

APRIL 2016

Recognizing and focusing on population health priorities





Why should we be concerned by the poor health status of New Brunswickers?

In 2016, the NBHC is reporting again that New Brunswickers are among the unhealthiest when compared to all other provinces in Canada. While many citizens may have heard this before and could find it discouraging, the importance of recognizing the issue and addressing it in a focused and sustained way simply cannot be understated.

As individuals, continuing on this same course means that many of us will have a shorter life, or that we will age with a poorer quality of life.

As a province, continuing on this same course means there will be implications to many other services that our taxes pay for and that we cherish. The more unhealthy we are, the more we will need expensive health services, including long-term care. The need for these services is projected to grow, but the tax base needed to fund them (as influenced by the availability of a young, healthy and productive workforce) may not be sufficient. This can also have significant implications for other government services as the money needed to fund the health services will have to come from reducing funding of other services, such as education, roads, tourism, environment and social service programs.

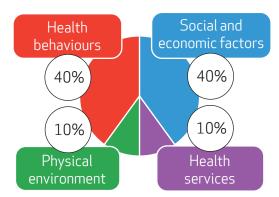
According to the population health model generally recognized in the province (Figure 1), health behaviours have a 40% influence on how long and how well we live. Adopting healthier behaviours at all ages is key as it can help prevent the appearance of chronic health conditions early in life, as well as avoid complications for those who already have chronic diseases. In addition, having all health service providers supporting timely access to health services and preventative services is also key.

Population health priorities identified by the NBHC

- Achieving healthy weights
- Lowering high blood pressure rates
- Improving mental health
- Preventing injuries
- Achieving tobacco-free living

Interestingly, health services only have a 10% influence on the health of the population. Despite this, it is consuming 41% of the entire provincial government budget.

Figure 1. Health determinants and the percentage of their influence on health outcomes



Health services receive **41%** of New Brunswick's provincial budget

If, as New Brunswick citizens and health service providers, we improve our collective efforts towards population health priorities, we can have significant influence on how long or how well we live! That is a great start in changing the present course.

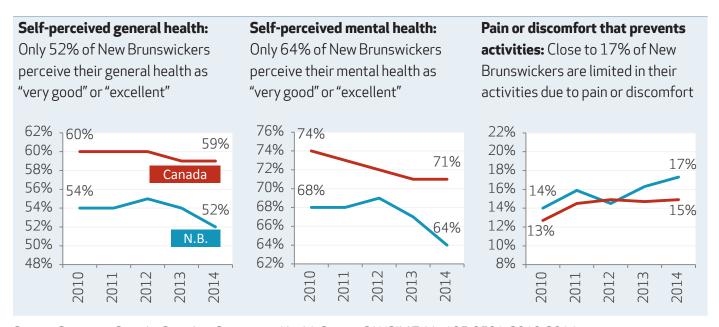
Health in New Brunswick: An urgent matter

The general health and mental health status of New Brunswickers continues to rank us at the bottom of all the Canadian provinces. Based on $2015 \, \text{data}^{[1]}$, New Brunswick ranks last among the $10 \, \text{provinces}$ on the percentage of the population who perceive their health as "very good" or "excellent" (52% in New Brunswick compared to 59% in Canada). In addition, only 64% of New Brunswickers perceive their mental health as "very good" or "excellent", compared to 71% in Canada (ranks 10^{th} out of $10 \, \text{provinces}$).

For the level of disability as measured by pain or discomfort preventing activities, New Brunswick ranks 9^{th} out of 10 provinces.

All these indicators are moving in the wrong direction, and this can potentially increase demand on health services.

Figure 2. Why do we say New Brunwickers are unhealthy?



Source: Statistics Canada, Canadian Community Health Survey, CANSIM Table 105-0501, 2010-2014.

Did you know? More than one in three New Brunwickers (36%) aged 15 and above have been diagnosed at one point in their life with a mental health disorder or substance abuse. That amounts to more than 222,000 individuals overall. [2] On a yearly basis, roughly 68,000 New Brunswickers seek mental health services.

Contributing factors to poor health in New Brunswick

1) Unhealthy behaviours

A major determinant to poor health, and specifically to the increase in chronic health conditions observed in New Brunswick, is the adoption of an unhealthy lifestyle. Although the vast majority of citizens recognize that their own health behaviours have the greatest impact on their overall health^[3], the necessary cultural shift towards adopting better health behaviours has not materialized. Some slow improvement has been observed in the area of smoking and heavy drinking; however, obesity rates continue to increase, as in the rest of Canada, with physical activity and healthy eating remaining unchanged.^[4]

Figure 3. Changes in health behaviours

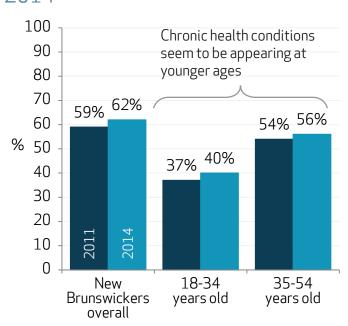
Percentage of citizens who are current smokers (daily or occasional, 12 years and above)			
	2007/08	2013/14	
N.B.	23%	21% ▼	
Canada	22%	19% ▼	

Percentage of adults who are obese (from self-reported BMI)				
(18 years old and above)				
	2007/08	2013/14		
N.B.	22%	26%	Δ	
Canada	17%	20%	Δ	

2) More chronic health conditions at a younger age

Over the past decades, there has been a significant increase in the development of various chronic health conditions, which can contribute to mental and physical health issues. This can now be observed in the earlier age groups (see Figure 4).

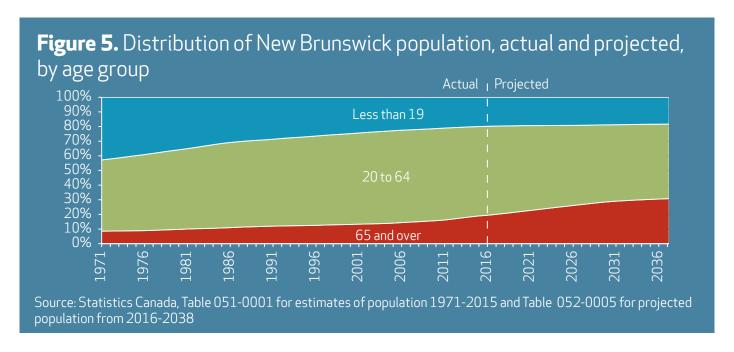
Figure 4. Percentage of New Brunswickers with at least one chronic health condition, in 2011 and 2014



Source: New Brunswick Health Council, "New Brunswickers' Experiences With Primary Health Services," 2014.

An aging population

The influence of an aging population can't be ignored in the trends related to physical and mental health status. The world's population is shifting towards an older population. In 2010, there were 524 million people who were aged 65 or older (representing 8% of the world's population). By 2050, this number is expected to nearly triple to about 1.5 billion (16% of the world's population). [5]



New Brunswick is not an exception to this phenomenon. New Brunswick has the oldest population in the country (19% of population aged 65 and older, compared to 16% in Canada^[6]). It was estimated that in 2011, there was a ratio of 3.9 individuals of the working group (20-64) for each senior. In 2020, it is estimated that in New Brunswick, this ratio will be 2.6 to 1.^[7]

As older people tend to have more chronic health conditions, a higher proportion of seniors in the population means that we will have to respond to this growing need.

3) A health system that does not respond to population health needs

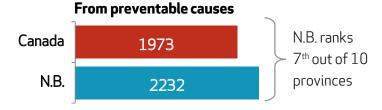
Despite the reality of an older and sicker population, the health system in New Brunswick does not seem to be properly addressing the challenges. Publicly financed health services have not evolved in line with population health needs, trends and challenges.

In the last few years, the NBHC has learned through monitoring and evaluation efforts that when it comes to our population's health, New Brunswick seems to fare well on avoidable mortality due to *treatable* causes (ranking 3rd out of 10 provinces), yet it does not fare as well on avoidable mortality due to *preventable* causes (7th out of 10).^[8] Preventable conditions like lung cancer, heart disease, suicide, COPD and transport accidents are the five leading causes of avoidable mortality in New Brunswick.^[9]

Simply stated, if you are really sick or require urgent and often expensive treatment, this province can take good care of you. On the other hand, more proactive community health services, which are targeted at preventing the leading causes of avoidable mortality, are needed to reduce the number of people suffering from these conditions, and consequently can save lives of New Brunswickers.

Figure 6. Potential years of life lost (PYLL) per 100,000 population from treatable and preventable causes





Source: Statistics Canada, Canadian Vital Statistics - Death Database and Demography Division (population estimates), CANSIM Table 102-4311, 2009-2011

Primary health and mental health

Primary health services have consistently received the lowest overall performance grade in the NBHC's annual Health System Report Card, indicating they are the weakest link in New Brunswick's publicly funded health services. Furthermore, the latest edition of the report card in 2014 showed that mental health and addiction services are also another weak element. [10]

Responding to emergencies

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The health system is currently reacting to what's coming through hospitals doors rather than redesigning around community health services, which would help reduce the number of cases that need to be responded to.

Figure 7. Publically funded health services in New Brunswick

Publically financed community health services

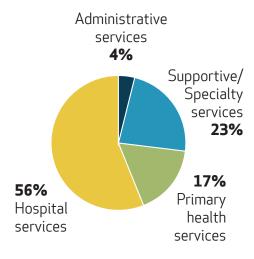
Primary health services

- Prescription Drug Program
- Ambulance services
- Public Health
- Community health centres and health centres
- Physicians
- Wellness branch from Social Development

Supportive/Specialty

- Mental health and addictions
- Extra-Mural Program
- Rehabilitation services
- Seniors Rehabilitative Equipment Program
- Physicians
- Long Term Care from Social Development

Distribution of public health expenditures by sector (fiscal year 2013/2014)



Source: NBHC in-house calculation using multiple sources from the Department of Health and supplemental data

Hospital services (acute care)

- Hospital services (including emergency room)
- Psychiatric facilities
- Out-of-province hospital payments
- Physicians

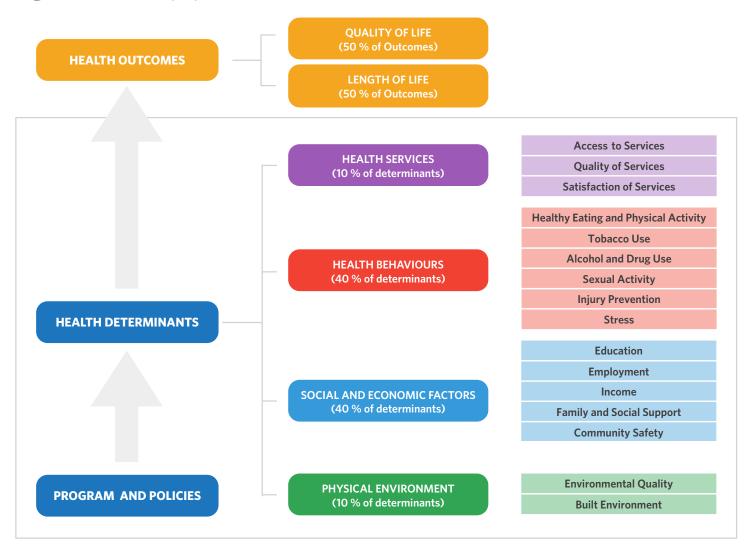
Administrative services from Department of Health

- Capital equipment and capital construction
- Administration services

Primary health services as the weakest link

- Although New Brunswick has one of the highest rates of "having a family physician", New Brunswickers still find it harder to see their family doctors
- Flu shots for the elderly are on the decline
- Despite trending in the right direction, many people are still being hospitalized for conditions that could have been avoided with better prevention and care outside the hospital setting

Figure 8. NBHC's population health model



What can be done to help New Brunswickers become healthier?

In light of the overall poor population health status in New Brunswick, and taking into consideration the trends around health behaviours, chronic health conditions, aging, and health services, a legitimate question would be: **How can New Brunswick better respond to the projected challenges in population health?**

Citizens can adopt healthy behaviours

Mahatma Gandhi once said: "You must be the change you want to see in the world", therefore, changing the status of population health starts with individual health behaviours.

Health behaviours have a 40% influence on health outcomes, which implies significant citizen accountability to overall population health.

Accordingly, citizens have a role to play in addressing this challenge.

In order to curb the increasing prevalence rates of chronic health conditions, New Brunswick needs to control the rates of obesity and smoking; therefore, New Brunswickers are encouraged to pursue healthier eating habits (e.g. eating more fruit and vegetables and drinking less sweetened beverages), and adopt a more active and tobacco-free life. Failing to achieve this transformation will compromise the potential for better population health, and will lead to unsustainable trends in the future with a sicker population needing more health services.

Health services can embed illness prevention and health promotion, and be more citizen-centered

Illness prevention and health promotion

Starting earlier in life in maintaining good physical and mental function and general well-being is one of our greatest opportunities to strengthen illness prevention. This of course will require the engagement of all citizens as well as all communities and government departments in buying in to this citizen-centred journey.

Prevention and health promotion is often perceived as a mandate of public health programs; however, a comprehensive approach to population health requires efforts across the continuum of health, with interventions targeting the whole population, the individuals at highest risk and those with early or established disease.^[11]

Examples of preventative services

- 1. Blood pressure, cholesterol, sugar and weight checks
- 2. Vaccinations (e.g. immunizations and flushots)
- 3. Screening tests such as mammograms, colonoscopies, pap tests and toddler early childhood assessments
- 4. Being proactive in talking with health services providers on how to maintain or achieve a healthy lifestyle

Citizen-centered health services

According to the World Health Organization, "transforming how health services are delivered is necessary to accelerate gains in health outcomes in an era of chronic diseases".[12] One of the key pillars of this transformation is "moving towards peoplecentered care by enabling patient self-management where appropriate, as well as delivery of care as close to home as is safe and cost-effective".

When faced with negative population health trends, a citizen-centered approach ensures that any barriers to improved health are identified and addressed through maximizing the use of available resources. Achieving the transition into a citizen-centered system requires developing actionable, attainable and sustainable practices across all health sectors, and all programs and services, and engaging all health professionals and administrative staff, empowering those interacting directly with the citizen to individualize their experience.^[13]

A shift towards a citizen-centered health system implies a shift away from a focus on hospital services (acute care) towards a focus on primary health and other community health services, strengthening the health system contact points which citizens use most often. Achieving that shift requires reallocation of resources, expansion of primary health and other community health services (including public health services), and ensuring an appropriate continuum of care with stronger care coordination across providers. [12] Inter-professional teams, partnerships with communities, a clear governance structure and an appropriate funding / resource allocation model will support the sustainability of that shift.

The role of health professionals (family physicians, primary and community care professionals and support staff) is vital to the success of the shift to citizen-centered health services. For example,

training health professionals to address barriers like the patient's literacy level or poor coordination with other social services will contribute to improved patient outcomes. More specifically, addressing literacy issues can help avoid errors or harm in taking medications, and coordinating with social services can support patients in affording their medications or treatment.

The health system can plan in a proactive and integrated way

The demographic trends have not taken the system by surprise; they have been expected and should have been better taken into account during planning efforts. The influence of an aging and a sicker population cannot be ignored in a fiscally challenging environment; proactive planning is necessary to manage, curb and mitigate current trends in population health.

Addressing factors of long-term nature like demographics, health behaviours, and social, economic and environmental factors requires a multipronged and integrated approach among all health system partners. That will entail a wide scope of partnerships among stakeholders, and the adoption of effective policy tools to address all determinants of population health.

Regional Health Authorities have a legal requirement in determining the health needs of the communities they serve. The allocation of resources, according to an in-depth analysis of the community needs, will ensure the provision of services that match the needs of the intended population. Furthermore, the Department of Health has a role to play in supporting these efforts and in ensuring that the resulting information is properly captured in all provincial planning efforts.

Efforts based on population health priorities

New Brunswick needs to break the cycle of deteriorating physical and mental health.

This requires coordinated efforts between all stakeholders and citizens to create a citizen-centered health system; a transformed health system where health promotion and illness prevention is the strongest component driven by strong primary health and community health services, and where citizens are empowered and adopt healthy lifestyles and behaviours.

The observed trends in population health and health service utilization have repercussions on health system expenditure with a projected increase in demand for health services, driven by both the aging population as well as the increase in the prevalence rates of chronic diseases.

Evidence is a major enabler to the shift much needed in the health system. Data and information provided by many stakeholders in the system, including by the NBHC, can help provincial leaders, providers and communities understand the situation, identify priorities and make the right decisions to redesign services to match population needs, and thus curb the deterioration of population health in New Brunswick.

Population health priorities have been identified by the NBHC, which can be used by stakeholders in the health promotion and illness prevention endeavour. Addressing those priorities within an integrated planning scheme and supported by a strong coordination of efforts among stakeholders and citizens will enable New Brunswick to dismantle the myth that an aging population is a sick population^[14], and will set the stage for healthy aging where

citizens enjoy positive health and mental health status regardless of age.

The NBHC has developed various tools to provide data and information at different scales and for different purposes.

- The Population Health Snapshot provides indicators, covering all determinants of health, that compare New Brunswick to the Canadian average and also compare the seven health zones.
- The "My Community at a Glance" community profiles present data at the local level, which has proven to be valuable for communitylevel discussions, as well as for health system planning and policy development.

These tools are available on the NBHC website under "Resources and Publications"

Sustainable improvement to health service quality requires initiatives that are embedded in an understanding of the health status and trends of the targeted population. Coordinated efforts require a minimum of awareness and common understanding among stakeholders of the shared priorities. Currently, the dominating approach to any priority is very reactive in nature. The intended outcomes, whether from a population health or health services quality perspective, are not clearly defined.

It is often stated that provincial health systems are not citizen centered, often stated and generally recognized but rarely with an appreciation of the cost of this reality. Publicly funded health services are failing to meet the needs of too many citizens. When these citizens and their needs are recognized, the challenge appears to be in managing the execution of these required changes throughout the province.

In light of the significant fiscal challenges ahead for the province, the provincial government is faced with many difficult decisions. Publicly funded health services are highly valued by citizens and any proposal that appears to reduce these services is met with strong public opposition. This is one more reason why a stronger collective understanding can be beneficial to having a sustainable approach for improving the quality of health services. The current approach is delivering unacceptable results.

The good news is that there is already a wealth of resources to be leveraged. From the perspective of publicly financed health services at the provincial level, New Brunswick compares very favorably on resource levels and spending per capita.

Furthermore, several New Brunswick communities have demonstrated the ability to implement leading health service practices. The required changes must include a strong grasp of population health trends, of community health services needs and sustained efforts in leveraging local resources towards clear priorities. These efforts must also be grounded in a strong commitment to public accountability.

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