

**Equitable Vaccine Distribution in Ontario:
Reaching the Unreachable & Most At-Risk Populations**

Executive Summary

Currently, Ontario has a limited vaccine supply and is struggling to provide adequate vaccination services to its population. As the province begins its initial steps in administering vaccinations, it is essential that the process is equitable and ensures the inclusion of the most vulnerable groups of the population, as well as those located in remote areas. The current plan fails to consider access to individuals in rural communities or those with disabilities who may have difficulty traveling to hospitals or alternative healthcare services. In light of these concerns, it is proposed that the government of Ontario evaluate and consider the use of mobile health units to target elderly populations and remote communities.

Introduction

Although the Canadian federal government advised a vaccine distribution plan, each province has adopted their own. The COVID-19 task force in Ontario has created a three-phase approach which equitably distributes vaccines throughout the province. The current plan considers the age and pre-existing health conditions of the population, while also accounting for densely populated areas, frontline workers, and communities with higher rates of COVID-19 transmission, morbidity, mortality, and hospitalization (“Ontario’s COVID-19 vaccination plan”, 2021). However, despite this framework’s ability to address the social determinants that affect an individual’s vulnerability to developing COVID-19 (i.e. low-income and racialized identities), it does not adequately address distribution of the vaccine to remote communities or the complications that individuals with disabilities may have when faced with the need to travel long distances for care. Thus, a plan which provides equitable care to these populations is extremely urgent.

Policy Recommendations - Mobile Health Units

Mobile health units have been used by organizations to bring disaster relief and access to healthcare around the world (Khanna & Narula, 2016). It is to be proposed that these mobile units be utilized and implemented as vaccination sites for elderly in densely-populated regions and adults in rural communities. According to a report published by Ontario epidemiologists, the most effective way to reduce transmission and hospital

capacities is to target by both age and high rates of COVID-19 because seniors are more at risk for COVID-19 due to pre-existing health conditions (Brown, et. al, 2021). While Phase One of Ontario's plan is largely age-based, it emphasizes seniors living in long-term care homes ("Ontario's COVID-19 vaccination plan", 2021). This excludes major communities of elderly people who make up the approximate 489 naturally occurring retirement communities, 259 of which have been affected by high rates of COVID-19 (Huynh et. al, 2021, p. 2). Thus, it is suggested that targeting these communities because of their vulnerability to COVID-19 would enable a decrease in COVID-19 transmission, hospitalization, and death. These mobile units would also seek to improve the difficulties senior citizens face in cases of mobility. The mobile units would enable senior citizens to have readily available access to the care they need and would shorten wait times in hospitals and other vaccination centers.

Subsequently, these mobile health units would be utilized to target rural communities throughout Ontario. While these locations are not at high risk for COVID-19, they face several barriers in accessing healthcare. For example, residents in these regions may have difficulty traveling to vaccination centers, have limited access to primary care, lack infrastructure for public transportation, suffer from mobility issues, and face vaccine hesitancy ("Mobile Vaccination Centers Improve Vaccine Accessibility", 2021). A similar program ran in West Virginia where the Marion County Health Department partnered with local emergency services departments and delivered H1N1 vaccines to remote communities through mobile clinics ("Mobile vaccination clinic reaches rural areas", n.d). It was extremely successful, cost-effective, and was positively received by the public ("Mobile vaccination clinic reaches rural areas", n.d).

The operation of the units would require a partnership with Emergency Service Providers on municipal levels. This partnership would enable the coordination required for delivering care to remote regions and allow for community based education on vaccinations. The vaccination education would then aid in the decrease of vaccine hesitancy allowing for the vaccination goal for the province and the country to flow more smoothly and effectively. Furthermore, the mobile units would enable Indigenous communities to have adequate access to the care, services, and education regarding COVID-19 vaccinations. The mobile

units would be equipped to provide the same level of support to Indigenous communities as they would in rural communities; the program would work with members from Indigenous communities and encourage engagement in the care for their communities.

Regarding staffing of the units, the ideal model would be that that of the program used in West Virginia, with one driver, two staff members from emergency services to set up the trailer for vaccination activities, two individuals to register the public, one person to direct traffic, and one to two nurses to administer the vaccine (“Mobile vaccination clinic reaches rural areas”, n.d). The cost of this program is approximately \$479,000 to \$822,000 and it is proposed that the funding be provided by the province of Ontario (Attipoe-Dorcoo, 2020).

Direct mailing would be an effective and efficient way of informing communities about the mobile vaccine units. It has been found that direct mailing has a 43% more effectiveness in a 2016 report by The Data & Marketing Association (Patel, n.d). The informative letter would include when the van would be arriving to the community, how a patient could book an appointment, and provide clarifying information about the importance and the purpose for vaccination. Including this information within a letter will effectively inform citizens of the use of mobile units in their communities and bring awareness to the COVID-19 vaccine. It is suggested that letters be sent out 2-3 weeks prior to the mobile clinics arrival to allow citizens to reserve time for their vaccination appointment.

It is proposed that there are two methods in which citizens can choose to reserve their vaccination appointments. Option one: Individuals can register using an official Government of Ontario online link where they will fill out their address, age, name and any other important information required to be eligible for vaccination. Option two: Citizens can utilize a phone number designated to the mobile units and arrange the specifics of their appointment. Both the phone number and website would be provided in the letter sent in the mail.

Although the implementation of mobile vaccine clinics have a range of benefits, there are some lingering political and social implications that should be addressed. Namely, targeting certain areas before others could be cause for social conflict between communities (Evans, 2020). This may result in ongoing tension between vaccine organizers and citizens as it may appear that some communities are prioritized over others (Evans, 2020). However, through research and analysis it is clear that densely populated older communities and rural areas are in dire need of care and targeting these communities is vital to ensure case numbers and death counts decline and every Canadian receives equitable access to care. Another risk that requires attention, is that of the widespread coordination and cooperation between various levels of leadership and government. However, despite this, it would be both politically and socially beneficial to demonstrate nonpartisan work ethic and unity throughout leadership in order to provide the best care to citizens. Conclusively, the overarching benefits to this plan outweigh its potential and hypothetical costs. Mobile clinics provide accessible, cost effective, and equitable ways in which all communities and individuals can receive the COVID-19 vaccine.

Research Findings

To begin our research, we analysed the Ontario government's current vaccine rollout plan and discussed the advantages and disadvantages to the program such as how it was beneficial that the plan targeted vulnerable groups. However, we noted that the current plan failed to consider those located in remote areas. Subsequently, we studied pre-existing reports published by Ontario epidemiologists and local newspapers regarding vaccine distribution plans. We found that a common theme among them was failure of the government at addressing accessibility barriers to seniors who live outside of long-term care homes as well as the lack of healthcare access for indigenous communities. Finally, we looked at case studies of how mobile units had been equipped in the past and how they are being used around the world focusing on their usage in the United States during the current COVID-19 pandemic. We sought to emulate the benefits seen in the United States through their use of mobile units, and aimed to design a plan both plausible and equitable for the province of Ontario.

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