

Abstract

Access and delivery of Canadian health care is expected to be enhanced through telenursing, a growing nursing specialty. Using institutional ethnography, I describe how telenursing work is socially organized within protocols, contracts, quotas, and time. My core argument, supported by evidence, is that nurses' work is too firmly tied to protocols that involve nurses in highly standardized and routinized activities. These are textually mediated work processes that cover over *and* squeeze out skilled nursing judgment. The research establishes a critical analysis uncovering nurses' troubling capture within 'conceptual practices of power' (Smith 1990) –taken-for-granted (supposedly competent) practices that overrule their capacity for skillful, compassionate interactions with callers. The findings have troubling implications for nurses and for the discipline of nursing. Moreover, in relation to the careful and prudent use of health resources, I show how organizing nurses' work this way is a serious waste of an important resource.

Acknowledgements

This thesis would not have been possible without the involvement of many people and I do want to sincerely acknowledge the contribution of many. First and foremost, the call centre nurses that placed an extra chair in their working station so that I can see their work process unfold, generously volunteered their time and sat with me for an interview and answered my questions with a genuine account of their day-to-day realities that make most of the content of this thesis.

I would like to acknowledge the committee members for their special efforts:

Dr. Janet Rankin: for her continued encouragement and support even in difficult moments of her busy schedule, in person and through long distance communication via e-mails, Skype and telephone calls.

Dr. Shelley Raffin: for her expertise and feedback in the ethics application preparation and in the final touches to this thesis.

Dr. Annette Lane: for her questions about data collection that resulted in refining this process, and for her input in the last draft of this thesis.

The people involved in my work and play, who encouraged me in many ways with their words, shelter, meals, strategies, companionship, rest, transport and recreation, I thank you; Dr. Kathleen Oberle who generously offered me a place for my daily nightly writings; my sponsors to Canada through the World University Service of Canada's (WUSC) Student Refugee Program (SRP): thank you!

Finally, I thank my family: my children **Jibu**, **Jeje**, and **Jia**, who carried the burden of the absence of their father during my long days and nights of data gathering and writing; to Mama Jibu (Jane) and Mama Jeje & Jia (Prudence) who kept the moral of the children

high; together with those I call and those I consider my “parents” (Kambale Jules/Adele Masika & Edith/Amos Kambere); to my daily inspiration colleague Tess Botor O. who tirelessly provided the much needed brain food from the Boston Blue Fish (BBF); … I am thankful.

Table of contents

List of Figures

List of Symbols, Abbreviations, Nomenclature

Symbol	Definition
ADL	Activities of Daily Life
ADRTS	*All-Digital Recording Telephone System*
AHA	American Heart Association
BHL	Breastfeeding Hot Line
CDM	Chronic Disease Management
ED	Executive director
EMS	Emergency Medical Services
ER	Emergency Room
F/U	Follow Up
HCP	Health Care Provider
HIA	Health Information Advisory
IE	Institutional Ethnography
LUHR	Local Urban Health Region
MN	Master of Nursing
OTC	Over The Counter
QMPR	Quality Management Performance Review
TDR	Triage Details Report
TIPS	Time of Onset, Intensity, Pain and Severity

Chapter One: **INTRODUCTION AND LITERATURE REVIEW**

This chapter introduces my interest in and assumptions about telenursing work. It provides background for the topic and the research. It includes a review of the literature in which I discuss blurring of the terms 'telehealth' and 'telenursing' both historically and inside nurses' practice. An overview of the chapters in this thesis concludes chapter one.

1.1 Introduction

Imagine if you will: ten nurses sitting side by side in cubicles wearing telephone headsets. Each nurse is looking at her or his own computer screen while providing nursing care to people who are geographically distant. To do this they use protocols, standards, and algorithms that have been generated for this work. A supervisor circulates around the floor intermittently peering over the shoulder of each individual nurse. A hand (or flag) goes up and the supervisor recognizes it as a request for a quick consultation about the patient on the phone or the protocol. At one cubicle a nurse hurriedly looks at her watch recognizing that 'this call has gone on for too long' and that she needs to close it. Another nurse finishes her call, while waiting for the next call to come in; she stands up to look over the divider of her workspace hoping to share an anecdote from her last caller. Her coworker is still involved in a call and cannot be interrupted. Hearing a beep she glances back to her own screen, sits back down, presses a button and says "*Talk to a Nurse* centre, this is a Registered Nurse Adele[1] speaking, how may I help you?" as she

[1] All names are pseudonyms.

commences her work with a new caller. That is the picture of the work of a telephone nurse or telenurse that happens in a call centre (Figure 1).

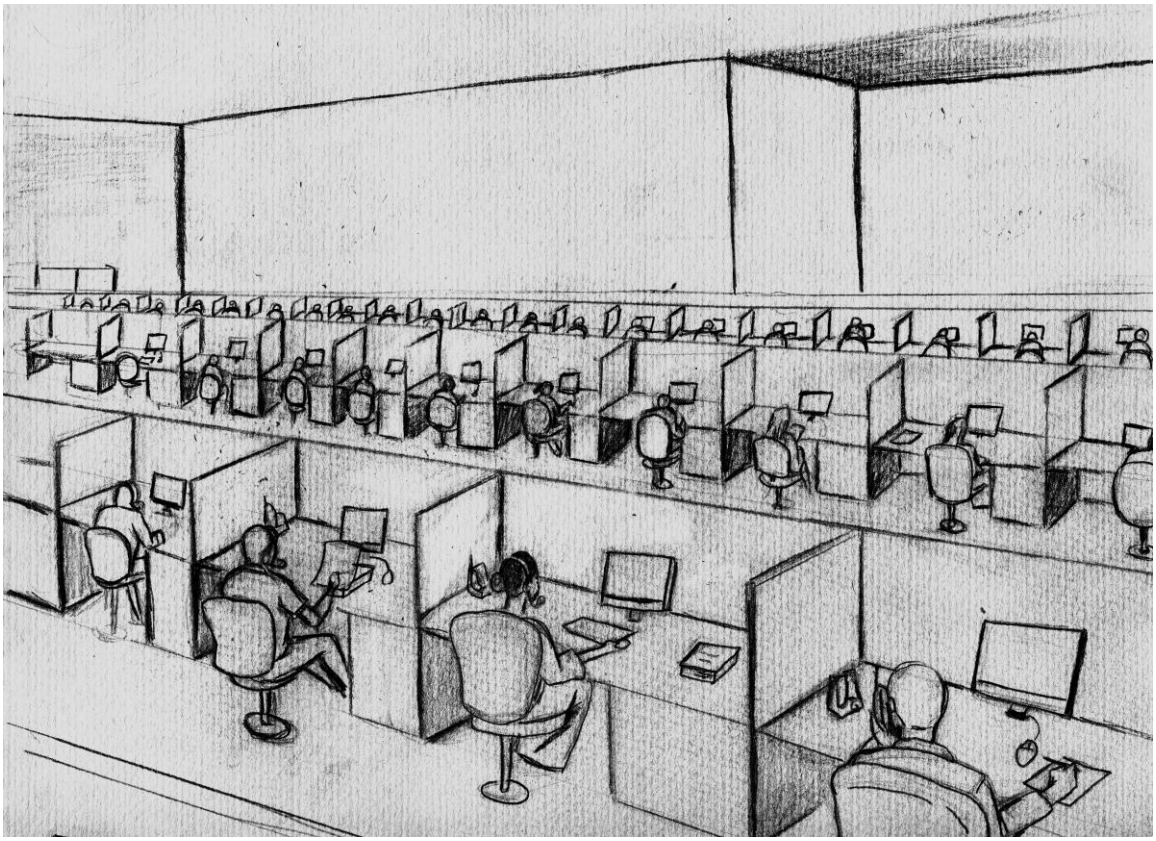


Figure 1: The call centre's physical setting drawing (Briand Nelson Mutima, artist; Personal Communication, February 11, 2013).

1.1.1 Research Interest

My interest in this topic was generated by my own work as a telenurse for 4 years. In my experience as a telenurse, I have encountered numerous challenges and tensions as I interact with patients on the telephone and use the tools that have been developed for this work. For example, during an encounter with a patient who was seeking advice about a painful scald on her fingers, the protocol required me to ask the patient about the status of her breathing and whether or not she had chest pain. The patient seemed irritated by questions. She wanted my attention to her painful burn. I was unable to establish my credibility and provide her with the immediate directions to submerge her finger in cold running water. Not only was my work mediated by geographical distance and my inability to reassure with touch or eye contact, but I was also constrained by standard safety work that required me to verbally establish that this patient's "CAB's" (circulation, airway, and breathing) were not in jeopardy. Incidents such as this one generated numerous questions about the nature and demands of telenursing work. I overheard and saw my fellow nurses having the same struggles as mine in the way they tried to care for their patients on the telephone. The pace of the work was fast as the telephone system provided a very short break between calls. The lack of time for consultation isolated me in my cubicle while trying to develop expertise in this area of my nursing practice, especially those times when I found that the rigidity of the protocols did not support me. I was often troubled by the way my practice unfolded. Frustrated, I began to question how my nursing care was being undermined.

My Master of Nursing (MN) study offered me a unique opportunity to ask in-depth questions that I would have not been able to address inside my work as a call centre

telenurse. The research has enabled me to understand how telenurses are implicated in the broader strategy of health care reform aimed at reducing health care costs by reducing pressures on certain areas of the health care system such as hospitals, emergency departments and home health. In this study, formulated as an institutional ethnography (IE), I investigated some of the tensions and contradictions that arise in the everyday work of telenurses or telenursing, a growing specialty for nursing practice in which the telephone is the only communication link between the patient and the nurse. Telenursing is a sharp contrast to most areas of direct nursing practice where nurses have face-to-face contact with people who they can see, touch, and smell. Telenursing is one of the applications of the broad field of telehealth (Sharpe, 2001) that has a relatively recent history in contemporary health services. In this research the ordinary and taken for granted activities of telenursing (such as the introduction vignette) are carefully examined in order to uncover what I present in this thesis.

1.1.2 My Assumptions

As with any research project it was important at the outset to examine the assumptions that I took into the research with me. Here I outline my *original* interests as I recall what I now recognize were somewhat naïve and unsophisticated understandings about telenursing, its problems, and its contributions – the impressions I gathered from my work and from my reading.

1.1.2.1 Stress is Present in Telenurses' Work

My original interest in telenursing arose from my experiences of doing telenursing and I entered graduate school with a quest to document forms of stress that arose in telenursing. Even though I enjoyed the work and believed it was an important new development in nursing I recognized that, as with most other nursing work (Carson *et al.,* 1997; Goodman & Boss, 1999; Muncer *et al.,* 2001; Payne, 2001; Tyler & Ellison, 1994), there were stresses and challenges that were poorly understood. At the outset of my graduate education I proposed to examine stress in the telephone nursing milieu (call centre) using the model of occupational stress (Cohen-Mansfield, 1995). I was interested in adapting this tool to amend this scale for telenursing. However, this project was riddled with numerous obstacles. The first obstacle was the lack of literature in the area of telenursing. In Canada there was no study that identified stressors in telenurses that could be included in an application to the Cohen-Mansfield for permission to develop the existing tool. Therefore the logical step was to explore this milieu to identify its stressors. This was the focus I included in the proposal that was included in my application to the master's program of the University of Calgary. However throughout my MN coursework I was introduced to institutional ethnography (IE). I immediately realized that IE could generate precise and extensive answers to my curiosities about telenursing and the following thesis recounts this work.

1.1.2.2 Nurses are Satisfied with Telenursing Work

As I recall my earlier, pre-analytical impressions of telenursing I am aware that I had always assumed that telenursing is important and rewarding work – key to both

saving lives and saving unnecessary trips to hospital emergency rooms. It made sense to me that people could receive high quality nursing advice in the comfort of their homes.

1.1.2.3 Protocols are always Effective and Flawless

Another assumption I had was about the protocols that infused my work. I realize now that I had faith in the protocols, understanding that they are the best way to ensure that people receive safe and effective care. I assumed that protocols were excellent tools for nurses to use in their practice in the call centre and that they worked to support a nursing standard of high quality care.

These assumptions, held by a great many of my nursing colleagues in the telenursing centre where I had been employed have been challenged by the IE analysis I present here

1.2 Literature Review

1.2.1 Literature review in IE

Prior to bringing you, the reader, into my literature review, I provide instructions to position the study in relation to the literature. Campbell and Gregor (2002) state that:

> In institutional ethnography, the researcher reads the literature both for conventional reasons—to discover the scope of research knowledge in this area—and for a particular reason related to her own positioning. The institutional ethnographer's research stance maintains the research interest in the social organization of the topic. (p. 51)

Thus, in reviewing the literature, I include how telenursing work is socially organized discursively through policies. I read the literature to discover the paradigms that organize how telenursing is known. I endeavor to discover how telenurses' work is theoretically

understood. The goal in reading the literature is to begin to discover what assumptions and taken-for-granted beliefs circulate about telenurses and telenursing. The literature is read as form of data that offer important clues into how telenursing is organized to unfold the way that it does.

Campbell and Gregor (2002) suggest that when a researcher, such as myself, is doing literature review in IE, prior to thinking about my own topic, I must be aware of the "possibilities of importing dominant perspectives into [my] thinking about the research setting" (p. 52). The authors caution that the ethnographer must be careful not to uncritically embrace the views that are reported in the literature since they often represent the views of what IE researchers call a 'ruling standpoint' that is established within abstract practices of knowledge. In embracing the stance of the literature, Campbell and Gregor warn that "[I] would have lost [my] stance in the everyday world" (p. 52). What this means for me when I am reading the literature about telenursing is that I become aware of and familiar with the discourses that are being used; those normative ideas related to standardized practices; quality assurance. This reading exercise requires constant check on any claims that surface in literature as they relate to what I (or my informants) know about what happens in telenursing work.

1.2.2 Telenursing in the Literature

Goodwin (2007) describes how the contemporary work setting of telenursing has been modeled on recent innovations in telemarketing strategies. The review tracks how telenursing, linked to health care reform and hospital restructuring, is being used to maintain the economic sustainability of the Canadian health care system. Telemarketing

strategies as a way to conduct nursing work makes sense within goals to reduce visits to doctors' offices, walk-in clinics, and emergency rooms (Goodwin, 2007).

1.2.2.1 Telenursing, Health Care Restructuring, Health Information Technology (HIT) and Access

In Canada, a major push to expand telenursing centres can be linked to the Romanow Report (2002) on the future of health care in Canada that recommends a decrease in health care spending through reform and restructuring. A key strategy to decrease health care spending is through telephone nursing by reducing pressures on hospital, emergency departments, walk-in clinics, physician offices and home health (Bohnenkamp *et al.*, 2004; Goodwin, 2007; Fry, 2009; Hagan, Morin, & Lépine, 2000; Stacey *et al.*, 2003). Canada, like many other countries[2] in the Organization for Economic Cooperation and Development (OECD) has been involved in focused efforts to decrease health care spending (Anderson *et al.,* 2006).

Each of these countries have shown efforts to implement Health Information Technology (HIT) (Anderson *et al.*, 2006*)* which, in Canada (a member state of the OECD), has resulted in the creation of the federal *Office of Health and the Information Highway* with a mandate to implement the *Canada Health Infoway* (Anderson *et al.*, 2006, p. 825). Nurses have been named as one of the providers participating in the end result of this HIT initiative which is the creation of Electronic Health Records (EHRs). Anderson *et al.* reviewed each country's spending on HIT. At the time of collecting data

[2] The United States, Australia, Canada, Germany, Norway and the United Kingdom (Anderson, *et al.* 2006, p. 825).

for their study they reported that, in Canada, a total estimate of 1.0 billion American dollars has been invested in this endeavor since 2005 (Anderson *et al.*, 2006).

As well as a key strategy to decrease health care spending, call centres where telenurses do their work, have been created with the focus on people's *access* (Chapman *et al*, 2004) to health services. In Canada for instance and some other countries such as the United Kingdom, Sweden, Australia and the United States of America (Goodwin, 2007), issues related to timely access to health care have led governments to implement telephone service and advice services (Hjelm, 2005; Perednia & Allen 1996; Stamm & Perednia, 2000). Registered nurses, using standardized protocols and telecommunication technology, are at the forefront of the telehealth initiative (Goodwin, 2007)[3] where it is expected to better serve geographically remote populations (Purc-Stephenson & Thrasher, 2010). It is also intended to address broader issues of "underserved" populations (Grady, 2011, p. 190). In the United States of America (USA) telehealth is expected to address patients whose socioeconomic status excludes them from conventional health services (Hagan, Morin, & Lépine, 2000).

Various issues, risks, and successes of telenursing have been discussed in the relatively small body of literature focused on this emerging field of nursing practice. Some of these issues are related to health care professional boundaries, employment structure, and work mandate (Boon, 2006; Duchscher & Cowin, 2004; Nancarrow & Borthwick 2005; Sanders & Harrison, 2008; Tourangeau & Cranley, 2006; Wahlberg *et*

[3] Telenursing begins to make sense for governments as the following issues surface: emergency room overcrowding, urban shortages of doctors and walk-in clinics, remote geographical areas without any other health resources.

al., 2003, Wahlberg *et al.*, 2005; Wranik, 2008). However the greatest emphasis of the scholarly/professional interest in telenursing has been focused on ensuring *safe practice* (Lang *et al.*, 2000; Marsden, 2000; Wheeler & Siebelt, 1997). A variety of different standards and accountability practices have been introduced as a result of research that has emerged from the evidence-based movement as it relates to telenursing (Grady *et al.* 2011; Kawaguchi, *et al.*, 2011; Röing *et al.*, 2012). These research interests include: how nurses use the knowledge and experience that they bring to the call centre, telephone competencies, protocol use, decision making systems, preset average call length, and short pause before next call (Goodwin, 2007; Hanlon *et al.*, 2005; Kingma, 2003; Kruijver *et al.*, 2000). The issue of lack of physical contact in telenursing practice in which the nurses' ears become their eyes and the patient is only virtually present is discussed by Pettinari and Jessopp (2001) and Holmström and Höglund (2007). Other issues discussed in the literature related to telenursing include quality of life for the employees, cross-jurisdictional licensure, patient safety, privatization, and the absence of a unique model of telephone nursing services (Goodwin, 2007; Sharpe, 2001; Knowles *et al.* 2002). There has also been research examining how "hardware operation that place considerable burdens (on nurses' time) when using mobile computers in telenursing" (Kawaguchi, *et al.*, 2011, p. 67).

1.2.3 History of telehealth in Canada

Telehealth in Canada was formally introduced in the late 1950s when a radiologist at the Hôtel Dieu Hospital in Montréal, Dr. Albert Justras, "used close-circuit television to transmit medical images" (Picot, 1998, p. 200). Picot (1998) reports the use of satellite

in the 1960s to send electroencephalograms (EEGs) to locations separated by very long distances. The electronic communication in telemedicine that was expanded by experiments, pilot projects, and other applications directed towards reaching even more remote northern regions in Canada, surfaced in the 1970s with the launch of the Hermes-CTS communication satellite (Picot, 1998). This period of telehealth history in Canada, according to the author, was highlighted by the 1978 launch of the Anik-B satellite (a successor of the Hermes-CTS satellite). The launch of the Anik-B made possible the establishment of some pilot projects that linked "St-John's in Newfoundland, London in Ontario, and Montréal in Québec with regions of northern Canada" (p. 200). At this time, the pilot projects did not evolve into ongoing programs of health care delivery. However currently, the Canadian government supports telehealth projects in a number of provinces that have been developed to provide medical care, education, and more recently telenursing and broad access for telephone consultation for rural and remote health care practitioners (Sharpe, 2001).

1.2.4 Blurring of terms

The literature has seen a blurring of terms referring to nurses' work in a call centres or nurses' work using telecommunication technologies. Part of this blurring stems from the general public's lack of knowledge about what nurses do as exemplified by Grady (2011) when she says:

> Ask an average citizen what nurses do and where and how they do it. Shaped by the popular media, the answer is likely to describe nurses dressed in white uniforms scurrying around a central station in a hospital unit or emergency department, performing treatments or administering medications to their patients lying in bed in the surrounding rooms. While this scenario still exists in many

> traditional health-care settings, nurses are also practicing in a variety of less traditional arenas, one of which involves telehealth nursing, or telenursing. (p. 179)

From this quote, terms become confusing between telehealth nursing and telenursing since some studies suggest that in some settings they are used interchangeably.

In the literature, telenursing and telehealth are not used with any consistency. Telenursing, as a part of telehealth, has evolved within a dynamic use of terms and definitions that are used to describe the work of nurses who are geographically distanced from their patients.

1.2.4.1 Telehealth, e-health, telenursing – definition of terms for this study

Sharpe (2001) states that:

> Telehealth is the utilization of telecommunication technology to link two or more end-user sites by any interactive electronic means, such as telephones, computers, e-mails, fax, and interactive video transmissions, for the purpose of transfer and/or exchange of information and data in any health-related application. (p. 3)

Thus telehealth, as a new use of telecommunication technology, encompasses a wide range of applications provided they are used in the health sector. Another term found in the Canadian literature is e-health. According to Alvarez (2002), e-health promises not only to reduce cost and risks in the health care system by bringing healthcare where the consumer resides, but also to deliver, manage, arrange, and account for it using the internet, and information and communication technology (ICT).

In every Canadian province, telehealth has a unique name (i.e., Nurse Line in BC and Health Link in Alberta) showing that this area of practice is being embraced by Federal, Provincial and Territorial governments alike. Despite the lack of uniformity in

naming these services, the pan Canadian use of telehealth resulted in creating a not-for-profit, independent pan-Canadian initiative in 2000 called the "Canadian Infoway (*Infoway*)" (Alvarez, 2002), which is also an application of telehealth. Broadly, applications in telehealth include information that is transferred across distances. That information "ranges from clinical records, to health promotion instructions, to still images of wounds and motion-images demonstrating exercise routines" (Encyclopedia of Nursing Research, 2005, p. 591).

Yet, speaking about telenursing, Sharpe (2001) states that "telenursing derives from two roots: the Greek *tele* meaning far off, and the Latin *nutricius*, meaning 'one who nourishes'" (p. 4) and:

> Telenursing is that subset of telehealth that utilizes telecommunications and nursing informatics to support the practice of nursing and the provision of professional nursing care to patients in remote residential or clinical settings. It is an amalgam of nursing informatics, nursing science, and the art of nursing. (p. 4)

This definition from Sharpe seeks to carefully distinguish tele*nursing* from telehealth, although in much of the literature these two terms continue to be used synonymously. Hartford (2005) proposes a more simplified definition of telenursing as "the application of telecommunications technology in the delivery of nursing service" (p. 460).

1.2.5 Capacities of Telehealth

Important aspects in the development of telehealth include capacity for surveillance of work processes, patient access (Lillibridge & Hanna, 2008, Twomey, 2000), and overall work organization. Surveillance is one of the important capacities of telehealth that has become integral to nurses' work in telehealth settings. In the literature

related to telephone help lines, a major part of telehealth is named "syndromic surveillance" (Greene *et al.*, 2011; Greene, *et al.*, 2012; Lemay *et al.*, 2008) it is a term used when data from sources such as physician prescription codes, postal codes recorded in emergency rooms, lab results, etc. serve to build models of threshold to declare or locate an outbreak. Most of these studies were done outside of Canada using the international Statistical Classification of Diseases and Related Health Problems' 10th revision known as ICD-10 codes. In Ontario (Canada) a study was commissioned in 2006 to look at using telephone helpline as a source of data for syndromic surveillance with the aim of displaying high sensitivity and specificity in detecting true outbreaks within that Province prior to "being detected by conventional surveillance systems" (Rolland *et al.*, 2006, p. 1).

The interactions that nurses have with callers are not merely simple professional conversations between a nurse and a caller. The nurse/patient interactions have developed within a set of protocols that are designed to build in systems of professional scrutiny, standards and accountability. Since it is remote and electronic, telehealth technology has provided the means for this sort of professional surveillance and its advancements have made it possible to monitor and assess patients who distantly use any form of health care (Sharpe, 2001). Although telenursing as an application of telehealth introduces increased scope and responsibility to nurses' work, it is also introducing an overwhelming capacity to ensure that 'this call may be monitored for quality assurance purposes' (Berkelman, 2004; Varca, 2006). This announcement has become a ubiquitous feature of the call centre industry (Dean, 2002) and has infiltrated telenursing work. Kiewe (2008) stated

that “in most contact centres, all agent activity is monitored, logged, and analyzed with the intent of improving agent productivity and enhancing quality of service” (p. 75).

Access is one of the key interests of telehealth that evolved initially from efforts to improve health care access in rural and remote regions where services were not physically available. The focus was on emergency services that make the difference between saving a life and a death. More recently, issues of access have expanded to include urban access to relieve the issues of waiting in overcrowded city centre hospitals. In Canada, the *Canada Health Act* (1984) in its “Accessibility” (Section 12.1) instructions raises issues of “reasonable access” (Section 12.1.a) and encompasses strategies directed towards the delivery of health care services to all Canadians despite their socioeconomic status or their geographic location. Telehealth contributes to this goal by increasing capacity to deliver clinical and in-home health care from various providers. Additionally it is seen as a means to deliver education to health care professionals/health care consumers, channel public health concerns, and to improve participation in scientific research (Sharpe, 2001).

Alvarez (2002) describes e-health (another even more recent application of telehealth) as “a variety of activities including almost any electronic exchange of health-related data, voice or video” (p. 3). Among other advances it is seen as, a strategy to deliver services in many different languages. It is an approach to healthcare services which is thought to support compliance and desired outcomes. E-health, also allows professionals in remote isolated areas to have access to continuing professional education, while those close to major healthcare facilities benefit from reduced travel and waiting time (Alvarez).

Establishing new modes of nurses' work organization is a key capacity of telehealth. Indeed, for the purpose of this research, the work organization of telenursing is an important focus. In the literature, the systems and resources made available to telenurses are discussed within interests in providing a highly standardized quality of care. They are embedded in practices of quality assurance (Goodwin, 2007). Telenurses' work is directed by computer-based protocols, algorithms, and other written texts that nurses are expected to follow very closely. The systems developed to support telenurses' work are a key interest in my study, they are formative in nurses' work processes.

1.2.6 Issues of Telehealth raised in the literature

Knowledge about the issues, risks, and efficiencies of telehealth stems from its mode of delivery (O'Cathain *et al.,* 2004) and the type of population it serves (Miller, 2006). According to Sharpe (2001), in the United States, telehealth serves patients confined to their homes (homecare), senior citizens, people in area where medical facilities are either scarce or insufficient, military personnel, and prisoners in correctional facilities. The individuals that a telenurse might talk to on the phone live in disparate geographical locations, and thus one of the main issues that has arisen during the expansion of telenursing are those related to licensure and regulation. In addition, because these nurses work out of call centres, physician supervision has been discussed as a concern. There is some debate related to the economics of telenursing and in Canada particularly, there has been some concern about whether or not telenursing is emerging within a business model that places emphasis on profitability (Belt *et al,* 2000; Sharpe, 2001).

Pursuing this further, another major discussion in the literature is related to the standardization processes of the computer technology. Although the processes that nurses follow are expected to decrease risks associated with nursing by telephone, there is a worry that nurses will cease to apply their critical thinking skills. In Canada, telehealth has become a component of national health services, and there are demands that the applications that nurses use are made uniform across the country. In a study of standardized decision making, Watcher *et al.* (1999) found that 58% of telephone triage nurses felt restricted by the protocol, 50% believed that the protocols confined them at times to focus on unrelated information, and 42% said they had knowingly diverged from the protocols at least once in the course of their work. Risks and a false sense of security in telephone triage protocols for patients using the service were discussed in the report of this study (Watcher *et al.*, 1999). The authors caution that lack of agreement about 'patient disposition' is a problem concluding that there is a risk for the user and the need for more studies to mitigate that risk. The Canadian Nurses Association (2003) states that a quality environment for nursing telepractice is achieved by providing clinical guidelines, standardized protocols, and policies and procedures that serve as a support and guide to the nurses' practice. These features of the nursing environment are understood to reduce nurses' liability risks.

As with many other areas of health services research, monitoring and measuring outcomes is the focus of some attention in telenursing. Larson-Dahn (2001) suggests there is a need for a "definition, standardization, identification of quality indicators and nursing-sensitive outcomes" (p. 145). Documentation of the nursing service rendered is a key feature as the evidence relied upon to determine outcomes. In telenursing,

documentation is relied upon as the sole proof of an encounter with a patient, and the issues that Larson-Dahn raises have become an important regulatory focus. The College of Nurses of Ontario (CNO) (2009) has responded to the standardization of telenursing by placing emphasis on the importance for each nurse to treat each patient as a unique case situation when using protocols. The college urges telenurses to "use clinical judgment to plan effective care in collaboration with client" (p. 5). However this idea of autonomous practice in telepractice engenders contradictions between the knowledge that nurses bring to their practice through their professional education and experience, and the new approaches to surveillance and controls that have been implemented through the quality assurance program in telenursing (Kiewe, 2008; Varca, 2006).

Issues related to preparing new graduates for the telenursing milieu are discussed in the literature in a critique asserting that educational institutions have not tailored their programs in a manner that facilitates new graduates access to this form of nursing (Goodwin, 2007). A nurse learning to work in the milieu of telenursing relies on the use of communication technology in her interaction with patients. Contrast this to the nurse at the bedside, who is talking to a patient who is bodily present whom she can touch, smell, and see. It is apparent that this new form of nursing practice deviates from conventional bedside nursing care and that it requires nurses to develop specialized skills such as assessing the patient without seeing her/him (Edwards, 1998), identifying health emergencies through tone of voice, and assessing the patient beyond audible verbal responses (Holmström & Dall'Alba, 2002).

Finally, in contemporary health settings, outcomes are invariably linked to economic efficiencies. Telephone nursing efficiencies are reported as part of outcomes to

be measured. Larson-Dahn (2001) suggests that both nurses and the people who use the services be monitored to determine the demographics of users and the type of health concerns that are addressed. He suggests that decisions related to the relevancy of telenursing to the overall health services can be made more effectively. In the model developed to integrate outcomes into telephone nursing practice, Larson-Dahn developed four main outcome categories that include: 1) the nurses' performance; 2) the patients' satisfaction; 3) the type of health concern; and 4) the overall organization. For nurses she suggested that outcomes be determined by measuring documentation, nurse satisfaction, quality of advice, cost effectiveness, and length of call. For the caller, she developed measures to determine levels of patient satisfaction (echoed by Bunn *et al,* 2004), whether or not the caller followed the nurses' advice, the accessibility of the service, self-care confidence, and quality of life. In the category of health concerns, she focused on symptom relief, health knowledge, health status, and level of functioning. The organizational measures included: continuity of care, system transformation, customer satisfaction, resource management, and cost-effective care (Larson-Dahn). In a Canadian discussion about efficiency potentials of telehealth and telenursing, Alvarez (2002) compares the Northern Ontario Remote Telecommunication Health (NORTH), the British Columbia Peace Liard Telemental Health, and the Central British Columbia and Yukon Telemedicine Project, and concluded that all of these programs have generated health system efficiencies.

1.2.6.1 Telenursing and the call centre technology

Telenursing arose in conjunction with the broader development of telephone call centres that use telephone technologies for marketing and service. Call centre technology allows for "outsourcing" of workers (Belt *et al,* 2000) who may work in countries geographically distant from the consumers of the call centre services. Within this marketing/service technology, strategies have been introduced that focus on monitoring for quality assurance (Kiewe, 2008; Varca, 2006). For example, whenever I contact a call centre for computer support, I generally discover that I am talking to someone overseas (most often in the Philippines). While I phone for support during the day, the person I talk to is working from a different time zone and is working during the night. The call centres I contact for computer support look very similar to the telenursing environment where employees sit desk-by-desk in front of computers with a telephone. Telenursing centres have the same physical form as call centres, every nurse works in a station/cubicle with headphones and a computer. In the same manner that an agent sells subscriptions to MacLean's Magazine or a bank employee calls me to discuss Retirement Savings Plans (RSP), nurses interact with telephones, computers, and clients to deliver services to the geographically distant public, in fact many of the systems from telemarketing centres have been adapted for use in telenursing (Kiewe, 2008; Taylor & Bain, 1999). Reporting on business oriented call centres, Kiewe states that "the contact-centre industry is large. Since the first call centre opened at Continental Airlines in 1973, the industry has grown to employ millions of agents" (p. 75).

1.2.6.2 Telephone triage and telenursing

A subspecialty of telenursing known as telephone triage and consultation emerged early in the literature as it identified the need to separate sicker patients from those who can wait (Smith 1999). Additionally, Kelly Smith (1999) states that telephone triage is:

> The process of collecting and interpreting information on the phone in order to determine the urgency of a problem and the need for medical intervention. The nurse determines how soon treatment needs to begin. The process requires knowledge of emergency categories and clear protocols for prioritizing problems. (p. 423-424)

Deciding when treatment should begin depends on many factors in telephone triage. Derkx *et al.* (2009) suggest that adequate communication skills (through good listening skills, active advising and structured responses) for nurses and enough time for telephone consultations in call centres are needed to ensure quality performance in telephone triage work.

From a nursing disciplinary perspective, the history of telephone triage is a subspecialty of telenursing which is discussed within issues related to the crossover of work among nurses and physicians. Historically, whenever there were 'extra' tasks in the daily practice of doctors, nurses were trained and certified to carry them out. These tasks were discussed as delegated competencies (Breslin & Dennison, 2002). Fox (1995) discusses the changing scope of practice asserting that this process of delegation changes "the practice boundaries of nurses" (p. 192). Issues related to health care professional boundaries, employment structure, and work mandate are widely discussed in the literature (Duchscher & Cowin, 2004; Nancarrow & Borthwick 2005; Boon, 2006; Tourangeau & Cranley, 2006; Sanders & Harrison, 2008; Wranik, 2008).

In working to carve out particular contribution that *nursing* makes to telehealth, Sharpe (2001) states that telehealth "is the dissemination of health care services and information across intervening barriers of time and distance to a disparate population most often in greatest need of access to such services" (p. 3). According to Grady (2011) telenursing:

> (…) involves the use of various technologies to transmit data, voice, and video communication signals. It can include the use of telephones, computers, videophones, and other more sophisticated devices that enable nurses to practice nursing in nontraditional ways. One example of a nontraditional approach to the delivery of nursing care is when the patient and the nurse providing care to that patient are not in the same physical location. Another example is when the nurse and patient are together but located at a distance from another provider, such as a physician or other specialist, needed to provide care or consultation to the patient. From these examples, one might glean that telenursing is useful in providing not only direct patient care, but also care management and coordination. (p. 179-180).

Telenursing, as a practice, continues to evolve over time. For the purposes of my research, my interest is in the actual practices of nurses doing work across distances using telecommunication technology that is broadly captured by the variety of the definitions cited above. Furthermore, I refer to this broad field of nursing that relies on telecommunications as the practice of telenursing. More specifically, I am interested in exploring nursing practice that is carried out in call centres, where the telephone is relied upon as the only means of communication with patients who are located at a geographic distance from the nurse and those other computer-based technologies that have been developed to support such work.

1.3 Overview of Chapters

1.3.1 Chapter One: Introduction and Literature Review

This chapter has introduced my interest in and assumptions about telenursing work. It provides background for the topic and the research. It includes a review of the literature in which I discuss blurring of the terms 'telehealth' and 'telenursing' both historically and inside nurses' practice. An overview of the chapters in this thesis concludes chapter one

1.3.2 Chapter Two: Methodology and Design

This chapter presents an overview of institutional ethnography as the approach to inquiry that was selected for this study. It is followed by a description of the specific design of this study.

1.3.3 Chapter Three: Introduction to Call Centre Work

Chapter three introduces a broad description of the telenursing work setting; the setting as examined from the telenurses' stand point. It is followed by an account of how the call centre is owned, funded and operated.

1.3.4 Chapter Four: Troubles in the Work of Telenursing

This chapter starts with a description of telenurses' knowledge about how to do the work of telenursing. This description sets up the analysis sections that follow. It is a summary of some of the troubles identified by nurses in doing telenursing work. I show how and when nurses use: 1) the various knowledge practices that are available to them,

2) the protocols and ‘expected’ ways the work proceeds, 3) the knowledge about the technological system and what it requires of them (what they know and then what they KNOW), 4) the clinical expertise they bring to the job and how it gets covered over. This covering over happens as nurses mediate between providing patient care over the telephone and responding to the electronic formulations required in doing their work. I will present examples of instances when this knowledge is used and not recognized—covered over—and where it is not allowed.

1.3.5 Chapter Five: Call volume

In this chapter, I move the focus of my ethnographic attention to the work of nurse managers. In particular, I focus on the issue of ‘call volume’, describing how it arises in the work of telenurses and how the issue of volume is socially organized. I note that call volume is a major concern of the call centre manager, although here, volume is known in a distinctly different way than how the telenurses know about it. I analyze call volume as one of the elements of interest to the overall management of the call centre that becomes a focal point in the work of the Executive Director who uses call volume to report to funders. I show how issues of call volume are organized and how they show up to be managed in nurses’ work within the problem categories of ‘types of callers’ as they relate to volume (‘frequent callers’ and ‘hang ups’). I discovered these categories activating the work of nurse managers who also see them as a problem to be managed. Value for service and safety are discussed in this chapter from the point of view of both the nurses and the Executive Director. I elaborate on nurses’ capacity to use their judgement at an important juncture of their work just before they activate protocols and

how this work was affected during the H1N1 crisis. In this chapter I use the text-work-text process the Executive Director produces as he mines the triage details report (TDR) (Appendix G) that are generated by the telenurses to establish the 'facts' of telenursing that are reported to funders. The argument of this chapter is that although the issues that the Executive Director/Manager tries to solve have the appearance of being directed towards supporting the front-line nurses; the work being undertaken takes a paradoxical twist that does not accomplish a useful resolution for nurses.

1.3.6 Chapter Six: Overruling Kind and Compassionate Responses

In this chapter, I discuss patients who call with physical symptoms who are triaged and dispatched. These callers are constructed as 'worthy of nurses' attention and care patients'. I also discuss callers with mental health issues referred to as 'social callers' including 'frequent callers, schizophrenics, etc.' who are constructed by nurses as 'not worthy of nurses' attention and care patients'. I conclude with the Executive Director's version of 'social callers' and his account of the lack of funding/a program to accommodate them. Nurses' views of these patients are not uncontaminated and become the stigmatizing dominant view in the call centre that, my data shows, affects their compassionate responses.

1.3.7 Chapter Seven: Discussion and conclusion

Finally, I return to a discussion about the overall mandated goal of the telenursing service in call centres as a government strategy to reduce health care costs; the backdrop wherein telenursing work happens. I summarize how this harnesses telenurses' work

processes to a symptom base model that becomes a ruling apparatus that coordinates particular nursing challenges. I synthesize and highlight the findings that describe how nurses' knowledge is viewed as an 'unauthorized' and inferior form of knowledge. In the authorized view, the outcomes of telenurses' work is understood to be a product of the protocols; not a product of nurses' knowledge and experience. The protocols and other electronic managerial systems that organize call centre work are rigidly formulated and interfere with nurses' capacity to make the most efficient and valuable contribution to the provision of health care remotely. In the short intervals when nurses are able to (and do) interject their own good knowledge, their contribution is rendered invisible by the protocols and electronics of the business-like formulations that are carried out within tightly monitored accountability circuits. I show how nurses are organized to respond callously and unkindly to certain patients who are considered a nuisance; not deserving of nursing care. I close the chapter with a brief account of the limitations and implications of this study, and my recommendations for future studies in telenursing work.

Chapter Two: **METHODOLOGY**

This chapter presents an overview of institutional ethnography as the approach to inquiry that was selected for this study. It is followed by a description of the specific design of this study.

2.1 A Particular Way of Looking: Through the Lens of Institutional Ethnography

Institutional ethnography (IE), developed by Canadian sociologist Dorothy Smith (1990, 2005, 2006), is a sociological approach to inquiry that gives the researcher tools to explore, make visible and understand how people's every day/every night activities are organized and coordinated. An analysis in IE is focused on discovering how things happen the way they do. It is conducted by observing and asking questions about how a particular place of work (work defined as 'purposeful activity') is put together through everyday actions and activities of the people there. In IE, these people are known as the 'standpoint informants' (Bisaillon & Rankin, 2012). When it comes to examining health care being delivered through actions and activities of nurses (such as the standpoint informants in this study who are telenurses) or other health professionals, IE has been established as a useful and practical approach. There are a growing number of IE studies conducted from the standpoint of nurses (Benjamin, 2011; Clune, 2011; Hamilton & Campbell 2011; Hamilton *et al.*, 2010; McGibbon, 2004; McGibbon & Peter, 2008; McGibbon *et al.*, 2010; and Melon, 2012). IE research that explicitly takes the standpoint of patients includes work by Lane (2007, 2011), MacKinnon (2006), and Angus (2001).

IE is an empirical, materialist approach to conducting research that is directed by three essential ontological underpinnings: 1) actual people put together a social world with their bodily activity (such as nurses), 2) people's activities (such as telenursing work) are empirically describable, and 3) local peoples' activities are coordinated by texts with other people's activities (D. Smith, Personal communication, June 15, 2012). Smith discusses people's work in the 'local' and the 'translocal'. The 'local' is the place where the standpoint informants are working. The translocal are the places where other people are doing things; things that are coordinated with the local happenings. It is an actual world, such as that of telenursing work that is assumed to exist in a material form that can be described. It is organized for nurses to act in it, and can be observed and analyzed. Smith (2005) uses the term "problematic" (p. 24), as "a project of research and discovery" (p. 24). A problematic is formulated within a concern from the local setting where people work and, through inquiry, is used to discover and demonstrate how this setting is organized and coordinated. Hamilton and Campbell (2011) stated that "because institutional ethnography does not test theory but explores how people's experiences are constructed (or as institutional ethnographers say, socially organized), analysis produces an account of how things actually work" (p. 283).

The analysis I present in this thesis chronicles my institutional ethnographic inquiry with telenurses. I observed and talked to them at work and then expanded what could be learned there to discover how their experience of their work was being shaped to uncover how their knowledge and their work are organized.

2.1.1 Characteristics of Institutional Ethnography

An IE project is generally organized around key terms (elaborated below): standpoint, social organization, social relations, materiality, texts, and ruling relations (Campbell & Gregor, 2002).

At the outset of an IE, the researcher is interested in discovering a 'researchable problematic'. According to Smith (2005), a problematic rests within a particular "form of social organization of knowledge in which the presence of the subject is suspended or displaced and 'knowledge' . . . is constituted as standing over against individual subjects" (p.43) these sorts of knowledge practices overrule individual subjectivities "overriding the idiosyncrasies of experience, interest and perspective" (p. 43).

In summary, authorized (translocal) knowledge appears as somehow objective and neutral. Subjective (local) knowledge is sometimes contradictory or at odds with objective types of knowledge. This can result in forms of contested knowledge. Paradoxically, since daily activities are organized within numerous taken-for-granted practices that are considered the norm, these contradictions are often muted and not readily apparent, even to those people for whom the problematic arises (the people of the standpoint).

According to Smith (2006) the distinctive properties that separate IE from other qualitative approaches rest in the idea that IE:

> is committed to discovering *beyond any one individual's experience* including the researcher's own and putting into words supplemented in some instances by diagrams or maps what she or he discovers about how people's activities are coordinated; (. . .) [IE] is distinctive among sociologies in its commitment to *discovering* 'how things are actually put together', 'how it works'; (. . .) [IE] isn't about studying institutions as such. Rather it proposes a sociology that does not begin in theory but people's experience. In avoiding theories that command

> interpretive allegiance it avoids commitment to the institutions of sociology that deploy the political effect of theory to master other voices. (p. 1, 2)

Unlike a meta-ethnography that helps re-interpret meaning across many qualitative studies (Atkins *et al.,* 2008), or conventional ethnography (Atkinson & Hammersley, 1994), IE is not interested in the concept of 'culture'. It does not categorize, theme, or theorize. It does not seek to establish causation (D. Smith, Personal Communication, June 15, 2012). Its focus, according to Rankin and Campbell (2006), is on "what actual people actually do" (p. 187), and how their "local activity is hooked into larger processes" (p. 187). The authors wrote:

> Institutional ethnographers attempt to find out *how things work*. They do not speculate on the causes of things and design research projects to test hypothesis. Rather, they focus analytic attention, empirically, on the material world – of people doing things, making things happen, of actual lives lived in actual settings. (Rankin and Campbell, 2006, p. 187)

In brief, institutional ethnographers ask one big question, that is, how is each day or each night in a particular setting structured to happen as it does (Rankin & Campbell, 2006)?

2.1.1.1 Social Relations

Rankin and Campbell (2006) state that "institutional ethnographers believe that the world is socially organized, that people bring the social into being. It is in people's work that we can see the 'social relations' that institutional ethnographers talk about" (p. 187). In other words, social relations are present in any location in which people's everyday work takes place. Campbell and Gregor (2002), state that social relations are "actual practices and activities through which people's lives are socially organized [they are] extended courses that take place across social settings" (p. 30-31), in which people

either knowingly or unknowingly participate. To illustrate this materiality, Campbell and Gregor state that "social relations may be a conceptualization, but the inquiry it supports is of material things. Something is actually connecting what happens here to what happens there" (Campbell & Gregor, 2002, p. 31).

2.1.1.2 People's Experience

The problematic of study, which according to Smith (2005) is formulated by the researcher as it arises in the data that the researcher gathers, is both from people's experiences and what can be learned about how those people take up practices (experiences) that may be organized against their interests. Smith (2005) states that "the institutional ethnographer works from the social in people's experience to discover its presence and organization in their lives and to explicate or map that organization beyond the local of the everyday" (p. 10-11). According to Smith, daily experiences of people are "embedded" (p. 38) in institutional complexity. The inquiry that an IE researcher conducts moves step by step into the relations that go beyond the local into the broad institution processes. In a practical way, "exploration may begin in talk with those concerned, learning from them sometimes more than they realize they knew about how they participate in an institutional process" (Smith, 2005, p. 40). In other words, to develop an IE analysis, the researcher must move beyond the accounts provided by the informants about their experience in a particular setting and follow the clues from there that will provide a glimpse into things happening outside that local setting. Such clues allow the researcher to find empirical confirmation of how this local setting is organized

by ruling practices apparatus and discourse decided elsewhere (Rankin & Campbell, 2006).

2.1.1.3 Standpoint as Defined in This Study

Campbell and Gregor (2002) suggest that "institutional ethnography takes the standpoint of those who are being ruled" (p. 16). *This* study investigates the everyday experiences of nurses in telenursing work; it is their standpoint the study takes up. DeVault and McCoy (2006) state that "institutional ethnography takes for its entry point the experiences of specific individuals whose everyday activities are in some way hooked into, shaped by, and constituent of the institutional relations under exploration" (p. 18). In IE research, this specific 'location' in everyday experiences is known as the research standpoint. In this research, the standpoint is that of telenurses.

Hence, IE has a politic. It takes a standpoint. It is looking for what Smith refers to as ruling relations, to develop an analysis.

2.1.1.4 Ruling Relations

Developing an analysis of ruling relations is at the heart of most institutional ethnographic inquiries. Rankin and Campbell (2006) state that:

> The major theoretical assumptions of institutional ethnography, [is that], social life, in this postindustrial, capitalist, and globally organized society is organized by ruling relations; when people are constituting their everyday lives, they do so knowledgeably in concert with and in ways dictated by ruling relations. (p. 187)

Specifically, despite their awareness of ruling relations in daily activities happening in a particular area of practice, people will still engage in such activities. In IE, ruling relations are understood as being predominantly textually mediated (Smith, 2005).

2.1.1.5 Texts in IE

In contemporary organizations, texts (reproducible forms of communication), are important features of the material practices that coordinate and articulate several activities of people who may be geographically or temporally distant and who do not know each other. Texts are activated by people; and texts move across time and space, thereby organizing the way people's conduct and actions shape their lives (Campbell & Gregor, 2002).

Texts are not inert, the moment people activate texts, they are participating in "the human involvement in the capacity of texts to coordinate actions and get things done in specific ways" (Campbell & Gregor, 2002, p. 33). In this manner, texts have the capacity to organize people to enact ruling relations since they coordinate activities in various locations without a physical presence of the author of the text (Campbell & Gregor, 2002). The arbitrating and homogenizing power of texts stems from their predetermined and reproducible form which allows them to be transmitted using various means and used not only locally, but also in remote settings by many people at any given time. Smith (2006) summarizes the nature, the flexibility, and the inherent power of texts by stating that:

> When institutional ethnographers talk about texts, they usually mean some kind of documents or representation that has a relatively fixed and replicable character, for it is that aspect of texts—that they can be stored, transferred, copied, produced

> in bulk, and distributed widely, allowing them to be activated by users at different times and different places—that allows them to play a standardizing and mediating role. (p. 34)

In the telenursing milieu, texts include electronic protocols, policy and procedures, call monitoring forms, intranet based referral information in the form of electronic protocols, health information resources (HIR), pathways, and algorithms. As part of my interest, I explored not only the existence of these texts, but also how they organized nurses' daily work processes. This exploration supported me to map the practices of nurses.

In conclusion, institutional ethnography as an inquiry approach allows me to examine the tensions that arise in telenurses' work. Texts provide a critical source of data. Texts are instrumental to discovery and to how the work is tracked and mapped. Every text has an author behind it, and telenurses, in their daily practice, activate them constantly.

2.2 Design of this Study

2.2.1 How to Read this Institutional Ethnography

What I describe in this thesis is an account of how nurses' work happens the way it does. I start out at what IE calls a 'standpoint' which is the everyday experience of registered nurses in the call centre (figure 4). From there I explore the discursive practices and institutional relations that organize nurses' work the way it happens trying to answer this simple question: 'how do telenurses get things done the way they do?"

2.2.1.1 Nursing Work

During a workshop I attended in June 2011, Dorothy Smith stated that:

> in institutional ethnography *work* refers to what people do that requires some effort, that they mean to do, that takes time, and is done in a particular place at a particular time and under definite conditions. (D. Smith, Personal Communication, June 15, 2012)

In this thesis work, IE's generous concept of work is used to describe what registered nurses are doing within each call (standardized to last 12 minutes each), as well as the broader work required in the call centre on a given day or shift (days, evenings, nights) in order to process telephone calls from patients within the guidelines of telephone triage (Canadian Nurses Association[CNA], 2003). The work includes nurses' engagement with electronic charting, protocols, the *All-Digital Recording Telephone System (ADRTS)*, computer use, and the floor supervisor.

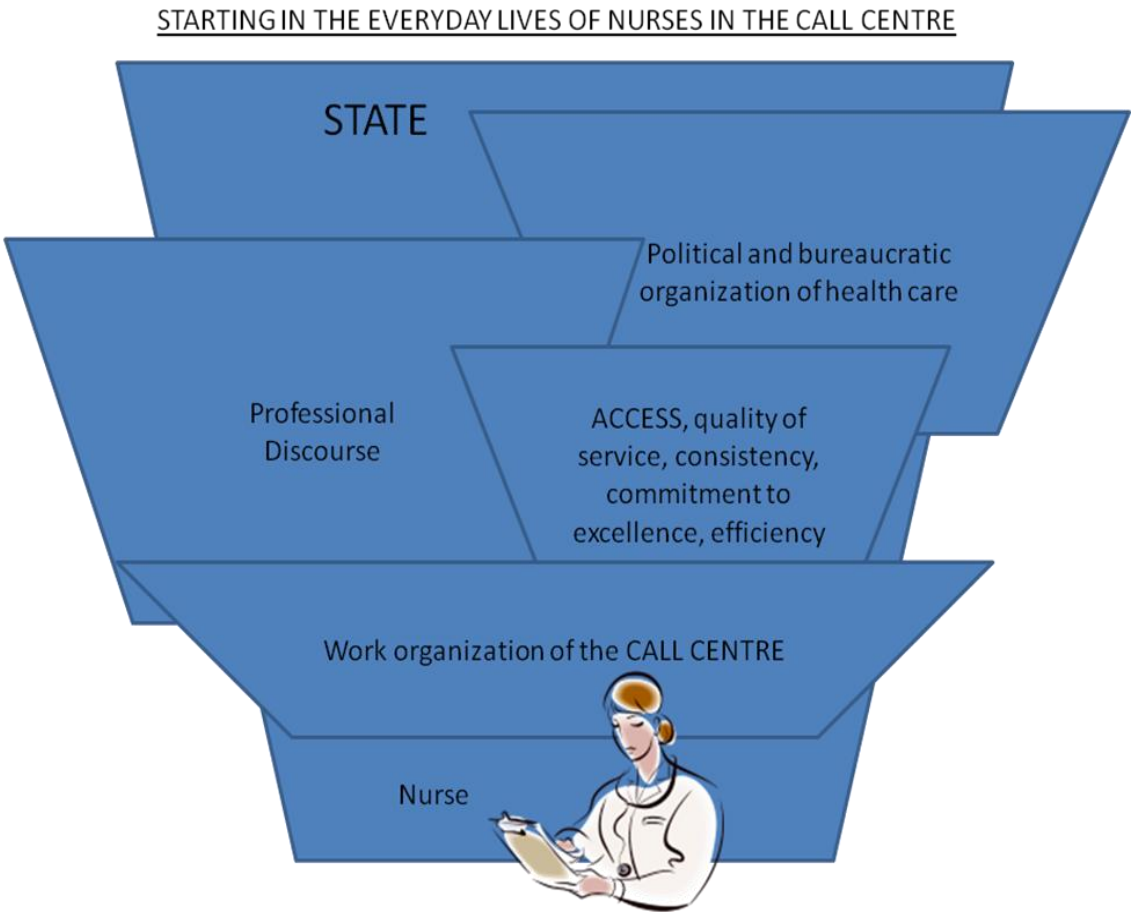


Figure 4: Starting in the everyday lives of nurses in the call centre. (Adapted from Dorothy Smith, 2006, p. 3 and Janet Rankin, personal communication, December 23, 2012).

2.2.1.2 Text Mediated Relations

What I describe is how select ruling relations in nurses' text-mediated work, coordinate what happens in telenurses' daily lives in the call centre and how their knowledge and experience fits (or does *not* fit) into how they can use their expertise in their work of call processing.

2.2.1.3 Textual Analysis

What you will read will be descriptive accounts of nurses' work processes that happened in their daily activities in the call centre during my field work. I also include excerpts from 7 interviews with participants in the study (nurses and managers). These seven individuals do not constitute a 'sample' in representing a population of people working in call centres; instead, I sought a *range* of experiences (D. Smith, personal communication, June 15, 2012) of these people in the institution of interest: the call centre.

2.2.1.4 Purpose of the Study

The aim of the study was to uncover how a telenursing practice happens the way it does by producing a detailed description and accompanying analysis of the everyday work of telenursing. My goal was to critically examine some of the taken-for-granted practices that have been adopted in the telenursing workplace. One of the objectives of the study was to make what is discovered about telehealth useful to both managers and to nurses in direct telenursing practice. The study provides new insights into what is happening in the work practices and how nurses are organized to produce a particular form of knowledge and the advice. The IE approach adopted for this study required that the work be conducted *for* telenurses, not about them. Nurses' work was not objectified. The goal was not to theorize telenursing work. Rather, in this study the focus was on empirically describing telenurses' work, and linking that work into the institutional relations of telenursing.

2.2.1.5 Brief Outline of study Design

To conduct this study I was approved by the Conjoint Health Ethics Review Board at the University of Calgary (formal approval obtained in May 2009). A second ethics approval was received in July, 2010, from ethics board of a telenursing centre in an urban Canadian city where data was collected, since this site was located in a different jurisdiction than the University of Calgary. I secured access to this site and spent 15 days in the field observing and talking to nurses, clerks, and managers. During the fieldwork I took notes and collected texts (for instance Manual call processing form, Triage Details Report and Quality Management Performance Review Form). I conducted 8 audio recorded interviews. The data collection period lasted from August 2010 to April 2012.

2.2.1.6 Recruitment

I recruited the standpoint informants (telenurses) through a poster in their lunch room at the site (Appendix A). Nurses talked to each other and the word of my research reached all the nurses who, in turn volunteered for the research and contacted me. All participants signed a consent to participate. Extra-local informants were selected based on the standpoint informant data. The Executive Director of the call centre indicated at the outset of the study that he was eager to speak to me and was highly supportive of my access to the field. All recruited nurses seemed keen to answer my questions. No stressful or uncomfortable experiences were noted during any of the interviews.

2.2.1.7 Data Collection

Data was collected over a period of about 20 months due to already scheduled vacation of some informants. I obtained access by contacting the Executive Director of the site. A meeting followed in which, the ethics approval letters, the aim of the research, the method I used, recruitment ad/study information sheet, and consent forms for informants (standpoint informants and general informants) were presented.

I have made every effort to preserve the anonymity of the people I interviewed and places I visited. I use pseudonyms such as Executive Director, numbers for nurses (for instance Nurse3), management, Urban Health Region, Provincial government, to preserve the anonymity of those who participated in this research or the area in which it was conducted. These pseudonyms and numbers will be used in all papers, quotes, and electronic documents. Any document that I have illustrated is in the public domain, and all identifying elements have either been removed or given a fictitious name. Many terms used in this thesis such as 'TELENURSING, PROTOCOLS, TRIAGE, REPORT, ASSESSMENT, DISPOSITION' are found in literature and also commonly used in other nursing practice areas across Canada; therefore, they cannot be specifically associated with a particular call centre or hospital site. The *All-Digital Recording Telephone System (ADRTS)* (or 'the telephone system') I talk about in this thesis is a standard all-digital voicemail system on telephones in Canada owned by individuals or companies. The setting for this ethnographic endeavor was *Talk to a Nurse*, a call centre located in an urban Canadian city. *Talk to a Nurse* is currently being restructured to expand its services within a restructuring plan to accommodate more provincial programs.

The inclusion criteria for a standpoint informant were: any registered nurse in the Province, who was working in the call centre, was proficient in English, was willing to participate, and signed the interview consent form. The inclusion criteria for the extra-local informants were: anybody inside or outside the call centre who had been identified in the process of data collection, was willing to be a participant, and signed the interview consent form.

A total of 5 standpoint informants were interested in the study, contacted me by e-mail and were recruited according to the inclusion criteria. A location, date, and time of initial meeting was set. Consent forms (Appendix B & C) were signed by these volunteers prior to buddying and/or interviewing. At every initial meeting with the potential standpoint informant I did the following:

a. Introduced myself as a Master's student who was conducting a study to explore the daily experiences of teletriage (telenurses) nurses.

b. Answered the informant's questions regarding the study, her or his role, her or his rights in relation to it, whom she or he can contact at the University of Calgary regarding it, and her or his rights as possible participants.

c. Provided the people who agreed to participate and met the inclusion criteria with documents describing the research and an interview consent form (Appendix B) that was signed before I was 'buddied' with them or interviewed them. (The informants then provided me with a schedule of their availability).

The 'buddied' fieldwork with five nurses comprised of five eight hour shifts -- a mix of days, evenings and nights. These observations culminated in a 45 to 60 minutes interview—focused on telenurses' experience of the day-to-day work in the call centre

that I had been observing. The interview also included cues from a basic list of open indeed questions (Appendix D).

I only conducted 45 to 60 minutes interviews with general informants who were managers and other participants identified in prior interviews with standpoint informants. Texts that document the practices of standpoint informants were compiled. Questions for interviews came not only from a basic list of open ended questions (Appendix E), but also from following leads from earlier interviews, field notes and observation in the call centre.

During 'buddying', I sat beside standpoint informants and took field notes. Their level of comfort regarding writing these notes in their presence was gauged, and an adjustment was made when necessary. The types of my field notes were: 1) informal verbal interactions with them during observation only when they were not on the telephone talking to patients ensuring that no confidential information was recorded: I selectively audio recorded these interactions with nurses; 2) observation notes: description of the environment; 3) personal notes: thoughts, reflections, and questions. Information the nurses gave me about their telenursing work was anonymously noted in my field notes. These field notes were time stamped and dated. During analysis, the time and date served the purpose of easy location of these notes some of them related to audio files of recorded verbal interactions with nurses during 'buddying'. I did not have a telephone headset and did not listen to the full conversation between the nurse and the caller. I only heard the nurses' side of the call. The patients, who were informed about my presence, were asked by the telenurse to provide verbal consent for the presence of the researcher. The caller's personal information was not audio recorded or included in

my field notes. No active patient charts were reviewed, although I observed how the records were made during each call.

Throughout buddying, nurses were informed that the researcher can verbally be asked to leave for the duration of a call per patient's request[4]. This way the patient on the telephone line would hear that her/his request had been respected. This situation did not happen for the entire duration of my 'buddying' with all standpoint informants.

Several of the nurses I spoke to, was buddied with, and interviewed were former colleagues, they were all aware (including the Executive Director) that I once worked in the call centre for almost 4 years. During interviews, they sometimes referred me to terms used in the call centre and often said: "you know what I mean; you have been working here so you know…" I always asked them to tell me more about whatever they were trying to convey to me.

As a researcher in this setting, with informed consent, any informal conversations with other people in the call centre was used as data. I had around 20 of these talks and I wrote field notes. Staff in the call centre including nurses who did not participate in any formal or informal interactions with me were aware that I could hear what they were saying on the telephone with patients given the nature of telenursing work. This detail was covered in my ethics application and everyone, including clerical workers, were informed of my presence in the call centre at the beginning of data collection. Standpoint informants were informed that I cannot guarantee that their anonymity will be protected

[4] If there was information that the nurses wanted to verbally say to the patient on the telephone line that the patient wished the researcher not to hear, they (nurses) were informed to verbally ask the researcher to leave for the duration of the call being processed.

because the call centre was an open area and this was an open study where standpoint informants could be seen by other co-workers.

Audio data was transcribed[5]. Field notes were handwritten and were entered into the researcher's computer as soon as possible following each buddying session in the call centre. In IE, data analysis starts with data collection as the researcher molds interview questions, while talking to each informant, to uncover more in the setting being researched (Campbell and Gregor, 2002).

2.2.1.8 Data Analysis Process

In every interview, I followed leads from a previous interview to analytically connect ideas, processes, troubles and how they were understood by nurses. While transcribing interviews, I started noting texts from this data that described work processes, work practices, and language used. The act of recording, then transcribing, according to G. Smith, Mykhalovski and Wheatherbee (2006) constitutes a dual process (that I engaged in during my data collection) that gives rigour in building up a detailed and systematic interpretation of data. The nurses told me about the realities, troubles as they knew them. They recounted their fears of litigation, time, callers' queues, and quotas. I meticulously reviewed the data and began the process of analysis by writing 'analytic chunks' that I shared with my supervisor. I also began making preliminary maps (diagrams) in which I sketched out what I knew about the work processes. This analytical process allowed me to see, for the first time, that nurses' work was textually mediated in

[5] In IE audio data can be selectively transcribed. Some of the audio data is not useful for analysis.

ways that I had previously taken-for-granted and that nurses were knowingly or unknowingly participating in complex processes required to do their work.

In IE data analysis, the researcher not only looks at the local setting, but also the general organization of the setting that informants may or may not know about. According to Campbell and Gregor (2002), "the guiding query to use as you read your collection of data analytically is 'what does it tell me about how this setting or event happens as it does?' " (p. 85). Such a query, the authors advise, will lead to the "discovery of the workings of social relations in everyday life [of informants]" (Campbell & Gregor, 2002, p. 83) which is the ultimate goal of this IE research.

Through 'buddying', field notes and interview transcripts, my analysis started with making connections to discover and understand how the conduct of nurses' work was coordinated in relation to ruling ideas and practices, and started to make those "connections and their implications explicit for others to understand" (Campbell & Gregor, 2002, p. 83). Campbell and Gregor (2002) recommend that "you must maintain your interest in what is actually happening in the setting you have been examining" (p. 84).

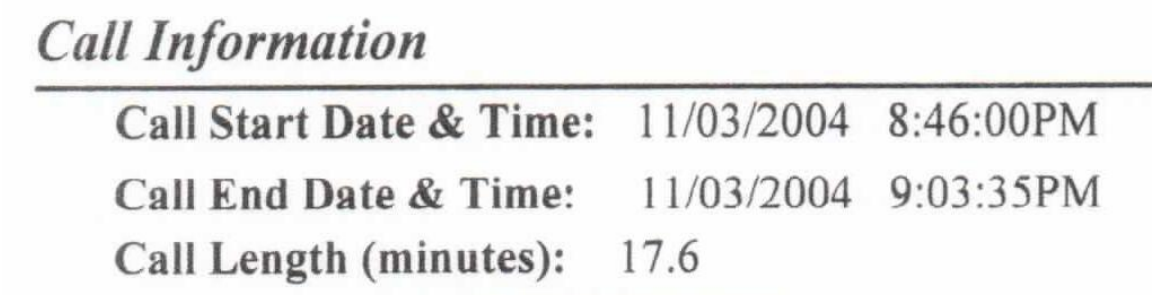
Chapter Three: **INTRODUCTION TO CALL CENTRE WORK**

This chapter introduces a broad description of the telenursing work setting; the setting as examined from the telenurses' standpoint. It is followed by an account of how the call centre is owned, funded and operated.

3.1 Nurses' Training Prior to Taking Live Calls: The All-Digital Recording Telephone System (ADRTS)

Nurses' work in the call centre happens within electronic formulations including computerized programs and an interactive telephone system. During training, nurses are introduced to these foundational features of the telenursing work setting. Any person who works in the call centre – including Team Leaders, the Executive Director, etc. – has to log on to a phone system called the '*All-Digital Recording Telephone System*' (ADRTS) before receiving calls from patients. In the orientation manual used for training, callers are consistently referred to as 'clients'. In order to accept incoming calls, nurses have to *LOG IN* with the following key sequences: *Enter LOGIN ID code followed by # sign* (the nurse's name appears on the telephone display). Nurses are automatically placed in the *NOT READY* state. When in the NOT READY state nurses have to give a reason why they are in this state by pressing the ACTIVITY key followed by an *ad hoc* code and then pressing the ACTIVITY key once again to confirm the code. These codes are: 1 – wrap up time, 2 – access resources, 3 – consultation with colleague, 4 – administration duties, 5 – fire drill. By pressing the *IN-CALLS* key once or the *NOT READY* key once, the *NOT READY* light goes off and the nurse is available to take incoming calls. When the telephone rings, the nurse presses the *IN-CALLS* key to answer the call and this key

remains lit as long as the caller is on line and goes off when the caller hangs up. All the *ACTIVITY* codes are established and built into the telephone system for the nurses to provide the sequenced care patients receive when they access the phone for help. For the nurses I observed, these codes were seen to be important and were necessary for them to conduct the work as they have been trained to do. They were unconcerned that the codes they enter not only organize the steps in their work but also establish computerised time stamps/landmarks (Figure 2) of every move that nurses make. I elaborate on this observation when I examine the Triage Details Report (TDR) (Appendix G) more closely in Chapter 5.


Call Information

Call Start Date & Time: 11/03/2004 8:46:00PM
Call End Date & Time: 11/03/2004 9:03:35PM
Call Length (minutes): 17.6

Figure 2: Computerized time stamps from the Triage Details Report (Appendix G)

The time the nurse completes each sequence is clearly marked in the TDR (Figure 2). For instance after nurses finished talking to the caller before making a few notes (typed using their keyboard in specific areas inside the computer program) I saw them pressing the *ACTIVITY* button on the telephone key pad and entering code 1 (Wrap up time). Then after they had completely closed the call, they pressed the *IN-CALLS* key. These two buttons established *talk time*, the amount of time the nurse spent talking to the

caller, and wrap up time, the amount of time the nurse spent finalizing the documentation on the previous call and signalling to the system that she or he was ready for the few seconds break before another call comes onto the line. In subsequent interviews with nurses I observed, they reported that time spent in these sequences is monitored and points are awarded for adhering to the standard time allocations during call evaluation. Figure 2 shows a call that lasted 17 minutes which is longer than the allowed 12 minute per call, this nurse would lose a point on her score when this call is evaluated.

3.1.1 Text-Work-Text Sequence During Training: From Nurse to Telenurse

The training process (Figure 3), is when nurses are introduced to various texts including the All-Digital Recording Telephone System (ADRTS), computerized software protocols, printed protocols (Appendix I), manuals and resources. The text-work-text sequence illustrated below (adapted from S. Turner, personal communication, June 15, 2012), represents the work process of learning the telenursing systems. In the schema, circles represented *doings* or 'people in action doing things' alone or with others that Turner describes are "activities maybe reading, talking, writing, and working at a computer as well as being engaged in activities involving physical effort" (D. Smith, Personal communication, June 15, 2012). The circle represents text reading work inside training work. The rectangles represent various texts nurses read, use, and activate (such as training software as texts) inside the training process. This schema is important as it sets the base for the next nurses' text-work-text sequence as they (nurses) take live calls, after their training sequence, to produce the TDR. I include this schema here to help you read the analysis chapters when the Executive Director enters the text-work-text sequence

himself starting with a text, the Triage Reports Details (TDR), produced by nurses following the training sequence illustrated below.

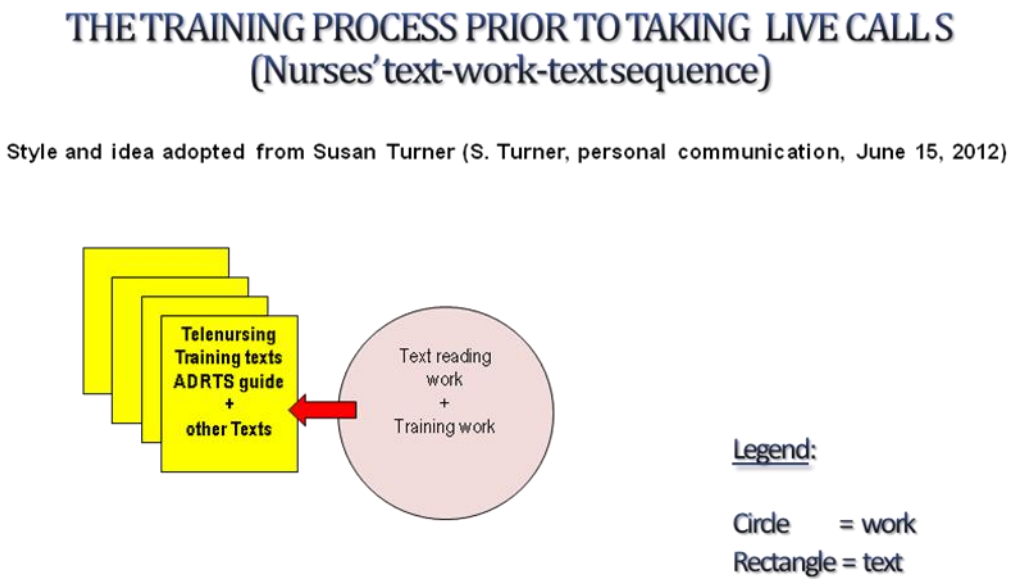


Figure 3: the Text-work-text sequence during nurse training (Adaptation from Susan Turner, personal communication, June 15, 2012).

3.2 Nurses' Work Setting

In this section, I describe the call centre which is the nurses' work setting (Figure 1), and explain how it is owned, operated and funded. I use an example of an actual call to define terms that appear in the analysis chapters (4, 5, & 6).

3.2.1 The call centre

In the Canadian province where this study was conducted, when people need answers about a health concern or need some general health information, they are advised to call the 'Call Centre' which, according to its fact sheet, is "an internationally-recognized contact centre that technologically supports health and social services delivery in the [Province] in cooperation with Province's Health and the Local Urban Health Region" (Call Centre Fact Sheet, 2012, p. 1).

3.2.2 Ownership

The Call Centre in this study is owned by the Provincial Government and operates clinical and nonclinical programs. The clinical programs include *Talk to a Nurse, Provincial TeleCARE; the Breastfeeding Hotline* and *Dial-a-Dietician*. Nonclinical programs at the call centre include: *Home Care, Family Services and Housing*, and *Employment and Income Assistance*. The call centre also operates the *Annual Influenza* and *West Nile virus* programs which are categorized as public health services.

My interest focuses on the *Talk to a Nurse* clinical program where nurses are hired, according to the Call Centre's fact sheet to:

> Obtain information about *symptom* and *follow clinical protocols* on their computer screens to offer advice on whether to treat the symptoms at home, see a family doctor or visit an emergency room. Calls range from concerns about abdominal pain to H1N1 virus symptoms. More than *186,000 calls* are made annually to the '*Talk to a Nurse'* line. (The Call Centre Fact Sheet, 2012, emphasis added)

In this fact sheet publically available on the internet, it states that nurses have to 'follow clinical protocols on their computer screen to offer advice'. In my analysis on nurses'

work in the call centre, I explore the implications of such a statement in nurses' work as it unfolds during the call processing and explicate the limitations that the protocols introduce into nurses' own knowledge and experience.

3.2.3 Funding

All the funding for the call centre comes from public taxes, but some is administered directly from the provincial government (Ministry of Health) and some is administered through secondary public institutions. These institutions include health regions (both urban and rural), 'minority languages services' that supports services for French speakers, telehealth, primary care and public health. Predominantly each funding envelope is known in the call centre as a 'contract'.

According to the Executive Director, a *Contract* starts out as a *Pilot Project* that is trialed at the call centre, projects that the nurses participate in. Once a *Pilot Project* is deemed to be successful it is supported by permanent funding and becomes a Contract. Most of the contracts are funded by the Provincial government's Ministry of Health through regular health care funding (Executive Director, Formal interview). During data collection in the call centre, I noticed that each contract is built into the computers the nurses use and the contracts are implicated in how nurses process calls. When a call comes in, it is the nurse that assigns it to a particular contract according to what the caller says or what the call came under (breastfeeding calls come in the call centre already self-identified by the caller who dials a particular number). Examples of these *Contracts* include: *The Breastfeeding Hotline, Chronic Disease Management (CDM), Heart failure*

Program, Talk to a Nurse, Immunization Service, Influenza Campaign, Left Not Seen Service, Post Exposure Protocol, and the *West Nile Virus Campaign.*

According to the Executive Director, overall funding formulas also use data related to a total number of calls (currently the centre is funded for 150,000 calls per year). The funded quota of calls is expected to come to a specific *Contract* in the clinical programs such as *Talk to a Nurse,* or the *Breastfeeding Hotline*. This strategy means that nurses working in the call centre handle a variety of calls coming to these different permanent projects. This funding strategy coordinates the knowledge nurses in the call centre need to access in order to handle the wide variety of caller's concerns in a safe, routinized, and trouble free manner.

The Executive Director explained that a contract is an agreement of providing a service in the call centre that is financed by a government body or its subsidiaries (health regions, 'minority languages services', telehealth, primary care and public health). He added that an example of a contract was the *Talk to a Nurse* contract that Nurse3 was using at the time of my interaction with the Executive Director. Some contracts like the breastfeeding hotline had *sub-contracts* that were assigned to different areas in the same Province. An example of a sub-contract was the *breastfeeding hotline of the North-East* region as opposed to the *breastfeeding hotline of the South-East* region all acquiring funding from public taxes (from the Ministry of Health or the Ministry of Wellness and Seniors) but specific to these programs that in turn set up a onetime *contract* (or permanent) service directly with the call centre.

When a patient calls the line, a pre-recorded message prompts them to select what service they wish to access. The telephone display in the call centre allows nurses to

glance over to see who (provided the caller has caller ID and did not intentionally block this feature) was calling, and what service they were seeking (self-selected in the ADRTS's welcome message) according to what was displayed. However I noticed that this was not a definite and reliable way of knowing the origin of the call or the person who was calling. Even if the caller self selected a service she or he needed to access, talking to the nurse very often changed this selection. The person might have been using a neighbor's phone thus the name displayed, if not blocked by the caller, might have not been the caller's name.

3.2.4 Operation of the Call Centre, Terms Used and Resources

The vignette from my data presented below introduces how the call centre operates and facilitates the definition of terms nurses encountered as they navigate the electronic formulations and other texts in their work.

3.2.4.1 Vignette

Nurse3 was working a day shift. She received a call from a lone carpenter who had just injured himself with one of his chisels that penetrated the centre of his left palm. The wound was bleeding profusely. The caller sounded scared and mesmerized with the presence of blood everywhere, asking for the nurse's help. The nurse instructed the caller to "put some pressure on the site of the wound, elevate your hand above your head and take some deep breaths. And now let me ask: what's your name? What is your address? Are you taking any medication?" This situation is similar to those that are processed on a daily basis at the centre.

3.2.4.2 Definitions of Terms Used in the Call Centre

From the above situation the carpenter's ***presenting problem*** was a penetrating hand injury. In the presenting problem area inside the software used in the call centre, Nurse3 documented time of onset, intensity, pain and severity (TIPS). Since it was the carpenter calling the line himself, he was the ***caller*** and the ***patient*** at the same time. If his wife was home and called for him, the wife would have been the caller and the carpenter the patient. When Nurse3 asked the carpenter his first name, last name, date of birth, address and phone number, she was making what is called the ***Caller person profile*** and the ***Patient person profile*** at the same time located in the ***person database*** that hosts a ***navigation tree.*** A ***Person database*** is where the caller's or patient's record resides electronically. A ***Navigation tree*** is an area of the software where all services being performed for a caller or patient are viewed on a computer monitor. More than one person can be processed at the same time by the nurse e.g. a mother calling about her 3 children. The navigation tree can show the mother as the caller and the 3 children as 3 patients each with their separate 'node' and services associated with them respectively. The nurse visually navigates through the patients or the caller by clicking on their node.

In the case of the carpenter the nurse entered information in the computer under a 1) ***clinical program*** and 2) the specific contract, *Talk to a Nurse.* The carpenter had 2 ***clinical problems*** which were pain and bleeding also called ***symptoms*** as a result of a penetrating injury. Nurse3 focused her attention on these symptoms in her ***assessment***. In the assessment Nurse3 performed, she identified the carpenter's care needs. The purpose of this assessment is to identify ***actual*** and ***potential problems*** of the carpenter as a result of his injury. All the work Nurse3 was accomplishing is part of ***processing the call***.

These actions include pressing buttons on a telephone, talking to patients on the line, making critical decisions, entering information in a computer, activating a computerized algorithm-like program and other texts, and ending the call with prescribed recommendations to the caller that may include 1) calling 911 emergency services; 2) presenting to an emergency room as soon as possible; 3) arranging to see a physician within 24 hours; 4) provide self care at home.

The questions that Nurse3 asked the carpenter come from a ***protocol***. A ***protocol*** is an algorithm-like set of questions specific to 'a ***triage****'*. These questions are read by the nurse to the patient on the telephone when processing a call**. '**A **triage**', in a call centre as my data revealed, is different from an emergency room triage in a hospital setting. Triage occurs only if the patient presents a physical symptom and does not happen at the outset of the call processing. Triage is activated when nurses access a specific computerized protocol related to a patient's presenting symptoms. If a patient had no physical symptom(s), the nurse only provides ***health advice, health education*** or ***referral*** to other resources in the community. In the call centre nurses have access to books, journals and other texts that they use to answer patients' questions about tetanus immunization, for example which should be done within 72 hours following an injury if the patient cannot recall the immunization well or if it has been more than 5 years since the patient's last tetanus immunization.

Nurse3 asked the following question to the carpenter: "is the injury that you have a penetrating injury?" And the carpenter answered YES. When the nurse uses the box in the computer to record this affirmative answer a ***recommendation*** appears: "See ER immediately". At this point in the call Nurse3 stops asking questions because a

disposition has been reached. A ***disposition***: is a conclusion about the recommendation that will be given to the patient in regards to what to do following the call. The carpenter's YES was a response to a **guideline**. In the computerized protocols, I noticed that a **disposition** was always indicated next to a **guideline**. In this call Nurse3 verified with the carpenter whether or not he could follow the advice to report to the nearest ER. He indicated that he would do this. At the end of the call, Nurse3 said goodbye to the carpenter. She then engaged in what is referred to as ***wrap up activities*** that include saving all the information entered in 'nodes', documenting the **encounter** outcome, documenting if this injury was an ***emerging health*** issue or not and, finally, closing the encounter. An ***Encounter processing*** is the module in the computer software used in the call centre in which a call is processed. An ***emerging health issue*** is activated when the number of people calling about a given issue exceeded usual numbers of callers. An example of an emerging health issue that occurred during my observations was when a number of people called about Malathion (an insecticide) exposure due to fogging in the city. Team Leaders in the call centre are responsible to track and respond to emerging issues.

What I am describing here is part of the *ruling apparatus* (Smith, 1990) in the call centre. Smith refers to ruling apparatuses as:

> (…) those institutions of administration, management, and professional authority, and of intellectual and cultural discourses, which organize, regulate, lead and direct, contemporary capitalist societies. The power relations which come thus into view from the standpoint of an experience situated in the everyday world are abstracted from local and particular settings and relationships. These forms of communication and action are distinctively mediated by texts. (p. 2)

A component of the *ruling apparatus* in telenursing work is Team Leaders. Team Leaders review and score nurses' calls on a monthly basis, using the Quality Management Performance Review Form, a text, to ensure compliance with call centre's call processing policies including telephone triage policies and practices; the ADRTS, protocols, and collecting data—a primary interest of managers—that seems unrelated to direct patient care.

In this chapter, nurses' training and nurses' work setting were presented. During this training, nurses become telenurses and are prepared to adhere to the various work processes involved in doing their work and dealing with its challenges. How the call centre is funded and operated have implications on how nurses' work happens the way it does in many ways, including the time spent to process each call, that will be discussed later in this thesis.

Chapter Four: **TROUBLES IN THE WORK OF TELENURSING**

This chapter starts with a description of telenurses' knowledge about how to do the work of telenursing. This description sets up the analysis sections that follow. It is a summary of some of the troubles identified by nurses in doing telenursing work. I show how and when nurses use: 1) the various knowledge practices that are available to them, 2) the protocols and 'expected' ways the work proceeds, 3) the knowledge about the technological system and what it requires of them (what they know and then what they KNOW), 4) the clinical expertise they bring to the job and how it gets covered over. This covering over happens as nurses mediate between providing patient care over the telephone and responding to the electronic formulations required in doing their work. I will present examples of instances when this knowledge is used and not recognized—covered over—and where it is not allowed.

4.1 Sources of Nurses' Knowledge

In order to do their telenursing work, nurses working in the call centre draw upon knowledge from four main sources.

The first of these is knowledge from formal education in the programs of nursing the nurses attended. This knowledge includes but is not limited to anatomy and physiology, pathophysiology, critical thinking, incident management, violent person management, and crisis intervention. Novice nurses possess this type of knowledge, but are not usually hired in a call centre.

The second place that organizes the knowledge of telenurses arises from nurses' experiences working in hospitals. Knowledge acquired from working in a hospital

develops nursing expertise, particularly when nurses spend many years in a particular area of nursing practice (such as working in an Emergency room setting). It is in the hospital setting where nurses routinely put their thinking skills into action. It is this form of knowledge that is considered critical for employment as a telenurse in the call centre. Novice nurses have not yet had an opportunity to develop these skills to the extent the call centre requires, therefore, novice nurses are hired infrequently.

The third form of knowledge organization is telenurses' orientation and training program that telenurses complete before processing live calls. This program is intensive and introduces telenursing recruits to the contracts and subcontracts to which their work is oriented and to the electronic formulations required to do their work. More specifically, nurses-in-training to become telenurses learn about telephone triage software, the *All-Digital Recording Telephone System (ADRTS)*, policies, procedures, and the call centre mandate of providing a courteous service to the public.

The fourth major source of experience that organizes telenurses is the knowledge they develop from their experience of processing calls. It is through the experience of call processing that several telenursing skills are honed. These include skilled listening in the absence of visual cues, identifying health emergencies through tone of voice, and being attentive to background environment noises and the clues they may provide about a caller's condition beyond audible verbal responses.

While doing their work in the call centre, nurses draw upon some of these various areas of knowledge at different moments in call processing. Some of what they do in these moments is formalized by the call centre's management such as in the Triage

Details Report and some of what they do is unacknowledged or covered over. Analysis in the next section turns to moments when their knowledge is being covered over.

4.1.1 The Ruling Apparatus versus Nurses' Knowledge

The *ruling apparatus* that Smith (1990) refers to as "those institutions of administration, management, and professional authority, and of intellectual and cultural discourses, which organize, regulate, lead and direct, contemporary capitalist societies" (p. 2) become particularly visible in the call centre when Team Leaders use special software to monitor the calls that telenurses process, from start to finish. The *All-Digital Recording Telephone System (ADRTS)*, described in chapter 3, is part of this *ruling apparatus*. It tracks what telenurses are doing at any given moment of their work. Telephone triage policies and practices are also part of the ruling apparatus. My data shows that protocols and call processing policies are powerfully evident as part of the ruling apparatus that organizes nurses' practice in the call centre. I explore some of the tensions nurses experience as they provide health information or referral services according to telephone triage policies and practices.

4.1.2 Ruling Tensions: Inside the Ruling Activities in Nurses' Knowledge

A telenurse processing a call in the local setting of her cubicle in the call centre is expected to provide standardized information according to protocols and other texts such as the training manual that were designed elsewhere. By processing calls according to these protocols and the call-taking procedure outlined in the training manuals the telenurse becomes an active participant in the *ruling relations* that organize multiple sites

of telenursing activity (Smith 1987). The *ruling* (Smith, 1990) over nurses knowledge in the call centre is reinforced when the Team Leader reviews calls with the telenurse, on a monthly basis using the Quality Management Performance Review Form (QMPRF) (Appendix H). This form details every process nurses are required to follow in processing a call. When nurses comply with a process from the Triage Details Report and the audio recording of the call through the *ADRTS*, telenurses are given a point. The total points on the form are 100. The Team Leader is responsible for the scoring. The aim of this review is to evaluate compliance with protocols and training manuals instructions. A so-called 'good call' is one that the Team Leader scores highly and is seen as meeting the requirements outlined in the QMPRF.

Thus, in the call centre, ruling is accomplished in the text mediated work that the nurses activate in the electronic protocols that are monitored by Team Leaders who evaluate telenurses' calls for compliance with protocols and the training manual. These textual practices effectively standardize and coordinate telenursing work processes across the call centre. Once nurses activate protocols much of their *other* knowledge is subordinated to the practices authorized in the protocols and training manuals. The opportunity for them to draw upon other knowledge is effectively eclipsed (a topic for further discussion in Chapter 5).

As telenurses try to insert some of their own knowledge into their work processes, troubles arise at different junctions.

4.2 The "Troubles" Identified by Nurses

The troubles identified by telenurses in their daily work stem from their attempts to draw in their own unique and particular knowledge of each situation instead of relying solely on the protocols and training manual. They are also generated by some of the technological systems themselves.

4.2.1 Troubles Arising from Computer Problems in the Call Centre

Technological issues and problems with the computers were frequent in the call centre and were a major source of frustration for telenurses. The nature of the computer problems varied. Every call is automatically recorded in every patient's electronic chart. Some patients, who called more often, are referred to as 'frequent callers' by nurses. These charts become very extensive. Nurse1 recounts that her computer froze when she was trying to access the history of a frequent caller who had a lengthy record. The computer froze, for some time while the file was being downloaded because the technology could not handle the amount of data that had been recorded. In cases such as these the nurses wait, making hand written notes, as they continue talking to the patient until the file is fully downloaded. The following is Nurse1's description of this situation:

> (…) when you try to get into these clients' old charts, because they are so extensive, the computer freezes. So you cannot get into their history to know if they've called about this problem before, because it freezes your computer and then your computers shuts down for a period of time where you are unable to take a call because it is running through an old chart and it keeps running and running until it gets the most recent chart. (…) when a frequent caller has been calling let us say for a good five to seven years, it takes a good 10 minutes before you can actually find out and scroll through that information to find out if it's a new problem. (Nurse1, Formal interview).

I noticed nurses getting really frustrated when their computers froze as they were trying to retrieve history from previous call, as per call process policy. The responses I heard the nurses giving indicated the patient on the line was asking what was happening. Nurses were caught in the process delay not able to manage the call when the computer was stalled.

In most cases, the computer did not recover from freezing and actually stopped working completely. The nurse then had to tell the patient on the phone that she needed to get a 'binder' before continuing. This binder contains hardcopy printouts of all the electronic adult and paediatric protocols. Calls that depend, for processing, on telenurses' use of the binder fall within the category known in the call centre as 'manual calls'. Manual calls also include those processed when the whole call centre network shuts down due to scheduled maintenance or the need arises to troubleshoot problems with external systems to which call centre computers are linked. At times like these, the queue of patients waiting to talk to telenurses inevitably gets longer. In addition, once computer functionality is restored, telenurses are required to do extra work to enter information about manual calls processed into the computer as well as to note "late entry" on patients' electronic charts using the activity code assigned by the *ADRTS.*

4.2.2 Troubles Arising From the Imposition of Call Processing Time Limits

In the call centre, telenurses are expected to deliver knowledgeable, safe, and trouble free service. As I gathered my data, nurses reported facing challenges in their everyday telenursing. Some of these challenges originated in the time issues related to frequent callers, anonymous callers and mental health callers as discussed in chapters

four and five. Time also arises as a challenge in each individual call telenursing work. Telenurses have about 3 seconds at the beginning of each call to make a decision that determines the direction the rest of the call will take and another 30 seconds towards the end of the call to gauge if the patient on the line has received the appropriate care she/he needed. For the rest of the prescribed maximum of 12 minutes per call, the telenurse is being organized to follow the step-by-step 'idealized models of decision-making' (Tjora, 2000; Wilson & Hubert, 2002) operationalized through the protocols on the computer screen. Nurses understand this need to carefully follow protocols within their fear of making mistakes that could lead to litigation.

4.2.3 The Prospect of Litigation as it Arises as a Trouble for Nurses

The prospect of litigation loomed large in telenurses' own understanding of their work as they fulfill their professional obligations to provide needed care to patients while at the same time adhering to the electronic formulations directing how their work is to unfold. The systems to prevent litigation seem airtight. There was no litigation involving the call centre and the manager confirmed that he too was unaware of any litigation in his region. Nonetheless the prospect of litigation seemed to hang over the telephone triage process as evidenced by the frequency with which telenurses expressed concerns about it. Nurse5 mentioned a 'huge lawsuit in Seattle' she learned about after attending a conference in the United States:

> I was at a teleconference in Minneapolis just in the Fall and they actually had a lawyer come up and speak about legalities in the programs and documentation, what you print out, and type out on the computer, all that kind of stuff which falls in this category was fascinating. She actually had a real call we listened to about a woman who called about her husband who was laying on the couch with pinpoint

> pupils, looking uncomfortable, breathing heavy, had a rapid pulse, and the nurse on the other end of the line said oh can I talk to him? So the man actually gets up, from the couch, comes over and talks to this nurse and she didn't focus on the part like are you having chest pain or how do you feel right now? Or anything … started talking about these blank pills that he was on, she focused completely on the pharmacy of the pills, what they are for, and she didn't even focus on the fact that he was possibly having a heart attack. She only focused on the history and the whole business about the meds, she made him physically walk to the bathroom to get the rest of the meds so she can complete the medication part of the clinical profile, still saying well, talk to your pharmacist da da da. It was only like a medication question. The whole call turned into, in her mind, a med question and ended that way. Now luckily the man is still alive but yeah he had a heart attack, he had a *CABG*[6] done same day, and survived. So obviously and there is a *huge law suit going on in Seattle* right now based on that! So really she needed to be quiet and listen and realize what the wife was saying and zoom in on more of the symptoms that are going on visually from the wife being the eyes and from what he was saying. She didn't even ask him once if he was having any pain anywhere, nothing totally pharmacological! (Nurse5, Formal interview, emphasis added).

This lawsuit involved the nurse's response to a caller. The nurse was seen as culpable for failing to dig deeper by asking the caller's wife more questions about what was going on with her husband. The fear of not digging deep enough lingers in telenurses' everyday work. Digging deeper is expected to happen when nurses follow the protocols and this belief is corroborated by the management team's (Team Leaders, Executive Director, and Clinical Content Specialists) repeated reminders to nurses to stick to the protocols in order not to put at risk the call centre's ability to access *insurance* coverage should there ever be a lawsuit against them. These regular reminders are contradictory in the case described above. On one hand the nurse was expected to dig deeper to use her own knowledge, which is often covered over in the call centre, and on the other hand stick to a protocol (in this call it was a protocol that led the nurse to the extensive medication

[6] CABG is short for: Coronary Artery Bypass Graft.

history) that, in this case, did not help her respond effectively to the care needs of this patient. The nurse became caught up in following the required process of filling the history of the patient in the computer including all medication the patient is taking. As discussed in chapter 3 nurses often 'think on their feet' as they work to identify emergency situations right at the beginning of the call, during the standard 3 seconds that are available prior to opening the computer program.

Surprisingly when I asked the Executive Director to cite a legal case originating from nurses' work in the call centre his answer was:

> "(…) *not as I know of* in [this Province] since I started working here (…)". (Executive Director, Formal interview; emphasis added).

Later in the interview, the Executive Director explained the need to remind nurses to stick to the protocol detailing how this is a prerequisite to maintain the viability of the insurance that covers the telenursing centre. Despite the reminders, nurses sometimes proceeded differently by drawing on their own knowledge. The action to proceed differently, against what the protocol directs, puts telenurses in a precarious position should their actions ever be called into question in litigation and for insurance purposes. Nurse4 observed that nurses "often do step out of the protocol". She went on to describe the way she used the 'override', to change the disposition dictated by protocol to a higher disposition. She also mentioned that she did not "underride" a disposition. To 'underride' a disposition would require a lower disposition than dictated by protocol which is understood to pose risks and to possibly expose the patient to health risks, to jeopardize her/his professional license and to open the institution to the risk of litigation.

> (…) we override, you can't under ride but you can override and certainly whenever you do an override that is warranted in that way you are legally

> protecting: you are looking for the patient best interest, but you are also legally protecting the program and yourself because you are making the most appropriate decision for that case at this point in time. So whenever, if you stepped out of the boundaries in a negative way, where you are thinking ah I can't be bothered to ask all these questions, let's say somebody with chest pain and *you are not reading the triage questions* or you are just assuming answers and you have a negative outcome, then certainly you can lose your license to practice. (Nurse4, Formal interview; emphasis added).

For this nurse, the lesson that adherence to protocol is a safeguard against litigation and insurance risks has clearly been learned. She further stated that:

> (…) there are *huge risk* management issues in telephone triage nursing because you don't get to see them [the patient] the information one gets is only as good as the person giving it to you. You have no way of knowing that that's *accurate or inaccurate information*. (Nurse4, Formal interview; emphasis added).

Thus the accuracy of the patient's reports of her/his health concerns is expected to be enhanced within the use of the protocol.

Telenurses do not see, touch, or smell their patients—in contrast with a traditional milieu of nursing practice such as a hospital ward; they deliver care 'remotely'. Despite that using the protocol is expected to improve care, particular challenges related to the sources of information upon which to provide advice arise that the protocols do not ameliorate. Nurse2 cautioned:

> I see the protocol more as a guideline. It is not cut in stone and I often will tell new people: the protocol is a protocol but it is not the 'be all and all'. You are the one making that final decision based on your nursing judgment and *your experience* and what else is going on with that particular caller. So I say never hesitate, if you think, if you have that intuition that something is going on, there is nothing wrong in upgrading that and sending that person in because *you can't see them, we have limitations in terms of what we can do over the phone* and we have to remember that we are getting the history that we're asking what they are seeing, what they are telling us, there could be something else going on that we have no clue. (Nurse2, Formal interview; emphasis added).

In another account of prospect of litigation, the limitations of the protocols, and the constraints to professional autonomy Nurse2 said:

> Well, in practice on the floor as a nurse, you are allowed to make independent decisions within the scope of practice. An example would be: you have to give medications all together, so you will give Tylenol with an antihypertensive, you know the morning meds and you know you can make some independent decision within your scope of practice. On the phone when a person calls with a medication question, in your *scope of practice* you know you've done these things. So you know you can say okay because you've done it in a *hospital setting* but *legally* in your computer *you have nowhere to go to say because of past experience* I know it is okay to do this, but there is nothing in the software that allows you to say it is okay. Unless you can *legally* find it in the software, technically you are not *legally* covered. So *your experience doesn't mean much*, *your past experience doesn't mean much*. (Nurse1, Formal interview; emphasis added).

In a similar vein, Nurse1 noted:

> (…) because of *legal issues* you don't necessarily have grace to go by nursing instincts or nursing experience or nursing practice because *legally* you have to follow a *guideline which protects you* but it can also be very complicated to the way that as a nurse you are trying to nurse. (…) Protocols are guidelines and they help us to ensure I guess in a *legal manner that we have covered all our bases*, we haven't missed anything. So we can assess from a *knowledge base and experience* and know what we are looking for, but you know, you *might not catch everything*. (Nurse1, Formal interview; emphasis added).

My study reveals that nurses feel pressure to provide only that patient advice that can be backed up by the authorized protocols of the call centre, written or electronic. Nurse3 sums it up as follows

> It is because *of legal reasons*, like I have to have the information to back it up. *We are told that we are not allowed to say anything unless you got something to back it up*, like in our information library or in one of the resource box and we can find it in. (Nurse3, Formal interview; emphasis added).

These nurses' past experience comes into focus here in contradictory ways as they describe how they are limited in using their experience while at the same time experience is critically important to being hired, as evidenced in the following job description:

> Current registration with [*The Provincial Governing Body*]
> *Minimum 3-5 years recent experience* - emergency or community health required
> A combination of pediatrics and medical-surgical considered
> Demonstrated advanced triage or assessment skills
> Demonstrated basic computer keyboard skills
> Excellent communication skills
> Experience with Windows, Microsoft Outlook and resource phone line preferred
> External Applicants: This position is subject to a Criminal Records Check. The successful candidate will be responsible for any service charges incurred.
> Fluency in English required, in French desired, and other languages an asset
> A good employment record is required. (*Matanda Health Region Careers*, Visited December 1, 2012; emphasis added).

This job advertisement clearly states that telenurses must be knowledgeable. Nurses' knowledge, although clearly required, is, subordinated in contradictory ways. The descriptions of how telenursing systems rely upon but also undermine nurses knowledge is a key feature of this analysis of nurses' call centre work. In this advertisement there are traces of recognition of that nurses' practice background experience is the critical criteria '3-5 years recent' is the first qualification to work. Nonetheless, the experience becomes contradictory. Nurse5 recognizes that she was hired because of her experience, but that once inside call processes, things happen differently:

> It depends totally on the call, and it depends on what is happening. Like how urgent it is, of course if it is a 911 you are going to wrap it up and make sure they are safe and people are on the way. But, it depends; if it is a suicide caller you are not going to just say "see you have a nice day". We can't do that. You got to get them to where you feel you are comfortable because remember all the calls are recorded and legally you can be responsible for it if something happens. (…) *So legally you have to go through the whole system with them*, at least I do. I go through everything; I want to make sure I go through the whole program. (…) I know they tell you in the beginning before they hire you that *they like a well rounded person, specific to critical care* because you pretty much see it all, and I have that background. So you are *using your experience but you can't wander off from that in what you are telling them,* you have to *follow the same protocol* even though you know in your head *well I will go further than that, but you can't legally*, you have your barriers, you have to follow the guidelines, *you have to follow the protocols* that have been written. (Nurse5, Formal interview; emphasis added).

It is in this way that once nurses get into the work processes their previous experience arises as a paradoxical resource. Nurse5 works with the protocols to align with her experience and to provide authorization for her knowledge:

> There are moments like that because you know that there should be more, like it's very generic and you want more specifics, so but your hands are tied, *legally* you have to follow the protocol but you can also make a statement, a final statement saying so you just stated that yes you are going to see your doctor today and at some point that you tell the doctor about A, B and C and I get them to repeat that and it covers you because in case something happens and *you know there is more to the story*, and more to what's going on, but it doesn't tell you to say that, in the recommendation then you've kind of told them but you haven't really told them and you need to ask the doctors specific questions or whatever related to that. So you then you go to management and say okay what do you think about this, you can't tell them because it's rude, so you just say please listen to this call, *do you feel there is any limitation on anything*? And you let them answer that, because they are supposed to be experienced and then if they don't get it then you help them out and *do you think this is something that might have to be changed?* Like you are not telling them, you are just asking, and then they can deal with it there. And if they are smart, they will say well *what do you think?* Well *from my experience*, A, B, C, and they will look into it. (Nurse5, Formal interview; emphasis added).

So it is that nurses are limited in using their experience to ask questions to find out 'more of the story' embedded in each specific call; and how this limitation is organized by protocols and fears of litigation. Nurses adhere to the protocols or material provided in the call centre taking actions to comply with what was needed to meet the required pre-requisites for insurance coverage. Whenever necessary, I saw nurses physically leaving their desks to get a book from a shelf located in the call centre when they provided information that was not present in the computers. Nurses took the prospect of litigation very seriously. At the end of each call, nurses are to ask patients if they will follow the care advise they were given. This practice is expected to protect nurses from liability; it is documented as proof that patients made their own "informed" choices. However, despite

the emphasis on legal risks; my study revealed no legal proceedings have occurred in this jurisdiction.

4.2.4 Protocol Failure: Nurses' Expertise at Work in Light of Arising Patient Condition

In their work, I saw nurses reading between the lines both of what the caller was saying *and* the protocols as they mediated their knowledgeable practices. They worked to identify those moments when the protocol did not accommodate what the patient was saying was incongruent with what the nurses were hearing. One may argue that this happened because the nurse opened the wrong protocol. Illustrative of this situation, is an observation I made of Nurse4 who was talking to the mother of a 5 months old "fussy baby". The mother did not fully describe what was going on—which often happens in telenursing— however Nurse4 heard the infant coughing which was followed by a commotion. She immediately stopped asking the preset questions of the protocol saying: 'what was that?' Later Nurse4 told me that she could hear that the baby had started to breathe in a different pattern. This is why she stepped out of the protocol she was using to process the call. She focused her attention on the new development in the infant's health, and asked precise questions that were directed by her knowledge and experience including the request: 'can you describe to me what is going on?' Nurse4 said that the mother reported that 'the infant had just vomited, was breathing really fast, was weak and looked flushed!' All of a sudden everything changed and Nurse4 was now doing another assessment; which was her own assessment; an assessment being carried out outside the assessment directed by the protocol that she had just abandoned. In this situation, Nurse4

described how this work was directed by her gut feelings, her knowledge, her expertise, and her training. The 'care advice' for this child was to direct the mother to immediately take the child to the Emergency room of a local hospital. Later, when I was interviewing Nurse4 about this call she explained:

> What one concludes depends on a lot of your *decision making*, isn't so much on just what is said, but how it is said, *what isn't said* and also *what you are hearing in the back ground*. (Nurse4, Formal interview; emphasis added).

What this demonstrates is the importance of Nurse4's ability to pick up any other information that she 'hears in the background' as the caller is providing the patient's main complaint.

In situations like the one describe above, a call can take a totally different outcome other than the one directed by the protocols. It is the nurse's astute listening skills that were used to benefit the patient. Similarly to Nurse4, Nurse1 notes that while the protocols are helpful they are not full proof. She said: "(…) sometimes your assessment does not match with the program and there is nothing to triage the symptoms under". This was apparent when she discussed a protocol named *Guideline no Guideline* and explained:

> Sometimes the program surprises me, that sometimes if you ask certain questions, it opens up a different avenue that you had forgotten to assess, or you had forgotten to think about and we sometimes as nurses on the floor, and we say 'oh the program actually works'. It was actually well set up and it actually works so beautifully that every question matches the symptoms that the person gave me. It is like a brilliant little: oh my God it works, as opposed to *sometimes your assessment does not match with the program* and there is *nothing to triage the symptoms under*. There is no [symptom]: what would be a generalized oedema all over their body. Their hands are puffy, their legs are puffy, they can't wear their rings, they can't wear their watch, they are not peeing properly, their shoes are too tight, their ankles are swollen, and they have no history of renal disease, no history of cardiac disease, they are not short of breath, there is nothing. There is nothing, you've assessed everything, you've assessed, you know, allergic reaction,

> you've assessed and *there is nothing to triage them under*. And *you don't know what to do with this person*. (Nurse1, Formal interview; emphasis added).

Nurse1 added "so sometimes the program surprises you and sometimes you just fight with it." In explaining what 'fighting with it' meant for her, Nurse1 said that it means that she does not agree with it, at the same time she is not allowed to provide unreferenced information.

Likewise, the nurses' example of oedema that did not match the 'one-fit-all' set up of the protocols reveals the limitations of the protocols (Nurse1, Chapter four). These are the moments when nurses, unable to fill in the blanks directed by the protocols, move away from the textual directions and rely on their own expertise; although how they activate their knowledge and mediate it within the protocols remains invisible in the call centre. It is these practices that generate troubles that the IE selectively tracks and maps.

4.3 Inside the "Troubles" Observed in Call Centre

4.3.1 Demographics Retrieval/Collection Frustrations

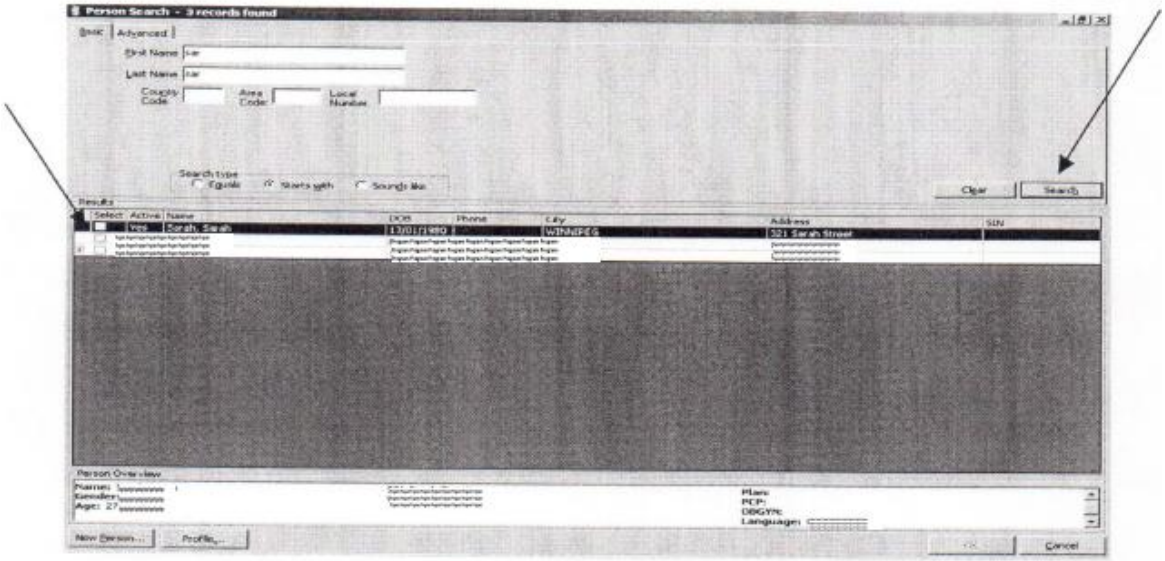
In collecting demographics or retrieving information from patients' prior records nurses experienced a number of frustrations generated both from callers and from the computer system. The frustration from callers arose when callers did not wish to provide their names. This was often related to callers' fears about how the information might be used and/or their desire to remain 'anonymous'. I overheard nurses telling patients that it is just like the records they gather in a hospital setting as part of their 'chart'. Some nurses referred to this 'chart' language as they asked for patient's name in order to 'access their chart'. Although patients have the right to remain anonymous, nurses found

more challenging to provide care to a patient without knowing the history of previous calls. Another frustration occurred when nurses could not access a patient's history; when a patient reported to have called someone at *Talk to a Nurse* but the record could not be located sometimes due to an error in name spelling. Or, the occasions when a record was not made since the patient wished to remain anonymous. Nurses rely on the previous record to determine what advice the patient had been given. In other instances I overheard nurses asking the patient to spell out her/his name in order to retrieve her/his 'chart'. Although the *ADRTS* had a screen display with caller identification properties nurses were not allowed to use this information to confirm callers' names. In a number of circumstances a neighbor's phone with the 'caller identification' feature not blocked was used to make the call and the name showing was not the patient's name. Nurses expressed frustration when patients repeatedly stated 'I have called before so my name should be there' and the nurses became absorbed in following directions to determine/confirm each caller by name, phone number, or address (figure 8). Patients who had previously called and whose identification was not blocked were also frustrated when they were asked to state their names over and over assuming that the nurses knew who they were already.

These were the clues that directed my close attention to the processes that, generated within technology, are mediated within nurses knowledge—knowledge not only of people, symptoms, health, and wellness—but knowledge about the technology, that it required of them and how they needed to work within these systems. I show how this knowledge, and nurses' experienced response to the *ADRTS*, the scrutiny, and their demographic work is linked to other people, distant from the call centre where they

produce the work; socially organized by work going on "elsewhere and elsewhen" (Smith 2005, p. 225).

Enter in the name using the first three letters of the first and last name, and click the search button.



If there are a number of matching records MAKE SURE YOU SELECT the correct entry on every call. Use the spelling of the caller's name, date of birth, address columns or phone number columns to make your selection.

Allow the caller tell you their personal information. DO NOT provide them with information you have on the system to assist in determining who they are. Let them tell you their name, address and phone number. Obtain personal information. Do not give it out. Sometimes names will appear twice, you need to confirm whether they are the same person or not.

Figure 8: Retrieving demographics (Texts from training manual).

4.3.2 Time: a Defining Indicator in the Call Centre

In my observations, I noticed that nurses and the Executive Director of the call centre all had their attention converging on time. Time (and waiting) emerges as a key

indicator defining satisfaction from the caller, a job well done by the nurses, and overall a sign of good management from the Executive Director. For instance Nurse4 stated that callers "are very angry that they waited that long" (Nurse4, Formal interview) to speak to a nurse which resulted in hang ups or an annoyed patient by the time the call came through to her. For nurses time is rationed, and discrete time goals allotted to each move in the call centre such as the time to log into the computer system or the time to process a call. For the Executive Director, time was used as a gauge of access, wait time, and hang ups.

4.3.3 Two Kinds of Hang ups

Some of the difficulties I observed that arose for nurses were vested in how they mediated their primary aim to address patients' needs with the electronic protocols designed to guide their clinical work and the other required non-clinical work of collecting data for statistical purposes.

In my field-notes I made note of the attention given to callers who ended the call without talking to a nurse. These calls, referred to as "hang ups", were common. Time is a big factor in a hang up. Nurses understand that patients hang up when they wait too long in the queue and become impatient. I noted that hang ups occurred on two main occasions. The first was when call volume, (discussed in more detail in Chapter 5), was high. The second occasion, being stressed here occurred when a specific female caller was hanging up on all nurses who answered the call; she was seeking a specific nurse. In this instance I observed nurses trying, in vain, to gesture to each other. Later the nurses informed me that this caller caused multiple 'hang ups'. Every call is documented

including hang ups. Nurses explained that the documentary processes required to administer a hang up are time consuming. The work detracted from the time available to respond quickly to callers waiting in the queue.

Although a record of the hang up is built into the software, the hang up is also littered with nurses' textual work to collect data that enters in the overall numbers of calls that are later used by the Executive Director to report and justify service provided. These issues will be discussed more detail in chapter five.

4.3.4 Managing Calls Prior to Protocols Activation and Inside the Protocols

In orientation nurses are advised to move quickly from answering the call (with an answer script) to opening the patient demographics screen. My observations revealed that the time between answering the call to demographics is a brief but pivotal period of the call that is not regulated. In my observations, I noted the nurses using this time very skilfully and wrote:

> This is the only time during the telephone call process when the call is not being directed and/or monitored within the computerized fields of information that direct a nurse's questions and provide various options for patients' responses. (Field notes, August 10, 2010; August 28, 2010).

This period seemed a 'critical' time (brief seconds) in each call, when nursing knowledge was being activated in non obvious and occasionally even covert ways. At the end of those brief seconds, the nurses seem to have a fairly accurate sense about what is going to happen with the call. The telenurse may ask a few questions that will help him/her later in processing the call such as 'are you alone'? In winter the telenurse may ask 'are the roads in good condition to drive to a nearby hospital? These questions are asked by telenurses

prior to activating protocols. It is at this brief juncture when the nurse makes a decision between a call requiring immediate action (caller with a life-threatening symptom) requiring the activation of EMS or proceeds with the call as a regular call.

I noted how nurses make small hand written notes about information gleaned prior to moving into the demographics collection and protocols. These notes may or may not end up in the official record. However, it is apparent that the information the nurse collects is vital for the rest of the call. For instance, in response to why she writes notes, Nurse2 states that:

> I do that partly because I forget very easily, someone will say this is my name or whatever, initially we are supposed to determine if the call is an urgent call so you want to kind of ask, get the sense of what the call is about, make sure it is not like a 911 call, which would kind of rush me through and do sort of maybe a bit of a different process, and those notes just kind of help remind me of what they have already told me so I am not repeating myself over and over and just sort of some point...and as I am writing those down I am kind of *already thinking ahead* what am I going to be asking about once I get into the computer and do the *assessment*." (Nurse2, Formal interview; emphasis added).

What this demonstrates is Nurse2's strategy to write down a few words instead of opening a new encounter right after introducing herself. She does this to avoid asking the caller to repeat the information she/he provided at the beginning of the call. Callers get angry and frustrated when nurses keep asking information that has already been provided. When a caller is angry and frustrated, I noticed that the call took longer than usual and overheard the telenurse shifting her approach from proceeding to the next call processing step (depending on the process) to calming down the patient first, a discretionary response not dictated by the protocol.

Occasionally, during the brief juncture between answering the call to opening the field demographics, the telenurse may be well positioned to provide advice, end the call,

and move to the next patient in the queue. However, this option is not available within the standards and protocols that organize the telenursing work process. What must happen next is that, based on the triage decision, the nurse activates specific texts and computer programs that direct and document each subsequent step of the call. Some of the information on her side note maybe entered in the computerized charting of the call, but when this happens it appears that the information was generated by the protocol, not by the nurse's expertise.

In following quote Nurse1 describes a situation in which she really struggled with the advice recommended by the protocols:

> (…) another example would be I got a call about a puncture wound. Puncture wounds have Emergency room (ER) dispositions and (…) then you are thinking why am I sending a puncture wound in the ER? You know their tetanus shots are up to date; they happened 3 days ago, they have been walking, why do they need to go to the ER and there is no sign of infection. So *sometimes you fight with what you know as a nurse* and *what the protocol is telling you to do* and you struggle with it. That's ridiculous, that's stupid, but *I have to follow my protocol*. (Nurse1, Formal interview; Emphasis added).

This situation exemplifies how nurses' knowledge is muted in the call centre where nurses consistently face circumstances where they are unable to use their knowledge and experience such as the one described in this quote. This caller, whose physical symptom is constructed as a 'deserving patient', will not benefit from this nurse's expertise but will be triaged and sent to other resources in the community. In the above quote, the nurse is aware that there is another avenue that would benefit this patient better, but it is not available to her and the patient as she has to follow the protocols.

On some occasions, if the telenurses had permission to freely give advice on the telephone without having to activate other texts, programs and procedures in the call

centre, the call might end here. To the question whether she gives advice right away when a caller asks something that she knows Nurse1 replied that she tells the caller that "'I am looking for information', put them on hold, 'I am looking something up in a book'" (Nurse1, Formal interview). This 'looking up information' that the telenurse already knows is time consuming. Therefore if the telenurses give this information right away, a call could only take four to five minutes, the service could tap more effectively into the expert knowledge of telenurses that is being subordinated –yet paid for—and the patient maybe served well and with more efficiency. However, during the remaining five to seven minutes of the protocol driven calls the nurse is engaged in entering data, personal information, and the multiple mouse clicks that are necessary to follow the algorithm-like programs that direct the questions (and possible responses) that mediate the nurses' interaction with each patient.

Nurse4 found that the protocol does not take her knowledge into account even though she understands that she is thinking and filtering what patients tell her during the brief juncture at the opening of every call: "my assessment does that because you assess *before* you go into a protocol" (Nurse4, Informal talk in the call centre). This is a critical statement since, in training; nurses are advised that the protocol is everything and should be followed word for word to ensure safety. Nurse4 revealed enormous insight into how her work works when she said:

> I make sure that I am carefully documenting it [assessment] so I don't think it's so much the protocol, it is the assessment of the nurse that is answering that, you should already know where this is going before you hit that triage button and bring the protocol up, you really should have a clear idea, and the Team Leaders will tell you that when they look at that assessment screen when they are assessing a call, and they read what you have documented, they already know what the disposition should be.

(Nurse4, Formal interview)

In this interview excerpt the nurse is describing how she interacts with the protocol as a result of her assessment and not the other way around. Team Leaders in the call centre have the duty of evaluating calls. A nurse's assessment is assessed for appropriateness of protocol selection at triage. This is why Nurse4 states that by looking at the assessment, which is the screen that precedes the activation of a triage in the computer program, the Team Leader is able to deduce the disposition for the call, an example of the standardization the protocols provide. My study uncovered that it is the telenurse's good assessment that leads to an appropriate protocol and eventually to a good disposition and not the opposite.

In summary, the telenurse's "assessment" that goes on during a "blank" period *and* the 'assessment screen' that appears prior to triage – is the assessment triggered by the "main complaint" of the caller. However—in the authorized understanding about how things work it appears as though it is only the computerized 'assessment' that leads to the appropriate protocol. This covers over the 'critical' work of the telenurse during answering the call to demographics junction of call processing.

4.4 Taken for Granted Ways of working: Nurses Carrying out the 'Troubles'

Some of the troubles I identified in the telenurses' work were not aspects that the nurses themselves are aware of, but were buried in their taken-for-granted understanding of competent telenursing.

4.4.1 Nurses Dealing with the Absence of Information in the Call centre

Part of the nurses' work processes in telenursing is to locate information written in protocols and health information libraries that nurses use to advise callers. However the information is only adequate when the callers' description matches the authorized information. There are many occasions when nurses use their own knowledge to respond to the needs of the caller. For example a call fielded by Nurse1 who was responding to a mother worried about her son's health recounted:

> One of the things that we often say to people is they will call in and they will say well I googled my symptoms and have ABC or D so normally your responses will be like you know Google isn't reputable, you can get on websites that aren't necessary reputable so let us start from the beginning. But I had a call where a woman was calling about her son and she was saying that there was a lump in the middle of his chest and she never noticed it before, there was no injury, just this lump and it was concerning. She was calling in and the more and more that she described it, I was thinking to myself well, you know, through assessment everything that she said was negative, negative, negative, and no symptoms, asymptomatic, and I am thinking, you know this is so strange. *For some bizarre reason I was thinking to myself she is probably feeling his xiphoid process*. So I tried to, over the phone, say if you feel that in between the ribs and this little lump here, you know, it's where your ribs meet and you know it is called the xiphoid process and she is like no I would have seen it before. Probably for the first time in my life I said to her: Google xiphoid process find where it is and I will stay on the phone. And she did that and she found it and said "*oh well that is exactly what it is*" and normally we don't use Google as point of reference but sometimes because you can't convince somebody for whatever reason you have to tell them what it is not. So I know it's definitely not ABC or D, I can tell you why I am definitely sure it's not ABC and D and then you can pull from literature in that manner to reassure them, but sometimes what you are looking for just isn't there and you have no way to explain over the phone so you try to go to a secondary resource as in "you have to look at this picture". So you have to Google a picture of what a xiphoid process looks like, what it feels like, and where it is to reassure somebody. (Nurse1, Formal interview; emphasis added)

For this nurse, her knowledge, although referred to as a 'bizarre', is what provided an answer to this mother. This call is an example of another 'good call' from the nurses' perspective, however as previously discussed in this chapter; the Team Leader assesses it

differently. To produce the authorized version of a good call, nurses are expected to consult books and required to document these references.

4.4.2 Nurses' Knowledge as Unauthorized Knowledge: Nurses Running to the Books

In the course of her work, Nurse3 described her work processes with a caller whose concerns were not addressed by the information in the computers. She described this work process as running to look for the books:

> There was one when I had to really kind of dig for some information to back up what I would have liked to have told her. About the concern. . . I really didn't find the answer for her. So somewhat of an answer, but not the exact answer. . . I mean I knew the answer myself but here [in the call centre] I have to have the information to back up what I am saying to her. So we couldn't find anything that backed it up actually. That was the one where I was *running to look for the books*. (Nurse3, Formal interview; emphasis added).

This quote illustrates what Nurse3 had to do to in order to provide advice based on what she knew. Ironically, it was her own good knowledge that directed every step in her assessment during the call. However, once she discerned the patient's needs she was not allowed to provide advice that is not programmed into the computers or backed up by a reference from the books present on a shelf (library) in the call centre. She was also not allowed to provide counsel based on what she knows. In situations such as this, nurses who wish to provide useful information to the callers physically left their cubicles and got a book to reference their responses. However some nurses simply chose not provide such information. In that matter, Nurse1 commented:

> If I don't feel confident that I can find the answer and know the answer, I am not going to answer it. (Nurse1, Formal interview).

In this instance, care of patients on the telephone suffers. The call centre's policy does not allow nurses to provide unreferenced information originating from nurses' experience. Despite that the job is understood to require expert, seasoned nurses – nurses' capacity to use their knowledge is consistently undermined. Thus nurses apply a different form of knowledge in order to meet patients' needs. It is the knowledge they learn "on-the-job" that informs how they work around the systems in order to bring their knowledge, experience and training to the foreground; strategies that subvert how the call centre system is designed to control them.

4.4.3 Nurse Offering Care Advice Outside the Scope of Protocols

As nurses provide service to patients they also find ways to overcome the built-in constraints of call centre protocols to provide 'care advice' that actually draws on their knowledge, expertise and training. The following quote illustrates a case of Nurse4 making choices outside of the scope of the protocol. It is an example that illustrates her sophisticated and nuanced knowledge, expertise and training on matters related to breastfeeding a "crying baby":

> There was very little actual data to go on other than: my baby is crying. Here we go, everything was negative I mean she gave me nothing to go on and I had to dig and dig and dig. (…) it was a woman from the South [of the Province] and she was extremely vague and she was calling because her baby was crying. That was basically the gist of it. (…) So when I asked how she is feeding the baby: oh yes I am breastfeeding. (…) There was no fever, no apparent abdominal pain, no nausea, no vomiting, and no tugging at the ear, no rashes, none of the other things. So we started to explore if the breastfeeding and the pattern of the baby's breastfeeding had changed and I think this baby was about four weeks old, and I said okay, let us talk about that and what the baby was doing was starts to nurse: would pull off the breast then start crying. I asked her to look in the baby's mouth, no white patches anywhere. So I am thinking okay maybe could this baby have thrush? And I said well any green explosive stool? No, that wasn't going on! So it

> didn't sound like a foremilk hind milk imbalance and I am trying to think of what might be happening, but we know that infants can have oral thrush without there being any patches. They don't have to be there for that to still be the clinical problem and what you can see is a change in your nursing behavior and the baby being more fretful, pulling off even spitting the soother out, she has been using the soother. So I was like oh so that is causing some mouth pain. So I said to them: is there anything new happening with you. Have you had any recent cracks in your nipples or discharge? Sure enough she had crested moon shaped crack right at the areola nipple junction. And that is one of the classic things you see in thrush for the mother: is a crested moon shaped crack, port of entry, you got a break in the skin so her skin was a little bit of shiny and itchy and tight and sure enough when I asked – one of the other behavior change is that babies can sometimes do this: and this is the only second time I have had an infant that had mentioned this – is that they click when they are nursing or when they are sucking, then make a clicking sound with their tongue. So I assumed at the point that I am not making a diagnosis but I am going to suggest the problem might be you both have thrush, it just hasn't got advanced enough that your baby has white patches so I went through the home care advice that you can start at home that night like the vinegar and water dip for your breast after you are done feeding, the supplements you can take, see the doctor I think in 24 to 48 hours. It was one of those rare calls where the mother calls back to thank me. They have both been diagnosed with thrush and everything had turned around. You know so and there was very little actual data to go on other than my baby is crying can you help me. (Nurse4, Formal interview).

From the above example, it is apparent how the nurse drew on her knowledge, expertise and training to provide care in the absence of a protocol that matched the problem presented by the caller. The interview excerpt reveals the nurses' thought process and the nuanced questioning she pursued to arrive at the 'care advice' that she gave. The nurse responds to the needs of the patient in this 'good call' example. It is through her expertise that she identifies information that is needed for this caller as she circumvents the authorized call process by using her own knowledge.

This juncture in the organization of the nurse's work seems logical and rational. She uses whatever resources she has to provide care to the patient on the telephone, but it arises differently in the actual work when she has to navigate away from the allowable

and decide to provide personalized advice (instead of pulling a triage in the absence of symptoms). It is illustrative of the contradictory way registered nurses are employed in telenursing services. It indicates what they contribute — and gestures towards what is being lost in a system that consistently overrides what they might otherwise contribute. Nurse4 focuses on symptoms not yet present when she says:

> 'It just hasn't got advanced enough that your baby has white patches' (…) so I went through the home care advice that 'you can start at home' that night like 'the vinegar and water dip for your breast after you are done feeding, the supplements you can take, see the doctor I think in 24 to 48 hours'. (Nurse4, Formal interview).

This is truly what helped this mother. Therefore the nurse's efforts in this call fall, again, in the invisible work nurses do in the call centre as healthcare experts. This also illustrates the nurse's subjective response her work as a telenurse that the systems undermine. The nurse is clearly uncomfortable with any assertion that she is making a diagnosis because nurses are informed, during training that they are not to diagnose on the phone. Nurse5 corroborates that directive by saying that:

> We are limited in a way according to our protocols, guidelines and we have, like for mental health: suicide, anxiety, depression, and schizophrenia. There is a few items there, so you are kind of limited so I mean we can't diagnose on the phone, so we can't assume, … so you have to ask appropriate questions to see where you are going to go, which category … if you don't look into the history, sure it may say history of schizophrenia then you know you are going to possibly go in there because you see the history, but you can't make that call if you have nothing in the history. So you don't know where to go. (Nurse5, Formal interview).

Nurses are only authorized to provide care according to symptoms and to triage patients for referral to other health care services. That is the mandate of the call centre. It is designed as an input, throughput and output service to reduce costs. The focus on speed

and on "risk" predominates as evidenced in the Executive Director's comment when he emphasized:

> When someone calls in, you know, we really have to quickly identify whether they have some issues that are, you know, necessitating management of any risk and then we have to be very good at dealing with them. (Executive Director, Formal interview).

Nurses who are responding to callers have enormous insight into what it *actually* takes to be "very good at dealing with them"; as evidenced by the detail provided by the Nurse1 who fielded a situation where the only apparent "symptom" was a crying baby. Nurses' skilled (subjective) assessment is critical. Nurse1 reinforced the skillfulness embedded in this work when she described the case of a caller who reported being short of breath:

> 'You know you stated you are short of breath but you just said out a full long sentence without even breathing. So you don't have shortness of breath at this time. Shortness of breath would mean, you couldn't complete a sentence, couldn't complete a paragraph that you just told me, you wouldn't be able to'. Ah also I guess the tone of this person's voice . . . someone who is usually quite ill is panicked. They don't have the energy to fight you or question you, they want serious help because they are seriously afraid and it is a little bit different than anxiety because anxiety tends to come out like a flood. 'Brrrrrrrrrr'. Then they'll pause and you'll ask a question and they'll be 'brrrrrrrrr'. And you kind of go: 'well through my experience this isn't shortness of breath its anxiety'. You may open up a program, go to their clinical history, check if they didn't have any history of anxiety, and then you can say: 'have you ever felt anxious before? Do you have a history of anxiety? If this is still anxiety, how is this different?' (Nurse1, Formal interview).

Every protocol requires the nurse to ask: 'are you short of breath?' In the above example, the nurse was not relying on the patient's self report. Instead she described how she knows about whether or not a person is short of breath and the subtle variations when this manifests. She reveals how her knowledge is fundamental to her capacity to respond to that caller's issues.

In this chapter, I have relied on data that reveals the contradictions embedded in how nurses' knowledge is socially organized in call centre work. The data introduced here sets the stage for the more detailed and distinctive analysis of very specific contradictory knowledge practices which I show have consequences for patients, for nurses and for the discipline of nursing more broadly.

Chapter Five: **CALL VOLUME**

In this chapter, I move the focus of my ethnographic attention to the work of nurse managers. In particular, I focus on the issue of 'call volume' describing how it arises in the work of telenurses and how the issue of volume is socially organized. I note that call volume is a major concern of the call centre manager, although here, volume is known in a distinctly different way than how the telenurses know about it. I analyze call volume as one of the elements of interest to the overall management of the call centre that becomes a focal point in the work of the Executive Director who uses call volume to report to funders. I show how issues of call volume are organized and how they show up to be managed in nurses' work within the problem categories of "types of callers" as they relate to volume ('frequent callers' and 'hang ups'). I discovered these categories activating work of nurse managers who also see them as a problem to be managed.

Value for service and safety are discussed in this chapter from the point of view of both the nurses and the Executive Director. I elaborate on nurses' capacity to use their judgment at an important juncture of their work just before they activate protocols and how this work was affected during the H1N1 crisis. In this chapter I use the text-work-text process the Executive Director produces as he mines the triage details report (TDR) (Appendix G) that are generated by the telenurses to establish the "facts" of telenursing that are reported to funders. The argument of this chapter is that although the issues that the Executive Director/Manager tries to solve have the appearance of being directed towards supporting the front-line nurses, the work being undertaken takes a paradoxical twist that does not accomplish a useful resolution for nurses.

5.1 Call Volume: Focus on Numbers and Accountability Systems

In my field work call volume was a hot topic for both nurses and managers. Consistently, nurses discussed call volume in relation to the number of calls that come on the line in a shift or in a given period of time. For example one nurse told me:

> I look in the queue after I finish any call. I always look into the queue sometimes as I speak I look to see, oh you know 25 in the queue then, (…) there could be anything on there, I hate when people have to wait. So yet I have to follow the program. (Nurse5, Formal interview);

> (…) we were so busy last fall with H1N1. (Nurse 2, Formal interview).

For the nurses "call volume" is assessed by the telephone queue display of the number of calls waiting. Call volume coordinates how fast they work in order to serve all the callers waiting. According to Nurse4, call volume:

> (…) is the number of calls that come in the call centre at a given time of the day on a given day of the week. (Nurse4, Formal interview).

Call volume is always variable but there are occasions when the volume is exponentially increased, for example during serious public health issues being reported by the media such as water contamination, West Nile Virus, or breaking reports about side effects of immunizations. Nurse1 described how her work was impacted when call volume increased unexpectedly during the Canadian H1N1 virus crisis of 2010 stating:

> (…) when we had H1N1, I mean our call volume must have multiplied by a thousand and that was something we could predict, that was something we didn't have the information to handle, it was of sort of coming to us second hand and we were the first contact for…for fear, fear based questions and anxiety and public scare (...). (Nurse1, Formal interview).

The public fear of contagion generated a remarkable increase in call volume that challenged the nursing resources. This nurse describes how her experience of the increased volume was intensified by an overall "lack of information". The nurses did not

have a clear understanding about the extent of the H1N1 crisis, and, as reported by the informant quoted above, were getting their knowledge "second hand". Nurse4 further reported that there were long queues in the following account:

> (…) During H1N1 (…) there were times when there were thirty people on the queue wanting to talk to a nurse. (…) we were doing like a thousand calls a day, … you just look at the display queue and it tells you how many people at this second are waiting to talk to a nurse (…). Some of the wait times were forty, forty-five minutes, people had to wait, way more than usual. (Nurse4, Formal interview).

This description of this sort of surge in call volume was described differently by the Executive Director. His interest in call volume is not informed by the experience of looking at the telephone queue display and responding to the pressures that high numbers produce. The tensions generated by call volume for the Executive Director are linked into his capacity to demonstrate that the call centre is achieving its mandate, and to secure ongoing funding to keep the centre operational. In his description of call volume he referenced the overall number of calls that come to the telephone lines, including hang ups, in each funding cycle. The Executive Director is responsible for reporting call volume to the funder. It is one of several dimensions of interest to the funders, and is integral to the accountability systems to which this manager is held.

5.1.1 Differing Knowledge of 'Value of Service'

In daily, monthly, and annual reports, 'value of service' is one of the 'key dimensions' that directs the Executive Director's focus to call volume. When asked more explicitly about the 'key dimensions' that draw his attention the Executive Director stated:

> So generally I take a look at the volume of calls. Now I don't have a lot of control over the volumes, right? You know we had H1N1 last year, and thousands more people called in than the previous year. I can't control how many people call in. But if calls are staying the same or going up or going down that might say something to me about *the value of the service* (…). (Executive Director, Formal interview; Emphasis added).

Note here how knowledge about "value of service" is different than how the nurses talk about "value of service". In chapter 7 I describe nurses who talked about a "good call", the times when they believed that they had really produced useful and valuable nursing advice. For nurses that is how their knowledge of 'value of service' is constructed. For the Executive Director however, value (in response to patients needs) is seen to be an exclusive feature of the protocols. Service is accomplished when protocols are thoroughly followed by nurses and when all the required data is collected. The Executive Director's perspective is not the same as what happens in a 'good call' which is not an explicit management priority in reporting to the funders. This Executive Director is organized by ruling relations that organize his reports of volume. The metrics he reports to funders that are taken as indicators about existing funds are being used and to show where additional funds are needed. In chapter 3 I described how the funding is secured – through 'contracts' for various categories of health issues. I have also described that a great many of the calls that nurses respond to do not fit easily into the existing categories, and while nurses are skilful at mediating calls into categories, certain call types do not find an easy fit within the protocols and systems that tightly choreograph telenursing. Nonetheless, *all* callers absorb nursing time and attention. Thus, the Executive Director is alert for opportunities to secure new contracts, and thus is interested in making a case for new categories. This is important managerial work and is routinely focused on showing that

the numbers of calls being handled supersede the current contracted volumes. Other ways in which the Executive Director uses these numbers about call volume are in reports to determine staffing, to measure service, to account for funded quotas, and to tally total number of calls, call completion, hang-ups/abandoned calls, call processed, etc.

5.1.2 Call Volume and Administering Nursing Labour

Aggregated and standardized statistical information about call volume is not only used for reports to funders who subsequently renew funding for daily operations of the call centre. It is also considered a predictor of busiest and slowest periods of volume for staffing purposes. Hamilton and Campbell (2011) develop a critique of the "staffing matrix" that guides hospital nursing staffing. They argue that staffing in hospital settings uses aggregated census data that *estimates* the nursing needs of hospitalized patients. The estimates are then treated as facts and are used to organize labour resources. I found tools and strategies similar to the staffing matrix at work in the call centre where staffing needs are calculated on objective data using aggregated numbers of patients who called at a given time of day/evening/night. Unlike the conventional work of nurses in hospitals where staff shortages are experienced with immediacy but where people can be shifted and adapted—pulling nurses from one team to help out on another, or calling nurses from the pool of casual employees who are available at short notice. The allocations of nursing staff resources for the call centre are entirely fixed. The deficiencies in resources appear to have less immediate consequences as the patients themselves, not bodily present, wait in the cyber-space of the queues. Physically distant their needs are more readily conceptualized and organized within aggregates of data about call volume (the metrics).

In the call centre, it is the metrics that are *exclusively* relied on to establish the calculative formulas that are used to develop nurses' work rosters. The rosters are static and the exact numbers of nurses required are hired (no more). While there is some flexibility for staff illness "extra" nursing staff are not available to cover unexpectedly heavy demand.

Not only is call volume used to determine how many nurse employees are needed but it is also used to determine how shifts are distributed among nurses and how many nurses are needed in the call centre at a given time of the day/week. Nurse4, responding to a question about how decisions are made about how many nurses are working on a given day said:

> They look at the needs...the stats. They work out the shifts according to the numbers when the calls come in, where are the peak volumes. So peak volume is one way that they determine: Okay we need... like they just added a day 6 (hours) shift, they noticed that early in the day, I guess, they were having more calls than they were able to handle so they just started an 8:00 am to 2:00 pm, so a day. This is just new in the last 2 weeks so it is a 6 hours day shift because we have a 6 hours evenings, 8 hours evenings, 4 hours early day, 4 hours late day, days 8:00 am to 4:00 pm, 9:00 am to 5:00 pm, 10:00 am to 6:00 pm, 12 hours day, 12 hours night, 8 hours evenings. I guess the most diversified hours in any place I've worked. There is like 11 shifts here you can work, 8 hours nights. (Nurse4, Formal interview).

Note here that when Nurse4 talks about "the needs" she references "the stats"; this is a different formulation of "the needs" of patients, than those that arise inside the actual work of this nurse. Thus, while using data about call volume to allocate staffing makes a great deal of sense, even though Nurse4 herself understands the rationality of the nurses' roster, the rostering does not reveal the whole story about what is needed to support telenursing. This is a contradictory use of the word "needs". When Nurse4 uses it here she is focused on the needs of the smoothly running organization. Nurse4 further states that:

> So that goes by *peak call volume* they look at the stats and determine: okay we seem to have a lot of hang ups or abandoned calls during this time with this many nurses in, this many calls, we need more staff at this time, (…). (Nurse4, Formal interview; Emphasis added).

Call volume is a key organizer determining how many nurses work in a shift at what time of the day or week. The aggregated statistic of call volume (an unpredictable and after-the-fact calculation) is used to predict and then to stabilize the authorized view of nurses' labour. In actuality, call volume is never stable. Any media story or public health crisis can increase the volume any time of day, night or week. Re-organizing staffing does not address the variability in call volume. It is not a material response to the steadily increasing number of calls and calls waiting. Nor does it respond to the individual sorts of patient needs that arise during high demand times – such as those described by Nurse1. This nurse noted the needs people had during the H1N1 outbreak when the call centre was "the first contact for fear, fear based questions, and anxiety and public scare". An adequate response to a caller's fear is hard to produce within the regulatory framework of standardized call protocols. Human fear (and public education) becomes work that is "squeezed" into a nursing labour framework that is coordinated by 12 minute call benchmarks and pre-determined calculations of call volume and 4 seconds breaks between each call.

5.1.3 Critical Nurses' Work Eclipsed and Delegated to Clerical Workers During H1N1 crisis

As previously discussed, staffing needs in the call centre arises as a problem; as it relates to call volume. Through a variety of managerial technologies, nurses' work is

closely timed and monitored. Production of nursing work for periods of high call volume is seemingly always organized around managerial knowledge related to time and volume and not necessarily around nursing knowledge and patients' needs. The variety of shifts in the call centre previously described by Nurse4, and pre-scheduling nurses during projected periods of high volume, exemplifies how nursing labour is carefully calculated and presumably rationed to the bare minimum required to address predicted volumes. My field work supports this assertion. I rarely observed nurses at work who were not actively engaged with a caller ('production efficiency'). During the scarce periods when call volume was less than the ratio of nurses who were scheduled to work, I observed nurses attempting to consult with one another about how they had responded to a particular call. Inevitably this sort of professional consultation was truncated by a new call coming in. There was no 'down-time' beyond the nurses' scheduled breaks. It is apparent from my data that every hour and every minute is apparently being scrutinized to ensure that the 24 hours coverage responded to standardized knowledge of call volume. Nurse4 stated the following when asked about staffing during the H1N1 call surge:

> What they did is they hired I think it was two women and they sat sort of where the nurses on our side are (…) They were non nurses and they had special programs I think loaded into those computers (…). (Nurse4, Formal interview).

When asked what these two women did, Nurse4 stated:

> They would take the incoming call and they would start the chart for us [the nurses]. So they would get the first name, the last name, the address, the phone number and why they are calling. And so they would start that and then those calls went into a holding area and it would come up on our telephone screen that there was a call that had symptoms that needed to be assessed and then you [the nurse] went into a different window, you [the nurse] went into an *encounter window* and all *the people waiting to talk to a nurse were in there* and you go down and you find that chart, you pull that chart out, you verify the information and go. So they helped with the sort of sorting out the: 'we have a question about

> H1N1' versus 'I have a symptom of concern'. So they helped manage the incoming calls and break it down to the ones that needed to go to a nurse and the ones that did not. (Nurse4, Formal interview; Emphasis added).

Nurses recognize that collecting demographics is not a good use of their time, especially during high volume. It makes sense to nurses to employ clerical workers who start the charts. This is like in emergency rooms (ER) where clerks start the charts and help to manage the long queue to make nurses' dispatch faster.

However, as I described in Chapter 4, there are 3 seconds after the nurse and the caller exchange greetings in which the nurse has to determine whether a call is an emergency or a regular non urgent call prior to the nurse opening the computer program or pulling up a protocol. Those 3 seconds are a very brief critical part of triage. This is how Nurse1 described them:

> I will look at the phone number then I will just listen. Well we have a *format* on how you are supposed to answer the phone, what you are supposed to say, how you are supposed to answer, the order you are supposed to get your information, which is not something necessarily as a nurse on the floor you would do. So the format is to introduce yourself, you know, you give your name, you say you are a nurse, and you have reached *Talk to a Nurse*, 'what is your concern or question?', and the reason for the '*what is your concern or question*' is to determine is this an emergency? Is this something *of urgent nature* and *will you react then in a different manner*? You know get the information on where they are things like that or for instance if this is a suicide call, try to get someone else's attention i.e. your team leader to say like I need help, I need you to call the police while I will keep this person on the phone. (Nurse1, Formal interview; Emphasis added).

Work that happens in this part of the call does not appear on record in the Triage Details Report (Appendix G) that nurses produce. Determining emergency in those 3 seconds, although an instance of nurses' invisible work, is however monitored/evaluated by Team Leaders during monthly call reviews (evaluations) using *Section 2* of the Quality Management Performance Review form (Appendix H). A time stamp is electronically

established and automatically recorded between the times when the call was received and when the nurse opened the computer program to start documenting information from the caller or activating a protocol. Prior to this action just after greetings, the nurse was only using her own knowledge, skills, and experience guiding her actions. The difference between the time the call was received and when the nurse opened the computer program (by a mouse click) establishes how fast the nurse determined emergency and the 3 seconds of invisible nurse work, are within this time frame.

I have identified that nurses listen very carefully at this step of the call process and they pay close attention because they understand that it is a critical part of the call. As Nurse1 states, "will you react then in a different manner" is an indication that it is the nurses' judgment here that directs what is happening. The nurse determines the course of the call from here on, no protocol is activated and there is no text guiding her judgment at this point. If the nurse decides that the call requires EMS she will then collect at least a few demographics such as a phone number and an address only in order to direct the EMS team. Having clerical workers categorizing calls in order to improve efficiencies has immediate consequence to how nursing judgment is utilized during a call. The loss of nurses' capacity to actually listen during that critical part of the call and make urgent decisions, if needed, is significant. Nurse3 described the importance of that fraction of the call when she said:

> (…) I listen to the clues, in the background or listen to the tone of voice perhaps to see, to get a sense of 'they are in pain', somebody will talk differently, or the strength of their voice, or how they are breathing, or it makes almost sense when someone is grimacing (…). (Nurse3, Formal interview).

This nursing expertise is being systematically eclipsed within the social organization of telenursing. Thus it is easy to fold it into efficiencies. The Executive Director absolutely believes that nurses' use of the protocols is what counts as a "good call" stating:

(…) [The nurses] need to ensure that they have *fulfilled their obligations* as *nurses using the protocols* (…). (Executive Director, Formal interview; Emphasis added).

Thus any nursing work prior to the activation of the protocol is dispensable and yet it is this work that is critical to the course the call takes. In a call centre study in England and Quebec (Canada) (Collin-Jacques, 2004; Collin-Jacques & Smith, 2005) nurses reported that protocols did not help them in empowering patients. A Nurse Advisor in the Collin-Jacques and Smith study concurred:

> I am autonomous. We have the protocols, but we have to customise our intervention to provide relevant information, education and advice relevant to the context. We can't read everything . . . sometimes the protocols do not assist us to empower the client. We have to use our expertise and clinical judgment. (Nurse Advisor, Health-Info CLSC B; Collin-Jacques & Smith, 2005, p. 16).

This nurse was unable to read everything from protocols to patients given that protocols were general and not individualized. Instead she [nurse] had to use her expertise and clinical judgment to "customize" her patient care. This example corroborates what my data revealed that nurses had to rely on their clinical expertise mostly at the critical stage of the beginning of the call.

5.2 Management of 'Social Callers' and 'Hang Ups': Implications for Time and Volume.

In chapters 4 and 6, I discuss the time consuming data entry work created for nurses when documenting social callers and hang ups. For nurses, this documentary work is an inexplicable waste of time. They cannot make sense of being tied up with producing a record for a patient they did not actually treat. This makes even less sense to the nurses within the maximum 4 second delay between calls organized by the *ADRTS* designed to pull nurses' attention to the queue. How does this textual work take precedence within a setting so carefully focused on minutes and seconds of the nurses' workday?

5.2.1 Documenting Abandoned Calls

The nurses I spoke to complained about the seemingly useless work of recording abandoned calls. The need for this work process became clear when I talked to the Executive Director who explained how he uses the statistics on abandoned calls—not only as a measure of call volume and organizational goals/commitments but also as an aggregate of all the calls coming into the centre. It is through this calculative work that he is able to demonstrate that the centre needs more resources. Nonetheless for the nurses the time consuming work of generating statistics takes them away from the needs of the callers who are waiting. Moreover the Executive Director reported that "I have a contract to deliver around 150,000 clinical calls. I deliver in excess of a 150,000 clinical calls for which I receive no additional funding" (Executive Director, Formal interview). In the description of his work, the Executive Director stated that exceeding the quotas seldom results in increased funding. It appears that the only way funding is enhanced is through

developing new programming – within the work of establishing new categories and new protocols.

5.2.2 Abandoned Calls: a Different Issue for Nurses than for Managers

Within the organized scarcity of time, the multiple fields and mouse clicks that nurses navigate when callers hang up after the nurse introduces him or herself or; the calls that are 'abandoned' before they are answered seem to take up precious nursing time unnecessarily. As noted by both the Executive Director and the telenurses, hang ups and "abandoned calls" increase when call volume is high, and the additional time required to document – in order to produce the statistics used to determine staffing – does not make sense, especially when there is a long queue of waiting calls.

It is a circular and contradictory dilemma that adds pressure to an already pressured work environment whereby, during the most high intensity periods, callers' waiting time is *increased* by the required work processes. In turn, this leads to even more abandoned calls. Nurses worry that waiting callers' health may be jeopardized when callers wait on the line. For the call centre's Executive Director, hang ups and abandoned calls are a different issue. For the Executive Director accurate documentation related to these missed calls are valuable data and potentially useful to secure more funding. The Executive Director explained how this works. All calls are considered a measure of call volume, call completion and wait time – the key accountability benchmarks that have been established and to which the Executive Director is held. To elaborate about call completion the Executive Director said:

> I think the other key dimension I look at is how long it takes for a call to be completed. And again I don't have hard and fast rules, but what we say is you know given 200,000 clinical calls ... what are the average handling times of these calls? I take a look at how many calls were abandoned. (Executive Director, Formal interview).

Abandoned calls are understood to be a measure of demand for service. Moreover, when the nurses enter data about these aborted calls into the computer software they are captured within the 'total number of calls' ('call completion') one of the key benchmarks used in the reporting mechanisms and (supposedly) implicated in funding bids.

5.2.3 Funded Quotas: Incorporating Bureaucratic Tasks into Nurses' Work

The Executive Director reports on how many calls were completed and how many callers gave up. He stated:

> And we sort of have goals and commitments but, you know, we have to look at them [abandoned calls] in perspective for instance … which means stakeholders accept that, you know, that people are going to wait longer or they may hang up because they aren't providing the funding to adequately address those calls. (Executive Director, Formal interview).

It is clear that a bureaucratic accountability circuit is built into nurses' work to collect data on abandoned calls. Even though, from the nurses' perspective it is not efficient to produce a record for a patient she or he did not speak to. In order to generate these statistics on abandoned calls, nurses' spend time documenting administrative data which takes them away from addressing volume. Paradoxically this slows down the very production line that the abandoned calls are seen to represent. The quote (above) from the Executive Director also reveals that the 'quota' is a significant underestimation of what actually happens. Thus –while the Executive Director and the nurses are held to accountability practices that are generated by the funding arrangements, the funders are

not similarly held accountable to fund the work that is actually being *done*. Nor are they accountable to the professional concerns of nurses whose knowledge is being relied upon to create health care efficiencies and to provide sound advice to people who access healthcare. As mentioned in chapter 1, as well as bridging the health care resource gap for remote geographical areas telenursing is one of the major strategies to alleviate emergency room overcrowding, urban shortages of doctors, and walk-in clinics.

Nurses' "quality" work in the call centre is coordinated by the numbers of calls negotiated in contracts with the funders who fund quotas. This happens within textually mediated work processes that consistently produce problems for nurses who have to handle the current way that 'social calls' and 'hang ups' are organized. Nurses are fully engaged in the bureaucratic work processes that arise; and their nursing knowledge is thoroughly saturated within this dominant bureaucratic knowledge. The computer software coordinates these new 'managerial' responsibilities that nurses produce. A Triage Details Report (Appendix G) has another life after nurses finish data entry and electronically close their encounter with each patient. As in other areas of nursing practice (Rankin & Campbell, (in press)) nurses' computer engagements aligns their work to "regimes of ruling" (George Smith, 1990) both clinically and administratively.

5.2.4 A Construction of Safety

As described earlier in this chapter, *value for service* engendered divergent views among nurses and the Executive Director. For nurses, value of service and the safety that they maintain comes from knowing about a 'good call'. The Executive Director's goal for the call centre is to provide a service to the public according to contracts that are vested

in numbers that originate from the provincial government[7]. The mandate understood bureaucratically is formulated as "safe" care, with safety both produced and represented in the documents that the nurses use and produce. The authorized view of 'quality and safety' of a telenursing call is vested in the *textual processes* embedded in triage, protocols, and dispatch. This administratively authorized construction of safety was emphasized in my interview with the Executive Director when he stressed:

> First and foremost, they (Nurses) should deliver a safe care, they need to begin by *collecting a record*, they need *to triage* as appropriate, (…), *refer them* as appropriate, and again use those strategies to manage callers**.** (Executive Director, Formal interview; Emphasis added).

For nurses, however, their knowledge of safety does not always fit with the manager's formulation of providing safe care. Nurses' experience and judgment requires different types of knowledge -- those acquired skills which support them to listen and to detect what is not obvious. Nurses' knowledgeable handling of each emerging situation, inside any call, is the sine qua non pillar of safety that results in a 'good call'. Even though the protocols are expected to create fullproof assessment, triage and dispatch, the nursing care provided on the telephone *does*, in fact, require subtle "noticing skills" that the protocols cannot capture. For Nurse3, non protocol driven components, what she called "clues", are essential for her to produce what she considered to be safe practice. She stated:

---

[7] At the federal government level, a document from the Canadian Institute for Health Information (CIHI) titled "Comparable Indicators Operational Definitions 2008" detailed how data for these indicators has to be collected. For instance for a call centre an indicator labeled *Proportion of the population reporting contact with a telephone health line or tele-health service* suggests that nurses knowingly or unknowingly participate in collecting this type of data when they are establishing records of callers. This document suggests that the CIHI is the main data repository for this information.

> (…) I listen to the *clues* (...) you just kind of have *to listen for those details*; if someone is smiling you can hear a smile through the phone. So if they are not happy and you know, then you can sense that there is *something that's not right*. (Nurse3, Formal interview; Emphasis added).

For Nurse2 safety is in rephrasing a question or requesting that the ill child be put near the phone when she said:

> (…) if they are trying to describe something and we are not kind of clicking sometimes I have to ask it a different way, if they are trying to describe how a child is sounding, I may get them to put the child on the phone so I can actually listen. See the breathing is an issue I may be able to pick up some things or get them to count their pulse or count their breathing. I have used those techniques to kind of give me some objective data. (Nurse2, Formal interview).

Using their listening skills and other techniques they perfect to learn about a caller nurses find themselves subverting the managerial accountability systems to produce a safe practice. They talk to patients a little longer first to detect or infer that they are safe, instead of immediately opening the computerized protocol as per policy. For instance from a daily activity account Nurse3 was able to gauge how a patient is doing when she said:

> I guess just asking them to describe exactly what they've *done during the day* tells me what their level of illness or pain might be, if they are able to do certain things, you know their perception of how bad it is what is going on with them, whatever it maybe, might be so severe, but *they are calling me from work*, and they are *able to do all their job*. So *it might not be that it's that terrible* if they are able to do their work and *lift all these boxes* and things like that. (Nurse3, Formal interview; Emphasis added).

For this nurse safety is produced when she can distinguish, from the patient's account of events, that a description of a condition matches or does not match, or is congruent or inconsistent with the level of illness described on the phone.

In my interviews with nurses the imperative of safety was *almost always* represented in the nurses' ability to independently assess (to subvert the protocol for 'some minor thing' in order to drill down into the patient's symptoms) *and* to take time. This is in direct contradiction to the authorized view that constructs and assesses safety within systems that scrutinize nurses' close compliance to the protocols and systems designed to reduce the time nurses spend with each caller. The different ways in which nurses actually keep patients safe, described above, rely on nurses' knowledge. They are not directed by the managerialized protocols of the call centre. I do not mean to suggest that protocols are not useful, or that they should be abandoned. Rather, I am showing how they *actually work* and I am suggesting that the systems of scrutiny that hold nurses to the ruling relation of the protocols are inherently flawed. The sense of security in the protocols is a misplaced trust, a folly, in-so-far that it is designed to overrule the skill, experience, and individual judgment of nurses. What I am illustrating here is that, for nurses, safe practice is much more complex than the administrative formulation that is focused on fear of litigation (discussed in chapter 4) that is passed on to nurses. In developing protocols that address the rare situation when a nurses' judgment may be impaired, all nursing judgment becomes shackled.

5.3 The Text-Work-Text Sequence for the Executive Director

'Documentary realities' are created using texts. In turn, these texts organize the work sequences in which the person creating these realities is involved in – sequences of text-work-text produce the selective and abstracted "facts" that become the authorized knowledge about things happening *and* the material world in which people's work

activities can be empirically described. Text-work-text sequences are ubiquitous in call centre work. In the introductory chapters I detailed telenurses who were fully engaged in the text-work-text sequences that the *All-Digital Recording Telephone System (ADRTS)* and the protocols established. In this chapter I turn attention to the text-work-text sequences of the Executive Director (ED) (Figure 9) in order to trace the ruling relations into the work processes going on that are distant from the dailiness of nurses' telephone answering work.

One of the key texts produced by the nurses that are used by the Executive Director (ED) is the Triage Details Report (TDR) (Appendix G). The ED accesses these reports which he aggregates and uses to secure funding. He is engaged in the work of 'mining' the text in order to establish the accountability systems to which the nurses are held (proper use of the protocols and dispatch directions). He also uses them to develop other "facts" about telephone nursing and to report these facts to funders either weekly, monthly, or annually. In so doing he is activating the TDR within: "a text in a sequence of action". In terms of my analysis I am interested in "looking for how it coordinates the work of those involved and how it ties that work sequence into the higher levels of institutional controls" (D. Smith, personal communication, June 15, 2012).

The Executive Director's report to funders produces a ruling *textual reality – of the call centre*. It is a documentary product that is representative of actualities that are 'written up' (Darville, 1995, p. 254). Once something is written up or worked up into a text, it becomes a fact. That becomes a textual reality wherein nothing but the textually selected relevance is seen or be made visible. Smith suggests that:

> Aspects of actualities are selected for attention, others are neglected or excluded. People's actualities have to be fitted to the categories and concepts of the institutional discourse ... and articulated to institutional courses or sequences of action. (D. Smith, Personal communication, June 15, 2012).

I have described how nurses electronically fill in the protocols flipping through the call. I have also interviewed nurses whereby they offered accounts about what they are thinking and how they respond. However in the case of the ED's work, the TDR becomes the sum total of "what happened"; whatever has been recorded in that call become the "facts" (the textual reality). Anything else that happened such as the nurses' thinking or judgment is not visible in this official account of the nurses' work. The Triage Details Report (Appendix G) is summarized by the ED in his reports. Here they are worked into another level of abstraction: the "key dimensions" (Executive Director, Formal interview) cited earlier in this chapter that become the focus of his managerial attention. These key dimensions include: volume of call; length of call completion; quality management scores; wait time; complaints and compliments; employee satisfaction-retention, and stake holder input. The ED generates a report to the funders that includes all the above 'facts'; that is the culmination of the ED's text-work-text sequence. The 'report' then becomes the work of somebody else, presumably a health ministry bureaucrat who likely summarizes the report into other structures that are at play in the broad healthcare accountability circuits. Whether his report results in renewal of funding, or new categories, or contracts is up to these distant decision makers.

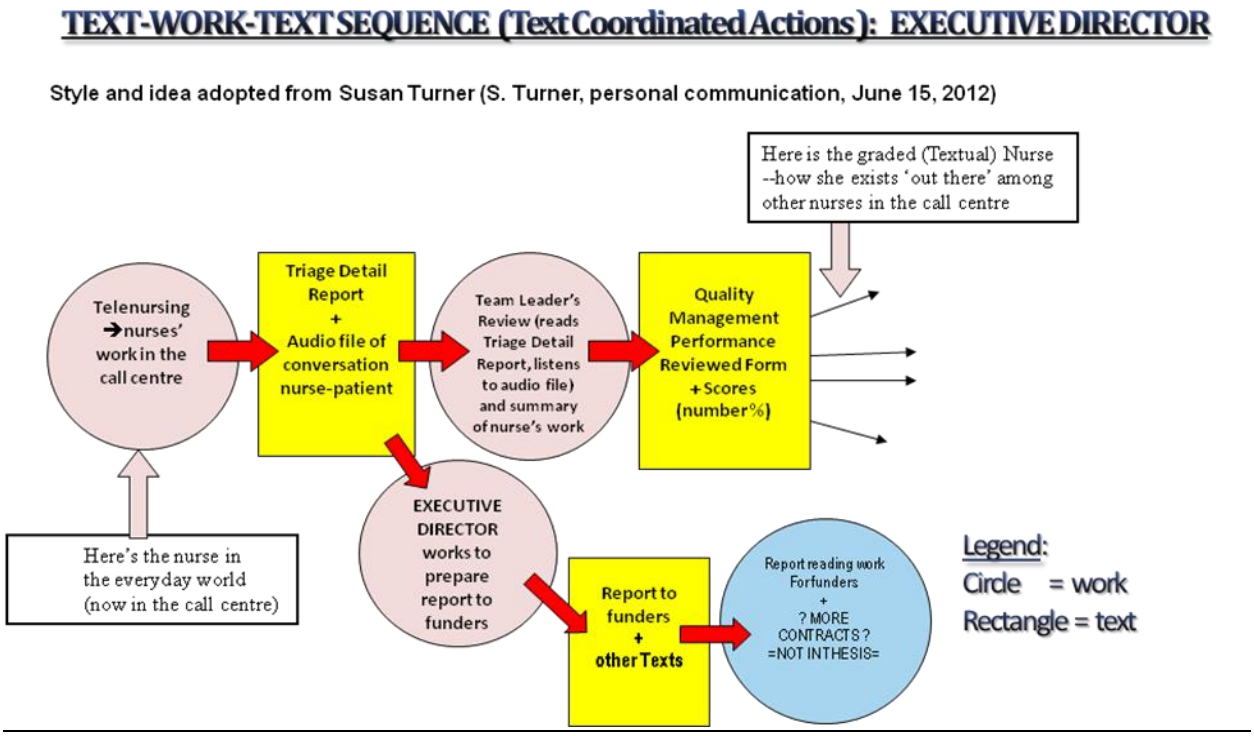


Figure 9: The text-work-text sequence for the Executive Director (Adapted from Susan Turner, personal communication, June 15, 2012).

5.3.1 Textual Reality of Performance: Evaluation Scores

Another textual reality the Executive Director produces for funders is linked into metrics of quality and safety. Quality and safety rely, at the outset, on the performances of nurses as they activate the protocols and contracts. Calls processed by nurses are used to obtain 'quality management scores' that the Executive Director explained as follows:

> (…) that is relatively new for us but we do have a quality management tool, we evaluate many calls in the nursing side (…) and we haven't done a lot of work yet on bench marking but are starting to say okay what are those scores' mean, and what do they reflect? And so we can use that individually to say, you know Edith you scored 80% on your calls and other nurses scored 95% that would tell me something. But then we can also take a look at them by service. '*Talk to a Nurse'* scored 93%, *Breastfeeding* scored 87% or whatever and we can begin to make

> some inferences around that. (Executive Director, Formal interview; Emphasis added).

Nurses told me that these scores are a product of the Quality Management Performance Review Form (QMPR) (Appendix H) that is an approach to scrutinizing how well nurses followed call processing instructions, including collecting the statistical data for managerial purposes.

This QMPR is a particular formulation of quality that does not precisely match how nurses understand quality. For nurses, a low score on a call does not translate in 'bad care' provided to patients/callers. For managers however, a low score is a gauge to ascertain that nurses are not doing what he wants them to do, which, as described above, is a very selective view of patient care/advice nurses provide. Nonetheless since it is '*written up*' in a text it is *what counts*. When asked about what she gathers for statistical purposes, Nurse1 said:

> (…) 'how did you hear about us, what would you have done if you had not called, would you have stayed at home?' Those again are, what is another word to use, logistical questions that we have to ask. There is a certain business component set into the program where certain questions, certain formats have to be followed for business purposes and statistical gathering of information. So what would you have done if you had not called? … If telehealth did not exist what would you had done? (…) another good example: how did you hear about us? Did you hear about us through the media, did you hear about us through the magnet we send, did you hear about us through the mail, did you hear about us through your doctor's office?' (Nurse1, Formal interview).

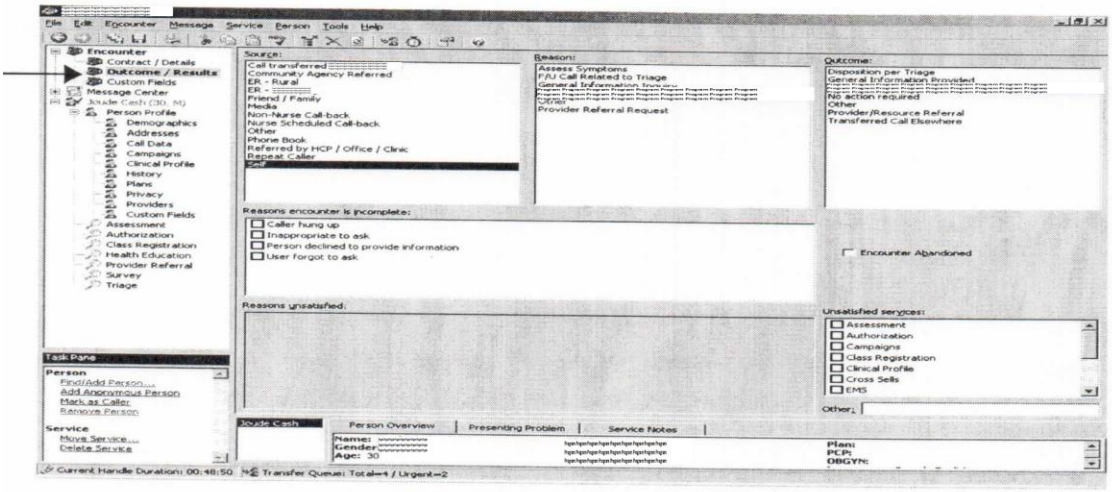
For this nurse, asking the patient how did she/he hear about the service (Figure 10) is a statistical question, a waste of her patient care time.

Encounter Outcome/Results

Right before you exit from the call, we require the completion of the Outcome/Results fields.

Source – source of the call
Reason – reason for the call
Outcome – end result of the call

On the navigation tree select Outcome/Results. The three columns provide a summary of call activity. Select the most applicable option from each column.



Go to Source, Reason and Outcome and select the most applicable responses.
Save Record.

Figure 10: How did you hear about us? (Texts from training manual)

However, if she neglects to ask this question she would "lose" a mark on the QMPR. In reality though, her posing this question does not reflect the quality of nursing care she provides to her patients. For the Executive Director, however, these scores are a measure of the quality of patient care and also a measure of compliance. Compliance is one of the features that funders are interested in. Nurses told me that in the event their call scores are low, they are sent back to training or followed around by a Team Leaders in the call

centre. Their calls are more closely monitored until their scores reflect "improvement" measured by whether or not they collect all the statistical data that is necessary to manage (rule) the telenursing operation in this performance oriented environment.

5.3.2 Textual Reality of Access: Service Time

Another step in the text-work-text process for the Executive Director is a process that involves him in looking at how many people accessed the service and the time it took for each patient to speak to a nurse after they have connected into the *ADRTS*. When asked about what he looks at specifically, the Executive Director said:

> This centre was built around access and improving access for [*The people of this Province*] and so a lot of emphasis is placed on how long people wait to speak to a nurse. (Executive Director, Formal interview).

As previously discussed, access to health care is currently being framed within the dominant discourse of "wait times" which, in the case of telenursing are affected by queues and hang ups that the nurses deal with daily. I have shown how this formulation of waiting becomes a vicious circle for nurses whose work is constantly being pressured within administrative attention to the numbers of calls funded and actual number of call processed in the call centre. The Executive Director's version of access relies exclusively on the metrics of numbers. It is not representative of the complexities of the actual nursing services provided, however, these aggregates are what "counts" and what link him with the accountability systems that he is required to report within this version of service.

5.3.3 Textual Reality of Satisfaction: Inside the Limits of Public Expectations from Call Centre

To produce a textual reality of users' satisfaction with the service provided by the call centre, the Executive Director looks at "complaints and compliments". The Executive Director uses these testimonies to make sense not only of what the public expects and has received from the call centre, but also of what is not delivered or can potentially be delivered. Compliments are self initiated by callers who call back to the call centre to voice a compliment. Unlike the patient satisfaction surveys that are being employed to measure satisfaction with care received during a hospitalization due to an illness or injury (Rankin, 2003) satisfaction and compliments in the call centre are linked into the "business practices" and "scope of service" offered by the call centre. Currently a document from the CIHI is changing how this data is collected as the call centre moves towards a more formal accounting of satisfaction in telehealth (CIHI, 2008). In elaborating about the content of complaints and compliments, the Executive Director explained that:

> Complaints are often very good because they tell us a bit of a story, you know, we don't receive a lot of them -- seriously maybe 20 or 25 a year on 200,000 calls I don't think that is a lot, but a lot of them really give us some sense of business practices or systematic issues that we can resolve so I really use those as sort of a spring board for learning. Now, you know what? To be very fair a lot of our complaints are things like you know Mary refused to diagnose my cancer and many actually, I would say about half the complaints or a third maybe is a better word; a third of complaints relate to stuff where we don't have business delivery, (…) they are outside of our scope of service. You know people say well he couldn't get me into a doctor. Well we'll never get you into a doctor because that is not the scope of our service. (Executive Director, Formal interview).

Satisfaction of patient in health care delivery was part of what I uncovered as nurses reported that patients who called back often reported not being able to generate an

appointment with their physicians when nurses advised them to see their physician within 24 hours. The Executive Director was aware of this problem. Towards the end of my data collection nurses told me that there is a new contract being developed that would supplement the "on call" work of doctors. Doctors will forward calls to the call centre as an after hour's service.

Nurse1 explained this coming contract by saying:

> (…) we are actually starting a new program ...we are going to be affiliated with physicians offices. Instead of the physicians being on call, their on call beepers are going to be directed to us and we are going to extrapolate the information and see if these physicians' patients need to be seen in the ER, they need to be you know call a physician, make your appointment in 24 to 48 hours… So it hasn't really hit the floor yet but it's up and coming. (Nurse1, Formal interview).

Many of the current health service problems facing Canadians are a result of cutbacks – the "new and improved" telenursing service will be seen to be an "addition" of services – rather than the stop-gap measure to respond to thoroughly eroded health infrastructures.

5.3.4 Textual Reality of Relevance of Service: a Hidden Mandate to Lower Health Care Costs

In the final text-work-text process I analyze here, the Executive Director produces a textual reality (a final report) (Figure 11) which is presented to funders to defend the economic advantages of the telenursing 'service'. To do this, the Executive Director seeks stake holder input. When asked what this was he said:

> And you know it is interesting right 7 years ago, years ago I would suggest to you that the biggest complaint is that why do we have '*Talk to a Nurse*' because we just send everyone to the emergency room anyway. And you know yourself [writer] having taken calls for 2 or 3 years that we probably only send a quarter of our people to emergency rooms and so I think you know, building capacity and understanding of the service and where we can help and where we can't help, I

> think it is a big one. I think for instance things like H1N1, things like SARS, things like West Nile Virus have really demonstrated our value. (Executive Director, Formal interview).

All the nurses I talked to said that if they judge that a patient needs to be sent to the emergency they will say so, even if the protocol suggests that the person should stay home or see a physician at a later date. However, the call centre's fundamental mandate is to keep patients away from emergency rooms, doctors' offices and walk-in clinics. Telenurses are the "buffer" for an overly strained system. When telenurses fail to deflect patients from the emergency room they come under criticism from the general public and from emergency room nurses who understand that the telenurses inappropriately refer patients to the emergency room.

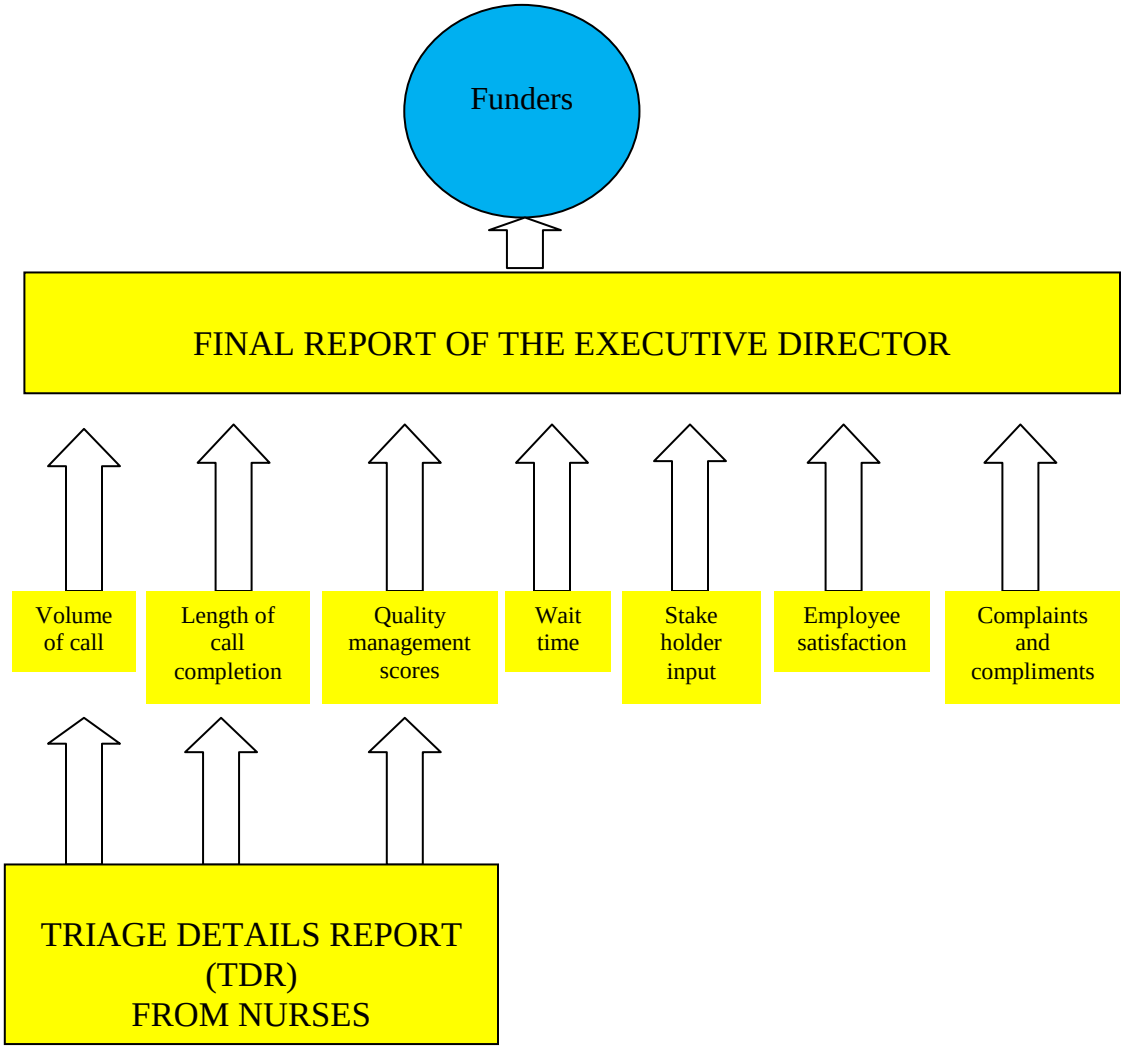


Figure 11: Textual realities of the call centre 'written up' (Darville, 1995) by the Executive Director.

In an anecdotal conversation I had with two new parents of twin boys, they rolled their eyes when they said:

> We've called the telenursing service about four times and *every time they sent us trucking off to emergency*. We'd have the sick twin and bundle up the other one and off we'd go. There was the time when Harry had not peed. As soon as we got to emergency and the nurse was checking him out, she had his diaper off and he

> just let go – all over her, all over the table, all over the floor. We felt really foolish. (Informal conversation; Emphasis added).

I argue that telenurses are placed in a "no win" situation. On the one hand they are systematically prevented from using their judgment and experience. On the other hand they are held accountable for calls that may get misdirected and result in morbidity or mortality. Despite these built in tensions all the nurses I interviewed told me that they do not hesitate to advocate and err on the side of caution by advising patients to report to the ER, or to seek medical attention sooner than later.

Chapter Six: **OVERRULING KIND AND COMPASSIONATE RESPONSES**

In this chapter, I discuss patients who call with physical symptoms who are triaged and dispatched. These callers are constructed as 'worthy of nurses' attention and care patients'. I also discuss callers with mental health issues referred to as 'social callers' including 'frequent callers, schizophrenics, etc.' who are constructed by nurses as 'not worthy of nurses' attention and care patients'. I conclude with the Executive Director's version of 'social callers' and his account of the lack of funding/a program to accommodate them. Nurses' views of these patients are not uncontaminated and become the stigmatizing dominant view in the call centre that, my data shows, affects their compassionate responses.

6.1 Patients with Physical Symptoms

As previously discussed in chapter 1, telenursing is funded through 'pilot projects' that later acquire general permanent health care funding as 'contracts' in the call centre (Executive Director, Formal interview). These contracts are based in a medical model that relies almost entirely on physical symptoms. Calls that come to the call centre have to be categorized and fit into the various categories of contracts by nurses.

Patients who call with physical symptoms whose case matches a funded category are easily dispatched. They fit the services of the call centre.

6.1.1 Call Received, Assigned to Contract and Dispatched

In the course of data collection, all nurses I spoke to reported that during orientation they are told that the call centre is operated in a symptom based manner

(funding allocation). This arrangement does not go without some difficulties for nursing work. The following is Nurse1's account of how she views the call centre's system:

> Well the way the program is set up it is symptom based. So anyone who has a symptom, you have to triage these symptoms. So if a call comes in, 'was at the doctor', was told they have an ear infection is on an antibiotic, they are phoning you, they say they are dizzy. *As a nurse you know an ear infection causes dizziness*! However they are saying the dizziness is new, you know the doctor wasn't aware, it is a new symptom, nurse's experience tells, you know, probably, but once again you couldn't find something to back up what you are saying, a book which I kind of feel everything should be in your computer, you shouldn't have to go look for a book but you need to find a resource to be able to say that right? So its symptoms based. Caller has a new symptom you have to triage them (…) any symptom has to be triaged that's inculcated in our head repeatedly. (Nurse1, Formal interview; Emphasis added).

This nurse is facing the challenge (discussed in chapter 2) about the requirement to back up any information that they pass on to patients. The nurse, from her experience, knows the advice that is needed, but the system does not allow her to share this knowledge. She has to follow the triage and dispatch path for this patient. It is apparent that this caller would have benefited from hearing this nurses' advice about ear infection and dizziness. The circuitous approach that this nurse was required to take does not make sense, even in relation to system efficiencies.

The following is Nurse2's account of how she processed a call with a physical symptom as she follows both her 'knowing how' to do telenursing work and the call centre's call processing requirements:

> (…) Well I guess first of all, you try to give the person to say: 'I have abdominal pain' or whatever. So you are trying first of all to determine again is this an *emergency type of situation*? Is it something that I can take a lot of time to discuss or is it something more concerning? So that is the first thing. I am going to determine if it's something that's absolutely urgent and I need to get on this and get them into the emergency services right away. (Nurse2, Formal interview; Emphasis added).

After Nurse2 determines that the call does not meet the criteria to be dispatched to the emergency room, she moves to the work of identifying the patient's symptoms. She weighs scenarios in light of the patient's condition and follows the protocol:

> (…) go into detail when they start off telling me what their *symptoms* are, I will try to expand on that, trying to get more specific information: 'how long have you had it? How bad is the pain? Where is the pain? What other symptoms do you have? Have you ever had this before?' And going through just all of the spectrum and *usually in my head* what I am trying to figure out is what the worse possible scenario for this particular symptom is. And that kind of helps me in my assessment too to figure out okay I am trying to *rule out things in my head*, I am kind of thinking ahead of what could this be, although I am not really giving a diagnosis, I am wanting to rule out some things in my own head. Once I have done that assessment, then I am also going to go through their *health history* figure out okay: are they diabetic? Are they on medications that could be contributing to the problem? *Past medical history, allergies*, and those kinds of things, because if I give care advice, I don't want to be me telling them to take something that they are allergic to or they can't do. (…) then you are actually going through the protocol which is, I guess more assessment, but a lot of those questions I may have already asked, but this is in more detail and that's what gives me my *disposition* in terms of whichever answer they give us as *positive* [YES] that's going to be their disposition. Once the disposition is arrived at, and then there is care advice, often I would say: 'okay you have to get to emergency, how are you going to get there? Who is going to take you? (Nurse2, Formal interview, emphasis added).

After the nurse has a yes response from the patient to one of the questions she asks during triage a *disposition* has been reached and the dispatch step of the call activated. In the midst of communicating this disposition, Nurse1 sometimes needs to reassure the caller in her own ways and said:

> Then I will follow the format, so you will do the Q and A, you ask the questions, you will find the information, distribute the information, tell the caller what they need to do, see a physician, stay home, reassure them, because a lot of clients don't want to stay home, they think they need to go to the emergency room, they think they need to be seen, they are anxious, they are upset and you have to reassure them: 'it's fine to stay home, if you have concerns, you can call back, we can reassess you at any time or you do need to see someone in a certain amount of time'. Most of them don't have a family doctor so where do you direct them to go? (Nurse1, Formal interview).

This telenurse's reassuring work does not end up in the final Triage TDR (Appendix G), the official textual print out record of the call. It is yet another instance of nurses' work that goes unacknowledged. The telenurse is puzzled when the call process asks her to dispatch a patient to a service that the patient cannot access.

Patients with symptoms are dispatched to resources or referral points in the community, only some of which are available 24 hours a day 7 days a week. I contrast that availability of service for this category of callers to another category for whom, if present, these services are only open a few hours a day, and a certain days in a week.

6.2 Rationing Time: Ruling Out Particular People

There are a number of patients whose reasons for calling frustrated nurses. My observations and interviews with nurses noted that certain types of patients were processed differently. Patients who called frequently in most cases had some form of mental illness and were labelled as 'frequent callers' by nurses. Nurses reported that these callers tend to 'want to chat, visit with nurses, tell their daily stories about their cats, dogs, medications, foods, where they went, etc.' All the 'talk' these callers wanted to do with nurses were activities referred to by them (nurses) as "socializing". All callers, including frequent callers, were assessed for physical symptoms first when they called the *Talk to a Nurse* line. In the absence of physical symptoms, some callers remained on the telephone wanting to 'socialize'. Nurses then had one goal which was to get them off the phone as quickly as possible. Therefore, the caller with mental illness was constructed

as not worthy of nurses' attention and care. Data will reveal that nurses used language that suggested that they have been organized to see these patients as not worth their time.

The call centre contracts are focused on physical symptoms to be assessed (Marsden, 2000), and this is how nurses categorize callers by selecting the appropriate box each symptom fits. For callers who have physical symptoms with concomitant funding envelopes, the data I amassed and have been detailing here demonstrates that nurses process them with complete care. However, when it came to mental health calls, in the absence of physical symptoms as defined by the contracts, nurses encounter difficulties in the triage, advice and dispatch process that characterizes input, throughput, and output of telenursing. Allocating patients to categories and dispatching them becomes much more challenging. People experiencing psychosocial health related issues had neither funding nor referral point in the community became a frustration.

6.2.1 Patient with no Physical Symptoms: Categorized as 'Hang up Caller', 'Social Caller', and 'Schizophrenics'

Nurse5, in the following example, describes the work processes she engages in when this informal 'social caller' category is activated:

> I will say, so and so why are you calling today? Are you feeling unwell or what? Could you tell me? And then she stops her socializing and she says: 'I cut my nail finger'. I say which hand? And I try to be very professional just zoom in on the problem, okay and I try and go through my assessment, but sometimes she tries to interrupt and start the socialization again. So I will say so and so, tell me more about the cut on your left hand that you stated it happened last night at whatever time. How does it look to you because I can't see it? And I just keep refocusing, refocusing and she tries her darndest to socialize, and I would say well okay now, and I will go through the whole process and this is the plan, you need to be going off to see the doctor. Are you going to see the doctor today? She will say, oh no I always go on Tuesdays, and then I will say, according to the recommendation and

> what you stated today, it's recommended to see a doctor today. 'Okay well we will see'. So I put her as undecided and that she only sees a doctor on Tuesdays. And then she again tries to socialize. And I'd say well thank you very much for calling and please remember to see the doctor. Bye bye. And that's it. Sometimes she hangs up before I do, but I end the call. (Nurse5, Formal interview).

What this demonstrated is how Nurse5 is trying to fit this patient in a symptoms box when her needs are just to talk to someone. This particular patient is "known" to the nurse not only from interactions they have had with her in the past, but also from the history of previous calls that is on record. This nurse, reading from the history of the call that the previous nurse processed, follows the practices of the previous calls. The caller is given a pre-set dispatch that to her does not fit her current needs.

Taken at face value, this conversation can be seen as absolutely bizarre. Why would an experienced nurse, skilled in therapeutic conversation and acting within a nursing mandate of compassion and dignity responds in such a ludicrous way to a woman's report that she 'cut my nail finger'? My interview with Nurse5 described the patient as "socializing", talk that was *not* about the wound. Nurse5 reported that this caller kept changing subjects throughout the call. She would start with a story about cutting her finger, then moves to shopping, then states that the finger does not hurt anymore, and then states that she was at her family physician the other day. Nurse5's advice to see the doctor and the recording of the advice in the dispatch record, ("thank you very much and please remember to see your doctor") seems somewhat inappropriate. As well, it seems from this data excerpt that the caller is well known to this nurse – "sometimes she hangs up before I do, but I end the call". How is this nurse organized to produce such a disingenuous practice?

Nurses report that some calls are deemed inappropriate for them to respond to, especially if they are aware that there are several queued calls. The nurses become adept at screening what they refer to as "social" calls. These are difficult calls to navigate within the processing and legal requirements that nurses are expected to adhere to. It would not be acceptable for a nurse simply to say something kind and supportive with a gentle indication that she cannot stop her work to "chat". Perhaps directing the caller to other community services would be more appropriate and give nurses that needed relief. However, for some callers, the telenurses seem to be the last resort. To illustrate this dilemma Nurse1 stated:

> (…) we have a lot of social callers; we have a lot of mental health clients, and a lot of our mental health clients have been banned from their social supports (…). (Nurse1, Formal interview).

Nurse1 adds that in their work as telenurses they are *not allowed to tell anyone not to call* (the call centre is seen as a part of the Canadian 'universal health care' system) as it will be confirmed later in this chapter in the Executive Director's interview account.

6.2.1.1 Anonymous Callers and People with Serious illness

People who experience mental illness or are in a crisis related to their mental health create very specific problems for processing the call. In their work place orientation, new telenurses are told to open a new encounter. Sometimes nurses choose to talk to the patient first instead immediately opening the computer program. The nurses explained that this is common for suicide callers. This is because unlike the other calls that nurses field – in the instance of a suicide caller nurses are required to keep the caller on the line to allow the team leader to listen in to the call, contact the police, and send the

EMS team (or the crisis stabilization unit) to the caller's location if necessary as explains Nurse1:

> (…) if this is a suicide call, try to get someone else's attention such as your team leader to say like I need help, I need you to call the police while I'll keep this person on the phone. So you automatically look on the phone and for me, I automatically start generating my programs so open up the program depending on the nature of the call for 90% of the calls they aren't emergencies. You know get the person's information: verify her/his chart with her/his name, birthday, address, if it is not in the system, we will generate a new chart and then I will get into a format where it is a Q&A [*Question and Answer*] and I am taking the information so I am listening, I am talking and I am typing (…). (Nurse1, Formal interview; Emphasis added).

Frequently callers who experience mental health crisis request to be anonymous and do not provide any demographics. This makes it even harder for nurses to do their telephone triage work while respecting all its processing steps.

In elaborating on her experience with people with mental illness, Nurse1 stated:

> So there is repetitivism in callers, we frequently have a caller that will phone and hung up, and phone and hung up, and she is looking for that nurse that she wants to speak to, who is going to take the time to be her social support, which is not what the service was set up for, but *sometimes that is difficult*. We are not a *social support service*, but we are there to deal with crisis, *immediate crisis*, suicide attempts, suicidal thoughts but we are not a social service, we are not a counselling service. So there are a lot of mental health people out there, that use the line as a counselling service (…). (Nurse1, Formal interview; Emphasis added).

The nurses understand that people experiencing mental illness may indeed be in crisis. They may be considering actions that place themselves (or others) at risk. There is a protocol for this; however, making the determination about whether *this* call is an instance of risk is not always easy. Moreover, *as soon as the caller is categorized as no risk* – and the category "social caller" is invoked, then the nursing goal is to *exit* the call as quickly as possible. This produces contradictions. On the one hand the goal is to keep

the patient on the line, and the other is to get the patient off the line. The judgment about being a "social support service" as opposed to responding to a "crisis, immediate crisis" emerges, as this nurse reports "sometimes that is difficult". The knowledge and time that it requires to respond to callers with mental illnesses was evident in all of my observations and interviews. And yet, as this nurse describes, this work is not *officially* a part of the job. The lack of allocated funding for people with mental illness in telenursing work is an ongoing stress for both nurses in direct practice and their managers.

Nurse1 concluded that these calls where the caller simply wanted to socialize verbalized vague symptoms to keep the nurse on the phone and said:

> (…) a lot of times callers just want to call and tell a story...so they just want you to sit and listen. So an example will be: you know a week ago I had nausea, vomiting and diarrhoea, I had it 17 times on Monday and then on Tuesday it was better. (…) you can't direct them. When you can't direct the call it is very difficult. You ask a specific question like: do you have a sore throat? I am nauseated! *Do you have a sore throat*? I am vomiting. Do you have a sore throat? My ears hurt. And those are the answers you are getting. And you could say do you have a sore throat 17 times and they will not answer the question. So at a certain point *you start to feel manipulated*. And you just keep repeating the question and redirect the caller (…). (Nurse1, Formal interview; Emphasis added).

What Nurse1 described is this account of a social caller who provided vague answers in order to stay longer on the line and accomplish a goal of using the line for socializing. This caller's need for service is not what this nurse appraised as a legitimate need. She made this appraisal within a consideration of how the call centre organizes her to work. How does it happen that a nurse begins to "feel manipulated" – is it because her work organization does not allow her to respond in a personal way to a vulnerable caller? Is it because her "dispatch" of this call will only be judged on whether /how she responded to physical risks? Is it because the call is being timed? Is it is because there are so many

visible prompts related to the queue and the emphasis on "hang-ups" and abandoned calls? Is it because this nurse will only have 4 seconds to refocus her nursing expertise between each patient? All these conditions contribute to this nurse understanding feeling manipulated and her unhelpful repeating of the same question that engages her in a cold conflict instead of a warm kindness.

This quote also brings to light the fact that patients who call with no physical symptoms are processed differently in the call centre. Nurses are constantly looking for those physical symptoms that *fit the protocols*, every call. Nurse1 is repeating the same question to get from one point to the other *in the protocol*. Most of the time these patients are repeat callers who have no other community support to turn to in that moment of their experience of their psychosocial needs. This is how Nurse1 described a typical conversation with a caller such as this:

> (…) 'my physician says that I can only come with one complaint, he does not want to see me for a month, mobile crisis said that they are not coming anymore, my psychiatrist doesn't want to see me anymore' (…), and we aren't allowed to tell anyone not to call. So we become their social support. We become like a counselling line and that's not what the service was set up for. (Nurse1, Formal interview).

When Nurse1 said "(…) that's not what the service was set up for (…)" she speaking with a managerial understanding about 'service'.

People with mental illness may go into crisis and these crises are not confined to "office hours". This caller's physician has limited how much service (one complaint per visit) this patient can request per visit. Similarly her/his psychiatrist and the mobile crisis service have severely limited their services. These are the sorts of people the restructured healthcare system are failing (Jacob *et al.*, 2007).

In illustrating another account from another mental health caller who did not know where to go or whom to call Nurse1 stated how the caller described:

> 'I am banned from mobile crisis, I am banned from urgent care, I am banned from the ERs[emergency rooms], but I can call you 17 times a day and talk to a different nurse for 15 minutes 17 times a day'. (Nurse1, Formal interview; Emphasis added).

Nurse1 was concerned as she did some calculations and found out that the total time this caller took in her day was 4 hours and 25 minutes (more than half of an 8 hours registered nurse shift). She concluded that most of the time when this patient called, it was just to 'check in' with her and no particular physical symptom was voiced. Due to the social organization of their work, nurses have learned to see patients with certain types of mental illness as not worth their time. As well, it would seem as though even though a single caller with a mental illness who is absorbing 4 hours and 25 minutes of nursing time on a single shift is *also* not getting a skilled or helpful nursing response. Instead, both nurses and patients are caught in bizarre responses that result in a nurse "directing them" and repeating over and over "Do you have a sore throat?" as per the interview excerpt with Nurse1 on the previous 2 pages.

While the time required to adequately respond to a person with a mental illness would appear to be the rationale for why this service is *not* an appropriate resource to support mental health, this argument of time is used selectively. For example, a 30 to 45 minutes breastfeeding call (supported by a funded contract) is not questioned.

Other nurses such as Nurse4 have a different experience with these callers with no physical symptoms. According to Nurse4 they become 'disruptive':

> Well, the one, I think probably the most annoying frequent caller we have, only wants to speak to one or two nurses and will phone 10, 12, 14 times a shift and

> will shop for the right voice, and that is extremely annoying and we did start tracking that person under the name "*hang up caller*" and when this person calls it always comes up "*740*" there is never any noise in the background because she is listening for who you are and sometimes her favorite nurse she will actually hang up on her because she doesn't recognize them, and a lot of us won't give our name anymore on the "740" we will say "you are speaking with a registered nurse" and there is always a pause while she is processing: is this the voice and then she'd just hang up. So, those ones are very frustrating. I get very frustrated when I get 7 to 8 hang up calls and often and you can hear them going right around the call centre bing bing bing bing... *and it gets very frustrating* while we are wasting our time having to chart each call while there is other people waiting who *legitimately* have symptoms of concern rather than somebody who wants to visit with us. Yes she obviously has mental issues but we are not able to help her. (Nurse4, Formal interview; Emphasis added).

This nurse is aware that she is "not helping" – and that is "frustrating" but the way she describes the frustration is almost completely linked to the "game playing" that the nurses are pulled into in order to "manage" this patient. The nurses' (socially organized) responses to handle and "manage" this patient preclude their capacity to move out of the frustration loop they are being pulled into. In the same interview, Nurse4 elaborated that there maybe someone waiting in line with a heart attack that she may not get to in time while continuously attending to this caller who only wants to visit nurses on the line. Often these are people who experience various forms of mental illness such as borderline personality disorder. This nurse and many others in the call centre have labeled this caller as the 'hang up caller' in their broader category of 'frequent callers'. Nurses had even found ways of knowing that this caller is the one on the line by looking at their telephone screens' display and reading the call id '740' which, as stated in chapter 2 and 5 shows up when someone blocks their number and wish to remain anonymous. Nurse4 also did calculations and told me that it is almost *an hour of nurses' time* that is 'wasted' when dealing with this caller in one shift. The nurse understands that callers with no physical

symptoms are not *legitimately* worth her time or care. Nurses' view of mental health callers has been tailored to the call centre's goal of serving caller's with symptoms only. Later Nurse4 stated that a manager had tracked down this caller and spoken to her. She said:

> The caller we have that constantly hangs up has been called by management many times and just continues and she is *shameless* in that she will say: 'of course I hang up on you; I know who I want to talk to'. And she makes no apology for it, and I think she really doesn't understand the amount of nursing time that is *wasted* per shift, never mind a 24 hour day, with her. That is very frustrating for a lot of us. (Nurse4, Formal interview; Emphasis added).

These quotes demonstrate that nurses have fully adopted the symptoms based operations of the call centre which is triage and dispatch. Frustration builds in the call centre over these callers as nurses try to triage and dispatch them to resources.

Nurse4 also provided a different account of her response to a person who is known to experience a certain type of mental illness. She said:

> The other frequent callers: we have 2 *schizophrenics*[8] that can say 'Hello', we know who they are, and I don't mind that because I am able to have a discussion: we will say, 'you are just phoning to check in with us?' 'Yes', 'okay so how are things going today? Have you eaten? Are you doing okay?' And you can say: 'You know we are really busy right now, okay I will let you go!' That I don't mind because I think we are still being useful in their life and we are serving a purpose of keeping them functioning in their community. And I still think that is a very valid thing to do. (Nurse4, Formal interview; Emphasis added).

For these two callers, the nurses subvert the protocol and respond therapeutically. I noticed that this response was made possible because it was ultimately linked to the "dispatch" and time. This account came to me as a contradiction since on one hand the

[8] This is the conception of nurses and this is how the situation has shaped how they think. I would not necessarily, standing outside of this, refer to people as schizophrenics and I recognize that most people with mental illness would not call this line as a 'social caller', however this is how the work constrains and work processes shape how the nurses conceptualize and refer to the mental health clients.

nurse provided service to someone who did not verbalize physical symptoms and on the other, knowing that the caller suffers from a certain type of mental illness, did not handle the call as she usually handled different types of mental health calls.

During my observation in the call centre, I only listened to a one way conversation of nurses talking to patients. This is how this research was designed. Due to this ethical implication, I did not hear what the patient said to the nurse but from time to time, the nurse could pause and explain something interesting that just happened in her last call for my field notes. During a day shift of 'buddying' with Nurse3, she explained a situation to me and I wrote the following note:

> Nurse3 finished a call about a caller who had an accident at a spiritual ceremony. The caller was hung up by ropes attached to wooden pegs the size of a pencil. The rope attached to one of the pegs gave in and the caller was hanging with one peg that also gave in breaking her skin. Now the sutures at the wound site were the concerns of the caller. (Field notes, August 29, 2010).

A prudent nurse would likely directly inquire about the broader health issues and risks that this caller maybe engaged in. Without stigmatizing or judging – a nurse experienced in the broad human experience may gently invite this caller to describe the 'accident' in more detail – and possibly use therapeutic questions to support this caller's ongoing safety. None of this potential 'health work' is possible within the standardized practices of this form of nursing work. Moreover, as I argue in this chapter, it becomes apparent that callers such as this one who deviate from the socially constructed "norms" of the telephone triage service, are most often stigmatized by the nurses and services are variously rationed—within the same subversion of the protocol. This is more than an

issue of individual nurses' attitudes and responses to the human condition – it is a socially organized response that activates social ignominy inside nurses' work.

Nurses also reported a frequent call from a sexually inappropriate male caller who provided vague symptoms and according to them, 'abused the system' by calling and masturbating while on the phone. This is Nurse5's account of this call when she said:

> My comments about it: well first of all, you never know who is going to be on the other end when you answer the phone. So I remember the first time I took care of the 'masturbator' on the phone, I had no clue. I went through the whole thing as innocent as I was, and the person on the other side of my little station was giving me the notion that because I kept repeating things, like pardon, pardon I can't hear you, can you speak louder. Those were all clues that that is who it is, but I don't know that. So I want to make sure this person is safe, you know and it is not a 911. So I realize at the end of the call, oh that is who it was. But I guess in a way you feel kind of oh he just abused me, kind of thing, but (…) like I said there is all kinds of mixed basket out in this world so it's not a good thing that he does it and abuses the system that way better than being out on the streets and actually physically doing that to someone, some innocent child or another person, but what has been done about it we all got together as a group and said you know this is really *unprofessional*. And *it bothers us in a way so can the police not get involved* our calls are recorded, can we not zero in or can a GPS or something help to find this person to stop this. And apparently that has been dealt with but we can't do much about it, *we can indicate on our program that we believe it to be the masturbator and there is a little tick off thing we can tick off on there under custom* (…). It will show a frequency and if we remember the times and stuff, we can tell our team leader I believe it is the masturbator on the phone. After a while you kind of understand his voice and the name is the same but he mixes up the letters, but he uses different addresses and different phone numbers. I have tried to trick him into to telling me what his name was, but he is pretty crafty he won't, so I end up pretty much I will say one moment, I will connect you to a male nurse. First I want to make sure that it's him. (…) you can't assume it is the masturbator. (…) But management is aware, and as far as I have been told the police have been spoken to, and unless they are physically harming you, physically, there is nothing they can do. That is my understanding. (Nurse5, Formal interview; Emphasis added).

This quote indicates the textual process related to sexually inappropriate calls – and the issues related to verbal sexual harassment and physical abuse. In the call centre, the capacity for authorities to address this sort of harassment is severely limited, but nurses

are still required to "manage" the call within the appropriate protocols or textual processes. For example, they would not be supported to speak loudly and curtly to this caller and to respond with a curt reprimand (that would likely be the conventional nursing response in such situations).

This nurse's mention of physical harm corroborated the focus of the call centre on physical symptoms (May, *et al.* 2003) and any service is geared towards the same goal of triage and dispatch. All the nurses I met in the call centre and those I spoke to were all in agreement when they talked about this case that they were concerned about their professionalism as nurses and felt abused as individuals. In the absence of what they referred to as a solution, nurses developed their own way of dealing with this caller by transferring him to a male nurse where upon he would hang up. The call centre management was aware of this caller at the time data for this thesis was collected.

6.2.1.2 Mental Illness and Long-term Counseling: The Executive Director's Account

What I gathered from my interview with the Executive Director advised that patients are not expected to establish ongoing 'long term counseling relationships' with the telenurses – and in fact, those patients who call too frequently became a problem to be managed, not only for the Executive Director, but also for nurses. As seen in a previous quote, those patients who experience their relationship with a particular nurse as a key reason for calling the service hang up until they are connected to the nurse with whom they want to talk. Hang ups that originate from these callers are a problem because they take up nurses' time to respond to other callers therefore increasing the queues.

Frequently, these calls that are referred to as "social" are most frequently people who are experiencing chronic mental illness. The Executive Director states that he cannot tell anyone *not* to call and yet he states that the call centre is *not* a place for managing chronic mental illness. For him, these callers require a different form of health care that he refers to as "case management". He says:

> This is about access, about direction, about home care, self care, and it wasn't about the management of mental health clients. (…) this service is not about *long term counselling relationship*s, it's not about case management, it's about assessment and triage and the provision of health education, information and referral to support the clients. (Executive Director, Formal interview; Emphasis added).

The call centre is *not* expected to provide service (access, direction, home care, self-care,) for patients whose health concern is not amendable to the "quick fix" of the timed and streamlined approach of the call centre. Therefore, patients who call the centre looking for more than this cursory "triage and dispatch" type of a service arise as a serious problem for both the nurses and their management team. The Executive Director indicated that there are certain types of calls that are not appropriate for the call centre. Recall how the centres were established during a period of health care crisis within a discourse of wait times for primary care and emergency services. The attention was firmly focused on physical care. People who experience mental illnesses are not considered a part of this mandate unless they present with an acute physical risk (physical harm to themselves or others). Thus, callers who have chronic mental illnesses who are not at immediate risk are considered inappropriate recipients of telenursing services. Nurses though, are trained to provide nursing care to people with mental illnesses. Callers experiencing mental illness create ambivalence for nurses, who, despite their mental

health knowledge, are organized to respond to these patients as "inappropriate" candidates for their nursing expertise. The Executive Director is using the "categories" of patients (the dominant and authorized way of understanding people's health needs across the spectrums of care) when he works to solve this problem saying:

> (…) one of the things I propose is there is a desire to implement a new chronic disease stage and that we propose mental health as an area where I think this would be a good referral point for health line to sort of say: 'you know like they say now they refer to the dietician, you know, there is this mental health chronic disease program that I think you should participate in'. (Executive Director, Formal interview).

The service the Executive Director describes would produce a "quick fix" and dispatch for telenurses. Should these services materialize, nurses would respond to callers with mental illness with an appropriate referral to a new category of "dispatch" that would be built around "chronic illness"[9]. Nursing work that is increasingly being harnessed to categories and protocols, the answer is to develop another category – but what nurses tell me is that people, their health and their fears often don't fit neatly into boxes. In her response about fitting everyone into protocols trying to standardize everyone Nurse2 stated:

> We all know that you can't just fit everybody into a particular protocol because there is always going to be variables, there is always going to be situational things (…). I don't think any protocol is ever 100% proof. We're dealing with people not … these are protocols that are trying to capture the most common but there is always those outliers, there is always other situational factors that will make a difference. (Nurse2, Formal interview).

[9] I am not opposed to this idea – but to point out that a system that is organized around "categories of needs" rather than actual callers' needs will always have flaws that telenurses will need to manage.

This response reflects nurses' thinking process of treating patients as individuals with unique features; however the protocols preclude this sort of nursing practice as they are aligned with the managerial goal of always focusing on a standardized "quick dispatch". Resources being considered in the call centre that are focused on this goal are likely not going to effectively address the needs of a great many patients. Patients calling with mental health issues most likely will continue to be treated in a perfunctory way – because there is not an objective category to "manage" and fund these calls. They are outside the mandated goal of telenursing service (to reduce ER visits). Thus they are "outliers" within the general practice of nurses, with no neat box within which to demonstrate the "value for service" that is being constructed for the other (legitimate) callers. While chronic mental programs may solve the triage and dispatch they will likely not address the immediate needs of callers with mental illness who are living in "deinstitutionalized" community settings with minimal resources. Telenurses will likely still be needed to be the 24 hour mediators. However they will now have the resources for a more efficient "dispatch". The socially organized documentary reality of "value" and "quality of service" will be upheld.

I conclude my discussion about patients who experience mental illness by pointing out that people with mental illness, most of the time, were dispatched *nowhere* due to lack of resources and limited access to service providers. Some were prohibited from using resources even if the resources existed. Moreover, these services are only open from 08:00 am to 4:00pm from Monday to Friday. I note how nurses are socially organized to see certain patients/callers as unworthy of kindness and compassion. Mostly those people with mental illnesses, who did not fit inside the mandate goal of the

telenursing service which is, at its heart, a strategy to reduce visits to family physicians, walk-in clinic, home health, and to reduce visits to emergency rooms.

Chapter Seven: **DISCUSSION AND CONCLUSION**

In this chapter, I return to a discussion about the overall mandated goal of the telenursing service in call centres as a government strategy to reduce health care costs; the backdrop wherein telenursing work happens. I summarize how this harnesses telenurses' work processes to a symptom base model that becomes a ruling apparatus that coordinates particular nursing challenges. I synthesize and highlight the findings that describe how nurses' knowledge is viewed as an 'unauthorized' and inferior form of knowledge. In the authorized view, the outcomes of telenurses' work is understood to be a product of the protocols; not a product of nurses' knowledge and experience. The protocols and other electronic managerial systems that organize call centre work are rigidly formulated and interfere with nurses' capacity to make the most efficient and valuable contribution to the provision of health care remotely. In the short intervals when nurses are able to (and do) interject their own good knowledge, their contribution is rendered invisible by the protocols and electronics of the business-like formulations that are carried out within tightly monitored accountability circuits. I show how nurses are organized to respond callously and unkindly to certain patients who are considered a nuisance; not deserving of nursing care. I close the chapter with a brief account of the limitations and implications of this study, and my recommendations for future studies in telenursing work.

7.1 The Problematic for this study

Throughout this thesis I have described how the protocols designed to channel care advice into one of a number of pre-determined options (Chapter Six) results in a

fundamental contradiction related to telenursing work. The problematic for this study is that: On the one hand, nurses' knowledge, training and expertise are relied upon to provide healthcare over the phone. On the other hand, the ways in which the work of the call centre is organized seriously constrains nurses' ability to use the professional knowledge, training and expertise on-the-job. In these systems, only those aspects of the patients' or the nurses' experiences that "fit" the pre-determined protocols can be activated.

7.2 Findings

7.2.1 Call Centre Creation: Inside the overall Mandate of Telenursing

My findings support the work of other authors who argue that nurses' call centre work is a tightly coordinated industrialized strategy implemented within the different Canadian provinces that is expected to reduce health care costs by decreasing patients' visits to health care providers (Goodwin, 2007). The unique contribution of this study details how nurses' work in the call centre is littered with technology that organizes and standardizes their work. My study reveals that nurses in the call centre are hooked into (and activate) what I, following Smith (1990, p. 2; 2005; 2006), refer to as a ruling apparatus that organizes their work processes in contradictory ways. This 'hooking up' happens as nurses *participate* in ruling practices as they provide service to patients over the telephone within the text-mediated (Smith, 2005) work practices of the call centre. As I examined these work practices I noticed that while nurses' work processes in the call centre are expected to support the provision of care, a great deal of nurses' work is directed towards collecting data—a primary interest of managers that seems unrelated to

direct patient care. Some nurses stated that they were aware of the dual character of the work processes they followed—such as asking every caller: 'what would you have done if *Talk to a Nurse* did not exist? The nurses I interviewed reported having a hard time asking patients this question as it is clearly not related to the nursing care needs of the callers. Nurses describe how asking this question disrupts their care processes. It requires them to respond in ways that callers experienced as bureaucratic and impersonal.

7.2.2 Protocols' Interference with Nurses' Provision of Care

Protocols are a major feature of telenurses' work processes. Nurses are organized to collect information in sequences that progressively lead them to slot the patient into one of the pre-established protocols that determines the pathway to receiving care. When nurses do not agree with what the protocol prescribed, they activate a different, somewhat subversive set of practices which includes: 1) overriding the established protocol by making a recommendation for care at a higher level than it would otherwise dictate; 2) giving information originating from their knowledge and expertise that is regulated by processes that consume valuable time; 3) becoming mute and silent in the face of the systems and learning to work covertly within brief interstices of the work processes that provide a way to address patients' issues as they arise.

Nurses who decide to 'override' the established recommendation from a protocol in order to recommend an intervention that deviates from the protocol typically stated that they do so "in the patient's best interest". It is work that involves nurses in a circuitous work process requiring them to consult call centre references and to document the rationale for their decision. They are also required to inform the patient that they are

not following the protocol. For example, nurses who make a decision to override the 'treat at home' recommendation from a protocol and suggest instead that the caller make an appointment with a physician very often say to patients: "given the information that you have given me *and my assessment*, it is better that you see your physician tomorrow morning instead of waiting the recommended 48 hours". Overriding a protocol and relying on their own knowledge, expertise, and training to disagree with the dictates of the established protocols requires a formal record in the computerized fields. Nurses are required to provide references from documents available in the call centre whenever they make a decision to provide advice/information to patients outside of the protocols. Once again, within the queues and wait-time monitoring, this additional work is difficult for nurses to accommodate within the limited time and resources being organized by the metrics of "call volume".

7.2.3 Nurses circumventing the Protocols

For the most part, the nuanced nursing work that runs behind every call is covered over. It is made to appear as if the protocol is doing the nursing work, not the nurses themselves. In my observations and interview data, I uncovered the covert ways nurses insert their knowledge into their work with callers. I describe the specific junctures of the call when this is possible. Nurses insert their knowledge at the beginning of the call, a segment of the call that is considered "empty"; a point in the *ADRTS* in which nurses are urged to move through very quickly; coaching that is buttressed within evaluation indicators of time "call answered" to "protocol opened." I argue that this squeezed interval is an instance of invisible (though critical) nurses' work that not only goes

unnoticed but is unauthorized and considered unnecessary. The second juncture of the call when nurses work to surreptitiously interject their knowledge and experience is at the end of each call when they activate a portion of the protocol called 'care advice'. However, their ability to apply their own judgment, based on knowledge about the patient's particularities gained during the call is hindered by the requirement to offer care advice according to the options programmed into the computerized protocol and the requirement to find an authorized rationale for their use of an "exception"; a rationale that is often hard to find (for example the data I analyzed regarding two different calls about a "fussy baby" and a "crying baby", Chapter 4).

7.2.4 A surveillance system and accountability in the call centre

My study reveals that the *All-Digital Recording Telephone System (ADRTS)* (Chapter 3) is not only a way to manage queues and waits but that it is a complete surveillance system intended to standardize, track and monitor every step of nurses' work. Codes establish time stamps that are later retrieved for accountability purposes (business-like formulations). Nurses' work is evaluated monthly in Quality Management Performance Review forms. Scores are given to nurses for complying or not complying with items on this evaluation tool. These scores, given by a Team Leader, are integral to the ruling apparatus present in the call centre (chapter 3 & 4). Nurses who score low on this tool are monitored even more closely by the call centre's Team Leaders, to ensure they fully comply with the required protocols and information gathering. Nurses however have a different view of a quality call. For them, a low score is not necessarily representative of poor quality care. Nonetheless, the ruling capacities of the surveillance

systems introduced into professional nursing work dominate and are understood to be a measure of nursing competence and 'good' patient care – that assiduously follows protocol.

7.2.5 Time Constrains in Telenursing Work

One of the significant findings of this study is the social organization of nurses' time. Data revealed that during the mental health calls nurses were organized towards a standard 12 minute (or less) call. However other calls, such as the Breastfeeding hotline, were exempted from this rule and calls to this service could take up to 45 minutes per call. This bureaucratically decided variation in permitted time for calls did not make sense inside nurses' work. In one of interviews, a nurse reported that she delivered nursing advice that went over the time limit. She detailed the careful work she did with the caller and referred to it as a "good call". However on her evaluation this call was singled out as a call that did not meet the standards. The nurse reported that although she understood that she had provided good care, she later felt "terrible" to have strayed from the allowed time limit. This is a troubling contradiction in competent professional practice.

7.2.6 The Socially Organized Nurses' Unkind Response to Certain Patients

The time constraints that disorganize telenursing care are particularly evident in regards to patients who "hang up" and patients who call without physical symptoms. It did not make sense to nurses that their valuable time was spent making records for callers they did not speak to. Moreover, this apparent waste of nurses' time is even more

paradoxical when contrasted with how nurses worked to limit the time they spent with actual callers, especially those people with no physical symptoms who were categorized in derogatory ways by nurses, as 'social callers' and 'schizophrenics'. These callers, often people known to the nurses who experience various types of mental illnesses (some who called more than once a day or who hung up until they were answered by the specific nurse they wanted to speak to) were frequently treated with rudeness and subterfuge by the call centre nurses. I showed how this response (in part) is socially organized within an ongoing scarcity of time and the overarching ruling relation of call volume. Calculations and staffing models based on call volume resulted in a relentless pace of work that coordinated nurses' responses to patients.

7.2.7 Professional Isolation of Telenurses

I also described how this ruling relation limited interactions among nurses between calls; a professional isolation exacerbated by the physical design of working environment (working stations and glassed desks/cubicles) set up to limit interaction between nurses (Figure 1). In doing work where it may often be necessary to share expertise and to consult, it is my impression that it is counterproductive to organize nurses within this sort of a "call centre" (marketing) model.

My critique of the telemarketing model is supported by my focused analysis on 'triage and dispatch' which uncovered how nurses are caught inside a business/management like imperative of striving for 'efficiency'. The call centre model (the 'telemarketing model') relied upon in the corporate business world to reduce costs of service delivery, creates significant barriers to the capacity of nurses to make their most

valuable contribution to people's health. The "efficiencies" being applied to telenursing work may indeed be a false efficiency.

In wrapping up, the major finding of this study revealed how nurses in the call centre are organized to regard their own knowledge as inferior to that of the authorized protocols. This is dangerous terrain, not only for the telenurses but for the profession of nursing more generally. It represents the muting of nursing as a practice based profession.

7.3 Conclusion

In conclusion this institutional ethnography has revealed the various moment-to-moment troubles that are coordinated inside the work or telenursing. On the surface the troubles do not look big. Nurses themselves seem to take them in stride and are unable to articulate what is actually happening to their professional contributions. My study detailed the knowledgeable practices of telenurses; a form of knowledge that is impossible to package inside standardized protocols (such as the capacity to assess a crying baby or to listen carefully to establish the severity of the callers' breathlessness). Most of the research into telenursing just glances over the problems that I have explicated here. Ultimately, I have shown how nurses' work, in the call centre, happens within text-mediated ruling relations (Smith, 2005) in which nurses participate (both knowingly and unknowingly). These activities include every aspect of a telenurses' everyday/everynight work. These ruling relations coordinate precisely what a nurse can say to a patient and organize conditions of continuous scrutiny.

In this thesis I have shown that, in part, the tensions embedded in telenursing work remain invisible *because* they are so well managed by the nurses. The nurses themselves just work on top of them. However, there is a serious disjuncture created when nurses' knowledge is actively subordinated by knowledge generated by technological/standardized systems that make it appear as though the systems themselves are producing the work (and the outcomes), not the nurses. This is significant not only to telenurses themselves, to the professional regulatory bodies that can support the work, but also to the people who manage and fund telenurses' contribution to contemporary healthcare.

7.4 Limitations and future work

This study exploring nurses' daily experiences with telenursing work has generated the terrain for a more institutional ethnographic study. How the work is linked to funded quotas through contracts as texts was only glimpsed in the data I collected for my research. As well, learning more about how the text-mediated nursing practices are translated into reports; where those reports go is a ground for ongoing IE research. I would like to examine how funders enter the text-work-text sequence and how this sequence results in funding decisions.

Towards the end of data collection for this study, the call centre introduced a new chronic management program where nurses were calling patients at home for follow up. This development in telenursing duties provides a new set of practices that invite further investigation. Known as an *outbound* program it is part of an organized effort *not* necessarily driven by concerns for people who are managing chronic illness at home but

by ongoing pressures to reduce costs and keep sick people at home. Investigation into these practices would bring into view how nurses' work in the call centre activates other people's work and is connected to other health care providers.

More broadly, focusing on the detailed work processes that are embedded inside the proprietary computer software (a text that is carefully protected and subject to copyright and thus not accessed fully in this study) is ground for another interesting project that may reveal even more detail about the coordination of telenursing work.

Due to the design of this study (ethical limitations), I only heard what the nurse said to patients during observation in the call centre. I did not hear the whole conversation between the nurse and the patient. Thus I was unable to gauge how much of what the patient told the nurse was recorded in the Triage Details Report. Access to this data could provide more empirical evidence about how some 'facts' are ignored or 'written up' when nurses are processing calls. A study focusing on the two way conversation between the nurse and the patient inside telephone nursing work would contribute a great deal to a critical analysis of telenursing.

7.5 Implications

Inside the broad implications (inferred from my findings), this study revealed that telenursing work is difficult and complex work. It supports prior research that revealed the unhealthy high demands that impact negatively on the nurses who do it (Demerouti *et al.*, 2001; Severinsson, 2003). The implications of my study challenge the current ruling relations that exist in the call centre. The textual practices that are assumed to be the foundation of safe nursing practice have been identified as being flawed. It is imperative

that both nurses and managers scrutinize the reliance on these tools and the accountability circuits they organize. Broad dissemination of my research findings will establish how people can take up the analysis to revisit and revise the ruling relations that organize the contradictions that are embedded in nurses' day to day practices. Beyond dissemination, I suggest that the practices uncovered in my research have important implications for practice, these systems in which nurses are embroiled are far too entrenched for a mere MN study to reverse – and making recommendations is far beyond the scope of my study.

7.5.1 Ethical Implications

Nurses' work in the call centre is organized around communication with patients on the telephone. These are interactions that are time limited and prescriptive. Nursing, one of the most intimate and relational of professional practices is ethically challenged when relational practice is actively discouraged within clear direction that nurses are not allowed to develop "long term relationships with callers" (Executive Director: Formal interview). Relational ethics (Oberle & Raffin Bouchal, 2009), the key to ethical nursing practice "place(s) emphasis on communication and relationship building" (Olmstead *et al.*, 2010, p. 699). My work has shown how telenurses in the call centre face several ethical challenges in relation to time limitations *and* broad professional autonomy that limits what nurses are authorized to say to a caller. These prohibitions erode trust in nurses, both the individuals who call and the broader public who learn of the interactions that nurses engage in. Organizing nurses' work this way has serious implications — not only for the ethical practice of *individual nurses*, but also for the *discipline of nursing* and the *public trust that nurses enjoy*.

7.5.2 Implications for nursing education

For nurse educators, Smith's ontological shift (Smith, 2006) provides a critically important tool. Educators who grasp this analysis can begin to move beyond the rhetoric of individuated caring practices that dominate contemporary undergraduate education. Using the tools of IE teachers can begin to demonstrate ruling relations that link local settings of nursing work to the ruling apparatus which constrains it. Starting from the standpoint of nurses has the potential to show beyond the local setting, how each person's work is organized. This approach can support nurses to look at what actually happens – rather than to have their consciousness organized by the abstracted and conceptual modes of thinking that currently dominate how nurses are educated to understand their work.

7.5.3 Implications for nursing practice

Despite being side by side in a large room (Figure 1) telenurses are organized not to interact. This lack of interaction reinforces how telenurses are isolated in the call centre. The findings of this study suggest that *recruitment*, *retention*, and *more efficient use of nursing expertise* can be achieved by modifying the work processes that support nurses to consult with one another and that allow them to take the time to use their experience and knowledge in a way that benefits callers and supports "quality" healthcare.

Prior to conducting this study, my assumptions then were that protocols are always effective and flawless. Now I know that inside their practice, nurses mediate the

protocols – and it is only this skilled nursing that builds the impression that protocols are effective and flawless.

By examining the findings of my study telenurses can now start to critically look at their nursing practice in the call centre that undoubtedly requires their knowledge, skills and expertise for the care they provide everyday/everynight to patients within the electronic formulations required to do their work.

7.5.4 Implications for nursing as a practice profession

Nursing is muted as a practice profession when nurses are not allowed to use their knowledge, skills, and expertise acquired during their education and practice. It is a fascinating set of circumstances that organize nurses to view their own knowledge as inferior. However, since, as I have shown, the work cannot proceed without skilled nursing work, nurses have learned to insert themselves in stealthy ways –to 'smuggle' their knowledge into the call at the junctures I have outlined in this analysis.

This study has uncovered a number of significant troubles in telenursing work together with work processes involved in how nurses practise *efficiency* through 'triage and dispatch' as they have been socially organized to come to KNOW how to provide care to patients in the call centre setting. I have uncovered, using IE, evidence that this efficiency applied to telenursing work, may be indeed a false efficiency in these economic tough times.

References

Alvarez, R. C. (2002). The promise of e-Health - a Canadian perspective. *EHealth International*, *17*(1), 1–4.

Anderson, G. F., Frogner, B. K., Johns, R. A., & Reinhardt, U. E. (2006). Health Care Spending And Use Of Information Technology In OECD Countries. *Health Affairs*, *25*(3), 819–831.

Angus, J. (2001). The material and social predicaments of home: Women's experiences after aortocoronary bypass surgery. *Canadian Journal of Nursing Research, 33*(2), 27–42.

Association of Telehealth Service Providers (2009). *Organizations and Agencies*. Retrieved from http://tie.telemed.org/links/organizations.asp on 21 December 2012.

Atkins, S., Lewin S., Smith, H., Engel, M., Fretheim, A., & Volmink, J. (2008). Conducting a meta-ethnography of qualitative literature: lessons learnt. *BMC Medical Research Methodology, 8*, 21–31.

Atkinson, P., & Hammersley, M. (1994). "Ethnography and Participant Observation", in Handbook of Qualitative Research, N. K. Denzin and Y. S. Lincoln (eds.), Sage, Thousand Oaks, CA, 1994, pp. 248–261.

Belt, V., Richardson, R., & Webster, J. (2000). Women's work in the information economy: the case of telephone call centres. *Information, Communication and Society*, *3*, 259–270.

Benjamin, K. (2011). The Social Organization of Personal Support Work in Long-Term Care and the Promotion of Physical Activity for Residents: An Institutional

Ethnography. (unpublished doctoral thesis), University of Ottawa, Ottawa, Canada.

Berkelman, R. (2004). Public health interactions with the public: can quality be assured? ‘‘this call may be monitored for quality assurance purposes.’’ *Journal of Public Health Policy*, *25*(1), 78–84.

Bisaillon, L., & Rankin, J. (2012). Navigating the Politics of Fieldwork Using Institutional Ethnography: Strategies for Practice [64 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, *14*(1), Art.14, http://nbn-resolving.de/urn:nbn:de:0114-fqs1301144.

Bohnenkamp, S. K., McDonald, P., Lopez, A. M., Krupinski, E., & Blackett, A. (2004). Traditional versus telenursing outpatient management of patients with cancer with new ostomies. *Oncology Nursing Forum*, *31*, 1005–10.

Boon, H. (2006). How far can complementary and alternative medicine go? The case of chiropractic and homeopathy. *Social science & medicine*, *63*(10), 2617–2627.

Breslin, E., & Dennison, J. (2002). The development of telephone triage: historical, professional and personal perspectives. *Journal of Orthopaedic Nursing*, *6*(4), 191–7.

Bunn, F., Byrne, G., & Kendall, S. (2004). Telephone consultation and triage: effects on health care use and patient satisfaction. *Cochrane Database Systematic Review*, *18*(4), CD004180.

Campbell, M. , & Gregor, F. (2002). *Mapping social relations: A primer in doing institutional ethnography*. Aurora, Ontario: Garamond.

Canada Health Act, Section 12(1)(a). Reasonable Access. Government of Canada, April 1, 1984. Retrieved February 12, 2013. http://laws-lois.justice.gc.ca/eng/acts/C-6/page-4.html#docCont

Canadian Institute for Health Information (CIHI), 2008: Proportion of the population reporting contact with a telephone health line or tele-health service in Comparable *Indicators Operational Definitions 2008*. Retrieved January 2, 2012. http://www.cihi.ca/CIHI-ext-portal/internet/en/Search/search/search_main_en?q=TELEHEALTH&client=all_results&start=0&num=10&filter=p

Canadian Nurses Association (CAN). 2003. *Telepractice*. Retrieved December 21, 2012. http://www.canadian-nurse.com/documents/pdf/access/Access_January_2003_e.pdf

Canadian Nurses Association (CAN). 2003. *Telephone triage*. Retrieved December 21, 2012. http://www.canadian-nurse.com/documents/pdf/access/Access_January_2003_e.pdf

Carson, J., Wood, M., White, H., & Thomas, B. (1997). Stress in mental health nursing: Findings from the Mental Health Care survey. *Journal of Mental Health Care, 1*, 11–14.

Caudle, J. M., van Dijk, A., Rolland, E., & Moore, K. M. (2009). Telehealth Ontario detection of gastrointestinal illness outbreaks. *Canadian Journal of Public Health, 100*, 253–257.

Chapman, J., Zechel A., Carter, Y., & Abbott, S. (2004). Systematic review of recent innovations in service provision to improve access to primary care. *British Journal of General Practice, 54*, 374–381.

Clune, L. (2011). When the injured nurse returns to work: An institutional ethnography. Published doctoral dissertation. Lawrence S. Bloomberg Faculty of Nursing, University of Toronto, Toronto, Canada. Retrieve from https://tspace.library.utoronto.ca/bitstream/1807/29519/1/Clune_Laurel_A_201106_PHD_thesis.pdf

Cohen-Mansfield, J. (1995). Stress in nursing home staff: A review and a theoretical model. *Journal of Applied Gerontology ,14*, 444–466.

College of Nurses of Ontario (CNO). 2012. *Telepractice.* Retrieved December 21, 2012. http://www.cno.org/Global/docs/prac/compendium.zip file name: *41041_telephone.pdf.*

Collin-Jacques, C. (2004). Professionals at work: a study of autonomy and skill utilization in nurse call centres in England and Canada. In *Call Centres and Human Resource Management* (Deery, S., & Kinnie, N., eds), Basingstoke, Palgrave, pp. 153–174.

Collin-Jacques, C., & Smith, C. (2005). Nursing on the line: experiences from England and Quebec (Canada). *Human Relations, 58*, 5–32.

Darville, R. (1995). Literacy, experience, power. In Marie Campbell & Ann Manicom (Eds.), *Knowledge, experience and ruling relations: Studies in the social organization of knowledge* (pp.249–262). Toronto: University of Toronto Press.

Dean, A. (2002). Service quality in call centres: Implications for customer loyalty. *Managing Service Quality, 12*(6), 414–423.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands – resources model of burnout. *Journal of Applied Psychology, 86*, 499–512.

Derkx H. P., Rethans, J. J., Maiburg, B. H., Winkens, R. A., Muijtjiens, A. M., van Rooij, H. G., Knottnerus, J. A. (2009). Quality of communication during telephone triage at Dutch out-of-hours centres. *Patient Education Counseling, 74*, 174–178.

DeVault, M., & McCoy, L. (2006). Institutional Ethnography: Using Interviews to Investigate ruling relations. In D. Smith (Ed.), Institutional Ethnography as practice (pp. 15–44). Lanham, MD: Rowman & Littlefield Publishers, Inc.

Doane, G. H., & Varcoe, C. (2007). Relational practice and nursing obligations. *Advances in Nursing Science, 30*(3), 192–205.

Duchscher, J. E. B., & Cowin, L. (2004). Multigenerational nurses in the workplace. *Journal of Nursing Administration, 34*(11), 493–501.

Edwards, B. (1998). Seeing is believing – picture building: a key component of telephone triage. *Journal of Clinical Nursing, 7*, 51–57.

Encyclopedia of Nursing Research. (2nd ed.). (2005). Fitzpatrick, Joyce & Kazer, Meredit: Springer Publishing Company.

Fox, P. (1995). Nursing developments: trust nurses' views. *Nursing Standard, 9*(18), 30–34.

Grady, B. Myers, K. M., Nelson, E., Belz, N., Bennett, L., Carnahan, L., Decker, V. B., Holden, D., Perry, G., Rosenthal, L., Rowe, N., Spaulding, R., Turvey, C. L.,

White, R. , & Voyles, D. (2011). Evidence-based practice for telehealth. *Telemedicine and e-Health, 17*(2), 131–148. DOI:10.1089/tmj.2010.0158.

Fry, M. M. (2009). Barriers and facilitators for successful after hours care model implementation: Reducing ED utilisation. *Australasian Emergency Nursing Journal, 12*(4), 137–144.

Grady, J. L. (2011). Telenursing in the United States. In S. Kumar & H. Snooks (Eds.), *Telenursing Health Informatics* (pp. 179–190). London: Springer.

Goodman, E. A., & Boss, R. (1999). Burnout dimensions and voluntary and involuntary turnover in a health care setting. *Journal of Health & Human Services Administration, 21*, 462–471.

Goodwin, S. (2007). Telephone nursing: an emerging practice area. *Nursing Leadership, 20*(4), 37–45.

Greene, S. K., Huang, J., Abrams, A. M., Gilliss, D., Reed, M., Platt, R., Huang, S. S., & Kulldorff, M. (2012). Gastrointestinal Disease Outbreak Detection Using Multiple Data Streams from Electronic Medical Records. *Foodborne Pathogens And Disease, 9*(5), 431–441. DOI: 10.1089/fpd.2011.1036.

Greene, S. K., Kulldorff, M., Huang, J., Brand, R. J., Kleinman, K. P., Hsu, J., & Platt, R. (2011). Timely detection of localized excess influenza activity in Northern California across patient care, prescription, and laboratory data. *Statistics in Medicine, 30*, 549–559.

Hagan, L., Morin, D., & Lépine, R. (2000). Evaluation of telenursing outcomes: Satisfaction, self-care practices, and cost savings. *Public Health Nursing, 17*(4), 305–313.

Hamilton, P., & Campbell, M. (2011). Knowledge for re-forming nursing's future: standpoint makes a difference. *Advances in Nursing Science, 34*(4), 280–96. DOI: 10.1097/ANS.0b013e3182356b6a.

Hamilton, P., Mathur, S., Gemeinhardt, G., Eschiti, V., & Campbell, M. (2010). Expanding what we know about off-peak mortality in hospitals. *Journal of Nursing Administration, 40(3),* 124–128.

Hanlon, G., Strangleman, T., Goode, J., Luff, D., O'Cathain, A., & Greatbatch, D. (2005). Knowledge, technology and nursing: the case of NHS Direct. *Human Relations, 58,* 147–171.

Hartford, K. (2005). Telenursing and patients' recovery from bypass surgery. *Journal of Advanced Nursing, 50,* 459–468.

Hjelm, N. M. (2005). Benefits and drawbacks of telemedicine. *Journal of Telemedicine and Telecare, 11,* 60–70.

Holmström, I., & Dall'Alba, G. (2002). 'Carer and gatekeeper' –conflicting demands in nurses' experiences of telephone advisory services. *Scandinavian Journal of Caring Sciences, 16,* 142–148.

Jacob, K. S., Sharan, P., Mirza, I., Garrido-Cumbrera, M., Seedat, S., Mari, J. J., Sreenivas, V., Shekhar, Saxena. (2007). Mental health systems in countries: where are we now? *Lancet, 370,* 1061–1077. Published online Sept 4. DOI: 10.1016/S0140-6736(07)61241-0.

Holmström, I., & Höglund, A. (2007). The faceless encounter: ethical dilemmas in telephone nursing. *Journal of Clinical Nursing, 16,* 1865–1871.

Kawaguchi, T., Azuma, M., Satoh, M., & Yoshioka, Y. (2011). Telenursing in Chronic Conditions. *Telenursing, Health informatics 2011*, 61–74. DOI: 10.1007/978-0-85729-529-3_6.

Kiewe, H. (2008). How May I Help You? An Ethnographic View of Contact-Center HCI. *Journal of Usability Studies*, *3*(2), 74–89.

Kingma, M. (2003). *Telenursing Fact sheet.* In Access. *Canadian Nurse, 99*(1), 32–33.

Knowles, E., O'Cathain, A., Morrell, J., Munro, J. F., & Nicholl, J. P. (2002). NHS Direct and nurses – opportunity or monotony? *International Journal of Nursing Studies, 39*, 857–866.

Kruijver, I. P., Kerkstra, A., Bensing, J. M., & van de Wiel, H. B. (2000). Evaluation of communication training programs in nursing care: a review of the literature. *Patient Education and Counseling, 39*, 129–145.

Lane, A. (2007). *The Social Organization of Placement in Geriatric Mental Health* (unpublished doctoral dissertation). University of Calgary, AB, Canada.

Lane, A. (2011). Placement of older adults from hospital mental health units into nursing homes: Exploration of the process, system issues and implications. *Journal of Gerontological Nursing, 37*(2) 49–55.

Lang, F., Floyd, M. R., & Beine, K. L. (2000). Clues to patients' explanations and concerns about their illnesses: a call for active listening. *Archives in Family Medicine, 9*, 222–227.

Larson-Dahn, M. L. (2001). Tel-eNurse practice: quality of care and patient outcomes. *Journal of Nursing Administration, 31*(3), 145–152.

Lemay, R., Mawudeku, A., Shi, Y., Ruben, M., & Achonu, C. (2008). Syndromic Surveillance for Influenzalike Illness. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, *6*(2), 161–170. DOI:10.1089/bsp.2007.0056.

Lillibridge, J., & Hanna, B. (2008). Using Telehealth to Deliver Nursing Case Management Services to HIV/AIDS Clients. *The Online Journal of Issues in Nursing (14)*1. Retrieved January 6, 2013. http://www.nursingworld.org/mainmenucategories/anamarketplace/anaperiodicals/ojin/tableofcontents/vol142009/no1jan09/articlepreviousstopic/telehealthandhivaidsclients.html

MacKinnon, K. (2006). Living with the threat of preterm labor: Women's work of keeping the baby in. *JOGNN: Journal of Obstetric, Gynecologic, and Neonatal Nursing*, *36*(6), 700–708.

Marsden, J. (2000). An evaluation of the safety and effectiveness of telephone triage as a method of patient prioritization in an ophthalmic accident and emergency service. *Journal of Advanced Nursing, 31*(2), 401–409.

May, C., Mort, M., Williams, T., Mair, F., & Gask, L. (2003). Health technology assessment in its local contexts: studies of telehealthcare. *Social Science and Medicine, 57,* 697–710.

McGibbon, E. A. *Reformulating the nature of stress in nurses' work in paediatric intensive care: an institutional ethnography* [Dissertation]. Toronto, ON: University of Toronto, 2004.

McGibbon, E., & Peter, E. (2008). An ethnography of everyday caring for the living, the dying, and the dead: Towards a biomedical technography. *Qualitative Inquiry, 14*(7), 1134–1156.

McGibbon, E., Peter, E., & Gallop, R. (2010). An institutional ethnography of nurses' stress. *Qualitative Health Research, 20*(10), 1353–1378.

Melon, K. A. (2012). Inside Triage: The Social Organization of Emergency Nursing Work. Retrieved from ProQuest Dissertations and Theses database. (UMI No. MR87906)

Miller, T. W. (2006). Telehealth issues in consulting psychology practice. *Consulting Psychology Journal: Practice and Research, 58*, 82–90.

Muncer, S., Taylor, S., Green, D., & McManus, I. (2001). Nurses' representations of the perceived causes of work-related stress: a network drawing approach. *Work Stress, 15*(1), 40–52.

Nancarrow, S. A. , & Borthwick, M. (2005). Dynamic professional boundaries in the healthcare workforce. *Sociology of Health and Illness, 27*(7), 897–919.

Oberle, K., & Raffin Bouchal, S. (2009). Ethics in Canadian Nursing Practice: Navigating the journey. Toronto, ON: Pearson Education Canada.

O'Cathain, A., Sampson, F. C., Munro, J. F., Thomas, K. J., & Nicholl, J. P. (2004). Nurses' views of using computerized decision support software in NHS Direct. *Journal of Advanced Nursing, 45*(4), 280–286.

Olmstead, D. L., Scott, S. D., & Austin, W. J. (2010). Unresolved pain in children: a relational ethics perspective. *Nursing Ethics, 17*, 695–704.

Payne, N. (2001). Occupational stressors and coping as determinants of burnout in female hospice nurses. *Journal of Advanced Nursing, 33,* 396–405.

Perednia, D. A., & Allen, D. (1996). Telemedicine technology and clinical applications. *Journal of American Medical Association, 273*, 483–488.

Pettinari, C. J., & Jessopp, L. (2001). 'Your ears become your eyes': managing the absence of visibility in NHS Direct. *Journal of Advanced Nursing, 36*(5), 668–675

Picot, J. (1998). Telemedicine and Telehealth in Canada: Forty Years of Change in the Use of Information and Communications Technologies in a Publicly Administered Health Care System. *Telemedicine Journal, 4*(3), 199–205.

Purc-Stephenson, R. J., & Thrasher, C. (2010). Nurses' experiences with telephone triage and advice: a meta-ethnography. *Journal of Advanced Nursing, 66*(3), 482–494. DOI: 10.1111/j.1365-2648.2010.05275.x

Rankin, J. M. (2003). 'Patient satisfaction': knowledge for ruling hospital reform — An institutional ethnography. *Nursing Inquiry, 10*, 57–65.

Rankin, J. M., & Campbell, M. L. (In Press). Exploring questions of care and gender in nurses' institutionally organized work. *Moral boundaries redrawn: The significance of Joan Tronto's argument for professional ethics, political theory and care practice.* In (Eds) Gert Olthuis, Helen Kohlen, Jorma Heier. Belgium. Peeters in Leuven Press.

Rankin, J. M., & Campbell, M. L. (2006). *Managing to Nurse: Inside Canada's Health Care Reform.* Toronto: University of Toronto Press.

Röing, M., Rosenqvist, U., & Holmström, I. K. (2012). Threats to patient safety in telenursing as revealed in Swedish telenurses' reflections on their dialogues. *Scandinavian Journal of Caring Sciences 2012*. DOI: 10.1111/scs.12016.

Rolland, E., Moore, K. M., Robinson, V. A., & McGuinness, D. (2006). Using Ontario's Telehealth health telephone helpline as an early-warning system: a study protocol. *BMC Health Service Research, 6*, 10.

Romanow, Roy (2002). *Building on values: The future of health care in Canada: Final report Commission on the Future of Health Care in Canada.* Saskatoon: The Commission.

Sanders, T., & Harrison, S. (2008). Professional legitimacy claims in the multidisciplinary workplace: the case of heart failure care. *Sociology of Health and Illness, 30*(2), 289–308.

Schmitt, B. D. (2008). Telephone Triage Liability: Protecting Your Patients and Your Practice from Harm. *Advances in Pediatrics, 55*(1), 29–42.

Severinsson, E. (2003). Moral stress and burnout: qualitative content analysis. *Nursing and Health Science, 5*, 59–66.

Sharpe, C. (2001). *Telenursing: Nursing practice in cyberspace*. Connecticut, United States America: Auburn House.

Smith, D. (1990). *Texts, facts, and femininity: Exploring the relations of ruling.* New York: Routlidge.

Smith, D. (2005). *Institutional ethnography: A sociology for people*. Oxford, UK & Lanham, MD: AltaMira Press.

Smith, D. (2006). *Institutional ethnography as practice.* Lanham, MD: Rowman & Littlefield Publishers, Inc.

Smith, G. (1990). Political activist as ethnographer. *Social Problems, 37*(4), 629–648.

Smith, G. W. (1990). *Policing the gay community*. In Roxana Ng, Gillian Walker and Jacob Muller (eds.), *Community Organization and the Canadian State*, Toronto: Garamond Press.

Smith, G., Mykhalovskiy, E., & Weatherbee, D. (2006). A research proposal. In D.E. Smith (Ed.), *Institutional Ethnography as Practice* (pp. 165–179). Lanham, MD: Rowan & Littlefield Publishers.

Smith, K. (1999). Telephone health care: It's more than just a phone call. *Pediatric Nursing, 24*(4), 423–429.

Stamm, B. H., & Perednia, D. A. (2000). Evaluating psychosocial aspects of telemedicine and telehealth systems. *Professional Psychology: Research and Practice, 31,* 184–189.

Stacey, D., Hussein Z., Fisher, A., Robinson, D., Joyce, J., & Pong, R. (2003). *Telephone Triage Services: Systematic Review and a Survey of Canadian Call Centre Programs.* Ottawa: Canadian Coordinating Office for Health Technology Assessment.

Taylor, P., & Bain, P. (1999). An assembly line in the head: work and employee relations in the call centre. *Industrial Relations Journal, 30,* 101–117.

Tjora, A. (2000). The technological mediation of the nursing–medical boundary. *Sociological Health and Illness, 22,* 721–741.

Tourangeau, A. E., & Cranley, L. A. (2006). Nurse intention to remain employed: understanding and strengthening determinants. *Journal of Advanced Nursing, 55*(4), 497–509.

Twomey, C. (2000). Telephone contacts with a cancer nurse specialist. *Nursing Standard, 15*(3), 35–38.

Tyler, P. A., & Ellison, R., N. (1994). Sources of stress and psychological well-being in high-dependency nursing. *Journal of Advanced Nursing, 19,* 469–476.

Varca, P. E. (2006). Telephone surveillance in call centers: Prescriptions for reducing strain. *Managing Service Quality, 16*(3), 290–305.

Wachter, D. A., Brillman, J. C., Lewis, J., & Sapien, R. E. (1999). Pediatric telephone triage protocols: standardized decision making or a false sense of security? *Annual Emergency Medicine, 33,* 388–394.

Wahlberg, A. C., Cedersund, E., & Wredling, R. (2003). Telephone nurses' experience of problems with telephone advice in Sweden. *Journal of Clinical Nursing, 12*(1), 37–45.

Wahlberg, A. C., Cedersund, E., & Wredling, R. (2005). Bases for assessments made by telephone advice nurses. *Journal of Telemedicine and Telecare, 11,* 403–407.

Wallace, Meredith (Editor). Encyclopaedia of Nursing Research (2nd Edition). New York, NY, USA: Springer Publishing Company, Incorporated, 2005. p. 591.

Wilson, R., & Hubert, J. (2002). Resurfacing the care in nursing by telephone: lessons from ambulatory oncology. *Nursing Outlook, 50,* 160–164.

Wheeler, S. Q., & Siebelt, B. (1997). Calling all nurses: how to perform telephone triage. *Nursing, 27*(7), 37–41.

Wranik, D. (2008). Health human resource planning in Canada: A typology and its application. *Health Policy, 86*(1), 27–41.

Appendix A: Recruitment Poster

APPENDIX A

RECRUITMENT POSTER

ADVERTISEMENT AND CALL FOR STANDPOINT INFORMANTS: STUDY INFORMATION SHEET

My name is Floribert Kamabu. I am a registered nurse in two Canadian Provinces (AB and MB) doing my Master's thesis on Exploring Registered Nurses' Everyday Experiences of Telenursing Work using an Institutional Ethnography approach at the University of Calgary, in Alberta, Canada, and I am interested in talking to you.

The purpose of this study is to explore registered Nurses' Everyday Experiences of Telenursing Work. It is hoped that the findings of this study will help guide the development of measures that will support directors, managers, nurses to provide better patient care, increased caller's satisfaction and nursing retention.

The data collected in this study will be used for my Master's thesis program as a requirement for my degree. My current thesis supervisor is Dr. Janet Rankin in the faculty of nursing, University of Calgary.

You will be "buddied" with me for a one 8 hours shift. At a subsequent time convenient to you, I will talk with you during one 45 to 60 minutes long interview about your everyday experiences of telenursing work. Depending on your choice, the interview may be conducted in the morning hours, afternoon hours, and on weekends outside of your work time. The interview will be audio recorded, then transcribed, and then stored in a locked filing cabinet in the researcher's home office for the period of the research and as required by the university of Calgary.

Your participation in this study is voluntary and you may refuse to answer any question during the interview or withdraw from the study at any time. Furthermore, although your anonymity cannot be guaranteed, I will do everything possible to use quotes, from the interview, that will not reveal your identity and maintain confidentiality. Only me (the student researcher), the thesis supervisory committee at the University of Calgary, and the Conjoint Health Research Ethics Board will have access to the interview recording and the

transcript made of the interview. Only the conclusion of the study will be shared with the management of the call centre in an anonymous manner.

Thank you for taking the time to read this information sheet. If you would like more information, please do not hesitate to contact me.
If you would like to participate please call or e-mail me (fkamabu@ucalgary.ca) for a meeting.

Please include a location, date, and time convenient for you. I look forward to talking to you in the very near future.

Sincerely:
Floribert K. Kamabu
fkamabu@ucalgary.ca

Appendix B: Consent for Nurses (Standpoint informants)

APPENDIX B

CONSENT FOR NURSES

Name of Student Researcher, Faculty, Department, Telephone & Email:
Floribert K. Kamabu
Faculty of Graduate Studies
Nursing, University of Calgary
fkamabu@ucalgary.ca

Supervisor:
Dr. Janet Rankin, Faculty of Nursing
Title of Project:

Exploring Registered Nurses' Everyday Experiences of Telenursing Work: An Institutional Ethnography

This consent form, a copy of which has been given to you, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, please ask. Take the time to read this carefully and to understand any accompanying information.
The requirements I am undertaking for this research have been approved by the Conjoint Health Research Ethics Board at the University of Calgary.

Background:

Telenursing is a growing specialty for nursing practice. It is one of the strategies directed towards reducing the pressures on hospitals, emergency departments, walk in clinics, physician offices, and home health (Bohnenkamp, McDonald, Lopez, Krupinski, & Blackett, 2004; Hagan, Morin, & Lépine, 2000; Stacey et al., 2003). In this new milieu of nursing practice, the telephone is the only communication link between the patient and the nurse. This is a sharp contrast to most areas of direct nursing practice where nurses are in a face-to-face contact with the people that they can see, touch and smell. Telenursing is one of the applications of the broad field of telehealth (Sharpe, 2001) that has a relatively recent history in contemporary health services.

The proposed research is being formulated as an institutional ethnography (IE) that will explore the everyday work of telenurses. The ordinary and taken for granted activities of telenursing will be carefully examined in order to develop an in depth understanding of the social organization of this form of 21st century nursing.

It is hoped that this study will help guide the development of measures that will support directors, managers, nurses, better patient care, increased caller's satisfaction, retention; address the nurse shortage and costs.

Purpose of the Study:

The purpose of this study is to Explore Registered Nurses' Everyday Experiences of Telenursing Work.

What Will you Be Asked To Do?

- Buddying: "Buddying", is being paired with you, while you are working, in one shift of eight hours or in eight hours of a 12 hours shift. In this study, I will be buddied with a total of 4 nurses. During buddying, I will be seated beside you taking field notes. The types of field notes are: 1) Informal interactions with you during observation only when you are not on the telephone talking to patients ensuring that no confidential information is recorded: I will selectively audio record these interactions; 2) Observation notes: description of the environment; 3) Personal notes: thoughts, reflections, and questions. Information you give me about your telenursing work will be anonymously noted in my field notes.

I will not have a headset on to listen to the conversation between you and the patient on the telephone. I will only hear what you are saying to the patient. You will inform the patient of my presence and that I will not hear what they tell you. The patients who are informed about my presence will be

asked to provide verbal consent. Your personal information as well as the patient's personal information will not be audio recorded or included in my field notes. During buddying, should something happen and you or the patient think that I should not be hearing what you are telling them on the telephone, verbally ask me to leave for the duration of the call. This will also be heard by the patient, which will confirm to the patient that their request has been respected.

- Interview: You will be asked to participate in one audio taped interview that will last around 45 minutes to one hour at a place and time mutually convenient. Your participation is voluntary. You do not have to answer any questions you do not wish to answer, and you may terminate the interview at any time.

Are there Risks or Benefits if you Participate? There is minimal risk associated with your participation in this research. The focus of the interview will be your everyday work. If, in the unlikely event recollecting an experience unduly upsets you we can debrief this during the interview and you might also decide to seek out a counselor with your employee assistance program.

There are no direct benefits either, although it is hoped you will find the interview to be an enjoyable experience.

There are no direct benefits either, although it is hoped you will find the interview to be an enjoyable experience.

What Happens to the Information you Provide? A transcript will be made of your interview. This transcript will not contain any information that links the interview with you. Your name and the names of any people or organizations you mention will be replaced with fictitious names in the transcript.

Only the student researcher, the thesis supervisory committee at the University of Calgary, and the Conjoint Health Research Ethics Board will have access to the interview recording and the transcript made of the interview.

Quotes from your interview transcript will be used in my writing based on this research. I will do everything possible to use quotes that will not reveal your identity and maintain confidentiality. Only this consent form will have your name.

If you decide to terminate the interview, the information you have provided will be retained and may be used in writing based on this research.

All data (hard copies, electronic copies and electronic audio files) will be secured in a locked filing cabinet in my home that will be accessible only by me. The computerized research information will be stored on my main computer that is password protected and accessible by me only.

After the research is complete, the consent forms will be destroyed; all the research notes and audio recordings will be destroyed within five to seven years; the password protected data will be transferred to a compact disc read-only memory (CD-ROM) that will be locked up until such a time when publication happens. The CD-ROM will be kept for 12 years, then destroyed.

As a courtesy, the management of the call centre will be informed of the results of the study. This information will, however, only consist of conclusions with none of your personal or identifying information.

****

Signatures (written consent)
Your signature on this form indicates that you 1) understand to your satisfaction the information provided to you about your participation in this research project, and 2) agree to participate as a standpoint informant. In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Questions/Concerns
If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Mr. Floribert Kamabu
University of Calgary
Faculty of Graduate Studies
fkamabu@ucalgary.ca

and

Dr. Janet Rankin
Faculty of Nursing
jmrankin@ucalgary.ca

If you have any questions concerning your rights as a possible participant in this research, please contact the Director of the Office of Medical Bioethics, 403-220-7990.

Standpoint informant's Name (please print)	**Signature and Date**
Investigator/Delegate's Name (please print)	**Signature and Date**
Witness' Name (please print)	**Signature and Date**

The University of Calgary Conjoint Health Research Ethics Board has approved this research study.
A signed copy of this consent form has been given to you to keep for your records and reference.

Appendix C: Consent for General Informants

APPENDIX C

CONSENT FOR GENERAL INFORMANTS

Name of Student Researcher, Faculty, Department, Telephone & Email:
Floribert K. Kamabu
Faculty of Graduate Studies
Nursing, University of Calgary
fkamabu@ucalgary.ca

Supervisor:
Dr. Janet Rankin, Faculty of Nursing

Title of Project:

Exploring Registered Nurses' Everyday Experiences of Telenursing Work: An Institutional Ethnography

This consent form, a copy of which has been given to you, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, please ask. Take the time to read this carefully and to understand any accompanying information.
The requirements I am undertaking for this research have been approved by the Conjoint Health Research Ethics Board at the University of Calgary.

Background:

Telenursing is a growing specialty for nursing practice. It is one of the strategies directed towards reducing the pressures on hospitals, emergency departments, walk in clinics, physician offices, and home health (Bohnenkamp, McDonald, Lopez, Krupinski, & Blackett, 2004; Hagan, Morin, & Lépine, 2000; Stacey et al., 2003). In this new milieu of nursing practice, the telephone is the only communication link between the patient and the nurse. This is a sharp contrast to most areas of direct nursing practice

where nurses are in a face-to-face contact with the people that they can see, touch and smell. Telenursing is one of the applications of the broad field of telehealth (Sharpe, 2001; Association of Telehealth Service Providers, 2009) that has a relatively recent history in contemporary health services.

The proposed research is being formulated as an institutional ethnography (IE) that will explore the everyday work of telenurses. The ordinary and taken for granted activities of telenursing will be carefully examined in order to develop an in depth understanding of the social organization of this form of 21st century nursing.

It is hoped that this study will help guide the development of measures that will support directors, managers, nurses, better patient care, increased caller's satisfaction, retention; address the nurse shortage and costs.

Purpose of the Study:
The purpose of this study is to Explore Registered Nurses' Everyday Experiences of Telenursing Work.

What Will you Be Asked To Do?
Formal interview: You will be asked to participate in one audio taped interview that will last around 45 minutes to one hour at a place and time mutually convenient. Your participation is voluntary. You do not have to answer any questions you do not wish to answer, and you may terminate the interview at any time.

Are there Risks or Benefits if you Participate?
Although the risk is lower because we will not be discussing your feelings, in the event that recollecting some experiences or reflecting on questions during the interview upsets you, let me know as you will be referred to appropriate services to help you (e.g.: counseling, etc.). There are no direct benefits either, although it is hoped you will find the interview to be an enjoyable experience.

What Happens to the Information you Provide? A transcript will be made of your interview. This transcript will not contain any information that links the interview with you. Your name and the names of any people or organizations you mention will be replaced with fictitious names in the transcript.

Only the student researcher, the thesis supervisory committee at the University of Calgary, and the Conjoint Health Research Ethics Board will have access to the interview recording and the transcript made of the interview.

Quotes from your interview transcript will be used in my writing based on this research. Everything possible will be done to use quotes that will not reveal your identity and maintain confidentiality. Only this consent form will have your name.

If you decide to terminate the interview, the information you have provided will be retained and may be used in writing based on this research.

All data (hard copies, electronic copies and electronic audio files) will be secured in a locked filing cabinet in my home that will be accessible only by me. The computerized research information will be stored on my main computer that is password protected and accessible by me only.

After the research is complete, the consent forms will be destroyed; all the research notes and audio recordings will be destroyed within five to seven years; the password protected data will be transferred to a compact disc read-only memory (CD-ROM) that will be locked up until such a time when publication happens. The CD-ROM will be kept for 12 years then destroyed.

As a courtesy, the management of the call centre will be informed of the results of the study. This information will, however, only consist of conclusions with none of your personal or identifying information.

****

Signatures (written consent)
Your signature on this form indicates that you 1) understand to your satisfaction the information provided to you about your participation in this research project, and 2) agree to be interviewed as a general informant.
In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Questions/Concerns
If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Mr. Floribert Kamabu
University of Calgary
Faculty of Graduate Studies
fkamabu@ucalgary.ca

and

Dr. Janet Rankin
Faculty of Nursing
jmrankin@ucalgary.ca

If you have any questions concerning your rights as a possible participant in this research, please contact the Director of the Office of Medical Bioethics, 403-220-7990.

General informant's Name (please print)	**Signature and Date**
Investigator/Delegate's Name (please print)	**Signature and Date**
Witness' Name (please print)	**Signature and Date**

The University of Calgary Conjoint Health Research Ethics Board has approved this research study.
A signed copy of this consent form has been given to you to keep for your records and reference.

Appendix D: Interview Guide standpoint informants

APPENDIX D

INTERVIEW GUIDE STANDPOINT INFORMANTS

The purpose of this research is to explore Registered Nurses' Everyday Experiences of Telenursing Work using Institutional Ethnography.

The research question we wish to address is what are Registered Nurses' Everyday Experiences of Telenursing Work?

Interview Questions

- 1—Tell me about your working experience here in the call centre.
- 2—Tell me how you came to do this work?
- 3—Can you tell me what happened during your last shift?
- 5—Tell me about something that helped make your job easier when you could not see your patient.
- 6—Tell me a time when it was hard to communicate with a caller. What did you do? If it happens again, what would you do differently?
- 7—Tell me an example when you felt supported by the management.
- 8—Tell me about a time when you did not agree with a co-worker. Tell me how you dealt with that situation. If it happens again, what would you do differently?
- 9—Tell me what you like about your work. Tell me about what you don't like.
- 10—Tell me about a good day at work.

- 11—Tell me about your relationship with colleagues and supervisor. What worked well?

- 12—What is the work that your supervisors do that helps you well. What is the work that does not work?

Note 1: Other questions will arise from interviews and budding with telenurses.

Note 2: Emphasis will be on concrete descriptions, following leads, and asking what happened next.

Appendix E: Interview Guide (general informants)

APPENDIX E

INTERVIEW GUIDE (GENERAL INFORMANTS)

The purpose of this research is to explore Registered Nurses' Everyday Experiences of Telenursing Work using Institutional Ethnography.

Preliminary interview Questions

- 1— Tell me how you came to do this work
- 2—What texts do you use to do your work? With your permission I would like to collect those texts for my research.
- 2—Tell me about your working experience here at in the call centre where you work.
- 3—Tell me about a good day at work
- 3—Can you tell me what happened during your last shift?
- 5—What kinds of support do members of the call centre team ask from you?
- 6—What kind of questions come to your desk more often? Rarely?
- 7—Who funds *Talk to a Nurse?*

Note 1: Other questions will arise from prior interviews and budding with telenurses.

Note 2: Emphasis will be on concrete descriptions, following leads, and asking what happened next.

Appendix F: *All-Digital Recording Telephone System (ADRTS)*

Phone Guide

Staff must log on to the phone before they can receive client calls.

To log in you must Press the IN-CALLS key. Enter your LOGIN ID code followed by # sign. Your name will appear on the telephone display and your phone will be in the NOT READY state.

To start taking calls, press the IN-CALLS key once or the NOT READY key once. When the NOT READY light disappears and you are now ready to accept incoming calls.

To answer a call: Press the IN-CALLS key. The In-calls key will light steadily as caller is on line.

The phone has been set up to give you a 4 seconds of BREAK between calls, after completing a call. If you require a longer post call-processing time you will need to press the NOT READY key, as this will temporarily remove you from the phone queue.

If forget to press the NOT READY key, you will continue to receive calls. It is not acceptable to press the NOT READY to re-queue (punt) the caller as they become the longest call in the queue.

Also, please remember not to walk away from telephone without pressing the NOT READY key. If a call is presented to your phone, it will ring 3 times then return back to the Queue. Your set will be place in the NOT READY state. Your telephone display will show CALL REQUEUED.

When in the NOT READY state, you may still receive or place calls using your Directory Number key (63XX), but a client call will not be presented while in the NOT READY stage.

When all phone sets in your skill set queue are logged out, callers will remain in queue.

To log out press MAKE BUSY key **TWICE.** Your telephone display shows LOGGED OUT

To transfer a call, press TRANSFER key, dial the number, announce call, press TRANSFER.

To conference a call, press CONFERENCE key, dial number, announce conference, press CONFERENCE key again to join all parties.

Hotline, you have 2 keys, 911 and LANGSVC, when pressed, they automatically call the desired location. These can be pressed while you have a caller on the line to establish a conference call.

ACTIVITY KEY, while in the NOT READY state, your ACTIVITY key will flash. A code needs to be entered into the ACTIVITY listing outlining the reason why you are in the NOT READY state. Press the ACTIVITY key and enter the appropriate code and press the ACTIVITY key once.

1 - wrap up time,
2 – access resources,
3 – Consultation with Colleague,
4 – Administrative duties,
5 – Fire Drill
6- Computer Downtime

TALK TO A NURSE April 2006

Appendix G: Triage Details Report

Triage Detail Report

Call Information

Call Start Date & Time: 11/03/2004 8:46:00PM
Call End Date & Time: 11/03/2004 9:03:35PM
Call Length (minutes): 17.6
Caller Name:
Relationship to Patient: Is spouse of
Operator Name:

Patient Information (Current as of 13/04/2012)

Name:
PHIN #:
Gender: Female
Date of Birth:
Age: 40 yr.
Address:
Phone:

Call Details

***Presenting Problem:** On March the 8th had a vien ligation to right leg, groin yesterday was seeping blood, today lessened. Tonight the leg around groin incision is red and hot to touch and hard above area where teds stockings are. Is feeling pain in the upper thigh. Had surgery done at
Has a temp of 37.8 axilla (=38.6 core)

***Encounter Notes:**

***Triage Notes:** Operator: The following note was added on: 3/11/2004 9:03:38 PM
Caller says will call envoy in the morning. Given the phone number

Guideline Title: Postoperative Problems , Version: C00003

Guideline Title

Question (All questions, regardless of response)	Response	Question Note
Postoperative Problems , Version: C00003		
Unconscious now or within last 6 hours	No	
New or worsening signs and symptoms that may indicate shock	No	
Coughing up large amount of obvious blood (not blood-streaked sputum)	No	
Severe breathing problems	No	
Continuous or heavy bleeding from operative site and NOT controlled with 10 minutes of steady pressure	No	
Wound separation AND internal organs protrude through wound or surgical incision (evisceration)	No	

*Information is accurate as of the time the call was taken.

Any cardiac signs/symptoms for more than 5 minutes, now or within last hour	No
New neurological symptoms	No
New seizure now or within last 6 hours	No
New onset severe pain and pale, discolored or cool below the surgical site compared to the other extremity	No
Signs/symptoms of anaphylaxis develop within 60 minutes of taking a medication	No
Vomiting red, bloody or coffee-ground material, more than streaks of blood or scant amount (not following nosebleed within past day)	No
Passing red, black or tarry material from rectum AND onset of new signs and symptoms of hypovolemia	No
Hives /Urticaria /Rash	No
Abdominal bloating	No
Depression and no other symptoms	No
Neck lump/swelling	No
Breathing problems	No
Unbearable pain	No
New swelling, pain, tenderness, or red cord-like area in extremity AND coughing up bloody sputum, or new difficulty breathing	No
Signs of dehydration	No
Persistent vomiting OR unable to retain fluids for 4 or more hours	No
No urination for 8 hours or more	No
New onset OR worsening bleeding from incision requiring pressure to control	No
Orthopedic hardware (metal plate, rod or screw) newly bulging under or through skin	No
Wearing cast or splint AND new or worsening pain, or any burning pain, swelling, numbness, tingling, coolness or change in color that is NOT improved by elevation for 30 minutes OR not resolved within 2 hours	No
Heavy vaginal bleeding	No
Recent eye surgery with visual changes	No
Pain not relieved by pain medication when taken as directed	No
Severe pain over bladder	No

*Information is accurate as of the time the call was taken.

Any temperature elevation in an immunocompromised individual OR frail elderly	No
Headache (such as following spinal anesthetic) AND not relieved by pain medication	No
Separation of wound edges without protrusion of tissue (dehiscense)	No
Urinary tract symptoms AND any flank, low back or lower abdominal pain	No
Current or recent urinary tract instrumentation AND urinary tract symptoms OR no urine flow	No
Recent onset of new one-sided swelling (edema), pain or tenderness, or red cord-like area in extremity	No
Bleeding more than expected from site of instrumentation or procedure	No
Productive cough AND new onset green, yellow, brown or bloody sputum	No
New or increased redness, swelling, or pain around surgical wound or drain site	Yes

Recommended Disposition	**Original Inclination**	**Intended Action**
See Provider within 24 - 48 hours	Did not know what to do	Follow advice given

Physician Contacted: No **Physician Instructions:** N/A

Care Advice Text:

Another adult should drive.
Consider acetaminophen as directed on label or by pharmacist/provider for pain or fever if there is no history of liver disease.
Prevent the spread of infection by not sharing any personal items, avoiding skin contact, and using good hand washing technique.
Call back to or call provider if symptoms worsen or new symptoms develop.
If unable to contact provider and arrange to be seen on the same day, go to the ER IMMEDIATELY if temperature is 38.5 C (101.4 F) or greater, or any temperature elevation if patient is immunocompromised (such as diabetes, HIV/AIDS, chemotherapy, organ transplant, or chronic steroid use).
POST-OP WOUND CAUTIONS:
- Call EMS if internal organs protrude through wound or surgical incision (evisceration); this is a medical emergency.
- Call provider if incision line opens (dehiscence).
- Monitor temperature several times a day the first few days post-op.
- Call provider if temperature of 38.5 (101.4 F) or greater develops, having chills or not feeling well.
- Call provider if redness develops around incision, incision looks swollen and inflamed, or purulent drainage develops.
List, or take, all current prescription(s), OTC or alternative medication(s) and street drugs to provider for evaluation.

Reason Care Advice Not Followed: Person declines to follow advice

Health Education Provided: None

*Information is accurate as of the time the call was taken.

Appendix H: Quality Management Performance Review Form

QUALITY MANAGEMENT PERFORMANCE REVIEW FORM

	Weight	Y/N	SKIP
1. Opening- Total Points - 8			
Introduces self with first name and registered nurse (As per _____ guidelines)	1		
"How may I help you today?"	1		
Selects appropriate sub-contract	1		
Determines reason for call and to rule out EMS 911 situation, where applicable, before moving forward with the call.	5		
2. Identifies EMS 911 Call- Total Points - 15			
Recognizes potential EMS 911 symptom/complaint	5		
Follows policy/procedure to process 911 call	5		
If disposition is 911, determines caller's ability to call themselves and conferences with 911 operator, when applicable	5		
3. Person Profile - Total Points - 6			
Selects appropriate electronic record of caller and/or patient if previously called	1		
Collects all demographics including name, address, gender, phone number, date-of-birth on caller, (if patient), and on all patients unless patient requests anonymity. Callers who are not patients will be asked name, address and phone number only.	1		
Confirms or verifies previously documented spelling of all names, phone numbers and other demographics with caller	1		
Follows call center policy/procedures if caller requests anonymity	1		
Associates address of caller with patient, if applicable	1		
Utilizes Call Data node to associate relationship of caller and patient, if applicable	1		
4. Reason for Call- Total Points - 8			
Encourages caller to express concern/request	1		
Summarizes priority by paraphrasing caller's need	1		
Utilizes Assessment Tool to perform clinical assessment of callers primary concern with documentation that accurately and completely reflects the information given bycaller	1		
Specific questioning related to certain at-risk populations (i.e. pregnancy)	1		
Reviews previous call history if pertinent/appropriate	1		
Identifies priority symptom using clinical nursing judgement	1		
Keeps "reason for call" or "presenting problem" as brief as possible to select appropriate guideline/health topic	1		
Completes Healthy Newborn Assessment on ALL infants < 6 weeks old, regardless of reason for call	1		
5. Clinical Profile- (updates/reviews if previous caller) Total Points - 5			
Past medical history, clinical problems	1		
Medications, including prescription, over-the-counter, or herbal remedies	1		
Past medical procedures, including injuries/surgeries/procedures	1		
Allergies/reactions	1		
Health Risk factors	1		

QUALITY MANAGEMENT PERFORMANCE REVIEW FORM

6. Guideline Selection and Disposition- Total Points - 30	Weight	Y/N	SKIP
Selects appropriate guideline for triage	2		
Asks and/or assesses ALL questions in guideline in descending order of urgency to triage priority symptom/concern	2		
Stops questioning when reaches most appropriate disposition (unless second yes required to access further care advice)	1		
If more than one triage guideline is required, upgrades to highest disposition reached, and cross-references triages	2		
Refrains from making any differential diagnosis unless specifically required for appropriate triage or contained within approved care advice	1		
Utilizes approved sources only to provide triage	2		
Speaks to patient ONLY unless patient is unable to speak on the phone due to age or illness (no third party triaging)	2		
Does not disclose any personal information with other parties unless permission received from patient and documented appropriately	2		
Uses triage, encounter, question and session notes appropriately to reflect call content accurately	2		
Appropriately overrides disposition (if applicable), based on health history, primary symptom, and nursing assessment and documents appropriately	2		
Provides current, relevant triage/care advice/home treatment, or health education, if applicable, and documents only what was provided to caller	2		
Uses appropriate judgment to determine need for collaboration with colleagues and/or Team Leader	1		
Following call center policy/procedure, encourages caller to follow disposition recommended	2		
Reports all at-risk callers following call center policy/procedures (i.e. animal bites, potential abuse, suicidal/homicidal calls)	2		
Refrains from judgmental statements (I.E. if caller requesting information on breast-feeding cessation/weaning, formula feeding	1		
Refrains from negative questioning such as "you don't have a fever , you did not fall, you don't have any health problems"	2		
Documents accurately all outside sources utilized to triage if not system generated	2		
7. Breast-Feeding Subcontract- Total Points - 2			
Determines if infant requires triage on ALL breast-feeding calls, regardless of main concern/complaint	1		
Sends appropriate referral to Public Health as required for follow-up	1		
8. Information and Health Education- Total Points - 4			
Asks questions to rule-out symptoms that may require triage on ALL information only calls	1		
Clarifies health education required and information requested	1		
Uses only approved sources	1		
Documents sources for all health education if not software generated	1		
9. Referral- Total Points - 2			
Refers to local agencies/resources using approved referral database/web site directory	1		
Provides caller with information provided in referral database on all referrals (i.e. hours of operation, location, and specialty, etc.)	1		
10. Closing- Total Points - 5			
Ensures caller's concern addressed if able or expresses regret if unable to meet caller's needs/expectations	1		
Ascertains caller's pre-call intent and intended action	1		
Determines how caller heard about TALK TO A NURSE if first time caller	1		
Verifies caller's understanding and comfort with information/triage/care advice	1		
Program Promotion – call again - Cross Sells if appropriate	1		

QUALITY MANAGEMENT PERFORMANCE REVIEW FORM

11. Navigation and Wrap-Up- Total Points - 4	Weight	Y/N	SKIP
Uses concurrent, not retrospective documentation unless manual processing required	1		
Utilizes software to support decision-making and charting and documents accurately to reflect exact conversation	1		
Keeps call-time and wrap-up time within contact centre standards whenever appropriate	1		
Uses interpretation service efficiently and documents appropriately	1		
12. Caller Rapport- Total Points - 3			
Builds rapport through empathy and active listening/paraphrasing and interrupts only when necessary to bring the conversation back to the issue at hand	1		
Communicates professionally, with respect and courtesy, keeping caller informed on what tasks are being performed to avoid "dead air" time	1		
Explains why information is required and seeks permission to obtain details to make caller comfortable with questions	1		
13. Vocabulary/Grammar/Cadence- Total Points - 3			
Uses proper grammar, articulates clearly, and avoids the use of highly technical language, unless appropriate to the caller	1		
Uses "slang" when appropriate for caller's level of understanding	1		
Keeps conversation at appropriate speed for caller	1		
14. Call Control- Total Points - 5			
Provides adequate information	1		
Avoids leading questions	1		
Keeps conversation focused by leading caller politely back to health concern	1		
Paces call according to situation	1		
Avoids extraneous conversation	1		
TOTAL	**100**		

EMPLOYEE NAME:

DATE:

TEAM LEADER NAME:

EMPLOYEE SIGNATURE:

TEAM LEADER SIGNATURE:

Appendix I: Chest Pain/Discomfort Protocol Overview

Version Number: [redacted]
Acuity: 1
Gender: B
Min Age: 18
Max Age: 120

Keywords:
ANGINA
ANGIOPLASTY
ARM PAIN
BACK PAIN
BREATHING PROBLEMS
BURNING CHEST PAIN
CHEST
CHEST DISCOMFORT
CHEST PAIN
CHEST PRESSURE
CHEST TIGHTNESS
DIAPHORESIS
DIFFICULTY BREATHING
DYSPNEA
EPIGASTRIC PAIN
ESOPHAGEAL PAIN
FAINTED
FAINTING SPELL
FAINTNESS
FAST HEARTBEAT
FATIGUE
FEELING OF DOOM
FELT FAINT
HEART
HEART POUNDING
HEART RACING
HEART SURGERY
HEARTBURN
HEAVINESS
HICCOUGHS
HICCUP
HICCUPS
HURTS TO BREATHE
HYPERTENSION
INDIGESTION
IRREGULAR HEARTBEAT
IRREGULAR PULSE
JAW PAIN
LIGHTHEADED
LIGHTHEADEDNESS
LOSS OF CONSCIOUSNESS
NAUSEA
NAUSEATED
NECK PAIN

CHEST PAIN/DISCOMORT PROTOCOL

Pain or discomfort anywhere between the jaws and the bottom of the ribs. Chest pain is often described as tightness, constricting, crushing, burning, dull, piercing, heavy, or stabbing. Radiation of pain to the arms, shoulders, neck, back, or upper abdomen may or may not be present.

OVERVIEW

Chest pain can be a manifestation of many disorders affecting the heart, blood vessels, lungs, digestive tract, or the muscle and bones of the chest wall. In assessing the history of chest pain, five specific characteristics should be considered: location, quality, duration, factors that bring it on or make it worse, and factors that relieve or lessen the symptoms.

According to the American Heart Association (AHA), chest pain remains the most common initial symptom of coronary artery disease in men and women, but women may also present with atypical symptoms such as shortness of breath, overwhelming fatigue upon exertion, and nausea or heartburn. Women may report pain/discomfort in lower chest, back or abdominal pain that comes and goes instead of mid-chest pain.

Risk factors for cardiovascular disease include:

Age: >35 male; >45 female
Predominant Sex: In age range 40-65: male > female; over age 65: male = female
Hypercholesterolemia (increased LDL; decreased HDL)
Hypertriglyceridemia
Family history of CAD or stroke before age 60
Hypertension
Tobacco abuse or exposure to second hand smoke
Excessive alcohol intake
Diabetes mellitus
Obesity or overweight
Sedentary lifestyle
Cocaine, methamphetamine, other drug use

END OF TEXT