The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care

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Abstract

This study aims to understand the organization of Emergency Department (ED) nurses in Ontario after years of restructuring and cuts made to the healthcare system. The news is currently filled with ED closures across the country due to a shortage of nurses and high hospital occupancy. The recruitment and retention of nurses in the ED has proven extremely difficult due in part to the Ontario government's Bill 124 capping nurses' wage increases at 1%. This wage freeze is inscribed in a larger rationale present internationally advocating for efficiency and marketization of all spheres of life, healthcare included. Most of the literature published on the work of ED nurses refers to ideas of performance of flow.

Using Institutional Ethnography (IE) as an approach and governmentality, more specifically neoliberalism, as a perspective, this study maps the ruling relations influencing the work of nurses in the ED. It also uncovers how the neoliberal discourse was not only internalized but applied by nurses in their work environment. The methodological approach and perspective used in this study highlight how a new rationale was implemented in the management and funding of healthcare, which then led to transforming the rationale of providing care in the ED. The ED now delivers care following a supply chain rationale employing technologies of governmentality such as Electronic Medical Records (EMR) to entice a specific conduct from nurses in order to meet the demands of the market. This new rationale, coupled with the implementation and sustaining of the technologies of governmentality, has come to completely transform what an ED nurse is nowadays. This new ED subject is responsible for most aspects of care, flow, and even her own training and security. The findings suggest that the use of algorithms based on best practices (such as medical directives) came to further erode the decisional power of nurses, resulting in "checkbox" practice.

The main interest in life and work is to become someone else that you were not in the beginning. If you knew when you began a book what you would say at the end, do you think that you would have the courage to write it? What is true for writing and for a love relationship is true also for life. The game is worthwhile insofar as we don't know what will be the end.

Foucault, 1988, p.9.

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A project of this size and length cannot be accomplished without the help and support of exceptional individuals.

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dedication to finish this came from you. You both are inspiring to me by your strength and bravery, thank you!

To my Mom and Pop, thank you for your support, we did it!

Table of Contents

Website Created as Reading Help

As the abbreviations, maps, appendices, and news articles were numerous throughout this thesis, a website was created as a way to ease the navigation and understanding of the different processes in the ED. This website and its domain were purchased and created by the author. Throughout the thesis, when the hyperlinks visible in blue are clicked on, the page will bring you directly to the material referenced on the website. The website can also be accessed from its direct link: politicsofnursing.ca

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List of Abbreviations

ACLS	Advanced Cardiac Life Support
AOD	Ambulance Offload Delays
AVS	After Visit Summary
BLS	Basic Life Support
BP	Blood Pressure
BW	Bloodwork
CAOS	Clinical Administrator on Site
CF	Care Facilitator
CIHI	Canadian Institute for Health Information
CNL	Clinical Nurse Leader
CNS	Clinical Nurse Specialist
CP	Chest Pain
CTAS	Canadian Triage Acuity Score
DART	Daily Access Reporting Tool
EC	Emergent Care
eCTAS	Electronic Canadian Triage Acuity Score
ED	Emergency Department
EHR	Electronic Health Record
EMR	Electronic Medical Record
HR	Heart Rate
HQO	Health Quality Ontario

IP	Intake Physician
IV	Intravenous
LOS	Length of Stay
LTC	Long Term Care
LWBS	Left Without Being Seen
MOHLTC	Ministry of Health and Long-Term Care
OBS	Observation
OHIP	Ontario Health Insurance Plan
OWTS	Ontario Wait Time Strategy
PALS	Pediatric Advanced Life Support
PIA	Physician Initial Assessment
PIP	Process Improvement Program
PN	Process Nurse
PO	Per Os (by mouth)
PR	Plaster Room
PSW	Personal Support Worker
P4R	Pay-For-Results
Quick reg	Quick registration
RAZ	Rapid Assessment Zone
RN	Registered Nurse
TNCC	Trauma Nursing Core Course
UC	Urgent Care
VS	Vital Signs

VSM	Value Stream Mapping
WTBS	Waiting To Be Seen
WTIS	Wait Time Information System

Introduction: Research Objectives and Chapters Overview

When imagining an emergency department (ED), most people will see images of trauma, bloody cloths laying around, and crash carts lining the halls. If you are living in Canada, you will probably imagine hallways lined with patients on stretchers waiting to be looked after in an overcrowded hospital, or the long hours you will have to wait to see a physician. Nowadays what will also come to mind are the countless news reports on ED closures due to nursing shortages, where parts of the ED or even whole EDs become unavailable to the public. Nursing shortages in Ontario and Canada are not a new phenomenon. Valiani (2012), in her book *Rethinking Unequal Exchanges*, explains the three key changes that created the nursing shortage in Canada. The first change is a sharp decrease in work satisfaction by the nursing workforce. Since the 1990s patients coming into the hospital are more acutely ill and are discharged quickly to recover at home after the acute phase of their illness. This has resulted not only in work dissatisfaction, as nurses can no longer see patients' conditions improving, but also in a severe intensification of their work. It takes more time and effort to look after acutely ill patients. The second change leading to a wide nursing shortage is the central focus on productivity within hospitals. Computerized systems and patient classification systems measure productivity, therefore making *care* within hospitals obsolete or perceived as superfluous. The last key change discussed is the transportability of the nursing workforce. Nurses started to work in different hospitals or different wards every shift to cover for missing staff. This led to the creation of a large percentage of part-time positions, increasing the precarity and vulnerability of nursing work. What Valiani (2012) exposes is the result of decades of transformations to the healthcare system with the central goal of productivity, cost efficiency, and sustainability. This reality impacted the work and definition of nursing in all departments of the healthcare system. In Ontario since

2019, Bill 124 or the *Protecting a Sustainable Public Sector for Future Generations Act* capped any public spending on wages of employees to a maximum of 1% per year (Legislative Assembly of Ontario, 2019). This meant that nurses' salaries would not keep up with the rate of inflation, creating further work dissatisfaction within the nursing workforce as was evidenced by the recent court challenge to this bill by the Ontario Nurses Association (ONA, 2022)

Under these conditions, past and present, the work of ED nurses has been deeply transformed and has led to frequent and numerous complete and partial closures in EDs in the province (Wallace, 2022). It is in this context that this research takes place. An important piece that is missing when discussing ED closures and nursing shortages is the experiences of these nurses in the field. This question is central for this research as it starts and ends in the ED nurses' experience of their workplace.

Research Objective and Questions

Using a framework of governmentality, more specifically neoliberalism, and an institutional ethnography (IE) methodology, this project seeks to explore how nursing work is currently organized in the ED. More specifically, I seek to understand how ED nurses experience their work, and how their work is socially organized within the hospital setting and more broadly within the healthcare system.

This project seeks to answer the following questions:

- How is ED nurses' work currently organized in the ED?
- How do nurses experience their everyday work?
- How is nurses' work organized from within and outside of the ED?

Relevance

Across the province, EDs are closing temporarily for anywhere from a day to several weeks as their staffing levels have become insufficient to care for the populations they serve. Successive transformations and reforms in EDs across the province have deeply transformed how ED nurses view, describe, and practice nursing in the ED. The COVID-19 pandemic has exacerbated longstanding problems that have been present for years, and these closures reflect the state of healthcare in Ontario (and across the country). Naming and explaining the forces that have led to these transformations in the ED is a first step in helping nurses understand their experiences locally and to place those experiences on the provincial or national landscape.

Overview of Chapters

This thesis consists of seven chapters and is structured in the following way. Chapter one will provide a background to the landscape of ED transformations in Ontario since 2008. The changes were implemented in multiple phases and included different approaches such as the pay-for-results (P4R) program and the ED Process Improvement Program (ED-PIP). This chapter is essential to understand the current experience of nurses in the ED.

Chapter two presents the literature review conducted with terms specific to the research problem. As this research is rooted in the experience of ED nurses, search and mesh terms were developed with the librarian covering the experiences of ED nurses in the first part and ethnographies conducted in the ED in the second part of the review.

Chapter three consists of the theoretical frameworks used for this study. As the methodology of IE contains its own specific theory, the rationale behind the choice of adding another specific theoretical component, neoliberalism as a political rationality, will be explained in depth. Finally, the theory specific to the methodology will be discussed.

Chapter four defines the methodological considerations and their applications in this research. This chapter is rooted in theory and presents the tenets of Institutional Ethnography (IE), linking it to the methods used in this study. IE is an alternative to sociological studies, placing the knower (participant) and their experiences at the center of the inquiry. IE is critical in nature as it questions how power travels through institutions. It seeks to understand how things are instead of what and why.

Chapter five presents the empirical results of this study, which are divided into three distinct indexes according to nurses' work experience in the ED. The titles of these indexes are mostly direct quotes from the participants. The main indexes used to present the results are flow, Epic, and nursing experiences.

Chapter six is the discussion linking the empirical results to the theoretical framework and the methodology as well as the literature review. This chapter starts with an analysis of the transformations of healthcare in Canada and Ontario, then discusses the application of governmentality in these transformations. Finally, a short conclusion will be provided.

Chapter 1: Background

In May 2008, the Ontario Ministry of Health and Long-Term Care (MOHLTC) announced the ED Wait Time Strategy reform to tackle ED wait times across the province. The stated impetus for this reform was that longer wait times are associated with increased morbidity and mortality in patients (Guttmann et al., 2011). The 23 hospitals with the longest ED wait times in the province were selected to be part of this program, which involved several initiatives (MOHLTC, 2008: pay for results (P4R), public reporting of wait times, ED-Process Improvement Programs (ED-PIPs), Offload Nurses (OLNs), and Clinical Decision Units (CDUs) . These reforms were fully implemented in the selected hospitals by April 2009 (MOHLTC, 2008) and would come to completely transform how ED nursing care is delivered in the province. The following five sections will explain these initiatives in detail. I argue that the implementation of these initiatives came to completely redefine what an ED nurse is and therefore serves as the background to this research.

1.1 Pay for Results Program

The Pay for Results Program (P4R) aimed to improve the performance of EDs in hospitals across the province by providing rewards (funding) to hospitals that met established targets set by the MOHLTC. These targets focused on the length-of-stay (LOS) of non-admitted patients, with four hours to see and discharge non-urgent patients and eight hours to see and discharge urgent patients. Non-urgent patients are defined as patients that are given a Canadian Triage and Acuity Scale (CTAS) score of IV or V, whereas urgent patients are defined as patients that are attributed a CTAS score of I-III. CTAS uses a five-point scale to establish which patients should be seen first, from CTAS I or resuscitative measure to CTAS V non-urgent presentation. The P4R program was implemented in three waves from 2008 to 2011. The

"reward" is only provided if hospitals meet these established targets 90% of the time over a 24-hour period. The 23 EDs selected in the first wave of the program were chosen as they had high wait time pressures and high volumes of patients and they shared close to $30 million in extra funding depending on their performance in meeting the wait-time targets (MOHLTC, 2008). There were four specific performance targets in the first wave. The first one was extreme LOS in the ED (greater than 24 hours) that had to account for less than 2% of total patient visits. On the next three targets, hospitals had to show an improvement from the previous fiscal year: patients given a CTAS I/II were to have a LOS within eight hours, CTAS III to have a LOS within six hours, and CTAS IV/V to have a LOS within four hours. (Vermeulen & al., 2015). These specific targets were set by the province and based on clinical evidence, yet this clinical evidence was not made available to the public (HQO, 2022). Based on the success of the first wave and the newly released targets, two further waves were implemented in 2009 and 2010 where hospitals in waves two and three shared $55 million and $100 million respectively. Before the second wave, further performance metrics such as time to Physician Initial Assessment (PIA), ambulance offload times, Left Without Being Seen (LWBS) percentages, and door-to-triage time, were added to the P4R reform. Local Health Integration Networks (LHINs) were also given the authority to add various performance metrics of their own choosing to the P4R program, irrespective of regional challenges in ED wait times (Schull et al., 2013).

1.2 Public Reporting of ED Wait Times

By October 2008, the 23 hospitals enrolled in the P4R program had to report wait times to the MOHLTC, which were then made available to the public. The architect of the ED Wait Time Strategy, Dr. Alan Hudson, called this strategy "Data, Money, Shame" (Ovens, 2011). The *data* component consisted of the compulsory reporting of ED wait times. However, as different

hospitals used different electronic systems, the reporting process had to be standardized, which will be discussed in detail in the discussion chapter. The *shame* aspect of this plan was linked to public reporting. Average wait times in hospitals have been available on the Health Quality Ontario (HQO) website since 2008. The HQO provides a list of hospitals in the province from best (shortest) to worst (longest) wait times, nicknamed the "list of shame" (HQO, 2022). The *money* aspect of Hudson's plan was the P4R initiative, where hospitals that met or exceeded pre-set LOS targets received additional funding. At the research site for this study, the results on P4R targets were posted daily through a Daily Access Reporting Tool (DART). The DART was a report listing various targets with associated colour codes, red indicating a failed target (i.e., patient LOS longer than the target LOS), yellow indicating on-target (i.e., patient LOS meets the target LOS), and green when targets were exceeded (i.e., patient LOS shorter than the target LOS). All staff received the DART tool daily/weekly by email to keep track of performance. The tool still is sent to staff by emails but is no longer posted within the department.

1.3 ED-PIP

Another aspect of the Ontario ED wait time strategy was to assist hospitals in implementing Process Improvement Programs (PIP) to improve flow and performance in EDs. In April 2009, select EDs across the province were tasked with forming and implementing PIP teams (Vermeulen et al., 2015). These PIP teams were funded by the MOHLTC; in the initial wave, the MOHLTC provided $7.5 million to the 23 participating hospitals for the creation of the PIP teams. The explicit goal of these PIPs teams was to change the processes in the ED by following Lean methodologies (MOHLTC, 2013).

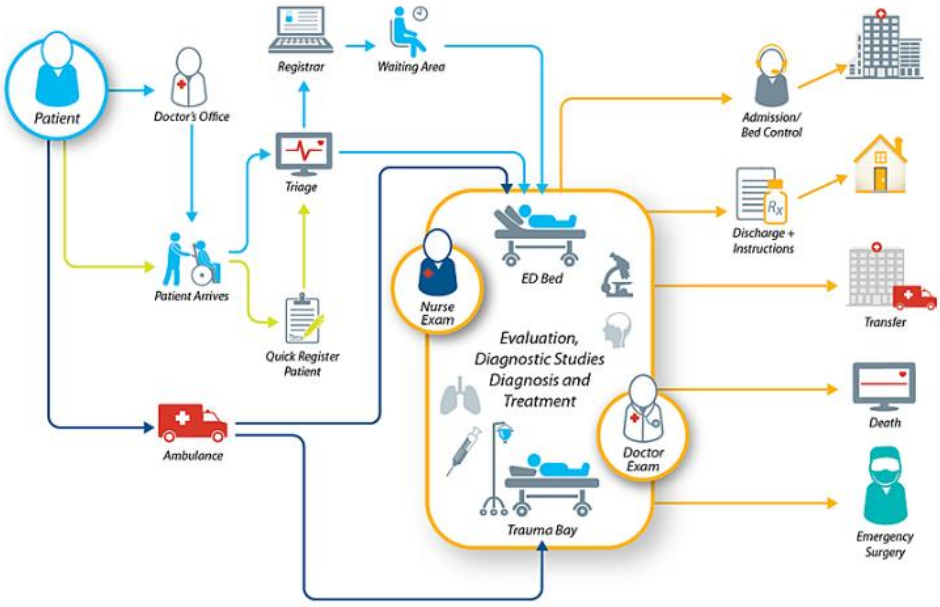
Lean methodologies emerged in the mid- 20th century at the Japanese Toyota car manufacturing company in the context of the "Toyota Way" and the "Toyota Production

system," which sought to streamline human activity (efficiency), cut "waste," and instill continuous improvement to extract additional value from the production process. Lean also emphasizes specifying "value" in terms of the client's perception of value, meaning the goal is to find the most efficient and cost-effective way to meet the clients' wants. The term Lean itself was coined in 1988 by John Krafcik, a production researcher at the Massachusetts Institute of Technology, who extended this approach to car manufacturing companies across the world (McKay & Peters, 2015; Womack et. al., 1991) The appropriation of a management technology developed in the car manufacturing industry was previously unheard of but gained quick popularity across Canada in the early 2000s (Fine et al., 2009). Lean, when used in healthcare, aims to expand the services provided without adding expense, or to "do more with less" (Fine et al., 2009, p.32). It is not only a way of changing processes and evaluating where waste is present, the goal is also to implement a Lean culture, where every actor is responsible for increasing efficiency and performance.

All EDs selected to participate in the PIP program formed teams of expert ED nurses (also colloquially called "seasoned" nurses, or with more than 5 years of ED experience) to study and change the work processes in the ED to meet the targets set by the MOHLTC, then by the LHINs. Lean management, through PIP teams, began with an active scrutiny of *every* single process in the ED. All nursing actions from triage to initial assessment, registration or discharge of a patient were studied, discussed, then transformed or modified to cut any possible wasted time/steps. Any steps that were found to not add value, or which created waste, were further studied and subsequently changed. Steps such as extra linen disposition, extra supplies at the head of the beds, or calling the floor nurse to give a report, were eliminated as other steps in the process were covering these (central station for supplies, faxed report to the floor nurse, etc.) As

a veteran ED nurse, with over eight years of experience, I was part of the PIP team at my organization from 2010-2015. Once a week, all team members would meet and brainstorm ways to cut waste and increase the speed of processing patients; everything we did was aimed at improving the flow of patients in the ED. Most of our efforts targeted patients with CTAS IV and V, or better ways to keep the flow going in the Urgent Care (UC) area. The UC area serves as a "walk-in clinic" where patients who can walk without assistance are sent to be seen by a physician. Most CTAS IV and V are sent to the UC area. Below is a map schematizing the flow of patients in the ED from arrival to disposition.

Figure 1: Patient Flow in the ED



Centrak, 2022 (https://centrak.com/resources/blog/optimized-patient-flow-in-the-emergency-department).

The blue and green lines to the left represent the arrival of patients in the ED. Patients can arrive via ambulance, from other areas of the hospital, or walk in themselves. The throughput in the ED

is the treatment, or the movement of the patients represented by the orange rectangle from triage to the treatment area until a disposition is decided. A disposition is a way to move the patient out of the ED, either to discharge home, an admission to the hospital, through death, or to an emergency surgery. Each section contains multiple steps, with nursing interaction or input in every single one of these steps. Each section of the map above was scrutinized in detail during Value Stream Mapping (VSM) meetings. VSMs were introduced as a tool in Lean management where team members, or the workers, study a problem and find a solution to it on their own. Approximate units of time are attributed to each action, for example, a set time for registration by the clerk and for triaging. PIP team members ran the meetings and various ED nurses helped study the processes and proposed changes to cut these times. We trialed various approaches such as skipping registration for patients requiring admission to an area of the ED with physical beds and assigning chairs in the waiting room for patients waiting to be registered (to decrease the time it took to make it to the registration desk). Despite the promise that Lean methodologies would streamline processes and cut waste in the ED or make care "better," what I observed was the increasing segmentation of ED nurses' work. As the sole focus of the entire PIP team and the VSM meetings was meeting the targets, the patient's experience was completely missing. The processes of other care providers in the ED such as physicians and orderlies were also studied and streamlined through these cycles of change.

1.4 The OLN

Another initiative that was part of the ED wait-time strategy was the creation of the Offload Nurse (OLN) position. The OLN position was announced by the MOHLTC in 2008, and $4.5 million was given to the participating EDs to create a space where OLNs could house ambulance patients not requiring immediate attention (MOHLTC, 2008). The OLN position was

created with the intent of decreasing patient offload times from the ambulance stretchers. In other words, the OLN should speed up the process of moving patients from the ambulance to a bed in the ED to decrease paramedics' turnaround time. The caveat is that OLNs hired through an agency are not paid by the hospital, but rather by the paramedic services. Therefore, in most EDs across the province OLNs were in fact not ED-trained nurses but rather nurses hired through an external agency, most of whom did not have ED experience. Specific criteria had to be established to determine which patients would be eligible for transfer to the OLN, namely, the patient must be cooperative, have stable vital signs, not require airborne precautions, and be non-violent.

Following the implementation of the OLNs in 2008, the MOHLTC reported that the offload delay of patients coming by ambulance had significantly improved (MOLTC, 2012). In 2012, the McGuinty government invested a further $9.6 million to staff 90 OLN positions across the province. However, based on my experiences and many statements of participants, patients offloaded with the OLN do not see a physician faster and are cared for by an agency nurse in the hallway, where privacy is provided only by removable walls and the washroom is not accessible.

1.5 CDUs

The final initiative in the reform of ED care in Ontario in 2008 I will discuss is the implementation of Clinical Decision Units (CDUs). These units were to be staffed by an ED physician and ED RN who would be responsible for patients who may require investigations or treatments that would last longer than the established wait time for their assigned CTAS (Schull et al., 2012). It is important to note that because the goal of this initiative was to decrease the LOS of ED patients, patients who required admission to hospital were not eligible for the CDU. Hospitals are penalized if more than a certain percentage of patients transferred to a CDU are

admitted. A concrete example of the use of CDU would be a patient awaiting a diagnostic imaging test that has a long wait time like a Magnetic Resonance Imaging (MRI). Regardless of CTAS on arrival, these patients are placed in a CDU due to the fact that staff are aware their LOS will be longer than the set wait-time target. A feature of the CDUs was that ED staff were only allowed to place 2% of their patients daily in it and the unit had to demonstrate admission rates under 30% (Salkeld et al., 2011).

As a CDU was a pilot project initially, participating EDs were given the option to create a physical CDU, where patients would be housed and cared for by an ED nurse and physician, or to create a virtual CDU. The virtual CDU consists of electronically transferring a patient into the CDU (meaning simply dragging and dropping their name from one area to another in the computer system), where time is "suspended," meaning there is no established or set target LOS for patients in the CDU. In other words, the CDU "stops the clock"; for example, normally a CTAS III patient should be seen and discharged within eight hours, but if they are placed in the CDU their LOS target no longer applies. It is critical to note that the care provided for patients in the virtual CDU did not change and they were nonetheless still part of a patient assignment in the treatment area. The only difference was their LOS, which was suspended; in the virtual CDUs, there was no physical patient movement, only a virtual displacement of the clock. Physical CDUs, in comparison, removed patients from treatment areas in the ED while they waited for various investigations, such as MRIs or ultrasounds, opening the bed in the ED for another patient and thereby improving flow. Nowadays, the nurse navigator, which will be discussed in the results chapter, is in charge of monitoring patient transfers to a CDU, ensuring they do not exceed the set number of patients allowed.

1.6 Conclusion

The present state of the healthcare system in Ontario is the result of years of cuts and reforms. In the ED, the implementation of the wait-time strategy in 2008 came to completely re-define how patients arriving in the ED are cared for and treated. The idea of flow in the ED, which will be discussed in the results chapter, became a central aspect of its operation and is consistently being scrutinized and changed. Flow enables EDs to meet the wait time targets set by the MOHLTC and secure additional funding. The P4R initiative, combined with the introduction of Lean methodologies in the ED, shifted the culture and rationale of ED nursing. The establishment of wait-time targets in the ED completely redefined how care was delivered and most specifically, how nursing work was organized. It is in this context that this research was imagined. The next chapter will present a review of the literature on the subject of ED nurses' work as well as ethnographies conducted in the ED.

Chapter 2: Literature Review

The published literature on emergency (ED) nursing is abundant and covers a broad range of subjects. A cursory look at this literature reveals that since the implementation of Lean management in the ED, most of the literature published discusses either the implementation of Lean processes or the results of these processes on performance. In the last decade, healthcare settings have rapidly adopted and implemented the Lean management style, especially in EDs (Deblois & Lepanto, 2016; Hossam Elamir, 2018). Hospitals administrators became responsible for the successful implementation and sustainability of a Lean culture, as well as reaching target wait times or exceeding them to qualify for increased funding.

The bulk of publications are quantitative in nature, using metrics such as Length of Stay (LOS), Physician Initial Assessment (PIA), and volume of patients according to the Canadian Triage and Acuity Scale (CTAS) score. While most of this literature does address or studies nurses' work in some way, there is a lack of attention to the concrete ways in which nurses' work is organized in the ED and how this has changed as a result of transformations of the healthcare system. Prior to beginning data collection, it was necessary to organize two streams to the literature reviews. The first was to better understand the existing landscape of literature surrounding nurses' work in the ED and transformations therein, and the second was to uncover any existing qualitative research limited to ethnographies. This chapter is divided into two parts; the first will provide an overview of existing literature pertaining to nurse's work, and the second will describe published ethnographies conducted with ED nurses. The goal of this chapter is to situate my research within the body of existing published literature about the work of nurses in the ED.

2.1 Nurses' Work in the Emergency Department

The goal of this literature review was to provide an overview of the existing literature regarding the organization of nurses' work within the ED. Nursing work in the ED can be described as anything nurses do. From interacting with patients and families to logging into a computer or scanning their badges to gain access to a room or equipment, it is the minute details of their time in the ED that define their work. Nurses in the ED not only respond to changes in patients' medical conditions, but they also respond and adapt to relations that originate from outside the ED (e.g., public policy). The ED wait-time strategy, discussed in chapter 1, is an example of public policies that influence nursing care at the bedside. The implementation of public reporting of wait times in the ED required new systems for tracking and documenting on patients' charts, all done by nurses. From this review, the following topics emerged as most salient: performance; interruptions; stress and burnout; roles; violence.

2.2 Methods

2.2.1 Search Strategy

To retrieve a broad range of perspectives for this review, both CINAHL and SCOPUS were searched. CINAHL was chosen to reflect the health science and allied health perspectives, and SCOPUS was chosen as it indexes both MEDLINE and EMBASE, which capture biomedical perspectives. Prior to the database searches, I used a modified version of the PICO and SPIDER to outline key concepts (Murdoch University, 2022) Specifically, the PI (phenomenon of interest) was retained from the SPIDER. (See Appendix A, Table 5, for the breakdown of search terms). Initially, only language limits (English or French) were applied to the searches. However, given the high prevalence of irrelevant articles, two other exclusion criteria were developed and applied. Considering the contemporary nature of the research

questions (i.e., neoliberal transformation of nurses' work), the date range was restricted to 2000-2020. Second, there was a pragmatic choice to exclude pediatric emergency departments given that the research area in this study was planned for an adult emergency department.

2.3 Data Management and Analysis

As shown in Figure 4, 876 articles were retrieved from the databases and imported into EndNote reference manager. Following title and abstract review, 595 full texts were retained. After removing duplicates, 235 full-text articles were screened according to the following criteria: English or French full text must be available; nurse's work, its organization, or its transformation must be a central concept; it must be related to nursing in the emergency department specifically; it must be peer reviewed. A total of n=190 articles were included in this review.

Content analysis allows for a broad but condensed summary of large amounts of data (e.g., documents) to provide a description of a phenomenon; this approach allows the researcher to stay close to the texts, while also providing insights into the phenomenon of interest. Therefore, to summarize the large volume of articles included in this review, I followed the content analysis approach outlined by Elo & Kyngäs (2008). They outline both a deductive and inductive approach to content analysis. In the inductive approach, categories are derived from the data itself whereas in a deductive approach, the categories are determined *a priori* based on a pre-existing model or framework. Given the exploratory nature of this review, the inductive approach was chosen.

According to Elo & Kyngäs (2008), there are three phases in content analysis: the preparation phase, the organizing phase, and the resulting phase. In the preparation phase, all included articles were imported into EndNote reference manager and read in full to immerse

myself in the data (i.e., each article was a unit of analysis). In the organizing phase, I began by assigning keywords (i.e., codes) to each article according to its goals, key concepts, and overall themes. I then reviewed the full list of keywords and began grouping them based on their similarities (i.e., creating document groups). These groupings were further refined into five categories. To provide an example of the distillation process, there were many terms and titles used to refer to specialty nursing roles in the ED, which were all coded as keywords. These keywords were grouped into the larger category "roles."

2.4 Results

Through the inductive content analysis procedure described above, five core categories emerged: performance; workflow interruptions; stress, fatigue, and burnout; roles; violence. The following sections will present these categories in detail.

2.4.1 Performance

In this review, performance, at both the level of the unit and the level of the nurse was the most prevalent theme; 47% (n=90) of the included articles discussed strictly performance and were only included in this category. The literature on ED performance has exploded since 2010 and these publications are all punctuated with words such as "efficiency" (Almulhim et al., 2020; Baker et al., 2013; Bobb et al., 2018; Fay et al., 2018; Kerasidou, 2019; Pati et al., 2014), "safety" (Evans et al., 2017; Lee & Oh, 2020; Meginniss et al., 2012; Pati et al., 2014; Webb, 2010; Xavier Schuh et al., 2020), "flow" (Baker et al., 2013; Gilardi et al., 2014; Mumma et al., 2014; Price, 2009; van der Linden et al., 2019; Vose et al., 2014; Whatley et al., 2016), "throughput" (Bertoty et al., 2007; Elder et al., 2015; Esbenshade, 2015; Handel et al., 2010; Webb, 2010), and "quality of care" (Bruno, 2017; Johansen, 2014; Melon et al., 2013; Vose et al., 2014). Performance in nursing of the ED can be defined as attaining specific goals set. For

example, if the LOS target for a CTAS IV patient is four hours, the ED and nurses are perceived as performant if they meet this goal (Baker et al., 2013; Vose et al., 2014).

As will be discussed in detail in the discussion chapter, in 2007 Local Health Integration Networks (LHINs) were created to manage Ontario's health system and the attribution of funding. The formation of these networks was a response to the Federal Government's *10-year Plan to Strengthen Healthcare* (Government of Canada, 2006). Central to this plan was the question of access to healthcare for Canadians by reducing wait times in various departments. This plan came on the heels of the "4-hour target" trend – the goal to see and discharge emergency patients within four hours of their arrival in the ED – which began in the early 2000s among EDs across the globe (e.g., Australia, United Kingdom, the USA, Canada) (Elston, 2010). In February 2009, the "Wait Time Strategy Team" set target wait times for ED care in hospitals across the province of Ontario (Trypuc et al., 2006). To meet these targets and be eligible for baseline or supplemental funding from the province, LHINs across the province introduced Lean management in EDs (Rotteau et al., 2015; Schull et al., 2013).

A recent scoping review by Mahmoud et al. (2021) synthesized 17 articles on Lean management in the ED and its perceived positive or negative impacts. The authors identify morale, motivation, and job satisfaction improvements as a direct result of the implementation of Lean management in the ED. However, this finding contradicts the other findings in Mahmoud et al.'s (2021) review, namely that the introduction of Lean management in the ED led to an intensification of work, job strain, and dehumanization of ED care. In an interview study with 31 ED nurses in the UK, Hoyle & Grant (2015) found the 4-hour target in the ED increased workload and had a negative impact on patient care. Of the literature included in this review, the dehumanization of ED care and increased workload were the most frequently reported impacts of

improvement processes from the implementation of Lean management in the ED (Hoyle & Grant; Melon et al., 2013; Webster et al.).

An important consideration in Lean management is *flow.* Flow in the ED can be defined as the movement of patients through the department, from their arrival in the waiting room to a treatment area (DeAnda, 2018; Garrett et al., 2018; Ray & Reinoso, 2019). *Throughput*, on the other hand, refers to the movement of patients throughout the entire organization, and most often refers to patients admitted to hospital (Esbenshade, 2015; Garrett et al., 2018; Murphy et al., 2014; Ray & Reinoso, 2019). Flow and throughput are often linked with improvement of care, funding, targets, and metrics (Baker et al., 2013; Mumma et al.; Nailon et al., 2015; Pati et al., 2014; Sorensen et al., 2012; van der Linden et al.; Vose et al., 2014; Whatley et al., 2016). In the reviewed literature, most studies about performance reported on the implementation of processes to improve flow and the subsequent impacts on wait times, discharge time, and patient satisfaction scores. Some of these processes include MD-assisted triage, zero wait time strategy, and advanced practice nurses in the ED (Combs et al., 2007; Considine et al., 2012; Deutsch, 2008; Edwards & Lewington, 2010; Elder et al., 2015; Fry et al.). Rapid Assessment Zone (RAZ) refers to internal areas within EDs that are designed to see and treat patients presenting with non-urgent complaints (e.g., those having simple lacerations, requiring an X-ray on a non-displaced fracture, or a sore throat) (Considine et al., 2012). The zero wait-time strategy within the ED was imagined as fully eliminating wait times, moving patients straight from arrival in the waiting room to a treatment area (Deutsch, 2008). Most authors and reviewed articles define the performance of an ED in metrics such as wait times, percentage of those who left without being seen (LWBS), time to initial physician assessment, and patient satisfaction.

The category of performance in the ED is most often centred on the idea of system or organizational performance. If the organization or the individual ED performs well on certain metrics (e.g., lowering wait times), they are perceived as successful and could qualify for additional funding. The second aspect of performance, which is not discussed as often as system performance, is the performance of nurses in the ED themselves. In the reviewed articles, the performance of nurses in the field is generally seen as a valuable resource (Selph, 2014). Any nursing time is viewed in terms of expenses, meaning spending money on tasks or nursing actions that are not perceived as adding value to the care of the patient. For example, looking for supplies or transporting patients is viewed as time wastage (Richardson et al., 2014; Selph, 2014). As Selph (2014) states, "Because productivity is an important indicator in health care, affecting providers' ability to provide care while adhering to budgetary constraints, avoiding inefficient processes is critical" (p. 368). From this perspective, the study of actions of nurses at the bedside generally revolves around waste avoidance; making supplies readily available, for example, removes the time needed to search for items, or removing no-value added activities in the nursing role, such as long documentation and organizational paperwork that keeps the nurses away from the bedside (Richardson et al., 2014; Selph, 2014). In keeping with the work of nurses in the ED, this next section will discuss workflow interruptions.

2.4.2 Workflow Interruptions

Most preventable hospital deaths and adverse events in the US occur in the ED, a result attributed to clinician interruptions (Forsyth et al., 2018b). *Workflow interruptions* are defined as any distraction that redirects a clinician's attention to another task, resulting in the discontinuation of the current task (Berg et al., 2016; Forsyth et al., 2018a; Johnson et al., 2014; Schneider et al., 2019). Workflow interruptions such as answering the phone, interacting with

families entering the department, or even verifying medications with a colleague are frequent in the ED and difficult to prevent (Forsyth et al., 2018). According to Forsyth et al. (2018), interruptions in workflow negatively impact patients because clinicians in the ED are more error-prone once their workflow is interrupted and interruptions increase clinicians' workload at the bedside. When clinicians' working memories are interrupted, their focus shifts from task to task without completing any, leading to errors and gaps in information such as missed or incorrect documentation (Berg et al., 2013). Schneider et al. (2019) also identify increased errors, as well as increased time to perform care interventions and longer decision-making processes, as negative consequences stemming from interruptions. However, they also described potentially positive effects of interruptions, such as improved communication of sensitive patient information and immediate provider response to patients' needs or change in condition.

Myers et al. (2016) argue interruptions may be necessary for safety and high-quality care. Their findings in their mixed method approach indicate that interruptions can be beneficial to patients as they refocus the attention of nurses to the patient while the nurse is out of the room. However, they also identified a certain *alienation* of patients; when the nurse is in a room tending to a patient and gets interrupted to tend to another patient, the initial patient may feel alienated, or if the nurse ignores the second patient calling, then this patient may feel alienated. However, contrary to these findings, Johnson et al. (2014) found that repeated interruptions interfere with concentration and negatively affect nursing care, potentially decreasing the quality of care, and increasing the risk of missed or near-missed adverse events.

In studies by Berg, Florin, Ehrenberg, Östergren, Djärv and Göransson (2016a) and Berg, Kallberg et al. (2016b) the authors explored different attributes of ED clinicians and how they affected their perceptions of workflow interruptions. Berg et al. (2016a) identified three main

attributes that led clinicians to define interruptions either as non-disturbing or disturbing, namely clinicians' constitution, external factors, and the nature of the interrupted task. Constitution refers to the level of experience and competence of the clinician as well as personality type. The authors argue that a more experienced or competent clinician tends to view interruptions as non-disturbing and is able to go back to the initial task with ease (Berg et al., 2016). External factors refer to the nature of the interruptions and their frequency. For example, when a clinician receives an update on a patient that could have waited until the task at hand was finished, the interruption is perceived as disturbing (Berg et al., 2016). Lastly, if the task being interrupted requires a high level of attention or is of high priority, the interruption will be deemed disturbing (Berg et al., 2016). Non-disturbing interruptions were defined as having a high value or a positive impact on patient care, such as when clinicians received relevant information for a critically ill patient. Disturbing interruptions, on the other hand, were interruptions that did not add any value to patient care, such as a non-important question from a colleague during a high workload time (Berg et al., 2016).

A study by Myers et al. (2016) linked interruptions with Lean management in the ED. They argue that interruptions, whether positive or negative, must be studied from the perspective of added value to the patient. In a health system where measures are generally tied to care delivered per dollar, they suggest what matters to the patients is actually the time spent in the ED and their comfort during their visit. These two attributes – time and comfort – should be central in the analysis of whether an interruption is positive or negative. They conclude that interruptions which re-focus the attention of the nurse to the patient or improve the communication about the patient within the team are generally positive (Myers et al., 2016).

In sum, clinicians can perceive workflow interruption as positive or negative. Negative workflow interruptions were most often described as those which disturb an important task or do not contribute to easing (i.e., reducing) the clinician's workload. Positive interruptions contributed to easing workload or brought important information for patient care in a timely manner. Most importantly, clinicians' attributes and external factors were also identified as crucial considerations in their perception of workload interruption. Most authors acknowledged workload in the ED as a major negative external factor contributing to workflow interruptions but focused on identifying and modifying factors intrinsic to the nurse (e.g., attitudes, beliefs), rather than the healthcare system in general (Berg et al., 2016a). They identified that the clinician's level of experience determined if they perceived the interruption disturbing or non-disturbing. Level of experience is an internal factor to the nurse and in this study, interruption is divided into two different categories (disturbing, non-disturbing). This finding aligns with the overarching imperative of modifying not only the healthcare sector but the actors within the healthcare sector to make it more efficient and sustainable.

2.4.3 Stress and Burnout

Occupational stress and burnout in nursing are well researched and documented in the literature (Adriaenssens et al., 2011; Adriaenssens et al., 2012; Adriaenssens et al., 2015a; Adriaenssens et al., 2015b; Basu et al., 2016; Browning et al., 2007; Hooper et al., 2010). *Burnout* is defined as "a state of emotional depletion that individuals develop in the workplace" (Chernoff et al., 2019, p, 667). Precipitating factors of burnout include repeated exposure to trauma and a lasting imbalance between the effort expended in the workplace and the reward obtained (Basu et al., 2016). *Occupational stress* occurs when the demands of work do not match the available capacities of the workers or the available resources in the workplace (Adriaenssens

et al., 2011). The result is a damaging physical or psychological impact on the worker. For example, many articles in this category explored the most significant causes of distress or trauma to ED nurses; the death or sexual abuse of a child or teenager was the most frequently reported (Abraham et al., 2018; Adriaenssens et al., 2012; Crilly et al., 2017; Greenslade et al., 2020; Leszczynski et al., 2019). In the reviewed literature, however, burnout was a taken-for-granted aspect of nursing practice attributed to the nature of nurses' work and the repeated exposure to human suffering (Adriaenssens et al., 2011), and not explored further in and of itself. Empirical studies identified a positive correlation between workload and high patient acuity and an increased incidence of burnout in ED staff (Abraham et al., 2018; Adriaenssens et al., 2012; Adriaenssens et al., 2011; Flowerdew et al., 2012).

In a survey of 254 nurses across 15 sites in Belgium by Adriaenssens et al. (2011), ED nurses reported increased levels of stress, time pressure, and physical demands than their counterparts in other departments. In other studies, ED nurses have also reported a lower perception of autonomy and poorer job satisfaction which, in turn, leads to increased levels of stress, burnout, and compassion fatigue (Abraham et al., 2018; Basu et al., 2016). However, certain aspects of ED nursing were protective against stress and burnout. When job satisfaction increases, the likelihood of burnout decreases (Abraham et al., 2018; Adriaenssens et al., 2015a; Adriaenssens et al., 2015b; Elston, 2010). Social support, teamwork, and the opportunity to debrief with peers (especially after traumatic events) were linked to increased job satisfaction (Adriaenssens et al., 2012; Adriaenssens et al., 2015; Adriaenssens et al., 2015).

In the included literature published after 2010, pressures related to economic incentives emerged as important contributors to burnout. In Canada, the United States, Australia, and the UK (among others), EDs are under ever-increasing pressure to see and discharge patients in

shorter amounts of time. Multiple authors discuss the four-hour target as an increased pressure on staff (Adriaenssens et al., 2012; Adriaenssens et al., 2015a; Adriaenssens et al., 2015b; Basu et al., 2016; Flowerdew et al., 2012). This aspect of the transformation of nurses' work is driven by political imperatives at the provincial, national, and international levels but have significant repercussions at the individual level, particularly in relation to burnout. Webster et al. (2015) describe how the pressure to see and discharge more patients in less time produces institutional stress. This form of stress is neither induced by patient presentation nor workload but produced solely by internal mechanisms aiming to meet targets. While Webster et al. (2015) studied various aspects of medical training, they nonetheless highlight how the perception of patients is altered, forcing the team to work faster, despite still trying to provide "good" patient care (Webster et al., 2015). In a qualitative interview study with 22 ED staff in London, England, by Flowerdew et al. (2012), participants identified working under pressure to meet the four-hour target and workload as the two primary stressors in their work environment.

The ED is a stressful environment for nurses whose unpredictable workload involves a high volume of patients often with high acuity. This burden is intensified when organizational constraints continuously transform the workplace in order to meet targets imposed by government agencies. It follows that the nature of the stressful work environment, and the professional and organizational constraints make ED nurses highly susceptible to stress and burnout which, in turn, often results in nurses working short-staffed, further intensifying the pressure on nurses (Adriaenssens et al., 2011; Adriaenssens et al., 2015; Browning et al., 2007);

2.4.4 Roles

For the purpose of this review, roles are defined as different positions created within the ED and filled by nurses with particular expertise. Although roles are closely related to

performance, a pragmatic decision was made to keep these as separate categories because it portrays the co-modification of nurses' work in order to fulfill an end goal. In other words, keeping these two categories separate preserves the distinction between the implementation of processes in the ED aiming to improve performance and the actual work of nurses in their different roles. Many different ED roles were described in the reviewed literature, and most of these roles were created with the stated aim of decreasing overcrowding and overcoming fragmentation of care within hospitals and post discharge (Greaves et al., 2016; Murphy et al., 2014; Ribas et al., 2018).

Murphy et al. (2014) discuss *ED flow coordinators* who act as liaisons between the inpatient units and the ED when a patient is admitted. These flow coordinators monitor the patients' conditions in the ED, connect with ED physicians and services to accelerate admission orders, and advocate for floor nurses to "pull" their patients into inpatient beds. In other words, the ED flow coordinator's role is to speed up the process of transferring a patient from the ED to a ward (referred to as throughput). In a pre-post quality improvement project, Murphy et al. (2014) measured throughput in the ED before and after the implementation of the ED flow coordinator role. They found the total length of stay (LOS) in the ED was 90 minutes shorter after the implementation of an ED flow coordinator. However, the authors mention many other departmental and organizational changes co-occurred with the implementation of the flow coordinator role, which raises questions as to the efficacy of this role as a stand-alone initiative.

According to Perry (2013), a *clinical nurse leader* (CNL) is a graduate level educated registered nurse who is experienced in ED care and a leader in the unit (which Perry terms the microsystem). CNLs emerged from the role of *clinical nurse specialists* (CNS), whose focus was to bring evidence-based practices (EBP) to the bedside and act as educators for other nurses.

While the CNL role does involve an educator component, the key difference between a CNS and CNL is that the CNL role encompasses the management of overcrowding and fragmentation of care in the ED. In fact, Perry (2013) outlines ten core "responsibilities" of the CNL including but not limited to "outcomes manager," "systems analyst", "risk anticipator," and "team manager" (p. 335). In other words, it is the CNL's responsibility to manage and compensate for the negative impacts of the transformation of nurses' work according to an economic rationale. Given the constant improvements in technology and evidence, and the ever-increasing efficiency imperative, Perry (2013) concludes the CNL role is necessary in the healthcare system to ensure ED nurses are skilled, up to date, and that hospitals meet efficiency targets.

Ambulance offload delay (AOD) is defined as a delay of more than 30 minutes in transferring the care of a patient from an ambulance gurney to an ED stretcher or chair (Elliott et al., 2020; Greaves et al., 2016; Schwartz, 2015). Despite the documented negative impacts of AOD – such as little to no coverage of paramedics for parts of the community and increased mortality and morbidity for patients – very little has been done to address the main causes of AOD, namely, overcrowding and lack of access to primary health care (Schwartz, 2015). To decrease offload times, EDs around the world implemented *Offload Nurses* (OLN). OLNs are experienced triage or senior nurses tasked with triaging, monitoring, treating, and transferring stable patients from ambulance gurneys to stretchers while they wait to be assigned a bed in the ED (Greaves et al., 2016). In Ontario, the Ministry of Health and Long-Term Care (MOHLTC) implemented the OLN program in 14 municipalities in 2008. As of 2020, the OLN role has been implemented in over 50 hospitals in Ontario and is almost uniquely staffed by RNs who are not ED trained (Elliott et al., 2020). Further, they highlight that some OLN patients are never actually treated in the ED; they are seen, treated, and discharged from the OLN area. This in turn

implies that OLN area beds are now often full, therefore increasing, once again, the offload time (Elliott et al., 2020).

2.4.5 Violence

Violence committed against staff working in the ER – referred to as workplace violence (WPV) – is a persistent and well-documented issue. In fact, healthcare workers are very susceptible to WPV and are verbally or physically assaulted more frequently than prison guards or police officers (Taylor & Rew, 2011). Of all healthcare sectors, the ED, psychiatry, and acute care units report the highest incidence of WPV (Taylor & Rew, 2011). Of these, nurses in the ED experience the highest incidence. In a survey study of 196 registered nurses at 11 EDs in Tehran, Esmaeilpour & Ahmadi (2010) found up to 91.6% of ED nurses have reported verbal or physical assault in their career. This increased incidence of WPV in the ED has been attributed to the increased turnover of patients compared to other departments (Gates et al., 2011; Hamdan & Abu Hamra; AlBashtawy & Aljezawi, 2016; Nikathil et al., 2017; Taylor & Rew, 2011). In this review, all authors reporting on WPV in the ED identified patients and visitors as being the main perpetrators of violent acts (Lau et al., 2012a, 2012b), with a low reported percentage (5-6%) of WPV committed by colleagues (Hamdan & Abu Hamra, 2015). Nurses in the ED report diverse forms of abuse; verbal assault, battery, threats, and sexual harassment are all documented as types of WPV committed (Taylor & Rew, 2011). Of these, being pushed (battery) or sworn at (verbal assault) were the most commonly reported (Esmaeilpour et al., 2010).

WPV against nurses in the ED has severe personal, professional, and organizational repercussions. In a survey of 230 ED nurses from across the United States, Gates & al. (2011) found a negative correlation (significant at $p=0.07$) between employee productivity and assault. For nurses, exposure to violent events is linked to a marked decrease in productivity, especially

when it comes to communication and seeking support. Gates & al. (2011) state that patient avoidance and poor quality of care are direct results of violent events. Esmaeilpour et al. (2010) also reported a negative impact on the quality of the care nurses provided after they were exposed to violent events in their workplace. Albashtawy & Aljezawi (2016) also state that nurses who are victims of violent events in their workplace are more likely to withhold care or provide incomplete care to patients. Increased absenteeism, burnout, and high turnover rates are all also linked to WPV in the ER (Esmaeilpour et al., 2010).

Despite important and long-lasting repercussions, the underreporting of WPV by nurses is common (Albashtawy & Aljezawi, 2016; Esmaeilpour et al., 2010; Gates et al., 2011; Taylor & Rew, 2011). Up to 80% of nurses who have been victimized do not report the violent event to their managers (Albashtawy & Aljezawi, 2016). This is accentuated in the case of sexual abuse, where cultural differences and stigma affect the rate of reporting. In a survey of 227 nurses in Jordan, Albashtawy & Aljezawi (2015) found that *no* ED nurses reported sexual abuse. The authors suggest this result may be "due to the conservative culture of Jordanian society where nurses find it inappropriate or shameful to report such a thing" (p.64). Hamdan & Hamra (2015) support the same argument in Palestine, where the report of sexual harassment against ED nurses is much lower than in the body of existing literature. This makes research about WPV committed against nurses in EDs challenging, which is further complicated by the fact that such research recalls past events, adding an element of recall bias (Lau, 2012a).

The reviewed body of literature supports the common perception that violence is just part of the job for ED nurses, who in turn view reporting as useless and find "victim blaming" (Lau, 2012, p. 70) behaviours and a lack of support from managers (ALBashtawy & Aljezawi, 2016; Gates et al., 2011; Lau et al., 2012a, 2012b; Nikathil et al., 2017). However, to reduce WPV and

improve workplace safety, some researchers have identified antecedents leading to or precipitating violent acts. In one review, overcrowding, long wait times, the perception of uncaring nurses, the shortage of ED nurses, patient use of alcohol or drugs, and lack of understanding regarding the role and scope of healthcare providers in the ED were the most frequently reported precipitating factors (Esmaeilpour et al.; Lau et al., 2012a, 2012b; Nikathil et al., 2017; Taylor & Rew, 2011).

2.4.6 Summary

As presented in this first section of the literature review, 190 articles pertaining to the work of nurses in the ED were reviewed and categorized into five distinct categories: performance, workflow interruptions, stress and burnout, roles, and violence. The search strategy was designed in keeping with the initial research questions and objectives. While conducting the review, a few things became apparent. First, research about the ED and the organization of nurses' work was mostly focused on performance and waste-cutting efforts. The realities of overcrowding have heightened the focus on performance in EDs across Canada, resulting in a large increase in published literature on the subject since 2010. The second aspect to become apparent was fundamental contradictions between the subjects and findings of the various reviewed articles. For example, when it comes to violence, most studies in this review did point to the fact that increased wait times led to more violence towards nurses in the ED (Hamdan & Abu Hamra, 2015; Taylor & Rew, 2011). However, contrary to this finding, Lau et. al. (2012a; 2012b) highlight that much research about WPV in the ED shows that aggression happens mostly within one hour of arrival in the ED. And finally, no studies included in this review examined how nurses in the ED reorganized their work following the Ontario MOHLTC's reform of the hospital system and the creation of the LHINs to manage the budgetary envelope of

healthcare in Ontario. These reforms have led to a complete re-definition of what an ED *is* and what ED nursing *is*, but authors have been silent on this transformation. To my knowledge, there is no literature examining the way nurses view, organize, and perceive their work in the current context of EDs in Ontario. The current state of the work of ED nurses in Ontario linked with neoliberal policies in health remains unknown.

2.5 Ethnographies in the ED

The first literature review helped to better understand the landscape of published scholarship as it relates to the work of ED nurses at the bedside. In some ways, this second review began years ago when I first read Rankin & Campbell's (2006) book, *Managing to Nurse: Inside Canada's Healthcare Reform.* Their ethnographic research on the transformation of nurses' work in Canadian hospitals during and after transformations was not only thought-provoking but inspired this doctoral research. Rankin and Campbell articulated my feelings regarding my own workplace, and finding out more about ED nurses' work in the transformed hospital became a passion. Given the paucity of ethnographies conducted with ED nurses, the goal of this second review was to explore and understand the published works of authors conducting ethnographies with nurses in the ED. This search was limited to ethnographies as I was interested in exploring how the culture of the ED had changed and the impacts of this change on the way nurses organize their work. I was not especially interested in individual experiences of nurses but more about how they perceived themselves in a changed ED culture.

Prior to the search, I outlined my key concepts and search terms in PICO format (see Appendix A, Table 6 for search terms in major headings (MH) and major subject (MM). Given the emphasis on nurses, only CINAHL was searched for this review and the only limit applied to this search was language (English or French). The retrieved records were then imported to

EndNote reference manager for screening. Titles and abstracts were screened according to the following criteria: the study must be conducted in an ED; it must directly examine or explicitly report on registered nurses; it must address the research questions, meaning the focus must be on nurses' work and its organization. This final criterion meant that articles that addressed only a particular aspect of practice, such as decision-making or interdisciplinary communication, were excluded.

As shown in Appendix A Figure 5 n=67 records were retrieved from the database search. Following title and abstract review, n=6 records were read in full and subsequently included in the review (Fry 2012; Person, Spiva, & Hart, 2013; Nugus & Forero, 2011; Kirk et al., 2021; Melon et al., 2013; Rankin, 2006). Following this full review, three further texts were included (Rankin 2001, Rankin 2003, Rankin 2015) bringing the total number of records reviewed to N=9. These texts were included in the review as they were frequently cited in other works, and I had previous knowledge of them. (See Appendix A, Table 7 included articles) Overall, there were very few ethnographies about nurses' work in the ED and most of those retrieved in the search tended to examine the culture of space within the ED. It is important to note that EDs have different and distinct patient treatment sections, such as triage or resuscitation, that have their own distinct cultures and work processes. Therefore, ethnographies in the ED tend to focus on these sections as separate entities. For this review, the included ethnographies all discuss some aspect of nurses' work in the ED, but most do not discuss the ED holistically, rather focusing only on one section. The ethnographies retained for this review will be presented in chronological order, aside from Rankin (2001, 2003, 2006, 2015), which will be presented last as a program of research.

2.5.1 Nugus & Forero, 2011: Understanding Interdepartmental and Organizational Work in the Emergency Department: An Ethnographic Approach

Nugus & Forero (2011) conducted a 12-month ethnographic study in two EDs in Sydney, Australia, to understand the impact of *external pressures* on the work of ED staff and how the staff responded to these pressures. These external pressures consisted of what the authors called "clinical and non-clinical aspects" of patient management; the non-clinical aspect consisted of organizing patient care and liaising with other departments while the clinical aspect consisted of the bedside care provided to patients in the ED. This study was particularly interested in interdepartmental pressures regulating nurses' work in the ED, pressures such as bed blocking from the floor or bed availability in specialized units. Bed blocking happens when an available bed on the floor for an ED patient cannot be opened for multiple reasons (lack of staff, cleaning procedures, high workload). The authors established that ED nurses, junior or senior, deal with clinical and non-clinical work to plan and manage care to patients. An awareness of patient census and patient presentation in the ED guided how they organized their work (Nugus & Forero, 2011). They conclude more research is required to better understand how ED staff manage the influence of the other departments on their own work.

2.5.2 Fry et al., 2012: An Ethnography: Understanding Emergency Nursing Practice Belief Systems

Fry (2012) examined the impact of belief systems on triage nurses' practice. This study recruited ten senior (i.e., worked in specialty area at least four years) Clinical Nurse Specialists in the triage nurse role across New South Wales, Australia, as informants and followed them over 12 months with 200 hours of direct observation over this time. The findings highlight seven

beliefs that influence the triage nurse's interactions with patients: respecting space and privacy while triaging, patients arriving with expectations or a "positive bag sign,"[1] patient not taking responsibility for their presenting illnesses, the mitigated effect of arriving with a referral letter, patient requesting a bed at triage, all patients should be triaged the same regardless of socioeconomical status, and the perception that patients were wasting ED time for non-necessary visits.

The findings of this study suggest that concepts of timeliness, efficiency, and appropriateness were central to how nurses perceived ED culture. This culture could have negative impacts on a patient's health and treatment as nurses might deem patients' presentation to the ED non-necessary (a positive bag sign, for example). Beliefs of ED nurses were often in contradiction to patients' or the public's expectations on how healthcare should be provided. In turn, this often led to tensions between the nursing staff and patients, increasing the potential of aggression towards healthcare workers.

2.5.3 Person et. al., 2013: The Culture of an Emergency Department: An Ethnographic Study

Person et al. (2013) used a focused ethnographic approach to examine the culture of a level II trauma ED in the Southeastern US. An anthropologist from the research team observed and participated in direct interactions and social exchanges with 250 ED staff for a total of 430 hours over a period of 5 months. These 250 staff were considered a "cultural group within the

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[1] For ED nurses, the term *positive bag sign* refers to patients arriving with their suitcase, signaling to the triage nurse that they are ill enough to get admitted to the hospital. In this study, patients presenting with a positive bag sign were less likely to be considered acutely ill by the triage nurse.

ED" (p. 223). The anthropologist also conducted formal and informal interviews with 34 physicians, nurse leaders, staff nurses, and support staff. The authors summarized the findings according to four main attributes: cognitive, environmental, linguistic, and social. Cognitive attributes refer to the sense of reward obtained when staff can intervene for a patient and produce a positive outcome; it is the feeling of making a difference. Environmental attributes encompass the physical space, the flow of the ED, and the available technology; high patient acuity and workload were commonly reported frustrations among the staff. Linguistic attributes are the skills used to communicate within the ED team. Participants recognized that technology for charting (i.e., electronic medical record [EMR]) added space between provider and patient, resulting in poorer communication. Social attributes referred to sub-groups within the ED, often established by age group or interests, including onboarding of junior staff. Overall, the authors concluded "organizational culture impacts ED overcrowding, throughput issues, inefficiencies, poorer quality outcomes and reduced profitability" (Person et. al., 2013, p.222). While this study discusses workflow and pressure, it does not mention pressure to meet targets nor the four-hour standard in the ED. The authors explored the environmental attributes of the ED in terms of workflow and overcrowding at the local level but fell short of addressing the external pressures and the larger context that affect ED workers.

2.5.4 Melon et. al., 2013: Beat The Clock! Wait Times and the Production of 'Quality' in Emergency Departments

In an institutional ethnography of ED nurses conducted in Alberta, Canada, Melon et al. (2013) examined the organization of nurses' work following the implementation of the Canadian Triage and Acuity Scale (CTAS) at triage. In other words, the authors examined how CTAS, a patient categorization tool, organized and directed the practice of nurses at triage. Through

observations and interviews, it became evident the medico-administrative model in most Western hospitals makes nurses' work invisible (Melon et al., 2013). An interesting aspect of this article is the absence of details on how the interviews and observations were conducted. The methods of data collection are central in IE, therefore, the lack of detail about data collection appears to be missing to get a full understanding of this study. Performance, quality, and cost control are now intrinsically part of front-line nurses' discourse; the adoption of industrial jargon is now naturalized in healthcare settings. Through benchmarking, performance indicators, and dashboards, various metrics are collected and aggregated to become the focus of improvement initiatives. Melon et al. (2013) highlight how this data (e.g., benchmarks, performance indicators) is centred on *wait times*, understood as the time to wait to see a physician or to be assigned a room, never the wait time to be assessed by a nurse. This is the mechanism by which nurses' work becomes invisible, as it is completely unaccounted for. Nurses are banished to the background, working to "accomplish both the ideological practices of quality and the actualities of access, efficiencies and safety" (Melon et al., 2013, p. 234). What the authors are suggesting is that nurses check boxes, fill forms, and follow algorithms (e.g., medical directives) to show quality patient care, but this quality of care is mainly implemented to fulfill the demands of efficiency within the ED. The authors conclude the data collected through these benchmarks and performance indicators are not representative of patients' experiences (including patient management and care) in the hospital. Some knowledge cannot be counted but is still essential in healthcare. The way a nurse will make on-the-spot lifesaving decisions, or the way a nurse provides education and support to a palliative patient and their family, cannot be reflected in an organization striving for efficiency.

2.5.5 Kirk et. al., 2021: "I Don't Have Any Emotions": An Ethnography of Emotional Labor and Feeling Rules in the Emergency Department

Kirk et. al. (2021) conducted an ethnography of ED nurses in two EDs in teaching hospitals in England to better understand the unique nature of ED nurses' *emotional labour*. Emotional labour is defined as "the management of feeling to create a publicly observable facial and bodily display" (Hochschild, 1983, as cited in Kirk et al., 2021). Following 200 hours of direct observation and 18 interviews with ED nurses, the authors identified four "feeling rules" of ED nurses when at work. The first rule is to be as masculine as possible. Be tough, fearless, and establish a certain emotional disconnect with the patient in order to remain efficient and task oriented. The second feeling rule is to always appear calm, even if the situation is life threatening. The third rule is to feel empathy for patients and refrain from showing frustration when patients are using the healthcare system incorrectly. The final emotional rule is to always suppress the upset. Even if you are grieving after the loss of a patient, you can show the family that you care, but not too much; it would be perceived as unprofessional. The authors conclude that ED nurses are constantly managing their emotions, which may lead to some practice changes such as emotional detachment from the patient (Kirk et al., 2021). ED nurses are unique when it comes to emotional labour given the required tough aspect of their work (masculinity), as well as the caring aspect of nursing (feminine). The uniqueness of the emotional labour of ED nurses comes from the disjuncture between these two aspects, a disjuncture that was well researched by this author.

2.5.6 Janet Rankin: A Program of Research

The most comprehensive work on nurses' work amid hospital reform was published by Janet Rankin (2001, 2003, 2006, 2015). Her research was not conducted in the ED specifically

but remains highly relevant to this research in terms of perspective and rationale. Her studies span many years and centres across Canada and examine how nursing is governed, the use of accounting technologies as metrics to determine staffing of hospital units, the impacts of the electronic health record implementation on nursing work, new public management in hospitals, and patient satisfaction amid re-structuring. Rankin's publications provide a historical and practice-based perspective on the working condition of nurses within a reformed hospital. Her program of study will be presented in chronological order.

Rankin's program of research began with an interest in how the Canadian Institute of Health Information (CIHI) became a driving force in the introduction of business attributes to the management of healthcare, specifically through the collection of data (Rankin, 2001). While caring for her mother after a hospitalization, she took part in a survey that quantified patient satisfaction. In Rankin (2003), she analyzes this encounter and how it led her to question the basis on which decisions are made within the current hospital reform in Canada and concluded the focus is not actually on patient experience, but rather data aggregation. *Managing to Nurse* (2006) presents the larger corpus of Rankin's work. She argues that within a reformed hospital, very little attention and research are dedicated to nurses' work and how they manage and adapt to healthcare transformations. Rankin (2006) also discusses the repercussions of introducing technology at the bedside (e.g., electronic medical records, portable computers). She argues there are many unintended consequences, and some aspects of patient care become completely forgotten or not even charted. In Rankin (2015), she discusses how patient-centred care is rhetoric rather than a reality (Rankin, 2015). She argues that patients admitted to hospitals are expected to behave and progress in particular ways. Information and details, such as medications and treatments pre-admission, that do not fit certain stages of pre-established clinical pathways

are often ignored or deemed non-important, making the care delivered in hospitals more result-centred than patient-centred (Rankin, 2015). Overall, Janet Rankin's program of research was instrumental in guiding this research, even before it was imagined. *Managing to Nurse* (2006) was the book that opened the possibility of researching my own workplace to better understand its organization; this book was and remains an important source of inspiration in this project.

2.6 Conclusion

Ethnographies pertaining to the organization of ED nurses' work are not only scarce but often fall short in understanding or addressing the larger sociopolitical context that shape the everyday reality of working in the ED (e.g., Person et al., 2013). Other ethnographies, such as that of Melon (2013), adopted a critical perspective but focused only on one area of the ED, namely triage. Despite being conducted in Canadian hospitals and not specifically the ED, the work of Janet Rankin was most closely related to my own research. When all these findings are taken into consideration, it becomes evident that there is a need for further critical research to understand the organization of nurses' work beyond the local level, to disentangle and understand how broad sociopolitical contexts (such as a neoliberal rationality) shape the intimate details of nurse's work in the ED. Put in other words, there is no avenue for challenging the transformations of the healthcare system without first understanding how they shape our daily lives. Therefore, using an institutional ethnographic approach, while adding a neoliberal theoretical framework to study the work of nurses in a transformed ED, will be a novel contribution to the literature.

Chapter 3: Theoretical Framework

The transformations of the ED in Ontario must be analyzed in the context of broader restructurings of healthcare services and healthcare systems in Canada and Ontario, but even more broadly in a global context. Broadening the perspective to a global context allows us to understand that the policies implemented in the Ontario healthcare system are very similar to those performed in most societies of the global North. This has come to the forefront particularly with the Covid-19 pandemic where the majority of healthcare systems are confronted with the same problems, like healthcare worker shortages, hospitals filled to overcapacity, the lack of hospital beds, EDs overflowing with patients, and some critical shortages in life saving medications such as antibiotics (Bourgeault et al., 2020; Choo & Rajkumar, 2020; Duong, 2022; Lopez et al., 2022; Turale & Nantsupawat, 2021). Many commentators acknowledge that these so-called crises of healthcare are the result of governments' attempts to reduce costs of healthcare systems with often devastating effects on the most vulnerable sections of populations (Lubao, 2023; Thompson, 2022; Walker & Tibbo, 2020). These fundamental transformations of healthcare systems, the increasing privatization of healthcare services, and the step-by-step implementation of profit-making in healthcare are only one side of the coin.

As Foth and Holmes (2016) argued, the restructuring of healthcare is part of a profound transformation of most Western societies. Increasingly, markets are replacing government planning of the economy and "simulacra of markets" have been implemented in every area of societal life, with the effect that most social services that were formerly provided by public services are now privatized (Miller & Rose, 2008b, p. 79). Forms of financial calculations increasingly replace professional and ethical standards and thereby transform the relationship between what had been considered "the political" and the "non-political." More and more

financial and accounting terms infiltrated the technical terms used to justify policies implemented in healthcare. A new form of expertise, namely the expertise of accounting and management, has replaced the medical and/or nursing expertise in healthcare service provision.

> "The realm of finances, involving the residues of the public sector, para-statal organizations and private service providers, became part and parcel of the new management systems for the governing and administration of universities, hospitals, social services, etc." (Foth & Holmes, 2016, p. 5)

The fact that these transformations started to occur worldwide at roughly the same time (beginning in the 1970s/80s) brings forth the following question "What are the shared rationalities that led governments to implement the same programs and so-called "solutions"? Trying to respond to it enables me to better understand the transformations of the ED in Ontario as a way to govern our societies in general, and healthcare more specifically.

In general, the transformations I have roughly characterized so far are understood as part of a neoliberal ideology. According to this perspective, states are serving the interests of capitalist societies and multinational corporations by increasingly economizing the social and opening social services to profit-making corporations. However, the theoretical perspective in this research project is different. In what follows, I will highlight that neoliberalism should be understood as a specific political rationality that cannot be reduced to the economization of the social. Instead, I propose to analyze neoliberalism as a governmental rationality on how to govern our societies and I will demonstrate the far-reaching consequences of this rationale. In the 1970s and 1980s economists like Milton Friedman from the Chicago School of Economics and politicians like Margaret Thatcher and Ronald Reagan made clear that neoliberalism was more about changing how individuals see and think about themselves, namely, to think and act as economic subjects or *homo oeconomicus*. From this perspective, even acting in social life must be rethought in terms of calculative activity and the individual must be rethought as an

entrepreneurial subject who constantly evaluates its actions in light of cost benefits analyses. As my research will demonstrate, this neoliberal rationality has had profound effects on the Canadian and Ontario universal healthcare system and more specifically, on the organization and transformation of the ED.

In the following sections I will provide a definition of what my interpretation of governmental rationality is and how this perspective is useful to understand the transformations of healthcare from a critical-theoretical perspective. Based on the work of scholars from the field of governmentality studies, I will outline Foucault's concept of governmentality. I will then provide a brief description of how neoliberalism must be understood as a particular form of governmentality. I will distinguish neoliberalism from the classical ideas of liberalism and emphasize the link between these theoretical insights and how this rationality is implemented in practice by focussing on the technological dimension of governmentality. This dimension is closely related to the methodological approach chosen for this project. Actually, IE is more than a mere methodology, because it implies a theoretical conceptualization of how power works in institutions and how ruling relations in organizations depend on the intertextual reality created through the complex interplay of documentary systems in the organization. In the last two sections of this chapter, I therefore discuss the theoretical insights of IE and link them to the theoretical discussion about governmentality and neoliberalism.

3.1 Governmentality and Governmentality Studies

The concept of governmentality goes back to a lecture series that Foucault gave in 1977-1978, which were published in French in 2004 and translated into English in 2007 (Foucault, 2004, 2007). Up to that point, only two lectures from this series had been published (Foucault, 1980) and the early work about governmentality relied on these fragments only. It is important to

keep this in mind because governmentality has become a field of studies on its own, with many scholars pushing the thinking about governmentality beyond what Foucault originally presented. Since the publication of his lectures in their entirety, the concept of governmentality has led to different "schools" of governmentality. It is also important to keep in mind that Foucault never systematically developed the concept of governmentality further because after these lectures and his lectures about neoliberalism one year later, his interests shifted. Thus, the interpretation of governmentality provided here is my interpretation of Foucault's concept and in what follows, I will focus only on those aspects of his theoretical discussion that have relevance for my research project. In my discussion of governmentality, I build on Foth's and Holmes's (2018) discussion of governmentality.

With the concept of governmentality Foucault shifted his analysis of power away from disciplinary power (see, for example, Foucault, 1995, 2006) and the idea that our societies are societies of (civil) war (Foucault, 1997) towards an examination of power as the "conduct of conduct" (Foucault, 2000, p. 341; 2008, p. 186). According to critical geographer William Walters, governmentality studies provide a

> [f]ramework for analysis that begins with the observation that governance is a very widespread phenomenon, in no way confined to the sphere of the state, but something that goes whenever individuals and groups seek to shape their own conduct or the conduct of others (e.g., within families, workplaces, schools, etc.). (Walters, 2012, p. 11)

This framework provides a perspective on governing that does not focus mainly on "the state," its administration or bureaucracy but rather understands government in a "nomalistic" way. Instead of perceiving the state as a given, governmentality studies analyze "specific arts, practices, and techniques that have combined in different ways and at different times to make something called "the state" thinkable and meaningful in the first place, and viable as a

framework for conducting human behaviour" (Dean, 2006, p. 10). Thus, governmentalities represent specific formations of knowledge and programs and "any way of reasoning, or way of thinking about, calculating and responding to a problem… which is … systematic … and might draw upon formal bodies of knowledge or expertise" (Dean, 2012, p. 24). This is what is meant by rational or rationality of governmentality.

Foucault in his lecture series analyzed new forms of reasoning in the governing of 16th-century Europe that was linked to new forms of institutionalization of knowledge (like medicine), disciplines, and technologies. These new *regimes of truth* (Foucault, 1971) and the tactics they used, which was then called police science, was about the governing of self, families and the state (Foucault, 2004). According to Foucault (2004), the modern (Western) state was a combination of political power and what he called "pastoral power" (Bröckling et al., 2011a, p. 3). Political power is rooted in the Greek and Roman ideas of the polis based on law, universality, the public, etc., and is closely related to what is known as the reason of state and police sciences, both of which will later become part of neoliberal rationalities (see, for example, Foth & Holmes, 2018). Pastoral power, on the other hand, emerged from the "Christian religious conception centred upon the comprehensive guidance of the individual" (Bröckling et al., 2011a, p. 3). This form of power uses techniques of guidance comparable to the shepherd of a flock of sheep, where the shepherd is always concerned about the protection and wellbeing of every single sheep but also about the wellbeing of the flock, guiding them to the best meadows to feed. Foucault analyzed how this religious pastoral technique became secularized and helped to develop modern states and capitalist societies.

> 'Political reason' represents an autonomous rationality derived neither from the theological-cosmological principles nor from the person of the prince. At the same time, the earlier goals of happiness, salvation, and well-being are now secularized

> and re-articulated in the framework of the 'political' problematic of the state. (Bröckling et al., 2011a, p. 3)

Foucault described this new form of governing as the "art of governing" and as "a sort of complex of means and things.

> The things government must be concerned about [...] are men[*sic*] in their relationships, bonds, and complex involvements with things like wealth, resources, means of subsistence, and, of course, the territory with its borders, qualities, climate, dryness, fertility, and so on. 'Things' are men in their relationships with things like customs, habits, ways of acting and thinking. Finally, they are men in their relationships with things like accidents, misfortunes, famine epidemics and death. (Foucault, 2007, p. 96)

Government defined in this way is concerned about the "common welfare and salvation for all" and it is about the "conduct of conduct." "Conduct of conduct" therefore includes both the individual as well as mass population and uses a wide range of technologies of power: law, discipline and apparatuses of security" (Foucault, 2007, p. 108).

3.2 Liberalism as Specific Art of Government

Apparatuses of security emerged with what Foucault called liberal governmentality as a specific art of government (Bröckling et al., 2011b). Apparatuses of security can be defined as "governmental programs and strategies that utilize statistical data concerning population and natural phenomena in order to manage and direct forces such as production and consumption, as well as health, crime and population" (Pierce, 2020, p.2). Governmentality targeted populations and discovered the economy as a new actuality, leading to a change in the employment of power and transformed government from the end of the 18th century on into a rational activity based on knowledge and technologies developed in the humanities and political economy. Bröckling et al. (2011a) emphasized that his liberal art of government "replace[d] external regulation by inner production" (p. 5). From this perspective, liberalism is about creating conditions that enable

individuals to use their freedom – meaning freedom is no longer thought as the opposite to governmentality but rather is the starting point of liberal governmentality. According to Foth and Holmes (2018), "[t]o make use of freedom as a mechanism of liberal governmentality means that the one governed is comprehended as an autonomous actor who is able to act and reason in numerous ways that are often unpredictable" (p. 4). Thus, liberal governmentality is about influencing the environment of possible actions and to ensure that individuals have the abilities to act on both selves and others. Government

> is any more or less calculated activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through the desires, aspirations, interests and beliefs of various actors, for definite but shifting ends and with diverse sets of relatively unpredictable consequences, effects and outcomes. (Dean, 2010, p. 18)

This idea of the self-governing and autonomous individual in control of his or her behaviour appeared in the 17th century and has been integrated into what I described as liberal governmentality. As should be clear by now, government is no longer about power imposed on the individual by an external authority, but rather about how the individual construes his/her identity and self. Governmentality studies therefore analyze "the interrelations between regimes of self-government and technologies of controlling and shaping the conduct of individuals and collectives" (Bröckling et al., 2011a, p. 13). The focus of these kinds of analyses is on how governments influence the conduct of individuals in order to achieve specific ends. "Governing oneself and others is always based on particular truths about life, existence and what human nature is, and these regimes of truth include scientific discourses like medicine, nursing, psychology, psychiatry, demography, etc. in their attempt to rule over individuals, communities or populations" (Foth & Holmes, 2018, p. 4).

3.3 Neoliberalism as Political Rationality

At the beginning of this chapter, I referred to the concept of neoliberalism to categorize the transformations of our current societies. It is important to recognize that since its onset more than 50 years ago, neoliberalism materialized in many different forms depending on the national context in which it became the leading rationality of governing. For example, in the global South, neoliberalism has mainly been imposed on populations through military force and dictatorships (e.g., Chile, Argentina, etc.) whereas in the global North, these transformations happened in a more subtle way in liberal democratic regimes (Harvey, 2007; Mirowski, 2015; Peck, 2010; Stedman Jones, 2012). Neoliberalism cannot be understood as a single consistent concept but rather as a constellation of conceptions that developed into very different, sometimes even contradictory, directions. In recognition of this complexity, Mirowski (2014, 2015) proposed to use the term *thought collective*. Despite the many differences or directions that the term neoliberalism and its concepts take, some aspects are shared across them. One key assumption is that a really free society can exist only if limitless competition prevails. Therefore, everything that might influence the free play of competition must be abandoned and politics must target those parts of populations who depend on public and state services. As discussed earlier, healthcare services, for example, have been increasingly privatized by returning public services to private corporations, leading to the implementation of profit-making in healthcare. We live, to use Stuart Halls' parlance, in a "neoliberal conjuncture" or the unresolved rupture of our epoch, which we can define as "the long march of the Neo-liberal Revolution" (Hall, 2011, p. 706).

Although neoliberalism as a theoretical and political rationality had been around in Germany (*Ordoliberals*) as early as the 1920s, and in the US with the Chicago School since the end of World War II, it was only in the mid-1970s that it systematically demanded the

dismantling of "welfarism" in North America (Peck, 2014). Neoliberal economists criticized the bureaucratic apparatus needed to manage the welfare state (Friedman, 2011). Furthermore, "the welfare state was said to have a morally damaging effect on its citizens because it produced a 'culture of dependency' based on expectations that government [would] do what in reality only individuals can" (Miller & Rose, 2009, 79). The welfare state, it was argued, eroded personal responsibility, thereby jeopardizing the moral fiber of the nation. Politicians like Margret Thatcher, a fervent devotee of Friedrich Hayek, one of the architects of neoliberal governmentality, emphasized that the state was no longer to accompany citizens from "cradle to grave" but should only maintain law and order to provide a framework that would enable people to become responsible for themselves and to understand themselves as entrepreneurs of their lives. By doing so, they would promote individual and national wellbeing (Thatcher, 1980, as cited in Eccleshall, 2002, pp. 242-244). As Thatcher underlined, "[t]here is no such thing as society … [t]here is only the individual and his [*sic*] family" (Eccleshall, 2002, p. 240). Instead, the neoliberal model was based on the idea of free, entrepreneurial, self-governing individuals with the state having no right to prescribe how these individuals manage their property. Only limitless competition in free markets would eventually lead to a situation where a "just price" converges.

Thus, neoliberalism cannot be understood as a mere bundle of economic politics. I argue with Wendy Brown and others that neoliberalism must be understood as a particular political rationality that "both organizes … policies and reaches beyond the market" (Brown, 2003, p. 2). The profound transformation of liberal democratic societies is achieved by submitting every dimension of our existence to an economic rationality, including the political sphere. According to this rationality, all areas of human relations must be understood and conceptualized as part of

a market economy. This implies that freedom in neoliberal societies is understood as the freedom to follow only one's own interests and by doing so the wealth for all will maximize. Markets must replace government planning of the economy and "simulacra of markets" have since been implemented into all kinds of practices (Miller & Rose, 2008a, p. 79). Whereas neoliberals claim that markets and markets laws are naturally given, Brown argues that this claim is "normative rather than ontological," because rational actors must be produced and market rationale for decision-making must be imposed (Brown, 2015, p. 45). Accordingly, neoliberalism must be understood as a "constructivist project" because it is organized through laws and the institutionalization of a rationality that directs the economy and protects it through laws and other regulations. As social theorist Thomas Lemke put it, "the market [must] be constituted by dint of political interventions" (Lemke, 2001, p. 193). Government:

> must orient its politics to the needs of markets by adapting its monetary policies, its tax regimes, its organization of social services and healthcare, etc., instituting a new form of legitimation for the state, which is now evaluated by its ability to maintain and strengthen "free" markets. (Foth et al., 2017, p. 21)

Accordingly, social behaviour had to be rethought in terms of calculative action performed according to economic lines. The individual was reconceptualized as a rational and enterprising subject who evaluates the cost and benefits of certain actions and chooses what to do based on these calculations. This individual is understood as *homo oeconomicus,* who organizes all areas of life according to this market rationality – every individual becomes an entrepreneur of itself, organizing life according to the model of the firm (Rose, 2005). These economic individuals are understood as human capital, which is a kind of capital that is "constrained by markets in both inputs and outputs to comport themselves in ways that will outperform the competition and to align themselves with good assessments about where those markets may be

going" (Brown, 2015, p. 109). This means that investments in oneself are investments in one's enterprise (as a self-entrepreneur) and its human capital will pay out in the future (e.g., care for its children). The human understood as human capital is responsible for itself and at the same time, becomes a dispensable asset because the neoliberal state grants no guarantee for the life of the individual. The role of the state is to guarantee the free play of the market economy; the state does not directly intervene in the game but rather oversees it so that the rules are respected by all players. Proponents of neoliberalism argue that markets imply or possess a specific, complex knowledge that cannot be apprehended by governments. For this reason, governments/states should not intermingle with markets because they would only distort their rational development. Governments must act indirectly on the conduct of free and autonomous entities by setting targets, implementing standards, allocating budgets, and undertaking audits (Power, 1997). Furthermore, the state itself must act as if it was a market actor and is responsible only for guaranteeing the conditions necessary for limitless competition. "The hegemony of *homo oeconomicus* and the neoliberal 'economization' of the political transform both state and citizen as both are converted, in identity and conduct, from figures of political sovereignty to figures of financialized firms" (Brown, 2015, p. 109). In classical liberalism, as discussed above, the citizen was based on the idea of freedom understood as the minimum necessary for self-rule and participation in liberal democracy for the common good. Under neoliberalism freedom is

> linked with a normative diminished conception of the person. The concept of the person as a "rational decider" is not only independent of the idea of the moral person who determines her will through an insight into what is in the equal interests of all those affected; it is also independent of the concept of the citizen of a republic, who participates in the public practice of self-legislation. (Habermas, 2001, p. 94)

3.4 Technologies of Governmentality

I have discussed so far that from the perspective of governmentality studies, all governmental projects are based on specific rationalities of how to govern. I emphasized that rationality is understood as a form of reasoning about how things are and how they ought to be. This also means that political rationalities are always linked to particular expertise on how to realize political targets. In order to make political rationalities effective they must be connected to "material conditions of possibility" (Walters, 2012, p. 61). Mitchell Dean introduced the term "*techné* of government" to grasp the complex interplay of "means, mechanisms, procedures, instruments, tactics, technologies and vocabularies that constitute governmental authority and rule" (Dean, 1996, p. 31). Thus, governmentality studies are not only about the history of ideas or the intellectuals who developed theoretical approaches called neoliberalism, but also the insight that government can only be understood if the material mechanisms in its realization are analyzed. What I will do in this project is exactly this, namely, to understand how the abstract ideas of the neoliberal rationale are implemented in the everyday experience of nurses and what technologies are employed to transform the ED in a profound way. Early on, Foucault in his lectures in the 1970s emphasized that biopower and governmentality are dependent on what he called apparatuses of security (Foucault, 1997, 2004). These apparatuses generated the knowledge needed to govern, like statistical practices used to identify problems needing to be addressed by governments. The technologies of government are put in place to address these identified "problems" and to analyze problematic situations. Thereby, the technologies also implement an invisible or hidden agenda because, according to Dean (1996) this *techné* introduces a focus on performance. By directing the focus to performance, it bypasses resistances and barriers often erected in the name of morality, compassion, or feasibility to focus instead on

"the optimization of performance" (p.61). The application of techniques of government in organizations creates a shift or a re-orientation; it transforms the initial aim or values of the organization by implementing technologies based on a specific rationality behind these techniques of government (Dean, 1996).

This re-orientation also concerns human action that is re-orientated, through the technology of government. People within the organization are not only inscribed as a "problem" to be fixed but also as a resource:

> human action is not simply something to be problematized so that it can be turned to specific ends. It becomes an element of the "standing reserve," something to be gathered-together, so that the powers of its combination and assemblage may be unlocked, extracted, stored, transported and distributed. (Dean, 1996, p.60)

Studies of governmentality enable inquiry into how multiple artefacts, technologies, and instruments mediate power relations and help understand how technologies are necessary to render the present calculable. Thus, governmentality is a useful approach to study how governments or organizations indirectly influence the conduct of citizens by looking at the tools or technologies that make governing in this specific manner possible. These tools or technologies of government linked to specific political rationalities are what enable governing "not too much" (Dean, 1996). At the same time, these governmental technologies also construct the subject within organizations; defining its goals and capabilities "allows non-human agents, such as technical artefact and recording and inscription devices, to participate in" how the individual understands itself and its environment (Dean, 1996, p.51).

In the following analysis of the transformation of the ED I will demonstrate that in order to make the hospital and the ED governable based on the neoliberal rationale discussed earlier, we need to understand how standardized ways of measuring performances, wait times, nursing

processes etc., have been used in these transformations and how the physical spaces have been transformed to enable this profound shift in the functioning of EDs. As Walters explained in another context, "[d]ata has to be written into forms and tables, inputted into spreadsheets, and transformed into durable and mobile forms such that it can be transported, accumulated and manipulated at certain 'centres of calculation'" (Latour 2005, p. 178 as cited in Walters 2012) – sites like planning bureaux, boardrooms, cabinet offices, university seminars" (Walters, 2012, p. 62). To identify the ED and the hospital at large as a problem of government, an entire regime of "metrology" (Barry, 2002) was necessary. Only through the interplay of semiotic-discursive and technical-material structure can the effects of power and truth be understood, which I will undertake in this study.

3.4.1 Governance

The definition of governance varies greatly depending on the source. The Canadian Audit and Accountability Foundation defines governance as "structures, systems, and practices an organization has in place to assign decision making authorities […] oversee the delivery of its services [… and] report on its performance" (2021). This definition gives insight into what governance is but in simpler terms, governance is "governing without a government" (as cited in Brown, 2015, p.123). It displaces top-down hierarchy with networks, integration, and partnering (Brown, 2015; Deneault, 2013). It also refers to the amalgamation of the political and business spheres. Public-Private Partnership is a salient example of governance. Projects are founded by the public sphere but managed in the private sector. Governance also means the deep insertion of business models into politics, making it the perfect instrument in disseminating a neoliberal rationality. As every sphere of life is conceived in economic terms, governance is the instrument making the re-definition of public services into goods that can be "marketized" or re-defined in

economic terms. Brown (2015) defines governance as “a specific mode of governing that is evacuated of agents and institutionalized in processes, norms and practices” (p.124). This definition brings forth another aspect of governance, the de-centering of the state. Institutions are replaced by processes, ruling becomes an exercise of problem solving, entirely apart from any form of value (Denault, 2013). Under governance, power is dispersed through public and private enterprises, privatizing what was once thought of as public goods only (power, health etc.). This in turn creates different relationships between the state, the market, and the subjects. Major shifts that accompany this re-definition of power in the state with governance can be examined. The ultra-reliance on tools and instruments to achieve different ends, usually economic ones, come to the forefront of the political, making the purpose of politics and different political organizations second to their own tools (Brown 2015). The political world also becomes intertwined with the private sector since private enterprises are no longer competing against public goods. As mentioned above, this makes the political a problem-solving enterprise, now completely focused on achieving economic ends, removing the notions of justice and equality from its operation (Brown, 2015). Resistance and struggles in relation to public goods become irrelevant, as these public goods are not public anymore. Governance puts emphasis on consensus; all agree there is no other way to solve a given problem, as it is exposed and explained strictly in economic terms (Denault, 2013). It becomes very difficult, almost impossible for people or subjects to resist or even deliberate on changes implemented. The “truths” under a political rationality are applied using processes that effectively remove the possibility to resist, even if values of equality or justice are forgotten.

For Machiavelli, the very definition of the political included deliberations that took robust positions on different subjects and decisions. Governance therefore removes the political

from public life (Brown, 2015). Central to governance are principles of devolution, decentralization, and public-private partnerships. According to Brown (2015), these principles come to completely re-define what democracy means. The ultra-reliance of governance on instruments and processes effectively removes the ability for subjects to have any kind of control or input on central values and even foundations of public organizations. The buy-in from the public comes only in the form of slight adjustments to processes and parameters, democracy becomes an "empty signifier" (Brown, 2015, p.128). With this buy-in also come a devolution of power and a reponsibilization of smaller actors, which will be explained next.

3.4.1.1 Devolution and Responsibilization. The critiques that led to the emergence of neoliberalism as a political rationality were the ideas that the state was too big, heavy, and involved in people's affairs (Friedman,1986). The central command post of government was criticized as being unable to know and address people's needs (Friedman,1986). Neoliberal governance therefore makes the devolution of power a central concern. The problem-solving exercise of politics is achieved by the stakeholders and the power is basically passed down to weaker, smaller units (Brown, 2015). Large, nation-wide problems like recession, failing healthcare, or climate crises are literally flushed down the power drain. Small, weak units like hospitals, schools, and organizations become responsible for solving the big problem in a cascade of blame and fix the problem cycles (Brown, 2015).

Medicare, implemented in the 1970s throughout Canada, was funded on principles of accessibility, public administration, portability, comprehensiveness, and universality. Federal healthcare transfers were to cover 50% of the healthcare bill and the provinces were to cover the remaining amount. Each province is responsible for the planning and the administration of health care services. Efficiency and privatization came to re-define Medicare almost from its creation as

it was deemed unsustainable. The federal transfers in health have been steadily getting smaller, turning over the responsibility to make the budget work to provincial governments. In turn, provincial governments turn to health services administrators, who have less money to distribute as well yet continue to have to make it work. Administrators of hospitals and other organizations then become responsible to deliver care, at a fraction of the cost. The workers (nurses, PCAs, etc.) in these institutions became fully responsible to fix a problem that initially was much bigger than themselves. These small actors have absolutely no decision-making power at the level of the organization, province, or nation, yet the big problem still belongs to them. Devolution, as explained, creates the need for incentivization. Competition for resources (money) becomes central in the allocation of funds. The organization's efficiency and effectiveness are compared against others. The norm dictates who gets what and these organizations become entrepreneurs, aiming to achieve higher and higher results (Brown, 2015).

Responsibilization, on the other hand, refers to the moral obligation of the single entity at the end of the drain of devolution. It also makes the subject responsible to become a self-entrepreneur; their very own survival depends upon it. Subjects are required to conduct themselves in a "responsible" manner, investing in their capacities in order to compete in the market (Brown, 2015). They have to become not only accountable but also adaptive in their behaviours in order to respond to changing societal or organizational demands. They also become responsible for transforming their own work environment into a competitive arena, where they can become better agents (Brown, 2015). The conduct of subjects is therefore organized and measured according to neoliberal governance principles. Devolution and responsibilization, when combined, create the moral burdening of the subject. As Brown (2015) states, "Through this bundling of agency and blame, the individual is doubly responsibilized: it is

expected to fend for itself (and blamed for its failure to thrive) *and* expected to act for the well-being of the economy (and blamed for its failure to thrive)" (p.134). This process produces extreme vulnerabilities as even if the subject makes decisions to secure its position in the market, the context and powers at play leave it very little room for improvement.

3.4.1.2 Benchmarking and Best Practices. The move of neoliberalism's rationality to the public sector is accomplished using a diversity of mechanisms, with the most prominent one being benchmarking and best practices. Benchmarking and best practices emerged in the 1980s, basically as a new form of knowledge, interested in amalgamating the business and political sphere (Brown, 2015). The central premise of benchmarking at the time was to make processes and knowledge transferable across industries, creating a "language" spoken by both the public and private sector as well as the political sphere. The aim of benchmarking and best practices is the creation, implementation, and application of governance techniques. It is the "machine" of neoliberal rationality.

In any industry, benchmarks are initially set by sector leaders. The accumulation of profit and their places in the competitive markets make them leaders and thus these benchmarks become the ideal to achieve for other sectors. Usually, benchmarking will be initiated as a study of efficiencies in order to import processes from another industry. An interesting aspect of benchmarking in industries or sectors is how easily it subsumes traditional ways of doing for the sector. Previous forms of knowledge specific to sectors are the first aspects replaced by benchmarking. This, in turn, makes the key aspect of benchmarking salient as it has the capability of transferring knowledge and economization of processes to any sector or industry. Changing or reforming industries according to the benchmarks established by leaders promises

the most valuable lesson of benchmarking. Three characteristics of benchmarking made it a tool of neoliberal rationality dissemination, especially in the western world.

The first one is the separation of practices and products (Brown, 2015). The aim, regardless of the industry, centers on productivity, quality, cost-effectiveness, etc. This is accomplished with a complete disregard to what is being delivered or produced by this sector. This is how reforming the health sector with the automotive industry's best practices was made possible. The transferability of processes and the application of these processes are at the base of the reforms. Second, Brown (2015) argues that the separation of practices from products makes possible the end goal of all industries or sectors, to re-define all aspects in economic terms or market language. Benchmarking introduces competition; sectors must always strive do better. Lastly, best practices replace the aims of the sectors being reformed with its own aims; it is all about market value. Often it is not a whole sector that is implementing best practices but certain sections within it that have been deemed "inefficient," like customer service or distribution. These sectors are then reformed with the one goal of having a competitive advantage. Best practices become the language used in any industry and can only be replaced by even better practices. They make sectors marketized that were previously seen as being apart from the market. All spheres are then re-inscribed in economic terms, exactly representing neoliberal rationality. This is not the only aspect of benchmarking that aligns with neoliberal rationality. For example, soft-power, or where best practices shape the preferences of sectors by appeal, is also closely related to neoliberalism. The appeal of best practices in any sector resides in the promise of improvement in performance and efficiency. This, in turn, makes resisting best practices very difficult. Most sectors then buy-in to best practices, as remaining competitive is the goal of all industry. The centrality of consensus within benchmarking is also a main feature

that is closely related to a neoliberal rationale. Benchmarking and best practices consolidate the practices and processes of sector leaders that can then be applied to all other sectors. Competition and marketization quickly replace the knowledge and practices of non-leaders, making it nearly impossible for any sector to actually implement processes or practices that are not in accordance with these goals. Governance with best practices and benchmarking are technologies of governmentality. The application of this theory as it related to IE will be discussed in the next two sections.

3.5 Texts as Coordinators

One way of analyzing the semiotic-discursive and technical-material structure in the everyday life of nurses working in the ED is Institutional Ethnography (IE). It is important to emphasize that IE is more than a mere methodology and that it includes a theoretical perspective on its own. The methodology of IE as well as the methods will be discussed in detail in the following chapter. The two sections that follow represent the integration of central theoretical aspects of IE into the research. When conducting an IE, the researcher is interested in the organization of people's everyday work lives within specific institutions. Institutions, according to Smith (2005), are defined as "the observables of complexes of organization and discourses that are focused on functions such as education, science, law, health care, government, corporate profitability, and so on" (p.68). The institution is therefore not just a bricks and mortar fixture but more of an assemblage of relations that enable the stated function, in the case of this research, healthcare. Central to institutions is the use of texts to connect the local experiences to the translocal coordination of people's everyday lives. Texts, in the context of IE, are defined as any "words, images or sounds that are set into a material form or some kind" (Smith, 2005, p.66); they can be printed on a sheet of paper or appear on a computer screen, for example, and

can be found within the institution but also be publicly available in the form of manuscripts or websites. The power of texts to coordinate people locally and translocally resides in their replicability. Texts can be read, heard, or seen by one or multiple people at once, as their replicability is what makes them so effective as coordinators of people's activities in the local setting. For example, if a nurse opens an assessment window on a computer, they will most often proceed to the assessment of the patient using the categories presented to them in order. Another nurse in another department will be doing the exact same actions with their patient, following the same steps. As the text is read by different users, it entices the user to behave in a certain way, accomplishing actions in a certain manner. The presence of texts in the local setting is so embedded in the organization of activities that they become naturalized, appearing as though they intrinsically belong to the work done within the institution, and they become indistinguishable (Campbell & Gregor, 2002). In IE, texts are the connection between the locally observable and the organization of everyday life from the translocal **(**Smith, 2005). For example, the ethnographer can observe a participant activating text at the local level, then can collect the text and use it to further hook the participant's actions onto the social organization of their work. Not only do they organize activities translocally, but they also translate people's consciousness locally and materialize in further actions at the translocal level to organize activities (Smith, 2005). Texts in this sense are the linchpin between the local, where people's experiences occur, and ruling relations. These texts only become active once the reader has read them and transposed their words or meaning to their own local experiences. This is what Smith (2005) calls the activation of texts. The reader activates the text by opening it and looking at it, then acting upon the words or image in the text by generating a sequence of actions, effectively integrating the text into their local experience. This is how texts originate translocally, meaning

they are not created or written at the local level but come to rule the local, by being inserted in people's experiences. The activation of the texts is what Smith (2005) called the "text-reader conversation" (p.104). Through the action of inserting texts into the local, the experiences of people and their consciousness are translated into institutional terms. Smith (2005) states that this action demonstrates "the distinctive ways in which institutional discourse subsumes and renders "institutional" the particularities of everyday experiences" (p.105).

As an example, Rankin (2006) studied the work of nurses in hospitals undergoing reform. As part of her inquiry, she collected and analyzed texts that organized nurses' work in the hospital and was able to link these texts to organizational priorities, which were planned translocally. Therefore, she was able to show the work of nurses followed institutional priorities rather than the stated goals of care (e.g., patient centred care). For Smith (2005), IE as a whole is rooted in discovering "how texts articulate our local doings to the trans locally organized forms that coordinate our consciousness with those of others elsewhere and at other times" (p. 66). The capture of consciousness into the texts thereby transforms the local experience into standardized translocal events. As texts coordinate the action of others translocally, their analysis is to be done in conjunction with the work of participants observed and they should not be used as a standalone data within IE work (Smith, 2005). As mentioned earlier, texts are the linchpin between institutions and ruling relations, which will be defined next.

3.6 Ruling Relations

Before defining ruling relations, a definition of power according to the IE methodology is necessary to situate ruling relations within institutions. Power, according to Smith, could be transcribed as ruling, given that in the "core ontology of IE, 'power' is referred to as 'ruling' or more specifically 'ruling relations'" (Rankin, 2013, p.243). This ruling, or power, is socially

organized and coordinates people's actions (Smith, 2005; Rankin, 2013; Campbell & Gregor, 2002). This definition implies that power is present in people's everyday work, in the mundane and often minute activities they perform (Rankin, 2013). The identification of ruling relations within institutions and the mapping of these relations is the goal of IE. In consequence, the concept of ruling relations is central to Smith's approach to IE. It is important to stress that ruling relations are not described as relations of dominance or hierarchy. Ruling relations are what organize and coordinate people's daily activities within an institution (Smith, 2005). They are created outside of the knowledge of the user but are nonetheless direct and structure behaviours and actions. Smith (2005) describes ruling relations as

> That extraordinary yet ordinary complex of relations that are textually mediated, that connect across space and time and organize our everyday lives – the corporations, government bureaucracies, academic and professional discourses, mass media, and the complex of relations that interconnect them. (p.10)

The emphasis of ruling relations is that they originate outside the subject and are powerful as they organize people's actions. Ruling relations in institutions are, according to Smith (2005), text-mediated, meaning anything written will coordinate people's activities within the organization. Texts as discussed in the previous section are the materialization of ruling relations. A text in itself cannot produce ruling if it is not activated by the user. Once the text, created afar, is activated by a user, it produces a certain effect in the local experience. Policies and procedures within healthcare institutions are a good example of the working of ruling relations. Policies are most often created outside of the local experience of people; they are created by management or quality assurance teams. Once a policy is implemented (in the case of charting, for example), users in the local setting activate the text form of the policy and coordinate their work in keeping with it. This is the description of a textually mediated ruling

relation. They happen every day, everywhere, and can be tracked by the activation of the texts (Rankin, 2013). As Rankin (2013) states, "People's work is infused with ruling relations that are observable and traceable. People cannot step outside ruling relations" (p.243). Ruling relations are intimately related to texts, the power of texts within organizations is that they shape people's actions and their lives by organizing and coordinating their actions locally from a translocal location (Campbell & Gregor, 2002; Smith, 1990a, 2005). Everyday life can be followed like a thread, from the micro to the meta level, mapping ruling relations as you move outwards in the analysis (Campbell & Gregor, 2002). This process is what enables people to see and understand the relations that rule them, opening the possibility of resistance (DeVault & McCoy, 2006).

3.7 Conclusion

The methodology of IE used in this research carries its own theoretical components but in order to analyze the transformation of the work of ED nurses in Ontario on a global level this study uses concepts of governmentality studies. Technologies of government become the link between IE and neoliberalism as a specific political rationality as they enable the identification and tracking of technologies of government. In a way, the tests used in institutions not only enable ruling relations but become the materialization of a neoliberal political rationality. A specific political rationality, such as neoliberalism, can only become visible when the empirical data of a research can track and show its implications on the people working within institution such as hospitals. The following chapter will detail the methodological considerations of this research using IE.

Chapter 4: Methodological Considerations and Methods

In the early 1980s, Dorothy Smith developed IE as an alternative to conventional sociology and ethnography. Smith proposed a sociology rooted in everyday life, where texts coordinate, conduct, or produce subjects (Smith, 2005). As explained in the theoretical framework, ruling relations, mediated through systems of documentation at the local and translocal level, enable us to "discover just how our everyday worlds are being put together within social relations beyond the scope of our experience" (Smith, 2006, p.32). They are technologies of government that serve to meet specific ends to different rationalities within organizations. The study of the interactions between systems at the local and translocal level allows for an understanding of the experiences of participants within the organization. The theoretical underpinning of Smith's conception of IE, especially as it relates to ruling relations, was informed by Marx and Engels's concept of ideology. Smith (2006) understands ideological practices as what makes it difficult for subjects to see the hidden reality in which they live, that is, being exploited, alienated, etc. Ideology makes the material conditions unquestionable, almost natural. Subjects believe this is the only way society or institutions can be organized and function. Using Foucault's approach to discourse, knowledge, and power enabled Smith (2006) to analyze ideological practices as power from a distance, meaning that documents coordinating processes in organizations create a translocal reality that is different from the local experience of the people in the organization. This is because documents are based in the conceptual, which comes to rule the actual where the actual is understood as the everyday actions of people, therefore "ideas and concepts are produced through and not independent of people's practices" (Bisaillon & Rankin, 2013, p.12).

A problematic well suited for an IE approach emerges when there is a disjuncture, or discrepancy, between people's actualities (what they do) and institutional realities (Smith, 2005). Central to such an inquiry is the importance of texts in studying the ruling relations within a social organization; "[…] social relations based on texts transform the local particularities of people, place and time […] they [the texts] perform at that key juncture between the local setting of people's everyday worlds and the ruling relations" (Smith, 2005 p.101). Texts include any documents or documentation systems. They are the technologies of government used to meet the end of a rationality. When a document user signs into the electronic system, the specific rationalities and their technologies become alive in a sense, it is their physicality. In IE, the research perspective is called standpoint theory. The following section will explain what standpoint theory is and I will then explain the standpoint of this research.

4.1 Standpoint Theory

Standpoint theory can be described as the point of entry into the inquiry; it is a perspective that comes from the *knower*, without any previous assumptions of subordination (Smith, 2005). The knower is the one who experiences the organization, who lives it every day and whose experience is usually not central to an inquiry. Smith's definition of standpoint theory uses, by and large, feminist theories and therefore describes a feminist standpoint theory. According to Smith (2005), social research at the time of first wave feminism looked at what women were doing in different capacities (mothers, wives, sisters, etc.). Smith (2005) argues this perspective subordinates and subjectifies women by contextualizing their actions and reactions as a continuous response to oppression. In contrast, standpoint theory seeks to discover the everyday lives of women, using their own stance into the research or their own perspective, paying attention to their everyday lives (Smith, 2005). Therefore, the entry-point into the

research should not be entirely focused on which forces push the knower to behave in certain ways. Instead, the point of entry into the research is focused on how people live their everyday lives and how they coordinate their work. This entry point to the social could detach the identity of a subject from forms of oppression and discover the real interactions and coordination between this person and their environment or organization through a textual reality. From this perspective any person can be a "knower," effectively removing restrictions on class, gender, and even location. Anyone activating texts within the organization and coordinating their work becomes a knower. Therefore, standpoint theory reveals a social that goes further than experience, as it traces the complex organization of everyday life (Smith 2005). The next section will explain the standpoint of this research, by explaining my positioning as the researcher.

4.2 Positioning of the Researcher

In an IE approach the problematic arises from a disjuncture between everyday experiences of those working or served by organizations and institutional realities (Smith, 2006). Accordingly, the problematic of this research study arose from the everyday experiences of RNs in the ED. In 2015, I had been a practicing RN for 13 years – 11 of which were spent in the ED – and was considered a "seasoned" ED nurse. This is the year I decided I must return to school and get a better understanding of my surroundings at work. When the ED wait time initiatives (i.e., P4R, PIP), discussed in detail in the background chapter, rolled out across Ontario in 2009, organizations created teams of expert ED nurses to help with the implementation. I became part of that team, or the ED-PIP team within my organization. Through my involvement with this team, I began to feel a deep sense of unease with the changes being implemented in my work environment. There was a disconnect between my understanding of the role and work of a RN and the reality of the transformed ED; practices such as giving patients pagers to come back for

blood results caused me deep moral distress. Some of the core components of Lean management (also discussed in the background chapter), such as identifying "waste" in the workplace, clashed with my perception of building professional trusting relationships with patients. The more I talked about my experiences with other nurses, the more I came to realize that we were all experiencing this disconnect, but our experiences were brushed off as "normal" or justified as necessary for "patient care" by our management teams. Ultimately, nursing interactions with patients and co-workers had fundamentally changed and when I could no longer keep up with the pace of work in my ED, I was forced to reflect on the rationale underlying these changes to better understand the bigger picture behind them. I made the decision to leave the ED in 2016 as I felt I could no longer work under these conditions. Having kept in contact with my ED colleagues, they did and continue to this day to share their experiences and perspectives on the changing nature of the relationships between nurses, physicians, patients, and other employees (e.g., clerks, orderlies) in the ED and their unease with the way patients are "processed."

The ontology of IE is an exact match to my feeling in creating this project. IE stipulates that the world around is created from interactions between people, or socially organized. The foundation of work processes is determined by the participants' engagement with their surroundings, which includes a textually mediated surrounding. This is what IE calls ruling relations. The interactions and work people create our reality (Rankin, 2017a). When I decided to quit the ED, the main question I had was around how the ED was now organized.

The epistemology of IE was also appropriate to study my workplace discomfort. IE stipulates that knowledge is not about one truth but is to discover a way to understand our reality that is based in the experiential, or an inquiry rooted from the inside, instead of the abstract. My experiences as a nurse in the ED were and still are at the heart of my thinking as a researcher.

The next section will provide the methodological components of IE and detail their specific application in this study.

4.3 Methodological Components of IE and the Specifics of this Study

Many authors have described methodological approaches for conducting IE (Campbell & Gregor, 2002; Deveau, 2009; Rankin, 2017a; Rankin & Campbell, 2009). The first step in conducting IE is to identify a problematic, which is different than traditional qualitative research as it evolves and changes as the researcher gathers data from different data sources. This problematic guide the inquiry but changes as data is collected, following the threads of ruling relations identified through interviews, textual analysis, and non-participatory observations. The creation of the problematic is followed by recruitment, then data collection and analysis. For ease of reading, the following sections will start by describing the methodological considerations of each of these components. Each section will close with a description of the application of the methodological considerations for this research.

4.3.1 Identifying a Problematic

Unlike most qualitative research, IE cannot be described or represented as a step-by-step approach. Smith (2005) describes the problematic of IE as "the discursive organization of a field of investigation that is larger than a specific question or problem" (p.38). As the researcher thinks or observes the field of inquiry, certain aspects of the coordination of people's work may look or feel out of place. This friction between the experience of knowers and organizational realities is at the heart of the problematic. The IE researcher uses her own experiences and the standpoint of participants to look at their everyday life and identify avenues of research, creating and refining the problematic. The fluid nature of IE means the method of inquiry is defined as the research progresses. As DeVault and McCoy, (2002) explain, the process is not linear but

"rather like grabbing a ball of sting and pulling it out" (p. 755). Only when data collection starts do certain aspects of everyday life appear to the researcher.

Due to the iterative nature of IE, the identification of the problematic starts with the clarification of the researcher's own perception as it relates to the inquiry. Often the researcher will write a detailed account of their knowledge on the inquiry; discussing and studying the written or spoken account of the researcher may highlight some tensions or unease that are at the heart of the IE problematic (Campbell & Gregor, 2002). However, the problematic of an IE is not rooted in what the researcher believes the problems are within the field of research or what initiated the interest of the researcher. Rather, becoming aware of how people are living their everyday lives in the field is instrumental to the creation of a problematic and the establishment of a starting point for data collection; the actions of the participants in the field, or ordinary people as Smith states, is the central aspect of the problematic.

The creation of the problematic requires some preliminary exposure to the fieldwork. This preliminary exposure allows the researcher to "hook" ordinary actions onto the bigger picture (the macro system) (Smith, 2005). While the starting point is always in the experience of knowers, it moves to studying the coordination of everyday actions and the relations that are constructed around the everyday lives of people. As the ruling relations are revealed through the organization of everyday life, the problematic moves from the local level to the translocal level. The translocal is situated outside the experience of people. It is not happening in front of them, but at a distance. All data collected must be in relation to the evolving problematic.

As discussed in the positioning of the researcher section of this chapter, the problematic for this research is rooted in my experiences as a nurse and my ever-growing dissatisfaction with my workplace. When Epic (an electronic medical record) was implemented after years of

changes and re-structuring, I signed up to become a "superuser," someone with extra training to support other users. The intersection between patients, care, and Epic felt tense or awkward and I felt like something was not working. The discussions that ensued with my supervisor led me to reflect more deeply on the work of nurses in an organization that was restructured on the one hand and that implemented Epic on the other. This layering of conditions organized nurses' work in a completely different manner from what I knew. This is how the problematic was initially identified but it kept growing and being modified by the experiences of nurses and the ruling relations that surrounded these experiences. At the end, the result of an IE is a map of ruling relations within an organization that organizes people's work locally and translocally.

4.3.2 Data Collection

According to Campbell & Gregor (2002), the "analytic core of the research process in institutional ethnography" (p. 59) is to illuminate the local and translocal setting and explicate the everyday lives of participants. The local is defined as how the setting and its surroundings are actually experienced by the knowers. The translocal does not necessarily refer to a place away from the setting. Once the consciousness of the knower is captured in texts or objectified, it becomes disentangled from the local experience and becomes translocal. The consciousness of the knower is captured by their activation of texts; they fill the required texts with checking boxes or providing narrative descriptions. Researchers collect data at two different levels. The first or entry-level data consist of field notes and the recollection of experiences by knowers in the local setting. These field notes – or accounts – guide the collection of level-two data, which attempt to explicate the everyday experiences of the knowers (Campbell & Gregor, 2002). Level-one data in IE research are the starting point of the mapping process. It is an observed or heard experience from participants that subsequently guides the data collection further. Level-two data

are collected by seeking to explain these experiences, and this is often where organizational documents or texts will be sought as they may contain the information to explain and map the experience of participants. When level-two data take the form of texts and documents they are most often collected at the translocal level as it is removed from the local experience. For example, if a nursing student shares with the researcher how their schedule is unbearable, the collection of detail on the curriculum locally (university) and translocally (Ministry of Education, College of Nurses of Ontario) may help explain this admission. The data points are not predetermined, nor do they proceed in a steplike manner (Campbell & Gregor, 2002; Smith, 2005). Once the researcher discovers an experience meaningful to the knower at the local level, they follow this thread to gather more data that could complete this picture and enable setting it into a wider context.

These two levels of data are mutually inclusive as people's everyday life is composed of subconscious actions and processes. The combination of knower's accounts with translocal data produces a rich account of the organization of people's everyday lives. What appears as "natural" or "automatic" in the field becomes the problematic, and the analysis allows the identification of ruling relations (Campbell & Gregor, 2002). As the problematic of IE is situated in the everyday lives of people, the data collected can vary from multiple forms of data to single forms such as texts.

4.3.3 Recruitment

Recruitment for planned interviews and observations in IE is not linear and the researcher strives to recruit useful informants for the specific thread of ruling relations under investigation (Smith, 2005); the researcher must identify which information is required and recruit a participant who knows about this thread (DeVault & McCoy, 2006). When the researcher has

decided on certain inclusion and exclusion criteria (for example, if the inquiry is focused on work processes of nurses, inclusion criteria would include nurses currently working in the field), recruiting for planned interviews and observations usually happens in the field. Alternatively, some researchers may post signs in the field or send mass emails to employees to gather interest in the research, and participants must then contact the researcher to find out more about the project and set up an appointment date and time to conduct the interview. The selection of participants for the interviews and observations must nonetheless be done in keeping with the problematic at hand in the appropriate phase of data collection. Participants recruited must currently be working in the field under study where they can be observed going about their daily routines of work.

For this study, once approval had been obtained from the ethics board and the departmental managers involved, recruitment was initiated by posting signs in the ED staff room (see Appendix B for Recruitment Posters). Nurses interested contacted the researcher via email or in-person. During the first shift of observation multiple other participants approached me to join the study; most participants were thus recruited in person. Inclusion criteria included 1) to be a RN, 2) to currently be working as an RN in the ED at the research site and 3), must speak French or English. The research site's nursing staff is composed entirely of RNs. Two participants requested to participate in both interview and observations giving a total of 14 participants (N=14). Participants were recruited from the study site exclusively and recruitment was completed within 24 hours of initiation. As the researcher was known to the study site, employees at the site felt comfortable and were eager to participate. As one participant stated, "When I saw your name (of the researcher), I wanted to participate as I know you understand. I

usually am not interested in research here; they all do the same thing" (PO4). A complete participant demographic table is provided at the beginning of the results chapter.

4.3.4 Interviews

IE interviews are conducted throughout the research as a window into the ruling relations around the knowers. IE interviews differ from regular sociological research because the goal is not only to gain a fruitful account of participants' experiences, but, more important, to discover which ruling relations come to structure and drive their experiences locally (DeVault & McCoy, 2006). In IE, interviews are considered *any* occasion to discuss the organization of the local with people in the field. The most structured form of interview is the planned interview, where participants are booked ahead of time and meet with the researcher with full awareness the interview is about to take place. The interviews are audio-recorded and transcribed by the researcher thereafter, which often reveals new questions to be answered in future interviews. The institutional ethnographer uses this type of interview to clarify and validate their findings in other interviews, fieldwork, or collected texts (Campbell & Gregor, 2002). Mykhalovskiy (1999) described their use of planned interviews when conducting IE as "… an analytic rehearsal. I'm checking my understanding as it develops; I offer it up to the informant for confirmation or correction" (Mykhalovskiy, 1999, as cited in DeVault & McCoy, 2006, p.23). The planned interviews usually consist of open-ended questions, with a focus on the steps or processes used by participants to accomplish their work (DeVault & McCoy, 2006). For example, the researcher can ask a participant to describe a specific process of their work in minute detail. The questions in planned interviews are often based on what the researcher has learned in other interviews or heard during fieldwork (DeVault & McCoy, 2006). Field talk is described as any discussion that occurs between the participant, other staff, the researcher, or even visitors (Smith, 2005). Field

talk is the flipside of a planned interview; it is an unorganized and spontaneous sharing of information in the field (DeVault & McCoy, 2006) that represents the informal sharing of people's experiences at the local level. With this informal type of interview, the researcher can seek clarifications "on-the-spot" verbally in the field, for example, can clarify unknown or challenging terminology (DeVault & McCoy, 2006, p.22). This type of interview is documented in the field notes, which will be described in a later section.

It is important to mention here that observations and interviews happened simultaneously in this study as it was not designed in a step-by-step manner. When undertaking IE, it is recommended that observation periods and interviews be intertwined, allowing for greater clarification and deeper understanding of the work processes (DeVault & McCoy, 2002). The 10 participants in the interviews were all currently working in the ED. The interviews were semi-structured, with the bulk of the questions related to detailed accounts of their work processes and activities in the work place (see Appendix C for Interview Guide). An interview guide was used to initiate the interview although most of the questions were added during the interviews to clarify accounts of experience and to delve more deeply into the documents and individuals involved in coordinating their work. Some questions were also related to the definition of a contemporary ED nurse. The interviews were conducted as a one-time meeting that lasted an average of 51 minutes. All interviews were conducted over the phone (due to COVID-19 restrictions) and were audiotaped and transcribed by the researcher. The transcription process allowed for the researcher to become fully immersed in the data, which informed future interviews. In this research, field talk also happened in informal meetings and social media posts.

4.3.5 Observations

Ethnography is traditionally concerned with culture, and the observation of participants in the field is the central data point in the inquiry (Smith, 2005). While the focus of IE is the coordination and the ruling of people's work, observations remain instrumental in seeing or highlighting aspects of people's work in motion, like the activation of texts or specific ruling relations at play (Diamond, 2006). Even if the researcher is familiar with the research setting, they must be open to *see* motion and movement of people and texts in vivo. They see this motion and movement by doing a back-and-forth iterative process among field notes, experiences of participants, and their statements. This practice leads to a constant questioning of the field even for the researcher who is familiar with the research site.

In IE, only very specific aspects of the field notes are helpful to the analysis; it is not unusual for institutional ethnographers to collect volumes of observational transcripts only to use one minute detail (Diamond, 2006). Field notes are taken during the observations on an observational protocol sheet. They are rich in detail, often descriptive of an event or a work scene or they can be reflexive, allowing the researcher to describe a feeling and or an idea experienced during the observation period. Field notes can also contain drawings to represent specific periods during the observation periods. The work of the institutional ethnographer is to discern and capture these important aspects by following different work processes from start to finish with attention to the details of these activities (Diamond, 2006). For example, the researcher can try to identify what triggers work for a participant; is it the phone ringing, the ping of an email, or the flag that appears on the computer screen? Following the movement of these triggers through the participants, the ruling of their work at a distance – the ruling relations

within the organization – is made visible and illuminates other possible ruling relations (Diamond, 2006).

Following the threads of ruling relations goes beyond simply watching and describing the work of the participants in a step-by-step manner as it is the intrinsic details of the coordination of their work processes and interactions that are important. Understanding precisely how they are governed and what the effects of the textually mediated reality are within the organization is a central goal of observations. The interplay of technologies such as texts, documents, and even structural architecture appears when the researcher is able to pay attention to the minute details of the work processes, discourses, and behaviours of the participants.

Interviews are recollections grounded in actual events and convey important aspects of the field to the researcher. From these, the researcher deepens their understanding of certain aspects through observations. In some instances, smells, feelings, and even movement captured during observations can help map ruling relations, thereby deepening the researcher's understanding of the ruling relations that coordinate and organize the work of participants (Diamond, 2006). By taking a step back, the institutional ethnographer must consciously and intently look at the room and the work; taking in the landscape of the room may also provide context to the thread being investigated. Thus, the collection of detailed, very specific, and understandable field notes is required.

For this research I followed and closely observed six different nurses on three 12-hour shifts each for a total observation time of 216 hours. I was able to observe participants on all shifts; days (D12), evenings (E12), and nights (N12). The nurses held different positions within the department such as triage nurse, team leader, observation nurse, process nurse, flow nurse, and resuscitation nurse. During the observation periods, I always kept a detailed field notebook

(see Appendix D for Observational Protocol). This notebook was filled during the shifts with quotes from nurses along with detailed accounts of work processes; shift reports, transfer of accountability, triage, initial assessments, admission processes, processing of orders, feelings I had while watching, sketches of processes, etc.

Throughout the observations, I was dressed in a uniform with a name badge clearly identifying me as a researcher. Due to COVID-19 pandemic restrictions, I was unable to enter patients' rooms but was able to stand outside the room to save on personal protection equipment (PPE). Further, the ED research team approval strictly stipulated that the researcher was not to have any contact with patients. During each 12-hour shift of observation, I stood close enough to the participant to see which screens in Epic (the electronic medical record used at the research site) were used before organizing their work. I would often ask questions on the spot like "How do you know there is an order"? Each participant then explained their process for verifying the order. I observed nurses exchanging reports for covering their patients during a break or at the beginning/end of their shift, and I took notes of what they used to communicate between them. I often would stop and ask myself "what I am looking at?" then document my feelings and the scene before me in my observational protocol. Every page of the protocol was then transcribed into a word document that was used for data analysis.

4.3.6 Texts or Documents

Similar to what happens with observations, multiple texts are retrieved during the IE inquiry and only a small portion will subsequently be used in the analysis. Questions during interviews are often related to the presence of texts and the way participants activate them. The institutional ethnographer looks and listens for texts during the observations, for example, the use of computer screens, references to specific policies, chats about pictures or graphs within the

department, etc. The goal is then to collect these texts for analysis, but to also be aware of their content to expand the researcher's understanding during interviews with participants. As explained earlier in this chapter, the collection of texts during the inquiry constitutes level-two data. Texts help to explain experience and enable the mapping of ruling relations within the institution.

The study site for this research had recently introduced Epic, an electronic medical record (EMR) and it quickly became evident that obtaining an understanding of which screens in Epic are used to what effect was going to be important during data analysis. To better understand Epic and its use in the ED, I attended a 4-hour Epic ED training session. It is important to note that currently no other documents relating to patient care are used within the ED. The daily staff assignment (a document that shows each section of the ED and the nurse assigned to it during a 24-hour period) was also collected. Pictures of signs posted across the ED were also taken, as nurses often referred to these signs before organizing their work. As the ethics approval did not permit follow-up interviews, the booked interviews were spaced in a manner to allow the collection of texts and thus the interviews could be used to review the use of texts by participants.

4.4 Data Analysis

In an IE inquiry, the goal of data analysis is to explicate the ruling relations that determine the organization of work and workflow within institutions. Therefore, the data analysis stage of the research focuses first on the identification of experiences, and then on the relations that shape or rule these experiences locally and translocally. As Campbell (2006) explains, "The analysis begins in experience and returns to it, having explicated how the experience came to happen as it did" (p. 91). As mentioned, data analysis in IE is iterative and happens throughout

the data collection. In particular, this iterative process allows for data collection to continually inform interview questions, thus increasingly aligning the focus of observations and narrowing the selection documents for analysis. Multiple authors on IE (Campbell & Gregor, 2002; Diamond, 2006; Rankin, 2017b; Smith, 2006) agree the analysis phase is not only difficult but a vulnerable time of the inquiry. There is a high possibility of analytic drift, which compromises the mapping of social relations and thus fails to explicate ruling relations. According to Rankin (2017), analytic drift occurs when the researcher loses sight of the institution and centres the experiences of participants in their analysis thereby making it impossible to discern the ruling relations that created these experiences. McCoy (2006) also states the "researcher succumbs to what Smith calls 'institutional capture' (Smith, 2005) and begins converting informants accounts of their experiences into the terms of an institutional discourse that constitutes people and their activities as the object of professional or managerial knowledge" (McCoy, 2006, p.110).

There is a fine line between producing IE results that explicate ruling relations and falling into a thematic analysis of informants' accounts or experiences. To prevent analytic drift, IE involves three distinct processes that together form the data analysis phase. These are mapping, indexing, and written accounts (Rankin, 2017b). Following these processes meant that the data analysis for this project took over a year.

4.4.1 Indexing

Analytical drift can happen when the researcher categorizes and arranges participant's experiences into themes, akin to a thematic analysis (Rankin, 2017b). In contrast to thematic analysis, indexing attempts to link work processes across the institution and across participants. It is a way to initiate data analysis while managing large amounts of data and enables centring the practices and experiences of informants as they relate to the organization of the institution.

The fine details given during interviews, observed in the field, or found in documents are indexed and followed like a thread and mapped onto the bigger picture of the organization of work. Indexed words or experiences could be seen as a marker for the researcher, signaling the need to investigate this specific aspect more deeply. For example, if multiple interview participants use a certain word or group of words to talk about a common experience, the researcher would index and sub-index these specific experiences while keeping the details of the data present (Rankin, 2017b). Indexing consistently directs the analysis towards the most significant or relevant data, while sub-indexing divides the experience or statement into smaller groups to better help define and investigate it. Rankin (2017b) stresses the importance of keeping the details of the data present all through the analysis, as it is in the details that the real organization of the social can be followed. This is accomplished by keeping detailed notes and consistently highlighting what participants do in their work in the smallest of details, like opening a specific computer screen after answering the phone.

For this research, each interview and observational protocol pages were transcribed to a word document and then uploaded to MAXQDA in their respective folders. The initial phase of indexing looked a lot like a thematic analysis as there were color-coded sections of interviews representing different experiences of the nurses in the interviews and observations. What was different in this case was that the color codes did not identify specific categories but represented a larger “sub-indexing” process relating to the experience of nurses. At this initial stage, the goal was to gather, in a vague sense, what nurses were actually talking about, not just the words they used. The immersion in the data comes through the transcription of interviews and observation but also by re-reading and bringing these sub-indexes to the field in the next observation. I will

use the example of the creation of a major index in the results to better explain how the data analysis took place.

As will be explained in detail later, the concept of flow is central to the work of nurses in the ED. Flow is simply the movement of patients within the ED from arrival to departure. After sub-indexing the interviews of three participants, the word flow was often mentioned but described vaguely. During observations, I started to "see" flow and to hear it even more. The concept of flow was expanding. To the nurses, flow also meant discharges and transfers and they used words such as "pushing and pulling" patients. It appeared to be a small victory to the participants to be able to open a bed and receive a new patient. The constant clicking on screens within Epic was almost entirely directed to an inquiry about flow in the department. The conversations they were having with their colleagues and the Care Facilitator (CF) always started with discharge/transfer plans to enable the flow of patients to continue. This newly found expanded definition of flow then became visible in the observation transcripts. While observing the CF for a 12-hour shift, I realized that most of their work was about flow, admitting patients from an ambulance stretcher or moving a patient to another area of the hospital. As I grasped the importance of flow within the ED, I went back to the sub-indexed interviews and started to look purposefully for flow in the words and descriptions of participants. Everything related to flow was then grouped in a sub-folder. As I transferred the sub-indexes of experience to this folder, I realized that not only were many terms used to describe flow, but that flow was tightly linked to the use of Epic. At this moment, flow became a main index to explain multiple experiences of the nurses, but I also started to see the enabling of flow through Epic, which later on became the second major index. The iterative nature of IE and data analysis took me back and forth between interviews and observations. I was never finished analyzing an interview as my definitions of

concepts kept expanding. Once I had developed three main indexes (flow, Epic, and resulting experiences), the sub-indexing of these indexes was used to describe it in detail. As will be presented in the Results chapter, most sub-indexes are direct quotes from participants, bringing their experiences to the forefront but using those experiences to map the ruling relations within the organization.

4.4.2 Mapping

Mapping begins from the standpoint of participants and tracks both how their work is organized and how their work organizes other people's work (Rankin, 2017b). From this standpoint, the goal of the analysis is to follow the relations that impact the organization of work within the institution, from within the institution or outside of it (Rankin, 2017b). Using diagrams and drawings allows the researcher to "see" the ruling relations in action. The work of drawing these schemes deepens the researcher's understanding and may illuminate other ruling relations to investigate. The initial and iterative mapping of the organization of the informant's work and the ruling relations surrounding it are one of the main aspects of data analysis in IE.

Once the main indexes were developed, I started to map how they were related to one another in the first place, then how they were coordinated within the hospital. The process of mapping the ruling relations forces the researcher to expand its definition but also to include more documents within the analysis. I drew multiple color-coded graphs, created tables, and had lengthy discussions with my supervisor (see Appendix E for Mapping Board) At some point, I became so immersed in the data that I couldn't differentiate between my experiences, the experiences of my participants, and organizational ruling anymore. I believe that this is when I could have easily fallen into the previously described analytical drift. I mitigated this by using

the initial drawing I had done, (re)placing the institution at the forefront of the mapping process, supported by the experiences of nurses.

4.4.3 Written Accounts

Another key aspect of data analysis is writing detailed accounts. These written accounts must be rooted in the standpoint of the informants while attending to both the organizational processes surrounding this experience and the texts involved in creating specific ruling relations (Rankin, 2017b). These written accounts are "chunks" of data which start in an experience and progressively attach other institutional realities to create a written map of what is happening in the field. Given that data analysis in IE is ongoing, the written accounts are modified and grow as the data are collected. Once the analysis focuses on a specific indexed experience, other segments of interviews can be attached to this experience to create a written account. The ruling relations around this experience, often found in the form of texts, can be brought into the analysis to explicate how they rule the work within the institution (Rankin, 2017b). This detective work leads to gathering more data-rich segments and to keep attaching and investigating other ruling relations. As the analysis progresses, documents, interviews, and observations come together to create the written accounts, aiming to describe the experience of the participants initially and then progressing to explicate the social organization of this experience.

The results chapter is the presentation of the written accounts produced during data analysis and includes quotes from interviews and observations as well as documents used in the organization of nurses' work in the ED. As described, the analysis started and ended with the experience of the informant's standpoint but was not subjugated by it as the institution was kept in view during the analysis.

4.5 Data Management

In IE, data collection yields a massive amount of data. As with any research, this data must be managed safely and confidentially in accordance with institutional guidelines. For example, electronic devices used to store the data must be password protected and encrypted. In ethnographic approaches, this also applies to observational notes, which must be confidentially destroyed following transcription and storage on a password protected and encrypted device. Many researchers elect to use data management systems (e.g., NVivo, MAXQDA) to classify and organize data.

For this research all data sources, such as interview transcripts, observation logs, photographs, and computer screen captures were uploaded to MAXQDA software (https://www.maxqda.com/) for data management and analysis. These data were organized in three separate databases within MAXQDA, one for interview data, a second for observation data, and a third for photographic and document data. None of the analytical functions within the software were used as the software was used solely for data management.

4.6 Trustworthiness and Rigour

According to Rashid, Caine, & Goez (2015), there are five criteria of rigour to evaluate ethnographies: triangulation, prolonged engagement, peer debriefing, member checking, and reflexivity.

Triangulation is the use of many data points to corroborate findings in qualitative research and is used as a way to verify and increase accuracy (Johnson et., al, 2020). IE studies usually collect three types of data – interviews, texts, and observations (both descriptive and reflexive notes) – and therefore inherently use a process that could be compared to triangulation to further the understanding of the arrangement of ruling relation at the local and translocal level.

As explained earlier, IE does not seek to find truths but to identify ruling relations that organize the work of participants. The use of multiple data points in IE comes as a way to corroborate the findings. Observations allow the researcher to adopt the standpoint of the participants, acting as an entry point to the field. Interviews then come to clarify and explicate the organization of work observed in the field. Finally, texts are used to link the observations and interviews to the translocal level and to complete the mapping of ruling relations.

Throughout this research, the multiple data points were constantly compared and expanded upon. As discussed earlier the analysis was lengthy as the need to go back to initial interview analysis when a new index appeared was an integral part of the corroboration process.

In ethnographies, prolonged engagement in the field is central to the rigour of the study. In health research ethnographies, prolonged engagement and triangulation demonstrate the credibility of the study; the understanding of work processes and ruling relations deepens with each subsequent interview and observation session (Rashid & all, 2015). It follows that there is no prescribed amount of time a researcher must spend in the field, the caveat being that their understanding of the participants' work must be sufficient for them to map how the work in the field is coordinated at a distance. This research includes 10 interviews and 216 hours of observations in the field, providing a lengthy engagement.

Peer debriefing in ethnographies has been associated with credibility (Schoepfle & Werner, 1999). Therefore, participants and researchers must be able to debrief after interviews or observations. The researcher should be available to answer participants' questions regarding the interview or observations and should inquire about participants' feelings. In addition, this debriefing allows for member checking where participants can add and deepen the researcher's understanding of the process of the work involved in certain events. Due to ethical restrictions,

formal debriefing after interviews and observations was not conducted. Nevertheless, there was extensive debriefing done during observation periods. Participants were keenly interested in seeing and understanding the data I gathered while observing them work. This process also enabled the participants to deepen or support some of the observations captured in the observational protocol. Member checking occurred frequently during observations as they were used to deepen my understanding of concepts discussed during interviews. The participants did not take part in the analysis of the data but added dimensions to the data collected in the field.

Reflexivity is often included in the field notes, as most researchers will note feelings and ideas as they observe participants. The term reflexivity in ethnographic research refers to the identification of the researcher's feelings and pre-conceived ideas regarding the work of participants (Rashid et al., 2015). These pre-conceived ideas need to be captured during observations to remain named and present during the analysis, forcing the researcher to look further in the data, going beyond these ideas.

As will be presented in the Results chapter, my feelings throughout the observations were noted and underlined in the observational protocol. I also often used my feelings as they related to my surroundings: loud noise level, smells, stress, etc. To that effect, I would often stop data collection during observations and just asking myself "What am I looking at? How do I feel about this right now?" then wrote these feelings down in the observation protocol.

4.7 Ethical Considerations

Given IE's critical perspective and interest in ruling relations within institutions, researchers may encounter reticence from research ethics boards. Beside mentioning ethical approval for IE projects, authors on IE methodology do not expand on the specific points of ethical considerations. Ethics approval was obtained from the REB of the research site and

University of Ottawa (see Appendix F for both ethical approvals). The approval process for this research project was long and became complicated with the emergence of the COVID-19 pandemic, requiring multiple communications with the REB, ED managers, and the research team of the ED. Both REB approvals were received by Sept 2, 2020. Before data collection could start, institutional approval was needed and was granted on October 21, 2020. Due to ongoing restrictions related to the pandemic, the research team in the ED approved the presence of the researcher onsite starting December 2, 2020. My connections and friendships with the research site enabled the data collection to go forward, as many other researchers waited up to six months to initiate data collection. During a period of observation, it is understood that the researcher also collects data from the surroundings of the participants, and that the conversations happening around the participants are also eligible to be captured, although no confidential information is kept on the field notes. Informed consent was therefore obtained from participants before the start of each observation period as well as before each interview (see Appendix G for Consent Forms). Each participant was given a 10$ Tim Horton's gift card as a token of appreciation. In accordance with institutional policies, these records must be kept for one year in a secure location.

4.8 Conclusion

Smith (2006) conceptualizes IE as an alternative to conventional sociology studies where the participant is perceived as the object of the research. The subject in IE is the *knower*, where the perspective of the research stems from the participant's perspective, what they do and how they live their everyday lives. This perspective in IE is called *standpoint*, it is the entry into the research. The lives of participants in an organization are ruled in specific ways, often at a distance following specific rationalities. These relations are called ruling relations and represent

power within an organization, they are part of discourses and are initiated outside the organization. Texts are powerful coordinators of people's everyday lives and are central to the ruling relations as they are inscription devices that create a specific reality within the organization. The result of an IE research is the ability of the researcher to create a map of the ruling relations local and translocally, showing how people's lives are coordinated within the organization. In IE, the inquiry starts and ends in experience, meaning that you use the experiences of participants to substantiate and explicate the ruling relations while writing the results. The institution remains in view throughout the inquiry as the mapping of ruling relations is the end goal, not the mere description of participant's experiences. The next chapter will present the results of this IE inquiry.

Chapter 5: Results

When conducting an IE study, the data analysis starts the moment you start to collect data as each subsequent interview and observation serves to deepen the understanding of the research problem. Accordingly, the following questions guided data collection and analysis: What am I looking at? How does this relate to the rest of the data? As I was immersed in the research site for an extended period of time, taking what I called pauses and stepping back to look at the bigger picture became instrumental in keeping the institution in view. This chapter will present the results of over 200 hours of observation, ten completed and transcribed interviews, and countless documents and photographs that constitute the data collected in the context of this research.

The sub-indexing and indexing described in the previous chapter ultimately led to the creation of three major indexes that account for the experience of nurses on the one hand and the ruling of their work within the institution on the other. The voices of nurses are central in the presentation of the results, as most sub-indexes are direct quotes from the interviews or observations. The first major index represents the centrality of flow, or patient movement (physically or virtually) in the work of ED nurses. The sub-indexes to flow serve to describe what flow is, the experience the nurses had when talking about flow, and the mapping of flow on the institutional map. The second index is Epic. Epic is the electronic medical record (EMR) used at the research site. The sub-indexes provide a visual of the impact of Epic on the nurses' works as well as the way Epic became the angular stone of flow enabling and tracking it within the ED and the hospital. The last index discusses the resulting experiences of nurses within the ED: How they lived with the idea of flow and the reality of Epic and the impact both had on their work, their identity as nurses, and their appreciation of their work environment. The results are

presented in a three-level analysis manner: flow makes the ED move (first level), flow is made possible through Epic (second level), and the nurses live with flow every day in their work, with tangible repercussions (third level).

This chapter will present and expand upon the three main indexes and sub-indexes. As discussed in the previous chapter, data collection was completed during the COVID-19 pandemic in a level one trauma center. The observation of the interactions between nurses and patients was therefore limited. The results presented are entirely rooted in the nurse's work "behind the scenes," or what happens outside a patient's room. To better portray and explain the results, I will present quotes from interviews and observations, as well as graphics. The hand drawings I made as I observed certain situations were instrumental in preserving the feelings, I had at the time of data collection and I will bring these feelings to the data analysis.

5.1 Overview of Participants and Research Site

The recruitment of participants at the research site was done using signs in the break room of the ED as well as in the washrooms. As discussed in Chapter 4, multiple participants approached me on the first observation shift to participate in the study. As I was known in the research site, it is important to mention that the participants in this study were generally the most senior nurses of the department, and the average years of experience as a nurse was 19 years. As detailed in Table 1 below, the average years of experience in the ED of participants was four years higher for those taking part in the observations. This difference can be explained by the fact that most participants were recruited onsite and in-person. These more experienced nurses had known me for almost 20 years. Table 2 details the demographics of participants for the interviews well as some descriptive statistics of participants. Table 3 provides descriptive statistics of participants.

Participant Demographics

Table 1: Observations Participants Demographics

Participant's Code	Gender	Experience as a nurse	Experience as an ED nurse	Observed Shifts
PO1	Female	32 years	22 years	2 shift D12[†] 1 shift E12
PO2	Male	10 years	8 years	3 shifts E12[‡]
PO3	Male	35 years	33 years	2 shifts D12 1 shift N12
PO4	Female	12 years	8 years	3 shifts N12*
PO5	Female	16 years	14 years	3 shifts D12
PO6	Female	19 years	15 years	2 shifts D12 1 shift N12

[†] D12 denotes a day shift (0730-1930) [‡] E12 denotes an evening shift (1130-2330) [*] N12 denotes a night shift (1930-0730)

Table 2: Interviewed Participants Demographics

Participant	Gender	Experience as a nurse	Experience in the ED	Duration of Interview
PI1	Male	32 years	22 years	50m26s
PI2	Female	8 years	6 years	44m25s
PI3	Female	11 years	9 years	43m52s
PI4	Female	6 years	5 years	1h13m50s
PI5	Female	25 years	24 years	1h6m45s
PI6	Female	16 years	14 years	50m16s
PI7	Female	35 years	22 years	49m46s
PI8	Male	10 years	8 years	46m15s
PI9	Female	24 years	14 years	1h01m12s
PI10	Female	7 years	3 years	1h10m55s

Table 3: Descriptive Statistics of Participants Demographics

N=16	Males	Females	Average experience as a Nurse	Average Experience as an ED Nurse	Average Duration of Interviews
Observations	2	4	21 years	17 years	
Interviews	2	8	17 years	13 years	51m19s

The research site comprises nine main areas but for ease of reading, I will describe only the five main ones. (Appendix H has a complete description and map of the research site.) Triage is at the entrance of the ED and is a glass enclosed area where the triage nurse has to her left an ED clerk and to the right another triage nurse. The ambulatory care section of the ED is named Urgent Care (UC). The bulk of patients visiting the ED are seen in this area. Normally patients sent to UC can walk and are not acutely ill. When patients are not able to walk and require more care, they are sent to the Observation (OBS) area. This area has 20 stretcher bays with a patient-to-nurse ratio of four patients to one nurse. Patients in this area should not require cardiac monitoring. The Emergent Care (EC) area contains 16 stretcher bays all equipped with cardiac monitors where acutely ill patients requiring cardiac monitoring are sent. The patient-to-nurse ratio here is three patients to one nurse with the exception of one assignment that has a ratio of four patients to one nurse. The Resuscitation area (Resus) is a four-stretcher bay area where critically ill patients, like those in cardiac arrest or who have sustained severe trauma, are sent. Two nurses staff this area at all times.

5.2 Indexes and Sub-indexes

The following three main sections will present the indexes and sub-indexes obtained through rounds of reading observation and interview transcripts. Table 4 provides the index and

sub-indexes. Most sub-indexes are presented as an anchor quote, as they are terms or expressions used by participants.

Table 4: Indexing and Sub-indexing Chart

Indexes	Sub-Indexes
5.3 Flow	5.3.1 The Perpetual Loop 5.3.2 The Proliferation of Roles 5.3.3 Triage as the Starting Point 5.3.4 We don't care for you, We Care for the Money 5.3.5 It's All About the Medics 5.3.6 Just Re-Arranging Deck Chairs 5.3.7 Nurses Creating Efficiencies
5.4 Epic	5.4.1 The Clipboard 5.4.2 Ping Pong Nursing 5.4.3 Nurses as Task Monkeys 5.4.4 Chasing After Orders 5.4.5 Time with the Patient 5.4.6 Where is the Patient 5.4.7 Changes in Communication 5.4.8 Organized at a Distance
5.5 Experience	5.5.1 Construction of a Patient 5.5.2 Staff is Green 5.5.3 Jack of all Trades 5.5.4 Tough Environment to Work In 5.5.5 Lack of Staff, Lack of respect

5.3 Flow

After mapping the experiences of participants, it became apparent that a significant aspect of their work was attached, in one way or another, to the idea of flow within the ED and the hospital. The analysis moved to define flow and explore what it means in the context of work in the ED. Multiple terms and meanings of flow were shared by the participants and observed in the field. Tracking the flow of patients from the ED is now made possible with Epic, from a patient's arrival at triage to either discharge or admission to the hospital. Once the understanding of flow was expanded and mapped in the post-analysis phase, a search for terms representing

flow was undertaken in the interview and observation transcripts, yielding 164 mentions of flow in the data. The analysis made clear that flow was central in nurses' work and the number of mentions of flow in the transcripts supported this finding. In the last observation session with PO6, she clearly validated this finding by stating that "It's all about flow, all the time. Keep moving them on, it's all that matters" (PO6, Day 3).

5.3.1 The Perpetual Loop

Flow in the ED refers to all movement of patients, from admitting them into rooms in the ED, to expediting their consultation to other services, and then either moving them up to the floor or discharging them home. Roles in the ED were created solely to ensure the continuity of flow. This will be discussed in detail in the next section of this chapter. The idea of a perpetual loop was coined by PI8 during his interview and then again in the observations as he described the role of the PN in the UC area. He was referring to the repeated actions of emptying the rooms, cleaning the rooms, bringing patients into the rooms, and then discharging/moving the patients. "Which is that kind of perpetual loop that you're kind of working in to see where you know so we can bring more people in kind of thing" (PI8).

This loop was also noted by PO5 when she described what she does in a shift as a Process Nurse (PN) of a CF. She showed me visually how the loop rolled: empty and clean room, bring patients in, then start over. PI9, a veteran nurse with 14 years of experience in the ED, often fills the role of flow nurse in the UC area. As described above, the UC area treats patients who are generally stable and walking with minor or uncomplicated reasons to come to the ED. As a flow nurse, she described her work as getting patients in from the waiting room (WR) and bringing them to the rooms to be seen by a physician. She then tours the UC to see if beds are empty and could be cleaned

to repeat the same process. Once she brings the patient into a room, she monitors their wait times to ensure they are seen within the target wait time of their assigned CTAS. Flow throughout the interviews was mostly referred to in terms of bringing patients in from the waiting room into treatment areas. “Also, there is more complaints, maybe because of the wait time, yeah it’s really good, you flow them in but we usually don’t have time to see them to do our full assessment, cause that’s very challenging in urgent care” (PI9). In this excerpt, the participant refers to “flow them in,” an action, as seen during the observations, that refers to physically finding patients in the main waiting room and bringing them into a care area or another internal waiting room.

This aspect of flow is, in a sense, the materiality of what happens virtually. The biggest component of flow happens mostly virtually. PI9 is able to find which patient is to be seen next by looking at the home screen of Epic for her area. She does not need to enter the patient’s room to verify if they have been assessed by the physician, this is part of the tracking of LOS in the ED that is made possible with Epic through the nurses’ documentation. In Epic, flow starts right at the quick registration step at triage, which will be discussed in detail later in this chapter. Flow is not visible in a physical manner, there are no physical flags sending patients places, although there are colored dots on the floor to direct patients to different treatment areas, as they are often not accompanied by staff. In Epic, the patient is virtually triaged and given a CTAS and a destination (UC, OBS, EC). This is when the nurses in these specific treatment areas know that a patient is waiting to come in. Before meeting any of them, the nurses know the number of beds they need, what kind of supplies they may require, and already anticipate the work that will need to be done. For that period, the patient is known strictly in a virtual manner

through Epic. In the UC area, nurses may never physically meet patients. PI9 explained that the patients can be sent to the UC area, placed in an open room, seen, and discharged by a physician without ever meeting a nurse. From the nurses' standpoint, the patients are only virtually flowed in and then discharged. In any given shift, there is always someone assigned to monitor the flow of patients, internal to the ED. For patients presenting with CTAS 4-5[2], destined to go to the UC area, the PN is in charge of the flow, 12 hours a day during the busiest time in the ED. The remaining 12 hours and breaks are covered by nurses working in the UC area and assigned specifically to the flow as described by PI9.

PI4 has five years of ED experience and described the organization of nurses' work in the UC area of the ED with flow as its central aspect. Two nurses during the day are assigned to managing orders and patient care and there is always one nurse in charge of flow. She stated that the PN in charge of the flow in the UC will empty rooms, have them cleaned, send patients out to the waiting room, follow-up on test results or blood work, and keep an eye on wait times within the UC area. My observation protocol clearly shows too how important flow is in the UC. For one entire 12-hour shift I saw PO5 working as the PN going around cleaning rooms, getting patients out of rooms, writing "room available" on a piece of paper, then proceeding to the triage area where she reviewed every patient waiting to come in the UC area. She would then compare the list of patients waiting to come in with the list on her piece of paper with available rooms. That paper was organized in a "hot/cold" manner, meaning patients with possible symptoms of

[2] Canadian Triage and Acuity Scale (CTAS) as described in the previous chapter refers to the urgency of a patient's presenting complaint. Patients given a CTAS I (Resuscitation) require immediate attention and aggressive Canadian intervention, it is a threat to life or limb. CTAS II (Emergent) require rapid medical intervention and are a potential threat to life of limb. CTAS III (Urgent) requires emergency interventions and are conditions that may progress to threat to life or limb. CTAS IV (Less Urgent) are conditions that are often chronic, and should be seen in the ED within one to two hours. CTAS V (Non-Urgent) are conditions that can be delayed, as there is no evidence of deterioration (CAEP, 2013)
http://ctas-phctas.ca/wp-content/uploads/2018/05/participant_manual_v2.5b_november_2013_0.pdf

COVID-19 were directed to a hot zone and patients without symptoms were directed to the cold zone. That paper was hand drawn by the nurse herself, no template was provided. Once the PN made the determination of which patient went where, she would electronically transfer the patient into a room in the EMR, then she would call the assigned patients in the waiting room to bring them into the UC area (PO5 from observational protocol). Once in the UC, she would direct patients to their assigned rooms and cross off that room number on her paper. Throughout the shift, the same process was repeated over and over. As participant PI6 stated, "The same thing over and over and over and over and over and over again it never makes a difference. You dig a hole; the sand goes back in" (PI6).

The concept of flow, in keeping with the previous quotes and observations, is defined by staff as the movement of patients from the WR to the treatment area in a pulling manner. The same applied to the observation area as well as the EC area. Nurses are "pulling" patients in from the waiting room. During observations with participant PO3, the idea of flow as a "pulling and pushing" action was highlighted. During a particularly busy day on day 2 of observations, PO3 was "trying to make space to pull these patients from the waiting room." The minute a bed could be opened either by discharge or transfer to the floor or to a chair, this participant would immediately look through the long list of patients to come in and call one into the now available room. The pushing aspect of the flow came up during a phone conversation with the flow manager[3] who was attempting to get patients from the floor discharged earlier to wait in communal rooms upstairs in order to get ED patients already admitted into a bed on the floor. PO3

[3] The position of flow manager is filled eight hours a day, from 7-3 by a nurse outside of the ED. This nurse works under the admission department and is responsible for taking a look at all possible discharges throughout the hospital every day and planning the assignment of beds to ED patients as well as surgical patients.

stated “Yes, ok. You talk to the floor then I will push these three patients up. I will get the navigator on it to increase the pressure.” This quote from PO3 represents the aspect of pushing patients out of the ED. Another way to “push” patients out of the ED is through discharges whether in the day or night. Multiple options are looked at when attempting to discharge a patient. PI5 explained that discharging patients at night is problematic, especially for patients who require assistance from family members or live in long-term care homes. Not all families are willing and able to come and get older parents from the ED in the middle of the night. Regardless, she explained that the pressure to push these patients out of the ED at night was high. Nurses start by assessing if the patient can take a cab home. If they can but don’t have money the hospital will pay for the ride home. Next, they call families or will sometimes book private ambulance transfers to free a bed and discharge a patient at night. She discussed the difficulties in getting patients discharged from the ED at night especially patients with reduced mobility, heavy psychiatric impairment, or dementia. The same process is followed during the day, with the only difference being that transport ambulances are available more quickly.

Flow in the ED is also a representation of pressure. This pressure is mostly exerted virtually as nurses see the names and numbers of patients waiting to come into specific areas. Even if they don’t see the physical patients, they nonetheless feel the pressure to bring these patients into treatment areas and transfer those patients in treatment areas elsewhere. Only the triage nurse sees these patients physically as they sit in the waiting room. From triage to discharge, the physical construction of the ED and the strong internal impetus of nurses to move patients from entrance to exit are not only all geared toward flow; it *is* flow.

The logistics in the ED around flow are extensive. Each nursing station possesses a computer, and each different treatment area has at least two boards constantly displaying the wait times of all patients with the color-coding system and where their visit sits according to targets. Clerks and orderlies are fully aware of and are trained on flow and the importance of moving patients quickly from one area to another in order to keep the flow going. The CF role is mostly dedicated to "making space," ensuring flow is always moving.

The processes to flow patients through the department and meet the targets are so central to the role of the nurses that PI1, a veteran nurse, defines the ED nurse as the operator of a conveyor belt. This operator must possess all the tools to fix the products that are circulating on this belt. Processes within the ED and meeting imposed targets for funding is so important that it almost supersedes the fact that patients are humans, seeking care. All this "assembly" on the conveyor belt is made possible by tracking the product through Epic. "[I]t's a conveyor belt, it's a conveyor belt of people coming into the ED, and you look after them" (PI1).

PI1 reduces flow to its most simple expression. A conveyor belt image accounts for the pushing and pulling, for the virtual movement of the patients, for the roles created around the flow. A conveyor belt never stops; it is a perpetual loop that the nurses work every shift. Nurses feel it is an assembly line and more patients in the waiting room mean more pressure to increase the flow to bring these patients in. The roles created to support and organize flow in the ED will be discussed next.

5.3.2 The Proliferation of Roles

Multiple roles have been created in the past ten years in the ED to address the issue of volume, capacity, and flow in the ED. These roles mostly stem from the need to meet funding

targets and maintain current funding levels. They are filled exclusively by experienced ED nurses, apart from the OLN role, as discussed in the background chapter. The definition of these roles was discussed with participants in both the interviews and observations, as well with as other ED nurses during the observation periods.

5.3.2.1 The RAZ Nurse. This role has now been replaced by the Intake Physician (IP) nurse but was often referred to during the interviews. The Rapid Assessment Zone (RAZ) nurse is an experienced ED nurse, triage trained, who sees patients that have been given a CTAS IV or V (LOS < 4 hours), in two dedicated small rooms behind the triage area. The RAZ nurse is partnered with an ED physician for a 12-hour shift, and they see and discharge patients as quickly as possible to meet the targets for their population. PI5 described the RAZ nurse:

> We processed the CTAS IV and V, it was the priority, we go through the small cases, let's go! We decant, we decant, we decant! And we have a lot of CTAS IV and V. And as it is, as I always said, it is the cash cow of the ED. (PI5, my translation)

The RAZ nurse was quickly assessing patients, doing blood work, giving medications, and discharging patients for 12 hours. According to a nurse heard during the observations, it was a very busy position.

5.3.2.2 The IP Nurse. The Intake Physician (IP) nurse is a position staffed by an ED nurse who is triage trained. Again, very similar to the RAZ nurse, this nurse works in partnership with an ED physician, ideally for 12 hours. The difference between the RAZ nurse and the IP nurse lies in the population they see and treat at triage. Whereas the RAZ nurse saw only CTAS IV-V patients, the IP nurse also sees CTAS IV and V but will start assessments and treatments on patients of higher CTAS waiting for a bed in the OBS area. The goal of the IP nurse is to decrease the time for physician assessment (PIA) for all CTAS II to V. The PIA time is only met once the physician accesses the chart through Epic and enters the time when the patient was

seen. Since the wait times to get into more acute treatment areas like OBS or EC have been getting longer and longer, according to PI8, something had to be done to decrease some of the metrics for these clients; hence the transformation of the RAZ nurse role. The IP nurse and physician are not assigned to these patients. They only assess them, but patients still have to wait to get into a treatment area. Once they reach the treatment area, the nurse will assign herself to these patients as they come fully worked-up (bloodwork, intravenous in, vital signs done) and sometimes are even referred to an admitting service. The same applies to the physician.

PI5 explained that the ED had been losing funding, as a nurse and a physician under the RAZ model (CTAS IV and V) were working to see and discharge patients destined for the UC area. She stated that not only was the ED losing funding, but that physicians were also losing money as other CTAS (II and III) patients waited longer to get into treatment areas. The fix to this problem was the creation of the IP nurse position that was meant to solely target the PIA time. The RAZ and IP nurses are dedicated to seeing patients right at triage to decrease the PIA metric, which is directly related to funding. As this research focuses on the organization of nurses' work in the ED, I will not expand on the statement made by PI5 about physicians losing money. What I did witness during my observations is the difficulty in staffing this position. There must be a physician booked for this role and there must be enough nurses available but during the observation periods, this position was filled only a third of the time. The challenge at the time of data collection was mainly related to the COVID-19 pandemic, where extra physicians were required to cover other shifts and where a constant nursing staffing shortage was only aggravated. When this position was filled, the pace did appear intense for the nurse, as she had to keep track of who was next to get blood work or medications from a full WR.

5.3.2.3 The Navigator. The Navigator nurse role is not new to the ED. The Navigator is responsible for following-up with patients discharged home who might have had abnormal blood tests or imaging or who had any other issue requiring a call. As an example, if a patient was seen in the ED for fever and had blood cultures that came back positive, the Navigator, after consultation with the ED physician, would call the patient at home to explain the reason for the call, fax in a prescription to the patient's pharmacy, and instruct him or her to follow-up with their family doctor.

The Navigator nurse also plays an integral role in "pushing" patients out to the floor. On the Epic screen, when a patient is admitted and assigned a bed, green in the bed box means that the assigned bed is clean and ready, and the patient can be transferred. Nurses in the ED fill a transfer form before putting the patient on the porter's list for transfer. Once the bed is ready, the Navigator will often walk to the treatment area where this patient is located and ask the assigned nurse to write the report and transfer the patient. This will sometimes create conflict as one nurse stated, "If I had time right now to do it, it would have been done, thanks" (ED nurse staff heard during PO6- Day 1). The conflict arises from a colleague (Navigator) telling another nurse what to do.

The Navigator will also manage the flow of admitted patients into the conference room, a room built initially for education purposes but now used almost permanently as a 5-bed treatment area for admitted patients waiting for a bed. The Navigator asks nurses in OBS and the EC if any of their admitted patients would be appropriate for the conference room (they have to be not confused or violent, stable, and not on airborne precautions). Once a patient is deemed appropriate, the Navigator will ensure that the patient gets transferred, thus opening up a bed in

the ED. The Navigator nurse also covers the CF for breaks and assumes responsibility for answering any calls or addressing any issues arising while the CF is gone.

5.3.2.4 The Process Nurse. The Process Nurse (PN) role appeared when Lean management was implemented to meet the funding targets set by the government. The PN only works in the UC area and is solely responsible to keep the flow of patients moving, ensuring physicians always have patients to see in examination rooms. They have a general sense of what is happening in the UC area at all times and keep a close eye on target wait times. If a patient's LOS box changes color, they try to convince a physician to see this patient. PI3 explained that in her role as a PN, she will approach the physician to see a patient when their LOS turns yellow, meaning they are close to exceeding the set target wait time. The PN then discusses with the physician the need to see this patient quickly. Once the LOS turns red, the funding for this patient is basically lost but the PN will still advocate for the patient to be seen next.

The PNs will move constantly throughout the UC to see if a patient that was already seen could be moved to a chair or could be discharged quickly. They also monitor the number of patients present in the UC, as the prescribed staffing ratio should be respected. As a general rule, nurses discussed during the observations that 60 patients was the soft limit. The PN has usually had special training on P4R initiatives and wait time targets, although this has disappeared recently, according to PI3. They are constantly communicating with nurses working in the UC and triage areas about patient movement and they try to be a step ahead in planning the flow of patients.

5.3.2.5 The Flow Nurse. The Flow Nurse, as described briefly earlier, is a nurse assigned to work in the UC area who covers breaks for the PN during the day and ensures flow during the hours when the PN role is not staffed. This role will often be filled by more

experienced ED nurses. As in the PN role, they are responsible for always having patients waiting to be seen in examination rooms, but they are also part of the care team, where they are expected to complete orders and treatments on patients. In contrast, the PN is not expected to complete orders, as two to three other nurses are assigned to do this on the staffed hours. PI9 is often assigned to this role on night shifts, and she described it as being busy, especially on Mondays with a higher volume of patients.

5.3.2.6 The Garage Nurse. The Garage nurse's role was born out of the COVID-19 pandemic. Patients who arrive with paramedics are triaged and wait in the garage for a bed in the ED. The garage looks like a garage and patients are housed on stretchers and monitored by paramedics until a bed becomes available. Once the patient is assigned a treatment area, a personal support worker (PSW) pushes the stretcher inside the ED from the garage. The garage nurse is responsible for completing the triage of patients brought in by paramedics as well as monitoring which patient is to go into the ED first. They are fairly isolated from the rest of the ED and can only communicate with others by phone. During data collection with PO6, as a garage nurse she also offloaded patients from the paramedic stretcher, "stretching" the offload time when she knew a bed was coming up shortly. This practice was seen multiple times; in reality, the patient remains with the paramedics but in the computer, they have been offloaded. As she stated, "It decreases our offload times, at least if we can meet this" (PO6- Day 1), alluding to what I would call the "constant worry" of ED nurses to meet some target times. They often talked about the fear of losing positions and support staff due to funding cuts. The garage nurse is an added triage nurse but dedicated solely to triaging patients arriving with paramedics.

5.3.2.7 The Care Facilitator. The Care Facilitator (CF) role has always been present in the ED, even if the name of the role has changed a few times. This role is what most people refer

to as team leader. The CF is responsible for the operations of the entire ED. PI5 talked at length about the multiple aspects of this role. A main function is about flow as the CF manages the flow of patients in the OBS, EC, and resuscitation areas. The CF ensures that a resus bed is always open in order to respond to patients arriving in cardiac arrest, for example. CFs also manage most conflicts in the ED that can range from a floor refusing a patient, staff arguments, patient complaints, and communication with police and paramedics in cases of disaster. This position is filled by an experienced ED nurse throughout the entire day and night. The CF also communicates with the PN, Navigator, and managers to keep everyone informed of problems arising. PO3 and PO6 filled the role of CF during data collection and the most important aspect of their role was to keep the flow going, especially when multiple patients were admitted and waiting for a bed on the floor. The CF often sits patients in chairs around the nursing station to make room for others still in the WR.

Realities around funding, wait time targets, processes, and flow appear to be a natural part of their work, almost the central part. Multiple roles within the ED were created to address the need to meet these targets and improve flow, with uncertain results.

5.3.3 Triage as the Starting Point

The starting point of flow in the ED is triage. This is where the "clock" starts, or the calculation of the length-of-stay (LOS) of each patient begins. Triage became important in the sub-indexing of flow as the majority of participants are triage trained nurses and spoke to the pressure of having patients in the waiting room, a sign of stalled flow. Defining the process of triage is difficult but I will attempt to explain its multiple facets. The verb triage comes from the French word *trier* or to separate things according to qualities (*Oxford English Dictionary*, 2022). Triage in the ED is carried out according to the Canadian Triage and Acuity Scale (CTAS, see

footnote 1, p.15). A number value of one to five is assigned by the triage nurse to each patient presenting to the ED. The triage score given to a patient does not change once the patient is registered and it follows them throughout their ED stay. The triaging and attribution of a CTAS score as well as the chosen destination (treatment area) in the ED department by the triage nurse initiates a myriad of actions from other ED personnel. Triage in itself is a complex process that needs to be broken down for ease of understanding. The process of triaging was also changed due to Epic. The end goal of triaging in the ED remains the same: attribute a triage score to a patient after a rapid focused assessment based on their presenting complaint. Triage looks easy, but the process is actually very complex and comprises many steps, involving different ED actors.

The first step of this process is what most ED staff call "Quick Reg," short for quick registration. This is the patient's first contact with any ED staff upon arriving in the WR. Recently, this quick reg process was delegated to the triage clerk, sitting on the left of triage nurse one. PI4 discussed that the first impression on a patient and their presentation to the ED is now done by the clerks and is not a nursing act anymore. She also stated that management and clerks expect that the triage nurse located in the cubicle next to the clerk will give each patient a quick look over to ensure that the patient is not critically ill. This is expected even if the nurse is busy triaging or treating another patient. When a patient arrives in the WR of the ED, they stand on a red X on the floor in front of the triage clerk's desk. Once the clerk is available, they take the patient's health card and swipe it, attempting to find the patient in a database. The patient's identity is verified with their current address. The clerk then asks the patient the reason for their visit or their presenting complaint. From a drop-down menu in Epic, the clerk selects the appropriate complaint, then proceeds to the Febrile Respiratory Illness (FRI) screen that now

includes an expanded COVID-19 section. All these components of initial contact were previously done by the triage nurse, but this process was changed as a way to cut down on interruptions for the triage nurse. According to PO5, these interruptions had to be eliminated as the time nurses took to triage patients after the implementation of Epic was more than double the time it took before Epic, resulting in long wait times just to be triaged. The ED clerk is now responsible for notifying the triage nurse if they think a patient should be triaged out of sequence or if they appear very ill. Each clerk has received a short training session about how to enter patients' information into Epic and which presenting complaints should be brought to the attention of the triage nurse. As PI4 mentions, most triage nurses feel an inherent responsibility to "look over" the patients presenting to the ED clerk's desk and keep an ear out for the stated presenting complaint. The whole triage area is built with windows, making the triage nurse, the clerk, and the patient visible to all. Once the "quick reg" is completed, patients wait for the nurse to call them for a formal assessment, take vital signs, and finish the triaging. The patient becomes virtually visible to the triage nurse after the triage clerk completes the "quick reg" process. This step is important as it starts the clock on the patient's journey in the ED.

The second step of this process involves the triage nurse and the patient. The triage nurse will look at the "roster" or the list of patients waiting to be triaged and will call the next patient into the triage area after donning proper PPE. As PI8 explained, while the patient is in the triage chair, the nurse obtains a medical history, a complete list of medications, a presenting complaint history, vital signs, and pain scale. Once the triage nurse has finished the assessment, namely filling all the required boxes and assigning a CTAS, they must click the "triage complete" button. This action signals to the registration clerk that the patient needs to be registered.

Registration clerks are located behind the triage area and are responsible for virtually attaching a medical record to the patient being registered.

Most triggers that initiate an action from staff are virtual. The patient presenting to the triage clerk is a visual cue of work to be done as the clerk must "quick reg" this patient. Once the "quick reg" is completed, the triage nurse is virtually cued that there is a patient waiting to be triaged. Next, the registration clerks are cued to call the patient to complete the registration process. Once the registration process is complete, the nurses in the different areas of the ED can see that a patient is waiting to come into their area, again through Epic.

The process of triaging involves multiple clicks in boxes at every stage. PI2 stated that a "whole bunch of buttons" had to be clicked in order to start triaging a patient. She explained that these boxes have to be checked to signal to others in the department that the nurse is currently triaging this patient. Clicking all these buttons sends a signal to the other triage nurse that the patient is currently being triaged, therefore she can move on to the next patient waiting. The physical or visual cue of seeing a patient sitting in the other triage chair does not signal to the nurse that a specific patient is being triaged or re-assessed, only the virtual cue in Epic does. Triage nurses most often do not know the names of patients waiting to be triaged, therefore the signal to triage a patient is entirely virtual. At the end of the triage process, the patient either waits to get into a treatment area or is brought in immediately.

5.3.3.1 CTAS and its Goals. The end result of triage is the attribution of a CTAS score. This section aims to clarify, define, and explain what CTAS is, how it is currently used in the ED, and its implication in the organization of nurses' work. Canada is not the only country to have implemented a triage and acuity scale in the ED. The Canadian version of the CTAS arrived in 1999 and was largely based upon the Australian version of a triage scale (Bullard,

2017). The number I to V assigned to patients on arrival determines the level of acuity, the recommended time to have them assessed or reassessed and, since the implementation of wait time targets by the LHIN, represents a marker used to measure ED performance.

When a nurse triages a patient, they inquire about their presenting complaint and other symptoms, their medications and take their vital signs. After they gather all the data, they assign a CTAS. With Epic, once the nurse has entered the patient's data, the computer proposes a CTAS level based on the CTAS algorithm, applying what is called modifiers. The first order modifiers pertain to the alteration of vital signs, a high pain score, known bleeding disorder, or mechanism of injury. For example, if a patient presents with a complaint and vital signs that would put them as a CTAS III but has one of those modifiers, their CTAS will be automatically increased. The second order CTAS modifiers relate to presenting complaints where first order modifiers do not apply, but the patient remains acutely ill. A good example of this is when a patient presents with a high blood sugar. Their vital signs are normal, they do not have bleeding disorders and no mechanism of injury, but they still need to be assessed and treated quickly. In this example, the second order modifier is applied, bringing the assigned CTAS up from III to II.

In the past, patients were assessed by the physician according to their CTAS. For example, if I presented to the ED with abdominal pain and was given a CTAS III, I would be seen by the physician before someone given a lower acuity CTAS. But CTAS is no longer a predictor of who will be seen first. Patients with assigned CTASs III-V who are triaged to the UC area are seen based on time of presentation, not CTAS. Currently, another defining feature of CTAS is its role in establishing the performance of an ED. In this sense, CTAS has become a metric, measuring performances in the ED and thereby assessing the performance of that ED. Overall, CTAS represents the acuity of patients presenting to the ED as well as a performance

marker for all EDs, as the reporting of CTAS is mandatory. CTAS in the ED is still assigned at triage.

The same rationale applies in other treatment areas within the ED with one difference: patients who are most uncomfortable or "sicker" will get the stretcher first but will often be seen based on presentation time once in the treatment area, which means they can lie down but are not seen by a physician. CTAS is not used as it was designed anymore. Less experienced nurses who have not worked in the ED before the implementation of the P4R initiative actually do not see the use of CTAS. When asked about the role of CTAS in the ED, PI4 answered that

> Truthfully, not much. Because I honestly don't think it does. I did on my old job in the other city, but Epic sort of does the thinking for you, so when you triage in Epic, I'm sure you saw a nurse at the front, that it chooses your CTAS for you (PI4).

PI4 has been an ED nurse for five years. In her view, the CTAS does not have a role to play in the ED anymore; first, it is assigned by the computer and second, patients are seen based on arrival time. This was also observed during the data collection. The PN would arrange for patients to come into the UC area based on the longest wait time to shortest, not by CTAS level. Epic, by default, arranges patients on the main screen from top to bottom by arrival time.

As CTAS does not determine when a patient will be seen anymore, the impact it has on nurses' work is greatly diminished, yet it remains present in a very subtle way. CTAS levels are closely tied to funding and nurses know that each patient given a CTAS IV or V has to be seen and discharged within four hours, not according to the care the patients need but according to the P4R initiative. This is now an integral part of the work of nurses in the ED. PI4 explained further that she was aware of the need to see certain CTAS faster as it was related to funding. She reflected on the pre-Epic era when patients' charts were arranged according to CTAS, and

certain physicians were assigned to see only the lower CTAS to meet the funding targets. The patient's time of arrival was not as central before the implementation of Epic.

As previously discussed, the role of PN is based on getting non-urgent patients seen and discharged. When the triage nurse assigns a CTAS to a patient, it determines their destination in the ED. Most CTAS IV and V go to the UC area. The CTAS IV patients, after registration, are sent to the UC. This then makes the PN plan for an open examination space. Given that the designation of a CTAS does not signal which patient should be seen first anymore, nurses have now developed other ways to signal they are worried about a patient, which we will explore in the next section.

5.3.3.2 Bump up and Green Dot. CTAS used to be a way of establishing which patients should be seen first, according to the scale of I to V and attributed by the triage nurse. Now, CTAS has been mainly transformed into a performance measurement tool and a way to keep an eye on P4R metrics within the ED. What nurses have done to signal to other nurses that a certain patient should be seen before other patients with the same CTAS is to apply a green dot to their chart. This basically pushes a patient ahead of the flow. PI8 explained that pre-Epic, nurses physically put a sticky green dot on the chart. When Epic was implemented in the ED, the green dot function was worked into the triage module of Epic. The green dot signals to the staff in the treatment area the need to bump a patient up, or to see this patient first as they require more urgent attention. "Yeah, so basically to make a patient jump the queue, you give them a green dot. Bump up with a green dot" (PO2). This applies to the UC area mostly. For the other treatment areas, nurses will communicate with the Care Facilitator (CF) if they judge that a patient should have the next bed, based on presentation. This is the only way the triage nurse can speed up the process for a patient to get a bed. The CF oversees bringing patients into OBS and

EC, usually by the acuity of presentation or by time of arrival. If the triage nurse is especially worried about a patient, the only way to jump the line is to talk to the CF. PI4 explained that if she is worried about a patient, she will call the CF and explain her concerns, especially if multiple patients are ahead to get into treatment areas. She felt that most CFs were understanding and did their best to address her concerns and bring these patients in faster.

These "side" mechanisms have come to fill a hole created by the shifting focus of the CTAS in the ED. Nurses have had to develop a means of clearly communicating with staff in other areas that they are concerned about a patient. Before the implementation of P4R, this was accomplished with the CTAS level. The implementation of wait time targets as well as Epic has completely changed how the triage nurses' work is organized. From clicking boxes to communication with staff in the treatment areas, the processes of triage and nursing in the ED have transformed where patients were sent to how nurses determined the CTAS level. Prior to the implementation of P4R and Epic, patients presenting to the ED were triaged on a paper chart and the RN would circle there the CTAS level attributed. Each patient presenting to the ED spoke to the triage nurse first, who would write down their name and presenting complaint. The paper chart was kept with the nurse who elected which patient would be called next to be triaged from her own initial look over of the patient, not by the "quick reg" time.

5.3.4 We Don't Care for You, We Care For the Money

Writing on this theme and using this title was a struggle for me as I believe ED nurses care about their patients and their work. I am not implying that ED nurses are devoid of compassion and caring attitudes towards patients. This sub-index came up in the interviews and again in the observations. I would like to present this theme in a very personal manner, based on

my own experience and the experiences of my participants, using recollections from the past and contrasting those to the current situation.

As one participant explained during the observations, it now is all about targets: meeting the targets, getting the funding attached to the targets, and pushing patients through (the ED) (PO3). Care in the ED has to fit within the set targets. As a veteran nurse stated:

> Want it or not people are saying it, it is exactly what it is! We think about the money… It's not really we care for you… no no we don't care for you, we care for the money. Unfortunately, it is what it is. That is when the government put all that in place, well it changed (PI5, my translation)

As PI5 highlighted, the focus of ED care was transformed at the same time as the targets tied to funding were implemented in EDs across Ontario. The frenetic pace of work in the UC area is a demonstration of this change.

Nurses working in the UC area do not know where patients are, why these patients are there, and what they might need. They perceive a patient as being present in their area when the wait time approaches the expiration of the target, or four hours. PI3, a PN, explained that patients become important or visible to the staff by a virtual cue, the changing of color of their LOS in the Epic charting system. Before this change of color happens, the feeling during the observation was "business as usual." Physicians would see one patient at a time, according to their arrival time. Then, when the box LOS becomes yellow, the PN nurse was triggered to approach the physician to inquire about the possibility of seeing this patient next. This was not done in response to a patient's presenting complaints or even symptoms; it was based solely upon this color change, which is a visual signal to the loss of funding. I witnessed PNs "pushing" for patients to be seen, not even knowing what their presenting story was (as the patient had not seen a nurse since triage). In the UC, there are two big electronic boards that display patients' LOS time, with the color code. This board is arranged by rooms, but the colors are quite visible. If

vital signs are due on a patient, the "task" section of this board will also turn red. This virtual color of urgency to see patients according to their LOS is also present in other areas, although the anxiety to see patients according to the color changes on the board did not feel as important as it did in the UC.

To recap, patients first undergo a "quick reg" by the triage clerk. The clerk enters their OHIP card number, finds them in the system by verifying their address, then enters a presenting complaint from a drop-down menu. Once the triage clerk clicks save, the patient is now virtually present in the ED. The triage RN from her screen will then call patients to be triaged according to the time of the "quick reg," unless the patient presented with severe chest pain (CP), a gunshot wound, stabbing or any other life/limb threatening injuries. Once the triage RN completes the patients' vital signs, takes their complaint and medications, a CTAS is assigned. If the patient is what was deemed a "walkie-talkie," or able to walk, talk and is orientated, their most likely destination will be the UC. The patient then sits in a chair in the WR along a wall identified for patients awaiting registration. The registration clerk registers the patient in the system, verifying demographics such as next-of-kin, address, family physician, etc. Once this registration process is completed, the patient waits to be called to a treatment area from the main WR. From the moment the triage nurse completes the triage and assigns a destination (UC, OBS, EC), the patient's name appears in italics in the system, indicating that formal registration is required. Nurses in the UC and the PN are therefore aware before registration that these triaged, virtual patients, are coming to their areas. Once the patient is brought into the UC, the PN is responsible for assigning a room, in Epic, to this patient. This patient is first virtually transferred into the room, then the PN physically brings in the patient. Until the LOS becomes yellow or red, the RNs have very little interaction or implication in this virtual patient's care. The trigger to push

for this patient to be seen by the physician is a change in LOS color. Virtually, this patient moved from the WR to being seen by the physician with minimal nursing interaction. This lengthy explanation highlights the initial quote “We don’t care for you, we care for the money” (PI5) by the fact that RNs in the UC actually do not care for patients until an order is entered in their chart, or their LOS box changes color. When an order is placed in Epic, a virtual signal is sent in the form of a clipboard appearing in the task section of Epic, prompting the RN to look at this patient’s chart and activate the order. This will be discussed in greater detail in a later section of this chapter.

The second aspect of this sub-index is closely related to patient care. As funding targets such as LOS, PIA, and time in the ED have become central in the management of an ED, certain aspects that were deemed nursing care have disappeared. As one participant asserts, “If it’s not related to ABC’s, it’s not done. The superfluous that gave patients a good experience is gone” (PO2). In the ED jargon, ABC refers to Airway, Breathing and Circulation. This is the way ED nurses assess which patient requires attention now; it is part of their training. Once a patient is stabilized, meaning airways are secured and unobstructed, breathing is present and unlabored, and circulation is within acceptable limits (BP, HR), the nurses can then begin assessing other aspects of their presentation to the ED. As the funding targets began to take up more and more time on the ED nurse’s shift, the aspects of care that are related to comfort such as providing an extra blanket and pillow have disappeared or become very hard to accomplish. The rhythm and pace of work of ED nurses has intensified to the point of having to “cut corners” on aspects of nursing care that were previously very important. During the third observation period with PO1, this new reality was quickly demonstrated. A patient being admitted to a hospital unit had been waiting for a bed for over 42 hours. As the porter wheeled the patient by, this participant noticed

that the patient was still fully dressed in jeans and hoodie shirt. She commented that this was probably not the most comfortable attire to be in for 42 hours with appendicitis. She attributed this reality to what was perceived as the new ED nurse, or the next generation of nurses, implying that older ED nurses cared differently for their patients. PO1 is a 22-year ED veteran and perceives herself as an older generation of nurses, more inclined to provide comfort care to patients in the ED. She felt that what PO2 described as superfluous was rooted in patient comfort.

The last aspect of this sub-index was observed and discussed in both interviews and observations. As the need to have rooms to see patients increases throughout the day to keep the flow going, patients are moved in and out of examination rooms on an as-needed basis. One patient's journey throughout the UC area may better explain this reality. After triage and registration, Patrick (not his real name) was sent to the UC area. He was not called in by the PN as there were fewer than 40 patients in the UC area. On arrival, he was placed in an internal WR. Once an examination room in the plaster room (PR) became available, he was sent to the available bed, PR1. The physician went in to assess Patrick and ordered an X-ray as well as analgesia. Patrick was given the analgesia (PO) and sent to X-ray by the nurse. He was then instructed to return to the internal waiting room of the UC area. PR 1 was cleaned, and another patient was placed into the bed. Patrick came back from the X-ray and sat in the WR. Thirty minutes later, the physician reviewed the X-ray to realize there was a fracture requiring reduction (re-alignment of the bones). Patrick had to wait for another bed in the PR to open up in order to get an IV and sedation for the reduction. Patrick eventually was placed into PR2 and received analgesia required for a reduction. The description of this scene in UC supports the previous point on what is seen as superfluous. The most important aspect in the UC is about keeping

patients moving and keeping the beds full of patients waiting to be seen; this is flow. Once these patients are seen they have to physically liberate the bed. One participant explains that

> Yeah, it sucks and sometimes I feel bad but I am like, ok they are uncomfortable, let's give them pain medication but then we have to move them into a chair or find them a place that is more suitable for them because unfortunately it's a walk-in clinic, people have to keep on walking, people have to keep on moving. (PI3)

As this participant described, the ED is a walk-in clinic. The UC is then a walking clinic to see patients that present with more minor problems. PNs must work to keep these beds constantly refilled with patients in the system if they want to meet the target wait times. This urgency to meet these targets pushes nurses to remove patients from the beds, even if on some occasions these patients could benefit from lying down and getting some rest. As PI5 stated, "We don't care for you, we care for the money." Often patients seen in the UC area will have little to no interaction with nurses, basically existing only in Epic but never in the real world.

5.3.5 It's All About the Medics

When talking about their current work in the ED, participants in the interviews and observations often discussed their dealings with ambulances and paramedic staff, from the triage nurse to the hospital administrator. This sub-index was frequently mentioned and expanded upon, exposing the reality of working with paramedics in the ED and their influence on flow within the department. On several occasions, nurses during the observation periods discussed how they perceived that meeting the ambulance offload targets, or any other targets, was just a way to look good for the organization. PO5 stated that "the pressure to get the ambulance patient off the stretcher is always there. When you are working triage, it really is all about the medics" (PO5). This is where the relationship between the paramedics' entrance into the ED and flow became visible in the mapping of nurses' experiences. Moving a patient from an ambulance

stretcher to a treatment area within the ED is part of the flow and a bottleneck in this area appeared to be more problematic to nurses than having patients waiting in the main waiting room. In their dealings with ambulances and paramedics, the predominant aspect discussed was meeting the target offload time of 30 minutes, meaning that nurses have 30 minutes from the time the patient enters the ED on the ambulance stretcher to the time that patient is transferred to a bed/stretcher, releasing the paramedic back onto the road. These targets were implemented in EDs across the province in the early 2000s and nurses are extremely aware of the targets and familiar with the changes needed to meet the targets. Participants reported having to work with this ambulance offload target, especially when assigned to the triage area since it is the role of the triage RN to meet this target. PI6 explained that as a triage nurse it was her role to find a space for patients on ambulance stretchers. She described four possible outcomes for these patients. The first was to place these patients in the WR if they could walk and were orientated. The second option was to send them directly to the OBS or EC area after triage, provided that a bed was available. The third was to send these patients to the OLN if they met the criteria for offloading, described later. The fourth and final option was to have the paramedics stay with the patient in the garage, waiting for a bed to become available.

PI7 has over 15 years of experience in the ED and is involved in multiple committees looking at making the ED efficient. Having patients stay with paramedics creates serious issues within the ED and the paramedic community. She described that at times, she could have upwards of eight ambulances waiting to come into the department. Not only is this a safety concern for the staff, but it also becomes a concern for the whole city as well. Having ambulances waiting two to three hours to be offloaded was just unacceptable, according to her. Another participant had more than 20 years' experience. She quit the ED to become a hospital

administrator onsite, basically a hospital team leader. Unit managers are responsible for the day-to-day operation of the ED Monday to Friday during the day, but outside of these hours, the Clinical Hospital Administrator On Site (CHAOS) handles the operation of all departments in the hospital. This position is filled exclusively by nurses with extensive experience, most often from a critical care department. This participant, who worked mainly night shifts, described her role of off-hours hospital administrator as overseeing the functioning of the hospital. She helped the CF in the ED if they had a problem they could not fix (e.g., if they were short staffed, had a patient requiring a higher level of care, had a violent patient/family, etc).

During data collection, the news was filled with clips and articles on how paramedics were held "hostage" in the ED and could not get back on the road. The city's emergency services manager blamed the hospital for holding paramedics or delaying admissions to the EDs from ambulances, arguing that this blockage contributed to increasing morbidity and mortality rates in the city (Osman, 2019). Although specifically linked to one hospital, the situation was similar in most Ontario EDs at the time. Increasing time spent on the runway, the physical space where paramedics wait with their patients, is problematic when the city is attempting to deliver a service. The nurses working in the ER spoke to this reality during the observations. During a particularly busy night, PO4 was casually talking with another nurse at triage, discussing Osman's article. She stated that:

> We do understand that the medics do not belong here in the hospital, we also want them out on the road. But when you have 25 admitted patients and nowhere to go, what is it we are supposed to be doing? I just can't pile them [patients] up anywhere. (PO4)

PO4 is a younger ED nurse with eight years of experience but nevertheless is considered a veteran and a mentor by many newer nurses. What she describes here is the interruption

of flow, when all beds are full and patients are not being moved outside of the ED. PI5 described the complexity of dealing with two doors in the ED, meaning there is more than what you see in the garage.

> If I only had to deal with the paramedics and no patients arriving walking, well there would be no problems. If I didn't have 35 admissions stuck in the ED and no beds on the floor, there would not be a problem, I would always have beds to bring the ambulances in in 30 minutes. The problem is I do not always have beds. I am always stuck with 20 admissions, and at the front, I can't close the door when I am full. (PI5, my translation)

The pressure coming from the front door, or where walking patients arrive, added with the pressure of the "back" door, where ambulances and police arrive, basically make up the feelings of the nurse at triage.

When trying to offload a patient, many factors come into play: available beds, staffing, and the patient's condition. To offload as many patients as quickly as possible, the institution, in partnership with the paramedics, established a "Vertical Patients" directive. This directive sees the paramedics offloading some of their patients in the waiting room on arrival in the ER, before seeing the triage nurse. If the patient meets the nine assessment findings of the directive, the paramedic explains this directive to the patient and directs them to the waiting room. The triage nurse is then made aware of the new patient by the paramedic and the "regular" triage process will take place, according to the institution's policy. This directive is used often in the ED and nurses are supportive of it. One participant stated:

> There are a lot of patients that take an ambulance for no reason, they take it as a cab. These patients, the nurse at triage will offload them and make them wait in the waiting room before they can be sent into an exam room. Same thing with the offload area where we have criteria. (PI5, my translation)

Offloading patients onto ED stretchers from ambulance stretchers is an important aspect of the work of the triage nurse, team leader, and administrators, as multiple participants shared. Patients that can be transferred to the Offload Nurse area (OLN) have to be in stable condition (no CTAS I), not require more than 5l/min per nasal canula of oxygen, be cooperative (confused agitated patients should not be transferred to the OLN) and cannot be under airborne precautions. The OLN can take only six patients at once. Patients transferred to the offload area do not necessarily get any diagnostic testing or treatment there. They are simply moved off the paramedic's stretcher onto a stretcher in the hall, waiting for a bed in the ED. This zone is considered on the outskirts of the ED, meaning it is literally a waiting room for patients who cannot sit in a chair.

During the observation periods, it became evident that there was great pressure to get patients off the ambulance stretchers. Once the triage process is completed, the triage nurse looks on the computer to see if beds are available and then calculates how many patients are currently in the OLN area. If it is less than six, the paramedics are free to offload the patient there. The triage nurse does not routinely contact the OLN to make them aware of an impending transfer, as everything happens through Epic. If the OLN area is full, the triage nurse proceeds to call the offload nurse and inquire about the bed situation (asking if patients are being transferred in the ED to a treatment area). If there is no possibility to offload the patient, they call the CF and "bargain" for a bed, for example, in the situation of a very sick patient or one in a fragile state (Observation P04). Despite crossing off all these checkpoints, when the volume of patients is too high the pressure remains.

> No, just let's go. After that we will find beds… Doesn't matter, just offload. Regardless of presentation, you offload, the 30 minutes (target) counts. (PI5, my translation)

As mentioned, the garage is now the physical space where paramedics and police officers arriving with patients are triaged. This location used to be a real garage and was used to park ambulances. The COVID-19 pandemic caused the hospital to separate the entrances for walking patients and patients brought in by paramedics in order to keep the paramedics out of the ED and hence limit contact between them and nurses. The garage is arranged similarly to a waiting room, just with larger dimensions. The idea of offloading in the garage and even installing cardiac monitors was floated as a way to meet the offload target of 30 minutes. Most nurses received this idea negatively. PI9 stated that:

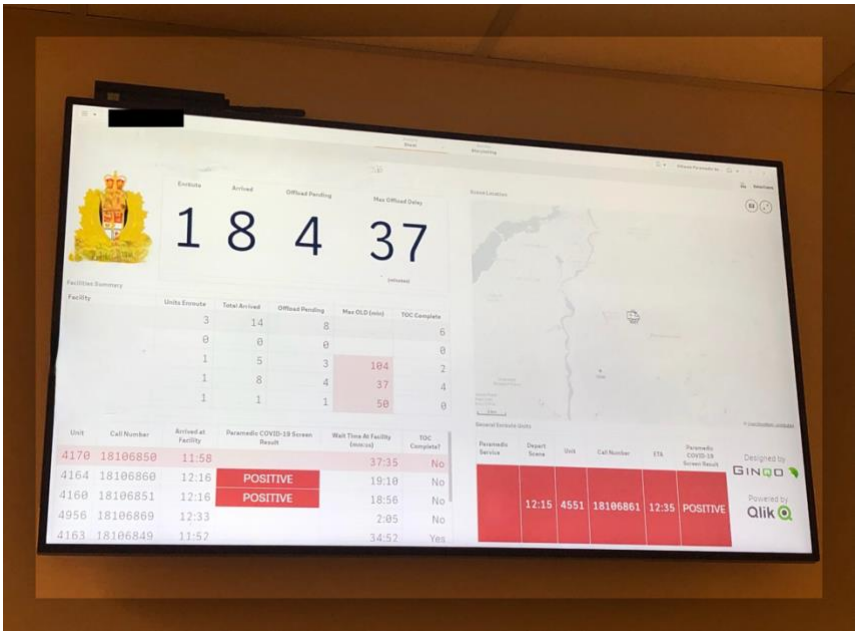
> Apparently, this Mr. XXX person whoever he is, he took over from the CEO, thought that we should probably set up some cardiac monitors in the garage so that the paramedics… because it's all about the freaking paramedics, not the safety of the nurse or the life of the nurse… But like to set up cardiac monitors so that the nurse who is triaging in the garage would have patients on cardiac monitors so we can let the paramedics go back in the community. When we have no monitored bed in emergent care or Resus. Yep, they thought about that. And I am like if it comes to that, I freaking quit! Yep…. So they… Because you know the whole concern about those poor paramedics, that are being held hostage, quote unquote, that was the words that were being used by the paramedics… That they were being kept hostage with their patients because we had no beds to keep monitoring patients who needed to be on cardiac monitoring. So they thought, hey let's let these poor paramedics go and we will just set up some cardiac monitors in the garage and the triage nurse can monitor these patients while we are waiting for a bed. While you are still triaging and getting more paramedics coming in. (PI9)

PI9 sums up most of the feelings participants had about having to navigate the offload time targets and patient volumes within the ED. PI9 is a veteran ED nurse with more than 15 years of experience. She is perceived as extremely professional by her peers as her interactions with patients and her attention to detail in her work is extremely high. She is described as even-

tempered, remaining calm even when pressures are high. For her, the 30-minute target was cumbersome and did not represent the reality of the ED. She continued by stating that the goal of meeting the offload targets was only to make EDs look good. In her opinion, it had nothing to do with patient care or safety. The idea of purposefully keeping paramedics hostage was to her "ridiculous."

According to some participants, the "system" that dispatches ambulances to specific EDs also has to be reviewed, as in their opinions certain EDs bear the brunt of the ambulance traffic. PI7 stated that as a hospital administrator she had been trying to address this problem of dispatching ambulances in the city to no avail. She stated that it was a dangerous practice as the distribution of ambulances is spread over 12 hours, meaning that the same hospital can receive up to 5 ambulances in 20 minutes. PI9 echoed PI7's feelings on the unequal distribution of ambulances within the city. According to her this problem was self-created by the dispatch system. If a hospital had five patients awaiting a treatment bed and was sent five more patients, it became impossible for the ED to accommodate this influx and had resulted in the use of words like "hostage paramedics." She asked, "So how can they expect us to offload all of their patients when we are being sent more than what we can handle?" (PI9)

Planning for influxes of ambulances became more prominent in the management of ED care, especially after the publication of articles in 2018 and 2019 that used the imagery of paramedics being held hostage (PO8). Many nurses and CFs demanded to know how many ambulances were coming to their respective EDs and there is now a real time board in the ED showing the distribution of ambulances in all EDs in the city. This board tracks the arrival, pending offload, enroute ambulances, as well as the offload times.



Picture # 1- Ambulance influx board

The information available on this board is visible in the hall where the paramedics used to come in before they started using the garage. PO3, a 33-year ED nurse and CF expressed how this information was not exactly useful:

> Well, the paramedic board … It cost an arm and a leg to implement, it only shows you the last hour, when really ambulances are being dispatched on 12 hours. Then when you bring up to whomever that the distribution within this hour wasn't fair, you are told it doesn't matter, as it is planned on 12 hours. So what's the point, really? (PO3)

These quotes, images, and pictures provide an overview of the important overarching aspects of flow and the reality of dealing with paramedics. The arrival and offloading of patients via an ambulance constitutes an important aspect of the organization of nurses' work in the ED, especially in the triage section. To an outsider of the ED, the board appears to represent something usually seen in fast-food restaurants, where the order being worked on appears on a board on top of the cash register. The tracking of ambulances across the city and hospitals

happens electronically, showing in real time the incoming crews of paramedics. When this board was implemented, it was thought that hospitals could then plan their work and movement of patients according to the number of ambulances coming in. ED nurses, on the other hand, perceived the installation of the board and surrounding infrastructure as a way to show to managers (ED managers and paramedic managers alike) that the distribution of ambulances within the city was not done fairly. The result is a board that does not answer the expectations of the nurses, but still shows incoming ambulances to the ED. The 30-minute target for offloading a patient is only one of the metrics that make up an ED visit and can only be met if flow is progressing normally.

5.3.6 Just Re-Arranging Deck Chairs

In an attempt to meet funding targets, the processes surrounding the flow of patients and workflows are consistently being reviewed. New committees and groups are formed to look at what is deemed areas needing improvement, or as PO5 stated, to "eliminate wasted time of the nurses." This is not new to the ED. Starting in 2009, the PIP team, as described in the previous chapter, began to operationalize changes within the ED to improve performance to meet the P4R initiatives. The PIP team would meet weekly and hold meetings with other ED nurses, seeking to pinpoint where processes could be streamlined. The initial study of this "wasted" time was done with meetings titled Value Stream Mapping (VSM). In Lean-management style, a VSM meeting analyzes the current state of affairs and aims to design the future state of affairs in an improved fashion. Through countless meetings, the team, consisting almost exclusively of ED nurses, would estimate the length of different aspects of a patient's journey through the ED, then propose solutions to shorten it. One salient example of this was the implementation of pagers in the ED. The pagers were given to patients waiting on blood work results or imaging reports.

Very similar to waiting for a table at a restaurant, patients were told to go for a walk and seat themselves in the WR until they were "buzzed" to come back. The rationale behind this initiative was to attack the congestion of patients in the UC, creating more space in the internal WRs. Even if this initiative seemed that it would have minimal impact on nursing work, nurses were responsible for recording the pager number, retrieving it from the patient, and returning it to the pager tower. Furthermore, this process changed the way patients circulated within the UC, changing the work process of nurses. This is one example of many that were implemented to change processes and flow in the name of meeting the funding targets.

Throughout the interviews, participants continued to talk about the IP physician trial (Intake Physician), the RAZ trial (Rapid Assessment Zone), Zero Wait Time Project, etc. All of these initiatives are about decreasing wait times and securing more funding. After years of process changes and new trials, one participant expressed that she perceived these changes as futile.

> [speaking of RAZ]…the process there whose responsibility was to action the orders of this specified doc, and it was like a schedule on whose job it would be to go see the patient like the physician side, and then it would be between the RAZ and the process, there's no action orders, so it's just like in another in, like in the frustrating part about that whole thing was that there was. It was just like rearranging deck chairs versus adding resources to make us meet those times right like. (PI8)

Four participants in the observations actually called these changes "re-inventing the wheel," meaning that they were trying to do better in terms of wait times but with the same resources, the same physical spaces, and the same number of patients. PO2 stated being very tired of all the process changes. She felt that the problem was not with the ED, it was a whole systemic problem. In her opinion, if beds were available on the floor, the ED would function as it was intended. PO5 too discussed at length how she and the ED nurses she talks to believe that

the problem was not in the ED but on the floors. During a break, multiple staff discussed that if there were open beds on the floor and if admitted patients went straight to the floor, they would easily meet and exceed the funding targets.

During data collection, calls were sent out to the ED staff social media website asking for volunteers to "re-design" the UC, Resuscitation area, and various carts within the department. The pressure to re-think all processes remains a strong focus in the ED. Other processes were changed initially to address some patient care safety issues highlighted by the ED staff. The EC area, where critically ill patients requiring cardiac monitoring are sent, is a 16-bed area. Five nurses staff this area at all times, therefore one of them must be assigned four patients. However, the physical environment was too difficult, the nurse could not monitor all four patients at the same time, and there were some IT issues with monitoring. Despite these problems, the only change made was relocating the place of the four-bed assignment, which landed at the back of EC where three nurses share a desk. No extra resources were added. The division remained the same; the process remained the same, but just changed places. PI8 highlighted that this assignment was the last remaining part of the "newer" ED that may create harm to patients as the nurse could not possibly monitor all critically ill patients. The nurse's feeling was that process changes in the ED, even though designed and implemented by ED nurses, often do not serve ED nurses or their patients well. When PO1 discussed how she was tired of these changes, she echoed the feelings of other staff nurses in their discussions of the new UC committee: the more you change the processes, the more futile it appears. Throughout all of these changes, what remains is the day-to-day work the ED nurses accomplished every day, although they may organize their work differently now.

5.3.7 Nurses Creating Efficiencies

Medical directives are sets of orders implemented before the physician sees the patient in the ED that aim to reduce wait times, streamline processes, and ensure the optimal flow of patients in the ED (OHA, 2007). Medical directives are arranged by the presenting complaint that ranges from abdominal pain management to eye injuries. Each medical directive has sets of inclusion/exclusion criteria with specific orders attached. A later section of this chapter will describe in more detail what medical directives are. In the sepsis directive, for example, the parameters for identifying sepsis are clearly indicated, with tasks to be performed. A patient presenting with a fever and tachycardia has blood work drawn, has a urine analysis done, and is started on IV therapy with Ringer's Lactate. By the time the physician is able to assess the patient, most blood work results are available, making the diagnosis, treatment, and disposition of the patient faster. Medical directives are similar to care pathways as they represent a standard of care. Nurses in the ED view the implementation of medical directives as providing efficient care, as they believe that patients are treated more quickly, ensuring the flow. Managing to fulfill tasks before the patient is seen by the physician has the potential to free up beds more quickly. PI8 stated:

> Do a head-to-toe assessment and just try and see whatever efficiencies there might be, right? So, like you know, try and get the urine, like a urine specimen sooner than later, so that is not going to be like a straggling item for the completed work up kind of thing. (PI8)

Here PI8 links accomplishing the tasks for the work up with being efficient. The delivery of care in the ED now must be quick and efficient; it is part of the reality of ED nurses. Multiple participants during the observations used the term efficiency or efficient when referring to their work, often linking it to the idea of not wasting time and resources. It appeared to be central to

their pace of work in all areas, from triage to resus. When a nurse receives a patient in OBS, for example, they will assess the patient while drawing blood and will insert the IV at the same time. Once the blood is drawn and sent to the lab, the nurse will return to the room to provide analgesia according to the medical directive. This scene was observed multiple times and participants accomplished this work in very similar manners. The use of medical directives by ED nurses appears to be so natural now that when they do not have the time or the staff to do them, particularly in the UC area, physicians will often complain. PI6 asserted that more and more physicians were complaining that medical directives were not initiated on patients. According to her, the expectation is now that most patients will already be investigated and minimally treated before they see a physician. Her feeling was that in OBS and EC, medical directives were almost always initiated before the patients were assessed by the physician and some nurses even went beyond the directive, asking physicians for verbal orders to expedite care or make the patient more comfortable. One nurse during the observations qualified this kind of activity as "playing mini doctors for them to meet their targets" (ED nurse heard during PO1, day 1). ED nurses outspokenly linked the implementation of medical directives to the need to meet targets within the ED. They also agreed that even with creating efficiencies and changes to process, flow remained the same; there was a feeling of powerlessness related to the difficulty of keeping the flow going. Capturing the flow and the performance of nurses and physicians in the ED is made possible by Epic, or an electronic medical record (EMR).

5.4 Epic

An EMR replaces the traditional paper chart of a patient with a digital version (Chen, 2010). It organizes and keeps patients' charts in the organization or, where different sites share the same EMR, the chart can be shared or accessed across several organizations. Epic is a world

leader with over 250 million patients (Epic, 2022). It was implemented in the institution around the time this study took place. According to the Epic website (2022), the implementation of this software increases productivity and effectiveness of care, giving practitioners more time at the bedside, as charting is made easier. Epic became an index as it tracks flow throughout the ED and the hospital. The wait times reported for funding are now obtained entirely through the use of Epic by nurses. A nurse's documentation at critical points in a patient's visit (arrival to triage, arrival in the treatment area, referral to service, etc.) basically enables the "clock" to keep going. Epic became the second level of analysis in the mapping of participants' experiences as it is necessary to flow, organizing nurses' work locally. The next sections will describe different components of Epic that became sub-indexed during data analysis. In the post-analysis phase, a search for terms related to the use of Epic by ED nurses in MAXQDA yielded 137 hits. This search was undertaken using terms such as "Epic, computer, charting, click, Rover, WOW," etc.

5.4.1 The Clipboard

The appearance of the "clipboard" under the column *New Order* on the main screen of the computer is the initial signal for nurses that an order needs to be processed. Once an order is seen, it must be acknowledged by clicking on it. PI2 stated that:

> From there, you have to acknowledge the orders, in order to, I guess, tell the computer systems that you've seen them, and then from there, you would go ahead and process whatever orders they've ordered. (PI2)

The "little clipboard" under orders also appears on the main screen and is visible to all nurses in the treatment area, for example. It alerts nurses to the presence of an unprocessed order. Processing an order in this context means acknowledging it and then completing it by giving the medication to the patient, for example. In this sequence, the work at the bedside with the patient is the second last step to completing the order. During observation with PO1, the process of

drawing blood work on a patient was observed in a step-by-step manner, which I will explain in relation to Epic. First, the clipboard appears in the task section in Epic. The nurse clicks on the clipboard and sees the unprocessed orders. They then print the stickers for the blood work, which contains the patient's information (chart number) and a bar code that is also used in the laboratory. They grab the supplies from outside the patient's room and proceeds into the room. About half the nurses will use a "Rover" in the room, which is a handheld device capable of scanning the patient's bracelet, medication bar code, or blood work bar code. Once the nurse enters the room with the stickers, they draw the blood, scan the patient's bracelet, scans the blood work stickers, applies the stickers onto the blood vials, and departs the room to send the blood to the laboratory via a pneumatic tube system. If a bracelet or a sticker does not scan, the nurse investigates the reason why. All physicians now have access to Epic at a distance, so they can review diagnostic imaging or blood work from anywhere. The ordering and completion of medical testing organize nurses' work in the ED, and the next section will discuss the visual aspects of this organization.

5.4.2 Ping Pong Nursing

This statement of "Ping Pong Nursing" initially came to me during the observation period and was not an idea from a participant. This came out of the feeling I had while observing all my participants as I watched them bounce from one area to another during observations. It represents the concept of the incessant back and forth of nurses between patients and computers, as well as the interruptions that occurred. Here is a passage from my observational protocol.

> Feels; feels like a ping pong practice, PC to gather meds to administer to PC to chart, repeats this cycle over and over; intertwined with copious interruptions. (PO1- Day 1)

Many aspects intertwined in this statement can be unpacked. First, the computer (referred to as PC) is not available at every bedside. Each nurse has a "station" where they come to sit with a desktop computer. Nurses can use WOWs (workstation on wheels), which offer the same functionality as desktop computers, to bring to the bedside. The nurses can also use the Rovers, or handheld devices, at the bedside, but their functionality is limited to blood drawing, medication administration, or verifying vital signs. And in the context of the COVID-19 pandemic, bringing any equipment into the rooms created extra work for nurses, as they had to sanitize the equipment after. Here is an example of a sequence showing the idea of Ping Pong nursing:

> Goes to the computer, sees orders on patient in room 2, represented as a clipboard on the dashboard view (main page of Epic when signing in this area). Clicks on orders, gets up to go get the medication. Dons full PPE (puts on gown, visor and mask) as patient is in droplets precautions. Porter comes, asks a question about patient in room 3. Back to the computer the nurse goes, clicks on new patient chart and gives the porter the information. Proceeds to go in room 2, hangs the intravenous medications. Back out, doffs and comes back to the computer to chart. Another order is placed on patient in room 2. Repeats the same steps as previous (Observational notes, PO1- Day 1)

Carrying out orders and proceeding through a shift in this manner really looked visually like a ping pong match. What the nurse sees on the screen "propels" them to bounce to a patient's room or the medication station. Upon their return to the computer, the screen will once again propel them in another direction. The other variable that will propel the nurse in a direction is monitor alarms or patient "disturbances." PO1, for example, was sitting at the computer in her assigned workplace completing orders and verifying vital signs (vital signs in this area are done automatically by the monitor and are "imported" into the electronic chart. She verified the vital signs, attesting that these vital signs were correct to document). A monitor started alarming, showing that the patient

was possibly in supraventricular tachycardia, a serious arrythmia that requires immediate intervention. PO1 got up from the computer, grabbed full PPE, then looked at the client to realize that this tracing was in fact artefacts. The nurse then made her way back to the computer (PO1- Day1). All of this happened without the nurse actually seeing the patient, meaning putting eyes on the patient. She got up, grabbed her PPE, looked at the monitor, and decided to intervene without physically seeing the patient. In this sequence, computers are central players; they coordinate most actions of the nurse.

The same applies when nurses are working in the triage area. The next patient to be triaged appears on top of the list on the computer screen. The nurse clicks on this patient name, then gets up to grab the required PPE, calls the patient from the WR and sits back at the computer screen to fill in the required information. This action is repeated over and over for the entire shift. It appears to be repetitive bouncing from the chair to the waiting room, calling a patient depending on what presents on the screen. In this instance, patients are called by the nurse opening the door to the triage area and yelling out their name.

Another component of ping pong nursing was observed with the CF and the PN. The nurses in these roles are to ensure flow and bring patients into available rooms. PO2 was filling in for the CF position during observations. He sees an open room in the EC area, not on the computer, a physically empty room. He signs into the computer to check if the room is empty. The previous patient was discharged, and the room is now clean. Seeing the clean room on the computer makes this nurse walk to the triage area, sign on to another computer and look at which patients are waiting to come into the EC area. This action on the computer then elicits another action; the nurse moves to the waiting room

where he loudly calls the patient to come to the open room in the EC area (PO2- Day 2). The transfer of this patient in the computer, not physically, triggers the nurse in the treatment area to go look at the empty room if they happen to be looking at the computer screen. Ping pong nursing in the ED is a significant experience for the nurses and has led to a re-definition of what an ED nurse is in relation to flow and Epic.

5.4.3 Nurses as Task Monkeys

One of the overwhelming aspects that emerged during the interviews by many participants was the mechanical nature of their work, especially in the UC area. When referring to the different roles of nurses in the UC area, one participant stated that:

> So, at the [other campus] a PCA (orderly) does flow like they do in the process nurse position and then they have RN one who does all medical directives in the first assessment. RN two is kind of like the task monkey it's like called orders. They do orders and then RN 3 is consults and admits. (PI4)

This participant explains the division of work in this busy area of the ED. The nurses working in this area are assigned different "types" of patients. She calls the nurse running after the "clipboards" as the task monkey. During the observations, the UC at its busiest had four nurses working. The PN looks mainly at keeping the flow of patients coming into the UC area. One nurse is assigned to the admitted patients and is processing admission orders, giving regular medications, monitoring vital signs, sending patients to their bed on the floor, and giving report. The third nurse is the orders nurse, which is what was defined initially as the task monkey nurse. Finally, a fourth nurse is also assigned to process orders from 11h30-23h30. PI4 described the erratic nature of the work of the RN in the UC area. The RN in this context is basically running from one patient to another, fulfilling orders, like a "task monkey." PI4 felt that running from one order to the other was unsafe. She stated that in the UC, nurses were so busy just

accomplishing tasks that they never had time to perform an initial assessment on their patients. This created another big safety gap in her opinion as nurses in the UC never knew where patients were. The way she described it was a technical nurse, running from one clipboard on a computer screen to another. What she described is the erratic pace of work in the UC area.

During the observations, nurses literally ran from one patient to another, taking blood work and completing orders. They kept "bouncing" from computer screen to patient, giving the observer a frank display of intense work. This section taken in the observation transcript I believe conveys this feeling:

> Feels: Going from one fire to another, just answering patients' questions as she goes along with her tasks. Frenetic, constant, and intense. The pressure can actually be felt. (PO1- Day2)

On one particular day, PO1 was working in the UC area, and was assigned to the admitted patients. After reviewing the charts and introducing herself to her six patients, she stated that it was time for her now to get on the task's bandwagon. This statement resonated as this task bandwagon or task monkey was an aspect perceived as detached from nursing care. These two participants clearly stated that running from one order to another and trying to find patients in the UC area was erratic and task oriented.

In this area, the nursing practice is also quite different from any other areas. Most participants stated that the required initial assessment on a patient's arrival is rarely done, as they cannot get ahead of the orders placed by physicians. The ED nursing training stipulates that every new patient that comes into an area should get an initial assessment by nursing staff. Again, the sheer number of orders to process makes it impossible to fill this requirement. This is not new to the ED. It has been an accepted reality since the implementation of wait time targets. Multiple participants established a link between what is felt as professional nursing practice and

the patient's initial nursing assessment, which can't be accomplished in this environment due to the sheer number of tasks to be done.

PO1 was attempting to accomplish all the tasks ordered on both her admitted and non-admitted patients. By 14:00 that day, there were over 60 patients in the UC area, with only four nurses on staff. The pace of walking, the level of noise in the UC area, and the traffic within the halls was intense. Walking out of the UC area to find supplies only enhanced how loud and fast the pace was in the area. It thus becomes difficult for nurses to locate patients in the UC area to complete a task. Epic screens show all the rooms in this area, but patients are consistently moved around either by physicians or nurses. When talking about the difficulty in locating a patient in the UC area, PO1 stated that they usually have no clue where patients are. Nurses will usually be aware of the patients they have processed orders on but no one else. This "running" around to accomplish tasks contributed to the feeling of being a task monkey. At the root of this reality is the sheer volume of orders placed by physicians and residents in the UC area. Other areas of the ED normally have one ED physician with a resident and a medical student on occasion. It is not rare to see four ED physicians and three ED residents in the UC area alone. This next section will continue speaking to this reality by discussing the theme of chasing after orders.

5.4.4 Chasing After Orders

The sub-indexing of chasing after orders was mapped after careful reviewing of the wording used around the processing of orders by nurses. They all referred to the clipboard as the signal of work to be done but many participants attached it to the chase of the clipboard. The narratives during the observations in the UC area could be compared to someone drowning; they complete an order, then three more clipboards appear. Nurses were "trying to keep [their] head out of the water" (PO1, day 2). The difference between this section and the previous two sections

lies in the fact that this theme was used on its own with the narrative centered on chasing, keeping up, catching up, etc., with orders. Again, the UC area is central in this theme, as the flow of patients there is larger and the work much higher paced. The use of Epic to "care" for patients is central in this area. This participant first stated:

> Like I find my experience like last few times I was in urgent care we've always been chasing after orders versus having the opportunity to implement orders. I think that speaks to, you know, the pace at which the physicians are seeing new patients, and we're always kind of playing catch up versus being able to anticipate and doing an assessment. (PI8)

What this participant describes is the constant pace of work in the UC area. The faster physicians and residents see patients and put orders in, the faster the nurses have to work. This chain (physician sees patients, writes an order that the nurse completes) ensures that the flow keeps moving. It ensures that patients get discharged or can be moved out of the room so it can be used by another patient (if they are awaiting blood results, for example). The flow of patients in the UC area proceeds in this manner: once patients are registered after being triaged, they are sent into the UC area if they can be accommodated. If the number of patients is too high, the PN goes to the WR physically to call patients in one at a time. Once they arrive in the UC area, they are sent to an internal WR until an examination room becomes available. This internal WR is located within the UC treatment area, detached from the main WR. They then appear "in-the-queue" to be seen by the ED physician, according to arrival time, not CTAS. Arrival times are the second data seen on an Epic screen after the patient's name, and this "clock" starts the minute the patient gets a "quick reg" by the clerk at the front. As discussed earlier, the only way to stop the clock is to transfer a patient into the virtual CDU. Otherwise, the clock on the time spent in the ED does not stop. Physicians and their residents assess and place orders on patients' charts very quickly. Every patient *should* initially be assessed by an ED RN, since it makes possible the planning of

resources and confirms the appropriateness of the area to which the patient was sent. Most of the patients in this area are presumed to be low acuity, mainly CTAS IV-V, and as mentioned earlier, should be seen and discharged within four hours of registration. To discharge these patients, orders have to be written, processed, and completed for each patient, putting a heavy emphasis on the processing of patients. As multiple participants contended, it is necessary to keep up with these orders to keep patients coming in. It is especially important at shift changes that the number of outstanding orders is as close to zero as possible, so the next shift can take over the flow and keep it going. PI6 clearly highlighted that keeping up with orders was challenging but it could be done until 16h00. After that, due to the increased volume of patients and physicians, "all hope was lost." Keeping patients moving from arrival to finish line within the defined targets is all done virtually through Epic. The processes of documentation, from triage to discharge/admission, serve as "checkpoints" for wait times. These can also be linked to the implementation of Lean management in the ED; these checkpoints serve to see how efficient the staff and the system are. When re-designing processes in the ED, it is this data that is used – data that is acquired virtually through nursing interventions.

The processing of orders is central in the UC area. Given the high volume of orders, nurses have to increase the pace and have more resources to stay afloat. The number of nurses increases throughout the day in the UC area with the sole goal to keep up with orders. In the quotes that relate to orders or processes, one can feel that patient care has been replaced by the process in importance. The patient is virtual, and the goal is time related, not health related. As PO1 stated in the previous section, most nurses in the UC have no idea where patients are located, and therefore are often not aware of the presenting complaint or any other details about a patient. Once a nurse can locate a patient to carry out a physician's order, any interaction is

limited. For example, if the nurse has to take blood work, the patient is placed in a "blood work chair" located in the hall, next to a cart full of supplies for blood work and intravenous insertion. If medication administration is required, it all happens in the chair, located in the hall. This process was observed several times during the data collection phase. Pleasant conversations still do take place, and nurses also provide information on next steps and approximate delays. At this point, however, it is visually striking to see that a "process" takes place and is entirely separated from what brought the patient to the ED. The patient up to this point has existed only virtually for the nurse and has not even been present locally.

Participants also mentioned, especially in relation to the UC area, that due to the high volume of orders, medical directives that require a nursing assessment prior to implementation are not regularly used. The previous section described medical directives being perceived by nurses as a mean to create efficiencies. Medical directives will now be discussed as a way to decrease chasing after orders. One participant during the observations referred to the UC area as "always chasing your tail" (PO1). Nurses are so busy running completing orders that they do not have the time to assess and implement medical directives. Currently, most medical directives on non-urgent patients are started right at triage, especially when it comes to pain control. A medical directive is defined by the OHA as an "advance, written order given by a physician or authorizer prior to his or her direct assessment of the patient that identifies the specific conditions when the order can be implemented, and who is authorized to implement it" (OHA, 2007, p.6). Medical directives in the ED were implemented with the goal to make ED care more efficient by increasing and streamlining the flow of patients within the department (OHA, 2007).

To better explain how medical directives work, I will use an example seen during the observations. Medical directives are seen as improving efficiency to the extent that when the

physician initially walks in the room to see the patient, blood work results are available, therefore decreasing the LOS by not having to wait for these results. A patient presented to the ED with abdominal pain. The triage nurse triaged the patient as a CTAS 3, and once the patient is registered, the WR RN calls the patient back and draws blood, inserts an IV, and may provide analgesia. The patient still has not been seen by a physician, but all these tasks were done and covered under a physician's name, basically to "expedite the care" (PO4). It appears that ED nurses now identify their role within the ED as having the capacity to implement orders through medical directives. Furthermore, the implementation of medical directives prior to a physician assessment decreases the number of orders placed on the chart in Epic. Throughout the interviews and observations, the idea of chasing after orders was always contrasted with having the time to perform an assessment and implement medical directives. Working faster and harder to complete all the orders appears to be a real concern of nurses in the ED. Having the opportunity to assess a patient and listen to their worries has been replaced by the overall importance of flow and meeting the funding targets. Epic and the centrality of flow impacted nurses' interaction with patients.

5.4.5 Time with the Patient

Participants had much to say about the use of Epic in the ED. As with anything new, there was a learning curve for staff during and after implementation. Using Epic for patient care in this organization is not a choice, it is an obligation. Paper charts do not exist anymore; everything is done through Epic and computers (desktops and WOWs). Epic's promises of increasing time spent at the bedside and making clinicians more available for bedside care fall short, according to this participant:

> Less time with patient care, more time with documenting. More time with the computer. I mean you are on the computer. You know in ER, we document more than we spend [time] with our patients, (PI1)

As PI1 describes, much time is spent entering information in the computer. As described in the section "Ping Pong Nursing," nurses depend upon the computer screen and its inscription to execute orders. The time spent on the computer has increased considerably since the implementation of Epic, therefore decreasing the time nurses spend at the bedside.

During observation with PO1, who was the main contributor to the theme of ping-pong nursing, the centrality of Epic to her work became very apparent. When PO1 received a new patient in the EC room, she went in to assess the patient, then placed them on the cardiac monitor. She performed her head-to-toe assessment before removing her PPE to find a computer and chart her assessment. The vital signs she took when she placed the patient on the cardiac monitor were ready to be imported in Epic; all she had to do was verify them. As she stated at the time, the fact that all vital signs in this area are automatically imported to Epic changed how she remembers information about her patients. She used to remember their vital signs, as she had to chart those on paper. Now she stated that she will even forget that vital signs were actually done. Once she was done with entering her initial assessment in Epic, she went back to the main screen to verify whether she had orders to be processed on her other two patients. Checking the computer appeared to be the main factor organizing her work. PO1 entered patient rooms to process the orders entered in the EMR and at the same time, would also look to see if vital signs were due, or if the time elapsed since the last vitals was longer than the order entered in the electronic system. Most of her time was spent looking at the computer, effectively removing her from being at the bedside.

5.4.6 Where Is the Patient?

One impact of implementing Epic in the ED is the subsequent difficulty in tracking patients. Epic is central to tracking times but finding patients, especially in the UC area, has become difficult, making it harder for nurses to try and increase the flow of patients coming through treatment areas. Formerly, the patient was sent into a treatment area with their paper chart in hand and would hand it to the clerk or the nurse. The nurse would then physically see the patient and grab their chart and they knew then that they had a patient to assess. This has now changed as patients come into rooms without charts and are following a system of colored dots on the floor. For example, red dots on the floor will take them to OBS where they then proceed to the assigned room number. Patients can then sit in the room without the nurse being aware of their arrival. PI3 asserted that unless you are sitting and looking at your computer screen, it is very difficult to know that a patient has arrived. PO6 would consistently physically look in her rooms to see if a patient had been sent in. The issue she highlighted was that some CF or triage nurses will send patients in seeing that the room is empty in Epic, but they neglect to virtually transfer the patient. The physical patient is sitting in a room, but their virtual counterpart did not follow. According to PO6, this leads to some safety issues, especially when working in the EC area, as patients tend to be in more critical conditions. On day 2 of observations with PO6, one of her rooms was empty when we left for break. Upon our return, PO6 happened to see a foot in the corner underneath the curtain. Nobody knew that this patient had been sent to the room. The patient was physically present in the room and also had been virtually transferred, but the covering nurse could not "see" this patient as the patient was not assigned. In order for the nurse to detect the virtual patient, they would have had to leave their assigned patients tab within Epic or go and look to see if the patient had physically arrived in the assigned room. In this case, Epic

appeared to compromise the ability to communicate between healthcare providers in the ED. This aspect of the implementation of Epic leads the next section on communication and Epic.

5.4.7 Changes in Communication

Communication between nurses and physicians has changed, according to multiple participants, with the implementation of Epic. Before Epic, the physician would write orders on the paper chart and bring it back to the nurses' desk, often clarifying their thoughts or sharing the plan of treatment for a patient. Now, everything is done at a distance and physicians do not have to come to the nurse's desk to hand in their orders. By the time the nurse sees the orders placed for a certain patient, the physician is often already in another room seeing another patient. This, according to PI1, is troublesome when trying to organize their work:

> It's … communication has changed in emergency medicine, it's all online… you rarely have a doctor coming up to you and be like "Hey, this is what's going on here, I think we are going to do this." As opposed to finding out online that this person is not going to have a CT scan… or an MRI… or now we got to do more bloodwork… Why the fuck didn't you just tell me when I was taking the bloodwork! (PI1)

This quote exposes a certain break or change in communication between physicians and nurses within the department. Certain communication channels that were perceived as important in the past have been reduced to reading an order on the computer. Communication in this manner create certain gaps in patient care, as nurses become frustrated over being left unaware of important pieces of information for patient care. One participant explains in detail certain repercussions of the implementation of EMR in the ED.

> If I were to give an example of something that happened last week. I had a woman in OBS to… the report to me was oh like the emerg doc reports were very limited like their documentation and the report was, you know…New diagnosis, cancer, abdominal pain, some shortness of breath and had a syncopal episode. And she's allergic to CT dye so she needs the 13 hours work up prior to getting her CT scan with dye so they needed like Prednisone, Prednisone and Benadryl right before

> she went and so she had like around like 11:00 PM she had 100 of PO Prednisone on board so she's like restless... she was a little bit odd in the 1st place. Hard to assess like very vague but vitally totally stable and she was getting increasingly restless and kept asking me for sleeping pill and I thought oh you know she's got like a lot of prednisone on board, she is never going to sleep. She's never going to be able to sleep. And then cardiology came and went to see her and did a little like pocus came out looking sort of concerned, didn't tell me anything. Didn't write anything down which…and then went to ask who was looking after the patient which…so she went to talk to like you know the emerg doc. Anyways, 30 minutes later she was prearrest over the edge of the bed in cardiac tamponade. And like I had no idea that we were even concerned about her heart specifically, like I had no idea. I thought, oh, you know, she's got you know tumors somewhere we need to get her that CT so we can see where the cancer is and figure out what to do for her. But she was within moments of the end of her life. (PI10)

Many nurses shared similar stories with me during the observation and interviews. Physicians, using Epic, can go around, assess patients, write orders, and write their notes of assessment later, or let their residents write the assessment note and impressions. The delay between orders and charting is sometimes significant and the physician might have departed the ED before they input their assessment in Epic. This leaves the nurse assigned to this patient to assume what they should be monitoring, based on patient presentation. Not all patient presentation in the ED is straight forward. This is usually the stage of the hospital stay where diagnostic tests are done to try and find the cause of symptoms. The communication that used to happen between physician and ED nurse ensured that all providers were on the same page for diagnostic and monitoring of patients. As PI10 later recalls in the interview, if a cardiac tamponade was suspected for this patient, a transfer to a monitored area would have been requested, which could have saved this patient from going into a pre-arrest state.

One other aspect of Epic that changes the communication piece between physician and nurses is what is called nursing communication orders. These orders appear as a task to be completed but are not a medical order, just a communication order. PI2 explained that she

thought this was initially “weird” in Epic. Her first experience with nursing communication orders came when a physician inputted the order to provide a snack to the patient. In the past, the physician would have come to see her and inquire about the possibility of locating a snack for the patient. She felt that this was a cold way to communicate, and that Epic had changed the dynamic of communication between nurses and physicians in the ED. Nursing communication orders are usually related to comfort measures like providing snacks and blankets, to discharge instructions asking the nurse to apply a dressing, to print the after-visit summary (AVS) and then discharge the patient home. Some nurses have complained that these orders are a little bit much sometimes, meaning they think it is almost insulting to them. The disappearance of quick verbal communication with the physicians to them is an added hurdle to try and better understand what is happening with their patients. This leads us to the last aspect of Epic as an organizer of ED nurses’ work from a distance.

5.4.8 Organized at a Distance

The clipboard that appears in the task column of Epic organizes the work of the ED nurses, as does the red box when the vital signs are due on a patient. A physician not physically present in the ED can place orders without seeing a patient, organizing the work of the ED nurse in this manner. This also can make the work of the ED nurse more complex, having to rely almost entirely on signing into the computer to know if a referred service (medicine, surgery, gynecology) even knows about a patient. Services can come and assess a patient, leave the ED, and place orders from a location distant from the patient without speaking to a nurse. Some services will even place orders without seeing the patient, which PI1 felt was highly inappropriate. Physicians and residents from specialty services like nephrology can write orders and adjust medication for a patient without even seeing the patient physically, relying entirely on

blood work or diagnostic imaging results to place these new orders. Furthermore, according to PI1, unless you sign into the computer, nurses have no way of realizing an order has been placed on the patient's chart. Before Epic, the paper chart was placed in an order bin, visible to all nurses.

Too often, these orders are placed and may not be well thought about or accurate for the patient. This is when an interesting aspect of the organization of ED nurses was observed and discussed during data collection. When residents or physicians place orders outside the department, some nurses will "let them think about it" (PO1-Day1). The nurses will purposefully ignore the order for a period of time, as they anticipate that it might change, creating non-necessary or extra work for the nurse. PI10 clearly explained this process, or ruling at a distance with residents' orders:

> Epic is maybe a little bit too accessible to inexperienced residents. Yeah, sometimes it's a little bit of like you watch their thought process during the orders. And yeah, like I have learned with Epic unless the patient is critical, like don't jump up to do what a resident might say to do, especially if somebody has just been admitted like if they are direct service or they've just been admitted to, services because emerg tends to not be that bad (PI10).

The section where she states "don't jump up to do what a resident might say to do" was clarified later in the interview and the meaning was about placing orders at a distance by admitting services. The same applies if the nurse calls the admitting service at night and the resident answers from a sleeping room. PO4 had to contact a resident overnight for a potassium result on one of her patients. The resident acknowledged the call and said he would be placing an order. The first order he placed was not an appropriate action for a high potassium level. PO4 just waited and within 30 minutes, a correct order was placed. In this sequence, I would like to highlight this chain of organization and the virtual aspect of its components. Blood work is

ordered virtually; the nurse draws the blood but must scan the patient to enter in Epic that they did draw the blood on the patient. The lab then processes the blood work by scanning the tube, showing virtually that they have received the blood. The results are posted virtually. The nurse pages the resident by clicking, again virtually and the order to rectify the abnormal blood result on the patient is placed virtually. Communication between nurses and physicians here happens entirely virtually.

5.5 The Resulting ED Nurses' Experience

Throughout the interviews and observations, nurses participating in this study were keen to share their experiences and the meaning of their work. The data gathered showed a "feel" of what it is like to work in the ED. Experiences that were brought forward and sub-indexed in this section all bring to light distinct aspects of nurses' experience. The introduction of target wait times centralized the importance of flow in the ED, which required Epic to track wait times and keep the clock going. This has resulted in changes deep within the nurses and their experiences. This final level of analysis and mapping basically was the embodiment of flow and Epic rationale by the nurses, organizing and classifying their experiences.

5.5.1 The Construction of a Patient in a Reformed Hospital

Hospitals across Ontario have been reformed with the idea of sustainability ever since Medicare was implemented in Canada. To make universal healthcare possible, decision makers argued that cuts and re-alignments were the only way to keep Medicare alive. This transformation of our healthcare system profoundly changed how care is funded, delivered, and evaluated. The ED also has gone through rounds of restructuring and process changes to maintain or accrue more funding. PIP teams targeted one area at a time, looking at processes judged to be problematic if they were lengthy or judged inefficient. This reality is now part of the

discourse of the ED nurse. The patient represents a problem to be solved, every step of the way. We will now explore different the "patient as a problem" perspective that was discussed with participants during data collection.

5.5 .1.1 Patient as a Bed Blocker. The concept of bed blocking was mentioned often during data collection. Bed blocking in the ED means a patient is occupying a bed but has nowhere to go, impeding the flow of patients through the ED, creating backlogs in the waiting room and on the ambulance runway. Bed blocking can also be created by a nurse who closes a room after a patient's departure, often because they are too busy to receive another patient or one of their patients is in critical condition. Participants referred mostly to the first definition of bed blocking in the ED, where beds are full and there was nowhere to send patients. It became interesting to hear participants referring to admitted patients as bed blockers. The responsibility of vacating the bed was now on the patient.

> But there's not just that too, it's that if I'm stuck with 20, 30, 40 admissions, these patients there, they take up places. I can't put them on the floor then I can't put them on top of one another. Because of that, the beds are blocked, these patients who are admitted who should not stay in the emergency room (PI5).

Here I would like to bring special attention to the choice of words of this participant. PI5 is a veteran ED nurse with over 25 years' experience and who also acts as a CF. She refers to these patients as blocking the beds since because they were admitted they do not belong in the ED anymore. PO3 also referred to admitted patients as bed blockers when on day three, 22 patients were admitted in the ED waiting a bed on the floor. He kept going from one computer to the other, looking to see if beds on the floor were assigned to patients admitted in the ED, so he could create some space and "relieve the bottleneck" (PO3, Day-3). The patient again in this example becomes the bed blocker, impeding the flow of patients through the ED. The pressure

on nurses to keep this flow going is strong. They will open beds by sitting patients in chairs around the nursing station in OBS and EC to keep the flow going. Displacing patients from their beds to sit in chairs is used as a way to solve the bed blocking problem. This way of unblocking beds in the ED causes other issues for nurses, who end up having to care for more patients than they are assigned. The patient in the chair is still assigned to the nurse, plus they still have their other four assigned bed bays. According to PI10, the drive to unblock beds often will come from the CF, who is usually attempting to bring more patients in on stretcher to be seen by the physician, keeping the flow going. She spoke to the fact that moving patients to the chair to solve the patient as a bed blocker problem was causing safety issues. The "throwing" of patients in chairs around the nursing station, as stated by PI10, looked exactly like this during the observations. The concept of bed blocking is often talked about as the root cause of delays in getting patients into treatment areas.

> Ok, I think a big problem is with like bed blocking. So, I'd say like more often than not in the morning over half the patients are admitted (referring to the OBS area). So, it looks like most of the time it's based on how long they've been waiting in terms of like who gets to come into OBS first (PI4).

Bed blocking delays getting patients into beds and starting their assessment and treatment. Patients waiting in the WR are called in to OBS mostly by the time they presented to the ED. During the observations, on a very busy day patients waited up to three hours to get a bed in the OBS area. These patients had fever, appendicitis, or even cancer treatment side effects like febrile neutropenia, which can be life threatening. The pressure to open beds on the CF and all staff therefore comes in a two-fold manner; they are acutely aware of wait time targets (and doing their best to meet those targets) as well as attempting to preserve the lives of patients waiting in the WR. The language used around the concept of bed blocking often will be in

relation to the patients physically occupying the beds. Whether they are waiting to go to the floor or are discharged home, they end up occupying a bed that is needed to preserve the flow in the ED.

During the interview with PI5, she explained the lengths ED nurses go just to be able to discharge a patient home at night. As discussed earlier, the assigned nurse will call the family, book a taxi or an ambulance to be able to open that bed for the night. If all these options fail, the patient then becomes a bed blocker. She used the following terms to describe this reality:

> No, so at night discharging patients is sometimes more difficult, which means that we often have to keep them until the morning. Then it blocks the beds, it prevents people from getting in, those who come in and are waiting in the waiting room, well, it's more difficult at that time (PI5, my translation).

I documented in my observational protocol this urgent feeling, especially in the UC area, to move patients out of rooms, even if treatment was ongoing. I watched as an older patient was receiving her first dose of IV antibiotics in a small chair in the hall or a gentleman who was getting blood work in the IV chair in the hall proceeded to faint. In reality, these patients would be blocking beds if not sitting in a chair in the hall. As PI3 explained:

> People just can't stay in the room forever. You need to move them out, because it is open 24 hours. Its 24 hours nursing, people just come all the time. And you need to keep moving people along (PI3).

Finally, the bed blocking concept also is projected to nurses on the floor. This component of bed blocking was highlighted by PI10 during her interview. She described how some floors kept their beds empty by not officially opening these beds in the electronic system. In her opinion bed blocking related to closed beds on the floor was also an ethical issue. Patients in the ED were waiting for beds upstairs, which in turn could lead to someone passing away from a critical health occurrence in the waiting room, as no beds were available. Here we can see that

the responsibility of bed blocking is shifted to the floor nurses. They are responsible for getting patients discharged from the floor quickly, to open beds for admitted ED patients. This shift now brings the patient as a bed blocker up on the care units. The patient in a bed on the floor waiting for an ambulance to bring them back to a nursing home, for example, becomes the bed blocker.

To recap, the admitted patient or the one who is unable to go home in the ED is an impediment to flow, which is called bed blocking, a term that also applies to the patient on the floor who is waiting to be discharged. The flow in the ED is now central to the organization of nurses' work and patients are often blamed for impeding the flow. This next section will discuss how some patients are perceived to be abusing the ED.

5.5.1.2 Not Using the Resources Appropriately. My experience in the ED as a nurse as well as multiple participants in this study led me to this category. When discussing how the perceptions of patients has profoundly changed, the idea of patients not using the ED appropriately is central. To clarify, this perception is not new; the main difference lies in the contradictions with this perception. Patients who use the ED for minor complaints like simple headaches or tooth pain during the week have always been perceived as not using ED resources appropriately. The distribution of physician hours through the department, especially at night, widened this concept. When there was only one physician seeing patients at night, those from Resus, EC and OBS were always seen first as their CTAS were more urgent. This often-left patients in the UC area waiting all night to see a physician, and they were not seen until the morning by the oncoming day shift physician. Physician coverage is now different, with multiple shifts starting at different hours, including a physician assigned to the UC all night.

The ED staff during the observations pointed out that many patients are now using the ED as a walk-in clinic, as they are usually seen and discharged quickly, under four

hours. During observations with PO1 on day 3, the participant was assigned to triage. For a Saturday morning it was a very busy with multiple patients in the WR waiting to be triaged. Although there were three nurses triaging patients, the wait time to be triaged was over one hour. The atmosphere in the triage area was tense, with all three nurses trying to hurry as much as possible, given the fact that they must don and doff PPE for each patient as well as disinfect the triage area. As an observer, I noted that I could feel the pressure, feel the eyes of the patients waiting on the nurses and the clerk at triage. PO1 called the next patient to be triaged, who presented with a complaint of rash. This patient came to the ED as he had an outbreak of acne, and he was requesting to see a dermatologist. PO1's assessment of this patient was extremely brief, taking less than two minutes. She obtained the patient's vital signs and medications and sent them back to the waiting room to be registered. There was very minimal interaction between this patient and the nurse. This patient was given a CTAS V and sent to the UC area. PO1 then talked about patients like this man who are taking up resources for people who really need them, where clinics and family doctors should be used in cases like these.

PI9 also viewed patients who could wait all night to see a doctor as not using the ED appropriately. If a patient could wait that long, she argued, they could have utilized their family doctor. These two examples of perceived inappropriate use of the ED differ in the sense that the first is rooted entirely in the presenting complaint and the second refers to how long a patient could wait. These differing perspectives became salient in the interviews. I will initiate this discussion here but delve into more details in the next chapter. PI9 refers to patients in the UC area as not using resources appropriately but throughout the interviews and observations, patients in the UC area were referred to as

the “bread and butter” of the ED, meaning that completing their visit within the set targets represents the bulk of the incremental funding attributed to the hospital. These patients are then necessary to obtain funding but are also deemed as not using resources appropriately.

The last aspect in this category refers to patients who are commonly called “frequent flyers.” Frequent flyers are defined as patients who come regularly to the ED and become known to most ED staff. In 2012, LHINs in Ontario implemented Health Links, which targeted high end users and promised to establish resources in the community to keep these patients out of hospital EDs. On observation day two with participant PO4, a patient deemed a frequent flyer came into the triage area to be seen for the same habitual presenting complaint. PO4 knew this patient on first name basis, knew their medications and allergies before the patient answered her questions. She also knew this patient came in every two days because they required pain medication for his medical problem. As usual in the ED, the UC area was full, which resulted in this patient waiting to go in, putting the triage nurses on high alert as he was known to have violent outbursts. The nurses discussed how this patient would be better served perhaps in a clinic or at least should be followed more closely by the chronic pain management team. From their discussion, it became clear that they believed this patient was not using the available resources appropriately. Forty-five minutes later he was called to the UC area where the nurse in charge of flow during the night shift had already made a bed available for him, which according to staff was the safest way to deal with this patient. He was already perceived a frequent flyer but also as an impatient and aggressive patient who would not tolerate a long wait time.

In this section so far, we have explored how patients are constructed in the reformed ED; on the one hand they are seen as bed blockers and, on the other hand, they are sometimes deemed not to be using the resources appropriately. The last aspect of this section will show how patients presenting to the ED have become a problem, a problem to be solved.

5.5.1.3 The Patient as a Problem to be Solved. This last aspect of the construction of an ED patient became salient after reading the data multiple times and reviewing the coding tree over and over. When PI1 referred to his work as being similar to that of a conveyor belt, the image that came to mind was that of a manufacturing assembly line. Businesses, especially when using Lean management, find that any slowdown in the assembly line becomes a problem to be solved. Teams gather to study what is causing the problem and how could it be fixed to increase efficiency and quality. In the ED, the problem on the assembly line is the patient. From triage to their transfer to the floor or discharge home, the ED team is constantly working to resolve the problem, or the patient. To better explain this finding, I will use a section of my interview with PI4, where she describes triaging a patient presenting with abdominal pain. Then, I will use a section of my interview with PI2, where she describes the work in a treatment area. Lastly, I will use my observational protocol during a critical event to attach an image to this theme.

In this next interview section, PI4 describes the process of triaging a patient presenting with abdominal pain. This section was chosen as the patient is almost absent from this description. The abdominal pain is the problem to be solved.

> Put on the blood pressure cuff, put on the sat probe while I'm asking them questions about why they're there. Their medical history, like the timeline that this has been going on. What they've tried to make this better, what they find makes it worse. I guess if Mr. Smith has ulcerative colitis like what his usual medication regimen is. If it's been working for him how long he's had his bloody stool, what his stool usually looks like, how much pain you are in, where it and is where it goes. What makes it better? What makes it worse? Those kinds of questions. And vitals. I at least fill out the medication portion on the triage note

> and like the medical history part as well. I don't know if ever… I don't think everybody does. I'm just going through the thing in my head. I'll include in my note if he's taken any medication and at what time. And I think yeah would be useful if that was in front of me and then based on like how he looks his medical history, presentation complaint, vitals I will choose the CTAS score and then I'll plus or I'll minus him. It is if I have to. Like I said, if I was super concerned about Mr. Smith, I would call the CF. And then dispo him to, let's say OBS because ulcerative colitis having like bloody diarrhea and his pressure is ok, but he's a little tachy (tachycardic). And then he'd go to OBS. (PI4)

The general feeling I received when reading this quote is that the presenting complaint and the medical history are being triaged. What is completely absent from the narrative is how this patient is coping at this moment with their medical problem. The abdominal pain then gets a CTAS and is disposed (dispo) of in a treatment area. The word disposition is used in Epic when talking about destination after triage or when a decision is made about a patient, to discharge them or refer them to an admitting service. Bringing this quote back to the conveyor belt analogy, the triage nurse basically decides which conveyor belt the problem will be placed on to get fixed. The nurses in the treatment areas then work on the problem to "fix it." They initiate medical directives to diagnose and treat the problem or presenting complaint. Throughout the hospital stay, the aim is to resolve the problem and finally be discharged.

Participant PI2 highlights another aspect of the patient as a problem to be solved. PI2 is an experienced nurse who often fills the CF role. In this excerpt, she describes the process of receiving a patient in the OBS area. This passage was chosen to represent the work done in the ED by nurses, which closely resembles the work of a pilot with a checklist. It is done in a methodical manner, one task after another.

> So normally from triage if you're sending someone to observation you notify the CF that you have a patient for that area. The CF will determine who goes to what bed and when they go in. So, the CF will normally call triage and say ok send Mrs. Smith to OBS eight. Then that patient would make their way down to OBS eight, it would be transferred in the computer into that room and then if you're the

> nurse in OBS, you're then responsible for going in and doing your initial assessment. Starting you're going to do your head to toe, getting blood work, putting an IV in, doing your vitals and getting the patient changed into a hospital gown and then they wait to be seen by the emergency physician (PI2)

The last section of this passage describes the steps nurses accomplish when they receive a patient in the OBS treatment area. These exact steps were observed, and are followed closely by nurses, almost in a methodic manner. Gown, head-to-toe assessment, IV, VS, medication, if necessary, then wait. Once all these steps are accomplished, the nurse moves to another patient or goes back to completing tasks according to clipboards appearing on her Epic screen. What is completely absent from this description is the patient themselves. The patient is "being worked on" by the nurse to solve the problem. They have made their way on the belt from triage, the OBS nurse fills out the checklist, and leaves the patient ready to be assessed. The problem, or the patient, does not get solved until they physically leave the ED.

Lastly, I will share part of my observational protocol with PO2 on day two who was working in the resus area. PO2 is an experienced nurse with over seven years in the ED and other critical care experience. Approximately four hours into the shift, an elderly patient was brought to bed bay number four. He was coming to this area to be monitored as two ED residents were attempting to perform an eye decompression. This is a high-risk procedure rarely performed in the ED and one that usually requires sedation. The older patient was frail and appeared frightened, which could be considered normal when you are about to have someone cut a slice in the corner of your eyelid. I observed the scene from a window, as this patient was also on droplet precautions. The patient was laying in the bed, with a thin bedsheet over him. The nurse attached him to the cardiac monitor. Two ED residents were at the head of the bed and another nurse was inserting an IV. The residents were talking back and forth to one another about the patient's eye,

never addressing the patient. The eye was the problem. The nurse inserting the IV was assessing the monitor and asking the patient about the level of their pain. As the nurse was monitoring the patient, assessment findings were yelled out to another nurse outside of the room for charting purposes. As the two residents proceeded with the procedure, the patient was shaking in pain. They did not stop the procedure until the nurse told them it was time for sedation. The nurse administered IV analgesia and the residents resumed the procedure. The last part took a maximum of two minutes, then the residents walked out of the room, stating "This may not have worked as advertised" (PO2 observations- day 1- line 60). They never addressed the patient; the problem was solved for now. PO2 provided warm blankets to the patient and stepped out of the room to move on to the next patient. The following drawing is a replica of a drawing I made at the time.

(PO2-Day1)

The feeling I had, while watching the scene was that the patient's body was basically considered a car with simple mechanics. The nurse was measuring the oil pressure while the residents were

changing a spark plug. I impulsively drew this drawing as the feeling was overwhelming, especially given the frailty of this patient. He later went to the operating room to have his eye problem solved. Before his departure to the operating room, I witnessed PO2 helping him get undressed, providing him more warm blankets, and explaining what had happened and what the next steps were. PO2 contacted this patient's family to keep them updated and ensured that the patient was comfortable.

Patients in the ED present with a complaint and become a problem worked on by the entire staff. It appears that sometimes the patients themselves disappear under their complaint. As an ED nurse, it is extremely difficult to practice in a way that keeps the patient in perspective. The pace of work and the volume of patients coming through do make nurses feel, as PI1 did, like they were on a conveyor belt. In the UC area, nurses most often do not know which patient is where, as they can have up to 60+ patient in this area at a time. This reality enhances the feeling of just working on a problem: you seek it, act on it, then discharge it.

5.5.2 The Staff is Green, Very Green

Participants often talked about their experiences with "green" staff, younger nurses with less experience, in the observations, interviews, and personal conversations held during data collection. They all commented that becoming an ED nurse is immensely different now from when they started. Fifteen years ago, nurses seeking to transfer to the ED had to have a very specific education, experience, and training. As PI1 expanded during the interview, back when he was hired in the ED, the requirements were high: he had to have three years of experience, be an Advanced Cardiac Life Support (ACLS) provider and have other qualifications all relating to critical care nursing. He described current requirements to become an ED nurse as "flimsy." In order to even apply for a position in the ED, I had to have successfully completed the Advanced

Cardiac Life Support (ACLS) course, a Trauma Nursing Core Course (TNCC), the Pediatric Advanced Life Support (PALS), have experience with reading cardiac monitors and have three years' experience in a busy medical or surgical unit. Without fulfilling these specific requirements, nurses would not even get an interview. The rationale behind it, as PI1 later discussed, was that nurses had to be able to organize their time and have appropriate training to care for a rapidly decompensating patient. By the time nurses started in the ED then, they had already witnessed many acute care situations as patients are not always stable on the floor. Now entry into the ED could not be more different.

As it became harder to fill ED positions, these requirements were changed. Now, nurses with three months experience are hired under the novice program umbrella, a program designed to train nurses with less experience to work in the ED. These nurses go through a special training with the ED educators and complete weeks of preceptor shifts with an ED nurse. Once they complete this training, they are considered fully fledged ED nurses.

> Most veteran ED nurses have voiced reservations about the novice program. Not only is it like putting people who may be unsafe in emerg who are keen and wonderful and wanting work emerg and are great nurses, but it's also putting them at a disadvantage because, A they could be unsafe, even though they're keen and lovely and smart. And like you're kind of like setting them up for failure. (PI4)

Participant PI4 touched on several different aspects related to the novice nurse program. Recruiting novice nurses and placing them in the ED may actually be an unsafe practice. The CFs in the ED are changing the staff assignment to have a mix of experienced ED nurses and novice ED nurses in each area. Novice nurses do not do triage, work in resus or the UC in the first 3-6 months of completing their orientation. Despite their best efforts, these nurses have a very difficult time integrating into the ED and managing their time. They are always so busy that questioning what is happening to a patient or inquiring about patient's wishes becomes very

difficult. Placing these novice nurses in the ED may also be setting them up for failure, as PI4 suggests. This participant and other ED nurses talked at length on this point. The novice nurses are just out of school and are thrown into one of the busiest units of the hospital. They do their best to "survive" after having completed the training, but support for them dwindles once they are on their own. According to multiple participants, there is a very low retention rate of novice nurses in the ED.

Retention was a main sub-index in the nurses' experience, and it related to both novice and veteran ED nurses. PI8 pointed out that some veteran ED nurses have retired, and others have left for other departments. He felt that not only did they take their experience with them, but they also took a certain layer of protection for novice nurses, explaining that most of the experienced nurses knew when a novice nurse was having trouble keeping up with their assignment. One participant was one of these experienced nurses who had just completed her last ED shift when she agreed to be interviewed. After almost 25 years in the ED, she was leaving for another department, stating that the pressure to meet the target times with ambulance offload and CTAS 4-5 became too heavy. She felt that the targets did come first, and that patient safety as it relates to appropriate staffing was being ignored and not part of the ED anymore. The lack of support from management to close areas of the ED when they were short staffed, for example, was a major factor in her decision to leave. These experienced nurses are then replaced by novice nurses.

> The senior nurses, they are all leaving. We only have these young new nurses that do not have enough experience. I know you have to start somewhere but the other senior nurses are tired… tired of the bullshit (PI7).

The mix of senior vs novice nurses is a concern for all nurses. Supporting younger staff was, in the past, a defining feature of an ED nurses' work, but it becomes problematic when a

large proportion of the ED staff is now made up of younger nurses. On one night shift of observations, the number of nurses trained for triage was exceptionally low, triggering the CF to change the staffing assignment multiple times in order to move experienced nurses in an effort to make the staffing mix safer.

Another concern that was expressed during the interviews was the capability of the CF to determine which nurse was requiring help at some point. The departure of several very experienced ED nurses over a short period, many of whom fulfilled the role of CF, left PI8 feeling that something important had disappeared for the novice nurses. CFs will often walk through the department and check on the newer nurses to see if they are coping. PO3 was CF during all three shifts of observation. He would often go into the OBS area, asking junior nurses if they needed anything or if he could provide help. During the second day of observation, one junior nurse received a patient in critical condition with high blood sugar. From his experience he knew this patient would require a lot of care and advanced monitoring, something this junior nurse would require assistance with. He requested a senior nurse from the resuscitation area to come and help the junior nurse to make sure her other two patients were also looked after. During the next two hours, I saw him coming back and checking that this nurse was coping and that specific medications, like the insulin drip, were mixed and infused according to the orders. The senior nurse from the resuscitation area checked on the other two patients' orders and vital signs and went into the room to ensure they did not need anything. This situation exemplifies what PI8 expressed during the interview.

Older nurses also believe that these new nurses do not have the required critical thinking skills, thus putting patients at risk. One participant links the idea of CTAS presentation and the lack of critical thinking skills of new nurses to patient safety.

> And the greenness in the department doesn't help. They have no critical thinking and don't know CTAS and acuity of presentation because that is not how they were trained. I think it's dangerous now, it's changed. Most ER nurses are green, don't know that CTAS IV-V patients should wait because they have never known anything else. So, they basically don't speak up for their patients. (PI3)

From the time spent observing, it was clear that newer nurses were often placed in assignments where the patient ratio was more stable and predictable. Upon the completion of their training, novice nurses do not work in resuscitation, triage, the UC or take on other specialized roles such as navigators or PN. The emphasis is on learning assessment and clinical skills, to ensure that they can provide basic ED patient care. CTAS is not part of their training, as they will not receive triage training in the first year to year and a half after their initial training. CTAS was not the only component participants mentioned as missing in the novice nurses training.

The strong emphasis on being competent and being able to cope as an ED nurse after the completion of their training created what participants qualified as dangerous situations. PO5 was working a resus shift on our second day. She talked to me and her co-worker about the fact that novice nurses do not ask for help, even if they need it. Shortly after this discussion, she checked on the nurses in her department to see if anyone needed help. As she walked past room three in EC, an agitated female patient was yelling out for help. She donned her PPE and went into the room to see how she could help. This patient had no blankets and needed to use the washroom urgently. PO5 had just asked the assigned novice nurse if they needed anything to help her with her patient load, but they said no. Once PO5 was in the room with the patient, the assigned novice nurse told her they had placed the patient on the bedpan three times, to which the patient immediately replied that she was not able to use it. PO5 brought in a commode chair which calmed the patient down. PO5 provided her with blankets and repositioned her in bed. This

patient had clearly required care, but the assigned nurse had obviously been too busy to provide it. As PO5 stated “See, I was just saying this, they do not accept help, ever!” (PO5, Day 2). This same situation occurred on multiple occasions with various participants throughout the observations. PI1 also echoed this finding: I think you know, the new nurses coming in feel like they have to do it all on their own. Like “No I don’t need help, I can do this on my own” (PI1).

The same situation applied to novice nurses being reluctant to ask for advice from the more experienced staff since they wanted to look competent. PI1 added that working with novice nurses adds to the workload of the more experienced nurses. The feeling is that experienced nurses need to “watch over” the patients in a younger nurse’s assignment, in his opinion ensuring patient safety but doubling their workload. Extra help is often required by novice nurses especially when a patient is acutely ill.

The recruitment of novice nurses in the ED is aggressive, and postings seeking candidates to fill 10 or more positions are created every 5-6 months. As soon as a group of novice nurses graduate, another group starts the program. Several staff talked during observations that there are multiple issues to overcome to retain these nurses. Some staff believed that the heavy workload in the ED was the deciding factor in keeping these nurses, although others mentioned that a nurse could work anywhere after being trained in the ED. A low retention rate makes it very difficult to build an integrated team. PI4 stated that the expectation now within the ED staff is that these nurses will leave. During data collection, I heard staff talking that at least half of the novice groups were leaving within a year. I was unable to obtain documents proving this point, and thus this aspect still needs to be clarified.

The sub-index of green staff paired with retention creates challenges for the CF and experienced ED nurses. The training of the novice nurses also monopolizes most, if not all, of

the ED educators' time, leaving no time for experienced nurses' continuing education. The novice nurse program fills gaps in staffing but at the same time creates multiple challenges for ED staff as well as safety issues with patients. The veteran nurses of this study adapted by closely supervising the newer nurses, adding to their own workload. They now define their role in the ED in a new light, which will be discussed in the following section.

5.5.3 Jack of All Trades, Master of None

When trying to better understand how the ED nurse is experiencing her role within the ED, one question I asked all the participants was "How would you define an ED nurse?" Most participants had a clear-cut definition of what an ED nurse is, but three of them used the expression "jack of all trades, master of none." Participants felt that they had to know everything but that they could not master anything.

> It is like you are a jack of all trades but master of none. Because you get everything. You have to deal with all the specialties that touch everywhere in the hospital. So, you have to know a certain amount of information about everything and try to do it like… as best as if you were in that specialty. Like the ortho patient, and the surgery patients and the septic patient and the patients that are supposed to go to ICU but there is no beds there so then you become the ICU nurse. I think it's just acute and you have to do it all and you have to know it all. (PI9)

ED nurses, given the nature of their work, have to adapt to a myriad of situations, patients, and realities. During a 12-hour night shift of observations, PO4 was assigned to care for a group of patients, all of whom had been admitted – a rarity now given the lack of trained ED nurses. Throughout the night, she attempted to keep up with admitting orders, blood work, medications, vital signs, positioning of patients, etc. When one patient was transferred to the floor, that open bed became a revolving door for ED patients. Between her work with the admitted patients and the ED patients, she felt that she had to switch personalities. The reality

of ED care now is that you can have a whole unit of 30 patients admitted and waiting for beds that are not yet available on the floor. The definition of an ED nurse has become so large and the limitations so blurred that some participants like PI3 could not define what an ED nurse is currently. Their role has become so expanded and fulfills so many needs throughout the department and the hospital that an exact definition of an ED nurse has become problematic.

Participant PI1 gave the "jack of all trades" expression a different perspective.

> Sigh… A jack-of-all-trades, master of none. How is that? Because you see everything, right?!? You see everything from traumas, burns to bobos on the thumb and you have to go from one critical event to another to another to a minor event and it's all in a day's work and our heads are spinning. It's a roller coaster. (PI1)

This participant clearly refers to the unpredictable and what some might describe as the exciting nature of ED nurses' work – this feeling that you never know what will come through the door and that you have to be prepared for it. He describes in excellent terms that the work has ups and downs, all in one shift and yes, it is a roller coaster. His description is congruent with my own understanding of what an ED nurse is and what the work is like. PI1 is a veteran ED nurse with more than 20 years of experience and has seen many changes in the ED in the past 12 to 15 years.

During the observation period, I witnessed extremely difficult situations where nurses had to become social workers and even therapists. PO4 demonstrated that there is still some care provided by ED nurses. During a night shift, an elderly patient was discharged home by the physician, as he judged the risk of COVID-19 for this patient was higher than being bedridden at home. PO4 strongly disagreed with the physician, speaking up on behalf of the patient and stating that "She can't even stand." She was nevertheless instructed to discharge this elderly patient with her elderly husband. PO4 had to call around the city to try and locate a walker at

night. She then called the husband and held a phone conference with the patient. In the end, this patient was discharged but required the help of two people to get in the car. PO4 instructed the patient's husband to call 911 if he was unable to take her into the house. Despite her best efforts, she believed that this patient was discharged in extremely unsafe conditions. It also is important to mention that this patient was just under the time spent in the ED to meet the funding targets for a CTAS 3 patient. Furthermore, there were over 20 admitted patients in the ED waiting for non-available beds on the floor. As this story shows, the ED is not an easy environment to work in.

5.5.4 It's a Tough Environment to Work In

The current state of the healthcare system in Canada overall as well as in Ontario makes it an extremely difficult environment to work in. The COVID-19 pandemic has highlighted and exacerbated serious problems that were already present in the current organization of healthcare delivery. It also brought to the forefront that nurses are essential to the delivery of healthcare in hospitals but that their work environment is increasingly challenging, making the profession less and less attractive. The observation period of nurses in the ED in the context of this research highlighted how harsh and maladapted the environment actually is. One aspect that was brought up by a less experienced nurse was the pressure that was exerted by the CF, specifically the pressure to move patients around to create space for new patients. Since the nurses will often have extra patients in chairs or even stretchers around the nursing station, not in a treatment bay, PI10 discussed the internal pressure exerted on staff by the CFs pushing hard to move patients around and keep the flow going. This internal pressure also contributed to the harshness of being a nurse in the ED. Nurses exerting pressure on other nurses make this workplace almost unbearable. The pressure exerted by the LHIN to have hospitals meet wait time targets has

effectively been transmitted all the way down the line and is working as both an external and an internal work regulator. In turn, as described by PI10 and PI9, this harsh environment creates staffing shortages as nurses simply become unable to deal with this environment.

Another aspect to nursing work in the ED is the threat of both verbal and physical violence. During the observation period with PO1, it was a usually busy day in the UC area. Everything within the UC area was chaotic; phones ringing, patients and families coming and going in the halls, stopping nurses to ask questions or directions, overhead pages blaring to find individuals, housekeeping "circling" UC to find dirty examination areas to clean, nurses searching for patients in the internal waiting rooms. PO1 was trying to "keep up with orders," and a specific medication was ordered by a physician. Each area of the ED has what is commonly called an "Omnicell," which can be described as an automatic medication dispenser "to provide a comprehensive, end-to-end solution for managing the supply chain" (Omnicell, POC, 2021). As stated on its website, the goal of the Omnicell is to make medication administration safer and faster at the bedside, freeing more time for clinicians to spend with patients.

When PO1 received the order for medication, she tried to find it first in the Omnicell in the UC and then in the OBS area. She was finally able to retrieve it from the EC area and made her way back to the UC. When she delivered the medication to the patient, the patient was now quite angry with all the waiting and was overtly rude to this participant. Unfortunately, this was not a singular occurrence. Throughout this 12-hour shift, I witnessed multiple patients being rude to staff, mostly in regard to wait times.

The other component of violence that makes the ED a tough environment to work in, according to participants, is patient presentation. Two nurses had been recently assaulted and the

threat of violence was real. PI9 explained that when a patient comes to the ED, they are not usually having their best day and will sometimes also be under the influence of different substances. She stated that nevertheless, verbal aggression should not be taken personally and in order to survive as an ED nurse, you had to have a "thick skin." Participants described verbal and physical violence as the harsh reality of working in the ED. The prospect of being put in harm's way and the attacks from patients experiencing a mental health emergency were seen as the main components of the harsh ED environment. One junior nurse basically talked about violence in her workplace as a common occurrence, something that has become a regular aspect of her work as an ED nurse.

> You definitely experience like…so so I have this little game that I play with myself whenever I go into urgent care, especially like on Monday night. When I see that there's like 40 people in the waiting? It's like how long until somebody swears at me. Somebody I've never seen before like just walks out of a room swears at me and then walks back in like how long will that take? And it's usually within an hour. People are waiting more than 8 hours to be seen for sure. Somebody unleashes and you just walk in someone you've never seen before. (PI10)

After being exposed to violence for a while, it appears it becomes natural to their environment, and this one nurse said, she makes it a game to see how long it will take before someone swears at you.

As mentioned earlier, during the time the observations took place, two ED nurses were assaulted quite severely. These assaults had an impact on how participants viewed their work environment. As described by two nurses during the observation period, the first assault occurred when a patient choked a nurse. Initially, the ED RN in the garage was always accompanied by a security guard because they were unable to communicate quickly with anybody in the department. As staff became used to this new configuration, the security guard disappeared to be

replaced by cameras that are only sometimes monitored. The rationale provided to the staff for this change was that the hospital was short on security guards, therefore, they were making things more efficient. It is also important to highlight that the most violent patients come through the garage, often accompanied by police officers or in restraints on an ambulance stretcher. One nurse ended up being assaulted in the garage, literally fearing for their life. PI9 was shaken by this situation, stating that it could have turned out much worse for this nurse as they were alone with the patient in the garage. The garage, as identified by this nurse, raises safety issues, as well as the UC area. UC is built like a circle, where patients "progress" through the stages of the department until discharge. A nurse was also assaulted in this area.

> The nurse was doing blood work on another patient and the… the intoxicated patient came out and punched her and even the patient who witnessed the whole thing happening… Like not just punched her, grabbed her hair, shook her head, it was quite the thing. And so, the patient was even like OH My God! The one who was witnessing, who was getting her bloodwork done witnessed it and was very distraught. (PI9)

Other nurses also spoke about this incident during the observation period, and it left a lot of the staff distraught and rethinking their work environment. PO5 described the nurses working in the ED as "punching bags" for some patients.

When asking a veteran nurse during break time if this type of violence was something new, she said both yes and no. The threat of violence and assault was not new to the ED nurses but in the past, the ED course would have course on violence, and they learned de-escalation techniques. Her ED course was taken over 25 years ago. She attributes the rise in violence, however, to the increasing drug consumption in the streets, as well as the ever-growing volume of patients coming into the ED. She believes that the biggest threat to the security of nurses in the ED appeared when the department became separated into silos, a belief that appeared fairly

frequently during the observations as a way to describe the work within the ED. The different areas (UC, OBS, EC, Resus and triage) are geographically distant from one another, and as one nurse stated, you can work a whole 12-hour shift not even knowing your friend is working. Being separated by walls and corridors makes the intervention of co-workers in an assault situation much more difficult, according to veteran nurses.

This is also true with regard to cooperation and teamwork within the ED. When the ED was smaller, changes in the noise level or pace of the feet on the floor would indicate a change in an area, and nurses usually inquired to see if assistance was required. This is no longer possible. Nurses are now working in silos, often unaware of what is happening in other areas of the department.

As one participant with 15 years' experience in the ED and a total of more than 25 years' experience as a RN notes.

> So, you were asking me about emergency nursing earlier, I think it's become more dangerous, if we are talking about the aspect of safety, it has become way more dangerous, There is a lot of risk. These assaults really affected me. That morning when I came on, I mean that night when I came on, it has just happened and her head was red and she was like… you could tell she was trying to keep it together, emotional… And then you are not done yet because you have to write the SLS, write about what happened, why did it happen… It was unbelievable. (PI9)

Working in the ED is a hard and harsh job. Nurses have expressed concerns about their safety and shared experiences where safety of the nurse and patients was compromised. The threats of violence and assault that these participants discussed also contributes to difficulties with retaining staff. This next section will explore this specific aspect of the work environment.

5.5.5 Lack of Staff, Lack of Respect

This sub-index was brought up by all participants during interviews and observations alike. The central concern for ED staff right now is the lack of staff, the difficulties of retaining both old and new staff as well as the realities of constantly working short staffed. This issue is not new to the ED. What seem to be different are the reasons behind why people are leaving their positions. As PI1 explains, "Ahhhhh it's stressful. It's stressful … You have all these… people are leaving because of the dynamics of the ER, people are leaving because of the scheduling. Lack of staff, lack of respect, hmmm" (PI1). PI1 acknowledges that the ED is a tough environment to work in, it is stressful. When this participant mentions the dynamics of the ED, what he alludes to, as clarified further in the same interview, is putting up with the pressure of a full WR as a triage nurse or managing difficult patients or family with already strained resources. His experience of working in the ED led him to believe that most staff burnouts were linked to the demands of ED nursing, especially in the context of being short-staffed all the time.

In order to relieve the lack of fully trained ED nurses, many hospitals in Ontario have resorted to using non-ED nurses thereby boosting the number of staff on each shift. This is problematic for ED nurses as it creates more work for them in the long term. ED nurses currently have to work with nurses who are not trained in emergency nursing, and they have to do so on a daily basis. This is something new. A team of nurses was created at the research site solely to fill holes in different departments. This team, called the resource nurse team, functions as a medicine unit would function. Nurses are hired on full-time basis; they have a manager but no assigned unit. They float where the requirements in staffing are. They do get trained for medical/surgical bedside nursing as well as some aspects of ED nursing. Most of these nurses end up working in the ED to take care of admitted patients. When using nurses from the resource team, the CF and

Navigator move admitted patients to one area and have resource nurses look after them, freeing up an ED nurse. Problems arise when a patient in this assignment gets a bed on the floor. The bed will eventually receive an ED patient requiring an ED nurse's assessment and interventions, as the admitted patients are usually kept in a more acute area than the UC area like OBS or EC. The resource nurse cannot complete an ED nursing assessment, therefore increasing the workload of ED nurses who must care for their own patients and ensure that the new patient is assessed and properly cared for. PI7 explained that, in her opinion, resource nurses should be trained to do more as ED nurses. As it currently stands resource nurses are filling in the holes with improper training just to fill the staffing assignment sheet.

This situation does not help with staff retention as experienced ED nurses end up filling multiple roles in multiple positions to ensure that some care is delivered. It also increases the pressure on the CF as they have to modify the staffing assignment in accordance with the presence of a resource nurse in an area. The CF has to surround this resource nurse by ED nurses who can handle this increased pressure. Unfortunately, the ED nurses who can handle this increased pressure are also needed in the triage and resus area. This situation happens daily in the ED, more so since the beginning of the COVID-19 pandemic. For some staff, these added responsibilities, on top of their regular responsibilities as an ED RN, are what they described as a lack of respect.

> I think they keep adding and adding and adding tasks to us but not always adding and adding nurses to help with the tasks and the responsibilities and their goals. It is nice that you have goals, you are sitting in your freaking office but are you really there to see what's actually happening on the floor? (PI9, my translation)

This participant verbalized what was heard many times during the observations. Staff was overheard talking about how management did not know what their work was, did not understand

the pressures and the reality of dealing with people. The feeling I had while listening to the nurses sharing their frustrations is that they attributed the responsibility for not knowing the ED work to upper management of the hospital rather than to the actual ED manager or assistant manager. There was a certain awareness that the manager and assistant manager were only trying to fulfill the demands that came from upper management. Despite feeling that the whole organization of the processes of ED care were not adapted to their reality, most of the staff had a positive outlook on or opinion of the manager and assistant manager. This is not surprising given the fact that the assistant manager was recently promoted from the floor to become management and was very present and understanding to the staff on the floor.

The detachment and lack of awareness by upper management was a central component to the lack of respect felt by ED nurses. As PI9 already stated,

> Apparently, this Mr. [CEO] person whoever he is, he took over from the CEO, thought that we should probably set up some cardiac monitors in the garage so that the paramedics… because it's all about the freaking paramedics, not the safety of the nurse or the life of the nurse. (PI9)

This kind of resentment was often expressed during the observations. Staff talked about the fact that the CEO of this hospital was not a medically trained person and was only concerned with the books and the money, as his background was entirely rooted in business administration. The idea of having someone that had never looked after a patient run a hospital of this magnitude was very concerning to a lot of nurses.

Another component of lack of respect concerns the continuous education of ED nurses. In the past, ED nurses were required to attend education sessions on various subjects, all related to ED care; use of rapid infusers, setup and management of Sahara thoracic drainage, triage updates, new equipment coming to the ED, etc. As multiple participants noted, these training or

education sessions have entirely disappeared. Staff are expected to keep their skills up to date but the education is not offered anymore. One participant explained that the educators used to put together an ED day, where nurses could come in and perfect their skills with different equipment, or attend a scientific presentation on an ED problematic, etc. The last time this event was organized, ED nurses had to pay to attend. PI4 felt like this was evidence of a lack of respect to them as nurses as well as it placed them in situations that could endanger patient's lives, as nurses have to know how to use specialized equipment that they will often only see once a year. ED nurses are expected to deliver excellent care and save lives while getting very limited or no continuous education. Most of the education is now done via modules on the intranet of the hospital, modules that must be completed yearly and not related to ED nursing practice. In comparison, other front-line professionals are receiving regular education sessions.

> The medics are pulled off the road once a month for you know, an education day, right? So that means you know they have 12 education days, at least where they are taught and review things that need to be reviewed kind of thing. And to me it shows like the paramedic services is very professional and very well trained and a capable organization to deal with you know emergencies, right? And I just don't see us getting any of that and it would be nice. (PI8)

In order for an ED nurse to further her education, education sessions have to be attended on a day off and each nurse is responsible to try and find a good course. This is not easy when some equipment used is specialized to the ED and its patient population. As ED nurses, as "Jacks of all trades, master of none," the breadth of knowledge and skills they have to acquire and maintain is very wide. They identify this as being professionals, being able to care for patients in an appropriate manner with the right equipment. As funding was shifted in the past years to try and maintain adequate staffing levels through the novice program, discussed earlier in this chapter, the retention and training of existing ED nurses has dwindled. ED nurses must now seek

out their own training and share new tips on how equipment functions among themselves. This is inscribed in their experience as ED nurses. I remember my days in the ED where we had lunch & learns, presentations, skills days, etc. I also remember how prepared and ready to work in any situations it made me feel.

5.6 Conclusion

The results presented in this chapter followed significant experiences lived by ED nurses every day in their workplace. Three main indexes were identified during data analysis through mapping and written accounts: Flow, Epic and the resulting experience. Under these three main indexes, sub-indexing was done using mapping to attach experiences to the broader organization of nurses' work. Every participant talked about flow and different aspects of flow. The process of mapping led to the question of how flow is organized within the ED. Epic became the main organizer of flow in the ED. Finally, the experiences of nurses that were related to the centrality of flow and the use of Epic as a work organizer were mapped. In keeping with the IE methodology, the experience of participants was central in the results, but the organization of their work and the institution remained in view throughout the analysis and the writing up of the results. IE is not only about experiences but focuses on the local and translocal social organization of participants' work. Questioning flow, processes, and experience, then using mapping to explain it, allowed for a deep understanding of nurses' work in the ED.

Chapter 6: Discussion

At the time of writing, the situation in EDs across Ontario and Canada is deemed critical with a widespread lack of staff, increased death in ED waiting rooms, and longer than ever wait times (HQO, 2022). Some analysts have stated that the Canadian healthcare system is "broken" and needs to be restructured to ensure that Canadians get the healthcare they need (Bell et al., 2023). What is absent from these discussions is a deeper reflection on how the healthcare system became inadequate for the needs of Canadians. Some highlight the lack of family medicine practitioners or other trained healthcare providers and cite lack of funding as being responsible for the state into which the healthcare system has fallen (Bell et al., 2023).

From the conception of this research, my aim was to understand and explore the work of ED nurses and how it had been affected by the changes to the healthcare system. This work sheds light on the rationale behind the changes to the healthcare system and the repercussions it has had on the way care is delivered – a subject that is rarely discussed. The theoretical framework laid out the perspective employed in this research project or neoliberalism as a specific type of governmentality.

This chapter will first set the stage to better understand the empirical data collected in this research study by presenting a discussion of the large system changes operating in Canada and Ontario since the implementation of Medicare (Section 6.1). The second section will discuss how the adoption of a supply chain rationale in the delivery of care became necessary for hospitals to compete in an "artificial" market (Section 6.2). The third section will show how technologies of governmentality were used to enable the transformations of the healthcare system into a market (Section 6.3). The fourth section will show the construction of nurses as new subjects in this transformed ED (Section 6.4) The last section will discuss the reasons behind the difficulties of

nurses to understand and critique their new reality in the way the system is currently organized. This section will also introduce the idea of resistance in nursing practice.

6.1 Governmentality Applied Macrostructures

Neoliberalism as a specific form of governmentality involved arranging the reality of actors in order for them to behave in a specific manner (Dean, 2006). Using governmentality as a perspective for this study allowed for the questioning of practices and rationales involved in shaping the reality of people. The arrangement of specific knowledge to create new or different accepted truths, interventions, technologies, and clusters of actions are central in an analysis using a governmentality framework (Dean, 2006). The specific manner in which the healthcare reforms happened clearly highlights the following of a specific rationale, that is, neoliberalism.

6.1.1 Medicare in Canada

Canada's publicly funded healthcare system, Medicare, was established in 1968. It currently operates under five main pillars: public administration, comprehensiveness, universality, portability, and accessibility (Government of Canada, 2016). Since its implementation, this system has been deemed as unsustainable; even in the early 1970s, the idea of a publicly funded healthcare system-initiated discussions of increased economic pressures and sustainability by politicians and economists (Ostry, 2012; Rankin & Campbell, 2006). In order to stretch public dollars, federal and provincial governments began planning a transformation and restructuring of not only the healthcare system, but also of the approach and understanding of health in general in the early to mid-1970s (Marchildon, 2012; Rankin & Campbell, 2006; Norcliffe & Bates, 2018). The initial agreement between provinces and the federal government was that each party would invest 50% of the cost of Medicare. By the late 1970s, the federal government funding in health transfers accounted for 37% of the health expenditures of the provinces. Now, federal transfers

for health account for only 10-11% of the provincial health expenditures (Mackenzie, 2016). To make the budget work or obtain a balanced budget, the provincial government turned to hospital administrators to make healthcare more efficient and as cost conscious as possible. The administrators then turned to nursing care, which they perceived as the largest of their healthcare expenditures at the time, and they specifically targeted nurses' time management and staffing ratios (Coburn, 1988; Rankin & Campbell, 2006). The decreasing funding from the federal government increased the pressure on provincial governments to decrease funding in healthcare. Medicare is managed similarly in each province, following an unsustainability rationale. This then pressured hospital administrators to deliver cost efficient care, which resulted in individual nurses becoming responsible to not only deliver care faster and cheaper but also to determine where reforms could be introduced to save money within hospitals. Multiple rounds of cuts and reforms to the healthcare system, in all provinces, by different governments have led to a weakened health system, as evidenced during the COVID-19 pandemic (Wooley, 2020).

6.1.2 A "New" Rationale – The Responsible Patient

From the beginning, the unsustainability of Medicare created the need for reform to address these critiques. In 1974, the publication of the Lalonde report entitled *A New Perspective on the Health of Canadians: A Working Document,* introduced a new rationale in the management of health and the creation of health policies. What was novel about the Lalonde report was the introduction of four distinct elements making up the concept of health fields: lifestyle, environment, health organization, and human biology (Lalonde, 1981). Lifestyle. according to Lalonde (1981), suggested that people were mainly ill because of personal decisions, or they had taken unnecessary risks. Smoking, motor vehicle accidents, obesity, or risky lifestyle were blamed for the unsustainability of the healthcare system in Canada. In other

words, Canadians were basically responsible for the increasing rates of morbidity and mortality. Environment was closely linked to lifestyle, as it was the surroundings of the individuals in which they had no choice (e.g., air quality Foth & Holmes, 2018).

Taking these two concepts together, environment and lifestyle, demonstrates the links between of governmentality and responsibilization. Governments needed to act on the environment to entice changes in behaviour or lifestyle that increased mortality and morbidity in the Canadian population. Arranging the environment of populations to behave in a specific manner is a classic example of the "conduct of conduct" (Dean, 2010, p.18). Individuals become responsible to act in a rational manner to preserve their own health. Individual behaviours can be changed using three distinct manners: persuasion, coercion, or legislation. The empirical data of this research provides evidence that people are now responsible for their own health, and whether or not they use healthcare appropriately. From this perspective, the rational individual should make the appropriate choices to preserve and maintain their health, thereby negating the need for large hospitals. However, this research demonstrated that nurses defined patients as bed blockers, or as not using the ED appropriately, when in reality, patients should be the reason why the ED is there in the first place. Presenting to the ED as a patient with a medical complaint has almost become treacherous, especially when they have a "positive bag sign" as described by Fry (2012) and discussed in the literature review section. Patients coming to the ED with luggage (the bag sign) were seen as not being responsible for their wellbeing and were accused of basically dumping their health problems on the ED staff. The reality of a changing patient identity is in keeping with the ideas initially presented in Canada by the Lalonde report.

6.1.3 Common Sense Revolution

In the mid 1990s, the first political party with an election platform openly declaring that cuts and downsizing were necessary for the healthcare system was elected in Ontario. Mike Harris was chosen as the leader of the Progressive Conservative Party of Ontario (PCO) in 1990 and was subsequently elected as Ontario's Premier with a majority government in 1995. The slogan of his electoral campaign was the "Common Sense Revolution" through which he sought to address the province's rising deficit by reducing the size of government, cutting social support payments, privatizing state assets, and decreasing personal taxes (Keil, 2002; Nesbitt, 2018). I begin my analysis with this particular political landscape in Ontario because Harris is widely regarded as the embodiment of neoliberal policies and state restructuring (MacLellan, 2009; Nesbitt, 2018). Harris and his team developed their political platform following Thatcher and Reagan's political platforms responding to the critique that the state was too big. They implemented a neoliberal approach to the state, with "mantras of private and personal responsibility and initiative, deregulation, privatization, liberalization of markets, free trade, downsizing of government, draconian cutbacks in the welfare state and its protection" (Harvey, 2000 as cited in Keil, 2002). Between 1995 and 1998, 40 entire hospitals were closed, provincial health spending was decreased by 18%, and many other hospitals were forced to close beds. In fact, after closing more than 10,000 beds between 1995 and 2003, and laying off thousands of nurses, Harris famously went on to compare nurses to workers in a Hula hoop factory, meaning that nurses were obsolete in a healthcare system that provided highly technological care on the one hand, and the prospect of the increasing privatization of healthcare on the other (Malek, 2020). This type of thinking led to a flurry of changes within healthcare in Ontario that will be explored in the following sections.

The transformations initiated by the Harris government still profoundly impact the present organization of healthcare in Ontario. In 2022, Ontario saw multiple temporary ED closures due to nursing staffing shortages (Wallace, 2022). According to the Ontario Hospital Association (OHA), in 2019 Ontario had the lowest healthcare expenditure per capita of any province, and the lowest number of inpatient hospital beds per capita in the world, 25 years after the introduction of an overt neoliberal rationale to the management of healthcare. The Harris government's deep cuts to healthcare expenditures also included the privatization of certain healthcare services, especially in long-term care (LTC). In expanding the private ownership of LTC homes, the Harris government approved the construction of multiple LTC homes that were then managed by for-profit companies, such as Extendicare and Chartwell. These companies continue to generate billions in revenue every year (Malek, 2020). Upon retiring from politics, Harris himself became the Chair of Chartwell, one of the largest of these companies. In 2021, Ontario had the highest percentage of private for-profit LTC homes at 57%, compared to the national average of 29% (CIHI, 2021; Stall et al., 2020). Current research has shown that for-profit homes consistently provide care that is inferior to municipal or other non-profit LTC homes (Stall et al., 2020). The COVID-19 pandemic painfully highlighted these discrepancies between for-profit and non-profit LTC homes in Ontario, where residents of for-profit homes died at a much higher rate than residents of non-profit homes (Stall et al., 2020).

The changes and rationale championed and implemented by the Harris government precipitated recurrent reforms and cuts in Ontario's health system. From 1996 to the present day, the same rationale continues to be applied to the management of healthcare institutions. Different governments (Liberals and Conservatives alike) have been in power since 1996, but the fundamental notion that the system is too big and must be reformed as it is not sustainable

remains. The years between 1996 and 2006 saw a progressive strengthening of the implementation of neoliberal policies in healthcare. The following section will focus on the reform of the healthcare system in Ontario since 2006, where the ideas of performance, efficiency, and waste avoidance within healthcare have become central to its redesign.

6.1.4 Changing Healthcare in Ontario

The Kirby report (Canada, Parliament, Senate, Standing Senate Committee on Social Affairs, Science and Technology, 2003), made public in 2002, restated that, across the country, the healthcare system was unsustainable and must therefore be reformed for efficiency and focus more on the careful use of financial and human resources (Boothe & Carson, 2003). The background of the Kirby report was a call for a wide privatization of healthcare in Canada as a way to solve the unsustainability problem. The efficiency rationale in healthcare was applied in Ontario, in part through the integration of healthcare services. Integration, as it relates to healthcare, means that all parts of care are seamless. Agencies planning and delivering healthcare are integrated and communicate with each other for the "better" delivery of care. For example, in 2006, the Government of Ontario legislated the creation of 14 regional offices (named Local Health Integration Networks [LHINs]) to manage the delivery of funding to healthcare providers. In the following sections I will discuss in further detail key initiatives and reforms in the neoliberalization of healthcare in Ontario. First, I will discuss the implementation of the LHINs in Ontario and the funding reform which led to the establishment of the *Quality-Based Procedures* and the *Health Based Allocation Model*. Then I will discuss the Ontario Wait Time Strategy (OWTS).

6.1.4.1 Local Health Integration Network (LHIN). In an effort to decentralize care and bring healthcare management and planning to communities, the Liberal McGuinty

government (2003-2013) legislated the establishment of 14 LHINs in Ontario to replace the existing seven regional offices. McGuinty's Liberal majority government ran in the post-Common Sense Revolution era, promising to increase spending in healthcare. However, this government basically continued with the same rationale used by the Harris government, albeit with different terms. The LHINS were responsible for planning, funding, and integrating healthcare in their specific geographical region (Lysyk, 2016) (see Appendix I for a map of each LHIN's geographic region). LHINs are crown agencies, meaning they are publicly funded but at arm's length of the government; the decisions made by the LHINs must be aligned with the government's priorities, but the tools used to reach these priorities belong to the LHINs. Each LHIN determined how they would distribute the money, according to which funding formula. In other words, the arm's reach of the government does not extend to decisions about how hospitals and other healthcare sectors are to be funded. The priorities in the delivery of healthcare are set by the government but the funding given to these priorities and health organizations are determined by the LHINs. Previously, the regional health offices were part of the government and elected officials made decisions regarding funding and funding formulas for distribution of money throughout the healthcare system. In contrast, the LHINs were constructed according to a business framework wherein a Chief Executive Officer manages the operations and the staff of each LHIN, and employees are non-elected officials mostly trained in business and management. LHINs were responsible for the planning, funding, and *integration* of six health sectors: private and public hospitals, LTC homes; community care access centers (CCAC), community support service agencies, community health centres (Lysyk, 2016). By 2010, all 14 LHINs had assumed their full functions.

The implementation of LHINs did not curb health spending. According to the Ministry of Health and Long-Term Care (MOHLTC), the growth in spending for healthcare remained unsustainable and the system urgently had to become more performant and efficient (MOHLTC, 2012). Therefore, in 2012, the McGuinty government announced the Health System Funding Reform (HSFR). The HSFR represented a move away from a global funding model to a patient-based model. In a global funding model, each hospital receives a lump-sum payment for the upcoming year's expenses in hospital operations (including infrastructure and equipment maintenance) (Lave et al., 1992). In a patient-based funding system, hospitals receive payments to cover direct patient care only, at a rate set by the LHINs (MOHLTC, 2008). A small part of the funding a hospital receives remains global on a year-to-year basis and is to account for general maintenance of the buildings and infrastructure. The switch to patient-based funding was enacted in two distinct ways by the LHINs; through Quality Based Procedures (QBPs) and Health Based Allocation Models (HBAM).

6.1.4.2 Quality-Based Procedures (QBPs*).* Quality-Based Procedures are procedures for which hospitals receive a set amount of money per patient (see Appendix J for all QBPs in Ontario). The payment amount is determined by healthcare experts, based on established clinical pathways and target length-of-stays (LOS, in days) (MOHLTC, 2022). Under this model, if a patient exceeds the established LOS, the hospital is responsible for covering the costs associated with the increased LOS. Inversely, if a patient is discharged sooner than the LOS target, the hospital does not have to repay the excess, meaning they can profit; the more patients are seen, the more funding can be obtained, ever increasing the imperative of efficiency and performance (MOHLTC, 2008). Using the QBP for hip or knee replacement as an example (see Figure 2), providers must aim to follow these algorithms and meet the set wait times designed Wait 1

(assessment) and Wait 2 (from decision to treat to pre-operative admission). Once admitted to the hospital the target LOS is 4.4 days, meaning the patient must be discharged home within this timeframe for the hospital to recover all costs associated with this surgery. According to the MOHLTC, all aspects relevant to patient care (including co-morbidities) are captured in this flow diagram, meaning they are captured in the target LOS. The implementation of QBP's had serious consequences for healthcare services and nurses. If the hospital wants to make a profit, they need to reduce the cost of services, which meant they needed to cut nursing services. For example, if a knee replacement surgery required 24 hours of continuous nursing services during a short admission, changing it day surgery requires only six to eight hours of nursing services. Surgeries such as knee replacements or hysterectomies became day surgeries, cutting the required nursing care for these patients' previous overnight stays. This is made possible by reinvesting the surplus mentioned earlier in more technology to create procedures that require less nursing time and supplies. The establishment of QBP's forced hospitals to change the way they delivered care in order to generate this surplus and remain competitive in their wait times to secure incremental funding. Supplies could also be bought more cheaply if bought in bulk; this led to hospitals merging. Previously publicly funded services such as linen or housekeeping were privatized, leading to the creation of part-time precarious careers within the healthcare industry (Armstrong & Armstrong, 2010).

Figure 2: QPB for Hip and Knee Replacement

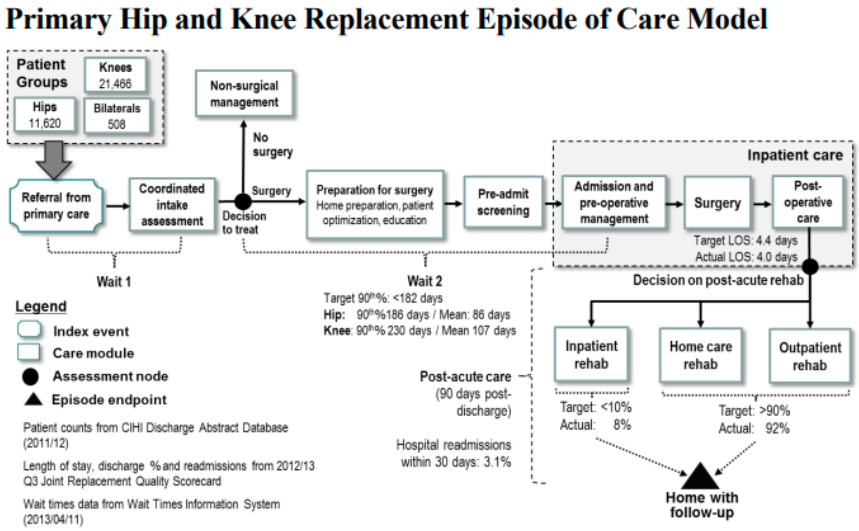


Figure 11: Episode of Care Model for Primary Hip and Knee Replacement

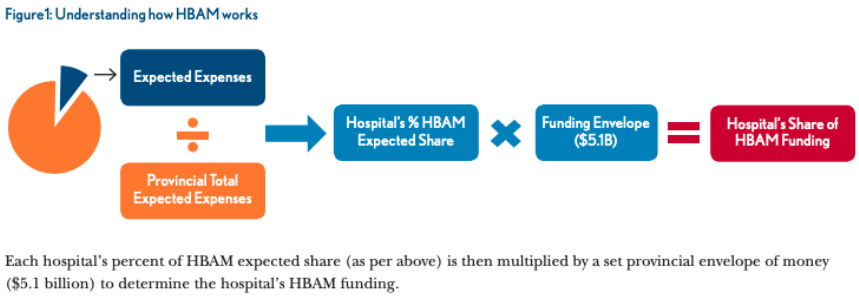
Note. Taken from the QBP handbook of the MOHLTC. Neither the handbook nor figures have been updated since 2013. Available at: https://www.hqontario.ca/Evidence-to-Improve-Care/Health-Technology-Assessment/Other-Publications/Clinical-Handbooks-for-Quality-Based-Procedures (HQO & MOHLTC, 2013, p. 63).

6.1.4.3 Health Based Allocation Models (HBAMs). HBAMs were created around two concepts: volumes and prices. The volume, or service, considers the number of patients that present at the hospital. To determine the volume, HBAMs use demographics such as regional characteristics to create a weighted case and determine the predicted level of "burden" each patient places on the hospital (OHA, 2016). The price, or unit cost, is determined by the provincial average for each weighted case with adjustment factors like community characteristics or geography (Figure 3). HBAM in the ED uses community traits such as education, geography, and numbers of frequent users to adjust the funding based on hospital location. Presently, HBAM and QBPs are central to hospital funding in Ontario, accounting for 70% of the total funding. The remaining 30% of funding is still attributed to hospitals through the global funding model (OHA,

2016). This funding model increases pressure on individual hospitals, forcing them either to increase the volume or decrease the price.

Figure 3: HBAM Funding Model

HBAM Funding Model



Note. Taken from OHA, 2016 (p. 2): https://www.oha.com/Documents/HBAM-What%20You%20Need%20To%20Know.pdf

6.1.4.4 The Ontario Wait Time Strategy (OWTS). Launched in November 2004, the OWTS was developed by the McGuinty government to increase organizations' accountability for healthcare management regarding wait times across Ontario (Lavis & Mattison, 2016). Hospital administrators were tasked with developing ways to capture, track, calculate, and share metrics related to wait times (also referred to as performance) for five key areas, namely cancer surgeries; cataract surgeries; hip and knee replacements; Computed Tomography (CT) and Magnetic Resonance Imaging (MRI); and cardiac revascularization procedures (Trypuc et al., 2006; Irish, 2017). These metrics directly influence how the provincial government allocates healthcare spending. In other words, the most productive and efficient hospitals (i.e., those with the lowest wait times for the five key areas) would receive more funding than their under-performing counterparts (Trypuc et al., 2006). The McGuinty government touted two primary benefits to the OWTS. First, it made all individual hospitals accountable for their operations. Second, it introduced competition by requiring hospitals to compete for the shortest wait times to

secure incremental funding. Competition between hospitals would drive performance and increase the incentive to meet the set wait times (Trypuc et al., 2006).

6.1.4.5. Wait Time Information System (WTIS). In the planning stages of the OWTS, consultants emphasized a lack of information as the central issue in Ontario's healthcare system; if hospital management and clinicians have ready access to data about their performance and the performance of other organizations, performance within health organizations would improve overall. To capture and track the massive amount of data stemming from the OWTS, the McGuinty government developed and launched the WTIS in 2005 (Hall et al., 2009). The WTIS captures historic and live wait times across the province and makes this information available to decision-makers, other hospitals, and the public. Since 2006, it has been mandatory for hospitals to report their wait times; a failure to report wait times results in a label of "non-compliant" on the WTIS website[4] (Trypuc et al., 2006). Naturally, a precondition for the WTIS was finding a way to standardize wait times across the province. Therefore, *wait time indicators* were developed based "on the advice of the clinical expert panels" (Trypuc, 2006, p.48). Wait time indicators set a certain standard or goal for hospitals to reach, and these standards are continually modified based on the performance of the overall system (i.e., the province) (Hall, 2009). Since its implementation, the WTIS has been the defining characteristic of the OWTS and is regarded as a beacon of transparency of wait time data among hospitals, government, and the public. The next section of this chapter will discuss how the healthcare system was transformed using a supply chain rationale by integration the elements discussed in this section.

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[4] See: https://www.ontariohealth.ca/our-work/public-reporting/wait-times

6.2 Governmentality Applied- A Supply Chain Rationale

The last section clearly outlined how healthcare was transformed on a provincial or macro dimensional level in Ontario over the last decades following what I described as a neoliberal rationale. But my results highlight the meso- and micro dimensions of these political changes – meaning what happened in the hospital and what these transformations mean for the nurses working in the ED. In the theoretical discussion, I already highlighted that one major change between the classical liberal approach and neoliberalism is the idea of competition. By conceptualizing all actors in a given society as entrepreneurs interested only in their own wellbeing and wealth, neoliberalism emphasized the need to create endless competition – not only among corporations, institutions, etc., but also among individuals. To remind the reader, the basic idea of competition is that only if economic actors can freely compete against each other will the best possible outcome be achieved. The government should create and maintain conditions enabling "free" competition automatically leading to the best possible, most efficient, and most effective outcome because of "consumer" choice. However, this rationale cannot easily be implemented in a healthcare system like Medicare that pretends to be based on the ideas of universal and publicly funded healthcare. The notion of free market competition would produce privatized healthcare systems in which all actors act based on economic rationale – both citizens investing in their private health insurance and private healthcare providers who sell their services in an "unregulated" healthcare market. Because of the significance of Medicare for a Canadian "identity," federal and provincial governments cannot just completely privatize the healthcare system, but instead can only take indirect steps in to accelerate the privatization of healthcare. One major step in implementing competition in the Medicare is to transform hospitals. What is important to remember is that in Ontario, hospitals are the only healthcare providers allowed to

generate surplus and to keep the money to invest in their institutions toward state-of-the-art technologies or construction for example. Thus, hospitals already have an incentive to try to generate profits and invest them into their infrastructure to achieve an advantage in the healthcare market. Seen from this perspective, the "new funding" QBP/HBAM model forced hospitals to decrease their "input" costs because the only way to generate surplus was to decrease the costs of medical and care interventions. This is why hospitals began to merge, to outsource many services, or to implement PPPs – de facto privatizing huge chunks of Medicare without publicly acknowledging it. With the implementation of QBP and HBAM, the government reconceptualized hospitals into a product line, defining diagnostic groups as the product of the hospital and thereby conceptualizing care, medical interventions, laboratory services, and everything else that is needed to produce QBP as one production line. Transforming care into part of the production line led to the implementation of Lean management, which was only a logical step in this transformation. Once the hospital is seen as a production site, hospitals would compete against in each other to deliver the product more cheaply than its competitors.

The transformation of the ED is another important aspect in the materialization of this central rationale because it allowed adding another dimension to competition among hospitals. The P4R initiative introduced competition among EDs in the province as patient stays are not only measured in time units, but they are also classified by CTAS score, then are compared within the province to all other EDs. This was the *data* section of Dr. Hudson, the architect behind the initiative of data, shame, and money plan, as previously discussed in chapter one (Oven, 2011). The public reporting of ED wait times (still available online) constitutes the shame aspect and the money section is all about funding. EDs that reach or surpass the provincial wait time targets receive incremental funding above the initial base funding. Focussing on

performance in regard to wait times transforms the ED into a logistical problem – because the decisive question is how to change the logistics of the ED in such a way that the largest amount of raw material (patients) can be processed in the quickest way possible. Outside the hospital this approach is known as “supply chain” meaning, like in Lean management, “the right resources at the right time at the right place.” This is how flow became the central truth of the new ED. The idea of flow is not only to process patients faster but is also about ways to make this process as efficient as possible. The “new” EDs central goal is now to see the maximum amount of people in the smallest amount of time, to make the processing of patients as efficient as possible. To attain this goal, the first part was to establish flow or movement as the central preoccupation of the ED and the ED nurses. The ED today is just another form of logistics and not different to logistics in other productions sites, like automobile or consumer goods production.

6.2.1 Flow as the Central and Only Truth

The results presented in chapter five emphasized that the concept of flow in the ED has become central to almost every nursing action. During the interviews, flow was mentioned 164 times with an ever-expanding definition. Not only did participants in the interviews often refer to flow as a concept, participants in the observation periods “worked” flow. The frenetic pace of work described in the UC, where the PN nurse finds empty beds, goes to retrieve patients to fill the empty beds, and has empty beds cleaned only to fill them again (all accompanied with numerous medical orders) was visual evidence of flow. Flow was literally described as the processing of patients in the ED. The same applied to the literature as flow and throughput were used as terms to describe the movement of patients through the ED and the entire organization (DeAnda, 2018; Esbenshade, 2015; Garrett et al., 2018; Murphy et al., 2014; Ray & Reinoso, 2019). Thus, in the literature, the concept of flow reduces the ED to a logistical problem as EDs

were described as performant when they could process patients or flow patient faster from admission to discharge (Baker et al., 2013; Vose et al., 2014). The participants in this study highlighted the importance of flow, or the supply chain rationale as a central ED goal. For example, one participant (PO1) was eloquent in describing the idea of patient movements before the implementation of P4R, or before 2009. She stated that in the past, patient movement through the ED was already an important aspect of her work, but the importance of moving patients through was less than helping patients to alleviate their pain or addressing their medical emergencies in a timely manner. She thought that ED care at the time was "real" ED care, where only patients requiring immediate medical attention were admitted rapidly to the department and were seen by ED nurses and physicians. Patients presenting with lower acuity concerns, CTAS IV-V, were made to wait to see a physician in a different section of the ED (PO1). Wait times in the area (also named the UC at the time) were not monitored and patients were literally seen one at a time, from ten in the morning to six in the afternoon. She stated that if these patients were not seen during these hours, they were sent back to the waiting room to wait for a non-urgent space to open. At that time, once patients with assigned CTAS of IV-V came back to the waiting room, their chances of being seen by a physician after ten pm were very slim. The logistical problem of flow has changed drastically with an increasing emphasis on paying attention to wait times and non-urgent patient presentation in the ED, which in turn required the re-design of the architecture of the ED. The space of urgent care area in the ED, for example, has been increased in order to accommodate and enable the flow of these patients (see Appendix H). Not only has the available space been increased, but the resources deployed to see and discharge patients with less acute presentations within the set target of four hours have more than tripled. PO1 and PI5 indicated that in the past, there was one physician with one nurse attending to patients presenting

with a CTAS of IV or V. Now during the day, up to five nurses and three ED physicians plus ED residents are assigned to the UC area. When a patient cannot get in to see a family doctor, or does not have a family doctor, they seek care elsewhere, and they often come to the ED. Beck et al. (2023) clearly demonstrated that failure to access a family practitioner has a direct correlation with increased ED visits and a more difficult and cumbersome access to healthcare. In order to deal with the increased pressure of seeing more patients and the pressure of and discharging these patients within the wait time targets imposed by the LHINs, flow needed to become the central reality of nurses and physicians working in the ED. This central reality was created by the need for increased funding, as outlined by the LHINs. Making flow efficient, fast, and easy to track became central in the restructuring efforts of EDs and ED teams (Combs et al., 2007; Considine et al., 2012; Deutsch, 2008; Edwards & Lewington, 2010; Elder et al., 2015; Fry et al.).

6.2.2 Efficiency

The Cambridge dictionary defines efficiency as "the quality of working well in an organized way, without wasting time or energy" (*Cambridge Dictionary*, n.d). Being efficient means that a product is built or created without wasting labour, time, or material. Efficiency in healthcare means the same thing; it is to deliver care without wasting time or resources (human or material). In the literature, efficiency was mostly referred to in terms of performance (Almulhim et al., 2020; Baker et al., 2013; Bobb et al., 2018; Fay et al., 2018; Kerasidou, 2019; Pati et al., 2014). The idea of efficiency was introduced in a systematic manner when Lean management was implemented in EDs by the LHINs, as Lean was hailed as the best way to improve efficiency (Beck et al., 2016; Rotteau et al., 2015; Schull et al., 2013). As clearly stated in the definition of efficiency, this concept refers only to procedural aspects of care and the need

to have an efficient and performant ED. A performant ED is described as being able to process the maximum number of patients in the quickest possible manner. It is also an ED that meets target wait times more often than not (90th percentile) (Baker et al., 2013; Vose et al., 2014; Trypuc et al., 2006). What is largely ignored, as it would be inefficient, are discussions around patients' experiences in the ED or nurses' working experiences. Melon et al. (2013) also argue that any ED striving for efficiency and performance cannot provide care that is centred on a patient's wellbeing such as palliative care and patient education.

Epic has become the overall management tool in the ED (and hospital more generally) and is another central instrument in directing the efficiency efforts of the teams, because the only accurate way to measure efficiency is through the timekeeping and process registering abilities. Once the triage nurse clicks "triage complete," a cascade of triggers appears, all virtually generated in Epic (registration, destination in the ED, etc.). It is between these checkpoint clicks, or conveyor belt point (a term used by participant PI1 to describe how he feels about the organization of the ED), that efficiency is measured and monitored.

The other salient example of clicking for efficiency is the CDU virtual space. CDU was created at the time that P4R was implemented as a way to stop the clock on wait times, enabling EDs to avoid going over approved wait times for patients who were identified as requiring a longer length of stay – those waiting MRIs, for example. Participant sites could decide to make CDU a physical or a virtual space. CDU at the research site for this study was solely a virtual unit. In the case of virtual CDUs the impact on the work of nurses is minimal as is a simple administrative task or click. Patients "transferred" to CDU (by moving their names to a section in Epic) physically remain in the same stretcher and area but the clock on their visit is suspended. The clicks literally suspend the wait time for these patients as they are placed in a virtual cloud to

await imaging results or discharge to a LTC home. The placement of a patient in a virtual CDU has absolutely no effect on the number of patients physically present in the ED as it is solely a game of playing with the clock to make it look like the ED is being efficient in the care delivered. The patient, waiting on a stretcher does not get extra care or even an explanation about their wait time in the ED. The only change noticeable happens through Epic.

Hospital management early on realized the potential of the CDU to artificially meet wait time targets without moving patients out of the ED, thus protecting their funding and increasing their competitive advantage with other hospitals. At the beginning of the implementation of the CDUs some hospitals virtually "moved" many of their patients into CDUs and became "high performers" in regard to their wait time targets, outperforming their competitors. A fundamental aspect of governmentality is that governments often identify problems that they then try to address through specific strategies and programs (Dean, 2010). However, often these strategies do not work in the way they were intended, as is the case of the CDUs, and then these programs need to be adjusted. Changes in strategies occur because actors might not react in the way the planners of these programs intended.

Another example of the difficulties in implementing strategic programs is the EMR. Forty-seven percent of the articles included in the review of the literature on the work of ED focuses on performance or the effectiveness of the ED in moving patients through. Calculating flow is made possible with the use of an EMR like Epic. Breaking down an ED visit into steps makes it possible to calculate in units of time each step taken for the movement of patients. As Rankin (2015) demonstrated, the use of EMR has unintended consequences for the relationship between nurses and patients and the communication between healthcare workers. EMRs like Epic are implemented with the rationale of making documentation faster, which Selph (2014)

argues is central to the management of nursing care in the ED as charting is viewed as an ineffective process. Research in the field of ED nursing care strongly suggests that no-value added activities such as charting should be eliminated (Richardson et al., 2014; Selph, 2014).

One aspect not mentioned in the literature was the idea that EMRs serve as a technology supporting the realization of the political rationality in place not only by orienting the relations of nurses with their work and patients but also by directing which priorities of change within the organization must be initiated next. I have discussed what governmentality studies understand as the technology of governmentality and Epic certainly must be considered one of these technologies. Epic organizes nursing work at the local level, ordering and categorizing what nurses need to know from the patient, but it also organizes the work of managers by highlighting where time is "wasted" in the work processes. Thus, the neoliberal rationality of logistics, supply chain, or flow materializes in the design of Epic, and it directs the way nurses perceive their patients because it predetermines what information can be entered into the system and what information is perceived as "important." This in turn enables interventions into processes deemed inefficient. Smith (2005) and others called this "governing at a distance" – the nurse becomes caught up in the logic of the documentary systems and applies the rationality lodged in the system. Furthermore, the data gathered through Epic becomes the starting point to revise and adjust original strategies. For example, based on the data gathered from Epic, management began to focus on what Epic identified as the longest processes and targeted them for improvement. For example, the triage time of patients skyrocketed at the research site after the implementation of Epic. Participants contended that they became so "slow" to triage that the waiting room was literally filled with patients waiting to be triaged. The bottleneck in flow moved from patients waiting to be admitted to the floor to patients waiting to be triaged. The "solution" to this

problem came with having the triage clerk instead of the triage nurse undertake the quick registration. This point will be developed further in a later section of this chapter.

A second solution was the initiation of an OHIP card swipe at triage, which automatically populates the name, age, and date of birth in Epic. Although only seconds separated the difference between one process and another, it appears that every second counts in this supply chain rationale. The only reason why nurses and administrators knew that the triage time was much longer was through the use of Epic. PO1 and PI6 stated that the initial expectation was that triage would take a little longer in the beginning but that it should be much improved after using this system for a while. However, the triage time only minimally decreased as time went on, triggering meetings with staff, managers, and project managers to investigate the root of the "problem." It was decided that interruptions during triage were the cause of the longer times. Any "waste" or inefficiencies at the beginning of the flow needed to be addressed, a finding also corroborated in the literature on ED performance (Richardson et al., 2014; Selph, 2014). Flow can sometimes be seen or felt but it happens mostly through screens and clicks.

The important element of interruptions at triage relates to longer wait times. Once the patient has undergone quick reg, the clock starts. If the triage nurse takes an hour before they are able to triage someone, the time elapsed counts toward the four-hour time frame. This significantly decreases the time available to see, treat, and discharge this patient. As triage is a closely monitored and researched area of the ED for funding, it became important to address the interruptions there, due to the possible economic repercussions for the department.

6.2.3 Interruptions as Hindrance to the Supply Chain

Workplace interruptions can be perceived as negative or positive depending on the healthcare provider's experience and the reason for the interruption (Berg et al., 2016a, Berg et al., 2016b). During the observation period, it became evident very quickly that interruptions were not only numerous but extremely disturbing to the sequence of nursing work. Forsyth et al. (2018) argued that workflow interruptions, meaning anything that interrupts nurses in their thinking or work processes, was highly correlated with errors like medication errors that occur in the ED. Participant PO1 was interrupted over 15 times in the span of 20 minutes after coming back from her break. Seeing her fly from one demand to another, from various people who were not her patients became a red lightning bolt on the observational protocol. As Myers et al. (2016) argue in their article, interruptions can produce a certain alienation of the patient. While PO1 was answering the multiple demands around her, she had no time to go back in her patients' rooms to reassess them or provide care. At the time of data collection, all COVID-19 measures were in place at the research site. The coupling of interruptions and the use of PPE produced a double alienation of the patients. Not only was PO1 struggling to address the interruptions, but she was also trying to "bunch up" the care before going in a room in order to avoid the need to don and doff protective equipment multiple times. These interruptions to bedside care are rarely, if at all, addressed by unit managers and project managers in the ED, providing further evidence that the data currently collected to ensure the efficient functioning of the ED is not capturing information vital to understanding the patient and nurse experiences of care. The systems in use in the ED to ensure efficiency are rewarding to the system and not to patient care, nurse wellbeing, or patient outcomes – that is, they are a system folded back in on itself that rewards self-monitoring for the sake of self-maintenance.

Under a neoliberal rationale all aspects of life (or work) become re-framed in economic terms and these aspects have to be producing something of value, meaning either increasing revenue or efficiency. Once a patient is registered in the ED and sent to a treatment area, their LOS is no longer affected by the nurse being interrupted countless times per hour. The only aspect that is affected by these interruptions is the experience of the nurse and the patient. These aspects are not captured in Epic for funding or benchmarking, therefore they are perceived as not important. Myers et al. (2016) established a direct link between interruptions in the ED and lean management. Their study concluded that any interruptions in the ED must be looked at in terms of its added value to the patient only, not the wait times. This study highlights the fact that nurses feel overwhelmed and overworked in part due to being constantly interrupted as it is not perceived as something to be changed because it does not affect the recorded LOS of the patient. What became clear during the observations is that these interruptions matter most for the nurse and the patient. In fact, being pulled in all directions at all times is in part responsible for the retention issues experienced in the ED.

6.2.4 The Construction of a Supply Chain ED

Now that the efficient flow of patients is the main goal of EDs, I will try to demonstrate how flow fits in with a manufacturing or supply chain rationale. It is also in keeping with the idea of a neoliberal rationale where performance and competition are central aspects. The first aspect of this construction was well explained by PI1 when he used the words “conveyor belt” to describe his work. The second aspect of the new ED that demonstrates this rationale is the paramedics’ board which constantly displays which ambulance is coming when. Finally, I will discuss how the ED patient was transformed into a product.

6.2.4.1 Evidence 1: The Conveyor Belt. The term "conveyor belt" was used by participant PI1 to describe flow. During his interview he was describing the movement or flow of patients through the ED and how important this was to the work of ED nurses. When asked to describe what flow was to him, he stated "[I]t's a conveyor belt, it's a conveyor belt of people coming into the ED and you look after them" (PI1). What PI1 describes here is the idea of a supply chain rationale. Once the patient arrives in the ED, the quick reg done by the clerk using the patient's OHIP card basically sets them onto the supply chain, or conveyor belt. This is where "product" assemblage happens (the product being the patient that will be discussed in the next section). The same analogy, with different terms, was used by PO5 when she called flow a "perpetual loop." What she meant is that it never stops; the flow or movement of the patient is continuous. This movement secures funding for the institution. The creation of this supply chain rationale, or flow, requires the elimination of processes that do not contribute to increasing the movement of patients through the ED, such as documentation and emotional support or any process deemed as no-value added (Richardson et al., 2014; Selph, 2014).The supply chain of the ED must always be moving and producing as this is the only way to generate funds. The work on this perpetual loop is never done, as patients, as products, keep coming.

6.2.4.2 Evidence 2: The ED Patient as a Product. The ED patient is now defined as a problem – a problem to be solved. This is in keeping with a neoliberal rationale where governing is also a problem-solving operation. The ED patient is now a product, loaded onto the conveyor belt at triage and removed when discharged or admitted to the hospital, for a total cost result. Hospitals and nursing are not in the business of care anymore, they are in the business of production; they are producing results, being paid for it, and improving their performance based on an analysis of their products. As PI5 stated, "We don't care for you, we care for the money."

A patient is no longer a complex assemblage of social, economic, gender, cultural and physiologic components. A patient is now reduced to their presenting complaint, or what they are treated for on the conveyor belt. In the ED, patients are now also reduced to their assigned CTAS at triage, then to their presenting complaint.

This reality was only made possible with the implementation of texts like Epic that literally restructured how providing care for humans is conceptualized. Epic enabled the standardization of a patient, effectively stripping them of their less-predictable human side. Every aspect of their visit in the ED is placed in a standardized box, then compared on the provincial market. After years of practice, these neoliberal tenets were implemented in the workplace, mind, and identity of nurses in the ED. This profoundly changed not only their interactions with patients but their perception of what it was to be a nurse in the ED. A poignant example of the internalization of the neoliberal discourse became evident during interviews, where all participants were asked to imagine what the perfect ED would be without space or funding restrictions. All participants stated that the perfect ED would have more staff and more space to hold all patients presenting to the ED. They would keep the same rationale behind ED nursing care and the same processes that led to marked work intensification in their workplace. The ideas of unsustainability and the inherent need for constant cost cutting efforts are so deeply embedded into ED nursing care that participants cannot even think of another way to deliver care. These ideas have been prominent now for so long that the ability to question the whole system, or to understand the rationale behind the arrangement of their workplace, has become impossible. This aspect of the findings is in keeping with Melon et al. (2013) who highlighted how the discourse of the nurse was now centered and structured around management strategies such as Lean. Nurses not only work the conveyor belt, but they also speak its language.

Electronic systems enabled the separation of a patient's identity to be placed into standardized boxes that can then be benchmarked and sold on the provincial market. Hospitals are then attributed funding, as if they are actually selling patients' data. Hospitals must function at over capacity at all times to stay competitive in this market. Because of this need, nurses are over worked and understaffed, and, in order to survive and cope with this kind of a workplace, have to dehumanize patients as they matter very little in an arrangement that is fundamentally a market transaction. Neoliberalism as a rationale does not take into consideration that humans are variable, particular, and complex realities. Regardless, all patients must fit into standardized boxes, it is seen as the only way forward.

6.2.4.3 Evidence 3: It's All About the Medics. Patients arriving via ambulance are also seen as a product and are even announced as incoming. The importance given to paramedic offload times was discussed at length by participants. The nurses felt that too much effort was put into taking patients off the stretchers of paramedics. PI9 discussed how the management and distribution of paramedic crews throughout the city was a failure resulting in multiple ambulances being sent to one ED at the same time. PI9 also felt that the security of the nurse or the patient did not matter to the institution as it has been suggested that the triage nurse should triage patients coming in by ambulance. She also believed that the offload target time of 30 minutes was rarely met but that when it was, it was only to "look good." She stated that the patient might be offloaded but that meant that a nurse somewhere in the department was required to handle extra patients. The role of the offload nurse (OLN), created to address concerns of increased mortality and morbidity due to offload delays, has been discussed in the literature (Elliott et al., 2020; Greaves et al., 2016; Schwartz, 2015). However, this role has had unintended consequences as certain patients never actually enter the ED; they are seen and treated in the

offload area, effectively removing them from full ED care (Elliot et al., 2020; Greave et al., 2016). The arrival of patients via ambulance also means the addition of product onto the supply chain that is the ED. These patients are triaged and registered then sent either to the offload or treatment area. (A complete ambulance patient encounter can be found at politicsofnursing.ca.)

What is different in the handling of these patients at the study research site is that ambulances are announced on a public board in the ED. The paramedic services of the city paid for this electronic board to be installed as a way for individual EDs to see live the "traffic" of ambulances in all EDs in the city. As mentioned earlier, this board bears striking similarities to boards at a fast-food chain restaurant where customers can follow the processing of their orders. Participant PO3 stated that the board was not useful to the staff as the data displayed only how many ambulances were dispatched to one site over 12 hours. However, this board is actual evidence of the implementation and maintenance of a supply chain rationale in the ED. The workings of this supply chain require technologies not only for its implementation and maintenance but also in the governing or ruling of the people that work it. This next section will discuss technologies of governmentality at play in the ED.

6.3 Governmentality Applied: Technologies of the ED

Epic is an electronic medical record that is used throughout health institutions in North America (Epic, 2022). It was implemented in healthcare organizations with the hope of increasing productivity, efficiency, and performance (Epic, 2022). Technologies of government that materialize as a neoliberal rationale are centred on performance and efficiency (Dean, 1996). Rationality is a systematic way to respond to "problems" or situations using specific knowledge and expertise (Dean 1996). When discussing a political rationality, such as neoliberalism, rationality can be described as a specific way of thinking about governing people or the state.

The current ascendant political rationality, neoliberalism, re-inscribes all aspects of life and governing in economic terms. In order to govern using a specific rationality, technologies of government are required. Technologies of government are any instruments, tactics, or procedures that make a specific political rationality effective (Dean, 1996). Epic can therefore be seen as a technology of neoliberal rationality. Its creation and implementation was done with promises of increasing time for nurses at the bedside by increasing the efficiency of charting and order processing (Epic, 2022). When nurses engage or activate the screens or texts in Epic, they effectively become neoliberal agents, as they give the text a voice through their reading and subsequent actions (Smith, 2005). The two components of a textually mediated relation are the text and the reader. One side is fixed, the other moving: "One party to the conversation is fixed and non-responsive to the other; the other party takes on the text, in a sense becoming its voice-even […] its agent" (Smith, 2005, p.105). It is at this specific juncture that Epic becomes a technology sustaining ruling relations. The next section will discuss the use of Epic as a technology of governance.

6.3.1 Electronic Charting in the ED

The implementation of EMR in any health organization aims to increase efficiency and productivity, therefore decreasing what Selph (2014) qualified as "inefficient processes" (p.368). Nursing actions that do not result in adding value (such as decreasing wait times) become the target of restructuration or have to be eliminated. It is with this rationale that EMRs like Epic are implemented. Pearson et. al., (2013) in their focused ethnography, found that nurses perceived electronic charting as an extra barrier the patient-nurse relationship. Rankin (2001, 2003, 2006, 2015), through her studies, was able to demonstrate, using IE, that electronic charting not only distances the patient and the nurse, but it also produces several unintended consequences, such as

missing aspects of patients' complaints or medical histories as the nurse follows the categories presented on the screen. Rankin (2015) also demonstrated that EMRs are the basis of benchmarking and enable transformations in nurses' workplaces that create intensification of work and dissatisfaction with careers. These findings from the literature were supported by the findings of this research. Terms such as "glorified data entry clerks," and "task monkeys" were used by participants to describe their work as it related to their use of EMR. This study also showed that in the context of a world pandemic, not only does the EMR create a distance in the therapeutic relationship, but also the use of PPE dug this trench even deeper. The rearrangement of computers (left outside the rooms) literally pulled the nurse outside the room, and basically left the nurse looking in at the patient. Outside of the work of Rankin (2015), the use and consequences of EMR in the ED has been discussed only randomly by researchers, despite it being central to performance within the ED. As a technology of government, Epic enables not only the calculation of metrics (LOS, PIA) but also the organization of nurses' work at a distance, or ruling relations. What came to the forefront in this research is how the need for Epic based on a neoliberal rational had even produced a physical restructuring in the ED to enable the placement of the required hardware. Physically, the ED had to be rethought to accommodate the placement of computer screens, Workstations on Wheels (WOWs), as well as Rover or the handheld devices to use Epic. These three different mediums of use each require specific steps to access, and they present different screens and capabilities. For example, the Rovers can accommodate for the scanning of blood work code bars, but narrative nurses' notes cannot be entered. Nurses and all ED staff required extensive training before the implementation of Epic, which I argue was designed to modify their practice in order to make Epic possible in the ED. They had to become used to using a computer to chart, but also to learn how to progress through

the categories presented on the screen. Certain steps, such as clicking the "triage complete" button for the patient to be registered, were never required before. Furthermore, before clicking the "triage complete" button, the nurse must acknowledge boxes (triage start, for example) without the patient being physically present. Their work is then governed at a distance as they cannot start physically triaging the patient before acknowledging these boxes. Epic's attributes as a governance technology resides in how it rules the work being done by nurses in the ED.

Smith (2005) explains that texts are present in people's activities. This presence coordinates how they organize their work locally and translocally as texts, especially in healthcare, present a sequence of actions that the reader will usually follow. This modifies the ED nurse, so that they become a neoliberal agent, as they activate the texts within Epic, carrying out processes that have an economic and market rationale. Nurses in the ED can be seen logging onto Epic from multiple locations within the ED; this represents, on one hand, the replicability of the texts, but, on the other, how much the sequence and the organization of their work is similar. Nurses in the ED sign-on to Epic using their ID badges. The movement of reaching for their badges and tapping it on the sign-on pad was replicated over and over throughout the shift. It is the fastest way to sign-on to Epic, but not the only way, as they still can use username and password. The next step was the clicking of the mouse to first select the area they were in, then scrolling down to the section or patient they were looking for. These steps of their work were accomplished in a very robotic manner. The use of the EMR in the ED caused a complete redefinition of the organization of nurses' work to accommodate this supply chain rationale.

When the analogy of a conveyor belt was used by participant PI1, as discussed in the previous section, it not only referred to flow but also to Epic as the conveyor belt becomes possible or even visible with Epic. The architecture even accommodates the idea of the belt

because even the way the halls run through the ED is thought of in terms of flow or production; larger halls basically run one direction from the waiting room to the treatment areas with colored dots on the floor to indicate which way the assigned section is. The treatment areas are larger and built like an inpatient department, where the nursing stations are surrounded by rooms and hallways (See Appendix H). The patient is not a patient anymore, it is a product worked on a conveyor belt by the manufacturing workers, the nurses. These checkpoints through the conveyor belt are the metrics captured for funding in the ED (LOS, PIA, TTT, etc.). The most visible part of the implications of Epic during the observations was just that, a conveyor belt. Click, click, click on the computer, the patient is then virtually present in the room (or next step of the conveyor belt). Epic and the architecture of the ED have also created parallel realities for nurses, which will be discussed next.

6.3.2 The Creation of Parallel Realities

I will first describe what I mean by parallel realities using the ideas of Smith (2005) and local experience. The local experience, as discussed in the methodology chapter, is the interaction of the knower with their environment, the activation of texts, and the subsequent organization of their work. Once the knower has activated the text by entering data in it, their local experience becomes disentangled from the institution and becomes translocal, being read and worked upon by different people in different realities (Smith, 2005). This is also the description of ruling relations or the power to organize work at a distance using a textually mediated reality. Once an order is entered in Epic, it creates a list of work or tasks for individuals in the translocal, basically across the institution. A good example of this kind of ruling relation occurs when an x-ray is ordered on a patient by the physician. The physician enters the order and the nurse, after they click on the clipboard in Epic, reads the order. They then go on to locate the

patient and directs them to the imaging department. Simultaneously, the technologist in the imaging department plans the influx of patients coming on their "roster." Once the patient comes to the desk, they activate the text created by clicking that the patient arrived. This is a representation of parallel realities, where both the nurse and the technologist work in silos, without talking to one another, in different realities yet all related to the creation of one electronic order. The implementation of Epic and the creation of the centrality of flow in the ED also created this silo work within the department where nurses work basically alone, in silos one next to another.

PO5 pointed out that newer nurses do not ask for help and work mainly alone, "even if they are drowning" (PO5, observation day 1). Perry (2013) suggested that the role of clinical nurse leader in the ED came to fill this gap or the space between the silo realities of nurses and the possible holes it creates for patients. At the research site there was no role specifically designed as discussed by Perry (2013), but the role of CF was the closest to the definition of this role. The clinical nurse leader aims to "anticipate flow," "mitigate risk," and be a "team manager" (p.335). A clinical nurse leader is a role created solely to address the repercussions of implementing a neoliberal rationality in the ED. Not only are nurses working in parallel realities due to the architecture of the ED (each area is distant and closed off to other areas), but the intensification of their work also created by the imperative of flow has separated their realities, or their work environment as a result. PI1 asserted that teamwork is now non-existent within the ED, with Epic pulling nurses and physicians further apart by using the messaging features as a means of communication within the department. This "new" (non)communication form in the ED leads to uncertain care conditions. In one example, a medically precarious patient was being monitored from a distance by a medical team and the nurse assigned to this patient did not know

how critical this patient was. This led to a near death experience for this patient, which could have been avoided if the medical team had been at the bedside, communicating with the nurse.

Multiple participants also referred to the "nursing communication orders" as creating parallel realities. These orders are entered in Epic by physicians asking for nurses to feed patients or even provide an extra blanket (PI1). Person et al. (2013), in their ethnography of the ED, also noted this change in communication as it relates to the use of an EMR as a significant finding, as it added space between providers and patients, potentially leading to increased mortality in the ED. The realities of the nurse, the physician, and the patient at that point are completely parallel, they only collide on Epic. Epic is one technology of governmentality in the ED, but not the only one. The application of these technologies will be discussed next.

6.3.3 The Application of Technologies

Governance could be described as governing without a central entity. Governance is, as Brown (2015) argues, agentless, and makes processes as the institution itself. The rationale also always follows an economic mantra, where the processes that are transformed can directly be marketized. This is where Epic becomes a governance tool, as seen in this research. The work of nurses in the ED is now ultra-reliant on Epic: how to find a patient, see an order, complete an order, initiate a visit, or even perform care. All these processes are dependent upon the information entered in Epic, or the textually created reality. Everything that happens to a patient in the ED must be captured on Epic; these are the processes of care. Currently ED nurses are continually participating in efforts to "fix" problems in the processes of the ED. The organization is reduced to a problem-solving exercise, where the line between the textually created reality and the physical parts of this reality become hard to reconcile, just like in a supply chain industry.

Participants noted the way in which a patient could be "virtual" for a long time, meaning that they existed only in Epic. This "virtual" status resulted in patients being sent to rooms in the ED to wait, with no care, as the nurses were unaware of their presence in their respective assignments. Participant PO4 was on a night shift on break while a patient waited for a full hour, seated in an OBS treatment room, as no one knew they were physically present in the room. This resulted in delays of assessing and caring for the patient. Or, a patient could be only virtually transferred to a room, and no physical patient is seen. This was often the case in the UC area where nurses had to literally go around the whole area calling patients' names in order to provide medications or complete an order on their chart. Regardless of how much time was wasted by the nurses running around trying to find a patient, what kept going was the virtual flow; what was important in the process of transferring a virtual patient into a room was the time stamp given to the patient's visit in the ED. When studying flow problems, this encounter does not register as a longer wait time to get into the room, even if care was effectively delayed. The most important aspect of this practice is the image of performance and effectiveness it produces. This finding was also discussed in the literature as the idea of flow, which is why time stamping in Epic became a major theme when I reviewed the work of ED nurses. Patient care was surpassed in importance by the idea of flow, or keeping patients moving (Baker et al., 2013; Gilardi et al., 2014; Mumma et al., 2014; Price, 2009; van der Linden et al., 2019; Vose et al., 2014; Whatley et al., 2016).

Brown (2015) also spoke about the removal of certain values within organizations that were replaced by economic discourses and values. The observation periods demonstrated that values of empathy, compassion, and care had been effectively replaced by values relating to the neoliberal rationality as throughout this research, it became evident that the central priority of

nursing care in the ED had become the need to keep the flow going (virtually, if not in reality), a priority that had an economic rationale because it was based on the need for funding.

Using and signing on and off Epic has become an automatic process that also influences discussions with patients. The best example is the interactions at triage. Triage is the starting point of a patient's journey through the ED and even sometimes through the healthcare system itself. Regardless of the patient's presenting complaint, the triage assessment was always coordinated in the same manner, closely following the categories presented on the screen. Assessing the patient's presenting complaint was most of the time reserved for the end of the triage procedure. The first section consisted of the medical history, medication list, presenting history, and vital signs. During the analysis phase of this study, I reflected on my own practice to find a reason why this process was the same for every nurse at triage. Selph (2014) explained in their study how processes in the ED had to be performant and efficient, from triage to discharge. It became evident to me that nurses were following this exact sequence of triage for performance motives as a frank display of the use of this technology of governmentality. If the nurse adheres to the pre-established sequence of triaging, the space for variation is greatly diminished, and thus the nurse's work is ruled closely. This is to say that nurses follow the categories on the screen of Epic that are pre-determined by a company in Wisconsin with performance and efficiency central to the design of their software. Again, this is related to what Brown (2015) refers to as governing without a government and principles of governance and what Smith (2005) calls ruling relations. The fact that nurses' work in the ED has been standardized to meet these parameters speaks to the power of ruling relations, arranged translocally, to influence the local actions of nurses. It transforms their experiences.

The implementation of Epic in the ED certainly arranged the possible realm of actions for nurses, from guiding the next steps of their work to the interactions with patients. Melon et al. (2013) in their ethnography also found that standardized aspects of practice, such as CTAS, direct and organize the work of nurses. During the observation periods, I noticed that another very important technology of governmentality became prominent in the work of the ED nurse. Signs are now plastered on every wall that rule the actions of nurses. For example, one sign was posted in an area where most nurses draw blood from patients waiting to go into a treatment area, warning them that four common laboratory tests were being over ordered. These tests were often part of orders contained in medical directives. Especially interesting to me were the specific instructions to nurses on how to manage these tests. For example, nurses were told that they MUST do a urine dip demonstrating nitrites or leucocytes before sending it to the lab for a culture. The other sections all referred to specific policies and procedures to entice a certain practice change by the nurses. Just as nurses were encouraged to use medical directives, using algorithms in the ED was not only encouraged but strongly advised as otherwise nurses could cause, as one sign stated, "patient harms". Melon et al. (2013) also stated that the work of nurses in their study was dependent on and organized by algorithms using a best patient care rationale when in fact the box checking behaviour was only present to fulfill the demands of efficiency in the ED. The conduct of nurses in the ED is modified to adhere to the neoliberal rationale underpinning their work. The ED contained multiple signs that were meant to alter the conduct of nurses in specific situations. They provided instructions on the management of Covid-19, end-of-life care, respiratory distress, oxygen delivery, communication with other providers, and prevention of falls in the ED, etc. All these signs demonstrated step-like procedures to follow in order to address specific situations, from assessment to intervention. Nurses in the ED are

expected to closely follow these procedures; if they did not, the suggestion was that it would lead to a dire outcome for a patient and the nurse would be perceived as a "bad" nurse (PO1, day1). As PI1 stated in his interview, nurses chart now to cover all their bases and to avoid being disciplined but at the same time, they are demonstrating compliance with the overarching neoliberal rationality. These disciplinary reminders in the form of signs signal that the nurses must conduct themselves in a specific manner.

The last technology of governmentality discussed in this section will be medical directives. Medical directives were created by the OHA, but how they would be implemented was worked out entirely by nurses. There are currently 18 medical directives available in the ED (Appendix K). Medical directives provide the nurse with a checkbox type of algorithms that must be followed for different patient presentations. Once a patient meets the all the inclusion criteria and none of the exclusion criteria, the nurse can then implement a series of orders ranging from medication administration to diagnostic imaging and laboratory testing. Medical directives now appear natural to nurses in the ED; they are just something to be done automatically in OBS and EC. The use of medical directives has had a direct impact on benchmarking throughout the province, and therefore on the attribution of funding. As nursing work intensified, administrators believed that the answer to the increased pressure was more efficient processes. However, efficient processes that served efficiency from an economic and neoliberal perspective were at the root of the intensification of work. By failing to recognize this, nurses ended up in a second perpetual loop, with efficiency leading to intensification, intensification leading to efficiency, and efficiency leading to further intensification. Despite the complete reorganization of his workplace, participant PI8 described medical directives as an

efficient process Participants in this study seemed not to be aware how medical directives directly contributed to the intensification of nurses' work in the ED.

Medical directives have as their stated goal the lowering of LOS for ED patients (Dewhirst et al., 2017). When discussing a directive like analgesia, it is interesting to see the findings mingled between wait times and delay in analgesia administration but not reporting on the experience of nurses working with the directive Most participants were aware of the language around the funding targets but shied away from linking process changes to their current working conditions. Interview participants discussed at length the issues of space capacity, patient volumes, and staffing ratios without questioning the root causes of these issues.

The implementation of a supply chain rationale in the ED, supported by technologies of governmentality such as Epic, has led to the creation of a new subject, the new ED nurse. The next section will discuss what this new ED nurse looks like now.

6.4 The "New" Subjects

The first three sections of this chapter demonstrated how the healthcare system and the EDs were transformed under neoliberalism, a specific form of governmentality. The ED in particular was transformed using a supply chain rationale with its main goal being the processing of the maximum number of patients in the shortest time and using the least amount of resources. In order to achieve this goal, a number of technologies of governmentality were implemented, from the use of the EMR, changes in architecture, and the modification of the nurses' work. This new ED, paired with the use of these technologies, deeply altered not only how nurses perceive their work, their selves, and their profession but it also changed how they operated within this new ED. This last section will discuss the new subject operating in this newly defined ED.

6.4.1 Devaluation of the Workforce

Nursing shortages in the ED across Canada are now a known fact and the reasons behind these shortages are often talked about in terms of rate of pay and working conditions. However, another important aspect of nursing shortages was brought up during the observation periods and the interviews. Multiple participants referred to the saying "a nurse is a nurse is a nurse" (PO3, PO5, PO6, PI1, PI9, PI5, PI7). What they meant by this is that regardless of how nurses perform as an individual in the ED, the individual self does not matter. If anything happened to a nurse, preventing them from coming to work, they would be replaced by another, as all nurses are considered replaceable. Retaining nurses in the ED is a complex matter, and many new nurses end up leaving the ED shortly after finishing their orientation (PI6). The research site for this study had multiple, very experienced nurses take early retirement due to the current state of their workplace. Years of pushing and pushing to shorten wait times led to work intensification so acute that withstanding it became very difficult (PI5). For this reason, the staff in the ED now is "very green," that is, there is an overabundance of young, inexperienced nurses and very few older experienced nurses (PI1 and PI6). When reflecting on the reasons why the staff is so green and why older nurses are leaving (without significant efforts, on the part of hospital administration, to retain them), the idea of a malleable and cheap workforce emerges.

When the wait time initiatives were first implemented with Lean in the ED, the pace of work was very different from what it is today. The ratio of new staff to older staff was lower. Resistance to change came primarily from the older nurses, as they were concerned both about patient care and about the devaluation of their work. These nurses have now left and have been replaced by much younger staff who adhere to the rules and regulations of this new system, taking these as the status quo as they have never experienced anything different. The current

state of their workplace appears natural; this is the only way they know it. Additionally, their salary is in general significantly lower than those of more experienced nurses, resulting in another way to cut costs for the ED. This "revolving" door of nurses coming and going from the department has resulted in an extra burden on the experienced nurses who remain. The statement that a nurse is a nurse can also be used in reference to the supply chain rationale employed in the ED. All actors are replaceable as the flow (or production) must never stop. The work of the ED nurse has become so "mechanical" with the use of algorithms used by the medical directives or CTAS that the single worker (the nurse) on the assembly line is not required to think or have specialized skills. This enables the perpetual flow of patients on the conveyor belt that is the ED.

6.4.2 Making the Individual Nurse Responsible

The process of the devolution of power or responsibilization within governmentality, or more specifically neoliberalism, has as its main idea to move power away from a central location and pass it to smaller and weaker units within the system (Brown, 2015). Every actor becomes responsible for the performance and efficiency of the organization by enabling, through micromanagement of their own individual performance, an increase in efficiency. The responsibility for the "survival" of Medicare in Canada was passed to the provinces, which then turned to hospital administrators as smaller weaker units. At the end of this devolution of power are the nurses and other healthcare providers at the bedside. Nurses in the ED have little to no say in decisions made by the CEO and board of directors, yet their work is necessary for the survival of the whole healthcare system in Ontario. In the ED, the micro knowledge that nurses had of their workplace and its processes was not only instrumental to but required to implement Lean management methodology. Once these Lean management methods were in place, ED nurses were responsible to keep the processes in place and to work within the set parameters. In

this sense, less powerful actors in the healthcare system become responsible for the survival of the whole system. Nurses in the ED are required the work in a perpetual loop of flow and keep a frenetic pace of work to meet funding targets. What keeps the pressure on the hospitals and nurses to perform and shorten wait times is the benchmarking that happens throughout the province. As Brown (2015) explained, the devolution of power within a neoliberal rationale creates the need for competition. Nurses in the ED are now responsible for all actions they take and for all aspects of their practice.

6.4.3 Burnout, Violence and Responsibilization

The subject of burnout in the healthcare worker community is not new and has been discussed intensively during the COVID-19 pandemic. The literature shows that stress-induced burnout of ED nurses arises from high workloads and exposure to trauma (Adriaenssens et al., 2011; Adriaenssens et al., 2012; Adriaenssens et al., 2015a; Adriaenssens et al., 2015b; Basu et al., 2016; Browning et al., 2007; Hooper et al., 2010). There was also a degree to which burnout was "taken for granted" or "part of the job" for ED nurses. Recruitment and retention of nurse are extremely difficult in the ED. Most experienced staff expect new nurses to leave shortly after their training period and many participants attributed this to the harshness of the working environment (PI1, PO5). High workloads, multiple patient demands, and constant pressure to work faster were all aspects of the harsh work environment discussed by the participants. PI1 described it as a tough environment where new recruits have a hard time adjusting and surviving.

Violence as a factor of burnout was also a major theme both in the literature and the accounts of study participants (Gates et al., 2011; Hamdan & Abu Hamra; AlBashtawy & Aljezawi, 2016; Nikathil et al., 2017; Taylor & Rew, 2011). Participants shared that they had witnessed severe physical and verbal aggression. Participant PI9 stated that witnessing their co-

workers being violently choked or shaken left other nurses fearful of their safety. Beyond this, it left them distrustful of the process of reporting violence to managers. As PI9 explained, nothing ever really happens when a nurse files a complaint of workplace safety after being assaulted. She argued that it seems like it is the nurse's fault the patient assaulted them. This belief of PI9 was echoed in the literature as multiple studies of violence against nurses in the ED highlighted that victim blaming and lack of support by managers was a common theme shared by ED nurses (ALBashtawy & Aljezawi, 2016; Gates et al., 2011; Lau et al., 2012a, 2012b; Nikathil et al., 2017). It is well established that poor quality of care, patient avoidance, and decreased productivity are direct results of being either the victim or witnessing a violent event in the ED (Gates et al., 2011).

Another way that ED nurses are now being made to feel responsible for the violence against them in the ED is by being required to take the Crisis Prevention Institute's Nonviolent Crisis Intervention training yearly. Nurses must attend this class every year to avoid being suspended without pay. This training is a way to make individual nurses responsible for their safety and includes tips on how to recognize possible violent behaviours and provides de-escalation techniques and defensive methods to prevent injuries when assaulted (CPI, 2022). This training represents one way in which hospitals can divest themselves of liability for violence in the ED, but it is not functionally useful in terms of reducing the violence experienced by nurses. PI9 stated that CPI training matters very little when you are being choked at triage with no one in sight to help. At that moment, the nurse is still responsible for the violence: perhaps they could have prevented it, called for help earlier, or better assessed the patient for the potential for violence. Nurses in the ED are now responsible to maintain their own education, as PI4 stated, and this responsibilization also applies to preventing violence and burnout. As a result

of feeling that violence in the ED is a part of the job, participants referred to their work as being tough or risky in some situations (PI10). This finding is in keeping with the literature published on violence in the ED, where violence is almost an accepted collateral consequence of being an ED nurse (Lau et al., 2012a, 2012b, Nikathil et al., 2017).

Violence or acts of violence cannot be quantified or captured in Epic. In fact, none of the work of nurses in the ED is visible in Epic and is never taken into consideration when changes to flow occur. This is evidence of a failure even in terms of its own rationality. As flow is central to the ED, acts of violence should not be ignored as they substantially affect nurses and therefore affect flow. The ultra-reliance on technologies such as Epic in healthcare creates "grey zones" as in the case of violence, as it cannot be marketized and benchmarked for funding. Violence is not recognized as a factor influencing flow therefore not requiring any interventions. In the end, the result is to make the individual nurse is responsible; it is the nurses' job to "make it work" and to "catch up" with the flow after being the victim of a violent act. Another component of the new responsible nurse in the ED is the creation of multiple roles to ensure the continuity of flow or the constant rolling of the supply chain.

6.4.4 The Roles of Flow

As flow became the central goal of the ED, multiple roles were created with the idea of efficiency and performance in mind. Roles like Ambulance Offload Delay (AOD), Clinical Nurse Leader (CNL), and ED flow coordinators were described in the literature as a means to support flow and improve care by reducing its fragmentation (Greaves et al., 2016; Murphy et al, 2014; Perry et al., 2013; Ribas et al., 2018). Roles like Process Nurse (PN), Navigator, flow nurse, Rapid Assessment Zone (RAZ) nurse, and Intake Physician (IP) nurse were all created and staffed for the one single purpose of flow. When these roles were created, the "selling" idea

behind them was that they were always about better patient care; patients would be seen faster in the most appropriate area. What became clear in the observations and interviews is that these roles are not only dedicated to flow in some capacity but also that they increase the pace of nursing work in the area. The PN, for example, keeps bringing patients into rooms in the UC area, leading to very rapid turnover of patients and preventing nurses from completing a full initial assessment on these patients. The frenetic pace of work in this area, described in the results section, is basically the result of this rapid turnover and the PN is in large part responsible for it. Unfortunately, what is described as a "good" PN is a nurse who keeps the rooms full of patients waiting to be seen by the physician, not a PN who supports the nursing staff in completing their initial assessments on all patients or ensures all patients have the necessary items to be comfortable (blankets, pillows, pain medication, etc.). The perpetual loop of the PN work in the UC area is now simply an exercise of problem solving; move a patient from the WR to UC in an empty room and make sure there are always patients waiting to be seen. The role of Navigator was also created for the same reason. It initially was staffed as a "follow-up" role, where the nurse would call patients at home with abnormal findings/results and arrange for appointments or prescriptions to pick up to address the medical issue (PO1). This role was modified when flow became the central organizing factor and then included "pushing" admitted patients to the floor or transferring them to the conference room to free up stretcher space in the acute treatment areas. These actions are all related to flow; pushing patients out to beds and pulling patients into the conference room to create more space are also all related to problem solving activities, just like the rationale of the supply chain explained earlier in this chapter. Whereas the PN is usually part of the team in the UC area (helping with orders and other tasks) the Navigator will rarely get involved in any patient care. Staff will thus often view the

Navigator in a slightly negative light, as was evidenced during the observations when staff working in OBS were resistant to speeding up the process of sending patients to the floor as they were busy and had no time to provide report to the floor nurse (PO5). The roles of RAZ and IP, also created in the ED to support flow, or more specifically, to decrease target wait times, also worked at a frenetic pace but their involvement in patient care was greater, as they were responsible for assessing patients and completing orders. This new ED nurse has then become a specialized agent entirely devoted to flow. Most new ED roles discussed in the literature point to these roles as supporting performance in the ED and decreasing the fragmentation of care (Greaves et al.; Murphy et al.; Ribas et al., 2018). The problem-solving roles created in the ED to support flow have not only transformed the execution and pace of ED nurses' work, but they have also come to rule their work, which I will discuss next.

6.4.5 The Ruling Work of Flow

The element of flow that relates to nursing work in the ED is how nurses rule others. Creating PIP teams for the ED initiated a Lean management rationale by streamlining processes and making the ED more efficient in providing the right process at the right time for the right patient. Many authors have identified not only that Lean management is currently used in healthcare systems but also that it was initially focused on the ED specifically (Deblois & Lepanto, 2016; Hossam Elamir, 2018; Mahmoud et al., 2021). Experienced nurses were recruited to these teams to help inform and transform operations within the ED. As a group, they studied every single detail of nurses' work within the ED and found areas where they believed processes could be streamlined. The process was the same for every single operational change in the ED. It started with a Value Stream (VSM) mapping exercise. As the Lean Enterprise Institute describes it, "A value stream is all the actions (both value-creating and non-value-creating) required to

bring a product from raw material to the arms of the customer" (Lean Enterprise Institute, 2022). VSM was the very first step in transforming a process in order to improve flow, or reduce wait times within the ED. After the VSM meeting, a single area of improvement would be identified as needing improvement, for example, the time between the end of triage and registration (time to registration). As a problem-solving activity in action, the team would undertake a PDSA (plan, do, study, act) cycle on the area identified as needing improvement. For the example of time to registration, the team of nurses, managers, and project managers in the planning phase would identify possible ways to improve this time target. The team at the research site for this study suggested skipping registration after triage and to do it once the patient was placed in a bed. Nurses with open beds in the observation area would have no control over when the next patient comes in as they would be sent directly from triage, and they would have to begin their assessment without having this patient registered. Nurses' work would effectively be ruled by the triage nurse, the registration clerk, and the team that devised this process change. Another idea was to have patients sit in front of the registration clerk right after triage, therefore "forcing" the registration clerk to work faster. These ideas were discussed away from the local experience and among actors who knew what happened at the bedside in general but were not able to take into consideration different situations that nuanced the work or locale. The implementation of these changes represented the local experience and the "do" of the PDSA cycle.

After trialing this new process for six weeks or more, the team met again to see if these changes had indeed improved the time to registration. The time to registration was the major driver in the decision to keep or eliminate the changes in the process. The local experience of the nurses with the process barely mattered in this decision. If the time to registration was shortened during the trial, then the changes would become permanent unless more areas of needed change

were identified during the trial to shorten this time even further. This phase was the "study" part of the PDSA cycle. Acting on these changes is the last phase. This example demonstrates that the ruling of nurses' work locally is accomplished by multiple actors located translocally. In deciding how the ED would function and how the work processes of nurses were to be carried out, nurses in the PIP team ruled their co-workers with the sole intent of decreasing wait times, or answering to the centrality of flow within the ED. Any changes in the work process imagined and implemented by the PIP team transformed the work of nurses uni-directionally, increasing the pace of work by forcing the nurses to see more patients more quickly. Process changes brought into the ED following a Lean management methodology are only acceptable when nurses accept a flow or supply chain rationale. Nurses must then modify their behaviours to answer the flow imperative, which will be discussed next.

6.4.6 Nurses Modifying Their Behaviours in the Name of Flow

Nurses who currently work in the ED but who were there before the introduction of Lean management and the P4R initiative had to significantly alter their behaviours to respond to the needs of flow. First, they had to accept that less urgent patients were to be seen before CTAS III level patients. Many of them struggled with this change for an extensive amount of time. Even to this day, as PI3 noted, some physicians and nurses will deliberately work "against" the process and refuse to see patients with lower acuity first. PI5 even described a time when she was reprimanded for closing the UC, where less urgent patients are seen, in order to have enough staff to care for more urgent or admitted patients throughout the department. As this incident with PI5 demonstrates, the change of behaviour was in this case operationalized through coercion and impending disciplinary action. PI5 had to change her behaviour and put less urgent patients first: she was sternly warned never to close the UC again. This situation created an

important break in PI5's relation with her workplace, so much so that she decided it would be better to leave the ED. This episode was also public knowledge, cementing in the nursing staff the fear of disciplinary action; going "against the current" could induce a real threat.

The pressure on nurses to keep the flow going and patients moving is so strong that, in a way, they are oppressing each other. As an example, the Navigator in the ED is responsible for patient follow-ups and timely patient transfers to the floor. Nurses at the bedside are required to shorten the time to send a patient to the floor, which is accomplished by the Navigator physically interacting with the assigned nurse and inquiring about the timing of the transfer. Some nurses resist this pressure, whereas others do not. Resistance, in this situation, means the nurse is reluctant to send the patient right away, either because they are busy with other patients, or the admitted patient is unstable. Sending the patient to the bed on the floor opens up an empty bed, which will often be filled very quickly by another patient, keeping the pace of work fast and the flow going. The Navigator in this situation had to modify their behaviour and way of thinking; as once a bedside nurse, they know that these continuous pressures of flow and fast pace of work become tiring and stressful for the nurses. Some nurses during the observation periods of the study explained that some downtime between transferring and receiving a patient was a way to catch their breath, or to stop drowning.

It is well established now that burnout in ED nurses is positively correlated to the high demands of heavy workloads (Abraham et al., 2018; Adriaenssens et al., 2012; Adriaenssens et al., 2011; Flowerdew et al., 2012). The literature on the subject and the behaviour of nurses during the research indicate that many nurses are attempting to develop protective behaviours by slowing down the pace of their work. Nurses also talked about how unsafe they felt when the pace was so fast, they didn't have time to think about the tasks they were doing. The internal

pressure the nurses keep on themselves to work faster and more efficiently, to accommodate the flow, is strong and it could be felt during the observations. Webster et al. (2015) argued too that the increased pressure to see, treat, and discharge patients in the ED leads to institutional stress that is not directly caused by patient presentation or patient ratios but solely by nurses' internal pressures to meet the target wait times.

External pressures might come from the CF, the triage nurse, or the Navigator but the nurses themselves maintained this internal pressure. Some nurses would move patients out of bed into chairs around the nursing station on their own, without the CF asking them to do so. They were effectively maintaining the faster pace of work and claimed to be working towards "getting the patients in." The perpetual loop of work in the ED never stops; the patients are never all in as they will always keep coming through the doors. Throughout the observations it was noticeable that some nurses wanted to work faster and faster so all the work would be done, meaning there would be a time when they could catch their breath. Unfortunately, this time rarely came as the volume of patients coming to the ED was ever increasing. This situation was also a component of the behavioural change in the individual bedside nurse in the ED, which became apparent after the second day of observation with PO3. As a CF that day, PO3 had to ensure the flow in mainly the OBS, EC and Resus areas. The day was very busy; the OLN area was full, more than 12 patients were waiting to come to OBS, and 5 patients were waiting for the EC or any monitored bed. There were no available beds on the inpatient units and the ED had 17 admitted patients at the beginning of the day shift. This is what is often called a "gridlock" situation in the ED. The CF has nowhere to bring patients in and nowhere to send them out. The pressure of all these patients waiting to come in can be seen in the CF's behaviour that was repeated over and over again and that can only be described as a compulsion. PO3 would go from one computer to the

other, signing in with a tap of his ID badge, and look at every area within the ED to "see" if there was movement. What he actually was looking at was the same thing from one computer screen to the other; no bed numbers were being assigned and the patients remained in the waiting room, those in the OLN area and the runway were still there. Despite knowing this, he kept going from one area to the other, signing in, and looking at the very same screens. It appeared to be the embodiment of the internal pressure previously discussed. As a CF, there was absolutely nothing he could do to bring in the patients waiting on a bed, but this compulsion was perhaps the internalization of the external pressures he was facing, making them his responsibility.

The new "neoliberal" ED nurse has had to modify their perception of themself as an efficient nurse by initiating medical directives and constantly reacting to the pressures of flow in their actions. Furthermore, nurses' behaviour in the ED has been modified to support the idea of flow through training and "molding" them to new roles within the ED that not only support flow but also help to maintain this internal pressure. The "new" ED nurse has developed new behaviours as evidence of an internalized flow or supply chain rationale. If the supply chain stops, something bad might happen.

6.4.7 Resistance in Nursing

The implementation of a neoliberal rationale in the ED was done with grave consequences to both the care nurses provide to patients and the way they identify with their profession. This last point became evident and painfully real when participants referred to themselves as "task monkeys" or "glorified data entry clerks." The professional aspect of nursing has been replaced by checking boxes and following the categories presented to the nurse on a screen. While completing the data collection, I started to wonder if nurses could resist these changes. My initial response was no, they are not resisting these changes, they have been formed

by this environment, and the problems with the neoliberal ideology have become invisible to them. I then started to reflect on the idea of resistance within a neoliberal context to explore this idea further. Neoliberalism, as explored in the theoretical framework, is a political and economic ideology that emphasizes the importance of free markets with tenets of privatization, responsibilization, and fewer state interventions (Dean, 2010). Governmentality, or neoliberalism as a specific kind of governmentality, refers to the arrangement or deployment of power within society to entice a behaviour that answers the needs or meets the ends of the rationale.

It is in this context, that Foucault (1979) addresses the idea of resistance. In short, Foucault (1979) explains that the sheer presence of power opens up the possibility of resistance. This change of focus in governing the state (to a market rationale) opened up avenues to resist, such as in protests and public demonstrations against cuts to social services, for example. Any action or inaction against neoliberal policies becomes forms of active or inactive resistance. When the ED initially became a Lean management project, forms of active resistance could be seen within the nursing staff; participants shared, for example, how nurses moved charts so patients with a higher acuity were seen first, or they refused to hand patients buzzers to come back for results. This was an active form of resistance against neoliberal changes to the nurses' workplace. Years later, this active form of resistance has become almost impossible, as Epic tracks and displays to all users who should be seen next, according to arrival time. Yet, nurses in the ED still are resistant to neoliberal process changes. This resistance, however, has shifted to a passive kind of resistance. In order to transform all processes in the ED with the PIP teams, experienced nurses were included on these teams to study, plan, and change these processes. Their knowledge of the workplace was essential in operationalizing this shift. As discussed earlier in this chapter, nurses were then responsible for the transformations of the workplace that

led to work intensification and staffing shortages. Nowadays, the involvement of nurses in these committees is not as strong, and the volunteers not as easy to come by. The withdrawing of experienced nurses from workplace change committees is, in my opinion, a form of passive resistance. As the ideas of cost cutting and unsustainability have become natural within the organization, the capacity to critique or even question these changes has become extremely difficult. Yet, active resistance, in the form of protest or publication, is essential for better working conditions, recognition, and patient focused care; it may be the only way to raise awareness of the current system issues.

Chapter 7: Conclusion

In this research, I studied the organization of nurses' work in the ED after years of restructuring and transformation following the installation of neoliberalism as a specific political rationality. Using concepts of governmentality studies, neoliberalism, and IE as a methodology, my aim with this study was to respond to the initial research questions. While responding to these questions I realized that I needed to understand the rationale behind these transformations as they have direct impacts on how nurses see themselves and experience their work. I tried to demonstrate the connection between a political rationality and the delivery of care at the bedside. Too often nurses claim to be apolitical and there to provide care only. I hope this research shows that the underpinning of nursing care is political and that the political rationality in place determines the way care is delivered. Using IE I focused the analysis on the presence, tracking, and mapping of ruling relations in ED nurses' work organization in order to show the "bigger picture" behind the organization of care. The first part of this last chapter will provide a brief summary of the results of my research, somehow closing the loop of this project. The second part will summarize the limitations of this study and the last part will discuss the implications and relevance.

7.1 Summary

The transformations of healthcare systems in Canada appear never to be complete and to never yield positive care results, defined as an increased access to the healthcare system by patients and a better work experience for healthcare providers. Rounds of transformations have left nurses with change fatigue and a significant intensification of their pace of work, increase in violence at the workplace, and the feeling of being replaceable or misunderstood by management from all levels. All these transformations are based on the accepted truth that Medicare as a

publicly funded system is unsustainable and needs to be changed in order to be efficient and cost effective. The privatization of large sectors of care provision created gaps and precarious working conditions for kitchen staff, those working in security, cleaners, etc. It is this climate out of which the problematic of this research emerged. The questions central to this inquiry were focused on how the work of ED nurses is currently organized and how much of this organization of work can be related to the political rationality of neoliberalism. The data collected (observations, interviews, and documents) revealed a certain mapping of the ruling relations in the ED. I first spoke of the arrangement, or the timeline of the changes, brought to the EDs in Ontario, including the Lalonde report as well as the common-sense revolution. Next, I discussed the new goal of the ED or the way in which the largest number of patients could be processed in the shortest amount of time, following a supply chain rationale in the delivery of care. Third, I explained how technologies of governmentality were not only implemented but work to structure nurses' behaviours and conduct in the ED to answer the supply chain rationale. Lastly, I spoke about how this new rationale and the technologies created new subjects in the ED, or the new ED nurse.

7.1.1 The Re-Design of a Rationality

The idea built into Medicare from its conception led to the need for reform focusing on efficiency and performance in hospitals, pushing provincial governments and hospital administrators to stretch the public dollar. This idea was already a change in rationale as Canada was starting to end a Keynesian economic approach – often called a welfare state based on the fundamental idea that the state was responsible for providing some basic services for all, like free education, social welfare, unemployment insurance, free healthcare, etc. Beginning in the 1970s all Western countries started to follow a neoliberal rationale, as discussed throughout this study.

The federal government decreased the funding delivered to the provinces in an effort to shrink the budget allotted to Medicare, increasing the pressure on the provincial governments to do better on the fiscal administration of healthcare. The provincial government turned to hospital administrators to solve this problem and they in turn looked to less powerful actors like nurses. These changes are not only budget changes; it is a deep transformation on how we define society. From there tenets of neoliberalism were implemented in the funding and management of healthcare throughout the country; decentralization, efficiency, performance, and privatization were the focus of the transformations. Large portions of the healthcare system became privatized (which continues to this day) and the decisions in funding and management have been passed down to unelected officials. Hospitals and EDs must perform, meaning they must see as many patients as possible in the shortest amount of time. The same ideas and concepts were applied to the EDs in Ontario. Through the LHINs, the provincial government implemented this artificial competition between EDs, where the most performant EDs would receive increased funding. All EDs in the province are now benchmarked on specific wait time targets and attributed funding according to their performance, or how often they meet the targets set by an entity outside the community or the hospital.

7.1.2 The New ED Rationale

Historically, triage in the ED has served as the entry point into the ED and the identification of patients most urgently requiring medical care. In the past, EDs were arranged to accommodate patients on stretchers who required immediate care while those presenting with less urgent matters were made to wait to be seen by a healthcare provider. This definition of the working of the ED could be labelled as sickest first. Once the idea of "data, shame and money" (Oven, 2011) was employed, EDs across the province had to change their whole rationale on

delivering care in order to remain competitive and keep receiving adequate funding from the LHINs. This required not only the physical re-design of multiple EDs but most important, the introduction of Lean management that had developed out of car manufacturing methods of management. This rationale is still in place and the goal of the new ED is to process the largest amount of product (patients) as fast as possible with little to no waste (nursing time). This is the definition of the supply chain rationale where the chain, or conveyor belt, must never stop. In the ED, the chain is the flow or the movement of patients through the ED. The chain workers are the nurses, and they are following the steps laid out in front of them (like medical directives) to keep the production going. To have nurses follow this new rationale, the deployment of several technologies of governmentality were required.

7.1.3 Technologies of Governmentality

In the discussion section, I elaborated on multiple technologies deployed in the ED to guide the conduct of nurses in order to answer to the supply chain rationale and increase performance. I argued that the most important and visible of these technologies is the EMR. Epic at the research site enabled the tracking and recording of patient journeys through the ED as well as the individual nurse's performance. This tracking enables, in my perspective, the marketization of all aspects of ED care, making it ready to be benchmarked throughout the province. Every little detail of nurses' work in the ED is studied and worked upon to bring improvements or decrease the target wait times. Nurses at triage are "guided" by the eCTAS aspect of Epic where the CTAS score is attributed by the computer and can only be modified by the nurse with multiple clicks for modifiers. The second technology was the architecture of the ED itself; hallways became larger and led to a treatment area identified by a colored dot on the floor (removing the need to have staff take the patient), and areas of treatment for less urgent

patients are bigger, etc. Finally, I discussed how medical directives and all signs plastered on the walls in the ED enticed a certain conduct from the ED nurses. The nurses basically now follow algorithms to provide effective care, meaning care as fast as possible to lead to an earlier discharge. The use of individual thinking is not exactly welcomed as it could lead to delays and is not seen as the best way to provide patient care. Another interesting technology discussed was the use of the paramedics' board, announcing which ambulance went where in the city. This board was a clear reminder of the supply chain rationale in the ED as it echoes the idea in fast-food chains showing which order is being worked on. The new ED rationale coupled with the technologies required to implement and sustain it has created new subjects in the ED.

7.1.4 The New Subject

Central to this research was the question of nurses' work organization. What became clear during and after the analysis was that the new ED nurse is not only concerned with flow, or the conveyor belt, they are also concerned with funding. Participants in this research displayed significant concerns with wait times, funding, and efficiency for the ED, as was demonstrated by the CF signing in from one computer to another with a compulsive-like behaviour, as no patients were moving anywhere. The responsibility of the supply chain (flow) is put entirely onto the nurses who must put in place the processes to work faster and faster with the product (patients). The new ED nurse is also responsible for their continuous professional training, attempting to protect themselves from violence and burnout, participating in committees to further change processes in the name of efficiency, but also to help fill staffing needs through social media. Multiple participants also highlighted how the new ED nurse comes with less specific training when hired but that the duration of a nurse's stay in the ED as a staff RN is much shorter due to continued difficulties in recruitment and retention. ED nurses feel that priority is given to

numbers, not people; as PI5 stated, “We don’t care for you, we care for the money.” The new ED nurses are neoliberal agents, enacting a neoliberal rationale at the bedside with each action. The neoliberal rationale is not only deeply embedded in nurses’ professional identity, but it also appears as a natural construct of their environment. Shocking proof of this was the fact that all interview participants could not imagine another way to deliver care in the ED, all they could see was the need for more staff and more space, highlighting how powerful and difficult it is to resist this rationale.

7.2 Limitations and Outlook

The most important limitation of this study came because of the COVID-19 pandemic. The inability to join the participants with their patients during their interactions at the bedside greatly limited data collection as it pertains to the nurse-client relationship. I suspect that this data would have enabled me to discern ruling relations specific to the bedside interaction as well as help explicate the internalization of the neoliberal rationality all the way to the bedside. I recognize that participants did describe their work processes in detail during interviews, but I also think that small intricate work processes happened at the bedside that I was unable to witness.

The second limitation of this study resides in the inability to engage managers and project managers in such critical research. All interactions that happened with this category of employee were informal or in passing. They all shied away from sitting down to provide a formal interview or even to provide information or numbers on retention or recruitment of ED nurses at the research site. An IE is more informative on the mapping of ruling relations when all personnel involved in the planning and administration of staffing are involved (Smith, 2005). I suspect that

managers were too uncomfortable to provide information that could be seen as detrimental to the reputation of the research site.

The third limitation of this study was the inability to run chart reviews on patients' visits in the ED. Rankin and Campbell (2006) in their study were able to be at the bedside, witness the nurse-patient interaction, then review the charting done by the nurse after the interaction. The witnessing of text activation and end result enabled them to paint a much clearer picture of the organization of nurses' work. The same applies to this research in the sense that the full mapping and understanding of ruling relations from the local to the translocal was not possible due to these limitations.

The fourth and final limitation of this study is the omission of an important theoretical component of governmentality that might have enriched data analysis. Although the idea of morality is embedded in the responsibilization of the individual self, detaching this theoretical component to use alone as a theoretical construct would have been helpful in the analysis of the internal pressures nurses embody in their work. The responsibilization of the nurse to be the sole saviour of Medicare in Canada implies that their current work conditions are the results of the "right" decisions made to sustain Medicare, which automatically references some kind of morality. Furthermore, the statement "best for patient care" is often heard in hospitals to explain the modifications in the roles of nurses to answer the neoliberal rationale. Using the concept of morality, paired with that of pastoral power, might have added to the findings in relation to the behaviour of nurses.

7.2.1 Outlook

In this section I use the limitations highlighted previously to discuss how this research could be expanded in the future. First, future research could be undertaken using critical

constructs such as morality and pastoral power to analyze the work of nurses at the bedside. The use of these different perspectives opens up the possibility to better understand the social and political organization of nurses' work. The use of Public-Private-Partnerships (PPP) was mentioned a few times throughout this research without further discussion or in-depth analysis. Using PPP to analyze the work of nurses and the repercussions of such arrangements could also be studied in the future. Questions around how these partnerships contribute to the nursing shortage, nursing retention, and increased violence against nurses (or the systematization of violence) should be explored.

The structural arrangement of healthcare delivery has contributed to a changed environment for nurses. This study also identified that some technologies of government are not only present within the workplace of ED nurses but have a large impact on the organization of their work. Further inquiry into the implementation, use, and modification of these technologies could help better understand the social organization of work within the ED. Using a critical perspective such as governmentality to question how these technologies arrange nursing work could potentially assist in a better understanding of the forces present within the system that define the experience of nurses. Finally, involving nursing managers and nursing executives in critical studies could provide another important perspective. Their experiences and actions are also arranged following a neoliberal rationale but on another level. Being able to incorporate their experiences into this research could have provided a whole new understanding of the implementation of different processes.

7.3 Implications and Recommendations

This study highlighted implications and recommendation for nursing practice, education, policy, and research.

7.3.1 For Nursing Practice

Bringing this complex assemblage of policy, nursing practice, and workplace transformations to the awareness of nurses I believe equips them with the knowledge to better reflect critically on their nursing practice. Simply highlighting ED staffing shortages and work intensification does not do justice to the complexity of nursing practice in the ED. As this study showed, nurses at the bedside delivering care are political agents and come to embody the current political rationality around them. They speak the language of politics and different technologies of government that are now embedded in their language. Saying that nurses are simply oppressed or have no voice is absurd. Nurses are powerful within our country as they can carry certain political agendas to the forefront. The missing piece of this power is an awareness that the apparent natural organization of their work is simply not natural. Knowing and understanding that the healthcare system has been reformed following strict economic rules and that they are expected to work within these rules is the first step in understanding how their work has evolved. It is the first step to resisting some of these changes. Nurses are particularly well positioned within the healthcare system to demand not only better working conditions but acknowledgement that the implementation of certain management technologies within the sphere of human care has had disastrous consequences for the system itself as well as patients and workers. An increased awareness of the implementation and use of technologies of governmentality is required in practice to perhaps slow the intensification of nurses' work and bring the focus back onto the human relationships created when nursing care is delivered.

7.3.2 For Nursing Education

I believe that everything starts with nursing education. The roadmap that appeared earlier in this study showed that the reality we live in today was created by a specific political

rationality, namely neoliberalism, which prioritizes the marketization of all spheres of life with little to no regard for the human aspect of nursing. With this in mind, the education of future nurses and nurse leaders should be undertaken with a strong accent on the human aspect of care as well as the realization that the decisions taken to transform our healthcare system could have been different if a different political rationality was in place. Being able to understand that things were not always like this (that there was once a welfare state, for example) would provide nursing students with an understanding that perhaps decisions could be made differently. Understanding this context is important as it enables nurses working in the ED to realize that their lives and experiences could be envisioned very differently. This point is probably one of the most important dimensions of my research – it is the invitation not only to question our present but to begin to imagine different futures. This study does not provide solutions due to, on the one hand, the theoretical perspective chosen for this project and, on the other hand, because a solution should be the result of broader societal discussions about what kind of society we want to live in. For example, some advocate for the idea of a caring economy and imagine a society based on mutual aid. During Covid-19, for example, communities came together with the realization that we need each other and are not just made up of *homo oeconomicus*. This would be a radical shift from the neoliberal rationale discussed in this study.

Higher education in nursing needs to move away from its focus on best practices and knowledge translation that only deepen the marketization of the nurse-patient therapeutic relationship. The tools, programs, and algorithms used by educators in the fields of best practices and knowledge translation are, as evidenced by this study, technologies of government that speed up the degradation of nursing care within health institutions. The belief that only some knowledge is seen as acceptable within academia bluntly ignores the reality that nursing care

should be provided in a holistic manner. A shift in the curriculum is urgently required to broaden the acceptance of other aspects of nursing practice. Explicitly questioning the structures in place that create the state into which nursing practice finds itself nowadays should be a required exercise for education. This research and my personal experience suggest that a greater variety of educators is required in order to infuse real critical thinking, and not just clinical judgement, into students' practice.

7.3.3 For Research

Nursing practice has been transformed in every unit of every hospital in the past 15 years. Nursing research going forward could benefit from expanding the use of critical approaches, like the one used in this study, to begin looking at the broader picture of local experience. Realizing that most hospitals and the units within them were transformed in the same way in Ontario was a pivotal moment for me after 13 years of practice. Increasing access to research that is focused on current conditions in nursing I believe would increase research uptake by nurses. Before even considering continuing any higher education I read Rankin's (2006) article that explained, in part, why I was feeling the way I did about my workplace. As was discussed in this research, there is a minimal amount of nursing research that focuses on the real reasons behind the transformation of the healthcare system. Being able to relate to research is important for nurses. Research funding needs to move beyond just best practices and knowledge translation to support projects that focus on the underlying causes of the current intensification of nurses' work. Questioning and analyzing the work of nurses in all spheres of the healthcare system is required to provide a wider perspective of the current conditions in nursing but could also serve as a starting point to a purposeful dialogue between bedside nurses and administrators. Nursing

practice would benefit from active research that actually focuses on what is important to nurses and would guarantee a wider interest in research from all nurses.

7.3.4 For Nursing Policy

Using a critical perspective in research is not about finding solutions but is more a critique of the current arrangement of reality. However, as was discussed in the previous section, it is hard to ignore the dominance of the fields of best practices and knowledge translation in nursing policy. More policy development tends to drive more research in the same domain, which is the opposite of what I wanted to accomplish with the perspective of this research. Perhaps thinking of nursing as a holistic profession that deals with human beings and emotions would be a good starting point for change. Most nursing policies implemented today only further accentuate the reliance of nurses on checklists and checkboxes to accomplish their work, enabling and emulating a market rationale in what should be a human-centered profession. Administrators and policy makers should encourage and support the engagement of nurses in proposing ideas that do not necessarily follow or align with the current rationale of performance. Sometimes these ideas will be what is best for the patient. Lastly, political action from nurses at all levels is urgently required. Having visible nursing politicians could help highlight the conditions of the current healthcare system and slowly show that other rationales behind the organization and management of healthcare could also be utilized.

7.4 Final Remarks

It is with mixed emotions that I close this chapter of my research. ED nurses are a very specific type who have knowledge of all specialities of acute and primary care. I have always been and will always be proud of my practice in the ED; I know where I come from. What these nurses do daily is not only tough but demanding. What they are being asked to do in the current

healthcare system in Ontario is unsustainable. The lack of recognition of their work, the lack of recognition of the multiple traumatizing experiences they face, the lack of consideration from governmental entities in supporting their work-life balance drives these nurses away from the bedside and too often to retirement, up to a decade early. What they are living in their workplace is the direct result of the implementation of neoliberalism and its specific management style (like Lean) in care environments. The promise that these changes would make the system better got these nurses engaged and participating in the implementation of these technologies, to their own detriment. I believe these promises were not only deceitful to nurses but extremely detrimental to our publicly funded healthcare. I feel for my colleagues and all ED nurses out there. It is a tough job, getting tougher every week. My hope is that this research helps them understand that there are other ways to think about the organization of ED nurses' work. They have worked hard to transform the system this way and I hope they will work as hard should the opportunity arise to think differently about the delivery of healthcare. Again, thank you for supporting this research and it is entirely dedicated to you and the illustrious careers you had or are having.

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Appendices

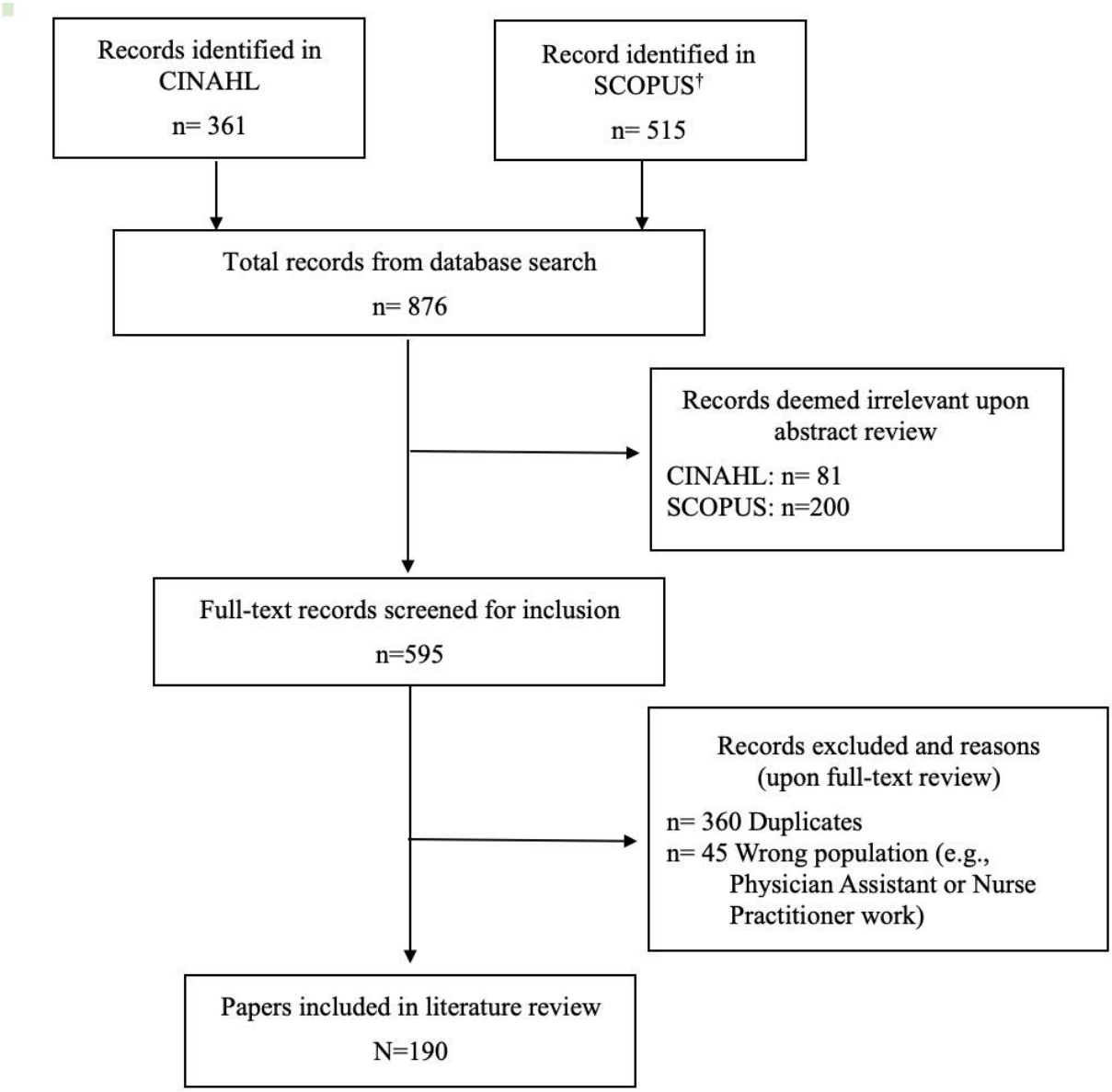
Appendix A: Literature Review Tables and Figures

Table 5: Search Terms

	P (Population)	**I** (Interest- Process)		**Co** (Context)	**PI** (Phenomenon of Interest- outcome)
Key concept	**Registered Nurses**	**Organizational changes**	**Political/systems level changes**	**Emergency room/department**	**Transformation of nurses' work**
Search terms	Nurse† OR Nursing staff† OR Emergency nurse OR Emergency nursing OR Emergency nurses' association	Quality management OR Organizational efficiency OR Quality improvement OR Hospital administration OR Delivery of healthcare OR Organizational culture OR Organizational policy†	Heath care reform† OR Health policy OR Transformation OR Healthcare delivery OR Health care planning†	Emergency service† OR Emergency room OR Hospital OR Trauma Centre† OR Emergency department†	Work† OR Workload† OR Work performance† OR Workforce† OR Health workforce OR Transformation of work OR Work assignments OR Experience OR Information Technology OR Nurse's role†

† Also used as terms for MESH search

Figure 4: PRISMA diagram detailing search and selection for first lit review



†Includes MEDLINE and EMBASE

Table 6: Search terms in major headings (MH) and major subject (MM)

	P (Population)	**I** (Interest)	**Co** (Context)
Key concept	**Registered Nurses**	**Institutional Ethnography**	**Emergency room/department**
Search terms	Nurse OR Nursing OR Nurses OR Nurs*	Ethnography OR Institutional ethnography OR Ethno*	Emergency OR Emergency department OR Emergency room OR Accidents and Emergencies

Note. Search terms searched in major headings [MH] and major subject [MM]

* Also used as MESH search term

Figure 5: PRISMA diagram detailing search and selection

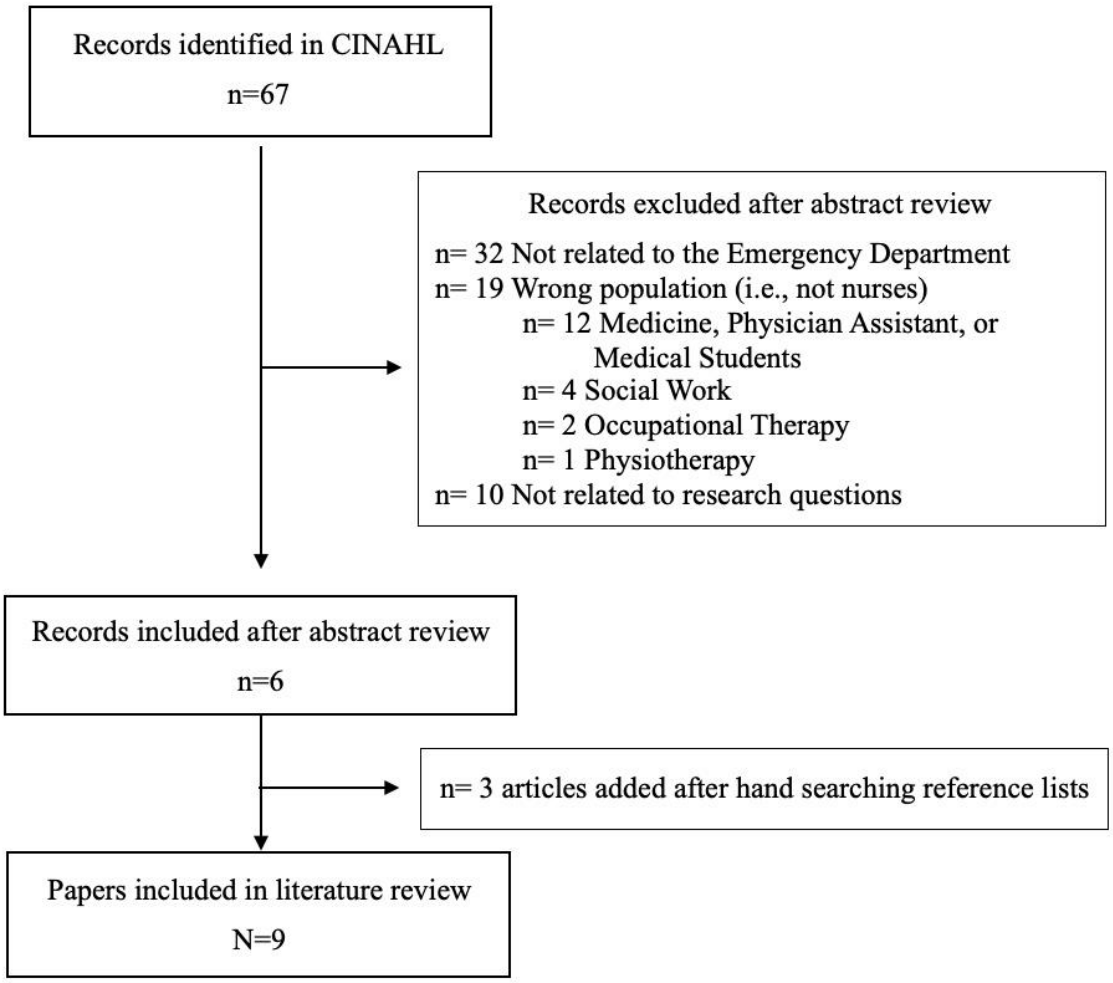


Table 7: Included Articles

Authors	Year	Title	Country of Origin	Study design	Focus
Fry et al.	2012	An ethnography: Understanding emergency nursing practice belief systems	Australia	Ethnography	How do cultural practices and notions inform beliefs in the ER which impact nurse's work?
Person, Spiva, & Hart.	2013	The culture of an emergency department: An ethnographic study	Southeastern USA	Ethnography	What is the culture in an ER?
Nugus & Forero.	2011	Understanding interdepartmental and organizational work in the emergency department: An ethnographic approach.	Australia	Ethnography	To understand how nurses "plug[…] gaps in the care of ED patients" (p. 69) and to "develop communicative and organizational work in emergency departments" (p.69)
Kirk et al.	2021	"I don't have any emotions": An ethnography of emotional labour and feeling rules in the emergency department.	England	Ethnography	To understand emotional labour in ED nurses and the feeling rules driving the behaviour.
Melon, White, & Rankin.	2013	Beat the clock! Wait times and the production of 'quality' in emergency departments.	Canada	Institutional Ethnography	To examine how managerial targets and thinking both dominate and control nursing practice in the ED.
Rankin ????	2001	Texts in action: how nurses are doing the fiscal work of health care reform.	Canada	Institutional Ethnography	To explore how a "business genre" has infiltrated the daily practice of nurses and doctors.

Appendix B: Recruitment

Recruitment Poster

[redacted]

uOttawa

PARTICIPANTS NEEDED FOR RESEARCH IN EMERGENCY NURSING

We are looking for volunteers to take part in a study of the organization of nurses' work in the emergency department who meet the following criteria.

Presently working as a nurse in the Emergency Department [redacted]

If you are interested and choose to participate you would be asked to: participate in an interview with the researcher lasting approximately 60 minutes **OR** take part in observations with the researcher for 3 of your 12-hour shifts in the Emergency Department, no other appointment required.
In appreciation for your time, you will receive a 10$ Tim Horton's gift card.

For more information about this study, please contact the Research Coordinator.

Version Date: 26/08/2020

Appendix C: Interview Guide

Study explained, consent form read and signed.

1. Introduction
    a. How did you decide to become an ER nurse?
    b. What kind of training did you get (formal/informal)?
    c. How long have you been an ER nurse?
    d. In your opinion, what is an ER nurse?
2. Could you walk me through the beginning of a shift at triage/urgent care/observation/ emergent care/ resuscitation? (Further this question with in-depth details relating to activities to each of these areas.
3. Let's look at this screen on Epic (triage, observation, EC, Resus), could you walk me through how you fill it with the patients? (Look for details on which categories on the screen are used, which aren't, what kind of questions are asked in order to fill certain categories)
4. Looking through different forms aside from Epic active screens (DART tool, transfer of accountability, whiteboard), can you explain how, why, and when these forms are used?
5. In your experience, do you feel that your role an ER nurse has changed? If so, how? Since when?
6. Do you feel like anything else has changed/is changing in ER nursing?
7. Leave time to clarify, deepen understanding of any reflexive notes taken during observations/document collection.

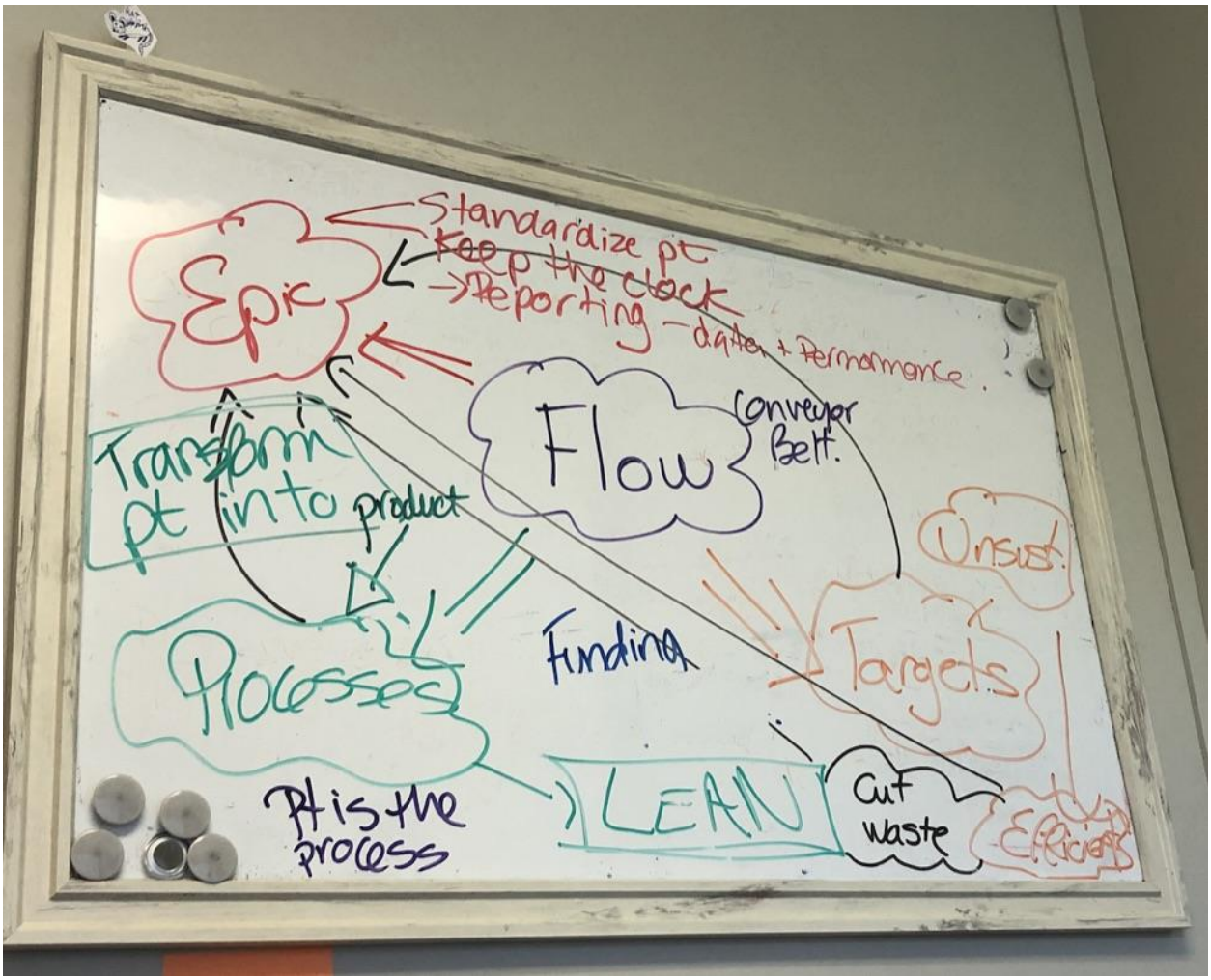
Appendix D: Observational Protocol

Date: Time: Area:

Participant :

Descriptive note : Describe event, participants, interactions, actions, outcomes	Reflexive note: What is happening here, in my opinion, relevant thoughts to the event

Appendix E: Mapping Board in Progress



Appendix F : Ethics Approval

[redacted]

Date:	August 27, 2020
Principal Investigator:	Dr. K m Lauz er, Un vers ty of Ottawa
Protocol ID:	20200478-01H
Study Title:	The Po t cs of Nurs ng- The Neo bera Transformat on of Nurs ng Emergency Care
Submission Type:	In t a App cat on
Review Type:	De egated
Date of Approval:	August 27, 2020
Approval Expiry Date:	August 27, 2021

Dear Dr. Lauz er,

An **Institutional approval** [redacted] **letter is required prior to the conduct of the study** at th s s te. The nst tut ona approva etter s an nd cat on that you have sat sf ed eth cs, contracts, departmenta not f cat ons, as app cab e.

Thank you for subm tt ng the above referenced study. The [redacted] Eth cs Board [redacted] has rev ewed the app cat on and granted approva for your study. Th s approva s granted unt the exp rat on date noted above. Th s research study s to be conducted by the nvest gator noted above.

The [redacted] **ethics approval** s app cab e on y for [redacted]

Exempt on from French trans at on s approved.

Documents Approved:

Document Name	Document Version Date
Eng sh Consent Interv ew	August 20, 2020
Eng sh Consent Observat ona	August 20, 2020
Eng sh Recru tment Rem nder Ema	August 20, 2020
Eng sh-Interv ew Gu de	June 25, 2020
Eng sh-Poster	August 26, 2020
Eng sh-Recru tment Ema -Observat ons	August 26, 2020
Protoco	Ju y 6, 2020

No dev at ons from, or changes to, the protoco shou d be n t ated w thout pr or wr tten approva of an appropr ate amendment from the [redacted] except when necessary to e m nate mmed ate hazard(s) to study part c pants.

REB members nvo ved n the research project do not part c pate n the rev ew, d scuss on or dec s on.

If the study s to cont nue beyond the exp ry date noted above, a Cont nu ng Rev ew Form must be rece ved by the OHSN-REB on or pr or to the fu board subm ss on dead ne date of the meet ng schedu ed to occur a m n mum of 30 days pr or to the study exp ry date. If the study has been comp eted by the exp ry noted above, a Study C osure Report must be rece ved by the OHSN-REB.

The [redacted] operates n comp ance w th, and s const tuted n accordance w th, the requ rements of the Tr -Counc Po cy Statement: Eth ca Conduct for Research Invo v ng Humans (TCPS 2); Internat ona Counc for Harmon sat on of Techn ca Requ rements for Pharmaceut ca s for Human Use; Integrated Addendum to ICH E6 (R1): Gu de ne for Good C n ca Pract ce E6 (R2); Part C, D v s on 5 of the Food and Drug Regu at ons; Part 4 of the Natura Hea th Products Regu at ons; Part 3 of the Med ca Dev ces Regu at ons and the prov s ons of the Ontar o Persona Hea th Informat on Protect on Act (PHIPA 2004) and ts app cab e regu at ons. [redacted] s qua f ed through the CTO REB Qua f cat on Program and s reg stered w th the U.S. Department of Hea th and Human Serv ces (DHHS) Off ce for Human Research Protect on (OHRP).

P ease do not hes tate to contact us f you have any quest ons.

[redacted]

02/10/2020

Université d'Ottawa
Bureau d'éthique et d'intégrité de la recherche

University of Ottawa
Office of Research Ethics and Integrity

Lettre d'approbation administrative | Letter of administrative approval

Numéro de dossier / Ethics File Number	H-09-20-6160
Titre du projet / Project Title	The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care
Type de projet / Project Type	Thèse de doctorat / Doctoral thesis
CÉR primaire / Primary REB	[redacted]
Statut du projet / Project Status	Approuvé / Approved
Date d'approbation (jj/mm/aaaa) / Approval Date (dd/mm/yyyy)	02/10/2020
Date d'expiration (jj/mm/aaaa) / Expiry Date (dd/mm/yyyy)	27/08/2021

Équipe de recherche / Research Team

Chercheur / Researcher	Affiliation	Role
Kim LAUZIER	École des sciences infirmières / School of Nursing	Chercheur Principal / Principal Investigator
Thomas FOTH	École des sciences infirmières / School of Nursing	Superviseur / Supervisor

Conditions spéciales ou commentaires / Special conditions or comments:

[redacted] REB # 20200478-01H

This approval is issued with the understanding that the Principal Investigator is responsible for ensuring that the research protocols comply with the most up-to-date advice, recommendations, directives, orders, advisories, and guidelines about the spread of COVID-19 from government and public health officials and with those from institutions, organizations or funding agencies relevant to the research.

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[redacted]

October 21, 2020

Dr. Kim Lauzier

Re: [redacted] Institutional Approval for [redacted]
Submission

Protocol ID#: 20200478-01H;

The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care

Dear Dr. Kim Lauzier,

This letter serves as [redacted] Institutional Approval for the above-referenced study. Please maintain this documentation in your investigator study file.

Based on the information you provided about this study through the Clinical Research Registration Form, you have satisfied the requirements for institutional [redacted] approval. This includes initial research ethics approval by [redacted] appropriate departmental/service area notifications and execution (fully signed versions) of all agreement(s) required to begin the study locally. Please note there may be additional agreement(s) pending execution that are required to send funds, samples, or data to external sites, but are not required for you to begin your study locally.

Changes and/or additions to your study that may require additional agreement(s) or revisions to existing agreement(s) must be communicated to the [redacted] Contracts Office. This should be undertaken simultaneously with any related [redacted] amendment submission.

Changes and/or additions to your study that affect various hospital/institution departments (e.g., pharmacy, Department of Medical Imaging, [redacted], EEG, etc.) must be communicated to the relevant departments.

As mentioned in the 'Response' tab of the Ethics application, you have 3 months from the date of initial [redacted] approval to submit French documents including the translation certificate to [redacted] through the Translated Documents section of the ethics application (if applicable).

[redacted]

[redacted]

[redacted]

[redacted]

/28/2020 Clinical Research Registration Form

[redacted]

uOttawa

[redacted]

Division/Department Head Signature Page

CRRF ID: 2241
Protocol Title: The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care
Principal Investigator: Lauzier, Kim
Division/Department Head Agreement:
Hospital and university administrators share responsibility for research activities within their division, department or program. The purpose of this signature page is to ensure that administrators are aware of:

a. the research activities undertaken in their division, department or program and
b. the impact of these activities on the resources of their division, department or program and the patients and the communities they serve.

As Division/Department Head:

1. I am aware of this proposal and support its submission; I consider it to be feasible and appropriate.
2. I attest that the Principal Investigator is qualified and has the experience and expertise to conduct this study.
3. I attest that the Principal Investigator has sufficient space and resources to conduct this study.
4. I agree this study is consistent with hospital/institution policies and mission.
5. I agree that this population is not being excessively recruited for clinical research.

Printed Name: [redacted]

Signature: [redacted] **Date:** June 15, 2020

[redacted]

Nursing Acknowledgment and Impact Form

Principal Investigator: Kim Lauzier

Study Title: The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care

Note: A copy of the study protocol must be enclosed for the signee to review prior to signature.

This form is applicable if the study requires **clinical nursing** time or resources; including being the participants in the study or required to perform a task such as one of the following (list is not exhaustive):

- Obtain consent
- Monitor vital signs
- Administer medications
- Sample Collection/preparation of requisitions
- Performs procedure(s)
- Assist MD with procedure(s)
- Accompany Patient on transport to other areas
- Additional Documentation on Patient Record
- Collect and document data
- Require operating room on Standby
- Education of Nursing staff

Please list which nursing units, clinics, etc. from where you will be recruiting or collecting data:

Whose signature should be collected?

1. If the protocol involves one Clinical Director's area of responsibility, then you are required to obtain a signature from that Clinical Director.
2. If the protocol involves more than one Clinical Director's area of responsibility, you are required to obtain the signature of all Clinical Directors from whose areas you will be recruiting or collecting data.
3. If the protocol involves the entire organization, then you are required to obtain a signature from the Senior VP, Professional Practice & Chief Nursing Executive.

Clinical Director(s) or Senior VP, Professional Practice & Chief Nursing Executive Signature(s):

By signing below, I acknowledge that the Principal Investigator of this study has notified me of which areas of the hospital will be impacted and where data collection will take place, I have reviewed the research protocol enclosed and the likely start and end dates.

Unit/Department/Division:

Name: [redacted] **Signature**: [redacted] **Date**: March 23/2020

Role: Director of Emergency, Patient Flow, Endoscopy and Inpatient Suregery

If more than one signature is required, copy and paste as many signature sections as you require.

Version 7, January 10, 2018

Appendix G: Consent Forms

Interview Consent Form

[redacted] [redacted] uOttawa

Minimal Risk Informed Consent Form for Participation in a Research Study

Study Title: *The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care- INTERVIEW*

[redacted]**REB Number***:*

Primary Investigator: Kim Lauzier, RN, PhD(c) [redacted]

INTRODUCTION

You are being invited to participate in a research study. You are invited to participate in this study because you are a Registered Nurse in the emergency department of the general campus at [redacted] This consent form provides you with information to help you make an informed choice. Please read this document carefully and ask any questions you may have. All your questions should be answered to your satisfaction before you decide whether to participate in this research study.

Please take your time in making your decision. You may find it helpful to discuss it with your friends and family.

Taking part in this study is voluntary. You have the option to not participate at all or you may choose to leave the study at any time. Whatever you choose, it will not affect your employment status and you will not face any professional consequences.

IS THERE A CONFLICT OF INTEREST?

There are no conflicts of interest to declare related to this study.

WHY IS THIS STUDY BEING DONE?

This project seeks to explore how nurses work is currently organized in the ER. More specifically, I seek to understand how ER nurses experience their work and how their work is socially organized within the hospital setting and more broadly within the healthcare system.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

It is anticipated that about 20 participants will take part in this study, from the research site located [redacted]

This study should take 3 months to complete and the results should be known in about 6 months

WHAT WILL HAPPEN DURING THIS STUDY?

You will be asked to attend one (1) interview. During this interview, you will meet with the principal researcher. Each interview will be about sixty (60) minutes in length and will take place at a location of your choosing. You will be asked to speak on your perception of your work as a registered nurse in the emergency department. The questions will be directed more specifically towards the organization of your work and how you interact with your work environment.

WHAT ARE THE RESPONSIBILITIES OF STUDY PARTICIPANTS?

If you choose to participate in this study, you will be expected to participate in only one interview. There will be no call back. This interview is conducted on your own time and not on your scheduled hours for [redacted]

HOW LONG WILL PARTICIPANTS BE IN THE STUDY?

Your participation on this study will last for about sixty (60) minutes.

CAN PARTICIPANTS CHOOSE TO LEAVE THE STUDY?

You can choose to end your participation in this research (called withdrawal) at any time without having to provide a reason. If you choose to withdraw from the study, you are encouraged to contact the research team.

You may withdraw your permission to use information that was collected about you for this study at any time by letting the research team know. However, this would also mean that you withdraw from the study.

If you decide to leave the study, you can ask that the information that was collected about you not be used for the study. Let the research team know if you choose this.

CAN PARTICIPATION IN THIS STUDY END EARLY?

Your participation on the study may be stopped early, and without your consent, for reasons such as: - The research team decides to stop the study.
- [redacted] Ethics Board withdraws permission for this study to continue

If you are removed from this study, the research team will discuss the reasons with you.

WHAT ARE THE RISKS OR HARMS OF PARTICIPATING IN THIS STUDY?

There are no medical risks to you from participating in this study but taking part in this study may make you feel uncomfortable.

You may become uncomfortable while discussing your experiences. You may choose not to answer questions or leave the interview at any time if you experience any discomfort.

WHAT ARE THE BENEFITS OF PARTICIPATING IN THIS STUDY?

There are no benefits to you for taking part in this study.

HOW WILL PARTICIPANT INFORMATION BE KEPT CONFIDENTIAL?

If you decide to participate in this study, the research team will only collect the information they need for this study.

Records identifying you at this centre will be kept confidential and, to the extent permitted by the applicable laws, will not be disclosed or made publicly available, except as described in this consent document.

Authorized representatives of the following organizations may look at the data you provided for this research at the site where these records are held, to check that the information collected for the study is correct and follows proper laws and guidelines.

- [redacted] Ethics Board who oversees the ethical conduct of this study.
- [redacted], to oversee the conduct of research at this location.
- The University of Ottawa to ensure the progression of this study.

Information that is collected about you for the study (called study data) may also be sent to the organizations listed above. Your name, address, email, or other information that may directly identify you will not be used.

During the discussions, participants will be encouraged to refrain from using names. If names or other identifying information is shared during the discussion, it will not be included in the written records.

The video/audio recordings will be stored in a secure location and viewed only by members of the research team. The recordings will be kept until they have been transcribed (turned into written records), and then they will be destroyed.

If the results of this study are published, your identity will remain confidential. It is expected that the information collected during this study will be used in analyses and will be published/ presented to the scientific community at meetings and in journals.

Your de-identified data from this study may be used for other research purposes. If your study data is shared with other researchers, information that links your study data directly to you will not be shared.

Even though the likelihood that someone may identify you from the study data is very small, it can never be completely eliminated.

Data collected during your participation in this study will not be shared with your employer/manager.

WHAT IS THE COST TO PARTICIPANTS?

Participation in this study will not involve any additional costs to you.

ARE STUDY PARTICIPANTS PAID TO BE IN THIS STUDY?

If you decide to participate in this study, you will receive a 10$ gift card from Tim Horton's.

WHAT ARE THE RIGHTS OF PARTICIPANTS IN A RESEARCH STUDY?

You will be told, in a timely manner, about new information that may be relevant to your willingness to stay in this study.

You have the right to be informed of the results of this study once the entire study is complete. If you would like to be informed of the results of this study, please contact the research team.

Your rights to privacy are legally protected by federal and provincial laws that require safeguards to ensure that your privacy is respected.

By signing this form, you do not give up any of your legal rights against the primary researcher or involved institutions for compensation, nor does this form relieve the primary researcher of their legal and professional responsibilities.

You will be given a copy of this signed and dated consent form prior to participating in this study.

WHOM DO PARTICIPANTS CONTACT FOR QUESTIONS?

If you have questions about taking part in this study you can talk to the principal investigator, that person is:

Kim Lauzier [redacted]
Principal Investigator Name Telephone

If you have questions about your rights as a participant or about ethical issues related to this study, you can talk to someone who is not involved in the study at all. [redacted]

[redacted]

Study Title: The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care

SIGNATURES

- All my questions have been answered,
- I understand the information within this informed consent form, • I do not give up any of my legal rights by signing this consent form,
- I agree to take part in this study.

Signature of Participant	Printed Name	Date

Signature of Person Conducting	Printed Name and Role	Date the Consent Discussion

Observation Consent Form

[redacted] [redacted] uOttawa

Minimal Risk Informed Consent Form for Participation in a Research Study

Study Title: The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care- Observations

OHSN-REB Number: 20200478

Primary Investigator: Kim Lauzier, RN, PhD(c) [redacted]

INTRODUCTION

You are being invited to participate in a research study. You are invited to participate in this study.
because you are a Registered Nurse in the emergency department of the [redacted]. This consent form provides you with information to help you make an informed choice. Please read this document carefully and ask any questions you may have. All your questions should be answered to your satisfaction before you decide whether to participate in this research study.

Please take your time in making your decision. You may find it helpful to discuss it with your friends and family.

Taking part in this study is voluntary. You have the option to not participate at all or you may choose to leave the study at any time. Whatever you choose, it will not affect your employment status and you will not face any professional consequences.

IS THERE A CONFLICT OF INTEREST?

There are no conflicts of interest to declare related to this study.

WHY IS THIS STUDY BEING DONE?

This project seeks to explore how nurses work is currently organized in the ER. More specifically, I seek to understand how ER nurses experience their work and how their work is socially organized within the hospital setting and more broadly within the healthcare system.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

It is anticipated that about 20 participants will take part in this study, from the research site [redacted]

This study should take 3 months to complete, and the results should be known in about 6 months.

WHAT WILL HAPPEN DURING THIS STUDY?

You will be asked to take part in observation sessions on your work shifts in the emergency department. You will be asked to perform your regular duties, as naturally as possible. These twelve (12) hour shifts will be part of your already pre-established schedule. These observations will be for three (3) twelve (12) hour shifts. Your availability, and that of the principal investigator, will determine

these three (3) shifts. During these observations, the principal investigator will take notes in a research journal and may also ask for certain clarifications.

WHAT ARE THE RESPONSIBILITIES OF STUDY PARTICIPANTS?

As a participant, you will be responsible for establishing the shifts chosen for the observation sessions. You will also be responsible for notifying the principal investigator if you should cancel, reschedule or exchange any of these shifts.

HOW LONG WILL PARTICIPANTS BE IN THE STUDY?

Your participation in this study will last approximately 36 hours, or three (3) twelve (12) hour shifts.

CAN PARTICIPANTS CHOOSE TO LEAVE THE STUDY?

You can choose to end your participation in this research (called withdrawal) at any time without having to provide a reason. If you choose to withdraw from the study, you are encouraged to contact the research team.

You may withdraw your permission to use information that was collected about you for this study at any time by letting the research team know. However, this would also mean that you withdraw from the study.

If you decide to leave the study, you can ask that the information that was collected about you not be used for the study. Let the research team know if you choose this.

CAN PARTICIPATION IN THIS STUDY END EARLY?

Your participation on the study may be stopped early, and without your consent, for reasons such as: - The research team decides to stop the study.
- [redacted] Ethics Board withdraws permission for this study to continue

If you are removed from this study, the research team will discuss the reasons with you.

WHAT ARE THE RISKS OR HARMS OF PARTICIPATING IN THIS STUDY?

There are no medical risks to you from participating in this study but taking part in this study may make you feel uncomfortable.

You may become uncomfortable while discussing your experiences. You may choose not to answer questions or leave the interview at any time if you experience any discomfort.

WHAT ARE THE BENEFITS OF PARTICIPATING IN THIS STUDY?
There are no benefits to you for taking part in this study.

HOW WILL PARTICIPANT INFORMATION BE KEPT CONFIDENTIAL?

If you decide to participate in this study, the research team will only collect the information they need for this study.

Records identifying you at this center will be kept confidential and, to the extent permitted by the applicable laws, will not be disclosed or made publicly available, except as described in this consent document.

Authorized representatives of the following organizations may look at the data you provided for this research at the site where these records are held, to check that the information collected for the study is correct and follows proper laws and guidelines.

- [redacted] Ethics Board who oversees the ethical conduct of this study.
- to oversee the conduct of research at this location.
- The University of Ottawa to ensure the progression of this study.

Information that is collected about you for the study (called study data) may also be sent to the organizations listed above. Your name, address, email, or other information that may directly identify you will not be used.

During the discussions, participants will be encouraged to refrain from using names. If names or other identifying information is shared during the discussion, it will not be included in the written records.

If the results of this study are published, your identity will remain confidential. It is expected that the information collected during this study will be used in analyses and will be published/ presented to the scientific community at meetings and in journals.

Your de-identified data from this study may be used for other research purposes. If your study data is shared with other researchers, information that links your study data directly to you will not be shared.

Even though the likelihood that someone may identify you from the study data is very small, it can never be completely eliminated.

Data collected during your participation in this study will not be shared with your employer/manager.

WHAT IS THE COST TO PARTICIPANTS?

Participation in this study will not involve any additional costs to you.

ARE STUDY PARTICIPANTS PAID TO BE IN THIS STUDY?

If you decide to participate in this study, you will receive a 10$ gift card from Tim Horton's.

WHAT ARE THE RIGHTS OF PARTICIPANTS IN A RESEARCH STUDY?

You will be told, in a timely manner, about new information that may be relevant to your willingness to stay in this study.

You have the right to be informed of the results of this study once the entire study is complete. If you would like to be informed of the results of this study, please contact the research team.

Your rights to privacy are legally protected by federal and provincial laws that require safeguards to ensure that your privacy is respected.

By signing this form, you do not give up any of your legal rights against the primary researcher or involved institutions for compensation, nor does this form relieve the primary researcher of their legal and professional responsibilities.

You will be given a copy of this signed and dated consent form prior to participating in this study.

WHOM DO PARTICIPANTS CONTACT FOR QUESTIONS?

If you have questions about taking part in this study, you can talk to the principal investigator. That person is:

Kim Lauzier [redacted]
Principal Investigator Name Telephone

If you have questions about your rights as a participant or about ethical issues related to this study, you can talk to someone who is not involved in the study at all. [redacted]

[redacted] [redacted]

Study Title: The Politics of Nursing- The Neoliberal Transformation of Nursing Emergency Care

SIGNATURES

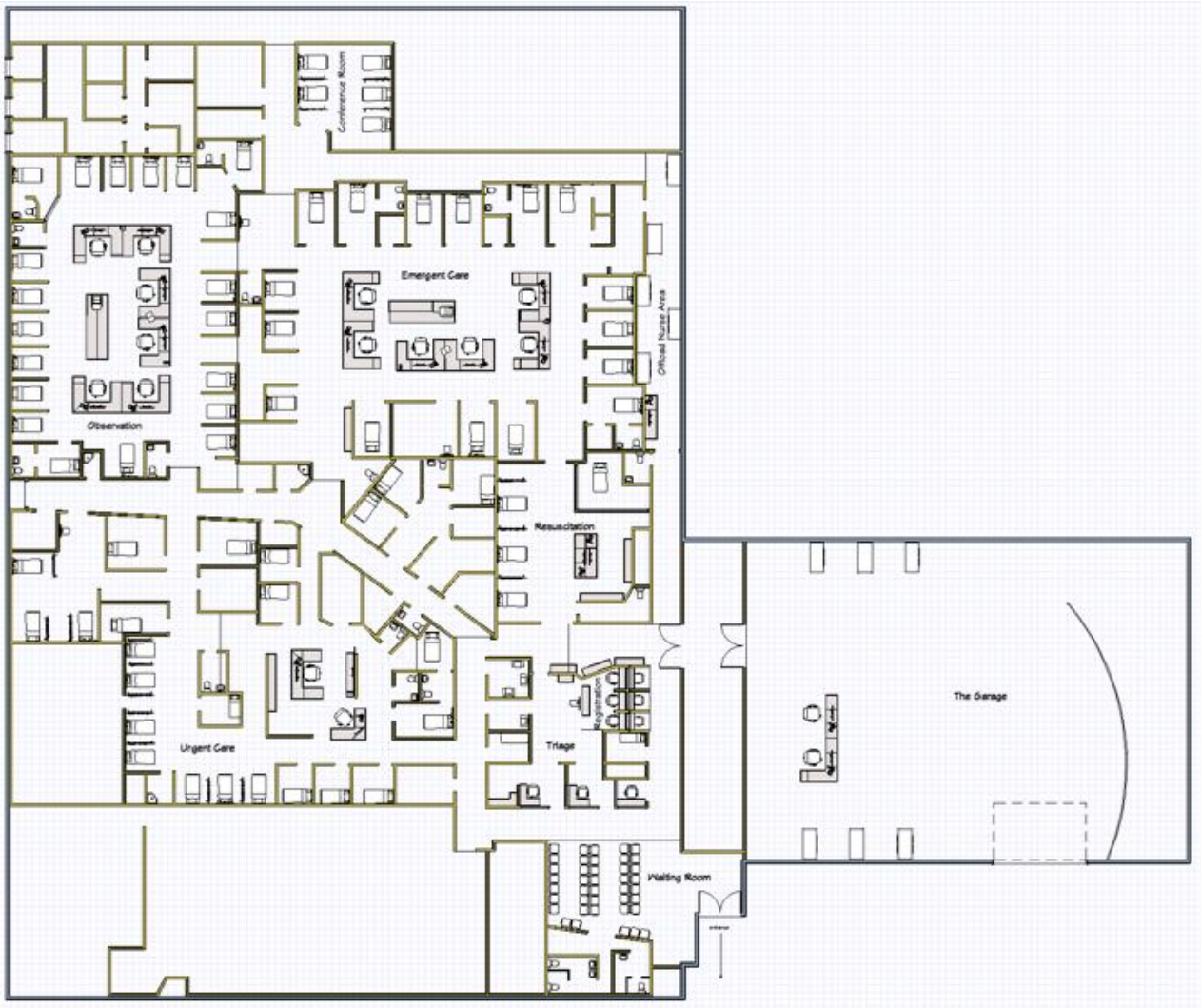
- All my questions have been answered,
- I understand the information within this informed consent form, • I do not give up any of my legal rights by signing this consent form,
- I agree to take part in this study.

Signature of Participant	Printed Name	Date

Signature of Person Conducting	Printed Name and Role	

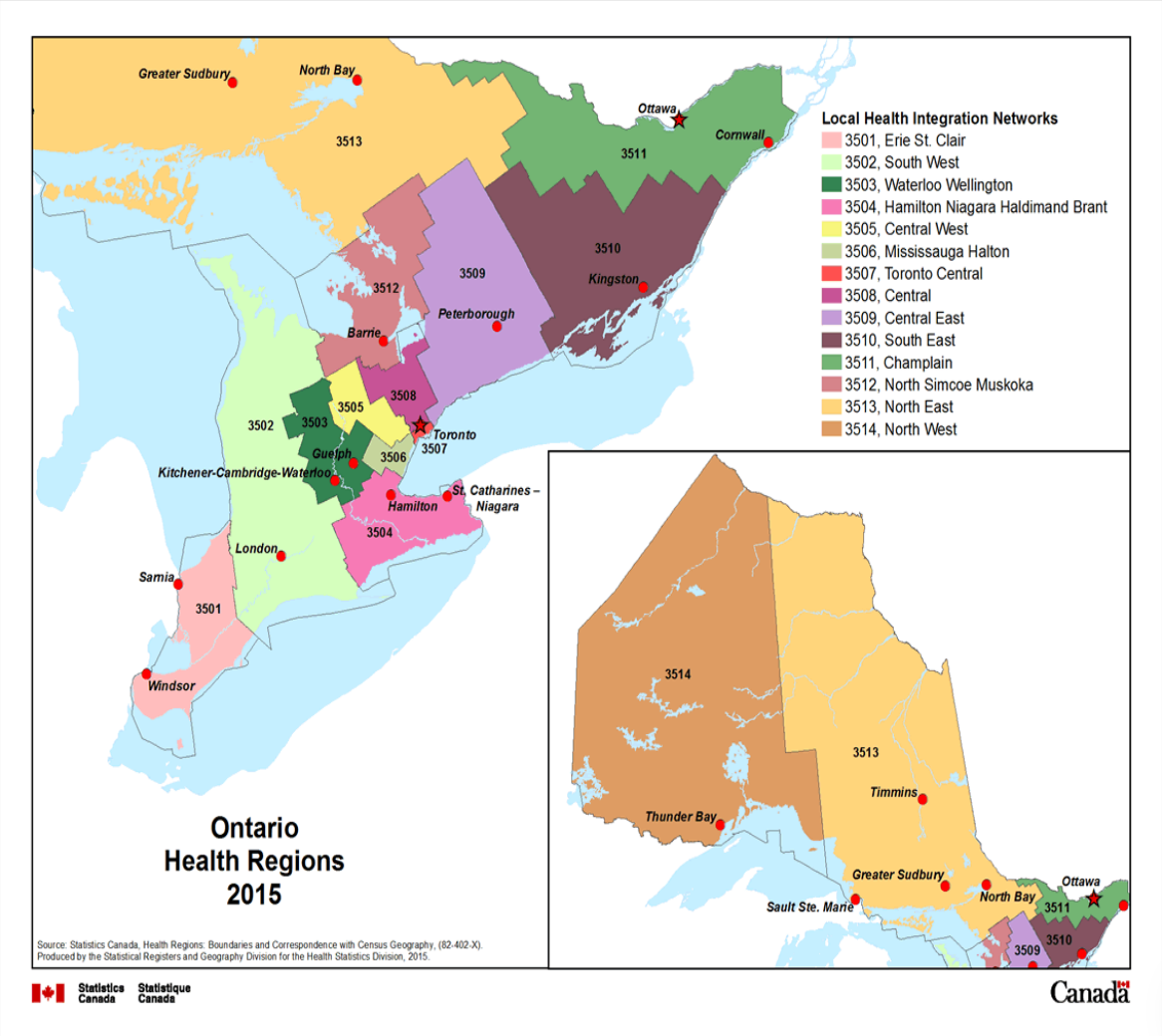
Date the Consent Discussion

Appendix H: Research Site Map



Appendix I: LHINs Geographical Map

Retrieved from https://www150.statcan.gc.ca/n1/pub/82-402-x/2015002/maps-cartes/rm-cr08-eng.htm



Appendix J : Quality Based Procedures in Ontario
Retrieved from
https://www.health.gov.on.ca/en/pro/programs/ecfa/docs/qbp_fiscal_list_en.pdf

Ontario

Quality-Based Procedures

List of QBPs and Clinical Handbooks

Ministry of Health

May 2021

The following tables list the Quality-Based Procedures (QBPs) and corresponding QBP Clinical Handbooks for procedures that have been funded as QBPs for the 2021-22 fiscal year. This includes:

- Ontario Health (OH) Region-Managed QBPs; and
- OH Cancer Care Ontario (OH-CCO)-Managed QBPs.

OH Region-Managed QBPs

Table 1. OH Region-Managed QBPs and Clinical Handbooks (Elective)

QBP (Subgroup)	Clinical Handbook	Date
Cataract (Routine Unilateral)	Cataract Day Surgery	May 2021
Cataract (Routine Bilateral)	Cataract Day Surgery	May 2021
Cataract (Non-Routine)	Cataract Day Surgery	May 2021
Hip/Knee Replacement (Bilateral)	Primary Hip and Knee Replacement	November 2013
Hip Replacement BUNDLE (Unilateral)	Primary Hip and Knee Replacement	November 2013

Knee Replacement BUNDLE (Unilateral)	Primary Hip and Knee Replacement	November 2013
Hip/Knee Replacement BUNDLE (Bilateral)	Primary Hip and Knee Replacement	November 2013
Non-Cardiac Vascular (Lower Extremity Occlusive Disease)	Non-Cardiac Vascular (Lower Extremity Occlusive Disease)	February 2021

QBP (Subgroup)	**Clinical Handbook**	**Date**
Non-Cardiac Vascular (Aortic Aneurysm)	Non-Cardiac Vascular (Aortic Aneurysm)	February 2021
Tonsillectomy	Paediatric Tonsillectomy and Adenoidectomy	November 2016
Knee Arthroscopy (Degenerative Meniscus and Joint)	Knee Arthroscopy	May 2019
Knee Arthroscopy (Other Meniscus and Joint)	Knee Arthroscopy	May 2019
Knee Arthroscopy (Ligament and Patella)	Knee Arthroscopy	May 2019

Corneal Transplant (Day Surgery)	Integrated Corneal Transplant Care	March 2018
Spine (Non-Instrumented - Day Surgery)	Non-Emergent Integrated Spine Care	September 2017
Spine (Non-Instrumented - Inpatient Surgery)	Non-Emergent Integrated Spine Care	September 2017
Spine (Instrumented Inpatient Surgery)	Non-Emergent Integrated Spine Care	September 2017
Shoulder (Arthroplasty)	Degenerative Disorders of the Shoulder	July 2015
Shoulder (Reverse Arthroplasty)	Degenerative Disorders of the Shoulder	July 2015
QBP (Subgroup)	**Clinical Handbook**	**Date**
Shoulder (Repairs)	Degenerative Disorders of the Shoulder	July 2015
Shoulder (Other)	Degenerative Disorders of the Shoulder	July 2015
Shoulder BUNDLE (Arthroplasty)	Degenerative Disorders of the Shoulder	July 2015

Shoulder BUNDLE (Reverse Arthroplasty)	Degenerative Disorders of the Shoulder	July 2015
Non-Cancer Hysterectomy (Open Abdominal)	Hysterectomy	August 2016
Non-Cancer Hysterectomy (Laparoscopic (via Incision))	Hysterectomy	August 2016
Non-Cancer Hysterectomy (Laparoscopically Assisted Vaginal)	Hysterectomy	August 2016
Non-Cancer Hysterectomy (Vaginal)	Hysterectomy	August 2016
Non-Cancer Hysterectomy (Outpatient)	Hysterectomy	August 2016

** QBP funding currently applies only to the acute component of the episode of care.*

Table 2. OH Region-Managed QBPs and Clinical Handbooks (Non-Elective)

QBP (Subgroup)	Clinical Handbook	Date
Stroke (Hemorrhage)	Stroke (Acute and Postacute)*	December 2016
Stroke (Ischemic Or Unspecified)	Stroke (Acute and Postacute)*	December 2016
Stroke (Transient Ischemic Attack)	Stroke (Acute and Postacute)*	December 2016
Stroke (Endovascular Treatment)	Stroke (Acute and Postacute)*	December 2016
Congestive Heart Failure	Heart Failure (Acute and Postacute)*	February 2015
Chronic Obstructive Pulmonary Disease	Chronic Obstructive Pulmonary Disease (Acute and Postacute)*	February 2015
Hip Fracture	Hip Fracture	May 2013
Pneumonia	Community-Acquired Pneumonia	February 2014

** QBP funding currently applies only to the acute component of the episode of care.*

2.0 OH-CCO-Managed QBPs

Table 3. OH-CCO-Managed QBPs and Clinical Handbooks

QBP (Subgroup)	**Clinical Handbook**	**Date**
Gastrointestinal Endoscopy	Gastrointestinal Endoscopy	April 2020
Systemic Treatment	Systemic Treatment	February 2013
Chronic Kidney Disease	Chronic Kidney Disease	January 2016
Cancer Surgery (Prostate)	Cancer Surgery	June 2019
Cancer Surgery (Colorectal)	Cancer Surgery	June 2019
Cancer Surgery (Breast)	Cancer Surgery	June 2019
Cancer Surgery (Thyroid)	Cancer Surgery	June 2019
Cancer Surgery (Neurosurgical (brain, spine)	Cancer Surgery	June 2019
Cancer Surgery [Thorax (lung, esophagus, thoraxother)]	Cancer Surgery	June 2019
Cancer Surgery [Abdominal (HPB-liver, HPB-pancreas)]	Cancer Surgery	June 2019

Cancer Surgery (Genitourinary)	Cancer Surgery	June 2019

QBP (Subgroup)	Clinical Handbook	Date
Cancer Surgery [Head and Neck (Designated Centre, Other)	Cancer Surgery	June 2019
Cancer Surgery [Abdominal (Other)]	Cancer Surgery	June 2019
Cancer Surgery [Skin (Lymph Node, Soft Tissue)]	Cancer Surgery	June 2019
Cancer Surgery (Gastric)	Cancer Surgery	June 2019
Cancer Surgery [Gynaecology (Prophylactic Oophorectomy, Designated Centre, Other)]	Cancer Surgery	June 2019
Cancer Surgery	Cancer Surgery	June 2019

[Endocrine (Other)]		
Cancer Surgery (Bone)	Cancer Surgery	June 2019
Cancer Surgery (Soft Tissue)	Cancer Surgery	June 2019
Cancer Surgery (Non-site specific)	Cancer Surgery	June 2019

Appendix K: List of Medical Directives

Medical Directive 1 – Analgesia for Foley Catheter Insertion

Medical Directive 2 – Antiemetic

Medical Directive 3 – Cardiac Care

Medical Directive 4 – Diagnostic Testing

Medical Directive 5 – Eye Injuries

Medical Directive 6 – Febrile Neutropenia

Medical Directive 7 - First Trimester Bleed

Medical Directive 8 – Hypoglycemia Prevention and Management

Medical Directive 9 – Removal of C-Spine Collar

Medical Directive 10 – Wound Care/Tetanus-Diphtheria Prophylaxis

Medical Directive 11 – Severe Sepsis/Septic Shock Care

Medical Directive 12 – Analgesia for Nasogastric Tube

Medical Directive 13 – Fever Management

Medical Directive 14 - Defibrillation

Medical Directive 15 – Initial Pain Management

Medical Directive 16 – Initiation of X-Ray Ordering for Isolated Injury

Medical Directive 17 – Chest X-Ray

Medical Directive 18 – Lidocaine for Intramuscular Injection