

**Alberta Health Services' Data Collection Processes During the COVID-19 Pandemic:****An analysis of the development and implementation of risk communication strategies****By: Serena Gadamsetti****Abstract**

As research on the COVID-19 pandemic continues, it is evident that many minority, ethnic and lower socioeconomic groups are experiencing unequal care and support at a disproportionate rate. Research conducted shows COVID-19 exacerbates many existing inequalities tied to socioeconomic status, education, age, gender, ethnicity and geography. Currently, Alberta Health Services (AHS) does not collect specific data to reflect groups disproportionately affected by COVID-19. This essay provides examples of how AHS can assess its data collection process; a study that examined the Winnipeg Central Intake Service (WCIS) highlights how public participation through policy roundtables effectively improved Manitoba's care service policies. Furthermore, Eiko Yoneki's (2009) research emphasizes wireless technology capabilities within dynamic physical networks and its effectiveness during an epidemic, providing relevance to the COVID-19 pandemic. Subsequent studies note the importance of risk and crisis communication while assessing research and stakeholder analysis to offer recommendations for AHS. This paper argues that the reality of COVID -19 is ever-changing; however, it is essential to continuously use and collect information to implement crisis communications properly. Therefore, AHS has the chance to strategically communicate with at-risk Albertans affected by the COVID-19 pandemic.

**Research Question**

Can specific data collection by Alberta Health Services assist the Government of Alberta in developing and implementing risk communication strategies during COVID-19?

Ongoing research on COVID-19 has highlighted that many minority, ethnic and lower socioeconomic groups are experiencing unequal care and support at a disproportionate rate. In his research, Richard Blundell (2020) explores inequalities resulting from COVID-19 within the realms of employment and the ability to earn a living, family life and health. One critical theory notes the many connections between existing inequalities tied to socioeconomic status, education, age, gender, ethnicity, geography, and how COVID-19 exacerbates such inequalities. Similarly, Ana V. Diez Roux (2020) identifies that the current systems and environments that promote health and health equity are lacking. As a result, many underlying inequalities and policy challenges, paired with various government responses to the pandemic and the pandemic itself, have contributed to the overall lack of care and support many are facing (Blundell, 2020).

The challenges minority world countries face when gathering basic data include “the systematic characterization of ... [COVID-19] in social groups characterized by race, ethnicity, social class and neighbourhood” (Diez Roux, 2020, p. 631). These challenges are significant contributors to disparities found within care and support. Understanding the impacts of COVID-19 amongst the intersections of the social determinants of health can help provide better care, improve policy-making procedures and assist government responses pertaining to specific groups throughout the pandemic. Currently, Alberta Health Services does not collect detailed data to reflect the various minority, ethnic and lower socioeconomic groups disproportionately affected by COVID-19. I argue that AHS has framed its lack of specific data collection as a non-issue. In light of this, it is in the best interest of AHS to conduct research and begin collecting data relevant to the previously mentioned groups to aid the Government of Alberta in developing and implementing risk communication strategies to assist those affected by the COVID-19 pandemic. Theories on gathering data on human interactions, crisis management and

risk communication strategies were examined to support this claim. A comparator case study on intake services at the Winnipeg Central Intake Service (WCIS) will highlight the necessity of public engagement and the importance of stakeholder relations.

### **Literature Review**

The following literature review provides context regarding the benefits and risks of data collection and risk communication strategies. To better understand how this affects AHS, in conjunction with the Government of Alberta, three articles are shared in chronological order, focused on hypothetical data collection during an epidemic and the importance of stakeholder analysis, research and data collection within risk communication strategies. Eiko Yoneki's (2009) study on small wireless devices and the ability to gather data on human interactions highlights how it could effectively track infectious disease spread. Research by John Bryson (2004) and John E.C. Cooper (2015) on crisis management and risk communication clarifies the importance of addressing stakeholders' needs and why it is vital to conduct research and data collection during risk communication.

In the event of an epidemic, Yoneki (2009) highlights a key consideration during this type of crisis by asking the question, "in dynamic physical networks, how do people form communities and how does community structure affect epidemic spread in a population?" (p. 941). Yoneki outlines wireless technology capabilities to collect data on individuals that use mobile phones, sensors and devices with Bluetooth capabilities. Data can be gathered on nearby devices through proximity and show how communities form, the number of times people are together and how often they meet. The information collected can be useful in the spread of epidemics; however, it raises privacy concerns. The article identifies that, "network characteristics (e.g. population size, geographical location) can be uncovered. Clustering will be

an important factor to drive the epidemic, and looking into causal patterns of the epidemics will give additional insight” (p. 941). Along with understanding how diseases spread, Yoneki (2019) discusses the importance of data collection and the potential for new technologies (mobile phones and sensors) to map specific individual interactions within data collection effectively.

While considering stakeholders, Bryson’s (2004) article looks at how using stakeholder identification and analysis techniques can help organizations create public value and meet their goals and objectives. Through his analysis, Bryson highlights that many students and practitioners of public policy, administration and planning are not taught useful stakeholder analysis techniques, such as organizing participation and creating ideas for strategic interventions. However, Bryson notes that they should be introduced to stakeholder analysis techniques as, “a variety of stakeholder analyses appear to be very useful tools for improving public and nonprofit management, creating public value and advancing the common good” (p. 47).

Lastly, Cooper (2015) outlines five well-known steps to take when a crisis happens; these five steps are: assemble a crisis team, establish a timetable, update materials, conduct research and maintain vigilance. Research is highlighted in the fourth step but plays a crucial role throughout all steps. As advised by Cooper, communicators, “must keep on top of the crisis and gather as much information about the crisis as possible as it develops so that they can respond to it” (p. 412). To improve strategic risk communications, Cooper emphasizes the need for organizations to look at past performances and assess others’ accounts within the same industry.

### **Case Study - Winnipeg Central Intake Service (WCIS)**

A study conducted by Damani et al. (2016) examined WCIS and evaluated the organization to improve patient care. A policy roundtable meeting formed to encourage public

participation and redevelop policy directions. Upon evaluating the study findings, researchers created five evidence-informed policy directions aimed at improving services across Manitoba. Throughout the policy roundtable meetings, 44 participants, consisting of six stakeholder groups throughout the province and individuals from the team were surveyed (Damani et al., 2016). Evaluation forms were created and distributed amongst participants, allowing all stakeholder perspectives to be analyzed for key concerns and themes before, during and after the meeting. The survey results showed that stakeholders supported all policy directions and other considerations from the roundtable meeting. The results were an indication that the roundtable meetings effectively achieved their purpose, resulting in the next steps outlined to improve Manitoba's care services and policies.

The WCIS case study indicates that Damani et al. recognized a lack of patient care and worked to mitigate issues surrounding it. By inviting stakeholders across Manitoba to participate, researchers could understand how to serve them better. This collaborative process resulted in identifying how to improve care services for individuals who need them. As Bryson (2004) states, identifying and meeting stakeholder needs can help an organization create public value while meeting its own goals and objectives. Besides, conducting research is invaluable. Cooper (2015) notes that research is an underlying foundation for mitigating possible crises. Furthermore, Cooper states that organizations should consistently gather information on a current or potential crisis while simultaneously looking at past performances and assess others' performances within the same industry. Initially, despite this study being focused on WCIS, the results helped create policies that would improve services throughout Manitoba.

### **Impact of COVID-19 on Minority, Ethnic and Lower Socioeconomic Groups**

Earlier in 2020, researchers from Statistics Canada conducted a study to understand the economic impact of COVID-19 on visible minority groups. The study uses census data from 2016, “to compare group differences in poverty rates, thereby offering an assessment of economic vulnerability prior to the COVID-19 pandemic” (Hou et al., 2020, para 2). For current data, Hou et al. crowdsourced an online questionnaire on social trust completed by 36,000 Canadians from May 26, 2020, to June 8, 2020 (Hou et al., 2020). Participants answered questions regarding job loss (temporary or permanent), reduced work hours and, “their ability to meet financial obligations or essential needs, such as rent or mortgage payments, utilities, and groceries” (Hou et al., 2020, para. 7).

The study found that minority groups with high poverty rates are more vulnerable to the financial impact COVID-19 has brought. Of the crowdsourced participants, “Whites and most visible minority groups reported similar rates of job loss or reduced work hours” (Hou et al., 2020, para. 10). Despite factoring in several group differences, researchers found that COVID-19 had, “a stronger impact on visible minority participants’ ability to meet financial obligations or essential needs than for White participants” (Hou et al., 2020, para. 10). In understanding the various impacts of COVID-19, Alberta Health Services should acknowledge the reality of COVID-19, take responsibility by collecting relevant data and incorporate the following recommendations into its existing risk communication strategies.

### **Reality, Responsibility and Recommendations**

As of Nov. 25, 2020, “1,265 new cases were identified ... [with] a total of 13,719 active cases” in Alberta (CBC News, 2020). While case numbers continue to rise, Alberta Health Services and the Government of Alberta have a responsibility to research and determine which

individuals, outside the parameters of age and gender, are more susceptible to the various impacts of COVID-19. Back in April 2020, Alberta's chief medical officer, Dr. Deena Hinshaw, told reporters that, "Alberta 'need[s] to look closely at' incorporating race-based data" (Flanagan, 2020, para. 7). She went on to say that "[we] know that certain groups of people are systematically disadvantaged based on their appearance or their socioeconomic status" (Flanagan, 2020, para. 8). As previously stated, there are several inequalities that the pandemic has exacerbated within the social determinants of health, meaning that many minority, ethnic and lower socioeconomic groups within Alberta may be at a higher risk to experience unequal care and support as COVID-19 ravages on.

As case numbers in Alberta continue to rise, Alberta Health Services and the Government of Alberta are responsible for addressing all Albertans' concerns and needs; therefore, Alberta Health Services should review its processes surrounding data collection during the COVID-19 pandemic. Following the WCIS case study results, it is evident that conducting primary research can positively impact policies to assist stakeholder experiences under an extensive, organized system. Similarly, it was previously less known about the impact of COVID-19 on visible minorities. Still, researchers with Statistics Canada were able to crowdsource invaluable information and understand the reality minority groups throughout Canada face during the pandemic. Therefore, Alberta Health Services should advocate for the implementation of primary research to the Government of Alberta. Primary research methods such as policy roundtables and crowdsourced questionnaires will grant effective risk communication strategies to target at-risk Albertans.

Additionally, reflecting on Yoneki's (2009) research, wireless technology capabilities are a probable solution to aid AHS and the Government of Alberta in collecting specific data.

Unfortunately, Alberta's provincial tracing app, ABTraceTogether, has seen limited success, despite being, "downloaded more than 260,000 times — [it] has been used in 'approximately 20 cases' to track down contacts of someone who tested positive" for COVID-19 (Fletcher, 2020, para. 1). The Canadian federal government-administered app, COVID Alert, has proved its effectiveness throughout half the country. Therefore, Alberta Health Services should advocate for the use of the nationwide tracing app COVID Alert. The federal app provides a more reliable system to help mitigate Albertans' risks by providing effective contact-tracing.

As highlighted in the literature review, research and data collection are essential. Bryson (2004) understands the importance of stakeholder identification and analysis techniques to help organizations create public value and meet their goals. Considering the current pandemic, Alberta Health Services must conduct stakeholder analysis and primary research to meet Albertans' needs. Secondly, as Cooper (2015) reiterates the importance of research during a crisis, it is recommended that AHS advocates for continuous research within the province while assessing practices conducted by other provinces. Ongoing research throughout the pandemic will encourage adaptive risk communication strategies until the pandemic is over.

### **Conclusion**

Despite its ongoing role in managing COVID-19 within Alberta, Alberta Health Services is not directly responsible for policy implementation nor providing Albertans with economic support. Regardless, as a healthcare system, Alberta Health Services has a responsibility to provide transparency for Albertans and hold the Government of Alberta accountable while ensuring various groups living within the province receive proper care and support. Watson (2020) believes it is crucial to promote and advocate for critical thinking and health preparedness to help professionals meet existing and future challenges. Whereas the examination of WCIS'

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intake services, conducted by Damani et al. (2016), highlighted the effectiveness of public participation in redirecting policies. As research shows, incorporating public data can aid in mitigating existing and future challenges.

The reality of COVID-19 is predictable to some degree based on viral spread data models and the best practices taken from the epidemiological sciences. Therefore, it is essential to continuously use and collect data and information to implement crisis communications properly. In turn, Alberta Health Services can eliminate the notable discrepancies between the lived reality of minority, ethnic and lower socioeconomic groups and the media's updates.

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