MedMe

Take Care.

Leadership and Democracy Lab
University of Western Ontario

Preparred for MedMe Inc.

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Executive Summary

MedMe is a Toronto-based telemedicine start-up who is developing software to have pharmacists virtually prescribe patients with medicines and then partner with local pharmacies to have this medication delivered to the customer. This report intends to provide political risk assessment to MedME and other telemedicine companies navigating the expansion of pharmacists prescribing capabilities in Ontario.

What is telemedicine?

Telemedicine involves the delivery of healthcare services through electronic information technology.[1] The use of communications technology to provide services and information to patients remotely has transformed the Canadian healthcare industry. It's existence significantly reduces the barriers to healthcare that many groups face, particularly by increasing the accessibility of healthcare. Telemedicine is a relatively new field and is still in the initial stages of product development and delivery. Regulations surrounding patient privacy and security of information are continually developing. There are significant legal consequences for companies and pharmacists who fail to comply with the regulations outlined by the Standards Council of Canada (SCC) and these must be considered when developing telemedicine systems. For these reasons, the facilitation and regulation of telemedicine in Canada remain a complicated issue.

Health care regulations, funding, and system capacities vary significantly between provinces in Canada.[2] In Ontario, reduced funding for hospitals in recent years has resulted in "hallway healthcare", in which many institutions are overburdened and under-resourced. The quality of patient care has suffered as a result of provincial budget cuts, and private telemedicine companies such as MedMe intend to fill these gaps in our healthcare system by providing an alternative solution through telemedicine.

In an effort to confront the problems caused by overburdened healthcare facilities, the Ontario Minister of Health has taken significant steps to grant pharmacists a greater level of autonomy in granting prescriptions for minor ailments. These shifts provide a dual incentive, as they would mitigate issues with "hallway healthcare" and act in favour of telemedicine companies and their services. This is because hiring pharmacists would allow telemedicine companies to increase their prescribing capacities. However, how this legislation is proposed is important, as different Canadian provinces have very different pharmaceutical landscapes.[3] This report outlines the differences between provinces and recommends which aspects of each system should be advocated for in Ontario in order to encourage telemedicine innovation in the province.

Given the public nature of the Canadian health care system, the most favourable option for a telemedicine company would be to partner with the provincial government to provide coverage for the services under the Ontario Health Insurance Plan. However, without this partnership, there is still a considerable consumer willingness to pay out-of-pocket for convenient medicine prescription and delivery services. Other avenues for funding are also explored in this report, including partnering with municipalities and rural areas by focusing on the cost-savings created through telemedicine. Other large interest groups and companies in telemedicine and pharmacy, including Maple, Babylon, and the Ontario College of Pharmacists, are examined to understand the competitive dynamics that the expansion of pharmacists prescribing capabilities will create.

Government Relations

1) Federal Government

Recommendation 1: To increase the likelihood of government funding (which is contingent on mitigating concerns regarding the lack of medical information), MedMe should implement a database of patient records to be updated after every consultation with a pharmacist.

Risk: Many telemedicine platforms (i.e. telepharmacy) are not publically funded due to concerns regarding the lack of medical information, like patient history, available to practitioners using these services.

Health Canada is in the process of adopting its approach to digital health products. Under the Regulatory Review of Drugs and Devices Initiative, Health Canada is establishing a new division called the Digital Health Review Division within the Therapeutic Products Directorate's Medical Devices Bureau. Ultimately, this allows for a more targeted pre-market review of digital health technologies, including telemedicine.[4]

Akira, a Canadian telemedicine company with similar services to Maple, provides patient consultations with nurse practitioners in primarily four provinces.[5] These health professionals can write prescriptions, order tests, and refer patients to specialists for a one-time or subscription fee. National coverage is being restricted for Akira based on two perceived problems by the government. First, for-profit telemedicine might violate the universality principle of the Canada Health Act. The universality principle states that public health care insurance must be provided to all Canadians.[6] Second, medical practitioners and pharmacists may not have enough information to diagnose or prescribe the appropriate treatment without access to medical records . Despite no government coverage, Akira partnered with Manulife Insurance in May 2019. Akira will be offered to Manulife customers through its new Healthcare Online platform to add virtual care to the insurance company's employee benefit plans.[7]

There are many other ways for telemedicine to receive coverage. In the United States, Medicare covers certain telemedicine services under Part B.[8] Moreover, the Ontario Telemedicine Network, which uses two-way videoconferencing for patients, is funded by the Ontario government. Similarly, The Pelican Narrows Telehealth Pilot, which uses a telemedicine platform that enables physicals to provide real-time clinical services remotely, is funded by Saskatchewan's Ministry of Health.[9] The Government of Nunavut also recognized the importance of funding telemedicine, particularly telepharmacy. In 2011, the territorial government instituted a new telepharmacy approach to medical treatment, which committed to talk to existing retail pharmacies about ways to implement telepharmacy into their business models.[10]

While strides have been made regarding publicly funding telemedicine, physicians and pharmacists will have difficulty diagnosing and prescribing treatment without access to comprehensive patient records, Because of this, governments are reluctant to fund these endeavours. Consequently, MedMe may find it difficult to receive government funding for these reasons.

Mitigation:

Implement a database of patient records to be updated after every consultation with a pharmacist.

MedMe could create a database where patient records are stored. Currently, companies exist that create these types of databases, such as Epic Medical. Epic Medical is a platform that hosts patient records for hospitals and independent drug stores.[11] Based in the United States, Epic Medical has recently made its way to Canadian hospitals. MedMe could partner with Epic Medical to build this secure database. If the database were to be created, MedMe would require all users to sign a form allowing their medical records to be released.

Alternatively, MedMe could simply create a database of patient records based on interactions with pharmacists during MedMe consultations. These records would entail detailed notes by the pharmacists who conducted the consultation and would be stored as patient information. If a new pharmacist were to be treating a MedMe patient, he or she could access this record to better understand the patient's medical history. Although this is not a comprehensive medical background, this feature allows more patient information to inform pharmacists' decisions regarding diagnosis and prescription of medication.

Recommendation 2:

MedMe must distinguish the company from drug stores in partner contracts to avoid legal ramifications if it fails to comply with national standards regarding telepharmacy.

Risk:

MedMe may bear legal ramifications for failure to meet accredited national standards regarding pharmacare, specifically telepharmacy.

The International Organization for Standardization (ISO) is an independent, non-governmental international organization with a membership of 164 national standards bodies. There is only one member per country, and it is the responsibility of each member to represent ISO in its country.[12]

In Canada, the Standards Council of Canada (SCC) is the member body. SSC is independent of government in its policies and operations but financed partially by parliamentary appropriation since it is a federal Crown corporation.[13] SSC develops both national and international standards. Standardization refers to the development and application of standards publications that establish accepted practices, technical requirements and terminologies for products, services and systems. Additionally, SSC is Canada's national accreditation body, which means the organization accredits conformity assessment bodies, such as testing laboratories and product certification bodies to internationally recognized standards.[14]

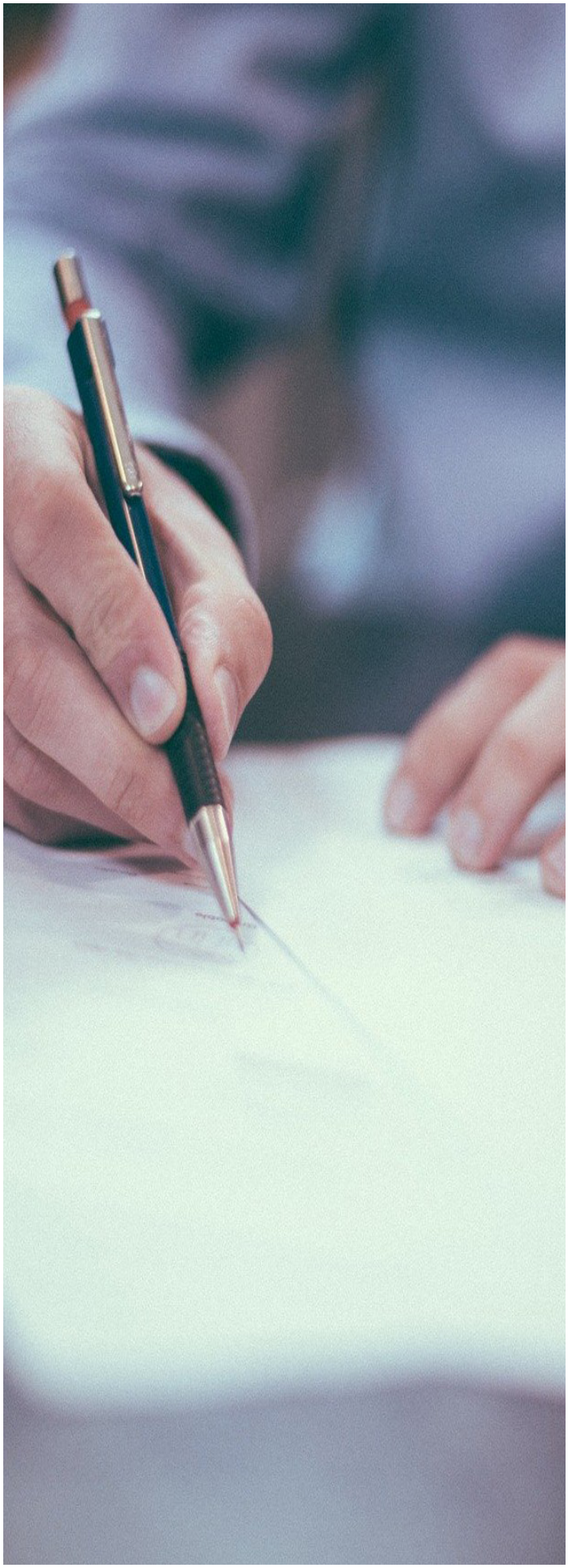
While SSC does not publish protocol regarding telepharmacy, protocols exist for pharmacare in general, including how medicine ought to be dispensed and specific information that pharmacists must convey to patients. If pharmacists do not comply with these regulations, there can be major legal ramifications.

There is a potential that MedMe may bear some of these legal ramifications as pharmacists use an online platform to communicate with and diagnose patients. While MedMe must be compliant regarding transportation of medicine (i.e. transporting medicine in a timely fashion, ensuring no defects occur during transportation), it should not be held responsible for the lack of compliance of individuals working for respective independent drug stores. MedMe is simply a channel through which pharmacists can diagnose patients without physical presence and transport needed medicine. As such, MedMe is not responsible for the actions of pharmacists.

Mitigation:

Develop a clause in contracts between MedMe and independent drug stores regarding compliance.

To ensure that MedMe does not bear any legal responsibility for the failure of pharmacists to comply with established regulations, a clause must be highlighted in its contracts to distinguish MedMe from independent drug stores. The clause must explicitly state that MedMe will not bear the legal burden of these incompliances which will protect the company from potential litigation issues that may arise.



Government Relations
2) Ontario Government

Recommendation 1: MedMe should implement a system for patients to rate their pharmacist consultation to ensure quality of service despite budget cuts to pharmacy funding and pharmacist salaries.

Risk: The lack of government funding for pharmacy dispensing fees may lower pharmacists' pay, jeopardizing quality service delivery to patients and MedMe's customer satisfaction.

As a result of the 2019 budget deficit of $7.4 billion[15], the Ontario government has reduced pharmacists payouts over the next five years. The government has saved $436 million from funding cuts which previously financed the Ontario Drug Benefit Program.[16] As such, a significant portion of the dispensing fees that pharmacies once collected are now claimed by the government. The provincial government would deduct up to 16% from dispensing fees for drugs that cost equal to or over $1,000 and up to 4% for drugs that cost under $1,000.[17] These fees covers services such as patient consultations, medication record checks, drug information transfer to doctors, and drug dispensing.

Given the elimination of dispensing fees, pharmacies receive less revenue which poses two specific risks. First, independent drug stores receive less government funding and may be pressured to lower payouts to pharmacists. Lower pay may discourage pharmacists from providing high quality care to patients. As such, MedMe may risk having a pharmacist team who are not incentivized to deliver quality consultations to patients. This may result in higher user attrition and dissatisfaction rates. Second, the elimination of dispensing fees will reduce MedMe's revenue directly as a portion of this fee is collected by the business itself.

Mitigation:
MedMe to implement a feedback mechanism.

To ensure that pharmacists are held to the standard required of MedMe patient consultations, the business should implement a consultation rating system. Many service-delivery businesses use rating systems as an effective measure to assess quality of service and identify areas for improvement, such as Uber and Instacart. The rating system would enable MedMe patients to indicate their level of satisfaction with their consultation experience, and optionally provide feedback about the pharmacist they were talking to. On a monthly basis, MedMe would send these ratings to partnered pharmacies which allows them to understand which of their pharmacists are conducting average or exceptional care delivery. As pharmacies already provide bonuses and pay based incentives for the number and length of consultations, and, more specifically, pharmaceutical opinions, it seems plausible that these drug stores will provide similar pay schemes based on MedMe's rating feedback.

Recommendation 2: Ensure that MedMe has pharmacists involved in the piloting of expanded prescribing capabilities.

Risk: Piloting pharmacists' ability to prescribe prevents or delays MedMe's ability to operate.

Regulation of the pharmaceutical industry in Canada varies greatly. As Ontario speculates the deregulation of pharmacists' prescribing capabilities, it is valuable to examine the current landscape. Of the eight provinces that permit pharmacists to prescribe for minor ailments, two require additional training and certificates. In 2013, Manitoba enabled pharmacists to prescribe and give vaccines.[18] Pharmacists' who desired this license had to apply to the College of Pharmacists of Manitoba and complete an online Self-Limiting Conditions Study Program.[19] Other privileges required viewing recorded professional development programs, in-person college meetings, and online streams.[20] As of 2019, pharmacists in Prince Edward Island (PEI) can only prescribe for certain minor ailments.[21] For these broader scope services, extended practice certificates are required.[22] Payment of $100 along with the completion of a registered education program and up to date CPR/first aid credentials are needed to attain the certification. Two education programs have been approved by the PEI College of Pharmacy. The Dalhousie Continuing Pharmacy Education Division involves an online component and one-day in-person class. The PEI College of Pharmacy also offers a recorded webinar, costing an additional $75.

Alberta, possessing the most deregulated pharmaceutical industry, is also of interest. In 2007, Alberta allowed pharmacists to prescribe schedule 1 drugs.[23] However, the process was piloted until 2012 and only 15 pilot participants were granted additional prescribing authorization during this time.[24] The completion of the pilot brought in the involvement of the Alberta College of Pharmacy and enabled all pharmacists to apply for an Additional Prescribing Authority. The application does

Pharmacists' Scope of Practice in Canada

Scope of Practice [1]		Province/Territory												
		BC	AB	SK	MB	ON	QC	NB	NS	PEI	NL	NWT	YT	NU
Prescriptive Authority (Schedule 1 Drugs) [1]	Independently, for any Schedule 1 drug	X	✓ [5]	X	X	X	X	X	X	X	X	X	X	X
	In a collaborative practice setting/agreement	X	✓ [5]	✓ [5]	✓ [5]	X	X	✓	✓	X	X	X	X	X
Initiate [2]	For minor ailments/conditions	X	✓	✓	✓ [5]	P	✓	✓	✓	✓ [5]	✓	X	X	X
	For smoking/tobacco cessation	X	✓	✓	✓ [5]	✓	✓	✓	✓	✓ [5]	✓	X	X	X
	In an emergency	✓	✓	✓	✓	X	X	✓	✓	✓	X	X	X	X
Adapt [3]/ Manage	Independently, for any Schedule 1 drug [4]	X	✓ [5]	X	X	X	X	X	X	X	X	X	X	X
	Independently, in a collaborative practice [4]	X	✓ [5]	✓ [5]	✓ [5]	X	X	✓	✓	X	X	X	X	X
	Make therapeutic substitution	✓	✓	✓ [7]	X	X	P	✓	✓	✓	✓	X	✓	X
	Change drug dosage, formulation, regimen, etc.	✓	✓	✓ [7]	✓	✓	✓	✓	✓	✓	✓	X	✓	X
	Renew/extend prescription for continuity of care	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
Injection Authority (SC or IM) [1,5]	Any drug or vaccine	P	✓	✓	✓	X [8]	P [9]	✓	X	✓	✓	X	✓	X
	Vaccines [6]	✓	✓	✓	✓	✓	P	✓	✓	✓	✓	X	✓	X
	Influenza vaccine	✓	✓	✓	✓	✓	P	✓	✓	✓	✓	X	✓	X
Labs	Order and interpret lab tests	X	✓	P [10]	✓ [11]	X	✓	P	P [10]	✓ [13]	X	X	X	X
Techs	Regulated pharmacy technicians	✓	✓	✓	✓ [12]	✓	X	✓	✓	✓	✓	X	X	X

1. Scope of activities, regulations, training requirements and/or limitations differ between jurisdictions. Please refer to the pharmacy regulatory authorities for details.
2. Initiate new prescription drug therapy, not including drugs covered under the *Controlled Drugs and Substances Act.*
3. Alter another prescriber's original/existing/current prescription for drug therapy.
4. Pharmacists independently manage Schedule 1 drug therapy under their own authority, unrestricted by existing/initial prescription(s), drug type, condition, etc.
5. Applies only to pharmacists with additional training, certification and/or authorisation through their regulatory authority.
6. Authority to inject may not be inclusive of all vaccines in this category. Please refer to the jurisdictional regulations.
7. Applies only to pharmacists working under collaborative practice agreements
8. For education/demonstration purposes only.
9. In emergency situations.
10. Ordering by community pharmacists pending health system regulations for pharmacist requisitions to labs.
11. Authority is limited to ordering lab tests.
12. Pharmacy technician registration available through the regulatory authority (no official licensing).

✓ Implemented in jurisdiction
P Pending legislation, regulation or policy for implementation
X Not implemented

volve any additional training, with the most strenuous requirement being one year of work. Alberta's implementation demonstrates a potential risk for MedMe. Should the Ontario government adopt a similar pilot system, MedMe's ability to prescribe could be significantly delayed. Longer pilot periods would strain cash flows beyond repair.

Mitigation:
Seek involvement in the pilot process.

Should a pilot period be announced, MedMe would have two options. The first, and less feasible, entails waiting out the pilot period. Continuing to scale operations during the period could further enhance a first-mover advantage for MedMe upon the opening to all pharmacists. This would increase costs, with revenues remaining fairly stagnant. In the second option, MedMe would lobby to have its pharmacists selected for the pilot or poach those selected. Both alternatives are costly, but the potential of unchallenged sales could be lucrative. Beyond the financial success of the pilot, it would also increase MedMe's brand recognition among consumers. Increased brand awareness could result in rapid revenue growth upon the end of the pilot phase.

Government Relations
3) Other Provinces

Recommendation 1: MedMe should continue its current business model in regards to tracking of pharmacy errors and its lack of prescription quotas in order to hold themselves and their employees accountable.

Risk: Current remuneration models act as a barrier to expanding new services provided by pharmacists

In regards to prescribing for minor ailments in Alberta, pharmacists are currently reimbursed through two public plans: Standard Medication Management Assessments (SMMAs) and Comprehensive Annual Care Plans (CACPS).[25] Pharmacists that have Additional Prescribing Authorization (APA) have a higher compensation rate for providing their expanded services. According to the Canadian Pharmacists Association, some public payers think that pharmacies should charge a user fee for the services provided.[26] However, some people believe that instilling this fee would drive others to services that do not have this charge. Ultimately, this creates a two-tier healthcare system, with some individuals able to pay out of pocket or through private insurance and others covered by the government. Additionally, a report by the Marketplace exposed that many Canadian pharmacists across the country are under pressure to meet set business quotas, which can be billed to provincial governments or patients.[27] Financial incentives have often been implemented for these pharmacies to conduct billable services by companies such as Rexall. Pharmacists report paying less attention to the patient in an effort to meet these goals and subsequently, make errors.[28] As a result, the patient's quality of care is worsened, which is completely contradictory to the central goal of the patient's health. Currently, in Alberta, there is no compulsory tracking of pharmacy errors so it is difficult to deduce how and why these errors occur.[29]

Mitigation:

Creating new regulations ensuring that quotas do not undermine patient safety

If MedMe were to be implemented, it must ensure that quotas do not compromise patient safety by adopting new regulations.[30] A lack of quotas is already integrated into MedMe's current service model and will act as a security against the over-prescription of drugs. It will additionally act as a protection for proper patient care, as pharmacists who had quotas at their companies reported "a work environment that was not conducive to safe and effective patient care."[31] The College of Pharmacists of British Columbia is the first regulatory body in Canada to implement rules that prevent corporations from imposing pressure on pharmacists.[32] If this were implemented in Ontario, MedMe would lose its marginal advantage that is within the lack of quotas and therefore MedMe should advocate against this being implemented in Ontario.

Recommendation 2: MedMe should advocate against a collaborative practice setting for pharmacies, however, if a collaborative practice setting is pursued by the Ontario Government, there are options to show MedMe's value-add to their process and could possibly open other avenues to becoming publicly funded. However, this would come at the expense of their business model and is therefore not advised.

Risk: Pharmacists in Nova Scotia have the authority to initiate prescriptions only within a collaborative practice setting for illnesses that are NOT minor ailments.

Collaborative care is defined as "the positive interaction of two or more health professionals, who bring their unique skills and knowledge, to assist patients/clients and families with their health decisions."[33] Currently, there are 50 collaborative practice teams set up in Nova Scotia.[34] Due to expanding the scope of practice, pharmacists are currently offering effective and safe client-centred care which involves three parties: the pharmacist, the physician, and the patient. Pharmacists have reported that their scope of practice could be broader in order to reduce the workload and stress for physicians. The CEO of the Pharmacy Association of Nova Scotia, Allison Bodnar, is in favour of collaborative practice settings, as she believes there are often medical conditions requiring extensive care, which extend beyond pharmacists' roles.[35] Ultimately, the goal of collaborative practice settings is to improve the health outcomes of the patient by delivering the highest quality of care possible.[36] The collaborative practice setting model poses a risk to MedMe because it would give competitors, such as Maple, an advantage. Maple has already integrated physicians into their service model, and these physicians have the ability to prescribe medications to patients directly.[37] Adding pharmacists to their service could act as an area for expansion for Maple, making MedMe's entry into the telemedicine market more difficult, leaving MedMe with a likely lower market share.

Mitigation:

In order to not require the assistance of doctors for prescriptions, MedMe should keep providing treatment for only minor ailments.

If collaborative practices are implemented in Ontario like in Nova Scotia, it may pose an issue for MedMe's current service model. MedMe's value-add is that the service is quicker and less of a hassle for patients, providing both prescriptive and delivery medication services. If collaborative practices were mandatory in Ontario, this would add another healthcare practitioner to the process and disrupt MedMe's current service model by requiring an additional health practitioner to be involved in their service. One of the biggest barriers in a collaborative practice setting is a lack of role clarity among healthcare providers.[38] When different healthcare providers work together, responsibilities can be misinterpreted, which may subsequently worsen patient care due to communication issues. For example, studies have found that there is decreased physician support for pharmacists recommending particular types of medications or for developing drug therapy treatment plans.[39] Moreover, pharmacists view assisting physicians with medication routines as a huge component of their responsibilities, whereas physicians do not.[40] These studies evidently oppose what the collaborative practice model intends to do, and these differing goals increase the gap between the healthcare providers involved. As a result, more errors can occur, which decreases the efficiency of the entire healthcare system. Overall, the healthcare system works more effectively when pharmacists have their own autonomy instead of having to rely on a physician for prescriptions.

However, if collaborative practice settings were implemented, it likely means the government would invest more money into this institutional change and would be more open to innovative ideas like MedMe. Those funding this service will aim to receive the highest return on their investments, meaning that the value-add MedMe provides may be of great interest to legislators.[41] Given the rise of different health services intersecting, it is reasonable to believe that the provincial governments can increase public access for such services, increasing accessibility and affordability of medications by partnering with MedMe.

Government Relations
4) Municipalities

Recommendation 1: Start conversations about partnering with smaller municipalities for subsidization of MedMe as they seem to be less affected by the large municipal cuts.

Risk: MedMe may not be able to receive municipal subsidization from large cities

This past August, Doug Ford announced that his government would move forward with the proposed municipal budget cuts to public health, child care, along with other public services. The following relevant budget cuts will take effect on January 1st, 2020:

1. Municipalities will be expected to take on 30% of public health costs where originally Ontario paid all or a minimum of 75% of municipalities public health costs
2. Among others; ambulance and emergency services cut by $7.7M, Ontario Municipal Partnership Fund cut by $5M (1%), Conservation authorities flood management budget cut by $3.7M (50%)

The Province claims that these cuts are necessary for an effort to attempt to eliminate an $11.7 billion deficit. They have announced two measured to help municipalities to help with the transition:

1. "Transitional Funding" over 2020 to help with the reduction in budget
2. $7.35M in audits to help municipalities find savings in their budgets. 34 of 39 eligible municipalities have taken this on.

With these cuts, the obvious risk to MedMe is that municipalities will not have the financial resources to subsidize MedMe's services for its residents in order to create municipal partnerships. Although larger municipalities, like the City of Toronto, do not intend to decrease their overall spending on public health programs, it is unlikely that they will increase spending in wake of the first year of budget cuts.[42] Furthermore, the City of Toronto will be paying $4.3 million more than the previous year from their operating budget of around $13 billion.[43] The Region of Peel shared a similar figure whereof their $36.4 million shortfalls, $11.1 million is directly attributable to the new cost-sharing policy.[44] These cuts mean that municipalities will have to figure out how they can provide the same level of servicing and programming with a more limited budget, meaning there will likely be less financial incentives for innovation.

Mitigation:

Explore partnership opportunities with smaller municipalities for subsidization of MedMe.

Firstly, either a result of exposure or actual impact, only the largest municipalities that have come out in direct opposition to the cuts emphasizing the large financial impact it will have on their programing. If MedMe chooses to partner with smaller municipalities (ex: Thunder Bay) then these cuts may be less of a concern; however, more conversation with these municipalities is recommended to truly understand the impact of these cuts. Secondly, these cuts can pose an opportunity for MedMe even with larger municipalities to either outsource otherwise costly internal programming to them or to help them achieve efficiencies within their programming, If this opportunity is to be acted on, MedMe must begin conversations with the municipalities as soon as possible, as they have likely already have a plan for how they are going to tackle the cuts looming in the next several months.

Virtual Consultations Subsidy Estimate - City of Toronto

Subsidy Amount

	50%	*Innisfil-Uber for low-income*
	40%	*Innisfil-Uber for all citizens*
	30%	*Lower amount for nature of MedMe*
Estimated Cost	$60	
City of Toronto Residents	2.93	*million in total (2017)*
15%	0.4395	*High* 439,500
10%	0.04395	*Medium* 43,950
5%	0.0021975	*Low* 2,198

Year 1 Subsidies Required by City of Toronto

Population Percentage	Subsidy Amount		
	50%	40%	30%
15%	$13,185,000.00	$10,548,000.00	$7,911,000.00
10%	$1,318,500.00	$1,054,800.00	$791,100.00
5%	$65,925.00	$52,740.00	$39,555.00

Recommendation 2: Either partner with municipalities by providing them the innovative service they are looking to invest in or learn how the programs the City runs can help subsidize MedMe's services.

Risk: eChat, a similar service to MedMe, is not funded by the City of Toronto

The City of Toronto has a program somewhat similar to MedMe called eChat.eChat is a free, confidential and anonymous online service for Toronto residents where an individual can chat with a Public Health Nurse from 8:30 a.m. - 4 p.m. from Monday to Friday.[45] Most of the cities health programs are funded with provincial and federal subsidies followed by municipal property taxes. [46]EChat is not listed under these funded services listed by the City of Toronto. This may mean that either eChat does not represent a large enough amount of investment so that it is not listed or the service is outsourced and not run directly by the City. Furthermore, either the City does not have the funds to service such a program or is limited by legislation to expand beyond online consulting. MedMe would either have no scale down its operations to counseling, which is not a feasible business option or find other ways within the municipal government to receive some type of financial support.

Mitigation:

In the coming years, the City has made it clear that the operating budget will no longer suffice to fund capital projects.[47] In order to fund these projects, the City will be using debt until 2027. These new projects will include community health information systems, public eLearning, data collection and mobile enablement, all of which will require minimum investments of one million dollars. This poses a great opportunity for MedMe to partner with the City as MedMe can bring specialized knowledge which could make these projects more agile and scalable. MedMe can position itself as a company that can provide benefits, both financial and social, that will allow the City to meet its debt payments while also contributing to the community. In conclusion, the debt-load the City is taking on and its goal of expanding its innovative projects is a great opportunity for MedMe to get funded.

Recommendation 3: Approach partnerships with municipalities through a multi-level tiered approach (Low-income, young adults (ages 20-26), average residents).

Case Study:

Innisfil partners with Uber to provide subsidized public transit in 2017, Innisfil Ontario became the first municipality in Canada to partner with Uber to provide subsidized public transit for their residents. Innisfil identified a public transportation void that affected over 36,000 people living across the 170 square kilometers across Town. While they considered transportation in the traditional sense, the capital investment in terms of buses, repairs, and building infrastructure would be too big of a burden for the town (originally estimated around $1 million) and would not provide the comprehensive service that residents were looking for.

Instead of investing in public transit, Innisfil partnered with Uber town would subsidize all trips within the city and to major centers up for a minimum of $4.[48] Innisfil originally invested $100,000 for the first phase of the project (6 months) and $125,00 for the second phase (8 months). However, the success of the program was greater than the town could have predicted. In 2017, there were over 26,688 trips that cost the town $150,000 in subsidies. This number jumped dramatically in 2018 as the town was an increase to 85,943 trips which required $640,000 in subsidies. In response to this increase, the town had to make adjustments to their program. Firstly, they capped rides to 30 per month per individual. However, an individual is able to submit for a request to increase their limit to 50 rides/month if they show circumstances with need. Secondly, the minimum price was increased to $5 to ensure that the costs stayed within their budget.

In recognizing the financial limits that individuals may face, Innisfil will launch a Fair Transit program in November 2019. This will eliminate the 30 ride limit, reduce their payments to 50% of the cost of all rides and receive two free return trips from the local Food Bank.[49] In 2019, the anticipated costs are likely to be around $1 to $1.2 million. This is a lot more than the town expected and when compared to original bussing estimates, seem to be comparable to one another.[50] Innisfil is adamant that the level of service received through Uber is far greater than that of a public bussing system. They estimate that if bussing were to provide the same level of "door-to-door service" it would require a $8 million investment.[51] Uber also received a benefit from this partnership, as it saw a 1500% growth in weekly rides when the program launched as compared to the 8 weeks prior to the program.[52]

Risks:

The Innisfil-Uber case study provides insight on how MedMe could be successful in partnering with different municipalities to offer their services to the public. Although MedMe could use a subsidy model comparable to the Innisfil-Uber case study, there are key risks that may impede MedMe's ability to do so. Uber's price and cost is a lot lower than what MedMe's cost would be in terms of virtual pharmacist consultation. MedMe's competitor Babylon (under Telus Health) has provided an online consultation service in British Columbia that is priced at $59 per appointment.[53] When looking at the minimal amount of investment that would be required to implement this project for the City of Toronto, we can see that it is quite high (Exhibit 1) as if only 10% of the population used the service at a 30% subsidy it could cost $790,000 in the first year. The question also becomes whether or not a subsidy of 30% is even high enough for incentive for individuals to use this platform. Furthermore, although we know more affluent individuals would be willing to pay for this service, the City of Toronto may be unwilling to subsidize a program that is just making lives more convenient rather than solving a pressing community issue (ie no public transit in Innisfil).

Mitigation:

The answer for the listed risks lies somewhat in the structure that the Innisfil-Uber case study presented. In order to gain buy-in from the City of Toronto while also pursuing financial success for MedMe, the partnership should have a tiered system for subsidization based on need. As Innisfil realized this year, limitations of the amount of rides and resources to make the service easier to use for those in lower-income households allowed the system to be ideal for both Uber and the Town. The City of Toronto and MedMe could look to decrease the subsidization of the program at the lower end (20-30%) for the average Torontonian while having a "Fair MedConsults" program for those with financial limits where the subsidies are much larger. This would be feasible as there is already an existing consumer demand for many who would be willing to pay for the service out of pocket for MedMe's services without any incentive. A subsidy would only add more individuals to that pool of customers and give the MedMe publicity through the municipality while also providing a service to lower-income Torontonians at a price that would interest the City.

Virtual Consultations			
Subsidy Amount			
	50%	*Innisfil-Uber for low-income*	
	40%	*Innisfil-Uber for all citizens*	
	30%		
Estimated Cost	$60		
City of Toronto Residents	2.93	*million in total*	
	0.4395	*High*	439500
	0.04395	*Medium*	43950
	0.0021975	*Low*	2197.5
Year 1 Subsidies Required by City of Toronto			
CoT Population		**Subsidy Amount**	
	50%	40%	30%
High - 15%	$13,185,000.00	$10,548,000.00	$7,911,000.00
Medium - 10%	$1,318,500.00	$1,054,800.00	$791,100.00
Low - 5%	$65,925.00	$52,740.00	$39,555.00

Recommendation 4: MedMe should seek activities that promote its scalability in rural areas if distribution of licenses are restricted

Risks: MedME may not be able to attain a license through the limited distribution method.

The Ford government may choose to broaden the prescribing capabilities of pharmacists. However, it is unclear as to how these new capabilities would be assigned and licensed to pharmacists. There are two probable avenues of licensing. First, all pharmacists could be given the right to apply for a license. Second, the quantity of licenses and those who can apply is limited. In the former scenario, MedMe would have little to no difficulty in obtaining a license. This is likely to occur, as the Ford government recognizes that pharmacists are underutilized.[54] However, should the latter be implemented, there would be significant challenges for MedMe. The inability to secure licenses for their pharmacists would diminish the feasibility of MedMe's business model. This section will examine this possibility.

One potential method of license distribution could be a lottery. A lottery would have interested candidates submit an expression of intent. From the expressions of intent, candidates would be selected and allowed to apply. The number of candidates selected would depend on the Ontario College of Pharmacists and the government's decision as to how many are needed to serve the population. Contingent on the number of candidates who expressed interest, it is uncertain if MedMe will receive a license. Another possibility involves a limited quantity of licenses, with applications open to all. This could also prove to be problematic. The fixed quantity would increase the competitiveness of the process. If this were to occur, it is likely that pharmacists at established institutions with more resources, primarily capital and brand exposure, would be preferred in this process.

A look into the distribution of cannabis licenses demonstrates potential concerns. Interested candidates had to post $60 000 in capital, of which $10,000 was a non-refundable deposit.[55] However, should the pharmacists not obtain a license, the lost fee would be the least of their worries. The absence of a license for prescribing would inhibit MedMe's diagnostic and prescribing services, rendering the business model useless. Of those who received a license, there were strict regulations and assessments.[56] Potential regulations or assessments could be more challenging to meet due to the online nature of the business.

Mitigations:

MedMe should seek activities that promote its scalability in rural areas.

Given that MedMe provides online diagnostic services, there is an opportunity for it to distinguish itself. Cannabis licenses were distributed based on geographic needs.[57] The urban areas will be the most competitive, with large retail pharmacies vying for licenses. More remote and rural areas have smaller populations and less competition. MedMe's online pharmacist diagnostic capabilities would enable them to enter these areas at a significantly lower cost than retail pharmacies. This would be of immense value to the government which has prioritized improving health care and infrastructure in rural Ontario in the fall economic budget.[58] Providing MedMe's pharmacists with licenses would be a cost-effective solution for the government to increase services in rural areas. Thus, should the distribution of licenses be restricted, MedMe should seek activities that promote its scalability in rural areas.

Competitive Dynamics
1) Maple

Maple: A Frontrunners Impact on Licensing

Maple is the leading telemedicine provider in Canada. On Maple's platform, one can speak with doctors through text or video, receiving diagnosis and prescriptions.[59] One's prescription can be sent to the pharmacy of your choice or delivered to your door. In terms of lobbying, Maple's efforts are constrained by a lack of excess cash. However, Maple has over 400,000 users and 400 physicians, indicating that it is not easily dismissible. Revenues have increased sixfold, attracting significant investor interest. The most recent funding round was oversubscribed and raised 14.5 million, along with an investment from one of Canada's premier banks, Royal Bank of Canada.[60] This article will examine the merits of proving one's value and utilizing one's sponsors.

Maple's investors and clients have a vested interest to see regulations and licensing result favorably for Maple. Investors seek financial performance and return, and clients seek an enhanced ability to use Maple's services. Lobbying on Maple's behalf would help achieve these desired outcomes. One primary investor, Acton Capital, has significant access to funds and resources that could be extremely useful. Furthermore, Maple is partnered with many of Canada's largest insurance providers and the existing healthcare institutions. Some examples include SE Health, one of the largest organizations of caregivers[61], and PEI's western hospital.

Demand has increased substantially for Maple's services. This has not only reduced the strain on the existing infrastructure, but it has increased the capacity of Canada's healthcare system.[62] These outcomes in themselves should be used to demonstrate the effectiveness and such value to the government. This would also help quell concerns regarding the safety of telemedicine, expediting the licensing process. Another valuable aspect is that Maple is the most developed telemedicine company. Including it in any pilot or in the primary stage would be essential in determining the viability of such programs.

Ultimately, for MedMe to succeed at lobbying, relationship management will be critical. Currently in the start-up phase, as with maple, resources for lobbying will be minimal, if existent at all. Managing one's sponsors, and their efforts are essential. This involves attracting larger investors and clients, ensuring the most recognition and credibility. Having established and credible operations will significantly increase the likelihood of being included in early-stage licensing.

Competitive Dynamics
2) Babylon

Overview of Babylon Health

Babylon Health is a telemedicine company that offers services including video-chat doctors, prescription delivery, and secure health data storage. One of its most popular services is GP at Hand which allows users to schedule video chats with general practitioners without waiting in-person. GP at Hand is essentially England's biggest GP Practice as a result of recent structural changes in the National Health Service (NHS). The NHS has allowed people "to register at a doctor's office outside the area where they live "which means that the "GP service, which uses video-conferencing to connect patients to doctors, has been able to rapidly register thousands of people".[63] Babylon is a private service that charges a low monthly fee for unlimited GP appointment and high flat fee for one-off consultations. The company's goal is to gain access to NHS patients and signed a contract with NHS England for its GP at Hand app in 2015. It is attempting to expand into other sites outside of London which requires applying to various jurisdictions.

In Canada

Babylon has recently entered the Canadian market through a partnership with TELUS Health. Similar to its UK operations, Babylon is offering online consultations with medical practitioners through a mobile app. The partnership does not entail pharmacy or drug delivery offerings. However, given TELUS' large Canadian customer base and financial resources, Babylon in Canada may be a strong competitor within the telepharmacy industry upon regulatory changes to increase pharmacist utilization.

GP at Hand (GPH) Contract

GPH now is commissioned as a primary medical service in the usual way by the CCG. In addition to online consultations, it also offers in-person services in Hammersmith & Fullham CCG area. This expansion is propelled by national GP Choice Policy in 2015 in which patients can register with a GP practice outside of their practice area. As a result, GPH has become one of the largest practices in England, with government data showing that of the 7,000 registered GP practices there are only 23 bigger than Babylon's.[64]

Alignment with Digital First primary care allowed for NHS funding towards Babylon services NHS England committed in NHS Long Term Plans that patients will be able to access a digital first primary care offer by 2023 through:

- Creating a new framework for digital suppliers to offer their platforms to primary care networks on standard NHS terms; and
- Ensuring that new 'digital first' practices are safe and create benefit to the whole NHS. This means reviewing current out of area arrangements and adjusting the GP payment formulae to ensure fair funding without inequitably favouring one type of GP provider over another

These priorities allowed Bablyon to be the perfect candidate to fulfill NHS' long-term goals. Each registered NHS GP patient gets the practice a set amount of money that's calculated by an NHS formula. Easy, low maintenance, patients are worth less than those who require more treatment. Babylon was initially prohibited from registering patients that may cost more to provide healthcare for.

GPH takes advantage of two different NHS systems: General Medical Services, which is how GPs are funded by the number of patients registered, and out-of-area registration. Since 2015, the latter has let practices register people who don't live in the local area, so long as they have a local connection. For GPH, anyone who lives or works within 40 minutes of its five London sites, or within London's transport zones one, two or three, can sign-up.

Stakeholders in the Industry

1) Ontario College of Pharmacists

Stakeholder Analysis

The Ontario College of Pharmacists serves to regulate Ontario's pharmacies and pharmacists by ensuring that they are accountable for legislation, established practices, and ethical standards.[65] The College is representative of the public, therefore transparency is a major component of their decision-making process. The Council is the established group within the College responsible for policy-making decisions, they work directly with members of government to decide on and execute policies impacting Ontario pharmacies and the public.[66] While the College has the potential to be an important resource to MedMe in terms of its direct connections to the Ontario government, funding decisions for the changes and services it lobbies for are not in its jurisdiction.

The Minister of Health has requested that the College submit regulations that would expand pharmacist's scope of practice and shift demand away from primary health care systems, who are currently facing capacity issues. Specifically, the proposed changes would amend the General Regulation 202/94 of the Pharmacy Act, Part VII.3 (Controlled Acts).[67] The Council has been tasked with defining regulations that would allow pharmacists to administer flu vaccines to children as young as two years old, renew prescriptions up to a twelve-month supply, administer substances by injection and/or inhalation for purposes beyond patient education and demonstration, and prescribe drugs for certain minor ailments.[68]

In the Council's August 2019 meeting, it was evident that the board supported the proposed changes to existing legislation. The College encouraged public opinion on the regulatory changes through links on their website intended to both inform the public and allow for feedback until October 26, 2019.[69] Specific recommendations are expected to be submitted by November 30, 2019, excluding the legislation regarding minor ailments, which is due by June 30, 2020. These regulations will follow a similar process to those proposed in August, requiring a 60-day public consultation and council approval before the government will receive them.

The council has expressed its intent to consult with a wide range of pharmacy professionals and stakeholders moving forward regarding these regulations. The OCOP's active interest in different opinions may benefit MedMe in terms of an easier path to access one of Ontario's most powerful and connected lobby groups, as they can position themselves as a unique perspective on the issues that the Health Ministry is proposing.

Looking forward, an analysis of the Council's upcoming meeting would further aid research on these regulations, as the results of consultation with the public will likely be discussed as well as an outline of the College's and the Ontario government's intended next steps.

Recommendation: MedMe should focus on building relationships with the Ontario College of Pharmacists to strengthen lobbying efforts for better patient access to pharmacists. However, the focus should be on informing the population on digital solutions (i.e. MedMe) rather than optimizing an area currently in the triaging process such as 911 call operators.

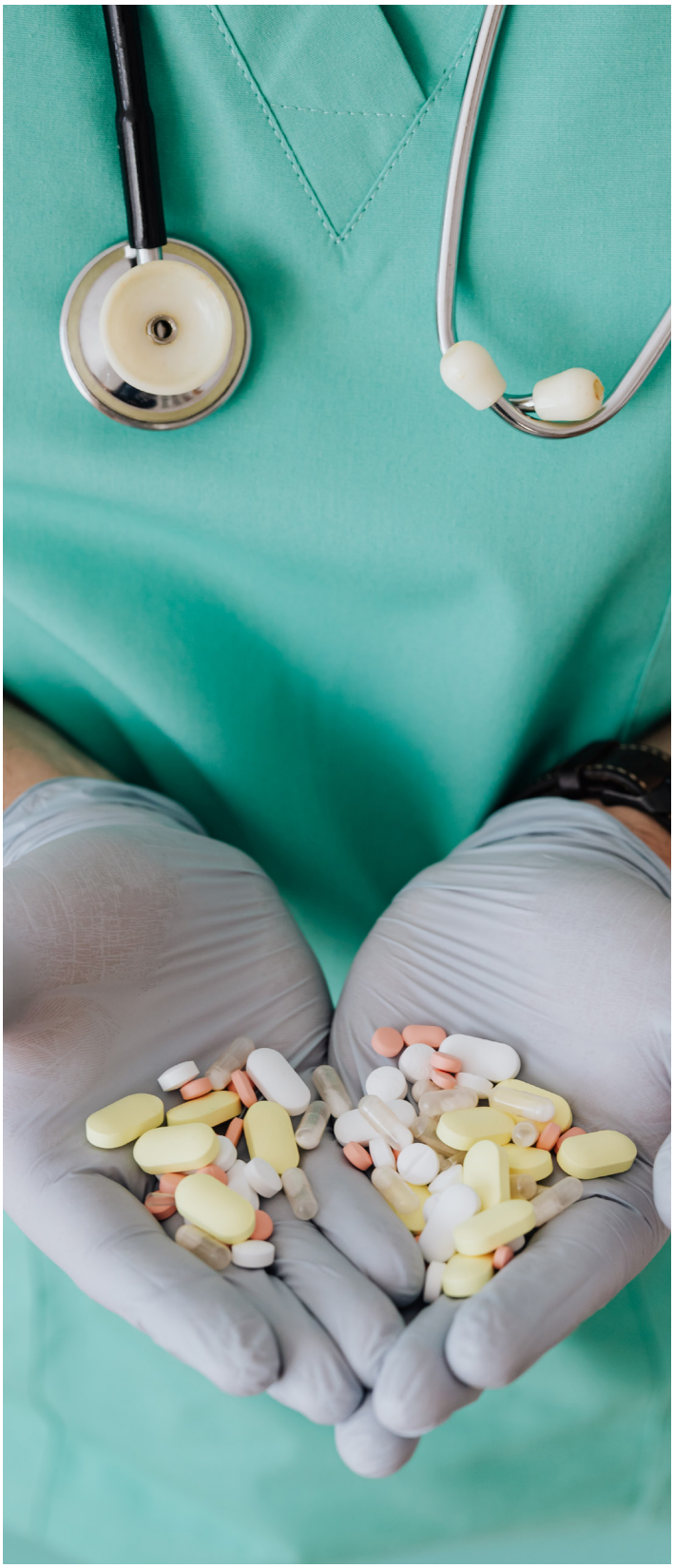
Currently, Babylon Health does not formally offer online video consultations with pharmacists as an official service. Prescriptions continue to be administered by general practitioners or other in-person healthcare services. However, the NHS is trying to increase the utilization of pharmacists and triaging processes for patients beyond partnering with Babylon Health.

The NHS Community Pharmacist Consultation Service (CPCS) is being commissioned as an Advanced Service from 29 October 2019. This service was developed following two pilot services which were part of the work to integrate community pharmacy into local NHS urgent care pathways, as an element of the Pharmacy Integration Fund program. These pilots were known as the Digital Minor Illness Referral Service (DMIRS) and the NHS Urgent Medicines Supply Advanced Service (NUMSAS)

Only 1% of 111 calls (Canada's 911 equivalent) are referred to a pharmacist in the UK. DMIRS is a service that directs emergency calls to a pharmacy for minor symptoms to alleviate the burden of emergency services. 111 operators can now send electronic referrals to a pharmacy on behalf of a patient. Callers can then access their local pharmacy for a private consultation in which they can be assessed and prescribed proper medication. This ultimately lessens pressures on GPs and A&Es to provide care to those with more urgent needs.

Main Risk and Mitigation:

This NHS solution increases pharmacy traffic but fails to turn to private solutions such as Bablyon's GP at Hand. As such, MedMe must consider the risk that lobbying for increased functions of pharmacists may not include a digital solution. The Ontario Health Agency may choose another focus area to tackle increasing pharmacy utilization (i.e. 911 operators). Therefore, more analysis needs to be conducted regarding where the government is likely to tackle their reform and MedMe must argue why the digital solution is the most efficient and low-cost option to increase pharmacy utilization.



Stakeholders in the Industry
2) Other Health Partners

Recommendation: To drive favorable changes to OHIP, MedMe should focus on displaying its value as a cost-cutting option, and work with citizen activist groups such as Ontario Health Coalition

Risk: Changes to OHIP only occur during elections or with changes in provincial government.

The Ontario Health Insurance Plan (OHIP) is essential to many in Ontario. The main stakeholders include citizens, the provincial government, and health administrators. It is important to note that the federal government is not a significant stakeholder as it is the provincial government is responsible for healthcare services and OHIP funding. There is significant sensitivity towards OHIP funding changes among citizens and healthcare administrators. Citizens rely heavily on OHIP as a primary source of health insurance and any changes in coverage could jeopardize their financial security. OHIP funding also impacts the functions and services provided by healthcare administrators provincially. Due to the heavy reliance on OHIP funding, Ministry of Health and Long-Term Care has a patient ombudsperson who investigates and advocates on behalf of citizens.

OHIP represents a significant portion of the government's budget. Within the Ministry of Health and Long-Term Care, OHIP accounted for 36.45% of its 53.3 billion budget in 2017-2018.[70] Historically, changes to OHIP have occurred under two main circumstances. The first being budget cuts, and the second being during election time. The former is well exhibited by the 2004 cuts from the McGuinty government, and more recently the Ford government.[71] Both cuts cited a deficit from the prior government. The latter is demonstrated by the Wynne government in 2018. In January, and later in March, Wynne made prescription drugs free for those 25 and under as well as 65 and over.[72] This came before the provincial election on June 7th and was criticized as a means to attract voters. These cuts have had serious effects on Ontario's healthcare capacity. The quality of care is diminished upon the reduction of resources, in addition to the increase in prominence of "hallway healthcare". This results in a shortage of hospital rooms patients to be treated in the hospital corridors.

Mitigation:

MedMe to work with citizen activists groups to promote its value proposition as a low-cost solution.

To drive favorable changes to OHIP, MedMe should focus on displaying its value as a cost-cutter, and work with citizen activist groups. As the majority of changes are implemented in relation to elections, MedMe is limited in its abilities to influence OHIP policy revision. Regardless of new healthcare policies or budget cuts, the government is primarily interested in stretching the healthcare budget while minimizing public backlash. MedMe should focus on its value-add as a cost-efficient alternative to the provincial government which could maintain care quality while maintaining low costs. This would involve working with citizen activist groups such as the Ontario Health Coalition. It has a mandate to "protect and improve our public health care system."[73] and has recently raised concerns over Ford's OHIP cuts.[74] MedMe could demonstrate its cost savings potential through increasing the utilization of pharmacists and emphasizing its absence of retail locations. This would not only increase savings for the government, but it would also maintain the current standard of service. Both of which would be of immense value to a government with a tight budget.

Stakeholders in the Industry

3) Ontario Telemedicine Network

Recommendation: MedMe should look to partner with Ontario Telemedicine Network, as they could provide valuable data to support the success of virtual consultations in the province and have similar lobbying goals

The Ontario Telemedicine Network (OTN) is an independent not-for-profit organization that is funded by the Government of Ontario. [75] Their vision is to create an Ontario where everyone has access to the best health care, when and where they need it. OTN has focused on innovation within virtual care to help push towards its vision. They have built many partnerships within the health care and technological field to help create what they refer to as "communities of care." They look to provide care to communities that otherwise experience great barriers while also providing expertise and value to their partners. OTN helps developers and vendors scale their solutions by providing knowledge in design development, and procurement in the healthcare industry.[76]

Although OTN provides a great platform for MedMe to partner with, they already have partnerships in place that provide virtual consultations to both indigenous communities and through its provincial corrections program.[77] This may mean that the area for expansion in partnership with the OTN is limited as they seem to have already developed such capabilities.

However, with both of these and other programs, they have reached over 300,000 patients. MedMe could position themselves as a platform that would be able to expand their reach and make the virtual model even more scalable with the inclusion of pharmacists and prescription delivery. Even if MedMe (or OTN) isn't interested in actually expanding their services with one another, it may be helpful to partner up in terms of information exchange. OTN could provide MedMe with data on how their past programs have performed which could help MedMe communicate to governments the benefits and feasibility of their service.

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