

Covid-19 and its Impact on Hospitals: A Content Analysis of the Effects on Emergency Department Wait Times Due to Covid-19

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Abstract

This qualitative study explored the extent to which the Covid-19 pandemic has impacted Canadian hospitals and emergency department (ED) wait times. A purposive sampling procedure was used for this study to conduct a content analysis on a sample of 50 of the most recent and relevant comments that included reactions, personal experiences, and possible solutions towards ED wait times from a *CBC News* article. A coding procedure examined any frequent themes and subcategories in the comments. Results showed six consistently present categorical themes: Wait Times, Shortage of Workers, Underfunded Healthcare System, Unrelated Covid-19 Symptoms, Avoidance, and Solutions. Furthermore, additional subcategories were determined from the themes. This study analyzes the intense backlogs of surgical cases and waiting rooms, resulting in adverse patient outcomes. Additionally, this study explores the underfunded and understaffed healthcare system, the stresses healthcare workers face daily, and possible solutions to mend this broken healthcare system.

Introduction

The Covid-19 pandemic induced a global state of fear and panic, resulting in restrictions being implemented to combat the spread of this infectious disease. So far, globally, there have been 6.6 million deaths due to Covid-19 (World Health Organization, 2022). Everyone has been affected by the Covid-19 pandemic, whether they realize it or not. Long-lasting outcomes have affected our daily lives and institutions. Mental health has decreased significantly because of limited social interactions and staying inside our homes to protect ourselves and our loved ones. There has been an ongoing effect on employment, and many have lost their jobs, struggling to make ends meet. An increase in the volume of patients in hospitals resulted in a limited supply of protective equipment and ventilators. The

Covid-19 pandemic has permanently changed the world.

Canadian hospitals have immensely been affected due to the Covid-19 pandemic. Emergency department (ED) wait times have increased, and the daily average wait time is approximately 4 to 17 hours in Alberta (Alberta Health Services). Due to increased ED wait times, people are afraid to call for an ambulance. Sitting in a room for hours would deter many people from seeking help to examine their health concerns, only to receive half the quality of care from healthcare workers.

In addition, surgeries that were deemed not urgent are being delayed for extensive periods, and urgent procedures are prioritized over previously scheduled surgeries. The Canadian Institute for Health

Information states that almost 560 000 surgeries were not performed because they were cancelled or delayed by hospitals. Kayla Wiebe, Simon Kelley and Roxanne Kirsch (2022) concluded that prioritizing urgency in surgery led to a problem of two wait lists: (1) a growing list of urgent cases, and (2) scheduled cases that are delayed for too long, leading to adverse patient outcomes. Surgery delayed for a long time could result in individuals developing more severe symptoms of their previously diagnosed health conditions. Other surgical cases that are negatively affected when delayed for too long are those that will not escalate to an urgent classification but will impede an individual's quality of life (Wiebe, Kelley and Kirsch, 2022). The effect on one's quality of life may include fertility, mental health, mobility, and development. Delayed surgery could also risk developmental milestones for pediatric patients requiring time-sensitive surgeries. Risking failure to reach developmental milestones can have a permanent effect on a pediatric patient's life. Wiebe, Kelley, and Kirsch (2022) suggest improvements to combat the flawed surgical system for hospitals across Canada. Improvement suggestions include scheduling surgeries during times of the year when there is a high probability of hospital beds and inpatient care being prioritized, such as outside flu season. Implementing these suggestions in the ED can address surgery backlogs, severely delayed surgeries, time-sensitive surgeries, and surgeries that impede one's quality of life could be dealt with sooner rather than later.

The Covid-19 pandemic challenged healthcare workers, requiring dramatic changes and high levels of adaptability. Hospital and ED staff had to devise different solutions to problems and continue to care for patients despite the volume of hospitalized patients. Almost no hospital beds or ventilators were left for the ICU, and patients with other concerns could not be treated because there was no space to conduct tests in hospitals. Despite the lack of hospital beds, medical equipment shortages, and extended ED wait times, healthcare workers continued to care for patients the best they could. Sayra Cristancho, Emily Field, and Taryn Taylor (2022) were interested in how healthcare workers adapted and utilized the Constructivist Grounded Theory, which is used to understand dynamic social processes and interactions. Cristancho and the team interviewed 20 healthcare providers to assess this theory. They had the interviewees comment

on how healthcare workers had to participate in implosive adaptations, which is adapting due to a sense of emergency (Cristancho, Field, and Taylor, 2022). The healthcare industry has discovered that no "one-size-fits-all" solutions can be applied to all pandemic responses since specific solutions can only be applied to specific situations. Healthcare workers have faced new challenges since the beginning of the Covid-19 pandemic and continue to this day by adapting to different situations quickly.

Panic across the healthcare industry due to the Covid-19 pandemic has resulted in testing new solutions to increase hospital reliability and effectiveness. Specifically, addressing the issue of increased wait times across Canadian hospitals, Hensley Mariathas and his team (2022) aimed to improve ED wait times by using a platform, SurgeCon. The pandemic has increased wait times to the point where the ED staff has to work more overtime than other hospital departments and is understaffed. Mariathas mentions that the Covid-19 pandemic's suspension of essential and nonessential procedures has negatively impacted wait times. Surgical delays result in increased high-acuity patients, impacting patient flow and wait times. SurgeCon aims to improve ED wait times and department efficiency and was piloted in an ED in Carbonear, Newfoundland and Labrador. During the piloting of SurgeCon, the results indicated that despite the increase in ED patient volume, the number of patients had an overall decrease (Mariathas et al., 2022). The pilot study allowed SurgeCon to allot to other EDs and assess how this platform's incorporation affects EDs. Having a reliable system that EDs can use is essential for decreasing patient wait times, and healthcare staff from working more overtime than need be. Although more testing needs to be done, Mariathas' findings show promising results and the potential that SurgeCon's intervention can provide solutions to ED wait times and improve efficiency.

This content analysis will contribute to how the Canadian healthcare system was affected by Covid-19 and look for possible solutions for prolonged wait times, decrease surgical delays, and improve emergency department efficiency.

Methods

Sample

The sample for this content analysis consisted of comments posted to the *CBC* article “‘Perfect Storm’ has Albertans waiting long hours in backlogged hospital emergency rooms,” published on October 26, 2022. *CBC News* is available online, providing several articles on current issues to inform the public. *CBC News* has been selected as the sample because this news outlet is one of Canada's leading national news outlets.

Sample Selection

The comments on the *CBC* news article totaled 506 comments. The search function on a keyboard, command+F, was utilized to look for comments that included keywords such as *wait times*, *underfunded*, *understaffed*, *burnout*, *surgery*, or *solution*. Also, comments which discussed and replied to Alberta's long ED wait times, the underfunded and understaffed healthcare system, staff burnout, and possible solutions to address the patient backlog were analyzed. The sample size of 50 was reached by selecting the most recent 50 comments containing keywords or discussion mentioned above.

Inclusion and Exclusion Criteria

This content analysis examines how Covid-19 has affected EDs and wait times across Canadian hospitals and possible solutions to address the patient backlog. As such, comments and replies were excluded if they did not contain the keywords or discussion mentioned in ‘*Sample Selection*.’ Comments and replies were also excluded if they contained political arguments/discussions or mention of worldly affairs. The 456 comments and replies which did not continue the discussion of the article or did not contain any specified keywords were excluded.

Unit of Analysis

The unit of analysis for this study is the first 50 comments that contain keywords such as *wait times*, *underfunded*, *understaffed*, *burnout*, *surgery*, or *solution* mentioned in the *CBC* news article titled “‘Perfect Storm’ has Albertans waiting long hours in backlogged hospital emergency rooms.”

Settings and Materials

Data collection and coding procedures took place in the principal researcher's area of residence and at MacEwan University. Necessary materials included a laptop and reliable internet access to locate the news article and the units of analysis and take screenshots of comments for data collection and analysis.

Coding Procedure

Each comment was examined individually for keywords and discussion relating to the dominant theme of prolonged emergency department wait times. Coded comments were re-examined to infer general themes which pertain to the topic, such as personal experiences of waiting long hours in the emergency department for non-Covid related issues. The comments were then grouped into revised theme categories.

Results

After analyzing the comments, many themes were prevalent in the *CBC* news article. Themes mainly consisted of individuals expressing their frustration with the healthcare system and how it is reaching its breaking point due to factors such as overworked staff, shortage of healthcare workers, and how the system is underfunded, leading to extreme lengths of wait times in the ED. Some commented on possible solutions to current problems to address extended wait times and lack of testing, while others chose to warn others about avoiding the ED at all costs.

The content analysis revealed six main themes, including 1) wait times, 2) shortage of workers, 3) an underfunded healthcare system, 4) unrelated Covid-19 symptoms, 5) avoidance, and 6) solutions.

Wait Times

The conversation about wait times that commentators personally experienced was shared throughout the comment section of the article repeatedly. Canadian hospital wait times have had a history of disorganization and wait time issues, but ED wait times worsened during the Covid-19 pandemic. Some cases were frequently considered more critical, and consultations were not conducted on time. This category identified four more subsections: 1) stress, 2)

length of wait times, 3) incomplete consultations and testing, and 4) symptoms worsening while waiting.

Stress was a common keyword among comments about ED wait times and personal experiences. Commentators expressed how waiting in EDs resulted in high-stress levels for patients waiting to be admitted. Stress was associated with a multitude of factors, but a common factor that was evident was stress due to the length of wait times.

The length of wait times was extensive, and individuals had to deal with their symptoms for long periods while waiting to be admitted. Because of high patient volumes, patients waiting to be examined had to wait long hours in the ED. When patients were admitted, a frequent complaint was that the physicians did not conduct all the tests to assess the patient's symptoms and spent little time with patients.

Incomplete consultations and testing were concerns from some commentators. A parent was concerned about how an ultrasound was not conducted for her daughter and mentioned how appropriate tests were not conducted (Table 1). Another commentator mentioned how she only received five minutes of consultation from a physician after waiting eight hours in the ED (Table 1). Patients do not feel they are getting quality care because they have not received proper testing or enough time with their physicians during their consult after waiting hours to assess their concerns.

Patient symptoms worsening during their stay in the ED has been a concern voiced by commentators. Understandably, sitting in a waiting room for hours with one's symptoms can worsen. A couple of comments mentioned individuals passing away while waiting to be admitted because they were not tended to promptly (Table 1). Patients are bound to be stressed by hearing incidents while waiting in the ED.

Shortage of Workers

There has been a shortage of healthcare workers across the country. Doctors and nurses are struggling to handle intense patient volumes on time. This category includes 3 subsections: 1) the ratio of ED staff to a high patient volume, 2) ED staff having to work harder, and 3) burnout.

The ratio of ED staff to a high patient volume has also contributed to increased wait times across Canadian hospitals. With the shortage of workers in the ED department, there needs to be more staff to handle the high volume of patients in waiting rooms. Due to a high volume of patients, there is also less space available for patients waiting to be admitted. Comments address this issue and mention how doctors and nurses are being turned away from positions they qualify for (Table 1). Low staff ultimately leads to lower quality of care and panic among staff in the ED about handling the number of patients.

The ED staff has to work harder because of low staff numbers in the ED. Nurses have to take on more than they can handle because there are not enough nurses to distribute the workload evenly. The ED staff has to work harder to accomplish tasks and handle patients, leading to burnout.

Burnout is when one is mentally and physically exhausted; in the ED staff, burnout occurs from an excessive workload. The shortage of workers leads to ED staff reaching the burnout stage faster. Burnout can also negatively affect the quality of care that ED staff provide patients. With staff working overtime to accomplish tasks and handle patients, staff burnout is expected because they take on more than they can handle.

Underfunded Healthcare System

The healthcare system is noticeably underfunded because of the country's shortages of doctors and nurses. Residents of Canada are concerned about the underfunded healthcare system because they cannot see a future where the healthcare system will improve. Three subsections arise from this category: 1) taking on multiple roles, 2) dysfunction, and 3) the healthcare system needs fixing.

Nurses take on multiple roles during their shifts. Because the healthcare system is underfunded, nurses have to track the finances of medical equipment (Table 1). Staff is taking on roles and responsibilities that are not in their job description and are being pulled away from patient care. The hospital staff have more than they can handle, leading to dysfunction.

Dysfunction in the healthcare system is evident and has become more severe since the Covid-19 pandemic.

Many commentators have mentioned that the healthcare system has reached its breaking point because of dysfunction and disorganization.

The healthcare system needs fixing was a common concept among comments about the broken system. Comments mentioned how healthcare staff are working extensively long hours just to get the work done and try to stay on track. One comment mentions that if the system does not improve, it will worsen (Table 1). A lot of effort and attention has to go into mending the system; otherwise, the healthcare system will continue to drown.

Unrelated Covid-19 Symptoms

During the first wave of Covid-19, most patients were admitted because they had contracted Covid-19. This led to a limitation of hospital beds and ventilators in the ICU. With a low supply of medical equipment, patients with concerns and symptoms that did not relate to Covid-19 could not receive appropriate care. Two subsections are connected to this theme: 1) long wait times with unrelated symptoms and 2) deaths from absent care.

Long wait times in the ER with unrelated symptoms, an issue that has continued since the beginning of the pandemic. Commentators express their concern by sharing personal experiences in the ED waiting room and suffering from non-Covid related symptoms. A commentator shared how they had to wait eight hours in the emergency room to receive an inhaler prescription (Table 1). Individuals have to suffer from their symptoms for long periods because a) there is not enough room to be examined sooner, and b) some cases are deemed more of an emergency than others.

Deaths from absent care are a common occurrence in EDs. Patients may not have enough time to wait to be admitted and undergo examinations and consultations. Many patients die in ED waiting rooms because of the intense patient volume because their concerns are not addressed soon enough.

Avoidance

Due to the constant news of increased hospital wait times and the lack of room and medical supplies to aid patients, some individuals avoid going to the ED altogether. Individuals are deterred from going to the

hospital in emergencies or even if they are left with no other option when clinics are closed because they do not want to wait for hours on end to receive a lack of quality care. A lack of quality care could include incomplete testing, having less time with physicians during consultations, and not receiving questions about all of one's concerns.

Although the healthcare system cannot be blamed entirely for the lack of quality care, the pandemic has caused the healthcare system to make a 180. Hospital staff have more responsibilities, resulting in low-quality care and longer wait times. Commentators mention that if you ever need the motivation to adopt a healthier lifestyle, ED wait times should be a reason because you will have to wait hours to address your concerns (Table 1). Individuals feel that waiting so long in the ED is not worth it when their concerns and symptoms are not being fully addressed, so it is easier to avoid visiting the ED in general.

Solutions

Although possible solutions have been tested in a few EDs, like SurgeCon's pilot in Carbonear, Newfoundland and Labrador, solutions have not been implemented in most hospitals across Canada. Solutions need to be enforced in hospitals to decrease overcrowding in waiting rooms, increase medical supplies, hospital beds, patient care, and a smooth running system.

Comments on the *CBC* news article mention how Canada needs to create solutions for hospitals, and some even suggest possible solutions. One comment suggests that the healthcare system should open 24/7 walk-in clinics for non-emergency cases so the ED staff can handle and give attention to urgent cases (Figure 1). Opening a 24/7 walk-in clinic beside a hospital or even throughout the city can decrease the volume of patients in ED waiting rooms, allowing nurses and doctors to handle severe cases and give proper attention to those patients.

Table 1. Examples of Comments by Each Category and Sub-Category

1) Wait Times	
a) Stress	<p>“I 100% feel for this family. Most definitely a stressful and long wait. Wait times vary daily.”</p> <p>“Scary stuff. I don’t care about myself- I’m 63 yrs old- I care that my children and grandchildren can get adequate care.”</p>
b) Length of Wait Times	<p>“Guess it’s a national healthcare decline. Because we have 20+ hour wait times in New Brunswick now.”</p> <p>“Interesting, the consistently longer wait times are in Edmonton, according to AHS. Calgary’s hospitals vary anywhere from 1.5 hrs to just over 5 hrs. What’s up with Edmonton...”</p>
c) Incomplete Consultations	<p>“No ultrasound in Lamont either? Given it’s the first thing that should be done, given a thin 9 yr old girl (not CT). Kind of a waste of time going when there are no appropriate services to solve appendicitis vs ovarian cyst issue.”</p>
d) Symptoms Worsening While Waiting	<p>“Guy died of aneurysm waiting for 16 hours in the emerg here.”</p>
2) Shortage of Workers	
Shortage of Workers	<p>“We have a massive shortage of workers and desperately need more people.”</p> <p>“I have been to a third-world country; for 3 months last summer. Let me tell you this, their medical system and as well as their justice system are 10 times better than ours. Doctor shortages have been a problem for years.”</p>
a) The ratio of ED staff to a high patient volume (turning away qualified candidates)	<p>“The only problem we have is not enough doctors and nurses. There are many qualified Canadians who meet the standards for medical or nursing school but are turned away. Anyone who wants to become a doctor or nurse and meet the requirements should be able to become one.”</p>
b) ED Staff Working Harder	<p>“It seems the entire country has the same issue...absent</p>

	<p>medical service. They’re just some of the ones working long hours to try and make it all work.”</p> <p>“Most people filling hospitals who are not admitted are taking up hospital staff’s time.”</p>
c) Burnout	<p>“How does one operate above 100%? It’s called overtime, and lots of it. Leading to burnout amongst the frontline workers.”</p>
3) Underfunded Healthcare System	
a) Taking on Multiple Roles	<p>“Currently, in Alberta, the government has hired and forced the hospitals to use the “Connect Care” system. Now nurses spend 50% or more of their time inputting and managing financial tracking of materials in the system.”</p>
b) Dysfunction	<p>“It does not matter what province you’re talking about- the health care system has reached the breaking point.”</p> <p>“The current health system is rotten... Canada has 10 times more administrators in the medical system than Germany...as long as this does not change, things will stay the same or go worse....”</p> <p>“ER overcrowding is just one of the many clear indicators of the dysfunction of the Canadian health care system. And it has been going on for DECADES!”</p> <p>“Perfect storm? Profoundly dysfunctional health care system!”</p>
c) The Healthcare System Needs Fixing	<p>“Not a fan of their politics, but this isn’t an Alberta problem. It’s going on all over the country and needs fixing.”</p> <p>“Need to seek efficiencies at delivering services.”</p>
4) Unrelated COVID_19 Symptoms	
a) Long Wait Times for Unrelated Covid-19 Symptoms	<p>“I just spent EIGHT HOURS in an emergency room for a five-minute assessment that, yes, I am suffering from an asthma attack, and to get an inhaler prescription.”</p> <p>“Last year, I had a fractured knee from a biking accident,</p>

	21 hours in the waiting room before I got to an x-ray.”
b) Deaths from Absent Care	“Did someone die in an emergency in Alberta? Didn’t someone die in Quebec after waiting hours in the emergency room? All provinces are suffering; tell it like it is.”
5) Avoidance	
	“If you ever need a reason to adopt a healthier lifestyle, forget looking good in a swimsuit, or even prevent diseases like cancer or diabetes, it should be so you can avoid EIGHT-HOUR HOSPITAL WAITS.”
6) Solutions	
	<p>“Identify the main factors contributing to the problem and address them. Kick out non-emerg cases. Treat the ER staff respectfully, have a few 24x7 walk-in clinics, so less urgent situations don’t clog up the ER, etc.... can’t be that complicated.</p> <p>“There is an app or two which tells you your best options if you have to be there right now or the wait will be up to nine or ten hours for things like getting fitted for an air cast.”</p> <p>“They need to put a “medicenter” type of clinic next to the emergencies for those who are not emergencies to reduce crowding due to doctor’s offices being closed at night or weekends.”</p>

Discussion

This content analysis was conducted to analyze the impact Covid-19 had on emergency department wait times. When analyzing the 50 comments from the *CBC* News article titled, “‘Perfect Storm’ has Albertans waiting long hours in backlogged hospital emergency rooms,” the following themes and categories were identified: 1) wait times, 2) shortage of workers, 3) an underfunded healthcare system, 4) unrelated Covid-19 symptoms, 5) avoidance and 6) solutions.

Upon analyzing this article, the results indicated that the healthcare system in Canada is struggling to function efficiently and is causing frustration among

residents. An interesting finding from analyzing the 50 comments on the news article is that connections can be made between the themes and categories identified. Each theme uncovered during the analysis relates to the other themes in one way or another. The healthcare system is underfunded, leading to a shortage of healthcare workers, an overworking staff, and increased wait times. Increased wait times will lead to the avoidance of EDs from the general public. To reduce the effect of the previously listed issues, solutions might be created and implemented in EDs.

The main concern among commentators was that the healthcare system has reached its breaking point. Doctors and nurses are overworked and have to work longer hours than any other department in the hospital (Mariathas et al., 2022) because the surplus of patients in the ED waiting room leads to a backlog of patients. This backlog leads to extremely long wait times in the ED, and some patients’ symptoms can worsen immensely, resulting in the patient’s overall health decreasing. The understaffed ED department results in dysfunction, which has led to a lack of quality patient care and incomplete consultations and testing by physicians so that the ED backlog can lighten. The lack of patient care, minimum minutes spent with patients by physicians, and worsening symptoms developing in waiting rooms are why many deter from visiting the ED. Hence, individuals choose to suffer from their symptoms and wait until the next walk-in clinic opens rather than waiting countless hours. Commentators offered solutions in the *CBC* News article on how to try to fix the system by hiring more doctors and nurses and creating systems within the department to minimize the responsibilities of nurses. The article’s findings and common themes align with the previously mentioned literature.

Wiebe, Kelley and Kirsch (2022) discussed the delay and cancellations of previously scheduled surgeries, which resulted in two waitlist problems, (1) the growing list of urgent cases and (2) adverse patient outcomes, such as declining health and worsening symptoms. The findings of Wiebe, Kelley and Kirsch mirror the experiences that patients endured while in ED waiting rooms. While in the waiting rooms, patient symptoms had a chance of worsening, and in some extreme cases, patients’ health deteriorated immensely, leading to death. Although wait times in EDs across

Canada have not been up to par, the effect of Covid-19 on hospitals has been tremendous and has shaken the healthcare system. To address ongoing issues in the ED, there needs to be a permanent solution to take some unnecessary weight off the shoulders of doctors and nurses so that efficiency in patient care and examinations can remain consistent. Once solutions are implemented, wait times will decrease, and efficiency will increase so that the ED will function smoothly.

SurgeCon was a possible solution piloted in an ED in Carbonear, Newfoundland and Labrador. SurgeCon is a platform that offers a solution to improve efficiency and address the issues of the high backlog of patients. Although Mariatha's (2022) piloting of SurgeCon was limited to some EDs across Canada, the pilot tests yielded positive results. The results of the pilot indicate that there was an overall decrease in patient wait times. Implementing solutions that are proven to work will benefit the ED staff and patients in waiting rooms. The results of SurgeCon are precisely what commentators of the article, and residents of Canada, are looking for. If no solutions are implemented in the healthcare system, the system will remain stagnant, and there are chances that the current position of the system might worsen.

Limitations and Suggestions for Future Research

There are five limitations to note within this study. First, data collection was done for only one article, meaning there was not enough comparable content to analyze the findings. Analyzing one article on Covid-19 and its effect on hospital wait times gives a limited idea of the topic. Second, only 50 out of 506 comments were chosen to be analyzed. With only analyzing one article and 50 comments, there is no external validity because the findings from the comments and the chosen article cannot be generalized to the rest of the population. Furthermore, only individuals who could access the online article and keep up with online news posts could comment and share their opinions. This might limit a wide portion of the population from expressing their opinions on ED wait times and possible personal experiences they would want to share. Therefore, there was no representation of the entire population's opinions. Third, most of the article's comments contained political opinions or statements which did not directly correlate to this study. Approximately 9.88% of comments were personal

experiences, opinions on the healthcare system, or possible suggestions for improving the system. The rest of the comments were those that were not relevant to the topic, users who had argumentative replies to other comments, or political opinions and statements. Another limitation was researcher bias when selecting comments because the principal researcher chose comments that were thought to hold significance and relevance to this study, failing to utilize inter-coder reliability. Finally, *CBC* has any right to remove comments that defy the common guideline, contain personal attacks, insults, or defamatory statements (*CBC Help Centre*), and removing such comments can hinder the discovery of other themes.

Considering the limitations of this study, there are a few suggestions for ensuring greater validity and reliability when studying the impact Covid-19 had on hospitals, particularly the length of ED wait times. First, future researchers should research many articles and compare the information found. Alongside researching more than one article, future researchers should also obtain a greater sample size of comments so there can be high external validity for generalizing comments to be more representative of the population. Second, future researchers should employ inter-code reliability; two or more researchers should agree on what comments to code to maintain consistency and validity throughout the research process and the study. The third suggestion is to analyze the ED first-hand and understand how the system operates and how the department functions in its day-to-day operations. By doing so, there will be natural observations, and information will be collected directly from the source relating to the study. Lastly, after observing the ED operations, it would be important to interview doctors and nurses from the ED on how they suggest improvements can be made to the healthcare system. By interviewing individuals who work directly in the foundational areas of this study, the suggestions made by healthcare workers can be piloted and applied to improve Canada's healthcare system and ED operations to reduce lengthy wait times, enhance efficiency, and reduce backlogs of patients.

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