

Improving Patient Care in Canada and California

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Abstract

My intended audience is technicians. They are the people who build, operate, maintain, and repair the stuff that the experts design and theorize about. The technical background of my intended audience is their education whether it be a bachelors or masters degree. This report will cover the amount of time that medical professionals have to check in and see each patient and whether or not the amount of time allotted affects the level of care each patient gets. The purpose of this report is to demonstrate the impact on the patients and how they feel their case was handled.

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EXECUTIVE SUMMARY

My intended audience is technicians. They are the people who build, operate, maintain, and repair the stuff that the experts design and theorize about. They have a highly technical knowledge as well, but of a more practical nature. The technical background of my intended audience is their education whether it be a bachelors or masters degree. They will know most about the topic but the field is always growing and evolving so there's always something new to learn. Their technical limitations are based on what models of machinery they have available to them in the hospital. This report will cover the amount of time that medical professionals have to check in and see each patient and whether or not the amount of time allotted affects the level of care each patient gets. The purpose of this report is to demonstrate the impact on the patients and how they feel their case was handled. The range of hospital care in the United States tends to diminish when medical professionals have less time to see each patient. This raises the question of what is considered the proper amount of time spent with each patient. Usually each hospital has their own rules and regulations as to how much time they want spent on each patient. Some hospitals would rather have higher numbers of patients seen rather than the higher level of care per patient.

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I. Introduction:

Patient care can vary greatly due to the amount of time spent with each patient. It does make a difference on the amount of time medical professionals spend with the patient and whether it affects the level of care the patient receives. RT's, Doctors, nurses, the families of the patients, and the patients all play parts in patient care.

Respiratory Therapy is based on the nose, mouth, voice box, trachea, bronchial tubes, the lungs, the blood vessels and muscles associated with breathing. It is so complex that it is not surprising that things can sometimes go wrong resulting in various diseases such as, "Tuberculosis, Chronic Obstructive Pulmonary Disease (COPD), Bronchitis, Emphysema" [8], and much more. Respiratory Therapists assist with various therapies and exercises that help assess patients breathing, lung sounds, and the delivery of the nebulizer therapy. Respiratory therapy has a wide range of professional development opportunities. It is more than just an occupation, it is a profession. RT's can conduct research in a variety of ways to further their knowledge of their field. Higher education is very important in respiratory therapy. In this field of study and work RT's are self-regulated. This means that they can assess situations and act on them according to their knowledge and judgment without oversight from other professions.

Respiratory therapists help with "coughing, deep breathing exercises, incentive spirometry, assessment of lung sounds as well as the delivery of nebulizer therapy" (Mastrangelo). Rt's typically work in hospitals but can also work in sleep labs, clinics, and much more. They study the inner workings of the heart and lungs. Common questions that respiratory therapists ask are: "have you had any shortness of breath, coughing, or wheezing?". Another question Rt's typically ask patients is, " Have you

noticed any clubbing of your extremities such as your fingers?”. There are many methods used in Respiratory therapy. Two common examples are Dry Powder Inhalers (DPI) and Metered Dose Inhalers (MDI). DPI’s are small hand-held devices that administer powdered medication into the lungs of the patient. This device helps treat health conditions that impact the breathing of the patient. If the patient is unable to take a deep breath they are not able to use this device and will need to use an alternative option. MDI’s administer a certain amount of medication to the lungs. The medication usually is in short bursts and typically is self-administered by the patient.

Respiratory Care Therapists are valued because they help immensely with putting patients on Non-invasive Ventilation (NIV). According to Kareus, patients that go on NIV have higher chances of prolonged survival [7]. You can see in Figure 3 that the data of patients seen pre-RT and post-RT are significant. Those who were seen by an RT significantly improved and prolonged their survival rate.

	Pre-RT n=37	RT n=40	p-value
Male gender	16 (43%)	20 (50%)	0.55
Female gender	21 (57%)	20 (50%)	
No PEG	23 (62%)	20 (50%)	0.28
PEG	14 (38%)	20 (50%)	
Bulbar onset	14 (38%)	11 (28%)	0.33
Extremity onset	23 (62%)	29 (72%)	
Non-spouse caregiver	10 (27%)	13 (36%)	0.60
Spouse caregiver	27 (73%)	27 (66%)	
Age (years)	58.5±13.9	60.3±11.4	0.54
Disease duration*	31.4±29.9	35.5±40.4	0.60
ALSFRS-R	24.8±6.8	24.8±6.9	0.97
Combined orthopnea & dyspnea score [†]	5.9±1.5	5.3±1.7	0.09
FVC	43.4±13.6	42.6±12.2	0.77

Figure 1: Baseline characteristics of patients seen pre-RT and post-RT. Kareus, Kagebein, & Rudnicki, (2008). “The importance...”

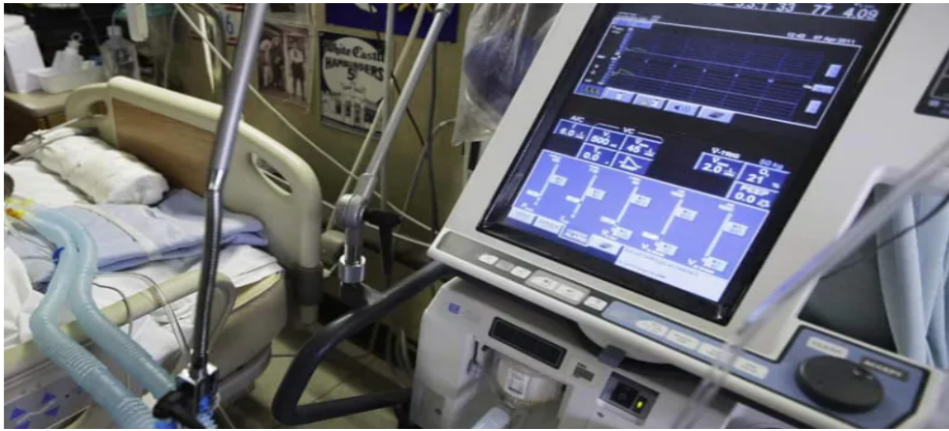


Figure 2: Respiratory Therapists intubate patients and monitor ventilators to ensure patients are getting enough oxygen.

II. Background of Problem/Situation:

The current situation that calls for improvement is the amount of time medical professionals spend with the patient. It is important for us to consider improving the time spent with patients because the patient feels like they have been heard and are cared for. While on the other hand the medical professional gets to know the patient better and will have a better relationship with the patient. Overall, both the patient and the medical professional will be better acquainted and well-informed on the status of the treatment.

Researching patient care is important because in order to improve we need to look back at the mistakes we made in the past. Future Rt's and other various nurses and doctors will use the results of this research. The patients and medical professionals are affected by the results of the research.

It is estimated that the amount of time that physicians and other health care workers spend with patients in Intensive Care Units (ICU) is less as opposed to performing other tasks. When looking at how much time is spent in the ICU with direct patient contact one cannot rely on just self report or human observation. According to Butler, physicians spent merely '15-17% of their time in the ICU in patient rooms' [2]. On the other hand, nurses spent "about 32% of their time in the ICU with direct patient contact" [2]. From the patient perspective, the lack of a consistent health care worker designated for each ICU room shows that direct patient contact is low in priority. Patients would benefit from increasing the amount of time each health care worker spends in each ICU room because it would allow more time to ask any pressing questions or address any concerns. Communication between RT's and patients is adamant because the more time spent with patients the better the level of care they will receive.

Respiratory Therapy is a fast-growing profession that is currently facing a shortage of employees. As of the year 2020 the Ontario government in Canada has been scrambling to acquire more ventilators and RT's. It has gotten to the point where The College of Respiratory Therapists of Ontario are trying to push for students to come work at the hospitals. "They've been training for three years to do this role and the last year has really been in the critical care setting itself. So they're already familiar with the ventilators that are in use, the infection control protocols and all of the precautions that are required at this time," [9] said Kevin Taylor, the college's registrar and CEO.

III. Criteria for Weighing Solution(s)

The criteria of cost is grants to help pay for the transition. A criteria for weighing solutions is resources. AARC and The Board of Respiratory Care are resources that are utilized by many RT's. AARC offers scholarships, grants, and much more to all RT's. The Board of Respiratory Care helps RT's become certified and licensed. Although this needs to be implemented immediately it will take years to implement because each hospital has their own protocols and regulations that they follow. The criteria for personnel is to hire more medical professionals in order to fulfill the need for workers. The criteria is reasonable and appropriate but will take time to implement. In a small town there are often not enough resources. On the other hand, in big cities there are often not enough workers to fill in all the job vacancies.

IV. Methods and Evaluation

The research methods I used to identify the problem were both online sources and scholarly journals. The research methods I used to identify the solution were also online sources and scholarly journals. The possible solutions are to either hire more medical professionals, or offer more opportunities for higher education to those already employed to further their knowledge. My primary research started with finding sources with information about Respiratory Care, nursing, physicians, hospital staffing, and much more. My main priority was to make sure that the sources I used were properly sourced and related to my research. A majority of my sources are associated with The Respiratory Board of California, American Association of Respiratory Care (AARC) and other solid sources. I tried to find a few extra just in case I needed more information later on.

Methods that my sources used to find their data were surveys. They did a good job targeting specific demographics. Overall, the sources I used should make their range more broad and look at less popular demographics. I liked that they were specific about what cities they chose to use and how they displayed their data.

V. Results of Research

The findings from my study show that there is a great disconnect when it comes to the amount of time physicians and other medical professionals spend directly with each individual patient. The number of patients seen by their primary care physicians and general physicians has considerably lowered due to the extensive wait time of 14-15 weeks. According to Michas, this is “the longest wait time between an appointment with a GP and a specialist’ [4]. You can see in Figure 3 the median waiting times for medical care in 2022 varies from areas in Canada. This graph shows that in certain areas a patient's wait time to see a GP can vary anywhere from ten and a half weeks to twenty three weeks.

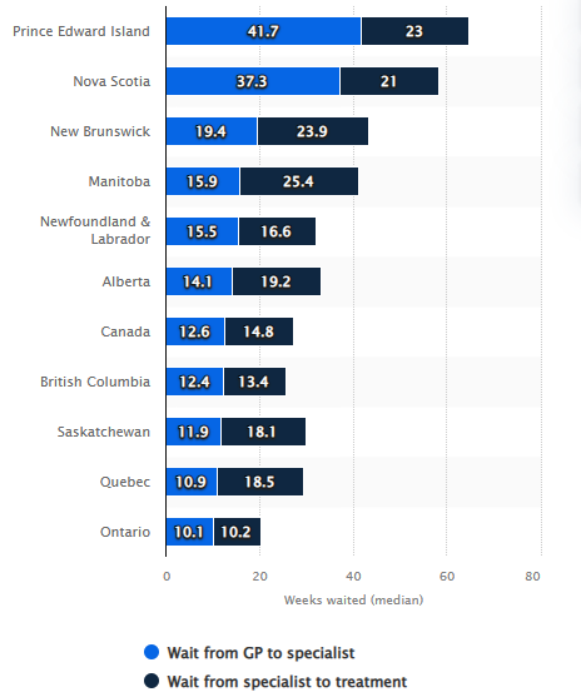


Figure 3: Median waiting times for medical care, from general practitioner to treatment, in Canada as of 2022, by province. Fraser Institute. (December 8, 2022). “Median waiting times...”

You can see in Figure 4 below. The median waiting times for medical care in 2019 widely varied from other areas in Canada. Compared to Figure 3, Figure 4 has better overall data. Figure 4 shows that in 2019 the wait times to see GP or specialists was dramatically lower than 2022.

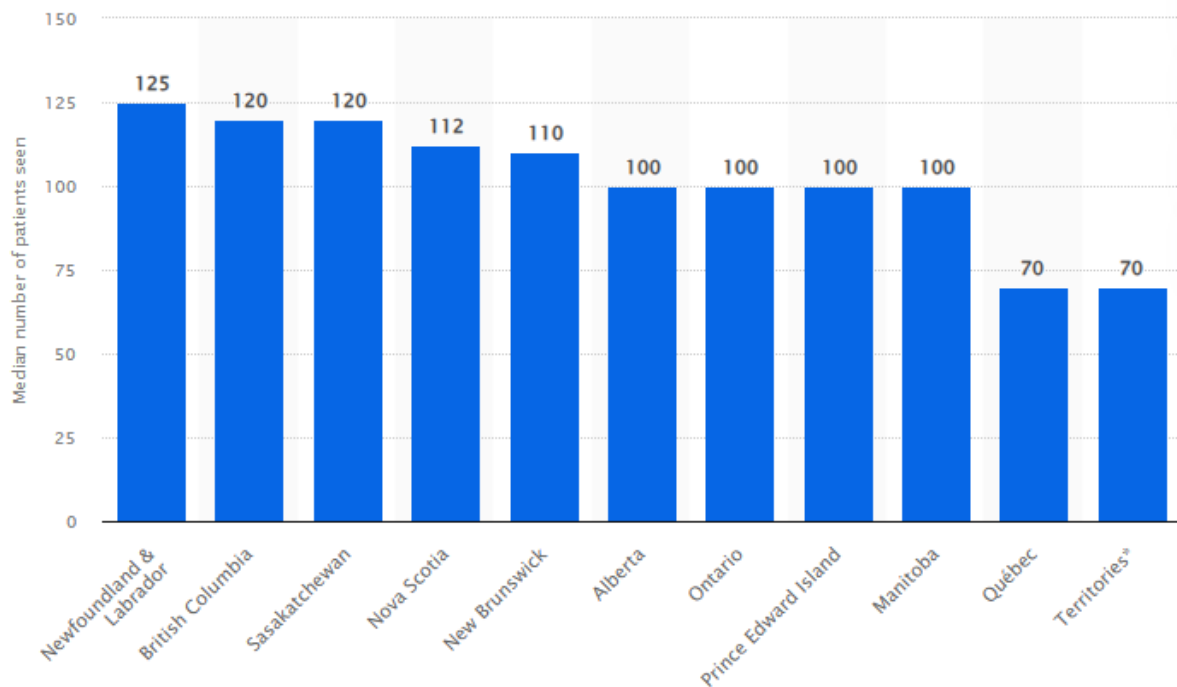


Figure 4: Median number of patients seen during a typical workweek by primary care physicians in Canada in 2019, by jurisdiction. CIHI. (January 30, 2020). “Median number of patients...”

VI. Conclusion

In conclusion, patient care can vary greatly due to the amount of time spent with each patient. It does make a difference on the amount of time medical professionals spend with the patient and whether it affects the level of care the patient receives. RT's, Doctors, nurses, the families of the patients, and the patients all play parts in patient care. Respiratory Therapy is more than just an occupation, it is a profession. They can assess situations and act on them according to their knowledge and judgment without oversight from other

professions. Patient care varies widely throughout the nation. There needs to be more of an effort made towards spending more time with patients during their visits as well as shortening the wait time for an appointment.

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Glossary

-Intensive Care Unit (ICU):The ICU is a part of the hospital where patients receive close medical monitoring and care.

-Dose Metered Inhaler (DPI's): are small hand-held devices that administer powdered medication into the lungs of the patient. This device helps treat health conditions that impact the breathing of the patient. If the patient is unable to take a deep breath they are not able to use this device and will need to use an alternative option.

-Metered Dose Inhalers (MDI's): administers a certain amount of medication to the lungs. The medication usually is in short bursts and typically is self-administered by the patient.

-Pandemic:a widespread occurrence of an infectious disease over a whole country or the world at a particular time

-Amyotrophic Lateral Sclerosis (ALS) clinic: Founded in 1998, the Amyotrophic Lateral Sclerosis (ALS) Clinic at Johns Hopkins is a globally recognized leader in ALS care, offering the latest in clinical trials and therapies to patients with ALS

-Registered Respiratory Therapist (RRT):a respiratory therapist who has passed the advanced level written and clinical simulation examinations of the National Board for Respiratory Care.

-Respiratory Therapist (RT):also known as a respiratory care practitioner, is a licensed medical professional who diagnoses and treats patients with lung and breathing

disorders. You can find respiratory therapists in places such as hospitals, nursing homes, special care facilities and physicians' offices.

-Primary Care Physicians (PCP): are trained to prevent, diagnose, and treat conditions you may have across your whole life span. Primary care includes preventive services like diabetes and cancer screenings, diagnosis and treatment of acute injuries and sickness, and management of long-term conditions.