

**The Saskatchewan Cancer Program:
A Historical Examination of Government in Providing Health Care**

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Abstract

The problem of cancer has long been an issue of vital importance to Canadians. In an attempt to arrest the spread of cancer, radiation therapy emerged early in the 20th century as an effective tool in combating the disease and prompted a new hope that a cure for cancer would be realized in the not too distant future. However, due to the expense of obtaining naturally occurring radioactive elements, radiation therapy was limited to a select group of patients. The onset of the Great Depression further exposed the inability of patients to pay for treatment and led the Saskatchewan government to establish a cancer program that provided consultative, diagnostic and radiation therapy at a cost largely incurred by the state. This thesis deals with the causative factors for the government to expand into the cancer care arena more than thirty years before the adoption of publicly funded universal health care. It argues that the fuel to provide cancer care was as much a desire to benefit the sick as it was to building a recognizable identity for the province. Legislators in Saskatchewan believed that they had a responsibility to mold an image for the province and ensuring that patients had access to increasingly specialized and technological treatments for cancer was a means through which the state could forge an identity as a progressive society dedicated to the health and well-being of its citizens.

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Introduction: Historiography of Cancer Care in the Twentieth Century

On June 25, 2010, Canwest News Service featured an article entitled “Health Care Here Ranked Second Worst.”¹ The study examined the effectiveness of medical facilities, average patient wait times and access to after hours care in seven industrialized nations. With Canada ranking only higher than the United States, the article highlighted the inadequacies with the provision of health care in Canada. This was an extremely damaging revelation for a nation long proud of its universal health care system. It suggests that although insured citizens are entitled to receive treatment there was no guarantee that the subsequent care was either immediate or of good quality. Assuming that timely and coordinated care are essential to providing for the best interests of the patient, the report demonstrated that there was an urgent need to re-evaluate the provision of health care in Canada.

One component of the Canadian Health Care system that exhibits many of the problems described in this article is cancer care. As more than sixty-five percent of cancer patients awaiting radiation therapy were forced to incur delays in 2006 it is evident that there are serious flaws in how care is being provided to treat a time-sensitive disease that is now the leading cause of premature death in Canada.² The problems have only been exacerbated since 2009 when Canada’s nuclear reactor in Chalk River, Ontario was shut down indefinitely. As Chalk River had been producing more than a third of the

¹ Giuseppe Valiante, “Health Care here Ranked Second Worst,” *Canwest News Article*, June 25, 2010.

² Charles Hayter, *An Element of Hope: Radium and the Response to Cancer in Canada* (Montreal: McGill-Queen’s University Press, 2005), 3.

world's total supply of radioisotopes, its sudden closure further handcuffed the system's ability to provide timely cancer care.³

Amid these troubling revelations historian and oncologist Dr. Charles Hayter argued in his book, *An Element of Hope*, that many of the current problems in cancer care have foundations in the policies of the past. Tracing the history of cancer programs in Canada from 1900 to the Second World War, Hayter demonstrates that these early endeavors formed the philosophical basis and structural organization of the system that remains in effect today.⁴ According to Hayter, this situation was problematic because there were deep schisms between the medical community and the state when establishing cancer initiatives.⁵ These conflicts led to compromises in the policies and practices, which Hayter contends, not only severely weakened the effectiveness of cancer programs but remained in effect despite obvious inefficiencies.⁶ Hayter's hope in making this argument is to launch further scholarship into how the current problems facing cancer care are deeply rooted in the policies of the past.⁷

The study here hopes to add another layer of analysis to the investigation by focusing on the history of cancer care in Saskatchewan. Saskatchewan is an ideal case study to trace the development of cancer due to the fact that it was the first province to introduce a comprehensive cancer program beginning in December 1931. Physicians Stuart C. Houston and David A.E. Shephard have both written on varying components of

³ "Chalk River Reactor Idled to Late 2009 or Longer," CBC News, July 8, 2009, <http://www.cbc.ca/news/canada/story/2009/07/08/chalk-river-nuclear-reactor008.html> (accessed September 7, 2009).

⁴ Hayter, 8.

⁵ Ibid., 111.

⁶ Ibid., 188.

⁷ Ibid., 8.

the Saskatchewan cancer control program. For instance, Houston provided a narrative of the accomplishments of the cancer endeavor, focusing primarily on the post-war period. Whereas, Shephard examined the first decade of care, 1929-1939, to consider how the strengths and weaknesses of the program were tied to the tenuous relationship between the government and physicians. In using these works to construct a narrative for this study, but in not wanting to duplicate the story already uncovered by Hayter, Shephard, and Houston, this thesis shifts the focus from the role of physicians and the medical organization of cancer care to consider the motivating factors that encouraged the state to become involved in cancer control.

International cancer historiography reveals that despite varying demographics, historians are united by a number of overlapping themes in their examinations of government involvement in cancer care. One recurring feature emphasized by historians is the role that public education played in formulating a response to the disease. David Cantor, for instance, demonstrates the tremendous controversies that surrounded the educational message in the United States in an article entitled “Uncertain Enthusiasm.” Focusing on the medium of film, Cantor highlights how the public health message stressed the need for early detection and treatment, while also describing the significant technological advances that had been made for treating cancer.⁸ However, the fear in promoting the progress of science, according to the American Society for Cancer Control, was that if technology was over professed as being able to defeat this disease, then it

⁸ David Cantor, “Uncertain Enthusiasm: The American Cancer Society, Public Education, and the Problems of the Movie, 1921-1960,” *Bulletin of the History of Medicine* 81, no. 1 (Spring 2007): 40.

might inadvertently detract from the importance for the public to seek early treatment.⁹ Consequently, while Cantor goes on to show that in the post-1944 era film became an indispensable part of public education for cancer control, in their early days cancer campaigns faced tremendous difficulties utilizing new forms of mass media to properly convey the problem that was cancer.

A similar problem surrounding education is echoed by historian Ornella Moscucci in her examination of the British cancer efforts that arose in the early twentieth century. In her award winning article, *The British Fight against Cancer: Publicity and Education, 1900-1948* Moscucci considers how the campaign was riddled by the conflicting desire of educating the public about the cancer problem and the uncertainties about the efficacy of available therapies. Fearing that public education may lead to increased anxiety and unrealistic expectations about the effectiveness of available treatments, British physicians simply did not want to create a demand that they were ill equipped to fulfill.¹⁰ As a result, education of the general public remained a low-key affair with teaching about the recognition of cancer directed solely at health professionals. These two articles suggest that while there were stark differences in how education was utilized in Britain and America, historians have established that education played a pivotal role in shaping cancer efforts.

In addition to focusing on education, international cancer historiography also reveals, that an increasing number of historians have considered the role of politics in launching cancer efforts around the world. The shift to politics has emerged due to the

⁹ Ibid., 41.

¹⁰ Ornella Moscucci, "The British Fight against Cancer: Publicity and Education, 1900-1948," *Social History of Medicine* 23, no. 2 (February 2009): 357.

fact that in many places governments not only sponsored, but also, initiated the cancer response. To understand the state's involvement in cancer care historians have tied cancer efforts to their contextual surroundings. Historian Patrice Pinell demonstrates the importance of context in his work, which centers on France. Employing a social historical approach, Pinell examined how the First World War redefined the role of the state to provide for its citizens. With the disease being held as a serious scourge on society, cancer became identified as a political issue that required state intervention to ensure the ability of patients to obtain cancer services.

Concurrent with the growing focus on the political history of cancer care, the notion of nation building has received significant attention from historians as a causative factor for the growing involvement of government in cancer care. Robert Proctor illustrates this in his work entitled *The Nazi War on Cancer* as he surveys the cancer effort launched in the 1930s in the name of National Socialism. As the Nazi's sought to construct an Aryan race composed of racially worthy Germans, cancer was considered a serious impediment to this objective and declared "the number one enemy of the state."¹¹ Furthermore, the German cancer campaign became associated with the Nazi desire to eliminate undesirables, such as individuals of Jewish heritage, who were not only seen as the purveyors of cancer but also considered a "tumor within the German body" who, like cancer, were viewed as a serious threat to German society.¹² While the Nazi cancer campaign is an extreme example of how treatment for the disease was tied to

¹¹ Robert Proctor, *The Nazi War on Cancer* (New Jersey: Princeton University Press, 2000), 68.

¹² Ibid.

a process of nation building, Proctor's work reinforces the historiographical importance of understanding the social and political context of cancer efforts.

Another historian demonstrating the importance of societal context and politics in cancer's history is Angela Creager. In particular, the influence that American politics had in shaping cancer therapies in a domestic setting, and abroad. Tracing the growth of the artificial radioisotope industry after mastering the power of the atom, Creager highlights the political debates that emerged in determining whether this technology should be shared with foreign nations. Politicians feared that making radioisotopes available to scientists in other countries "might speed the development of atomic weaponry elsewhere."¹³ This position was eventually overcome when President Truman announced on September 3, 1947 at the opening of the Fourth Annual International Cancer Research Congress that the United States' radioisotopes would be available to foreign scientists. It nonetheless reinforces the extent that politics has had in shaping cancer practices.¹⁴

The focus on government involvement in cancer care, however, is not an approach employed by all historians writing about cancer. Barbara Clow, for instance, studied the therapies offered by unconventional practitioners to cancer patients in Canada in the first half of the twentieth century. A number of alternative healers professed serums, enzymes and herbal tea concoctions as remedies that could cure cancer.¹⁵

¹³ Angela Creager, "Tracing the politics of changing postwar research practices: the export of 'American' radioisotopes to European biologists," *Studies in History and Philosophy of Biological and Biomedical Sciences* 33 (2002): 376.

¹⁴ Ibid.

¹⁵ Barbara Clow, *Negotiating Disease* (Montreal: McGill-Queen's University Press, 2001), 85.

Addressing the popularity of such treatments Clow established that they posed a serious challenge to the authority of conventional medicine. While Clow's study highlights another component of cancer's historiography it is not in keeping with the investigation being undertaken here since one of the reasons the Saskatchewan cancer program was launched was to reinforce what constituted legitimate medicine.

Another branch of the historiography considers the long-standing consequences that politics have had in hindering cancer care. An additional work by Proctor entitled, *Cancer Wars: How Politics Shapes What We Know and Don't Know* demonstrates this growing trend. Proctor argues that in America an ever-expanding bureaucracy has detracted from achieving the desired intent of decreasing the mortality rates of cancer. He supports this claim through considering the nominal improvements that have been made in defeating cancer since President Richard Nixon declared "War on the Disease" in 1971. Despite Nixon's pronouncement sparking an investment of over twenty five billion dollars in research by the National Cancer Institute, Proctor shows that cancer patients (i.e. lung, colon, and prostate cancer) surviving over five years has only increased from forty-nine to fifty-three percent.¹⁶ Proctor traces the source of these dismal results through the political history of cancer care, as subsequent administrations in America did not share Nixon's sentiment towards defeating the cancer problem. For instance, examining the many-anti-environmental actions of the Reagan-Bush administrations, Proctor documents the growing rhetoric in this era that downplayed the

¹⁶ Robert Proctor, *Cancer Wars: How Politics Shapes What We Know and Don't Know About Cancer* (New York: Basic Books, 1996), 4.

dangers of manmade carcinogens and minimized the environmental threat of cancer.¹⁷ As this belief delayed the greater regulation of carcinogens, Proctor argues that the causation of the disease has become a highly politicized topic.¹⁸ Meaning, that the very definition of cancer transcends medical interpretation.

In addition to establishing how politics have shaped perceptions of the disease, other historians have considered how politics have influenced the types of treatment practiced in America. Historian Ilana Löwy argued in her book *Preventive Strikes: Women, Precancer and Prophylactic Surgery* that the lack of state support in America has inadvertently resulted in insurance companies dictating the types of cancer treatments available. She concentrates on breast cancer and reveals that insurance companies have used the Breast Cancer gene (BRCA) to direct the treatments available to patients. It is important to note that a positive test for the BRCA gene is not an indication that a woman has, or is definitely going to contract cancer. Rather, it merely suggests that she is at an increased risk of acquiring breast cancer at some point in her life compared to a woman who is not a carrier for the gene. Löwy then demonstrates that in the case of a positive BRCA test, where a woman has yet to contract the disease, insurance companies would only provide coverage for women who opt to undergo a bilateral mastectomy followed by reconstructive surgery.¹⁹ The justification for this invasive surgery is that the cost of prophylactic action is far cheaper than supporting a long-drawn out battle with cancer. As the rate of prophylactic surgeries occur at a far higher frequency in America than

¹⁷ Ibid., 6.

¹⁸ Ibid., 14.

¹⁹ Ilana Löwy, *Preventive Strikes: Women, Precancer and Prophylactic Surgery* (Baltimore: The Johns Hopkins University Press, 2010), 204.

anywhere else in the world, it is evident that the lack of a state presence in health insurance has had an enormous impact in shaping cancer care practices in the U.S.²⁰

When these studies are considered together a unified historiographical narrative emerges regarding the important role that states have had in shaping cancer efforts. To be clear, a number of scholars have examined the origin and development of the welfare state that emerged in Saskatchewan. David E. Smith, for instance, traced the growth of the Liberal party in Saskatchewan and how their policies resulted in a recurring theme of partisan politics.²¹ Seymour Lipset employed a similar examination on partisanship proposing that the emergence of socialist ideals was a direct result of the overwhelmingly rural population.²² As Saskatchewan lacked powerful urban centers early in the 20th century, Lipset argued that it was the collectivist ideals, which emerged as a byproduct of farmers' day-to-day experiences that proved instrumental in the promotion of the welfare state by the Co-operative Commonwealth Federation (CCF).²³ In contrast to Lipset, Nelson Wiseman argued that it was not agrarian values that rooted social democracy in the province but rather the high number of British, continental Europeans and Catholics who called Saskatchewan home.²⁴ As a consequence, it was the unique demographics of Saskatchewan that proved instrumental in the rise of social democracy as votes from

²⁰ Ibid.

²¹ David E. Smith, *Prairie Liberalism: The Liberal Party in Saskatchewan 1905-1971* (Toronto: University of Toronto Press, 1975), 324.

²² Seymour Martin Lipset, *Agrarian Socialism: The Cooperative Commonwealth Federation in Saskatchewan* (California: University of California Press, 1950), 50.

²³ Ibid., 69.

²⁴ Nelson Wiseman, *In Search of Canadian Political Culture* (Vancouver: UBC Press, 2007), 223.

these constituencies represented the swing factor in elections fought between the Liberals and the CCF.²⁵

While the aforementioned works provide various theories on the development of partisan politics in Saskatchewan the cancer story suggests a political commitment that transcends party lines. This finding suggests that there are certain fundamental rights that will be supported by the state, regardless of political affiliation. Therefore, this thesis adds to the historiography by providing a new perspective for understanding the state's involvement in cancer services through examining the cancer initiative through the Social Contract Theory.

The most commonly recognized proponents of Social Contract theory are John Locke, Jean-Jacques Rousseau and Immanuel Kant. Considering that these philosophers lived in different time periods and cultural conditions it is understandable that they had varying ideas as to what structure government should take. For instance, Locke professed a faith in a decentralized government whereas Rousseau argued for a strong and direct form of democracy.²⁶ In spite of these differences, they all embraced the same basic premise that because the governing authority depends on some degree of the consent of the people, that the state has a responsibility to ensure the continued functioning of society.²⁷

²⁵ Ibid., 224.

²⁶ Christopher Bertram, *Rousseau and The Social Contract* (New York: Routledge Taylor and Francis Group, 2004), 107.

²⁷ Note: this is a gross simplification of the deeply developed ideas that Locke, Rousseau, and Hobbes put forth on the Social Contract. Greater detail is not considered here because this thesis is not concerned with interrogating what their beliefs were but rather to draw attention to their premise that the government provides the conditions for a stable society.

A 20th century re-interpretation of the social contract by Harvard philosopher John Rawls entitled, *A Theory of Justice*, took to a higher level of abstraction the theories to argue that it is not enough for a society to be satisfied with maximizing the benefit of the majority. The reason being, that acting strictly under those terms it would, ultimately, result in the position of some segment of society being sacrificed. Rawls' argues that we are all citizens within a liberal society and the government must satisfy the demands of both freedom and equality for all individuals.²⁸ Rawls' focus, therefore, is to describe a just arrangement of the major political and social institutions of a liberal society, since he considered the arrangement of these institutions the basic structure of society.²⁹ He does so because he maintains that it is these institutions that distribute the main benefits of social life and will have the most profound effects on the lives of citizens, influencing not only their prospects, but also their goals.

In order to achieve a social contract that equally and fairly distributes the advantages of social cooperation, Rawls argues that the management of institutions must adhere to two guiding principles. First, each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberty for all.³⁰ The first principle is therefore to be used for ensuring political righteousness, that is, that citizens have the same basic rights to civil liberties. Examples include, the right to vote, freedom of speech and assembly, freedom of thought, and freedom of the

²⁸ Note: Rawls terms his version of the social contract "Justice as Fairness." For consistency and clarity it will be referred to for the rest of this thesis as Rawls' Social Contract.

²⁹ John Rawls, *A Theory of Justice* (Cambridge, Massachusetts: Harvard University Press, 1971), 7.

³⁰ *Ibid.*, 266.

person along with the right to hold personal property.³¹ Rawls assumes that these liberties are required to be equal under the first principle because citizens of a just society are required to have the same basic rights.³²

The second principle, which was intentionally placed by Rawls in a serial order, holds that inequalities in the distribution of goods are permissible only if these inequalities benefit the least advantaged members of society.³³ The second principle was designed to apply to primarily social and economic institutions as a means to overcome the natural divisions that arise with social cooperation. Rawls arrived at this conclusion as a result of the realization that each person finds themselves born into a particular position in society that will materially affect their life prospects.³⁴ While he is not suggesting that the distribution of wealth and income be equal, he does suggest that it be to everyone's advantage. According to Rawls this level of equality can be achieved if institutions are set up to improve the situation of the less favoured as they will then improve the lot of citizens in general.³⁵ However, with respect to health care services, Rawls reasoned that because we all have physical needs and psychological capacities within the normal range, then there could be no inequality in access to health care services.³⁶

In describing a theoretical framework as to how a fair and just society could equally distribute the benefits of institutions to all citizens, Rawls understood society as a venture of cooperation for mutual benefit. However, Rawls assumes that the government

³¹ Ibid., 61.

³² Ibid.

³³ Ibid., 266.

³⁴ Ibid., 12.

³⁵ Ibid., 71.

³⁶ Ibid., 83.

must act in this way because this is, in essence, the very responsibility of the state. As people come together in a society to grant power of authority to a government it is in turn the sovereign's responsibility in a democratic state to arrange an ideal environment that treats all people as free and equal citizens and creates the opportunity for them to further their own means.³⁷

As such, with Rawls' argument that the state must provide the ideal conditions to benefit the whole population, the state sponsored cancer program launched in Saskatchewan embodied many of the characteristics inherent in Rawls' social contract. As Saskatchewan developed a cancer model in 1931 that provided all citizens, regardless of their ability to pay, the right to receive cancer treatment, this was a society adhering to a guideline that its population needed to be treated as fair and equal citizens. Yet, while this ideology overlaps with Rawls' social contract theory, further interrogation of the cancer endeavor reveals a contradiction with his theory. Although the program satisfied the primary condition of overcoming utilitarian ideals, as it was available to all citizens, it is clear that the state was not just acting to provide for its citizens. Rather, there was an interest to the state itself for undertaking this endeavor.

The benefit to the province for providing cancer services stemmed from the fact that this was a means through which the province could forge a recognizable identity for itself. The government's realization that it had a responsibility, arguably more so than any other province in Canada, to construct their own provincial image, stemmed from the lack of a historical or linguistic continuity in its diverse population. Subsequently, the provision of cancer services that was both scientific and technologically advanced was a

³⁷ Ibid., 11.

means by which Saskatchewan could gain recognition and prestige. Tracing the course of cancer care's development over a thirty-year period, from 1931 to 1967, this thesis considers how subsequent governments remained dedicated to providing cancer services in an attempt to solidify a Saskatchewan identity. Moreover, that the desire to succeed in affirming an identity for the province, resulted in a continued commitment to renegotiate and improve upon the provision of cancer services that culminated with Saskatchewan becoming a world leader in the fight against cancer.

Cancer care, in this regard, can be understood as an ideal endeavor for pursuing a provincial identity given the societal context in which it was launched in 1931. As cancer was a disease for which there was no cure, the realization that it was a disease that could affect all ages, sexes, classes and races suggested that cancer posed a serious threat to the very fabric of society. Unlike tuberculosis (TB) and mental illness, which were often associated with the urban poor and "Indians," cancer was a disease for which there were no social boundaries. This meant that unlike other health issues there was initially no particular social stigma attached to cancer. The universality of the disease was therefore a major distinction between it and other major public health campaigns. Furthermore, the cancer problem was heightened due to the tremendous cost associated with receiving treatment. Owing to the increasingly specialized equipment required to treat the disease, being the first in Canada to ignite a comprehensive program that would enable all of its citizens to access care, regardless of their ability to pay, suggested that Saskatchewan was a province dedicated to overruling the contingencies of nature.

To be clear, realizing that there was a motivation to the state that extended beyond the benefit to the citizen is by no means meant to detract from Rawls' social contract. In

actuality, the study here hopes to build on his framework of a fair and just society to show that it is only to be expected that there should be a returned benefit to the state, as governments are comprised of people, who are just as fallible and wanting as the people they govern. Moreover, in tracing how there is a returned benefit to the state it reveals not only how this situation results in a continued ideal condition that provides for the best interest of the citizen but furthermore shows how this arrangement results in the establishment of a legacy whereby subsequent administrations remain dedicated to sustaining a particular service.

The realization that there was a reciprocal benefit to the province for providing cancer services inevitably shaped the types of primary sources examined in this thesis. In attempting to understand the “official mind” of the government, this study relied heavily on primary sources documenting legislative proceedings.³⁸ In particular, the Saskatchewan Journals of Legislative Assembly as well as the Legislative Scrapbooks from the Regina *Daily Star* were instrumental in providing perspective on the state’s motivation to provide cancer services in Saskatchewan. The material in these sources documented the speeches, bills, debates and concerns that were raised in the Legislative Assembly on an annual basis. Because these sources highlight the political impetus of the state’s involvement in cancer care they can be used to extrapolate the advantages to the government for providing cancer services.

This study also focuses on evidence that attempted to garner attention for Saskatchewan. For instance, speeches describing Saskatchewan’s intent to lead the way

³⁸ Ronald Edward Robinson, John Gallagher and Alice Denny, *Africa and the Victorians: the Official Mind of Imperialism* (London: Macmillan, 1961), 25.

in Canada, and how the province could be depended upon by western nations to supply cancer therapies are instances of the types of evidence used to understand the province's motivation. The use of external accolades by politicians to describe the success of Saskatchewan's cancer initiative was another thread used to confirm the continued desire to solidify an image for the province.

These sources are not an inclusive representation of the documentation used to compile this thesis. Supplementary primary sources from newspapers, such as the *New York Times*, were useful for demonstrating the emergence of a culture of cancer. While the Canadian Medical Association Journal (CMAJ) proved pivotal for understanding the continued expansion of the state's involvement in cancer care in the post-war years and the response from the medical community. A long-list of secondary sources contextualized the expansion of the welfare state on both the provincial and federal level and provided additional support for understanding the renegotiation of the relationship that existed between the state and its people.

Consequently, in adhering to Rawls' social contract theory that society is a scheme of cooperation for mutual benefit, this thesis will expand on this argument to establish that the state also benefited from the provision of cancer services as a result of being able to forge an identity for itself. The first chapter provides the background and context of the factors that drove the need for a provincial cancer program in Saskatchewan. Specifically, it looks at how rising cancer mortalities combined with deteriorating economic conditions, on account of the depression in the 1930s, exposed the government's need to reconsider its responsibility to its citizens. The second chapter traces the development and expansion of the cancer initiative amidst an unstable political

and socio-economic climate, as subsequent administrations remained dedicated to improving and expanding cancer services. The third chapter explores the expansion of cancer care concurrent with the introduction of new technologies and the associated shift to the federal government in securing treatment services. Chapter three argues once again that the forces driving cancer care at the provincial level were characteristic of the dominion's increasing involvement in cancer care in the post-war era. Meaning, that the decision to embark on the provision of cancer services was as much a desire to benefit the citizen, as it was a self-serving desire to benefit the state.

Chapter One: The Origin of Cancer Care in Saskatchewan & The Building of a Province

In the early twentieth century the threat of cancer was a rarely mentioned subject in Saskatchewan. As provincial health campaigns primarily centered on the construction of hospitals, tuberculosis and mental health reforms it was not until the end of 1929 that cancer became identified as a problem that could no longer be ignored. Sparked by concern that both the incidences and mortality rate of cancer were on the rise, the medical profession and the state united to formulate a response to this increasing threat.³⁹ Receiving the full endorsement of the Canadian Medical Association, the state introduced an ambitious cancer campaign to provide consultative, diagnostic and radiation therapy at a subsidized cost. With the first patient receiving treatment in December 1931 the initiative sought to ensure that any resident of Saskatchewan requiring cancer care would not be deterred by their inability to pay.⁴⁰ Providing this service more than thirty years before the adoption of Universal Health Care, this is an early example of a Canadian province re-examining its responsibility to provide for the health and well being of its citizens.

Rawls' social contract theory sheds light on the government's decision to embark on this endeavor. As Rawls argues the state has a responsibility to provide services that benefit all members of society. This thesis takes that assumption and further contends that there must also be a reciprocal benefit to the state to sustain the social contract. In tracing the origin of the cancer initiative it became apparent that the state also benefited

³⁹ Hayter, 90.

⁴⁰ Ibid., 102.

because establishing a cancer program also aided in building a provincial identity. This chapter argues, therefore, that the state used the cancer services program as a means of forging a recognizable identity for the province. The goal being, to project an image of Saskatchewan as a communal and progressive society dedicated to the health and well being of its citizens.

Although writings on cancer date back to Hippocrates, it was only at the turn of the twentieth century that a fear emerged amongst medical professionals that the incidences of cancer were on the rise around the world.⁴¹ The reason for the sudden identification of cancer as a problem was likely precipitated by a number of changing societal conditions. For instance, by the end of the nineteenth century tremendous improvements had been made in public sanitation and in treating infectious diseases.⁴² As a result, people were simply living longer, which resulted in the impact of chronic diseases, like cancer, appearing that much more profoundly in the general population.

The increased incidence of the disease proved to be an extremely troubling revelation for physicians due to the fact that not only was the origin of cancer's cause elusive but also because there was no consensus on an effective means of treatment. Surgery had often been employed throughout the 1800s as a means to eradicate tumors, but uncertainties surrounded the efficacy of operations due to the high percentage of recurrences to which many patients eventually succumbed.⁴³ As such, the rising rates of

⁴¹ Devra Davis, *The Secret History of the War on Cancer* (New York: Basic Books, 2007), 4.

⁴² Kant Patel and Mark E Rushefsky, *Health Care Policy in an Age of New Technologies* (New York: M. E. Sharpe, 2002), 3.

⁴³ Moscucci, 359.

cancer combined with the inefficiencies in treating the disease led physicians to believe that cancer posed a serious threat to societies around the world.

Coincidentally, while doubts persisted over the curability of cancer through operable means, a new treatment option emerged from the lab of Marie and Pierre Curie. Marie, a Parisian educated physicist and chemist, had been working with her husband on possible fields of research for her thesis.⁴⁴ Intrigued by Henri Becquerel's discovery of natural radioactivity in 1896, Curie set out to investigate the energy emitted by uranium in greater detail. However, Marie disputed Becquerel's hypothesis that radiation was the outcome of some interaction between molecules.⁴⁵ The reason being that the activity of uranium compounds appeared to vary depending on the quantity of uranium present. In the search to support her theory Curie identified two new radioactive elements, which she named Polonium and Radium. As these elements displayed varying activities of radiation, which supported Curie's theory, she presented her research to the *French Academy of Sciences* on the 12th of April 1898.⁴⁶

The publication of her research ignited widespread interest among scientists who sought to better understand the properties and potential of radioactivity. Thomas Edison, Max Planck and Nikola Tesla are but a sample of the scientists who turned their attention to radioactive materials.⁴⁷ However, since the deleterious effects of radiation exposure were not yet understood researchers did not take the necessary precautions to protect themselves and subsequently, encountered significant health problems. Thomas Edison, for instance, nearly blinded himself and almost killed his research assistant on account of

⁴⁴ Patel, 3.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Ibid.

radiation exposure.⁴⁸ Yet, with experiments like Edison's revealing that exposure to radiation damaged tissues and cells, ideas emerged about the possibility of applying radiation therapeutically against tumorous growths.

These ideas were quickly put into practice after the turn of the twentieth century and radiation therapy became increasingly employed and recognized, as an effective tool against cancer. In a July 1903 article from the *New York Times*, radium was heralded as "A Cancer Cure" on account of the "astonishing results obtained in the case of a patient whose condition apparently was hopeless."⁴⁹ A subsequent article from December of the same year reiterated this sentiment touting radium as "the unmistakable cure for cancer" due to a long-standing cancer case being cured by radium rays in Vienna.⁵⁰ These findings were repeated by institutions around the world, as the effectiveness of radiation therapy in defeating cancer appeared undeniable. Many researchers felt that the application of radiation therapy, in combination with surgery, could produce a cure for cancer in the not too distant future.

In an effort to expedite the realization of a cure, the first international conference on cancer was held in Heidelberg, Germany in 1906 under the auspices of the German cancer committee.⁵¹ Attended by representatives from England, France and the United States, members debated questions surrounding research methods, the efficacy of treatment by both surgery and radiation, and the necessity of maintaining vital statistics.

⁴⁸ Matthew Josephson, *Edison: A Biography* (Toronto: MacGraw-Hill Book Company Inc, 1959), 383.

⁴⁹ "Radium As A Cancer Cure," *New York Times*, July 4, 1904.

⁵⁰ "Cancer Cured By Radium," *New York Times*, December 31, 1903.

⁵¹ "The International Cancer Conference at Paris," *Nature* 84, no. 2139 (October 1910): 545.

Furthermore, out of the conference developed the International Association for the Study and Suppression of Cancer, which they modeled after the successful endeavors that had been taken against T.B. As tremendous improvements had been made in the survivability of patients with T.B. the collection of doctors at the Heidelberg Conference set out to do what their peers had done to T.B.⁵²

The success of the Heidelberg Conference warranted a second meeting in Paris only two years later. Attendance expanded to one hundred and fifty delegates from over twenty countries as cancer grew to receive ever-increasing attention. The result of the conference was an increased awareness among doctors about the need for early diagnosis and immediate treatment.⁵³ However, this realization exposed a significant hurdle in that physicians seeking to provide radiotherapy encountered a common problem with the extreme expense of obtaining radium as a source of radioactivity. The high cost stemmed from the fact that the acquisition of naturally occurring radioactive material was very labour intensive. Consequently, private physicians were constrained in their ability to obtain sufficient amounts of radium to effectively treat patients.

In an attempt to overcome the cost hurdle a variety of responses emerged around the world. In the United States, for example, a small group of private physicians interested in providing radiotherapy united to formulate a response. This move was instigated largely by Dr. James Douglas who had lost a daughter to cancer in 1906. Douglas believed that while his daughter's case was beyond saving, her condition had improved so much from treatment with radium that, following her death, he devoted his

⁵² Ibid.

⁵³ Ibid.

efforts to securing this therapy for all cancer sufferers.⁵⁴ As a result, Douglas along with a couple of partners contributed a hundred and fifty thousand dollars of their own money to pay the expenses for organizing a National Radium Institute (NRI).⁵⁵ The establishment of the NRI not only ensured that the cost of acquiring radium would be paid for but, furthermore, that hospitals in New York and Baltimore would freely provide radium therapy to all cancer patients.⁵⁶

In contrast with the cancer effort in America, European nations derived support for cancer initiatives from the state. France, for example, saw the need to reform its health care system in the immediate aftermath of the First World War.⁵⁷ The war had exposed the need for the state to provide specific services deemed essential to public health and cancer was identified as one such condition in the post-war period. Consequently, centralized cancer centers were established in highly specialized institutes whereby services, such as radiation therapy, could be delivered at the expense of the state.⁵⁸ In short, efforts like the French one exposed how the need to treat cancer universally ignited reforms and adaptations to an antiquated approach of providing health care that focused on an individual's ability to pay.

Concurrent with the health care reforms in America and France, Canada was also re-evaluating its provision of health services at the beginning of the twentieth century. As hospitals had previously been seen as a charnel house for the sick poor, advances in diagnostic efficacy, technological innovation and surgical accomplishment that could

⁵⁴ "Scientists' Eyes on Radium Tests," *New York Times*, December 28, 1913.

⁵⁵ *Ibid.*

⁵⁶ *Ibid.*

⁵⁷ Patrice Pinell, *The Fight Against Cancer* (New York: Routledge, 2002), xvi.

⁵⁸ *Ibid.*

only be provided in highly specialized centers spurred a new perception of the hospital.⁵⁹ Casting off its Victorian identity the hospital took on a redefined image as an institution to provide health care for all social classes.⁶⁰ Although this transition also resulted in the hospital becoming a two-class institution, as better treatment of the rich was used as a means to generate revenue, it nonetheless facilitated a “wholesale transfer of the care and treatment of the sick from the home to the hospital” between 1890 and 1920.⁶¹

Medical technology played a major role in rebranding the hospital and appealing to the modern middle-class patient. Yet, amid this transformation radium therapy, initially, was not a part of this medical revolution. A possible explanation for the lack of a coordinated cancer effort, in comparison to America and France, is that doctors in Canada were far more subdued in their assessment of the possible impact that radium had for cancer. For example, a 1909 article in the *Canadian Practitioner* reported on Dr. Edmund E. King’s favorable results in the use of radium treatment for cancer of the tongue. However, while praising the improvement, King was careful to note that this was in no way a cure, but rather, a means for improving the condition of the cancer patient.⁶²

This sentiment was echoed by the, albeit small, community of physicians in Canada working with radium. A supplementary article in the *Canadian Practitioner* entitled “Radium in the Treatment of Malignant Growths” conveyed how Canadian doctors believed that radium would never displace surgery, but rather, would best be used

⁵⁹ David Gagan and Rosemary Gagan, *For Patients of Moderate Means: A Social History of the Voluntary Public General Hospital in Canada, 1890-1950* (Montreal: McGill-Queen’s University Press, 2002), 6.

⁶⁰ Ibid.

⁶¹ Ibid., 3.

⁶² Edmund E. King, “Cancer of Tongue – Radium Treatment,” *Canadian Practitioner* XXXIV, no. 12 (December 1909): 747.

in combination with surgery to destroy neoplastic cells.⁶³ Furthermore, the article hypothesized that radium would not be effective against all types of cancers, claiming, “that to think so would be ridiculous.”⁶⁴ With Canadian physicians being far more reluctant than their global counterparts in accepting radium as an all-encompassing cure for cancer, this perception likely contributed to why Canada lagged behind the rest of the world in formulating an initial response to the cancer problem with radium at the forefront.

It was not until after the First World War that Canadian physicians organized to provide radiotherapy for cancer patients. Although radiotherapy was still not being heralded as a cure in Canada, it was at this time more widely accepted as an effective means to treat cancer. This newfound opinion first appeared in Quebec as an initiative was launched to subsidize the purchase of radium for cancer care in 1922.⁶⁵ The Victoria General Hospital in Halifax, Nova Scotia followed suit in 1925, becoming the first institution in English Canada to embark on a formal cancer crusade.⁶⁶ However, while these two efforts marked the beginning of cancer programs in Canada, they were not indicative of cancer practices throughout the nation.

Most of the county remained reluctant to recognize cancer as a problem that required immediate attention. In Saskatchewan, for example, when doctor’s suggested in 1922 that the government should purchase radium for cancer therapy, the reception was not exactly welcoming. Premier C.A. Dunning denounced the plan to purchase radium

⁶³ N.S. Finzi, “Radium in the Treatment of Malignant Growths,” *Canadian Practitioner*, March 1910, 199.

⁶⁴ *Ibid.*

⁶⁵ Hayter, 85.

⁶⁶ *Ibid.*

due to the fact that, in his opinion, there was no evidence of its benefits. Furthermore, Dunning believed that there were far more pressing health issues, such as TB, to deal with.⁶⁷ This mentality was repeated in an editorial from the Saskatoon *Daily Star*, which called radium “a plaything, a bauble, that puts hope in the minds of cancer sufferers that this technology would provide a magical cure.”⁶⁸ The author goes further in supporting this claim by arguing that the radium craze was fabricated by medical professionals in an attempt to increase profits.⁶⁹ Because the cancer scare was perceived to be a fictitious anomaly conjured by doctors and clerics, the premier refused to be duped into allowing mountebanks to have undue influence over public policy.

However, by the end of the 1920s cancer was a concern that could no longer be ignored in Saskatchewan. Initiated by the Saskatchewan Medical Association in November 1929, a cancer committee was struck to determine whether the government purchase of radium was a worthwhile endeavor.⁷⁰ Arriving at a conclusion in only two months, the committee proposed seven recommendations to the government: 1) institute a provincial program for the study and treatment of cancer; 2) establish two treatment centers equipped with radium; 3) purchase 1.5 grams of radium, which would be distributed among the two centers and a central emanation plant; 4) form a Canadian Society for the Control of Cancer; 5) institute a program of public education about cancer through the medical profession and the Department of Public Health; 6) organize medical

⁶⁷ Ibid., 88.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Ibid., 89.

cancer conferences for joint study of cases and the collection of scientific data; and 7) organize cancer conferences at the discretion of the secretary of the SMA.⁷¹

In an attempt to instill these reforms, Dr. Earle Shepley of Saskatoon proved to be “influential in the negotiations between the medical profession and the government.”⁷² Shepley wrote numerous letters to the Minister of Health, Dr. Frederick Dennis Munroe, during the winter of 1929-1930 outlining the intentions of the cancer committee.⁷³ The Minister’s reaction to the report proved extremely prescient for the future development of healthcare in the province, as Munroe believed that the committee’s recommendations were not enough. The reason being that while the government purchase of radium would help to subsidize the cost incurred by the patients, they would still ultimately be responsible for the payments of treatments. To circumvent this situation, the Minister wanted to expand on the committee’s recommendations and planned to institute a comprehensive cancer program that would provide consultative, diagnostic and radiation therapy at an expense largely incurred by the state.⁷⁴

In making this declaration of intent, Munroe was fully aware, likely as a result of being a physician himself, that doctor’s might feel uneasy about the state’s intrusion into health care.⁷⁵ In an attempt to first gauge the support of the profession, Munroe submitted a draft of the legislation to the president of the Canadian Medical Association, Dr. A.T.

⁷¹ Ibid.

⁷² Ibid., 90.

⁷³ Ibid., 91.

⁷⁴ Ibid., 92.

⁷⁵ Ibid.

Bazin of Montreal.⁷⁶ The letter stated that the legislation was not intended to give free treatment, it was simply a means to provide specific services that would be limited to diagnosis, consultation and radiation therapy for patients, for which doctors would be compensated.⁷⁷ To Munroe's surprise, Bazin's reply was both congratulatory and supportive, and provided the Minister with the confidence to introduce the legislation for the establishment of a permanent cancer commission in Saskatchewan on the 14th of February, 1930.

During the second reading of the Bill, which occurred just over a month later on March 17th, Munroe went into far greater detail to describe not only what the cancer problem entailed, but also, why it merited the involvement of the state. Defining cancer as an uncontrolled growth of certain tissues of the body, Munroe expressed concern over the fact that medical science had yet to determine the true cause of the disease.⁷⁸ The inability to understand cancer's etiology was further complicated by reports of the Dominion Bureau of Statistics, which revealed that from 1905 to 1928 the provincial death rate had risen from 8.8 to 55.2 per one hundred thousand people.⁷⁹ However, despite this alarming climb, when compared to the rest of the country Saskatchewan actually had the lowest incidence of cancer in the dominion. Munroe justified these findings by considering the age distribution of the population. As cancer was proving to

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ Saskatchewan Journals and Sessional Papers 1929 and 1930, Journals of the Legislative Assembly of the Province of Saskatchewan, Volume XXVII (Session 1929), 419, Minister of Public Health F.D. Munroe, Speech on the Second Reading of An Act to Provide for the Establishment of a Permanent Cancer Commission. Monday March 17, 1930.

⁷⁹ Ibid., 420.

be a disease that largely targeted adults between the ages of fifty to seventy-nine, it was understandable that the frequency of cancer deaths was lower in Saskatchewan because its population comprised a mean age that was far below the national average.⁸⁰ From this interpretation Munroe reasoned that if action was not taken immediately, then cancer posed a problem that was going to become increasingly severe in upcoming decades.⁸¹ As a consequence of its comparatively low rates, Munroe believed that the province was in a unique position to take pre-emptive action against the disease.

Munroe identified a number of hurdles that needed to be overcome in an attempt to alleviate the cancer burden of future generations. The first was that since physicians did not understand the causation of cancer they had to be experts in identifying the early stages of the disease.⁸² Munroe held that improvements in the diagnosis of cancer could be obtained through the coordination and centralization of facilities available to all citizens of the province. This arrangement would, ultimately, concentrate cancer patients in a single facility, which Munroe believed would be a benefit to the cancer cause because “the more cases of a disease a physician has contact with, the more expert he becomes in its treatment.”⁸³

The second problem that Munroe identified as a serious hindrance to the efficacy of centralized cancer facilities was that patients had to report to them before the onset of the disease had become difficult, if not impossible, to treat. He argued that individuals delayed in consulting medical advice because the general public was unaware of the

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Ibid., 421.

⁸³ Ibid.

deceptive and insidious symptoms of early internal cancers.⁸⁴ For this reason Munroe placed a great emphasis on the need for lay education. This point was illustrated in his address to the legislature where he proclaimed “that this aspect (education) shall receive constant and persistent attention, because, no matter how efficient the methods of treatment, if patients do not seek early advice and examination, and are not prepared to accept the information given them, we can hope to accomplish very little.”⁸⁵

Finally, in addition to documenting the importance of education and diagnosis in the proposed comprehensive cancer program the minister also addressed the type of treatment to be provided in the clinics. Citing the success of government-supported cancer programs in Sweden, Norway, Britain and Massachusetts, Munroe drew concerted attention to their shared devotion to radiation therapy. Munroe noted how these nations purchased radium as a means to overcome the prohibitive cost to the individual physician. He then stressed how through the application of radium therapy these states had obtained excellent results in treating the disease with cure rates, in some forms of cancer, equaling those of surgery.⁸⁶ Munroe saw the success of these programs as justification for the province to embark on a similar scheme of cooperation whereby up to \$115 000 of the state’s budget would be directed towards the purchase of one-half gram of radium for cancer therapy.⁸⁷

Munroe also placed a strong emphasis on the fact that the service should not be provided free of charge. The intent of the charge was to avoid the appearance of a

⁸⁴ Ibid.

⁸⁵ Ibid., 422.

⁸⁶ Ibid., 423.

⁸⁷ Ibid., 426.

charitable experience, which Munroe reasoned would undermine the value of the initiative.⁸⁸ This perception stemmed from the idea that Saskatchewan residents were a hard working, laborious people who were simply not used to receiving handouts. Saskatchewan historian Bill Waiser has argued that prior to the depression the attitude persisted that a healthy person without a job must have been simply lazy.⁸⁹ Work was assumed to be always available, whether on the farm or elsewhere, for anyone who truly needed it.⁹⁰ Although this belief was called into question during the depression, as even the healthiest of men were unable to find work to support their families, people were often still rooted in a pre-depression mindset about receiving social assistance.⁹¹ Therefore, the inclusion of a charge was by no means meant to be exclusionary, as provisions were made to ensure that any individual unable to pay would be covered by the state. Rather, the small fee was to ease the transition into a period in which the state would assume an ever-expanding role.

However, while the cancer initiative provided a service that benefited all patients with cancer, regardless of their social standing, it was also advantageous to the government. The reason being, the cancer program was a means through which the state could build a provincial identity and serve as a unifying force for the people of Saskatchewan. The need for the province to use public policy to mold a provincial image for itself was a necessity realized from the outset of Saskatchewan's entry into confederation in 1905. As the province was comprised of an overwhelmingly rural

⁸⁸ Legislative Scrapbooks, Saskatchewan Archives Board (SAB) S-X3G 28, Seventh Legislature, Second Session, March 19, 1930.

⁸⁹ Bill Waiser, *Saskatchewan: A New History* (Calgary: Fifth House Ltd, 2005), 283.

⁹⁰ Ibid.

⁹¹ Ibid.

population that was void of any singular historic or linguistic continuity due to the large number of immigrants from the United Kingdom, continental Europe, Eastern Canada and the United States, Saskatchewan, arguably more so than anywhere else in Canada, was forced to look elsewhere as a means to establish a provincial identity.⁹² With approximately thirty five percent of its population in 1931 born outside of Canada, it was a province that lacked a sense of unified consciousness.⁹³

One example, in which the developing province attempted to forge a recognizable identity for itself, was through the development of an agricultural industry. This was evident as early as 1913 when the *Report of the Agricultural Credit Commission* concluded that, “We [Saskatchewan] must at all hazards beget a provincial consciousness.”⁹⁴ Promoting the cohesiveness of rural life, grain became advertised as Saskatchewan’s gold, and was a means through which the government could construct a sound social and economic structure. Furthermore, the state attempted to provide security for farmers with the *Farm Act* passed in 1915 that sought to protect the farmer from extreme debt in the purchase of farm machinery.⁹⁵ Considering that it was the opportunity to own and harvest large plots of land that attracted immigrants to the prairies, the government’s promotion and support for the embrace of rural life was a calculated effort to establish and unify a provincial community.

⁹² A.W. Johnson, *Dream No Little Dreams: A Biography of the Douglas Government of Saskatchewan, 1944-1961* (Toronto: University of Toronto Press, 2004), 7.

⁹³ David E. Smith, *Building A Province: A History of Saskatchewan in Documents* (Saskatoon: Fifth House Ltd, 1992), 28.

⁹⁴ Ibid.

⁹⁵ Ibid.

However, with the onset of the great depression, extended droughts, deteriorating field conditions and low crop yields called into question the agrarian identity that Saskatchewan had constructed for itself. It is not to say that Saskatchewan abandoned its commitment to farming, it is just that the province was primed to renegotiate its recognizable identity at the beginning of the 1930s in a manner that was not subject to the forces of nature. In this regard, the transition to a health-focused society was appealing because in contrast to the agrarian effort, where nature had overruled the state's objectives, the provision of cancer services that were both scientific and technological could overpower the contingencies of social circumstances. With Munroe describing his intent to "lead the way in Canada, so far as provincial action is concerned, in dealing with the cancer problem on a provincial basis" it suggested that this was a progressive society, that paved its own destiny.⁹⁶

One means through which the province sought to establish this position was with the construction of an emanation plant at the University of Saskatchewan. In essence, an emanation plant was needed to convert radium into a readily available form for providing cancer treatment. The process involved collecting the gas from a radium salt, "into very minute tubes of gold, called seeds."⁹⁷ However, the products were not only to benefit patients in Saskatchewan, but rather, provided the radium seed requirements for hospitals across Western Canada.⁹⁸ As British Columbia, Alberta and Manitoba all welcomed the possibility of utilizing radium seeds produced in Saskatchewan it served as further

⁹⁶ Munroe, Saskatchewan Legislative Journals, 422.

⁹⁷ Ibid., 423.

⁹⁸ Ibid.

indication of how the government was acting in a way to solidify Saskatchewan's position as a leader in the race to control cancer.

The fact that cancer care required such highly specialized equipment is what also made the cancer endeavor more ideal for forging an identity as opposed to other previous state-sponsored health campaigns. Joel Howell's *Technology in the Hospital* sheds light on this assertion, noting that it was the modernization of treatments that transformed the hospital into an acceptable middle-class institution.⁹⁹ As hospitals had previously been seen as providing care for only the lower class, the promise of modern scientific care and the addition of new technologies changed people's ideas about the hospital's function and thereby helped to entice a growing number of middle and upper class patients.¹⁰⁰

Subsequently, the cancer initiative in Saskatchewan was very much indicative of the reformation of the hospital. However, the government's desire to ensure that cost would not be a prohibitive factor for individuals to acquire specialized cancer care was also indicative of a transition in health care. As the state embraced a new responsibility to make available modern cancer therapies, it presented Saskatchewan with an opportunity to brand itself as a province that was very much the purveyor of medical needs and served as a sign of developments to come.

Even before the program was adopted into legislation, Saskatchewan had already received a great number of accolades for the proposal of the cancer bill.¹⁰¹ Dr. Shepley had discovered these attitudes while he was on a tour of cancer care facilities in eastern

⁹⁹ Joel D. Howell, *Technology in the Hospital: Transforming Patient Care in the Early Twentieth Century* (Baltimore: The Johns Hopkins University Press, 1995), 15.

¹⁰⁰ *Ibid.*, 32.

¹⁰¹ Munroe, *Saskatchewan Legislative Journals*, 423.

Canada in the early months of 1931.¹⁰² He later reported to Munroe that the “Saskatchewan cancer legislation was already famous as Eastern Canada is looking to Saskatchewan for leadership.”¹⁰³ Munroe shared a similar sentiment with the members of legislature in quoting a telegram from the chairman of the British Columbia Cancer Committee, Dr. C. W. Prowd, who stated: “Such progressive legislation offers adequate solution of the rising and insistent cancer problem. (It) Also maintains Saskatchewan’s lead in Public Health Matters.”¹⁰⁴ In addition, Munroe quoted an extract from a letter written by Dr. G. E. Richards, an authority on radium and radiology at the Toronto General Hospital that read:

I can only say that this meets with my very enthusiastic approval, and I think you are to be congratulated in taking these steps which will put this work in Saskatchewan far in advance of anything in Canada along these lines. One envies you the opportunity for constructive work which will be made possible by such an organization. I have every confidence that, having undertaken the matter in the broad way which is obvious in this legislation, you will have no difficulty in working out a scheme which will solve your problem and redound to the credit of your province....¹⁰⁵

These findings were also echoed in popular culture. For example, *Saturday Night* magazine commented in its March 27, 1930 edition that the “Canadian prairies were now ahead of the federal government and the eastern provinces in regard to cancer.”¹⁰⁶

Although these represent a small sample of the praise directed towards Saskatchewan, they serve to show, how even before the first patient received treatment in the Regina

¹⁰² Hayter, 100.

¹⁰³ Ibid.

¹⁰⁴ Munroe, Saskatchewan Legislative Journals, 428.

¹⁰⁵ Ibid., 429.

¹⁰⁶ Hayter, 94.

Clinic in December of 1931, Saskatchewan had become increasingly recognized for its leadership, ingenuity and forward thinking in addressing the cancer problem.¹⁰⁷

For this reason, it is evident that the state was not only driven by a desire to provide for its citizens, but furthermore, by an impetus that extended beyond an immediate benefit to the people. In this regard, this was a society functioning through a scheme of cooperation for mutual benefit as the cancer initiative served the dual purpose of benefiting both the state and the people. However, because the cancer program also created a benefit to the state it was more than a simplistic or temporary endeavor intended to get votes, but rather, a policy that extended beyond partisan politics. The fact that the official opposition lauded the government's efforts for introducing the cancer program hints at this shared devotion. Apparent in a speech by the former minister of health, Dr. J.M. Uhrich, he declared, "any sincere attempt on the part of the government to control or reduce the mortality of cancer in Saskatchewan will receive the support of the opposition."¹⁰⁸

Consequently, with a strong non-partisan commitment to cancer it marked a period in which subsequent governments remained dedicated to improving and expanding upon the provision of cancer services. The need to re-evaluate the cancer program stemmed from Reports of the Department of Vital Health and Vital Statistics, which showed that the cancer initiative was not having its desired effect. Rawls' social contract theory again sheds light on this pattern of events as Rawls considers it essential to renegotiate the terms of the social contract since the face of society is anything but static

¹⁰⁷ Ibid., 102.

¹⁰⁸ Legislative Scrapbooks, SAB.

and thereby results in failures of the initial contract.¹⁰⁹ Therefore, as changing governments wanted to sustain the returned benefit of the cancer program, the amendments introduced to cancer services throughout the thirties and early forties can further be understood as an exercise in state building and is the subject of the next chapter.

¹⁰⁹ Rawls, 20.

Chapter Two: The Depression and the War Years: The Expansion of Cancer Services

The need to revise the provision of cancer services in Saskatchewan emerged relatively shortly after the program's inauguration. Annual reports from the Department of Public Health and Vital Statistics revealed two troubling setbacks. The first was that in 1932 and 1933 a disproportionately small number of cancer patients within the province were treated at the clinics. The limited use of the facilities exposed a second problem in that of those patients admitted to the centers, the survival rate of cancer patients remained less than fifty percent. These dismal results revealed inefficiencies in the delivery of cancer care in Saskatchewan and consequently, highlighted the need to implement further adjustments. Foreshadowing events to come, the reformation of the cancer program became a drawn-out process throughout the 1930s and 1940s, culminating in the implementation of the Cancer Control Act in 1944.

The framework of Rawls' social contract provides perspective as to why there continued to be amendments to the cancer program. Rawls emphasizes that within all societies there are specific economic, social and cultural imperatives that transcend political lines, suggesting a great deal of continuity from one administration to the next. However, as societies are liable to experience new pressures, such as population growth, Rawls acknowledges that the social contract must be re-evaluated in the wake of evolving societal conditions. Building on this element of Rawls' theory, this chapter argues that the continued expansion of the state's involvement in cancer services stemmed not only from a desire to maintain continuity with previous Saskatchewan governments but more so to improve on their predecessor's efforts.

Insights into the problems with the program come largely from the Reports of the Saskatchewan Cancer Commission (SCC), whose primary purpose was to organize the day-to-day administration and organization of the clinics. The most significant reason that the Commission believed there were problems stemmed from statistical evidence, which was considered an imperative from the program's outset. The report offered details not only about the number of patients reporting to the clinics but specifics such as age, race, gender and occupations of the cancer patients, as well as their medical histories, symptoms, previous treatments, results of treatment and prognosis.¹¹⁰ It was a result of the strict adherence to data collection that exposed the high percentage of patients seeking treatment with advanced stages of the disease that were beyond the reach of available therapies.¹¹¹ Subsequently, the Commission reasoned that if the program was going to have its desired effect of curbing the cancer problem then people had to seek medical attention earlier.

To overcome these poor results it became clear to the Commission that a greater effort had to be devoted to educating the general public about cancer. The Commission sought guidance in this matter and turned to American cancer activist and educator, Dr. Joseph Bloodgood of Baltimore. Bloodgood was renowned for publishing articles on the importance of detecting cancer early and the correlating affect that public education played in improving survival rates. He relayed this belief to the members of the Cancer Commission in Saskatchewan, noting that the province should be commended for their

¹¹⁰ Hayter, 103.

¹¹¹ Ibid.

efforts directed towards controlling cancer.¹¹² Although, he also added, the greatest weapon for combating cancer that still needed to be implemented in Saskatchewan, was public education.¹¹³

The lack of public knowledge about the program was surprising given that at its outset Munroe had reasoned that education was absolutely essential for the cancer initiative to be effective.¹¹⁴ Beginning in 1929 Munroe made frequent radio addresses teaching about the necessity of spotting the warning signs and seeking medical advice immediately if at all suspicious about cancer symptoms.¹¹⁵ He reiterated the importance of receiving early medical attention when introducing the proposal to launch a Saskatchewan cancer program. Making reference to the fact that Massachusetts was the only locale in North America that had developed a cancer program, Munroe credited their initial success to a well-organized educational effort that underscored the importance of early diagnosis and immediate treatment.¹¹⁶ Consequently, Munroe stressed that the government must invest in public education about the disease and its early detection if the cancer program was to be successful. Furthermore, that education required constant and persistent attention because if the state neglected to educate the general public, it would render the most effective method of treatment null and void.

Despite advocating this perspective at the program's inception, the education aspect was deliberately neglected by the Commission. Commissioners reasoned that in

¹¹² Ibid., 105.

¹¹³ Charles Hayter, "Compromising on Cancer: The Saskatchewan Cancer Commission and the Medical Profession, 1930-1940," *Saskatchewan History* 54 (2002):12.

¹¹⁴ Legislative Scrapbooks, SAB.

¹¹⁵ Hayter, *Element of Hope*, 90.

¹¹⁶ Legislative Scrapbooks, SAB.

promoting this service almost entirely free of charge that the clinics would be inundated with patients who did not require care.¹¹⁷

Munroe's drastic change in opinion over the importance of education was likely influenced by the British Empire Cancer Campaign (BECC), which Saskatchewan became a branch of in 1931.¹¹⁸ As the British had launched a public campaign into cancer shortly after the turn of the twentieth century, British medical historian Ornella Moscucci has shown how the BECC favored a strong anti-educational policy. The reason being, medical practitioners felt that an educational effort would only lead to 'cancerphobia' among the general public. Fearing that doctor's offices would be overrun by patients attempting to take advantage of free health care services, the belief prevailed that lay education would only detract from the real focus on controlling the spread of cancer.¹¹⁹ The minutes of the SCC express a similar concern with members expressing hesitation on the issue of publicity, out of fear that it "might seriously crowd the clinics."¹²⁰ This opinion suggested a tremendous crossover with the BECC in the decision to move away from a focus on public educational campaigns.

By the fall of 1933, however, the SCC had realized that it could no longer neglect the education of the laity. While Bloodgood's visit ignited a modest education reform it was not until the Liberals returned to power in 1934 that a more earnest devotion to public education was launched. The urgency for cancer education was certainly tied to the revisions that were made by the Department of Health and Vital Statistics in their

¹¹⁷ Saskatchewan Cancer Commission (SCC), February 11, 1933 (copy in Saskatchewan Archives Board).

¹¹⁸ SCC Minutes, October 4, 1930.

¹¹⁹ Moscucci, 362.

¹²⁰ SCC Minutes, February 11, 1933.

collection of cancer data. As the previous reports did not take into account the total number of cancer cases that existed in the province, the new surveyors felt that these summaries were essentially meaningless, as they provided no significant measures for the success of the cancer program.¹²¹ The first analysis that included a full range of statistical data was published in 1934 and provided discouraging results. They found that of the 1,081 cases of cancer diagnosed in the province, fewer than half of those patients had received treatment in either of the two provincial cancer clinics.¹²² Data from 1935 exhibited a similar trend, showing that of the 556 new cases identified that year only 262 had been referred to the clinics.¹²³ A 1936 report in the *Canadian Journal of Public Health* shed light on the small number of cases reporting for treatments. The most intriguing finding revealed that many Saskatchewan residents simply did not believe that they could afford the cost of cancer treatment.¹²⁴

It is apparent that the intention to provide a cancer service where cost was not a prohibitive factor in determining access to care was a message that had not been clearly communicated to the general population. In an attempt to remedy the Conservative failure, the new Minister of Health, Dr. J.M. Uhrich, whose elected position warranted him membership on the cancer commission board, made public education of the cancer problem absolutely paramount. As Uhrich demonstrated in a 1936 speech to the legislature, he stressed that an ill-informed public rendered the most efficient technology

¹²¹ Hayter, *Element of Hope*, 103.

¹²² *Ibid.*

¹²³ Public Health Speech Delivered by the Honorable J.M. Uhrich, Minister of Public Health and Provincial Secretary in Journals and Speeches – Saskatchewan Legislature – Session 1936 volume XXXIV, 19. March 13, 1936.

¹²⁴ Davison, “Progress in Cancer Control in Saskatchewan,” *Canadian Journal of Public Health* (1936), 498, quoted in Hayter, *Element of Hope*, 105.

useless.¹²⁵ Therefore, he wanted to emphasize the fear associated with being too late to receive effective treatment in the hope that it would drive suspected cancer cases to seek consultation early.¹²⁶ By no means did Uhrich expect this educational task to be an easy one that could be accomplished simply through newspaper advertisements. Rather, Uhrich sought a broad range of cooperation that included service clubs, church societies, homemakers' clubs, radio shows and movie presentations in an attempt to reach the "consciousness of everyone in the province."¹²⁷

Uhrich was careful to note that education and early diagnosis were not enough to defeat the cancer problem. The Minister stressed that diagnosis must be followed immediately by the best available therapies.¹²⁸ He reinforced that surgery, X-ray and radiation therapy were the only recognizable forms of treatment in the province. The need to highlight the best available therapies stemmed from the fact that there had been a tremendous increase in quackery, with cures being claimed for cancer through non-traditional methods.¹²⁹ For example, in 1935, a Kingston, Ontario doctor, named Hendry Connell, promoted "Ensol Therapy" as a successful means to combat cancer, which resulted in an overwhelming influx of cancer patients from all parts of the continent who wanted to take part in the groundbreaking treatment.¹³⁰ The SCC attempted to verify

¹²⁵ Uhrich, Public Health Speech, 1936, 17.

¹²⁶ Ibid.

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Ibid.

¹³⁰ Barbara Clow, 104. Note: Ensol therapy refers to Enzyme (En) Solution (Sol). Initially the therapy was designed to treat cataracts. The premise being that injection of an enzyme, possessing specificity, into the lens would digest unwanted proteins. By extension, Connell held that the same philosophy could be applied to cancer, where the injection of a proteolytic enzyme might digest cancerous cells.

Connell's results through its own investigation only to find that there was no evidence to support the notion that 'ensol therapy' actually worked. Uhrich felt that to avoid the referral of patients to doctors like Connell, both the public and physicians needed to be educated about the medically-approved treatments, including radiation therapy, that were available throughout the province.

In attempting to improve the effectiveness of the cancer program the Liberals acted on the premise that the "government had a responsibility to implement policies that would make the path back to prosperity easier."¹³¹ Through the social contract lens, the Liberals responded in a way that renegotiated past policies because they were no longer satisfactorily creating a benefit for all members of society. Here again, Rawls' theory provides perspective as to why an educational component was so important to the programs' success. According to Rawls, it is integral for the success of the social contract that a condition of publicity be satisfied. The reason being, that if the social contract is to meet the principles of all parties involved then it is only reasonable to assume that all parties have knowledge of the principles they are entitled to.¹³² Therefore, the failure to educate the general public creates cracks in the foundation of the social contract and signals places where the terms of the agreement must be re-evaluated.

It is the contention of this thesis that governments rarely, if ever, pursue these endeavors to provide the best society for its citizens with altruistic intentions. Rather, as has already been discussed in the first chapter, there must be a benefit in return to the

¹³¹ Public Health Speech of the Honorable J.M. Uhrich Minister of Public Health and Provincial Secretary in Journals and Speeches – Saskatchewan Legislature – Session 1938 volume XXXVI, 14, February 22, 1938.

¹³² Rawls, 16.

state. In this respect, the Liberal devotion to the cancer program was very much a continuation of cementing a provincial identity that began with the Conservatives. As the province had received such high esteem at the program's outset it was a means of establishing a positive recognizable identity for the province that the Liberals did not want to lose. Furthermore, it was all the more imperative to solidify Saskatchewan's leadership in cancer care given the growing national attention that was being directed towards the disease.

In 1935 for example, to celebrate the Silver Jubilee of King George V, the Governor General, the Earl of Bessborough, decreed that monies be raised in support of the cancer cause.¹³³ According to historian Robert A. Macbeth, it was common practice for countries of the British Commonwealth to present the King with gifts on occasions such as the Silver Jubilee of a Monarch's coronation.¹³⁴ However, King George V asked that on account of the difficult times that were crippling countries around the world that monies be directed in support of some worthy national project. Asking each nation in the commonwealth to select a specific cause that merited assistance, the Governor General chose cancer control as Canada's project. Although the exact reasons for the Earl of Bessborough choosing cancer are not clear, it reinforces that by the mid-1930s a culture of cancer existed in Canada. The growing attention directed towards cancer made Saskatchewan, as a province, determined to improve the efficacy of its cancer clinics, which by all accounts were severely underperforming, in an attempt to reaffirm its position as the Canadian leader against cancer.

¹³³ Robert A. Macbeth, "The Origin of the Canadian Cancer Society," *Canadian Bulletin of Medical History* 22, no. 1 (2005): 163.

¹³⁴ *Ibid.*, 164.

The result was that in subsequent years the Minister of Health remained dedicated to widespread education as an essential need in the fight against cancer.¹³⁵ The production of a short documentary film in 1937 entitled, “Rays of Hope” was another means through which educational efforts attempted to attract a broader audience. Yet, in spite of these efforts “the mortality from cancer continued to climb.”¹³⁶ Uhrich nonetheless reasoned, “that many of these deaths need not have occurred” as it was “the failure of the patient to seek early treatment, not the provision of imperfect remedies for the disease” that was the major reason for the climbing death rate. Uhrich implied, that in order for the cancer campaign to be successful the final responsibility rested with individuals who needed to seek medical attention in a timely manner.

The argument that fault lay with the citizens and not with the accessibility or quality of the therapies being provided was likely influenced by the high number of accolades that continued to praise Saskatchewan for its leadership in cancer control. This point was made evident in a 1938 address by a Professor of Pathology at the University of Alberta, Dr. J.J. Ower, to delegates at the annual convention of the United Farmers of Alberta (UFA). Ower claimed that, “Saskatchewan is far in the lead in Canada in the treatment of cancer.”¹³⁷ That general public interest in the subject must be aroused and that “it is only through the influence of bodies such as yours [UFA] that a campaign, such as the one Saskatchewan is conducting, can be instituted.”¹³⁸ Praise expressing the desire

¹³⁵ Public Health speech Delivered by the Honorable J.J. Uhrich, Minister of Public Health and Provincial Secretary in Journals and Speeches – Saskatchewan Legislature-Session 1937 volume XXXV, 25, March 31, 1937.

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Uhrich, Saskatchewan Legislature 1938, 15.

to emulate Saskatchewan's endeavors explains the heightened confidence that Uhrich had in the program they had spearheaded and why he identified the citizen as the ideal scapegoat in attempting to understand the failure to achieve better results.

Rawls' social contract helps to explain why the decision to blame the public for the failure of the cancer program was ultimately problematic. The reason being, the social contract requires re-evaluation over time, as the changing nature of society leads to inefficiencies in the original agreement. However, since Uhrich inferred that the problem lay with the users and not the establishment itself, there was no impetus to renegotiate, let alone consider, what improvements could be made to cancer care. Even though there may have been a great deal of truth that the population was at fault, by no means is it right to think that these problems were completely one-sided, that there was nothing the state could do to improve cancer services. In thinking so, it resulted in a static period of neglect.

This is not to say that there were no amendments whatsoever to the Saskatchewan cancer initiative; however, the scale on which changes were made was limited to an administrative and organizational level. For instance, in 1939 efforts focused on increasing the number of physicians and nursing staff employed in the clinics.¹³⁹ Dr. Allan Blair, an associate in Radiology at the Toronto General Hospital and a highly respected expert in cancer services, believed that in order for the program to be a success it needed to be further centralized. Expanding the radiotherapist positions from part-time to full-time with the clinics operating five days a week, as opposed to the initial three,

¹³⁹ Allan Blair, "Memorandum on Management of Cancer In Saskatchewan," *Saskatchewan Cancer Commission*, July 1944, 4.

was one means through which amendments were made to make the clinics more readily available to patients and thereby improve the efficacy of cancer care.¹⁴⁰ While Blair's recommendations were implemented in 1939, it marked the end of the Liberal venture in reforming Saskatchewan's cancer program, as Uhrich believed that the province had done all that was required of them to overcome the cancer problem.

Upholding the status quo was a common practice by the provincial Liberals, who were resistant to implementing reforms in health, education or welfare.¹⁴¹ It was only with the rise of the Co-operative Commonwealth Federation (CCF) to the status of the official opposition that the Liberals came under pressure to readdress cancer services. Under the leadership of George Hara Williams, the CCF advocated for a greater expansion of the welfare state as a means of providing prosperity for its citizens. One example in which the CCF pressed the Liberals was in regard to a bill that "favoured a further expansion of state-aided hospitalization and medical services in the province, especially to those living in rural areas."¹⁴² Although the Liberals passed the bill, adding the stipulation that it would only be implemented when the finances of the province were stable enough to permit such an endeavor, it nonetheless demonstrated the pressure the CCF exerted on the Patterson government to expand the provision of health care services.¹⁴³

¹⁴⁰ Ibid., 14.

¹⁴¹ Johnson, 5.

¹⁴² Journals of Saskatchewan, Journals of the Legislative Assembly, Province of Saskatchewan, Fourth Session- ninth legislature, Volume XL, Session 1942, March 13, 1942, 67.

¹⁴³ Ibid.

The desire to expand the welfare state continued in 1943 as a Special Committee was struck to consider issues such as social welfare legislation, social security and the provision of health services.¹⁴⁴ With respect to health care specifically, a consensus of the assembly supported the province cooperating “with the Government of Canada in developing and putting into operation a National plan of Health Insurance.”¹⁴⁵ This changing culture of the expanding welfare state finally exposed the antiquated policy of the Saskatchewan cancer program. Overturning their previous position from five years earlier, which refused to amend cancer care because the failure of the service was perceived to be that of the patient, the Liberals under this renewed mandate introduced the most far-reaching reforms for cancer care, calling for the provision of “treatment and hospitalization to persons suffering from Cancer [sic] without cost to the patient.”¹⁴⁶

Considering that prior to this proposal the Liberal’s public policy was stagnant and in a period of paralysis, something had definitely ignited their desire to renegotiate the provision of cancer services. In this regard, the Liberal objective to expand cancer services was very much driven by politics and was done in an attempt to provide campaign fodder for re-election. The Liberals had fallen out of favor with the electorate after they had remained in power beyond their five-year mandate, using the war as justification of an extraneous circumstance to expand the life of government for one additional year.¹⁴⁷ In an effort to re-align themselves with the popularity of the social

¹⁴⁴Journals of the Legislative Assembly of the Province of Saskatchewan, volume XLI, Session 1943 in Journals – Saskatchewan Legislature, March 2, 1943, 31.

¹⁴⁵ Journals of Legislative Assembly, March 23, 1943, 86.

¹⁴⁶ Journals of the Legislative Assembly of the Province of Saskatchewan, Volume XLII, Session 1944 in Journals – Saskatchewan Legislature, Feb 8, 1944, 10.

¹⁴⁷ Johnson, 5.

assistance policies promoted by the CCF, the Cancer Act can thus be thought of as an attempt to win favor with a disgruntled electorate. This last ditch attempt did little to persuade Saskatchewan voters to support the Liberals, who ultimately lost to a large CCF majority in the 1944 election.

The timing and circumstances surrounding the Liberal's renewed interest in cancer is in keeping with the argument that there is very much a selfish interest guiding a government's *modus operandi*. That it is idealistic to think that governments act to establish a society that imposes benefits for all citizens, regardless of societal circumstance, without wanting something in return. Subsequently, the Liberal approach revealed that when the returned benefit to the state was lost it in turn had the effect on detracting from the benefit to the population as well. As this situation no longer fits Rawls' description of society being a scheme of cooperation for mutual benefit, it is appropriate that the population looked to a new power to restore this relationship.

In this regard, it is fitting that it was the CCF under the leadership of Tommy Douglas, who was also simultaneously the Minister of Public Health, that passed into legislation the Cancer Control Act in October 1944. The Act ensured that any individual who had resided in Saskatchewan for at least six months "was eligible for all services necessary for the diagnosis and treatment of cancer, without charge, including all specialized diagnostic and radio therapeutic services and all surgical operations for the treatment of cancer."¹⁴⁸ The expansion of the cancer services provided by the state thus

¹⁴⁸ Stuart Houston and Sylvia Fedoruk, "The History of Radiation Therapy in Saskatchewan," in *A New Kind of Ray: The Radiological Sciences in Canada: 1895-1995*, ed. John E. Aldrich and Brian C. Lentle (Vancouver: Published for the Canadian Association of Radiologists, 1997), 144.

served as evidential proof of the continued devotion that Saskatchewan governments had to providing cancer care, as well as the efforts that were made to expand and improve on their predecessors policies.

The benefit to the CCF for expanding the cancer program came in the form of restored efforts to establish Saskatchewan as a leader in cancer care, and to forge a strong provincial identity as a progressive region. Douglas had acknowledged in a campaign speech that, “We (the CCF) are desirous of building a more just and secure economy; but we are conscious of the fact that when we have improved the economic lot of mankind, we have only begun the much greater task of building a new society...”¹⁴⁹ As the Cancer Act was to ensure that the cost of receiving treatment from increasingly specialized and modern equipment would not prevent an individual from obtaining all the care that he/she required, it epitomized the CCF’s objective of constructing a provincial identity.

The expansion of services provided by the state and the complete removal of costs proved to be a tipping point for encouraging patients to seek care early. As the number of individuals receiving treatment in the clinics jumped twofold between 1944 and 1946 to reach 2,626 patients per annum Saskatchewan had developed “a more comprehensive cancer program than any other province or state on the North American Continent.”¹⁵⁰ These findings suggest that even though the inclusion of a charge in the original act was never meant to be exclusionary, the sudden climb in patients requiring services following the implementation of the Cancer Act in 1944 suggests that to some degree cost, in addition to inadequate education, had been a prohibitive factor.

¹⁴⁹ Johnson, 26.

¹⁵⁰ Houston and Fedoruk, 144.

Of course, it could also be thought that the Cancer Control Act marked a recognizable and accepted transformation of the hospital from an institution associated with charity to a facility offering specialized care for all people regardless of societal position. It has already been discussed in a previous chapter how at the beginning of the twentieth century public perception viewed hospitals as primarily for the poor. However, with the passing of the Cancer Control Act it is evident that these affiliations no longer held true. Hospitals had become accepted as modern facilities providing industrial and scientific health care, and as such needed to be available to the whole population.¹⁵¹

The Saskatchewan government wanted to support this redefinition of the hospital by ensuring that the cancer services being delivered in their clinics was the most scientifically and technologically advanced. The need to keep pace with advancing technologies was exposed by some new scientific breakthroughs that emerged during the Second World War. The betatron, for example, developed in 1940 by Donald Kerst of the University of Illinois, offered a far more efficient and cost effective means of delivering radiotherapy than radium.¹⁵² Although there were some doubts expressed by the National Research Council President, Dr C.J. Mackenzie, as to whether research of the betatron was advanced enough to properly benefit cancer care, the newly appointed full- time physicist for the Saskatchewan Cancer Commission, Dr. Harold E. Johns, thought otherwise.

¹⁵¹ Gagan and Gagan, 11.

¹⁵² Houston and Fedoruk, 146.

Johns argued that the betatron offered “a method of delivering easily a high dose to tumors at a depth, without appreciably affecting the overlying skin.”¹⁵³ As this technology would reduce the risk of radiation sickness he requested approval from the University of Saskatchewan and the Premier/Health Minister, Tommy Douglas, to purchase a betatron.¹⁵⁴ Receiving approval in 1946, it was another two years before the unit was manufactured by the Allis-Chalmers Plant in Milwaukee, Wisconsin.¹⁵⁵ Following the installation of the unit in the summer of 1948, it took another year of tests and calibrations before the first cancer patient received treatment on March 29, 1949.¹⁵⁶ In doing so, Saskatchewan became the first province to use betatron treatment on a routine basis in Canada and demonstrated once again that the province was at the forefront in providing inclusive, specialized treatments for cancer patients.¹⁵⁷

The cost of operating the betatron, however, proved to be rather expensive and although it was cheaper than acquiring natural sources of radium, Johns and his colleagues began considering alternative sources to provide high-energy radiation therapy. One option that Johns believed could replace the betatron was the application of cobalt-60. As a natural by-product of atomic reactors, cobalt-60 could be produced in vast quantities at a fraction of the cost of providing radium and/or betatron therapy. Johns first became exposed to the possibility of cobalt-60, as a radiation source, while attending a series of lectures in Toronto by a British medical physicist named M.V. Mayneord.¹⁵⁸

¹⁵³ Ibid.

¹⁵⁴ Ibid.

¹⁵⁵ Ibid.

¹⁵⁶ Ibid.

¹⁵⁷ Ibid.

¹⁵⁸ Ibid.

He predicted that cobalt-60 was a more suitable source than radium in the treatment of cancer. This prediction ignited Johns' belief that this technology held tremendous potential for the future of cancer care.

The construction of a nuclear reactor in Chalk River, Ontario during the War spurred Johns' hope that cobalt-60 therapy could be provided in Saskatchewan. Canada became the benefactor of a nuclear reactor as a result of a British desire to avoid an American monopoly on nuclear power.¹⁵⁹ Consequently, Chalk River became the site of the first self-sustained nuclear reaction to occur outside of the United States in September of 1945.¹⁶⁰ However, with Chalk River's inauguration coinciding with the end of the Second World War, the objectives of the plant were shifted to entirely peaceful purposes.

One area of nuclear power that research and development pursued in the post-war era was the production of cobalt-60. Researchers discovered that when cobalt was placed in the reactor it quickly adopted another neutron. The resulting product, termed an isotope, was considered ideal for cancer therapy since it emitted far more radiation than naturally occurring radium. Furthermore, considering the unique specifications of Chalk River's design, the Canadian reactor was able to produce cobalt-60 at a rate that was unmatched by any other reactor in the world. Given these conditions, Johns recognized in a visit to the facility in June of 1949 that "cobalt would offer even better and more economical opportunities for cancer therapy."¹⁶¹

¹⁵⁹ D.G. Hurst et al, ed. *Canada Enters the Nuclear Age: A Technical History of Atomic Energy of Canada as Seen from its Research Laboratories* (Montreal: McGill-Queen's University Press, 1997), 5.

¹⁶⁰ Ibid.

¹⁶¹ Houston and Fedoruk, 147.

In spite of the tremendous faith in the potential of cobalt-60, a mechanism to deliver this therapy was still required. Believing that he could accomplish this task, Johns wrote to the President of the University of Saskatchewan, Walter P. Thompson on July 15, 1949, asking for between \$2500 and \$7000 to develop an effective source of 1000 curies of cobalt-60.¹⁶² However, Johns and his colleagues quickly realized that this project would likely receive greater priority if it were considered as a research project, which fell under the mandate of the province.¹⁶³ With this in mind, Johns, accompanied by Dr. Allan Blair, visited Premier Douglas in Regina in an attempt to expedite an approval.¹⁶⁴

While it is known that Douglas had an open door policy with no need for appointments, Johns was especially comfortable in making an unannounced visit, as he had known the Premier since he was a young boy. This relationship stemmed from the fact that when Douglas was a student at Brandon College, his favorite math teacher, Dr. Alfred Edward Johns, the father of Harold Johns, would on occasion invite Douglas over for Sunday dinner. As a result of this relationship, Douglas observed that even at an early age, the young Johns showed great promise as a scholar. Therefore, when Johns and Blair made their pitch to develop a high voltage radiotherapy program without any documented evidence or reports, it was on account of the integrity of the people making the proposal that Douglas gave his consent. Bypassing “the cabinet, the treasury and the University Board of Governors,” Douglas acted alone to give the government’s approval

¹⁶² Ibid. Note: a Curie is the unit of radioactivity. Named after Marie and Pierre Curie. The 1000 curies requested was equivalent to about 100 times the activity of any radium unit.

¹⁶³ Ibid., 149.

¹⁶⁴ Ibid.

to pursue cobalt-60 for cancer therapy in Saskatchewan.¹⁶⁵ In doing so, it affirmed Douglas' pre-election commitment to using local resources and industries to shape a society. Furthermore, it is another testament to how the desire to lead the way in cancer care became tied to the formation of a positive provincial identity.

Subsequently, upon receiving Douglas' support, Johns along with a graduate student named Lloyd Bates, set out to determine an effective means for providing cobalt-60 therapy. Arriving at a design, the construction of the machine was left in the hands of the proprietor of Acme Machine and Electric, located in Saskatoon. Co-named after Mr. J. A. Mackay of the machine shop, and Harold Johns, the Mackay-Johns collimator was installed in the newly constructed cancer wing at the University of Saskatchewan on August 17, 1951.¹⁶⁶ The first cancer patient received cobalt-60 therapy on November 8, 1951.¹⁶⁷ The three-month delay between installation and treatment stemmed from the fact that Johns insisted upon rigorous measurements for determining exact dosages to ensure that the patient would not be in any danger.¹⁶⁸ The delay resulted in a cobalt unit in London, Ontario, of a different design, claiming the title of being the first to treat a patient in Canada.¹⁶⁹ Although the London unit was not put through the same rigorous tests employed in Saskatchewan, the Canadian press widely publicized the London achievement as being the first in the world. However, not to be outdone, an editorial in the November 7, 1951 edition of the *Saskatoon Star Phoenix* challenged the medias assertion. Asserting that, in respect to a cobalt unit "one is indeed, or to be more

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid., 151.

¹⁶⁹ Ibid.

accurate, one has been installed” in Saskatoon.¹⁷⁰ The desire to affirm Saskatchewan’s place in the cancer effort is further indicative of the image they were attempting to present, as a province dedicated to providing ever more efficient and economical cancer treatments for its citizens. Moreover, the fact that the first woman to receive treatment on the London unit died shortly after receiving therapy, while the Saskatoon patient lived another fifty-two years suggested a devotion to quality that was unmatched in the nation.

The dedication by the CCF to ensure the provision of cancer therapies that were both highly specialized and technologically sophisticated was very much a commitment to the same imperatives outlined by Munroe at the initial outset of the cancer commission. In this regard, the CCF not only continued, but also, improved and expanded on the legacy of cancer care that the province had already developed for itself. The outcome of the cancer initiatives implemented under the Douglas government appeared just as significant in solidifying Saskatchewan’s reputation as a progressive society dedicated to the health of its citizens. The development of the Mackay-Johns collimator proved to be not only effective, but also economical to purchase and maintain. It drew immediate international demands. Mackay’s small engineering firm in Saskatoon produced one hundred collimators for nations around the world for more than thirty-years, with Saskatchewan’s model serving as the staple for administering cobalt therapy.¹⁷¹ As more than 2500 units remained in use around the world in 1984, Saskatchewan remained a recognizable leader in the fight against cancer.¹⁷² Meaning, that Douglas’ gamble in Johns had an enormous pay off for both the patient, who benefited

¹⁷⁰ Editorial, *Saskatoon Star Phoenix*, November 7, 1951.

¹⁷¹ Houston and Fedoruk, 153.

¹⁷² *Ibid.*

from having cutting edge care provided at the state's expense, and the province, who continued to solidify its reputation as a leader in the fight against cancer.

In tracing how the Saskatchewan cancer commission developed over a twenty-year period it is clear that the province employed a scheme of cooperation that was mutually beneficial to the parties involved. Rawls' social contract provided perspective for understanding the development of cancer care in Saskatchewan amidst the turbulent period of economic instability and political turnover. However, while this chapter has focused on the contribution the province had in shaping cancer care it is also important to realize that in the aftermath of the Second World War the federal government took on a growing involvement in supporting the cancer care effort. With the Dominion expanding its role in cancer services in the post-war period, the next chapter will show that many of the same elements used for understanding the program at the provincial level were also applicable to the dominion's increasing involvement in cancer services.

Chapter Three: From Province to Dominion: The Federal Involvement In Cancer Care

By 1946 Saskatchewan had established a cancer program whereby all citizens, regardless of their ability to pay, could receive treatments at the expense of the state. Saskatchewan had created an optimal set of cancer services by incorporating pioneering innovative methods for delivering ever-advanced therapies. However, in addition to the role of the provincial government in creating this model, it would be an error to neglect the contribution of the dominion. As the dominion began to expand its involvement in provincial affairs after the Second World War, the provision of both funds and radioisotopes to Saskatchewan at the end of the 1940s became integral to the success of the cancer endeavor.

While it is understandable how this arrangement would be of benefit to the patient, adhering to the argument established in the first two chapters, there must also be some benefit to the state. In this regard, the development of a radioisotope industry had been motivated by economic incentives. As Prime Minister Mackenzie King believed that the federal government had a responsibility to procure a strong and stable nation, stimulation of the economy through exports was one way in which this could be achieved. Subsequently, with a growing international demand for radioisotopes in the post-war period, this industry served as a market for the government to secure economic stability. Consequently, with this imperative to meet, it not only provided a driving force for the federal government to produce this technology, but furthermore, served the dual purpose of aiding in the provision of cancer care in Saskatchewan and thereby enabling the province to retain its position as a leader and pioneer in cancer care.

Before considering the motivation and impact of the dominion's involvement in the Saskatchewan cancer program, it is first important, if not necessary, to understand the background and context of the federal government's growing desire to expand its role in provincial affairs. The impetus for the dominion to take on a greater responsibility stemmed largely from issues exposed during the Great Depression. Canada was particularly hard hit by the Depression due to the disappearance of markets for export staples.¹⁷³ In the prairies (Alberta, Saskatchewan, Manitoba), for example, the decline in agricultural exports resulted in the net income from farm operations dropping from \$363 million in 1928 to a negative \$10, 728, 000 in 1932.¹⁷⁴ The result was an increasing number of people who did not have a sufficient income to survive on.¹⁷⁵ This dire situation was further compounded given that the relief for destitute families and individuals was a municipal responsibility, which was modeled after the nineteenth-century English Poor Law.¹⁷⁶ The problem with this arrangement was that municipalities and provinces were limited in their capacity to generate revenues since the ability to tax their citizens lay with the federal government.¹⁷⁷ As a result, with the provinces unable to procure funds, the severity of the Depression's conditions exposed the difficulties with the financial arrangements of the British North America Act and served as a catalyst for Canadians to look to the federal government for some sort of relief.

¹⁷³ L.M. Grayson and Michael Bliss, "An Introduction," in *The Wretched of Canada*, ed. L.M. Grayson and Michael Bliss (Toronto: University of Toronto Press, 1971), viii.

¹⁷⁴ *Ibid.*, ix.

¹⁷⁵ *Ibid.*, ix.

¹⁷⁶ *Ibid.*, xii.

¹⁷⁷ Smith, 50.

A creative strategy employed by some people who urgently needed relief was to write directly to their millionaire Prime Minister R.B. Bennett. Receiving letters from hard-up cases all across Canada, the independently wealthy PM often went above and beyond to personally aid people in their plight.¹⁷⁸ The content of letters ranged from children seeking money for sporting goods and Christmas presents to more basic requests for the simple necessities of everyday life. For instance, in September 1933 Mrs. Thomas Perkins of Kingdom, Saskatchewan wrote Bennett asking for money to buy her husband underwear.¹⁷⁹ Describing the complete failure of their crops and the corresponding lack of funds to live Perkins' letter highlights the extent of the suffering encountered by people on the prairies during the depression.

Other letters speak of the tremendous hardships that parents felt in providing for their family. John Eldon of Banner, Saskatchewan wrote to the Prime Minister following the birth of their triplets. Adding to the four small children they already had, he was extremely concerned given the conditions in 1932 about his ability to provide for his seven children.¹⁸⁰ A 1935 letter from Mrs J.W. Gruzlewski expressed a similar sentiment explaining how her nine children had no shoes or clothes of any kind to go to school in.¹⁸¹

¹⁷⁸ Note: Bennett inherited stock in the Eddy Match Company valued at approximately \$400,000 from Jennie Shirreff Eddy, a close friend from childhood, in 1921. In 1926 he inherited shares worth about \$1,500,000 from her brother, Joseph Thompson Sheriff.

¹⁷⁹ Mrs. Thomas Perkins to Prime Minister R.B. Bennette [sic], September 28, 1933, *The Wretched of Canada*, ed. L.M. Grayson and Michael Bliss (Toronto: University of Toronto Press, 1971), 53.

¹⁸⁰ John A. Eldon to the Honorable R.B. Bennet [sic], March 15, 1932, *The Wretched of Canada*, ed. L.M. Grayson and Michael Bliss (Toronto: University of Toronto Press, 1971), 22.

¹⁸¹ Mrs. J.W. Gruzlewski to Honorable [sic] sir, January 31, 1935, *The Wretched of Canada*, ed. L.M. Grayson and Michael Bliss (Toronto: University of Toronto Press, 1971), 106.

These pleas to the Prime Minister establish how amid the continued deteriorating conditions of the depression an increased desperation led many citizens to embrace the possibility of receiving assistance. Yet, as discussed in chapter one, the transition to accepting handouts was by no means a rapid process as many people still found it extremely difficult to even contemplate handouts in the 1930s. Mrs. P. E. Bottle of Craven, Saskatchewan illustrates the internal conflicts people had in asking for help.

Writing to Prime Minister R.B. Bennett in February of 1935 Bottle said:

Please don't think I'm crazy for writing you, but I've got three little children, and they are all in need of shoes as well as underwear... I don't know what to do. I hate to ask for help... but if you don't want to do this please don't mention it over radios as everyone knows me around here and I'm well liked, so I beg of you not to mention my name. I've never asked anyone around here for help or clothes, as I know them to well.¹⁸²

Bottle's letter not only highlights the frustration felt by citizens in the thirties, but furthermore demonstrates how federal leaders had first-hand knowledge of the struggles its citizens were encountering. As Bennett replied to her plea by sending her five dollars of his own money, he acknowledged the urgent need for the federal government to re-evaluate its responsibility to the people.¹⁸³

Although Bennett was defeated before his government could implement major reforms, his successor, Mackenzie King, also embraced the need to renegotiate the terms

¹⁸² Mrs. P.E. Bottle to Sir, February 11, 1935, *The Wretched of Canada*, ed. L.M. Grayson and Michael Bliss (Toronto: University of Toronto Press, 1971), 112.

¹⁸³ Note: Bennett often responded to his letters either personally or through his secretaries with the inclusion of a small amount of money. The sum often varied between two to five dollars. While an exact figure of how much Bennett personally distributed was never officially recorded, estimates suggest that it exceeded two million dollars.

of the constitution. To achieve this, the Royal Commission on Dominion-Provincial relations was launched in 1937 with the objective to determine how:

the distribution of legislative powers essential to a proper carrying out of the federal system in harmony with national needs and the promotion of national unity, will best effect a balanced relationship between the financial powers and the obligations and functions of each governing body, and conduce to a more efficient, independent and economical discharge of governmental responsibilities in Canada.¹⁸⁴

Taking three years to assemble all the evidence, the Commission suggested that the provinces transfer their main fiscal powers to the federal government. However, as the arrangement would make the provinces financially dependent on the federal government, the provinces were split on the Commission's recommendations. The discord likely stemmed from the varying conditions experienced by the provinces during the Depression. As some provinces, like Saskatchewan, were hit much harder by the depression, they appreciated the benefit of assistance much more than Ontario or Quebec, who were not nearly as devastated by the economic downturn. Consequently, in being unable to reach an agreement the Commission's report was officially shelved.

It was not until 1945 that another effort to establish a new partnership was struck between the federal government and the provinces. The focus of the conference aimed at creating the conditions that would ensure high employment and income throughout the nation.¹⁸⁵ This belief was tied to the hope of sustaining the prosperity that had returned to Canada with the outbreak of the Second World War in the post-war period.¹⁸⁶ The

¹⁸⁴ James A. Maxwell, *Recent Developments in Dominion-Fiscal Relations in Canada* (Cambridge, Massachusetts: National Bureau of Economic Research, 1948), 14.

¹⁸⁵ *Ibid.*

¹⁸⁶ *Ibid.*

American detonation of the atomic bomb over Hiroshima on August 6, 1945 signaled a rapidly approaching finality to the war and coincided with the date set for the first post-war planning meeting in Canada. The delegates focused on fields such as social security, health insurance and transportation as areas that would contribute to creating the ideal conditions necessary for stimulating wealth and the economy. However, in spite of the realization to speed along post-war planning, there was still much debate in regards to how the provincial-dominion arrangement should take shape. Opposition was particularly strong from Quebec and Ontario, which deemed that such a partnership would result in a net transfer of income that would ultimately hinder financial growth.¹⁸⁷ Consequently, since such issues were too large to overcome the conference foundered on May 3, 1946.¹⁸⁸

Despite the failure to reach an official agreement between the federal and provincial governments, King's Liberals slowly began to expand the dominion's involvement in provincial matters. One of the most significant areas that the dominion ventured into was the health care domain. Evidence of this commitment is apparent from an address by the Prime Minister on May 14, 1948 where he announced "that thirty million dollars would be made available to the provinces for health care through ten separate grants."¹⁸⁹ The grants targeted a variety of areas providing funds for services such

¹⁸⁷ Ibid.

¹⁸⁸ Ibid., 15.

¹⁸⁹ W.V. Johnson, "The Medical Profession and the Federal Health Grants," *Canadian Medical Association Journal* 60 (March 1949): 301. Note: Thirty million dollars in 1948 is equivalent to \$314,210,526.32 according to the inflation calculator available from the bank of Canada.

as the treatment and cure for TB, mental diseases and the construction of hospitals.¹⁹⁰ Unfortunately, this money turned out to be of little benefit to Saskatchewan since it had already invested capital in the construction of hospitals as part of its Hospital Services Plan, which was launched in 1946 and therefore, did not qualify for reimbursement.¹⁹¹

However, another area of the grant that did benefit Saskatchewan was the money allocated to funding cancer services. Beginning in 1949, the federal government specified that three and a half million dollars (from the thirty million total) would be available for cancer control across the dominion.¹⁹² These monies would reimburse the provinces fifty cents for every dollar they spent on cancer control, up to a maximum figure that was set annually by the federal government. In the first year of funding Saskatchewan maxed out its allowable contribution at \$234,671.¹⁹³ This situation suggests that the province was willing to utilize all the tools at its disposal to further advance its effort to provide cancer services.

The dominion's decision to provide these funds was very much tied to a desire to bring the benefits of modern medicine to more of its citizens. The Minister of National Health and Welfare, Paul Martin, expressed this sentiment in 1948 claiming that financial support to the provinces was a means through which the highest standards of service

¹⁹⁰ C. Stuart Houston, *Steps On The Road To Medicare: Why Saskatchewan Led the Way* (Montreal: McGill-Queen's University Press, 2001), 92.

¹⁹¹ *Ibid.*

¹⁹² "\$234,671 Assistance on Cancer," *Regina Leader-Post*, March 7, 1949.

¹⁹³ *Ibid.*

Note: "Building A Province" (pg 322) quotes a similar albeit different figure. Since I did not track down the primary source the editors cited to demonstrate this figure, I am going to rely on the number provided by the Leader-Post.

could be provided to the people.¹⁹⁴ As the increasing sophistication and modernization of treatment was invariably raising the cost of medicine, Martin wanted to ensure that the “adequate facilities were available to the doctor to provide the care that he is trained to give.”¹⁹⁵ Martin also wanted to ensure that no barriers existed between the doctor and the patient that would ultimately weaken the doctor’s effectiveness because it would only enhance the suffering of the patient and allow diseases to advance beyond the reach of medicine.¹⁹⁶

In this respect, there is a strong corollary between the factors that motivated Martin and those that spurred Munroe to first support Saskatchewan’s cancer initiative. With the mandate of the federal health grants holding that monies needed to be provided to overcome social and economic inequalities so that everyone could benefit from medical technologies, the state was providing the conditions that enabled all citizens the opportunity to further their own ends. From a Rawlsian perspective, the dominion was acting, just as the province had done, to ensure that the advantages of social cooperation were advantageous to all members of society.

However, in addition to providing financial assistance the federal government also took on the role of sourcing pivotal medical tools that were of increasing importance to administering cancer care. One tool that was considered by the dominion as a necessity for improving the quality of cancer care was the production of radioisotopes in Chalk River for delivering radiotherapy. With the government’s purchase of the

¹⁹⁴ F.W. Jackson, “Organized Medicine in a National Health Program,” *Canadian Medical Association Journal* 62 (January 1950): 89.

¹⁹⁵ Paul Martin, “The Canadian Pattern of Health Progress,” *Canadian Medical Association Journal* 69 (August 1953): 170.

¹⁹⁶ *Ibid.*, 171.

Eldorado Mining and Refining Limited Company in 1943, which oversaw the management of Chalk River, the industry came under government control. Initially, radioisotopes were considered such an important discovery for medical science that Chalk River produced and distributed isotopes freely in pursuit of research goals and in the hope of sharing information to aid in the development of an exciting new field.¹⁹⁷ Subsequently, the first institution to receive a shipment from Chalk River was the University of Saskatchewan on October 31, 1947.¹⁹⁸

Amid this initial policy to provide radioisotopes freely to research institutions discussions were already underway about the tremendous potential of selling its products in the global market.¹⁹⁹ The reason for this opportunity is apparent from a May 3, 1947 *Collier's* magazine article by science journalist Alfred Q. Maisel entitled “Medical Dividends.” As Maisel explained, “to scientists, radioactive isotopes are tools of power in the eternal fight against pain and death; they may be even means of prying open the once tightly shut door to an understanding of the inner processes of life.”²⁰⁰ An article in *Maclean's* magazine echoed a similar forecast claiming that, “(nuclear) reactors will soon be stationed at strategic points across the continent, ready to supply any amount of powerful ray-emitting atoms.”²⁰¹ Bill Bennett, the man responsible for the day-to-day affairs of Eldorado was familiar with the “great expectations from the scientific world” in

¹⁹⁷ Paul Litt, *Isotopes and Innovation: MDS Nordion's First Fifty Years, 1946-1996* (Quebec: Les editions du Septentrion, 2000), 51.

¹⁹⁸ *Ibid.*, 45.

¹⁹⁹ *Ibid.*

²⁰⁰ Angela Creager, “The Art of Medicine: Atomic Transfiguration,” *The Lancet* 372 (November 2008): 1726.

²⁰¹ Litt, 44.

regards to radioisotopes.²⁰² As a result of this realization, Bennett insisted by 1947 that the isotope branch at Chalk River not only develop methods to make and purify those radioisotopes that were expected to come into demand, but furthermore, to include a provision in the budget for the marketing of isotopes.²⁰³

These sentiments highlight an important means through which the state could benefit by providing this service. That is, the exporting of radioisotopes could help to ensure a strong and stable economy. The fact that the development of the radioisotope industry was driven by market incentives is very much indicative of the growing influence that economist John Maynard Keynes was having on Canadian economic policy makers. The influence of Keynesian economics on the Canadian government emerged in the aftermath of the Great Depression as he argued that it was the relative inaction of depression era governments that contributed to the problems prevalent throughout the decade.²⁰⁴ Keynes surmised that the government had a responsibility to provide the conditions for prosperity through stimulation of the economy.²⁰⁵ Subsequently, with economists in Canada setting out to apply Keynes' theory to Canadian circumstances, his theories became highly influential in shaping government practices, as a policy of high and stable government spending on exports was promoted as a means of increasing employment and income.²⁰⁶

²⁰² Ibid.

²⁰³ Ibid.

²⁰⁴ Donald Markwell, *John Maynard Keynes and International Relations: Economic Paths to War and Peace* (Oxford: Oxford University Press, 2006), 183.

²⁰⁵ Ibid.

²⁰⁶ Ibid., 164.

Consequently, it was with the realization that the production of radioisotopes could serve as a stabilizing force for the economy that efforts were directed at establishing a global presence. Streamlining the market division of radioisotopes in 1947 actually encouraged the Americans to further their own development and distribution of radioisotopes. As historian Angela Creager explained, the Americans felt that “they needed to begin distributing radioisotopes to foreign nations so that they could stake their claim on the market before the Canadian reactor was up and running.”²⁰⁷ The fact that there was such stark competition for a market that did not yet exist in 1947 suggests how quickly the market was expected to develop and therefore the need to be ready.

To capitalize on the growing market potential of radioisotopes the Eldorado Mining and Refining Limited Company received exclusive rights to distribute cobalt-60 to commercial and industrial users in September 1949.²⁰⁸ By March, 1951 Eldorado took control of all isotopes destined for commercial or industrial markets and changed its name to Eldorado’s Commercial Products Division (CPD) with efforts directed at establishing a marketing campaign to distribute isotopes abroad.²⁰⁹ The organization underwent further changes in the following year when the Atomic Energy of Canada Limited (AECL) took over control of Chalk River. It was not long before suggestions were made that CPD should fall under this umbrella as well. As CPD’s products no longer came from Eldorado’s mining operations it only made sense that it should join AECL.²¹⁰ Following minor negotiations AECL took over CPD on August 1, 1952 and

²⁰⁷ Creager, *Postwar Research Practices*, 377.

²⁰⁸ Litt, 48.

²⁰⁹ *Ibid.*, 53.

²¹⁰ *Ibid.*, 54.

while transitioning CPD to a crown corporation, the sales organization established under Eldorado remained intact as CPD was to remain profit-oriented and focused on establishing a global presence.²¹¹

The desire to expand the products' share of the marketplace resulted in cobalt-60 being produced for both medical and non-medical applications. For instance, in addition to its use against deep-seated tumors, cobalt-60 was also utilized as a tool to sterilize medical supplies, to assist the study of gamma-radiation effects on materials through laboratory experiments, and finally to extend the shelf life and storage time of food.²¹² Creating so many avenues for the distribution of isotopes, CPD's products came into high demand in the 1950s as market competition between nations started to open up. Exporting its products to the U.S., Europe and Asia, CPD established itself as a major supplier of bulk radioisotope products to much of the world, as global demand for isotopes rose 1500 percent between 1955 and 1960.²¹³ CPD even sold its products in China and the Soviet Union at a time when it was unheard of for a western enterprise to make sales forays into the communist world. It was undeniable that Canada had established a global presence in the radioisotope market.

In this regard, the devotion to providing this service abroad can also be thought of, in addition to procuring a stable economic climate, as a further endeavor into forming a national identity. The need to establish an international identity, as an advanced and technological nation in the early sixties was all the more significant given the damage that was done to Canada's image at the end of the 50s with the Avro Arrow debacle. As

²¹¹ Hurst, 100.

²¹² Ibid., 105.

²¹³ Ibid., 107.

Canada had developed a supersonic jet in the post-war period it very much served as a symbol of the country's technological prowess. However, with the support for the project being pulled by Diefenbaker's government in February 1959, the cancellation of the jet was perceived as a "betrayal of Canada's potential to take its rightful place in the world's modern high-tech economy."²¹⁴ Furthermore, an additional unfortunate outcome from its cancellation was that it resulted in a brain drain of scientists and engineers to NASA's Space task group.²¹⁵ However, according to historian Robert Bothwell the end of the Arrow was an important lesson for Diefenbaker's government and was a significant factor with the Conservative's favoring plans "to improve its shaky standing in the realm of high technology."²¹⁶

Subsequently, with perceptions of Canada's devotion to innovation and ingenuity being tarnished, this turn around helps explain why it was so important for the federal government to establish a global identity in the distribution of radioisotopes, as it was a means through which the Canadian commitment to high technology could be restored. The desire to establish a global presence in the radioisotope industry was further solidified in 1961 when the Americans withdrew from the isotope business altogether.²¹⁷ The decision to do so was likely influenced by the fact that in 1959-1960 CPD had been outselling its American counterpart in Oakridge by more than eighty percent. As a result, these conditions led to even greater research and development by CPD to expand the potential markets. One area that research and development focused on using

²¹⁴ Litt, 1.

²¹⁵ Robert Bothwell, *Nucleus: The History of Atomic Energy of Canada Limited* (Toronto: University of Toronto Press, 1988), 248.

²¹⁶ *Ibid.*

²¹⁷ *Ibid.*, 273.

radioisotopes was for improving crop yields through food irradiation. Treating food with irradiation eliminated insects, reduced bacteria and stopped sprouting.²¹⁸ The benefit of this course of action was that it had tremendous potential for “reducing losses, improving quality, extending shelf-life enlarging markets and tracking health problems.”²¹⁹

Consequently, this relatively untapped market led R.F. Frington, vice-president of the CPD to conclude that, “this was but another area of radioisotope development that held tremendous economic potential for the Canadian economy.”²²⁰

However, while the government remained dedicated to exporting its radioisotopes as a stimulus for the economy, this commitment also proved advantageous to Saskatchewan’s continuing desire to lead the nation in cancer care and maintain its reputation as a leader in cancer care. As the province was primed through the development of the Mackay-Johns Collimator to administer cobalt-60 it continued to propel Saskatchewan to the forefront in treating cancer. A 1953 article in the *Saskatoon Leader Post* entitled “Cancer Research Program in Saskatchewan Receives Praise,” by Dr. O. H. Warwick, the executive director of the National Cancer Institute in Toronto, acknowledged the tremendous contributions and leadership that had been made in Saskatchewan, particularly in respect to the field of radiation therapy.²²¹ Another article on March 14, 1955 entitled “Saskatchewan Leads in Cancer Research” contained a similar sentiment. Reporting on a speech by the president of the Canadian Cancer

²¹⁸ David Spurgeon, “Radioisotopes Role in Canada’s Economy Called Enormous,” *The Toronto Star*, October 17, 1966.

²¹⁹ *Ibid.*

²²⁰ *Ibid.*

²²¹ “Cancer Research Program in Saskatchewan Receives Praise,” *Saskatoon Star-Phoenix*, October 10, 1953.

Society, Dr. F. R. Butterfield, to a congregation of the unit in Swift Current he proclaimed that, “as the result of education and treatment the program in Saskatchewan is being jealously examined by all other provinces.”²²²

Although the failure to adequately educate the public was a major setback in the 1930s when the program was first launched, it is evident that the province had learned from its mistake making cancer education an absolute necessity. In a 1955 article in the *Canadian Medical Association Journal* entitled “Public Opinion on Cancer in Canada,” author A.J. Phillips questioned participants on the symptoms of the disease, the value of early diagnosis, curability and the progress that was being made in treatment of cancer. The article concluded that Saskatchewan respondents ranked far above the rest of the country.²²³ Even though Phillips’ study was limited, surveying only women in regards to cancer of the breast and of the cervix, these findings were still significant in demonstrating that a strong educational message about the cancer problem existed in Saskatchewan and had resulted in superior success rates.

The outcome of this commitment to education combined with the provision of advanced therapies further solidified Saskatchewan’s image as a leader in combating this disease. A 1959 Saskatoon *Star Phoenix* interview with Dr. A.R. McGee, the President of the Canadian Association of Radiologists, described the Saskatchewan endeavor as “amongst the best in the world.”²²⁴ One of the reasons, according to McGee, for this increasing attention stemmed from the development, production and utilization of the

²²² “Saskatchewan Leads in Cancer Research,” *Regina Leader-Post*, March 14, 1955.

²²³ A.J. Phillips, “Public Opinion on Cancer in Canada,” *Canadian Medical Association Journal* 73 (October, 1955): 639.

²²⁴ “Cancer Clinic Among Best in World,” *Saskatoon Star-Phoenix*, January 14, 1959.

world's first cobalt-60 therapeutic unit.²²⁵ Another article in August, 1962 focused on how the cancer plan itself was the envy of doctors the world over. Dr. T.B.C Barclay, a member of the Allan Blair Memorial Clinic came to this conclusion after presenting a paper at the eighth international cancer congress in Moscow. Reporting on how at least ninety percent of all cancer cases were seen or known about by the cancer clinics, these numbers were unmatched by any other cancer initiative in the world.²²⁶ These findings were significant as doctors still promoted that early diagnosis and treatment were the best weapons against cancer, and served as a signal to foreign physicians to embark on more ambitious programs in their own respective areas.

Furthermore, the fact that cancer education was leading to earlier diagnosis and treatment resulted in Saskatchewan's cancer cure rate being unequalled in any part of the world.²²⁷ Referring to cancers commonly treated by radiotherapy, Dr. T. A. Watson recorded the vast improvement that Saskatchewan had witnessed since the program's inception to 1963. With skin cancer treatment almost one hundred percent effective and achieving enormous leaps in the success of treating breast and lip cancer, Saskatchewan had established itself as "the banner province in Canada" in the fight against cancer.²²⁸

At this point, the Saskatchewan cancer initiative was arguably at its zenith. In a period that pre-dated universal health care the contributions of the provincial and federal government proved instrumental to shaping the success of the cancer program in Saskatchewan. It is for this reason that the understanding of society, from a Rawlsian

²²⁵ Ibid.

²²⁶ "Provincial Cancer Plan World's Best," *Regina Leader Post*, August 14, 1962.

²²⁷ "Saskatchewan Cancer Cure Rate Unequaled in World," *Saskatoon Star-Phoenix*, February 10, 1963.

²²⁸ "Province Leads Cancer Research," *Regina Leader Post*, February 7, 1963.

perspective, as a scheme of cooperation for benefit to all parties involved, including the government, provides insight and perspective into the course of the programs development. Because what it reveals is that when there are imperatives for parties to uphold and adhere to it serves as a template to ensure a fair and just society that is equally beneficial to all members of society. As the government had their own vested interests to protect, the outcome of cancer care was as much a desire to protect the goals of the state, as it was to provide for its citizens.

The reason that it is ideal to think of the cancer program in this manner is because it suggests that there are a set of self-imposed duties that guide actions and decisions.²²⁹ As a result, decisions not only have a framework to be made within, but furthermore, provides a model for objectives to be reconsidered when problems arise. This is certainly true of the federal government's decision to reconsider its role in producing radioisotopes. Even though Canada had established itself as a major supplier of bulk radioisotope products to much of the world by the 1960s, it had to work to ensure that it was able to uphold this position. It did so out of the realization that just as quickly as it had established a worldwide market, newer more specific radioisotopes came into demand from cancer-treatment clinics in the 1970s that made CPDs products antiquated.²³⁰ As a result, CPDs revenues flat lined from 1970 to 1975.²³¹ The AECL board approved support for a resurgence program to bring CPD back to a favourable

²²⁹ Note: Rawls frames the morality of actions within a deontological ethic. The intent being to establish that it is not the ends, but rather, the means with which a society should be concerned. In making this distinction, this is another example of Rawls' departure from utilitarian's.

²³⁰ Hurst, 107.

²³¹ Ibid.

position that involved turning its focus to the production of molybdenum-99, which had come into high demand from researchers and cancer clinics. The shift in production yielded substantial profits from 1978 onwards, resulting in a continued respect throughout the scientific world, with numerous nations looking to CPD for consultation and guidance in the development of their own radioisotope industries.²³²

Consequently, the decision to shift production was guided by the desire to continue the economic benefit that this industry had provided to Canada. Considering society as a scheme of cooperation for mutual benefit, this example further highlights the necessity to renegotiate the terms of social cooperation overtime to ensure that society continues to be advantageous to the parties involved. As this situation resulted in Chalk River solidifying its role as a world leader in the production of radioisotopes up until its closure in 2009, it suggests that understanding the benefit to the state is not only useful for providing historical explanations, but moreover, has contemporary applications as well.

²³² Ibid.

Conclusion

By 1966 the province of Saskatchewan had developed a comprehensive cancer program that was amongst the best in the world. Saskatchewan achieved this position through three integral steps. The first stemmed from the province covering all the costs associated with cancer treatment. Second, an aggressive public education campaign about the cancer problem encouraged patients to seek medical expertise at the earliest sign of cancer. Lastly, Saskatchewan maintained a dedication to providing the most scientific and technologically advanced therapies for its citizens, based on a combination of international trends and local innovations. In regard to technology, it should not be forgotten that the dominion had an important role in supplying the necessary tools, radioisotopes, which gave Saskatchewan the opportunity to excel in cancer care. Consequently, in this pre-medicare period, Saskatchewan, with support from the dominion, had realized the advantages of state involvement in providing health care services.

Yet, in tracing the origin and development of the Saskatchewan cancer program over a thirty-year period it becomes apparent that the advantages and benefits of this initiative were not simply directed towards the citizens. The reason being, that subsequent government's remained dedicated to improving and expanding on the provision of cancer services because this was very much an exercise in forging a strong provincial identity. As cancer stimulated fears around the world that it posed a serious threat to the very make-up of society, Saskatchewan took the lead in combating this new threat. As the first province in Canada to cover the costs associated with treating cancer, while also ensuring

that the treatments being provided were of the highest quality, Saskatchewan developed a reputation as a leader in health care reforms, and a province dedicated to its citizens' health care needs.

Building on the notion that there was a reciprocal benefit to the state at the provincial level is also helpful for understanding the dominion's involvement in cancer services after the Second World War. As cancer technologies changed, and radioisotopes became part of the modern application of cancer treatments, the federal government became dedicated to developing a radioisotope industry at Chalk River, Ontario. This partnership enabled Saskatchewan to deliver the most sophisticated and modernized technology to cancer patients in the world, but it also was spurred by an ulterior motive. In particular, the radioisotope industry was driven by a desire to distribute these products to an expanding international market so as to ensure a strong and stable economy. This mentality ultimately guided the management of radioisotopes in Canada up until the closure of the Chalk River's nuclear reactor in 2009, at which point it was producing over a third of the world's radioisotopes.²³³

In highlighting the tremendous, albeit different, benefits at both the provincial and federal levels of government, this thesis demonstrates why this relationship was ultimately so beneficial to the citizen. Cancer services provided a mutual benefit to both the people and the state, and as such, these services offered a guiding model for subsequent governments to uphold. The case of cancer care services suggests that the multiple layers of government, and several different administrations supported the

²³³ "Reactor Idled," CBC News.

development of cancer services in a manner that benefitted both the citizen and the state. However, the evidence here suggests that the governments involved did not do so altruistically. The success achieved through the Saskatchewan cancer endeavor, for both the individual and the government, nonetheless implies that having a reciprocal benefit for all the parties involved was a necessary condition to achieving a fair and just society.

Although this argument is predicated on a rather myopic study of the cancer story in Saskatchewan, the case of cancer may serve as a model for further examinations of the development of provincial cancer programs throughout Canada. Considering that the Saskatchewan cancer initiative served as an impetus and model for other provinces to replicate it seems appropriate to consider whether this argument provides insight for understanding the development of cancer care in other provinces. Of course, it need not be the case that other province's were attempting to build a source of provincial pride as Saskatchewan was. Rather, it might have been that for other provinces the development of a cancer program was simply an exercise in political expediency as neighboring governments did not want their constituents to feel left out of a growing national trend. Ultimately, while this assessment of the motivation driving other governments is completely speculative, the study here hopes to have provided a framework that is applicable for providing perspective on the historical development of additional cancer programs across Canada.

However, in addition to providing a historical perspective on the origins of cancer care, the argument that there must be a returned benefit to the state is also relevant for understanding the contemporary condition of cancer services. It is all the more important to examine the current state of affairs given that the cancer situation in Canada is far from

ideal. Society is littered with cancer reminders such as Lance Armstrong's "Livestrong," breast cancer's "Run for the Cure," and prostate cancer's "Movember November," but remarkably, in spite of its publicity, cancer remains the leading cause of death in Canada. With more than sixty-eight thousand deaths occurring every year from cancer and more than 2,800 Canadians diagnosed with the disease every week it suggests that the war on cancer is far from being won.²³⁴ The significance of these statistics is further compounded by the fact that more than sixty-five percent of all Canadian cancer patients are on waiting lists to receive radiation therapy.²³⁵ These delays were only exacerbated in 2009 when Canada's nuclear reactor in Chalk River was forced to shut down due to safety concerns.²³⁶

As Canada maintained its position in distributing radioisotopes globally for more than fifty years it is clear that up until the closure of the nuclear reactor, this industry continued to provide an economic return for the state. Yet, given the current inadequacies with the system in providing timely and coordinated care, the same continued success cannot be said of cancer services today. The contemporary situation indicates a major departure from the conditions that led to a successful cancer program in Saskatchewan for more than thirty years. As the current situation suggests that we are no longer a society adhering to the framework of a cooperative venture for mutual benefit. Considering how the notion of reciprocal benefit has provided insight into Saskatchewan's cancer success in the past, the hope here is that the same idea has some value for providing perspective on the current cancer condition. The overarching

²³⁴ Hayter, *Element of Hope*, 3.

²³⁵ Ibid.

²³⁶ "Reactor Idled," CBC News.

argument helps to explain not only where the program has failed, but moreover, how it might be improved. As historians like Robert Proctor, Ilana Löwy and Devra Davis have turned their attention to studying the detrimental effect that politics has had in limiting the progress against cancer, an investigation into the causative factors of the current problems with cancer care in Canada would be in keeping with the developing historiography and an ideal avenue for further scholarship.²³⁷ This thesis offers one small step in that historiographical direction with a concentration on providing the political background in the pioneering model.

²³⁷ Proctor, *Cancer Wars*; Löwy, *Preventive Strikes*; Davis, *Secret History of the War on Cancer*.

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