Ensuring New Brunswickers Always have Access to a Pharmacist

Executive Summary

The role of the pharmacist has changed a lot in recent years and is still in a state of flux, as is the pharmaceutical sector. The debate about national pharmacare continues to rage on, with most of the emphasis on the rising cost of drugs, as well as who should pay for them. Unfortunately, there is not so much discussion on the importance of the role of pharmacist in the national pharmacare debate. Policy makers seem confused by the dual nature of the role of community pharmacist. On one hand, there is the trusted health professional with the tools and education to provide expert advice on how to get the most benefit from prescribed and OTC medications. On the other hand, there is the pharmacist who is trying to manage his/her way as a small business owner.

The role of Government cannot be overstated in discussing the future of community pharmacy in Canada. Provincial governments establish the services and products they will fund, they decide who gets to be eligible for these benefits, and they have recently begun negotiating and regulating prices through the pan-Canadian Pharmaceutical Alliance (pCPA). Third party payers are providing benefits to those people who aren't eligible for provincial programs. They usually offer more generous formulary coverage and certainly benefit from the low drug prices that Government negotiates with manufacturers. Both have continued to reimburse pharmacists based on the traditional distribution model: a flat dispensing fee and a small percentage markup based on the drug price.

The federal government regulates and limits pharmacists' ability to negotiate collectively with third party payers through the Competition Act. Pharmacists also have to comply with their own rules as defined under the Pharmacy Act. Pharmacists are amongst the most regulated of all professions.

But governments are changing the landscape on pharmacists revenues through their direct negotiations with manufacturers. As we will discuss, the New Brunswick Prescription Drug program has seen prescription volume growth from 3.5 million to more than 5 million prescriptions in the past ten years. However, the total budget for 2018/19 is exactly the same as it was in 2010/11 at $179.9 million. Pharmacists volume of work related to prescriptions has increased by almost 50%, while the revenues which are mostly based on drug prices are being negatively impacted. Most provincial governments across Canada have recognized this and are working with pharmacy associations to manage this disruption in the sector.

New Brunswickers need better access to qualified healthcare providers. Pharmacists are the most accessible of all healthcare providers and are qualified to fill some of the gaps in healthcare. Many of these recommendations will generate savings to the health system, while some others will come with costs. The Province of New Brunswick should engage pharmacists through the former Pharmacy Affairs Working Group, to consider the recommendations being made in this report.

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Introduction

- Pharmacists are highly educated health professionals who are experts in medication. Nobody knows more about prescription and non-prescription drugs and how they interact with the human body and with other drugs.
- Pharmacists are also business owners who for the most part, operate in the private sector. New Brunswick pharmacy owners have a significant impact on healthcare and also on the New Brunswick economy. In terms of direct effects, according to the Conference Board of Canada[i], the pharmacy sector is estimated to generate about $299.7 million in GDP, representing about 11.2 per cent of the provincial health sector. The pharmacy sector also employs 4,600 residents and directly generates about $142.2 million in labour income among its residents, which translates into $30,600 per employed person.
- The national debate regarding the merits of a national pharmacare program go back to the mid-1990's if not longer. Proponents continue to assert that some people have to choose between groceries and prescription medications, and that the price of drugs continues to escalate. While it seems like nothing has happened in twenty years, in actuality a lot has been happening within the pharmacy sector.
- In this document we shall discuss how the role of the pharmacist has evolved tremendously. We'll also discuss how manufacturers have moved from pills, to expensive (and hard to copy) biologic agents; how governments and third-party insurers have regulated generic drug prices; how New Brunswickers are oblivious to all these things and how government policy makers are limiting themselves to concerns about drug prices, while ignoring the potential contributions of the pharmacist to improved health outcomes. We will outline in detail how pharmacists can contribute to improved access and improved health outcomes for New Brunswickers.

Current Policy Environment

- New Brunswick's community pharmacies are facing extreme uncertainty as the sector continues to go through a major disruption in the next few years. In fact, their very viability will be challenged.
    - They are facing threats from large distribution giants such as Amazon and Costco.
    - Most 'new' drugs being developed by large pharmaceutical companies are biologic and must be delivered through a 'specialty pharmacy'[ii]. The average community pharmacy doesn't see these new products. More and more insurers are requiring prescriptions to be mailed directly to patients with counseling by phone.
    - Drug plans, including the NB Prescription Drug Program and NB Drug Plan, are negotiating directly with manufacturers to fix prices and coordinate these types of arrangements. In fact, pursuant to an Access to Information request, the Minister of Health confirmed that in 2016/17 the Department received $19 million in secret rebates from **brand** manufacturers following these private negotiations. This number is likely higher in 2017/18. The Ontario Auditor General confirms that the Ontario Government received $1.1 Billion in secret rebates from **brand** manufacturers.[iii] The details are

sealed under a non-disclosure agreement. We don't know how these payments are being made, if the rebates are for 'packages' of drug listings and what conditions manufacturers are imposing. Consumers pick up their prescription at the pharmacy; they pay the copayment required and leave. Governments and insurers receive the rebates after the fact.

- Successive Governments have often lamented that drug prices continue to increase, putting a strain on our healthcare system. In fact, the New Brunswick Prescription Drug Program budget for 2018/19 was $178.8M[iv], which is exactly the same as it was in 2010/11.[v] Provincial drug plan spending is budgeted at $203M in 2018/19 but only because the Government in 2014 added a new drug plan for catastrophic instances, creatively named the New Brunswick Drug Plan. Provincial Governments have been regulating the prices of generic drugs downward since 2011. But due to the fact that copay policies are fixed at $9.05 or $15, the public has been unaware of these changes. If copay policies on government drug plans were established as a percentage of the total cost (20% or 30%), then consumers would be well aware of the differences in prices between generic and brand products, and would ask for less costly generic drugs, as they do in the USA.[vi] Almost 85% of prescriptions filled in the USA are generic vs. 70.5% in Canada.[vii] Moreover, seniors who pay the flat copayment of $15 on generic product are paying the majority of the cost of that prescription, since the average generic prescription in Canada now costs less than $21. Seniors who pay a flat copayment of $15 on brand drugs are not getting anything back from brand manufacturers who provide rebates to governments and plans sponsors. But, since the copay policies remain fixed, consumers continue to pester doctors for 'special authorizations' to dispense only a brand product, because they have an allergy or intolerance to the generic. Governments and private payers may also have preferred arrangements with brand payers that they would have to disclose to consumers if the copay were based on a percentage of price. They don't seem interested in that type of transparency.
- Provincial governments also continue to collaborate to reduce the price of **generic** drugs by negotiating directly with generic manufacturers.[viii] While this saves government money, it also benefits third party payers (insurance companies), as they all have tied their private agreements with pharmacies to the Government prices. Pharmacists however see a reduction in prices as a reduction in revenue as their markup is a percentage of sales price. Lower prices mean lower profit. On April 1, 2018 the provincial Department of Health reduced generic prices on nearly 70 drugs that they estimate will save the Government $8 million. All of which will come out of pharmacists' revenues. In fact, when you add the revenues lost from the third-party payers, New Brunswick's 225 pharmacies will lose more than $24 million in revenues based on this decision with no consultation or concern about the impact on the long-term sustainability of community pharmacies in rural or urban settings.
- Shoppers Drug Mart responded to these cuts by laying off 500 staff.[ix] McKesson Canada recently announced it will close forty (40) Rexall pharmacies in Ontario and Western Canada[x]. Jean Coutu was taken over by the Metro grocery chain[xi] because the

Government agreement with generic manufacturers limited sales of Jean Coutu's in-house generic company *ProDoc* to 50% of their total.

- **Governments across Canada are playing a major role in disrupting the status quo in the pharmacy sector.**
- New Brunswick pharmacists have no formal agreement with the Department of Health since the expiry of the current MOU in March 2015. This means there is no predictability and no formal process to not only manage these disruptions to community pharmacy, but to actually play a leadership role in developing changes to the sector.
- Pharmacists rely on an outdated reimbursement model. They are only paid when they dispense drugs (even if that's the worst outcome for the patient). Most payers are attacking pharmacy distribution costs without consideration for the important healthcare role that pharmacists provide – which is largely subsidized by dispensing fees and markup. Other Canadian provinces have reinvested savings from these price policies into pharmacy services. (see Pharmacists Scope of Practice in Canada).
- Front-line pharmacists are extremely frustrated at not being able to provide services for which they are trained, and for which legislation has been approved. While pharmacists can assess and treat patients for urinary tract infections, impetigo, cold sores and others, these services are only insured when a doctor or nurse practitioner treats them.
- **If Government wants a vibrant community pharmacy sector in all regions of New Brunswick, we need a new approach to working with pharmacists**, which will require leadership and collaboration from Government and pharmacy representatives. That approach will mean a commitment to a formal Pharmacy Affairs Working Group as well as to a negotiated long-term agreement with community pharmacists.

Access

- New Brunswick has a serious problem with hospital overcrowding[xii] and misuse of Emergency Department resources to treat non-urgent conditions. There have been many media reports in recent months regarding ER overcrowding[xiii], limited number of hospital beds available, doctors retiring and new doctors taking fewer patients. The New Brunswick Health Council reports that 41% of New Brunswickers can't get an appointment with family doctor within 5 days.[xiv]
  Pharmacists can be part of the solution.
- Pharmacists are the most accessible health professional in Canada, and New Brunswickers trust their pharmacists completely. Moreover, New Brunswickers use their pharmacists far more than Government measures. The New Brunswick Health Council regularly surveys citizens asking them "what is their first point of contact" when seeking medical care. Unfortunately, while they ask about family physician, after-hours and emergency rooms, they don't ask if people contact their pharmacist first. According to a recent Abacus Data survey[xv] 50% of New Brunswickers call or visit their pharmacist before seeking assistance from their family doctor, the after-hours clinic or emergency department.
- New Brunswick was the second province in Canada to initiate changes to the role and scope of the pharmacist in 2008, to provide improved services and access to patients and the public.

These services were enabled by an amendment to the Pharmacy Act in 2008 and again in 2014 with the passing of an entirely new Pharmacy Act, which enabled important services such as independent prescribing for patients with urinary tract infections and administration of drugs by injection such as vaccines for the flu or shingles or travel.

- New Brunswick community pharmacists dispensed roughly **13 million prescriptions** in 2017, through 225 community pharmacies. Forty of these communities rely on a single pharmacy to provide access to counselling and prescription medications.
- In 2014, and electronic **Drug Information System** (DIS) was launched in the province. By December of 2016 all pharmacies in NB have been connected to the DIS which is managed under the Department of Health by e-Health NB. Pharmacists must login to the DIS to see the patient's complete medication profile. While this is a great improvement, provinces such as Nova Scotia have a DIS that is interoperable with pharmacy systems. Pharmacists don't have to login externally. NS pharmacists can see the drug interactions between all prescriptions, not just the ones in that pharmacy's system. In New Brunswick, pharmacists have to login and review drug interactions manually which takes time and places significant liability and risk on the pharmacist. **The New Brunswick has to finish the development of the DIS by making it truly interoperable with pharmacy software systems.** Because this project is on-going and has been funded in part by federal subsidies, it is difficult to provide a cost estimate.
- Through the e-Health portal, New Brunswick pharmacists can also now see the patient's recent lab tests and adjust prescriptions based on what they see, as well as established protocols. These advancements in technology are changing the practice of pharmacy for the better. However, these services take time and none of them are funded.
- These advancements in scope of practice were achieved in large part through the ongoing collaboration between physicians with NBMS, the Government of New Brunswick and provincial pharmacists through the NBPA and NBCP. Sadly, that progress has stalled in recent years with the dissolution of the Pharmacy Affairs Working Group.
- Recently a Parliamentary Committee issued a report[xvi] recommending a national pharmacare program. But a lot of uncertainty remains in regard to access to formulary, and cost to implement[xvii]. For example, Ontario recently announced a program to provide prescription drug coverage to young people up to the age of 25. An unintended consequence of this program is that some drugs that used to be covered under a private drug plan, are not covered under the public formulary. The employer or plan sponsor is 'off the hook'[xviii] to provide coverage while the government plan is inadequate. A national pharmacare program may also not generate the savings being discussed in media. These savings are based on PMPRB data and OECD data (which uses PMPRB). The problem with these assumptions is that PMPRB data only reports the gross sales dollars without netting out the rebates that large brand manufacturers are secretly paying to provincial governments which we discussed earlier in this document. The Auditor General of Ontario recently reported that this represented $1.1 billion in Ontario alone.
- At the same time, Ontario[xix] has proposed a plan for 2019 to make prescription drugs free for people over age 65 which includes elimination of deductibles and copayment requirements. The Government of BC has eliminated deductibles for families earning less than $30,000, eliminated

copayments for people over 79.[xx] **These policies completely eliminate the barriers to access for the most vulnerable patients and should be considered by the New Brunswick Government**.

The New Brunswick Department of Health does not have a long-term vision for the role of community pharmacist in their Health Plan. They have no initiatives in place to examine the role of the pharmacist. Their main focus is on drug plan formulary and drug prices. The Minister's official statement to NBPA members in reference to recent price regulations is as follows: "*We understand that generic price changes will have an impact on pharmacies. However, rebates given to pharmacies by drug manufacturers or other financial arrangements between manufacturers, wholesalers and pharmacies are private business transactions and do not involve the Government of New Brunswick*."

- Before discussing how to get the most out of the profession of pharmacist, we should first outline a brief timeline and define what pharmacists actually do every day. The New Brunswick Pharmacy Act was amended significantly in 2008 by Minister Murphy. The most significant changes allowed pharmacists the ability to assess and prescribe, to adapt prescriptions (dosage, duration, quantity), to initiate therapy in emergency and to administer drugs by injection. These advancements to the scope of practice placed New Brunswick second in Canada behind Alberta at the time. In 2014, an entirely new Pharmacy Act was proclaimed. Major changes included the ability to prescribe independently to treat specific minor ailments such as cold sores and urinary tract infections. As stated earlier, e-Health advancements including a DIS and PMP have provided useful tools to help the pharmacist make better clinical decisions.
- What does dispensing actually involve? Verifying whether the prescription is legal and valid. Identify the patient, gather the medication history. Review laboratory and diagnostic information. Check for appropriateness of drug, as well as dosage, strength and days' supply. Work with prescriber for appropriateness of this medication. Identify relevant and irrelevant patient information. Identify trends in patient's management of their chronic condition. Look for potential drug interactions, duplicate therapy or other unintended consequences. Elicit ideas and input from the patient. Anticipate what to expect and communicate with patient. Verify correct information (drug, directions, quantity, patient). Counsel the patient or advocate with recommendations for follow up as required. Advocate on behalf of patient in reference to their third-party payer (insurance).

Qualifications and expertise:

- Pharmacists are the gate-keepers for prescription medication. They often have a four-year science degree prior to being accepted into a four-year pharmacy program in Canada, where they spend much of their time learning about the impacts and interactions that medications have with the human body. In fact, many universities have transitioned to a five-year doctorate in pharmacy program. Dalhousie University is planning to make this transition soon. More than 700 students apply for admission to the Dalhousie College of Pharmacy annually. Only 90 are accepted. In the past ten years more than 70% of Dalhousie pharmacy graduates are female. These are highly intelligent and extremely competent individuals. They are the medication experts. Conversely, students at Canada's medical schools can take an elective course on

pharmacology. Many medical students graduate with at most forty hours of education related to pharmacology. Pharmacists will call a physician on average forty times in a week to verify prescription information. Younger physicians frequently consult pharmacists to inquire about appropriate prescriptions for specific diagnoses. This collaboration is important to patient safety.

- While dispensing is critical, it often gets short thrift from payers and government policy makers who believe this role can be easily done through mail-order or by phone. There is significant evidence that New Brunswickers do not understand their medications currently. Implementing systems that reduce opportunities for direct patient counseling is short-sighted given the already low literacy levels in New Brunswick. Prescriptions that are shipped by mail or courier from out of province should at least have to be included in the patient's electronic record through the Drug Information System.[xxi]
- **Adapting/Refilling prescriptions** – Patients frequently run out of medication unintentionally and cannot get to their physician within a reasonable time frame. Pharmacists can extend their prescription on a temporary basis, or in some cases, following an assessment which may include accessing recent patient lab data, the pharmacist may simply prescribe the patient's medication independently with a notification to the physician. Pharmacists may also adapt prescriptions which are erroneous. For example, a physician may have written a prescription with a strength that does not exist, or that is inappropriate, or where a patient prefers capsules to tablets, pharmacists can make these adjustments and advise the physician. Some cost savings from these reduced physician visits is being realized by the province today. But this service is far from ideal as often times, pharmacists do not have the time to allocate to these services **since they are unfunded**. In these instances, they simply refer the patient back to the physician, which can lead to frustration for the patient and all healthcare providers.
- **Patient education** – As the most accessible front-line service provider, pharmacists play a key role in educating patients on the appropriate use and ongoing adherence to their medication as prescribed by their physician or nurse practitioner. Pharmacist intervention is effective in the improvement of patient adherence[xxii]. Many New Brunswickers have difficulty reading labels or understanding the printed instructions that frequently accompany their prescriptions. Low health literacy is hypothesized to be associated with sub-optimal use of prescribed COPD and asthma medication and poor inhalation technique. Asthma is the leading cause of hospitalization among young Canadians. Asthma hospitalization rates remained about 1.5 times higher in the lowest-income neighbourhoods compared to the highest-income neighbourhoods according to recent CIHI reports.[xxiii] It is important that pharmacists have the time and resources to properly counsel patients on their OTC and prescription medications.
- **Compliance or Adherence Packaging –**
  These are terrific tools which are rarely funded by governments or insurers. Nursing homes insist on unit dosage adherence packaging as a best practice to improve patient safety. If a nursing home, (which has licensed nurses on staff to help administer medications), is insisting on compliance packaging, why shouldn't a senior living at home alone do without? The province of PEI reimburses community pharmacists for 'blister packaging' to eligible residents as does the

federal Veterans Affairs program. **New Brunswick should consider following these initiatives and implement a plan to measure outcomes.** The program costs the PEI government roughly $1.5 million. Many people, seniors in particular, often forget whether or not they have taken their medication today. These packages which are prepared at the pharmacy are a useful tool to assist patients to remain on-track with their medication. In fact, non-adherence to a prescribed medication therapy is the leading reason for uncontrolled hypertension, diabetes and COPD. According to the US Center for Disease Control: "Poor medication adherence is linked with poor clinical outcomes. While these facts may seem obvious, a staggering one half of patients in the US stop taking their medications within one year of being prescribed.[xxiv]"

- **Prevention of adverse drug interactions** – There is significant evidence that patients taking multiple medications are often confused by their medication usage and that as a result their health outcomes are compromised. On one hand, this can lead to patients discontinuing their medication, which contributes to poor control of chronic disease in our province. We know that diabetes, hypertension and COPD patients are not in control of their chronic diseases and as a result are frequent users of our hospital resources. On the other hand, some patients take too much medication or mix with OTC or natural health products. As many as 28% of emergency department visits have been estimated to be drug related, with as many as 70% of them being preventable. The New Brunswick Health Council reports that as many as 56% of New Brunswickers taking more than six medications could not say why they were taking these medications or what their medications were supposed to do for them. Each visit to the ER costs the New Brunswick healthcare system roughly $1,500. Adverse drug reactions are among the leading causes of hospitalization among seniors. The Province of New Brunswick should expand the NBPharmacheck[xxv] program Pharmacists should be provided with opportunity and funding to conduct medication reviews for vulnerable populations, including seniors and people with chronic disease who are taking multiple medications.
- **Funding to support deprescribing**

  Deprescribing is "the planned and supervised process of tapering or stopping of medication that may no longer be providing benefit, or that may be causing harm". The goal of de-prescribing is to reduce medication burden and harm, while maintaining or improving quality of life. For many drug classes (such as proton pump inhibitors (PPIs), benzodiazepines and opioids) this is not a simple process, and patients require guidance and monitoring to avoid withdrawal side-effects or more serious events. Pharmacists are experts in medication therapy and are in the best position to work with patients through a systematic approach aimed at reducing, where appropriate, the number and/or duration of drug therapies a patient is on. Since pharmacists are only reimbursed when they dispense drugs, there is a misalignment between this initiative, and what is in the patient interest as well as the taxpayer interest. **The Government should reimburse pharmacists for providing de-prescribing services that will result in reduced drug utilization, generating cost savings, while improving patient safety and outcomes.**
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Maximizing the Role of Pharmacists in New Brunswick Health Care

In the 2014 New Brunswick election, the NB Liberal Party platform[xxvi] included a commitment to maximize the role of the pharmacist. The word 'maximize' has significant meaning. It doesn't just mean improve. It means to get the most out of something.

We have some additional suggestions to provide that would help improve population heath in the province.

Refusal to Fill

This policy was agreed to with the Department of Health in 2014, but never finalized in the MOU. The Province of New Brunswick should reimburse pharmacists when they refuse to fill a prescription for patient safety reasons. There are many instances in a pharmacists' week where he or she may refuse to fill a prescription. This provision from Appendix A of the 2014 MOU was never implemented.– *Appendix A "$11.00 fee (criteria to be determined in consultation with the Pharmacy Affairs Working Group)*. This service is reimbursed in provinces such as Québec where the government paid $565,000 in refusal to fill fees on a budget that exceeds $5.6 billion.

Pain Management

New Brunswick is not immune to the fentanyl problem that has been affecting other communities across Canada, particularly in Vancouver and Calgary.[xxvii] The Chief Medical Officer recently released the Department's fourth quarter surveillance report on opioid overdoses in New Brunswick.[xxviii] There were 37 apparent opioid deaths in 2017 of which 33 were deemed accidental or with pending intent, including 8 related to fentanyl or fentanyl analogs.

The Chief Medical Officer hosted a public forum on harm prevention in fall 2017 at which time she presented some research data from the Journal of General Internal Medicine. This research showed that when a patient has a second refill of a short-acting opioid prescription, 7.2% became long-term opioid users. When they had a third refill, 13.4% became long-term opioid users. When they had a fourth refill, 22% became long-term opioid users. The Chief Medical Officer also noted that in spite of all the media, and all the data, that opioid prescriptions increased by 6% in New Brunswick last year.

It's essential then that we implement programs to reduce harm by reducing the frequency of opioid prescriptions.

Proper implementation of an electronic Prescription Monitoring Program for drugs of addiction/opiate abuse, which is interoperable with pharmacy software systems is essential. While a DIS and PMP are being implemented in New Brunswick now, the systems are not fully interoperable with pharmacy software. A

Insist that RHA staff have access to and make use of the DIS and PMP tools. Nursing staff in most New Brunswick hospitals are currently still calling pharmacies to have patient information faxed to hospitals, often multiple times on different wards for the same patient. The information is readily available online

to authorized health providers who should be required to use it just as community pharmacists are. This policy should not have additional costs to implement.

The College of Physicians & Surgeons have updated guidelines with respect to opiate prescribing. These include a statement that doctors should check the PMP before prescribing an opiate.[xxix]

9. Clinicians should review the patient's history of controlled substance prescriptions using the Prescription Monitoring Program (PMP) data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose.

As stated earlier, even with these safeguards in place, Chief Medical Officer, Dr. Russell noted a 6% increase in opioid prescriptions in New Brunswick last year in spite of the fact that we know opiates are very addictive.

Pharmacists should be able to provide a clinical pain management intervention when they see a first or second refill for an opiate prescription to a 'new' (opioid naïve) patient, **and the Department of Health should provide appropriate funding for these important interventions**, which could save lives down the road. The NBPA has submitted a draft proposal to Department of Health on this initiative.

We propose a **pharmacy delivered pain management program** informed by the 2017 Canadian Guidelines for Opioids for Chronic Non-Cancer Pain and the Health Quality Ontario Quality Standards for Opioid Prescribing, and in alignment with current Opioid Strategies by various health professional colleges. The program will address the prescription related elements of the on-going opioid crisis and provide patients with one-on-one support to appropriately manage their pain, while mitigating the potential risk of opioid dependence. This program may require a pilot phase which could be focused on acute pain patients in high risk communities as identified by the NB prescription Drug Program. Collaboration with the New Brunswick Medical Society and New Brunswick College of Pharmacists will be important. The federal government has allocated funding to assist in this area.

Mental Health and Addiction

The Province of Nova Scotia provides funding for the Bloom program[xxx] which aims to improve the health and well being of people living with mental illness and addictions. Patients registered with the program can expect in-depth, patient-centred **medication therapy management**, with a focus on mental and physical health problems as well as medication-related issues. In addition, pharmacies participating in the program support navigation of the system helping people to find local services and supports, **referral** to the appropriate level of care when needed, and offer education and resources about mental illness, addictions, and medications. Patients are eligible for the program if they have a diagnosed mental illness or addiction causing functional impairment and a current medication therapy issue. Eligible diagnoses are those that are commonly managed by psychotropic medications.
For each person enrolling in the program, the goals are to support recovery, address the most important health and medication issues, and be discharged from the program after 6 months. Extensions are possible. The Bloom program researchers estimated an annual operations budget of $65,000 in addition to the professional pharmacy fees per patient, which were as follows: $75/month (up to 6 fees) to

ensure continuity of care and time and opportunity to address medication and health issues. Additional extensions were allowed at a maximum of $30/mo for up to 6 interactions. Ten per cent of the Bloom program patients were extended, with 221 patients enrolled in the program.

The Province of New Brunswick should work with pharmacists to implement a pilot trial of the Bloom program[xxxi] here in NB.

Advanced Prescribing Authorization – The Province of Alberta has the most advanced scope of practice for pharmacists in Canada. For a number of years, Alberta pharmacists have had the ability to prescribe independently if they have taken the Additional Prescribing Authorization course authorized by the Alberta College of Pharmacists.[xxxii] Research is still in early stages, but appears very promising in areas of diabetes and hypertension. At 26-week program including prescribing by pharmacists for patients with poorly controlled type 2 diabetes revealed yielded very positive results[xxxiii] as fifty-one percent of the patients achieved the target HbA1c of ≤7% at the end of the study. Community pharmacist prescribing interventions and care reduced estimated cardiovascular events by 21% in three months[xxxiv]. Pharmacists are accessible front-line health care providers who see patients more frequently than doctors. In fact, roughly 30% of patients with chronic disease won't or don't see a primary care physician. The pharmacists' main ability was their *availability*. Beyond that, their ability to prescribe independently in a convenient setting, to access and interpret lab data and to follow-up with the patient were critical determinants of improved outcomes. **New BrunswFick pharmacists should be able to take the accreditation course for APA and the Department of Health should work with the NBCP and NBPA to maximize the role of the pharmacist by including pharmacists in their health plans and by providing appropriate funding for services that improve health outcomes and increase access**.

Funding pharmacist treatment of uncomplicated UTI –

Urinary tract infection (UTI) is a common infection, estimated to affect about 12% of women each year, with 50% of women experiencing a UTI by 32 years of age. UTIs produce symptoms that may be unpleasant and distressing for patients and have the potential to lead to complications. They are also commonly misdiagnosed and treated inappropriately, resulting in unnecessary antibiotic use and increased potential for side effects. Unnecessary antibiotic use also puts patients at increased risk of developing resistant bacteria, which can be problematic later. Because bacterial resistance is on the rise, we have to be careful with when and how we use antibiotics. Pharmacists are accessible and highly knowledgeable healthcare providers who are able to take on a larger role in the management of medical conditions, including UTIs, and they have a unique skill set which can be useful to ensure that antibiotics are being used appropriately.

Beyond the Alberta APA authority, New Brunswick was the first province to allow pharmacists to prescribe for uncomplicated urinary tract infections for women. Québec and Saskatchewan have since followed suit. A joint study by the University of Alberta and Horizon Health has just finished and we expect the results to be shared at the Canadian Pharmacy Conference in Fredericton in June 2018. The study was carried out in forty participating New Brunswick pharmacies with more than 750 participants. Historically, a woman experiencing a UTI has to contact her doctor's office for an appointment, go to an

after-hours clinic or an emergency room. We know that most people cannot get an appointment with their family doctor within 24 hours, and UTI's will not resolve on their own. At the end of this process, the patient still has to go to the pharmacy with her prescription. While all these options are funded by Medicare, the 'Go Directly to the Pharmacist' option is not. If patients have the ability to pay the $22.50 average assessment fee, they can bypass these other time-consuming steps. For those women who cannot afford to pay, they must wait at the emergency room. T**he Department of Health should provide appropriate funding for assessment and treatment of uncomplicated UTI's by pharmacists.**

This program could be implemented in all NB pharmacies in a short time frame. These forty pharmacies have provided roughly 750 interventions over a ten-month period.

What would it cost?

The epidemiology suggests that between 82 and 100 women per day are affected by a urinary tract infection in New Brunswick. Assuming that some will continue to seek treatment from traditional sources, and that some will be too complicated, and therefore require further medical intervention, we believe that pharmacists have the potential to treat 50 women per day for an uncomplicated UTI. Over a 365 period, this means that 18,250 interventions could occur at an estimated fee of $25 which would **cost the Department roughly $456,000**. This would provide significant relief to women, at a small fraction of the Department's multi billion-dollar budget.

Contraception:

Saskatchewan pharmacists are now authorized to prescribe birth control[xxxv]. New Brunswick pharmacists currently are able to provide Emergency Contraception. In fact, due to the importance placed on the urgency of access for emergency contraception, Health Canada has eliminated the extra time and steps associated with trying to find a doctor to get a prescription. They have now made this a Schedule III product, which means it is available for sale in a pharmacy in the presence of a pharmacist. While no consultation is required, pharmacists regularly counsel patients on emergency contraception. *It follows that appropriate counseling for contraception should also include making plan for regular contraception.*

We recommend that pharmacists be allowed to initiate a prescription for regular contraception for two months; if tolerated, which can be refilled for one year, at which time the patient should be reassessed or referred to a physician or nurse practitioner if they haven't been there already.

Regularly scheduled pelvic exams are no longer recommended; for asymptomatic women. PAP tests are recommended only every three years.

What would it cost?

There were 196,944 contraception prescriptions dispensed in New Brunswick in 2017 according to ims Brogan data. Assuming that all of these prescriptions were as a result of an assessment by a pharmacist, at a $25 fee, this would have cost $4.9 million. This compares well to the costs related to paying a physician $42 per prescription which adds up to roughly $8.3 million. This proposal would actually free up physicians to see other patients, while potentially saving $3.4 million health dollars by reallocating them to a more accessible, qualified, lower cost health care provider.

Pharmacist treatment for regular contraception should be authorized by the New Brunswick College of Pharmacists and funded by Government.

Sexual Health

According to Public Health,[xxxvi] roughly 12% of New Brunswick women between ages of 15 and 25 are affected by chlamydia. What can pharmacists do? Pharmacists and pharmacy technicians could enable testing on site by collecting samples and having them delivered to the nearest lab. Pharmacists could interpret the lab data online once it's available, and when appropriate, prescribe the best antibiotic course of treatment while also providing appropriate counsel for preventative measures as well as birth control.

Funding pharmacist treatment of pharyngitis (acute streptococcal)

It is difficult to distinguish between sore throat caused by virus and a sore throat caused by Group A Streptococcus bacteria based on clinical features alone. "**Strep Throat**", also known as streptococcal pharyngitis, is an infection of the back of throat caused by group A streptococcus bacteria. Roughly 4 million physician visits (between 2% and 4%) are related to strep throat, (not counting walk-in clinic and ER visits). Roughly 70% of patients are prescribed an antibiotic. However, the majority of sore throats are viral, with lab cultures showing that only 5% to 15% of adults with sore throats and 20% to 30% of children actually have Strep A. Lab results can take two to four days to come back and as a result, physicians tend to prescribe immediately. This means that antibiotic use is inappropriate in a majority of cases and this is contributing to the development of antimicrobial resistance.

A Strep Point-Of-care pilot program was initiated in Alberta and Nova Scotia in all Shoppers Drug Mart locations in November 2015. Pharmacists were trained on sample collection and collaborated with physicians. While the literature states 5% to 15% of adults have Strep A, the SDM pilot showed 25.5% tested positive. 90% of the patients who tested positive on-site received an antibiotic. Those who tested negative were counselled on other therapy options to treat a sore throat. Cost savings were estimated to be $18.66 per patient in Alberta and $12.78 per patient in Nova Scotia.

The Department of Health should collaborate with New Brunswick College of Pharmacists and the NBPA to enable pharmacists to initiate treatment following an approved protocol/algorithm for a pilot program. This would also involve collaboration with NB Medical Society as well as local physicians and infection disease specialists as well as with regional health authorities.

Funding for pharmacist treatment of shingles

Shingles (Herpes Zoster) are a self-limited condition for most people. More serious cases would be referred for medical assessment. Antiviral treatment is most effective when started within 72 hours or preferably 48 hours of rash appearance. **Authorizing pharmacists to prescribe antivirals for shingles would expedite early treatment to maximize the effect of antivirals (decreased severity and duration of symptoms)**. Antiviral treatment is not associated with any serious adverse effects. Pharmacists are ideally suited to provide timely and effective treatment for shingles. Pharmacists in Nova Scotia are expected to gain approval from their College to provide this service in 2018.

According to Health Canada,[xxxvii] globally, the incidence of Herpes Zoster ranges from 1.2 to 3.4 cases per 1,000 healthy persons per year, increasing to 3.9 to 11.8 cases per 1,000 individuals per year among those over 65 years of age. HZ-associated hospitalization rates vary across countries and are estimated

to range from 5 to 10 per 100,000 people for an average length of stay of 10 to 13 days. In recent Canadian studies, the lifetime risk of HZ has been estimated to be as high as 30% in the general population. In Canada, it is estimated that each year there are 130,000 new cases of HZ, 17,000 cases of PHN (Post-herpetic neuralgia), and 20 deaths, which result in 252,000 physician consultations and 2,000 hospitalizations.

Additional costs related to funding pharmacists prescribing 'early' treatment for shingles should be offset by the reduced costs of hospitalizations.

The Department of Health should collaborate with New Brunswick College of Pharmacists and the NBPA to enable pharmacists to initiate treatment for shingles.

Chronic Disease Management

There is plenty of research to demonstrate that pharmacists play a critical role in reducing blood pressure (hypertension), in improving A1C results in diabetic patients and in improving control of COPD patients, thus reducing hospitalization rates. Hypertension Canada supports the Canadian Pharmacists' Association "Cost-effectiveness of pharmacist care for managing hypertension" study.[xxxviii] In order to save time, we will focus on Hypertension.

Hypertension Management

In February of 2018, the NBPA hosted a breakfast with provincial MLA's and invited the Chair of Hypertension Canada (Dr Nadia Khan, UBC) and a lead researcher from University of Alberta Faculty of Medicine, Dr Ross Tsuyuki as keynote speakers. Following are the highlights of that presentation: It is currently estimated that 151,000 New Brunswickers (26%) have hypertension. It is the most common reason for physician visits. It is the leading risk factor for premature death and disability (ahead of smoking) according to Hypertension Canada (Lim SS, et al, Lancet 2012). Roughly 35% of patients with hypertension are uncontrolled. Hypertension consumes roughly 10% of the national health care budget. Hypertension Canada supports fully leveraging the scope of practice for pharmacists in hypertension care[xxxix]. Access is the key. Patients see their pharmacist roughly eight times more frequently than they see their physician. There is strong evidence for pharmacist care with more than 45 randomized trials of hypertension management by pharmacists. In Alberta, using the advanced prescribing authority, pharmacist-managed hypertension care reduced blood pressure by 18.3 mmHg and was also economically dominant. **If savings applied to only ½ of eligible NB patient population with uncontrolled hypertension cost savings were estimated to be $445 million over 30 years.** A key enabler to the success of this program was the Advanced Prescribing Authority (APA) which is not currently available in New Brunswick. This initiative depends on Government's action on APA, but in the interim, could also be a collaborative initiative with the NB Medical Society which could assist in developing collaborative agreements between pharmacists and physicians.

The Department of Health should collaborate with Hypertension Canada to initiate a program based on the APA model. Fees for pharmacist intervention in managing patient hypertension should be based on the Alberta model.

INR testing

Many New Brunswickers currently suffer suffering from high blood pressure or who are at risk of stroke are being prescribed warfarin. INR tests are lab tests that measure how long it takes for blood to clot and to see if medicines (like warfarin) designed to prevent blood clots, is working. The Government of Nova Scotia signed an agreement with the Pharmacy Association which included funding of demonstration projects. Since a high percentage of RHA lab resources are tied up with INR tests, and since pharmacists can administer point of care tests to determine INR values in the pharmacy, the Department and PANS agreed to work on a demonstration project that would pay pharmacists to manage these tests and upload the data into the patient's electronic record. The pharmacist was also authorized to adjust dosages as needed in order to safely maintain the patients INR within target range. This project is still on-going but appears to be achieving its' goal of improving access and making better use of limited RHA resources. **The Department of Health should collaborate with NBPA on implementing and funding an INR testing program like Nova Scotia's. The cost of implementing this program could be offset by the savings achieved in hospital laboratory budgets. Nova Scotia is using savings from the generic drug price regulations to fund this demonstration project.**

Cannabis for Medical Purposes

The federal Government announced plans to decriminalize cannabis and provincial governments have been working hard to meet the deadline of July 1, 2018 for the legalization of cannabis sales. At this writing, Health Canada and the Canadians for Fair Access to Medical Marijuana (CFAMM) confirm that more than 269,000 Canadians have a legal authorization to purchase cannabis for medical purposes[xl]. A lot of these people live in New Brunswick. The Canadian Pharmacists' Association (CPhA) believes pharmacists have a unique perspective on the legalization of cannabis and is asking the federal government not to overlook how the legislation could impact patients who rely on the medical cannabis system. Moreover, the CPhA has made the following recommendations to Government:

- Ensure a distinction between recreational and medical cannabis.
- Enhance and support increased research into medical cannabis to support safer, more effective prescribing and methods of administration, e.g. non-smokable products.
- Restrict the use of terms such as 'dispensary' or pharmacy-related symbols such as a green cross for the recreational distribution of cannabis.
- Support and include pharmacists in the management and distribution of medical cannabis.
- Establish pricing for recreational cannabis that would not encourage patient diversion from the medical cannabis stream.
- Regulate recreational cannabis distribution through the lens of health promotion.

The Canadian Pharmacists' Association and the New Brunswick Pharmacists' Association support the position that – if a physician prescribes cannabis for medical purposes, that a pharmacist should be involved in the dispensing and patient counseling, just as they do for other prescribed medications.

While Health Canada doesn't provide specifics on the quantity of dried marijuana or cannabis oil dispensed to New Brunswick patients, we do know that New Brunswick registered clients receive 5% of

the total national shipments of both medical dried marijuana and cannabis oil combined. This over-indexes against population when comparing shipments to New Brunswick to the rest of the country. This is primarily due to the large number of veterans in the province.

There are over 175 medications that can be affected by cannabis or in turn affect cannabis itself. Many of these prescription drugs are commonly prescribed medications used by millions of Canadians and include:

- Antibiotics (clarithromycin, erythromycin)
- Blood pressure medications (diltiazem)
- Insulin for diabetic treatment
- Neuropathic pain medications (amitryptilline, nortriptyline)
- Antipsychotic and bi-polar medications (olanzapine, clozapine)
- Acid Reflux medications (omeprazole)

Medical cannabis has many contraindications (i.e. medical conditions where cannabis should not be used or should be monitored closely):

- Individuals with schizophrenia and bi-polar disorder are counseled to avoid cannabis as it can worsen or exacerbate psychotic episodes. Cannabis can also worsen the symptoms of depression in some patients.
- Cannabis can also affect heart function, increasing a patient's heart rate. Patients with uncontrolled hypertension (high blood pressure), arrhythmias (irregular heartbeat) and a history of myocardial infarction (heart attack) are advised to avoid cannabis.
- Furthermore, since cannabis is processed through the liver any patient with liver diseases such as hepatitis C, or liver failure will have to reduce their consumption significantly or avoid it altogether.
- Patient age is also a consideration:
  - Cannabis should not be administered to pediatric patients unless the risk to benefit has been properly assessed by a physician
  - Elderly patients are more susceptible to the side effects of cannabis, which can be handled by reducing dose and selecting the appropriate strain

Cannabis' main effect on patient physiology is through the Central Nervous System (CNS):

- Euphoria, sedation, dizziness and in some cases, hallucinations are side effects that need to be managed by a pharmacist
- Many of these effects can be reduced through proper counseling on dosing, monitoring *and the selection of strains low in THC* (the main culprit in these CNS effects)

The New Brunswick Pharmacists' Association co-signed a submission to the federal Minister of Health for a Section 56 exemption to enable implementation of a research project to provide medical cannabis to patients through community pharmacies in New Brunswick in November 2017. This research proposal was written by the NB Health Research Foundation with support of the NBPA, the New Brunswick Institute for Research, Data and Training[xli] and Tetra Bio-Pharma.[xlii] This proposal is consistent with the NB College of Pharmacists recent position statement on Cannabis for Medical and Non-Medical

Purposes,[xliii] which encourages clinical trials and pharmacist participation in them. This request for Section 56 approval is still waiting federal approval at this writing.

The Government of New Brunswick should write a letter of support for this research, in order to clearly signal to Ottawa that the Province supports this distribution model for research purposes.

There are a number of **benefits** to dispensing medical cannabis through pharmacy:

1. Pharmacist oversight on drug-to-drug interactions, contraindications and side effects will reduce patient harm and maximize the therapeutic benefits of cannabis.
2. Pharmacy will only sell Health Canada approved product that has rigorous quality and testing standards.
3. Pharmacies can provide face-to-face access to medical cannabis for patients, to provide appropriate clinical oversight. There are over 225 pharmacies across New Brunswick that are staffed by 904 licensed pharmacists.
4. Pharmacists are experts in monitoring narcotic use and distribution and are trained to identify double-doctoring, forgeries, product diversion and abuse.
5. Pharmacists can also recommend medical cannabis as an alternative to opioids for certain patients
    a. Canada has one of the highest per capita consumption of opioids in the world, leading to a substantial increase in opioid addiction and deaths
    b. In 2014, New Brunswick spent more to treat addiction than they did on opioid prescriptions, according to CIHI figures
    c. Cannabis represents a safer alternative to opioid therapy and can help patients decrease opioid use significantly
6. Pharmacists will record all medical cannabis prescriptions on their pharmacy system and New Brunswick's eHealth and PMP systems to ensure patients are not abusing cannabis or abusing the cannabis dispensing process.
7. Pharmacists are best equipped to help patients who smoke medical cannabis move to other safer methods of consumption.
    a. For example, patients can consume the dried cannabis flower using a vaporizer (two of which have been approved by Health Canada as medical devices). These vaporizers heat up the cannabis to vaporize the oil without burning it.
    b. Furthermore, other formats are available for the pharmacist to recommend to patients based on their clinical needs (e.g., oral, buccal, topical etc.)
8. Pharmacy has a well-established supply chain that requires a chain of signature. Regular inventory checks, Health Canada oversight and Quality Assurance personnel oversight reduce the risk of theft or diversion in the pharmacy supply chain.
9. Pharmacy dispensing will result in lower prices for the consumer according to a white paper published by the Conference Board of Canada
    a. In 2015, patients would have saved ~$80 million in cost if dispensed in pharmacy compared the current ACMPR system

Include Pharmacists as Immunizers in Government funded Vaccine Programs.

Overview

Each year the New Brunswick Department of Health (Public Health) oversees a seasonal influenza vaccine program across the province which usually begins in early October. The seasonal influenza vaccine is available free of charge to the following New Brunswick residents via many different immunization providers. Pharmacists have been providing publicly funded influenza vaccine in New Brunswick since 2010. In Nova Scotia, pharmacists began providing the vaccine in 2013/14, and research from Dalhousie University[xliv] suggests that the number of people getting a vaccine increased, as did the overall vaccine coverage rate as compared to the three years prior to pharmacists becoming providers.

Eligibility:

Adults and children with chronic health conditions:

- cardiac or pulmonary disorders (including bronchopulmonary dysplasia, cystic fibrosis and asthma);
- diabetes mellitus and other metabolic diseases;
- cancer, immune compromising conditions (due to underlying disease and/or therapy);
- renal disease;
- anemia or hemoglobinopathy;
- neurologic or neurodevelopment conditions. These include seizure disorders, febrile seizures and isolated developmental delay in children and neuromuscular, neurovascular, neurodegenerative, neurodevelopmental conditions and seizure disorders in adults, but excludes migraines and neuropsychiatric conditions without neurological conditions;
- conditions that compromise the management of respiratory secretions and are associated with an increased risk of aspiration;
- morbid obesity (BMI≥40); and
- children and adolescents (ages 6 months to 18 years) undergoing treatment for long periods with acetylsalicylic acid, because of the potential increase of Reye's syndrome associated with influenza.

- People of any age who are residents of nursing homes and other chronic care facilities;
- People ≥65 years of age; Healthy children 6 months to 18 years of age;
- All pregnant women;
- Aboriginal people;
- People capable of transmitting influenza to those at high risk:
  - household contacts (adults and children) of individuals at high risk of influenza-related complications (whether or not the individual at high risk has been immunized);
  - household contacts of infants <6 months of age;
  - members of a household expecting a newborn during the influenza season;
  - household contacts of children 6 months to 59 months;
  - health care workers.

All healthy persons aged 19-64 years are also encouraged to receive the influenza vaccine at their own costs. **All healthcare providers who administer the flu vaccine should have refrigeration systems that meet Health Canada standards for cold-chain continuity.**

The New Brunswick Health Council estimates that 62% of New Brunswickers suffer from at least one chronic disease, which, in all likelihood makes them eligible for a seasonal flu jab under the above criteria.[xlv]

In recent years, the efficacy of the flu vaccine has come under scrutiny by the media and public officials. The vaccine must be developed and grown months in advance, to combat against the most likely strains of flu that public health officials (through the WHO) believe will be in circulation. Sometimes they get it wrong. As a result, many members of the public believe it is not worthwhile to get the vaccine. Others believe the myths that the flu vaccine can actually give you the flu. The working poor and young people, especially college or university students, cannot afford or choose not to pay the $25 to cover the vaccine as they do not qualify for the publicly funded vaccine. And finally, there is a growing trend of 'anti-vaxers' online who believe that vaccines cause other diseases such as autism.

The following is an excerpt from the WHO website regarding ***Herd protection***[xlvi]:
Efficacious vaccines not only protect the immunized but can also reduce disease among unimmunized individuals in the community through "indirect effects" or "herd protection". Hib vaccine coverage of less than 70% in the Gambia was sufficient to eliminate Hib disease, with similar findings seen in Navajo populations.[29][30] Another example of herd protection is a measles outbreak among preschool-age children in the USA in which the attack rate decreased faster than coverage increased.[31] Herd protection may also be conferred by vaccines against diarrhoeal diseases, as has been demonstrated for oral cholera vaccines.[32]
"Herd protection" of the unvaccinated occurs when a sufficient proportion of the group is immune.[33] The decline of disease incidence is greater than the proportion of individuals immunized because vaccination reduces the spread of an infectious agent by reducing the amount and/or duration of pathogen shedding by vaccinees,[34] retarding transmission. Herd protection as observed with OPV involves the additional mechanism of "contact immunization" – vaccine viruses infect more individuals than those administered vaccine.[1]

Over the years, New Brunswick physicians have generally taken the view that if someone asks for a flu vaccine, they will provide it whether they are eligible or not under the program. We believe this is an appropriate approach. New Brunswick pharmacists have been providing the flu vaccine since 2010. Pharmacists who are still relatively new at administering flu vaccines, try to follow the rules even though they believe in immunizing the herd. Pharmacists are subject to regular and frequent audits under the provincial drug programs. Much more so than physicians. Often times pharmacists have declined to provide a vaccine under the publicly funded program, only to have that patient go to the physician office and get it at no charge. New Brunswick has the oldest population in Canada with the among the highest rates of chronic disease in the country. It makes little sense to make health providers pick and choose between insurance criteria when we all know that there are benefits to herd immunization, and that there are many external influences that deter the public from getting a vaccine.

For these reasons, we recommend that New Brunswick follow programs in place in Ontario and Nova Scotia by allowing anyone who wants a flu vaccine to be able to get one from their provider at no charge to the patient.

What are the cost implications?

Recently during debate over Department of Health estimates, the following statements were provided by the Minister:

- There were 273,500 doses of vaccine ordered through Public Health in 2017.
- We estimate the average cost to be $8 per unit.
- Those vaccines were distributed as follows:
  - 4,465 to nursing home residents; 2,285 to nursing home staff
  - 5,930 to hospital residents; 14,150 to hospital staff
  - 1,840 to First Nations communities; 670 to Extra Mural staff
  - 82,350 to Community Pharmacies, the rest to physicians
- Community pharmacists are reimbursed $12 to administer a vaccine. Family physicians are reimbursed $20, unless the patient is seen for another condition as well, in which case the physician bills $12.50 plus the other fee for service.
- There is no fee for the administration of vaccines in nursing homes or hospitals which is done by hospital nurses or other staff.

Even if we assume generously that by changing the existing seasonal influenza program to a universal program, that **we would increase vaccination rates by 25%**, here are the rough estimates of added cost:

- There would be a total of 333,753 doses needed at an average cost of $8/unit or $482,020 in additional vaccine cost.
- We can assume that there would be no growth in vaccines in nursing homes, hospitals or staff as these are all assumed to be at full capacity. We can also assume that there would be no uptake in First Nations and Extra Mural clients as these are already free of charge. No incentive exists.
- The only added costs are related to estimates regarding administration cost of vaccine through physician offices and community pharmacies. We assume for this argument that pharmacies would charge $12 and that 34% of the increased patients would be immunized at pharmacies as this is roughly the current percentage. This would cost an additional $244,494 in administration of vaccine fees. The balance of the increased vaccines would be administered by physicians. For simplicity, we assumed that physicians would charge an average of $17, based on the criteria previously explained. Roughly 64% of the existing vaccines in community are administered by physicians and therefore using that rate, the additional cost to administer flu vaccines by physicians is $677,927.

The total additional cost to change from a exception based seasonal influenza program to a universal program is therefore:

- Vaccine cost - $482,020
- Pharmacist cost - $244,494
- Physician cost - $677,927
- Total incremental cost assuming a 25% increase - $1,404,000

Benefits

The following research demonstrates that "Reducing influenza cases decreases health care services cost" and concluded that a universal immunization against seasonal influenza was estimated to be an economically attractive intervention. So while we can see that there would be an additional expenditure of $1.4M that the cost savings to the healthcare system would offset these investments.

Economic appraisal of Ontario's Universal Influenza Immunization Program: a cost-utility analysis[xlvii].

This flu season in New Brunswick, there were media stories detailing how our hospitals in Fredericton, Moncton, Saint John and Miramichi are all reporting long wait times and overcrowding in Emergency Rooms. This incremental vaccine cost seems like a minimal investment.

Medication Waste and Environmental Stewardship

New Brunswick is one of three provinces in Canada without a formal environmental stewardship program in place to manage medication waste and used sharps. Almost thirteen million prescriptions are dispensed annually in New Brunswick, and many more medications are sold as Schedule II or Schedule III products.

In 2009, Canada's Ministers of Environment signed an agreement to support a Canada Wide Action Plan for Extended Producer Responsibility. This principle requires that manufacturers accept responsibility for their product from cradle to grave.

Industry representatives and pharmacists have expressed concern about the potential impact to the environment related to inappropriate disposal of medications. They are also concerned about public safety related to used needles and sharps in our environment, as well as to the diversion of narcotics and opiates which can contribute to misuse and addiction.

The New Brunswick Pharmacists' Association (NBPA) is proposing to accept a role as steward and to oversee a return and disposal program for medications and sharps similar to the program being operated by the Pharmacy Association of Nova Scotia since 2001. *Innovative Medicines Canada* recognizes the PANS stewardship program[xlviii] as one of the best in Canada. This program proposal would need the support of industry and of the Minister of Health.

The elements of the program would include a negotiated agreement with a certified waste management service provider such as Stericycle. The program would supply pails to pharmacies for distribution to sharps consumers. Those pails would be returned to pharmacy when full. Pharmacies would use different pails for collection of medication waste. Stericycle would have a regular pick up service at least every twelve weeks for each pharmacy in the province, and bring the waste back to their incinerator or shredding operation in Québec. Initially, in order to properly fund the program, the manufacturers will be invoiced a percentage of the first year's budget, equal to their percentage of the provincial sales through the NBPDP and NB Drug Plans. The NBPA would require regular, quarterly reports from the Department of Health in order to properly allocate a share of expenses equal to a share of market.

What are the cost implications?

The program should have an initial budget in the range of $240,000 to $300,000 which should be fully funded by generic and brand manufacturers. This proposed program could begin as early as January 2019.

Smoking Cessation

Smoking is the leading cause of premature death in Canada, leading to about 37,000 deaths annually. Many people have trouble quitting, and we can help our patients in several ways. But a recent study demonstrates just how big an impact pharmacists can have. The report entitled ***The Value of Expanded Pharmacy Services in Canada***[xlix] revealed that for every $1 spent on pharmacist smoking cessation services, the health care system could save $9.10, amounting to billions over time. It makes sense: more health care service at your local pharmacy means fewer visits to physician offices and emergency rooms. The direct savings come from associated conditions like lung cancer, while indirect savings come from increased productivity for both the patient and their caregivers. The Conference Board of Canada report[l] looked at the population health and economic impact of increasing access to smoking cessation services and identified "Community pharmacists as cost-effective primary care providers" (p. 58). Pharmacists in Saskatchewan are reimbursed by the provincial government for their smoking cessation interventions.[li] Each stage of consultation comes with greater intervention time as the patient moves through the stages of quitting. **The New Brunswick Government should collaborate with the NBPA on a pilot initiative to assess the costs and benefits of implementing a pharmacist led smoking cessation program similar to the Saskatchewan model.**

What are the cost implications?

There are various stages of intervention in the Saskatchewan Pact program. The base intervention is the Bronze level, which reimburses pharmacists $5 for an intervention lasting two minutes. The Bronze Plus intervention is $10 for a five-minute intervention. The Silver/Gold interventions are for 90 minutes (max 3 per year) and $180. The Silver/Gold Group intervention features a maximum of three sessions at 150 minutes for which the pharmacist is reimbursed $150. And finally, there are ten follow-up sessions per patient at a maximum of 50 minutes and $100 maximum reimbursement to the pharmacist per year.

The Current Pharmacy Business Model

- Pharmacist dispensing fees typically included verifying for drug interactions, allergies, therapeutic intent and to act as a double-check for physicians. Regardless of the cost of drug, these essential services as gatekeeper are critical and payers provide a dispensing fee to recognize that service in addition to a minor markup on drug cost. If a drug cost $10, the 8% markup doesn't cover the cost of the service. Similarly, if a drug costs a $1,000, the service standard should be same.
- **Generic drugs:** Since early 2000's, the generic market has increased in size and percent of volume. Brand manufacturers began referring to a 'patent cliff' beginning in 2006 and peaking in 2011 with the loss of Lipitor, which was a $1.1 billion drug in Canada that year. As these drugs

became available to generic companies, the pharmacy revenue landscape changed dramatically. Because there are more than a dozen large generic manufacturers providing product, pharmacy owners had leverage to negotiate commercial terms. Since many pharmacy owners in Canada are mass merchant and grocery chains, they applied the same commercial terms they use in grocery products to pharmaceutical products. If Apotex, Teva or Pharmascience wanted to have access or even exclusivity in a grocery pharmacy, they agreed to negotiate commercial trade allowances or rebates to the retailer. While these were competitive and secretive, it was generally known that the trade allowances could range anywhere between 50% and 85% of the original brand price, depending on the drug. For every dollar's worth of product a pharmacy purchased from the generic manufacturer, between $0.50 and $0.85 was available to come back as a rebate, based on sales targets achieved or exclusive purchase arrangements that were in their negotiated agreements. Because there were so many new generic products flooding the market, this became the primary source of revenue for pharmacies. They did not charge for other 'new services' or express concern about low dispensing fees because the revenues associated with generic drugs offset these concerns. However – since governments began regulating the price of generic drugs,[lii] all of this has changed. For example, in 2012/13, all payers spent $169 million on 7.1 million generic prescriptions in New Brunswick according to IMS Brogan data. By 2015/16 the volume of generic prescriptions had increased to 8.1 million, but the payers spent only $135 million on generic prescriptions. Pharmacists who have been relying on markup and rebates associated with generic drug prices have seen a steady decline in revenues. As Canada's Premiers continue to support the pan-Canadian Pharmaceutical Alliance[liii], this trend will no doubt continue.

Disruption in the Sector

Governments and third-party payers are creating new regulations that have negatively impacted pharmacy revenues. Many of the new drugs being developed and added to provincial drug plan formularies are not being sold through traditional community pharmacies. Mail-order pharmacies are aligning with pharmacy benefit managers (PBM's) such as ESI or Bioscript, which forces consumers to buy through them instead of their local community pharmacy. New delivery models such as Amazon, Google or some yet to be determined technology giant are always potential threats to the pharmacy sector. These trends will continue. While some governments across Canada have demonstrated an interest in sustaining the community pharmacy sector, New Brunswick's government has not yet shown an interest in this area, or recognized the vulnerability of this sector. Without question, the latest reduction in generic drug prices which went into effect April 1, 2018, will eliminate $24 million in revenues from community pharmacies, roughly $8 million coming from government savings. Community pharmacies are going through significant disruption in the sector and will need to change from a distribution model to a service-based model, or they will die. It is now up to Government to decide if this is an important policy issue.

We believe the Government of New Brunswick should develop a vision for role of pharmacist in the health plan. They should also begin to value community pharmacies as centres of health, in the same way that New Brunswickers currently do.

In the United Kingdom, the National Health Service (NHS) has initiated and funded a "Pharmacy First" campaign[liv]: And the National Pharmacy Association has supported this with a *See You Sooner Campaign*[lv] campaign. They know that every year, millions of residents visit the GP with a minor health problem that a local pharmacy could help with, and they provide appropriate funding for these services.[lvi]

In Québec, the Government has been negotiating with the Association of Québec Pharmacy Owners for more than two years to develop a reimbursement model that recognizes the new and expanded roles of the pharmacist. The char of services in the Appendix section is a sample of services reimbursed in Québec since 2015.

Conclusion

Governments Canada are playing a major role in disrupting the status quo in the pharmacy sector. If the Government of New Brunswick wants a vibrant community pharmacy sector in all regions of New Brunswick, we need a new approach to working with pharmacists:

Following is a summary of the recommendations that have been made in this report. Many of these recommendations require funding. A good number will actually generate savings. All of them should deliver improved access and better health outcomes. The New Brunswick Pharmacists' Association is ready to work with Government on advancing these initiatives and we believe the best approach to success is to reinstate the Pharmacy Affairs Working Group, and to work with government stakeholders in establishing a list of priority initiatives from the following, along with clear deadlines and deliverables.

- The New Brunswick Department of Health does not have a long-term vision for the role of community pharmacist in their Health Plan. **It should develop one.**
- New Brunswick pharmacists should be able to take the Alberta accreditation course for Advanced Prescribing Authorization and the Department of Health should work with the NBCP and NBPA to maximize the role of the pharmacist by providing appropriate funding for services that improve health outcomes and increase access.
- The Department of Health should collaborate with Hypertension Canada, the NBCP and NBPA to initiate a program based on the APA model. Fees for pharmacist intervention in managing patient hypertension should be based on the Alberta model.
- The Government of New Brunswick should include pharmacists as immunizers in Government funded vaccine programs.
- All healthcare providers who administer the flu vaccine should have refrigeration systems that meet Health Canada standards for cold-chain continuity.
- New Brunswick should implement a universal flu program such as those in place in Ontario and Nova Scotia by allowing anyone who wants a flu vaccine to be able to get one from their provider at no charge to the patient.

- NB should consider making prescription drugs free for people over age 65 which includes elimination of deductibles and copayment requirements similar to proposals in BC and Ontario.
- New Brunswick should follow PEI and Veterans Affairs Canada in funding blister packaging that would improve adherence and patient safety.
- Pharmacists should be provided with opportunity and funding to conduct medication reviews for vulnerable populations, including all seniors and people with chronic disease who are taking multiple medications
- The Province of New Brunswick should implement programs to reduce the frequency of opioid prescriptions by supporting and funding a pharmacist intervention at first or second refill for opiate naïve patients
- The Department of Health should insist that RHA staff have access to and use the DIS and PMP tools which have been in place since December 2016.
- The Province of New Brunswick should work with pharmacists to implement the Bloom program for mental health and addiction.
- The Department of Health should provide appropriate funding for assessment and treatment of uncomplicated UTI's by pharmacists.
- Pharmacist treatment for regular contraception should be funded by Government.
- The Department of Health should fund pharmacists for screening and where appropriate, prescribing for treatment of chlamydia in young adults.
- The Department of Health should collaborate with New Brunswick College of Pharmacists and the NBPA to enable pharmacists to initiate treatment for pharyngitis (acute streptococcal)
- The Department of Health should collaborate with New Brunswick College of Pharmacists and the NBPA to enable pharmacists to initiate treatment for shingles.
- The Department of Health should collaborate with NBPA on implementing and funding an INR testing program similar to Nova Scotia's.
- If a physician prescribes cannabis for medical purposes, a pharmacist should be involved in the dispensing and patient counseling, just as they do for other prescribed medications. The Government of New Brunswick should write a letter of support for the NBHRF proposed research, in order to clearly signal to the federal Government that the Province supports this pharmacy 'distribution model' for research purposes.
- The Ministers of Health and Environment should support the New Brunswick Pharmacists' Association (NBPA) proposal to oversee a return and disposal program for medications and sharps similar to the program being operated by the Pharmacy Association of Nova Scotia since 2001.
- The New Brunswick Government should collaborate with the NBPA on a pilot initiative to assess the costs and benefits of implementing a pharmacist led smoking cessation program similar to the Saskatchewan model.
- The Government of New Brunswick should begin to value community pharmacies as centres of health, in the same way that New Brunswickers currently do. This should be reflected in RHA initiatives and in the Department's health plan.

Appendix 1

Pharmacists Scope of Practice varies across Canada. While New Brunswick has been a leader in advancing scope of practice over the years, Alberta is still the clear leader and Saskatchewan and Québec seem to have the most momentum.

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]	X	✓	✓	✓	✓ [5]	✓	X	X	X
	For smoking/tobacco cessation	X	✓	P	✓ [5]	✓	✓	✓	✓	✓ [5]	✓	X	X	X
	In an emergency	X	✓	✓	✓	X	X	✓	✓	✓	X	X	X	X
	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
Adapt [3]/ Manage	Make therapeutic substitution	✓	✓	✓	X	X	X	✓	✓	✓	✓	X	X	X
	Change drug dosage, formulation, regimen, etc.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X
	Renew/extend prescription for continuity of care	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	X
Injection Authority (SC or IM) [1,5]	Any drug or vaccine	X	✓	✓	✓	X [7]	X [7]	✓	X	✓	✓	X	X	X
	Vaccines [6]	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	X	X	X
	Travel vaccines [6]	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	X	X	X
	Influenza vaccine	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	X	X	X
Labs	Order and interpret lab tests	X	✓	P [8]	✓ [9]	X	✓	P	P [8]	P	X	X	X	X
Techs	Regulated pharmacy technicians	✓	✓	✓	✓ [10]	✓	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. For education/demonstration purposes only.
8. Ordering by community pharmacists pending health system regulations for pharmacist requisitions to labs.
9. Authority is limited to ordering lab tests.
10. 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

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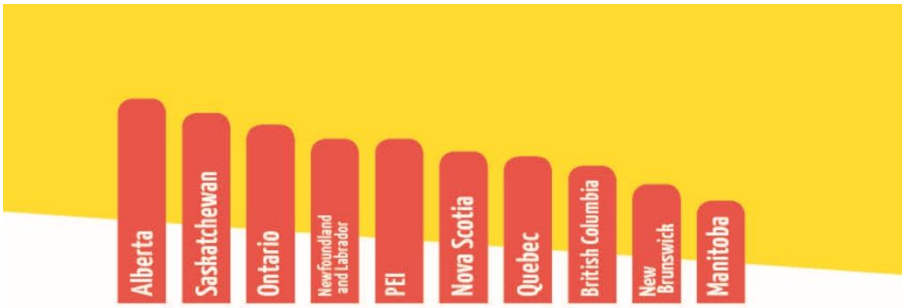
Appendix 2

This national comparison of pharmacy services funded by Government shows that while New Brunswick is a leader in advancing scope of practice, the same can't be said for funding. New Brunswick is near the bottom of the list when it comes to funding services by community pharmacists.



A national comparison of pharmacy services funded by government.

Alberta
Comprehensive annual care plan
Comprehensive annual care plan – Follow up
Standard Medication Management Review
Standard Medication Management Review – Follow up
Standard Medication Management Review – Diabetes Specific Care Plan
Standard Medication Management Review – Tobacco Cessation Specific Care Plan
Administration of Drug by Injection
Prescription Adaptation
Immunization (flu)
Prescription Renewal
Prescription Emergency
Prescribing at Initial Access or to Manage Ongoing Therapy
Refusal to Fill
Trial Prescription

Saskatchewan
Medication Assessment
Interim Supplies – Continuing of Existing Prescription
Unable to Access Supplies – Continuing of Existing Prescription
Emergency Situation – Continuing of Existing Prescription
Insufficient Information
Alter Dosage
Drug Reconciliation
Minor Ailments:
Atopic dermatitis
Dysmenorrhea
Gastroesophageal Reflux Disease (GERD)
Dyspepsia
Musculoskeletal strains and sprains
Headache
Superficial bacterial skin infections
Hemorrhoids
Tinea skin infections (tinea corporis, tinea cruris, tinea pedis)
Minor Acne
Cold Sores
Insect Bites
Allergic Rhinitis
Diaper Dermatitis
Oral Aphthous Ulcer
Oral Thrush
Emergency Contraceptive Prescribing
Refusal to Fill
Smoking Cessation
Compliance Packaging
Immunization (flu)

Ontario
MedsCheck
MedsCheck Follow Up
MedsCheck for Diabetes
MedsCheck for Diabetes Follow Up
MedsCheck at Home
MedsCheck for Long Term Resident
MedsCheck for Long Term Resident Follow Up
Pharmaceutical Opinion
Immunization (flu shots)
Smoking Cessation – First Consultation
Smoking Cessation – Primary Follow Up
Smoking Cessation – Secondary Follow Up

Newfoundland and Labrador
Medication Management – Adapting
Medication Management – Change Dosage or Quantity
Medication Management – Complete Missing Information
Medication Management – Non-Formulary Generic Substitution
Medication Management – Diabetes
Medication Management – Multiple Medications
Antibiotics Counselling – Short Term
COPD - Newly Diagnosed Medication Adherence
Immunizations (Flu Shots and All Injections)
Prescribing (Pending)
Emergency Prescribing
Refusals to Fill
Therapeutic Substitutions

PEI
Renewal for Continuity of Care
Medication Review and Follow Up
Medication Review (Diabetes) and Follow Up
Refusal to Fill
Medication Management – Provide an Interim Supply
Medication Management – Extending a Prescription
Compliance Packaging
Flu Shots
Prescription Adaptation
Therapeutic Substitution

Nova Scotia
Advanced Medication Review
Basic Medication Review
Medication Review Follow Up
Prescription Adaption
Refusal to Fill (Prescription Monitoring Program)
Therapeutic Substitution (one allowable for PPIs)
Immunization (flu shots)
Prescription Renewal – Continuity of Care
Minor Ailments (demo project for Pharmacare beneficiaries for skin ailments, cold sores and allergic rhinitis.

Quebec
Emergency Prescribing Contraception
Refusal to Fill
Renewal Prescription (packaged)
Renewal Prescription (unpackaged)
Pharmaceutical Opinion
Transmission of Drug Profile
On Call Service
Prescription Substitution
Showing How to Administer Medication
Prescribing Lab Work for Therapeutic Monitoring
Prescribing for Minor Ailments
Prescribing a Medication when No Diagnosis Required
Adjusting a Prescription
Extending a Prescription

British Columbia
Medication Review – Standard
Medication Review – Pharmacist Consultation
Medication Review – Follow Up
Immunization (flu)
Refusal to fill
Prescription Renewal
Prescription Adaptation
Therapeutic Substitution
Trial Prescriptions

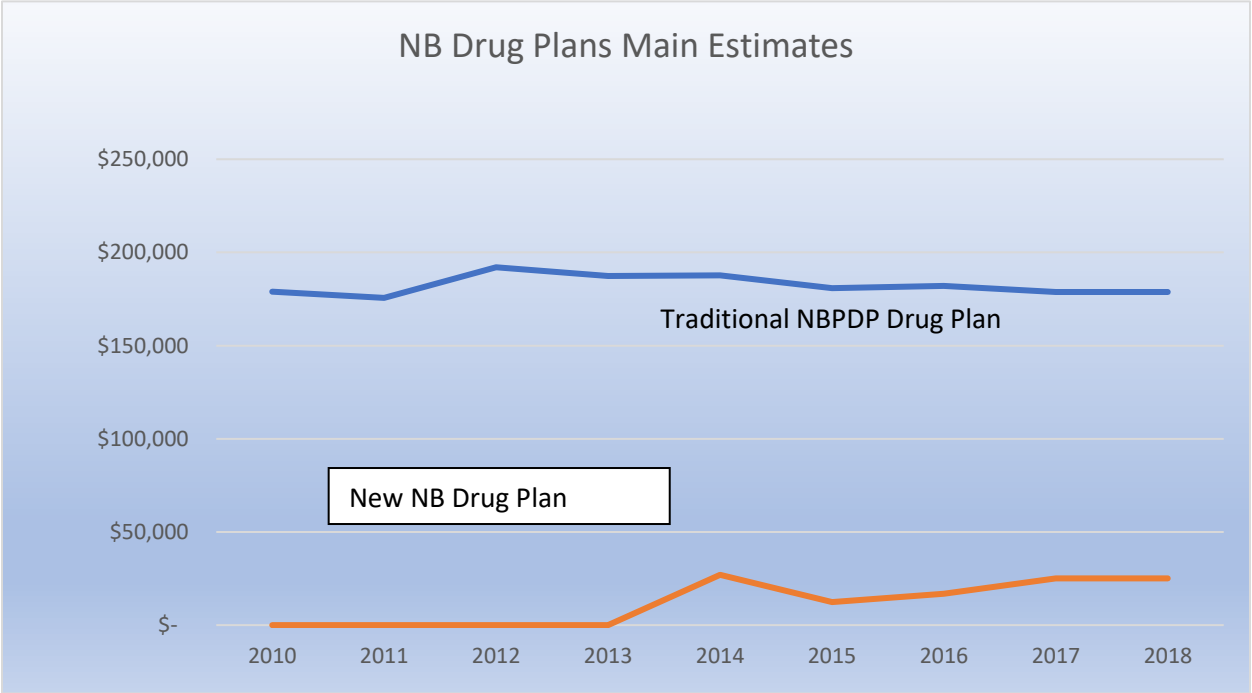
New Brunswick
PharmaCheck
Immunization (flu)

Manitoba
Immunization (flu)

Appendix 3

Annual New Brunswick Drug Plan Expenditures from the Government of New Brunswick 'Main Estimates' between 2010 and 2018 show that even with prescription volumes increasing dramatically, the New Brunswick Prescription Drug Program expenditures are almost exactly the same for 2018/19 as they were in 2010/11.

Total drug expenditures are up in that time frame because of the newly developed NB Drug Plan which was introduced in 2014.



Appendix 4 – Government of Québec funded pharmacist services and fees

Québec: Description of Service	RAMQ Fee
Evaluation for extending a prescription	
EVALUATION - RX EXTENSION 0-30 DAYS	$0
EVALUATION - RX EXTENSION 31+ DAYS	$12.50 (max 1 claim per patient per year)
Evaluation of the need for prescription of medication to treat minor conditions	
EVALUATION - ALLERGIC RHINITIS	$16.00
EVALUATION - HERPES LABIALIS	$16.00
EVALUATION - MINOR ACNE	$16.00
EVALUATION - YEAST VAGINITIS	$16.00
EVALUATION - DIAPER RASH	$16.00
EVALUATION - ATOPIC DERMATITIS (ECZEMA)	$16.00
EVALUATION - ALLERGIC CONJUNCTIVITIS	$16.00
EVALUATION – THRUSH	$16.00
EVALUATION - MOUTH ULCERS	$16.00
EVALUATION - DYSMENORRHEA	$16.00
EVALUATION - HEMORRHOIDS	$16.00
EVALUATION - URINARY INFECTIONS IN WOMEN	$16.00
Evaluation of the need for prescription of medication in cases where diagnosis is not required	
EVALUATION - TRAVELLER'S DIARRHEA	$16.00
EVALUATION - MALARIA PROPHYLAXIS	$16.00
EVALUATION - PERINATAL VITAMIN SUPPLEMENTATION	$16.00
EVALUATION - NAUSEA AND VOMITING RELATED TO PREGNANCY	$16.00
EVALUATION - SMOKING CESSATION	$16.00
EVALUATION - HORMONAL CONTRACEPTION	$16.00
EVALUATION – PEDICULOSIS	$16.00
EVALUATION - ANTIOBIOTIC PROPHYLAXIS IN VALVE CARRIERS	$16.00
EVALUATION - CYTOPROTECTIVE PROPHYLAXIS IN PATIENTS AT RISK	$16.00
EVALUATION - PROPHYLAXIS OF ACUTE MOUNTAIN SICKNESS	$16.00
Prescription adjustment to ensure achievement of therapeutic targets – Initial visit	
INITIAL EVALUATION - HYPERTENSION	$15.50
INITIAL EVALUATION - DYSLIPIDEMIA	$15.50
INITIAL EVALUATION - HYPOTHYROIDISM	$15.50
INITIAL EVALUATION - NON-INSULIN-DEPENDENT DIABETES	$15.50
INITIAL EVALUATION - PROPHYLACTIC MIGRAINE TREATMENT	$15.50
INITIAL EVALUATION - INSULIN-DEPENDENT DIABETES	$15.50
INITIAL EVALUATION - MULTIPLE HEALTH PROBLEMS	$19.50
INITIAL EVALUATION - ANTICOAGULANT THERAPY	$18.50
Prescription adjustment to ensure achievement of therapeutic targets – Follow-up visits	
FOLLOW-UP EVALUATION - HYPERTENSION	$20.00/visit (max 2 claims per year)
ADDITIONAL FOLLOW-UP EVALUATION - HYPERTENSION	$10.00/visit (max 2 claims per year)
FOLLOW-UP EVALUATION - DYSLIPIDEMIA	$20.00/visit (max 2 claims per year)
ADDITIONAL FOLLOW-UP EVALUATION - DYSLIPIDEMIA	$10.00/visit (max 2 claims per year)
FOLLOW-UP EVALUATION - HYPOTHYROIDISM	$20.00/visit (max 2 claims per year)
ADDITIONAL FOLLOW-UP EVALUATION - HYPOTHYROIDISM	$10.00/visit (max 2 claims per year)
FOLLOW-UP EVALUATION - NON-INSULIN-DEPENDENT DIABETES	$20.00/visit (max 2 claims per year)
ADDITIONAL FOLLOW-UP EVALUATION - NON-INSULIN-DEPENDENT DIABETES	$10.00/visit (max 2 claims per year)
FOLLOW-UP EVALUATION - PROPHYLACTIC MIGRAINE TREATMENT	$20.00/visit (max 2 claims per year)

ADDITIONAL FOLLOW-UP EVALUATION - PROPHYLACTIC MIGRAINE TREATMENT	$10.00/visit (max 2 claims per year)
FOLLOW-UP EVALUATION - INSULIN-DEPENDENT DIABETES	$16.67/visit (max 3 claims per year)
ADDITIONAL FOLLOW-UP EVALUATION - INSULIN-DEPENDENT DIABETES	$8.33/visit (max 3 claims per year)
MONTHLY FOLLOW-UP EVALUATION - ANTICOAGULANT THERAPY	$16.00/month
Prescription adjustment to ensure achievement of therapeutic targets – End of treatment	
END OF TREATMENT	$0
Other professional activities	
EVALUATION - INSTRUCTION ON ADMINISTRATION OF MEDICATION	$0
EVALUATION - ADJUSTMENT - OTHER CIRCUMSTANCES	$0
EVALUATION - PRESCRIPTION OF LABORATORY ANALYSIS	$0
EVALUATION - THERAPEUTIC SUBSTITUTION	$0

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