



New Brunswick Health Council | Conseil de la santé du Nouveau-Brunswick

Engage. Evaluate. Inform. Recommend.
Engager. Évaluer. Informer. Recommander.

New Brunswick Health System Report Card 2014



New Brunswickers have a right to be aware of the decisions being made, to be part of the decision-making process, and to be aware of the outcomes delivered by the health system and its cost.

The New Brunswick Health Council will foster this transparency, engagement, and accountability by engaging citizens in a meaningful dialogue, measuring, monitoring, and evaluating population health and health service quality, informing citizens on health system's performance and recommending improvements to health system partners.

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How to cite this document:

New Brunswick Health Council, *New Brunswick Health System Report Card 2014* (NBHC 2014).

Cette publication est disponible en français sous le titre:

Conseil de la santé du Nouveau-Brunswick, *Fiche de rendement du système de santé du Nouveau-Brunswick 2014* (CSNB 2014)



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Executive Summary

Why measure the performance of the New Brunswick health system?

Performance measurement information is becoming increasingly important for provincial governments, particularly in helping to chart their progress in increasingly frugal times. Learning about how the health system performs in New Brunswick can help in understanding how different programs and services are performing within a particular sector. But more importantly, it helps understand how sectors relate to each other as part of an integrated system which is meant to respond to the needs of the population to support the improvement of health outcomes.

The New Brunswick Health Council (NBHC) is delivering its fifth ***New Brunswick Health System Report Card*** as part of its commitment to providing the citizens of New Brunswick with important information about the quality of health services delivered in the province. Our health system's performance remains at an overall "C" grade, which continues to place us as an average-performing province.

Areas of **below-average performance** are:

- Coverage of prescription drugs
- Wait times
- Screening tests or appropriateness of tests and procedures
- Readmission rates to hospitals
- Use of emergency rooms and hospital beds for cases that could be taken care of in the community
- Communication and transitions across the continuum of care or integration across services



Also of note in this year's report card, **safety has dropped from an "A" to a "C" grade**. This drop in performance was driven by areas such as:

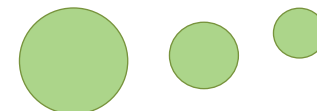
- Inappropriate drug prescribing to seniors
- Hospitalized hip fracture event rates
- In-hospital hip fracture event rates
- Intentional self-harm or suicide death rates
- Lack of use of electronic medical records to enter and retrieve a patient's clinical notes

Primary Health Services Sector Not Improving

Improving primary health services was one of three recommendations made to the Minister of Health in 2011. In this year's report, the NBHC notes **a lack of overall improvement in primary health services** (which are defined as the first place people go when they need advice or have health concerns). Although there is a modest trend in the right direction for some of these indicators, the contributions of these improvements are not significant enough to compete with national trends. More importantly, the observed trends **do not signal a fundamental shift towards primary health services reform** in New Brunswick, a shift which is needed to reduce demand for acute care or hospital services and consequently help curb health system costs.

Program and Service Expenditures

Citizens have always and continue to request more transparency and understanding of health system costs. In this year's report, the NBHC reviewed program and service expenditures since 2010. The analysis reveals that **the proportion of money being allocated and expended to primary health services has not changed** over the past five years. The total health system expenditures has increased from 2.9 to 3.4 billion dollars, but the manner in which we continue to allocate resources and deliver services has remained the same.



Observations on Primary Health Services by Quality Dimension

- **Accessibility** to primary health services does not demonstrate major improvements in 2014 as compared to the situation before 2011. This fact highlights the limited health system response to a key message from citizens regarding the need for improved accessibility to primary health services.
- **Appropriateness** of primary health services does not appear to have witnessed significant improvements. Cervical cancer screening (pap smear test) seems to be trending in the wrong direction in New Brunswick overall; breast cancer screening rate (mammogram) has not shown a major difference, but colorectal cancer screening rate and flu shots for seniors however seem to be trending in the right direction.
- **Effectiveness** of primary health services as measured by the rate of avoidable hospitalizations (ambulatory care sensitive conditions) continues to trend in the right direction, and across all health zones. However, there is still significant room for improvement given that the provincial rate is still 1.5 times the Canadian average.
- **Efficiency** in the provision of primary health services (as measured by the % of less urgent and non-urgent cases showing up in the emergency room) does not demonstrate considerable improvement on average. The only exceptions worth noting are the decreases in Zones 5 and 7 which merit further exploration in identifying the factors contributing to the improvement.
- **Safety** of primary health services seems to be slowly trending in the right direction in general, with slightly fewer people reporting community error/ harm rates, and an overall modest decrease in the rate of injury hospitalizations.
- Geographic **equity** in the quality of primary health services should receive more attention from health system leaders and managers. According to the selected indicators assessed for equity in this analysis, the widest inequity gaps seem to be in the effectiveness and safety of primary health services.



Costs, Quality and Outcomes

The improvement in health system performance goes beyond just measuring health services quality. It is important to pursue health system performance by simultaneously reviewing costs or resources together with the quality of health services (as measured through our six dimensions of quality) and health outcomes in a planned and strategic manner. This performance management structure needs to acknowledge different levels of functions, alignment and accountability. These levels include: individual or staff lens measures, operational or site specific measures, tactical or regional measures, strategic or provincial measures and ultimately population health measures or public lens. It is important to note that in the absence of a performance management framework for the health system in New Brunswick, the NBHC has been limited to “status reporting” or data collection and analysis and not necessarily performance reporting. Performance measurement has greater relevance when there is an effective performance management structure in place.

Lack of integration and coordination of policies, plans, programs and initiatives in the field of primary health in New Brunswick, to support transformational change have contributed to the status quo in the distribution of resources, the quality of primary health services and the health outcomes being experienced by the citizens of New Brunswick.



In Focus: Primary Health Services

Introduction

Performance measurement information is becoming increasingly important for provincial governments, particularly in helping to chart their progress in increasingly frugal times. Learning about how the health system performs in New Brunswick can help in understanding how different programs and services are performing within a particular sector. But more importantly, it helps understand how sectors relate to each other as part of an integrated system which is meant to respond to the needs of the population to support the improvement of health outcomes. It is also important to note that reduced quality in health services can have negative consequences to the population which can in turn increase costs to the health system. Therefore, it is important to view health system performance through the lens of cost, quality and outcomes in a planned and strategic manner. In addition, performance measurement is only relevant if there is an effective performance management structure in place.

Different stakeholders contribute to health system performance through their own planning or funding or in the delivery of health services. For the purpose of the NBHC Health System Report Card the key stakeholders responsible for the largest part of these public services include:

Department of Health; Regional Health Authorities (Horizon Health Network and Vitalité Health Network), FacilicorpNB, Ambulance New Brunswick as well as Social Development and Healthy and Inclusive Communities.

The New Brunswick Health Council has reported on health system indicators which compare our province to the best performing province on each of these measures. It is important to note that our provincial average and grade received can certainly highlight areas of concern; but our own provincial average is highly influenced by variable levels of performance within different areas of the province and standards of service by health service providers. Therefore, priorities, policies and resource allocations should be customized and tailored to address gaps in performance and to appropriately meet the demand of the population while addressing their needs.





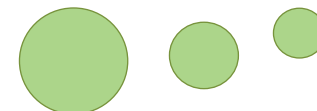
In this report, the NBHC will focus on the performance of the primary health services sector. It is one of the three sectors of health services that we measure and report on in our Health System Report Card. It is usually the first place people go when they need advice or have health concerns. Over 90% of the New Brunswick population has used a service within the primary health sector. These services are usually delivered in the community and by a wide range of providers including general practitioners or family physicians, nurse practitioners, nurses, psychologists, physiotherapists, occupational therapists, pharmacists, public health professionals and other community health workers. Primary health service providers care for their patients across the continuum of programs and services within the health system as well as their patients' life cycle. Elements of primary health services include:

- Providing timely access to care
- Comprehensive whole-person care
- Building longitudinal relationships and treating chronic problems
- Coordinating care with other providers

The main goal of these services is that they are provided at the right time, in the right place, and by the right provider to achieve the best possible outcomes.

In 2011, the NBHC released three recommendations to the New Brunswick Minister of Health under the title of "Moving towards a planned and citizen-centered publicly-funded provincial health care system". These recommendations were based on a province-wide citizen engagement initiative in 2010, and the analysis and review of health system performance (clinical and financial) and population health outcomes.

Primary health services are usually provided at the first point of contact with the health care system, and refer to several types of services that can be provided by many different health professionals, including family doctors, nurses, nurse practitioners, dietitians, physiotherapists, and social workers. Primary health services typically include routine care, care for urgent but minor or common health problems, mental health care, maternity and child care, psychosocial services, liaison with home care, health promotion and disease prevention, nutrition counseling, and end of life care.



RECOMMENDATION #1

The Government of New Brunswick, through the Department of Health, take steps to develop, within the next twelve month period, a multi-year comprehensive and integrated health services plan for the province.

The plan should outline the following: measurable desired health outcomes; measurable service targets (range and volume of services); standards for the level and quality of services; financial and human resources (inputs) required to achieve service targets and the geographical and linguistic allocation of services and resources.

RECOMMENDATION #2

The Government of New Brunswick, through the Department of Health, review the organization and delivery of primary health care in the province with a view to maximizing the utilization of existing human and financial resources.

This review should focus on ways to improve access to care and quality of care, as well as integration with other health services programs, namely hospital services.

RECOMMENDATION #3

The Government of New Brunswick, through the Department of Health, ensure that a concerted strategy is developed to improve health promotion and disease prevention in the province. This strategy should consider the determinants of health, and focus first on four key areas: achieving healthy weights, lowering high blood pressure rates, improving mental health and preventing injuries.

The strategy must identify the organization responsible for the coordination of the work with related stakeholders for an integrated execution of the initiatives undertaken.

The focus for this year's Health System Report Card is to review what has happened over the last few years following these recommendations but with a detailed lens on **recommendation #2**. The originating recommendation was a result of NBHC's measurement and evaluation of the performance of the primary health services sector in previous health system report cards where the sector received a "D" grade. In addition, citizens expressed many concerns regarding their experiences with primary health services based on survey results in 2011. The Minister of Health also identified primary health care as a priority area in 2011, and a discussion paper was released in preparation for a Primary Health Care Summit in fall of 2011.



In addition, it was emphasized that the goal of the delivery of primary health services, should result in making it easier for New Brunswickers to receive the health services they need at the right time, in the right place, and by the right provider to achieve the best possible outcomes.

“The goal of the delivery of primary health services, should result in making it easier for New Brunswickers to receive the health services they need at the right time, in the right place, and by the right provider to achieve the best possible outcomes”

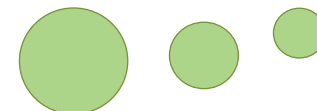
For these reasons, the analysis in this report is looking back at the trends pertaining to the performance of the primary health services sector, and compare those trends –wherever possible- to the Canadian average. The focus also attempts to explore trends by health zones in order to help identify potential zone or geographic contributions to the overall quality of primary health services. It also assists in informing stakeholders on whether programs or initiatives have been effective in responding to citizens’ concerns or experiences.

Have we been making any progress with primary health services in New Brunswick?

The New Brunswick Health System Report Card has measured the performance of the health system sectors (primary health , acute care, supportive/specialty services) through the six quality dimensions which have been clearly identified in the NBHC Act as the areas of focus for performance measurement: accessibility, appropriateness, effectiveness, efficiency, safety and equity.

The observed trends of performance on select primary health indicators from 2009 (or the closest earliest year with available data) until 2013 provide some insights on the direction of primary health services for the province as well as health zones and accordingly they highlight areas of improvement as well as areas of better performance.¹

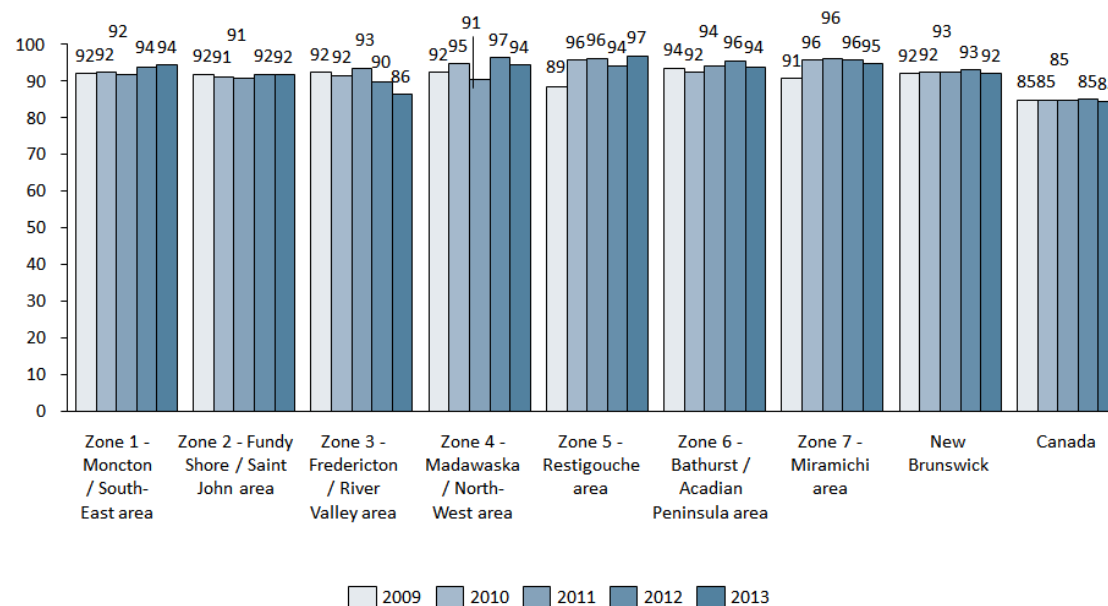
¹ Zone 1: Moncton/South-East Area, Zone 2: Fundy Shore/Saint John Area, Zone 3: Fredericton/River Valley Area
 Zone 4: Madawaska/North-West Area, Zone 5: Restigouche Area, Zone 6: Bathurst/Acadian Peninsula Area
 Zone 7: Miramichi Area



Accessibility

Overall, accessibility indicators in primary health services have not shown major changes. New Brunswick continues to rank high (best) in Canada for the proportion of population **having a regular medical doctor** (92% compared to the Canadian average of 84.5%) (Figure 1); we have more general practitioners per population when compared to national rate (122 vs. 112 per 100,000 population²), but New Brunswick does not rank as high in **contact with a medical doctor** in the past year (Figure 2).

Figure 1. Percentage of New Brunswick population (12 years of age and above) who have a regular medical doctor (%)³

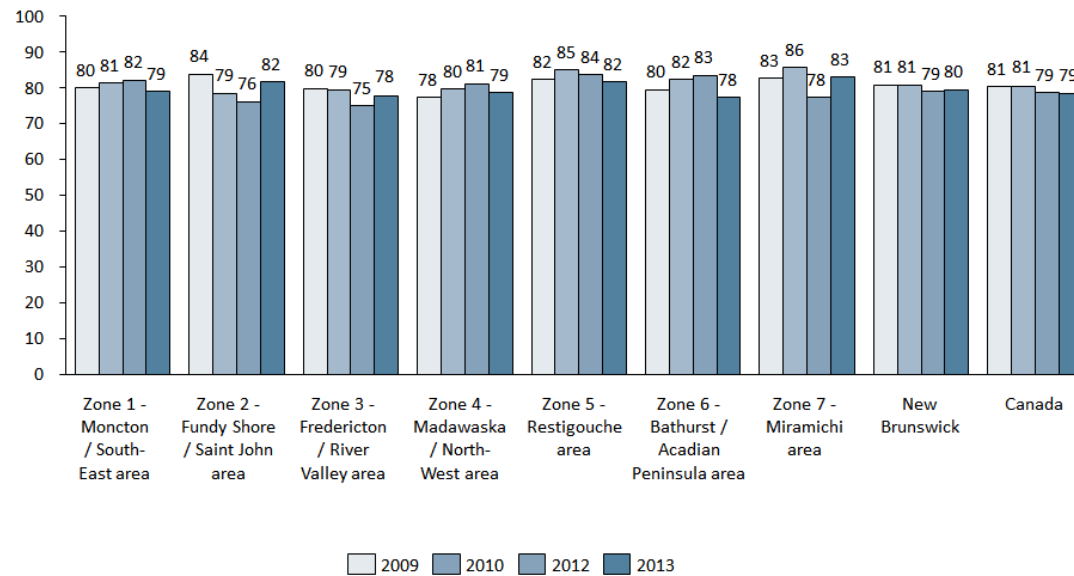


² In house calculation, Physician counts from Scott’s Medical Database, 2013, Canadian Institute for Health Information (CIHI Quick stats) + Statistics Canada, Table 109-5335 for population estimates for the year 2013

³ Statistics Canada, table 105-0501, Canadian Community Health Survey

Regional variations can be observed, with most health zones maintaining the proportion of population with a regular medical doctor, except for Zone 3 that witnessed a drop from 92% in 2010 to 86% in 2013 (Figure 1). Most health zones either maintained or demonstrated a decrease in contact with a medical doctor in the past year (Figure 2).

Figure 2. Percentage of New Brunswick population (12 years of age and above) who contacted a medical doctor in the past 12 months (%)⁴

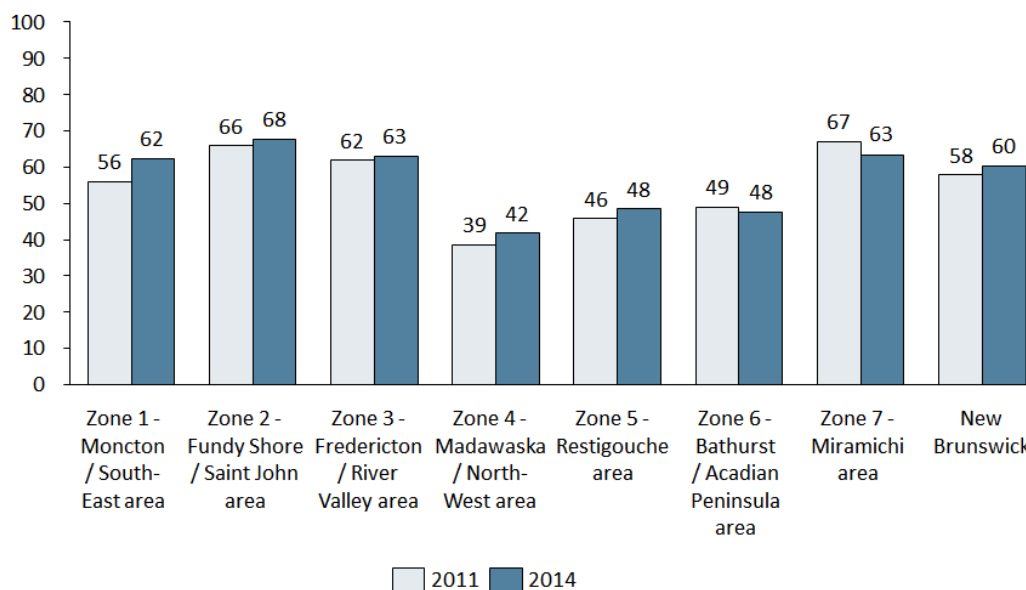


⁴ Statistics Canada, table 105-0501, Canadian Community Health Survey



A small improvement (58 to 60%) can be observed at a provincial level pertaining to the **accessibility to appointments with family doctors within 5 days** (Figure 3). However, regional variations continue to persist as noted in zones 4, 5 and 6 averaging almost 20% lower than other zones in the ability to see their family doctors within 5 days. Inability to get an appointment within five days can be a driver to the higher utilization of other services such as emergency departments or after-hour clinics which may not support continuity and coordination of care and services in particular for citizens with chronic diseases and complex care.

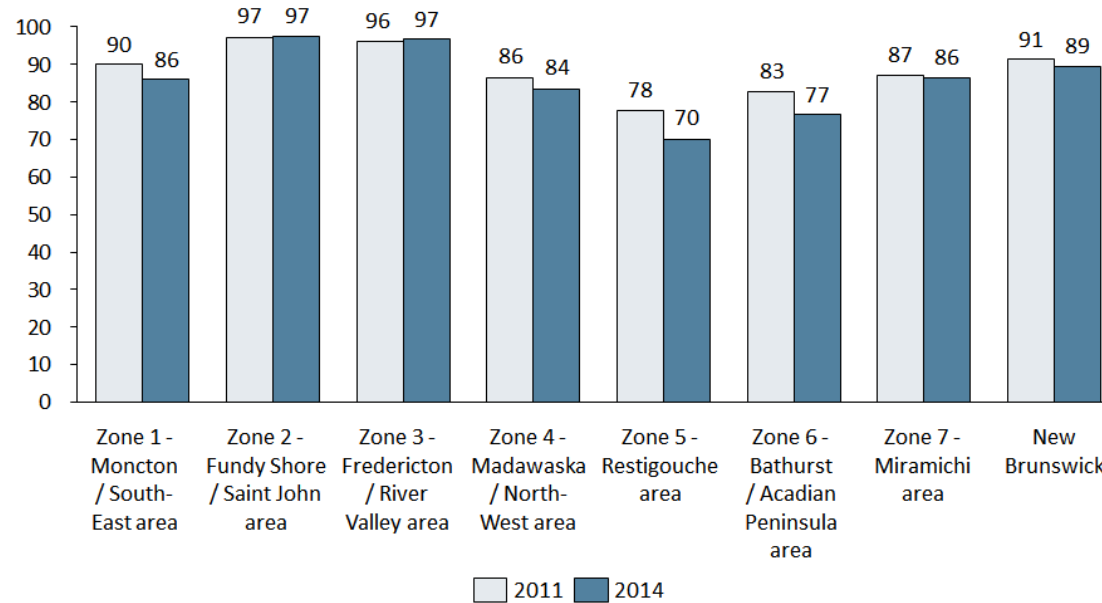
Figure 3. Percentage of New Brunswick population (18 years and above) who can get an appointment with family doctor in 5 days (%)⁵



⁵ New Brunswick Health Council. New Brunswickers’ Experiences with Primary Health Services (2011 & 2014)

Another aspect of accessibility is the language of service. Citizens have the right to receive the service in their language of choice. This aspect of accessibility is especially important in a province that is officially bilingual. According to the findings of the New Brunswick Primary Health Survey, there seems to be a slight decline in the proportion of population **receiving services in the language they prefer** (91% of New Brunswickers in 2011 vs. 89% in 2014). That finding varies by health zone, with some zones demonstrating no change, such as zones 2, 3 and 7, while all other zones demonstrate a decline (Figure 4).

Figure 4. Percentage of New Brunswick population (18 years and above) who received primary health services in their official language of choice (%)⁶



⁶ New Brunswick Health Council. Primary Health Survey (2011 & 2014)

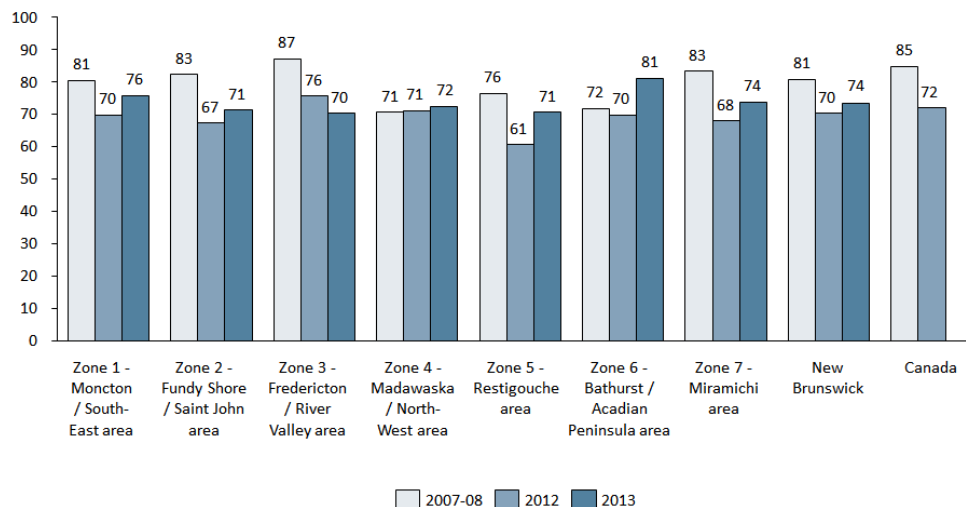


Appropriateness

Screening and standard testing are important in achieving better health outcomes. Comparing the trend in New Brunswick vs. Canada, screening rates (colorectal cancer screening, mammogram, pap test) appear to be decreasing or maintaining the same trend (Figures 3, 4, and 5).

Pap smear testing rates in New Brunswick are lower than Canadian rates and geographically the zones vary from a high of 81% in Zone 6 to a low of 70% in Zone 3.

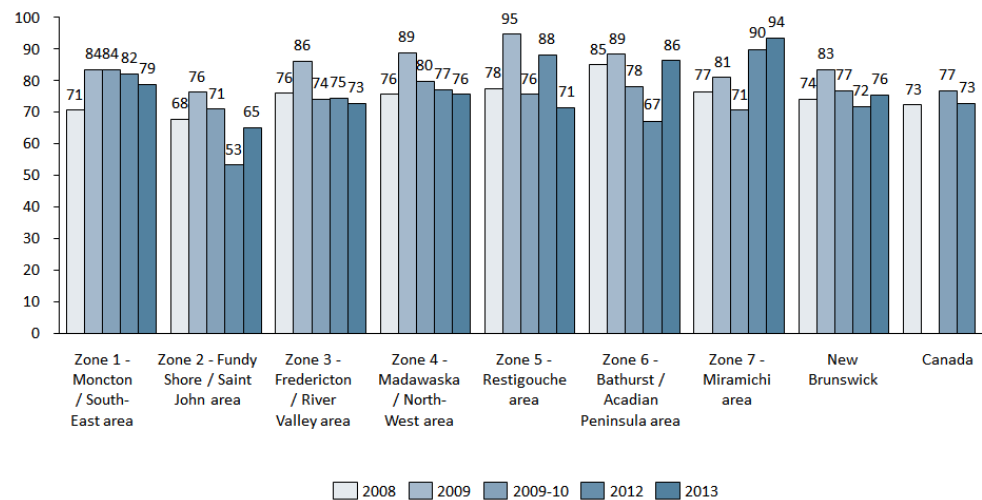
Figure 5. Percentage of females aged 18 to 69 years who had a pap smear done within the last 3 years (%)⁷



⁷ Statistics Canada. Canadian Community Health Survey, through Department of Health

Breast cancer screening (mammogram) demonstrates trends and rates that are similar to Canada. In 2008, New Brunswick (at 74%) ranked best in Canada with zones ranging from 85% to 68%. In 2013, the provincial rate was 76% (values were not available from other provinces), with a wider range across the zones (highest in Zone 7 at 94% and lowest in Zone 2 at 65%). Zone 7 showed the strongest improvement with an increase from 77% in 2008 to 94% in 2013.

Figure 6. Percentage of females aged 50 to 69 years who received a mammogram within the last 2 years (%)⁸

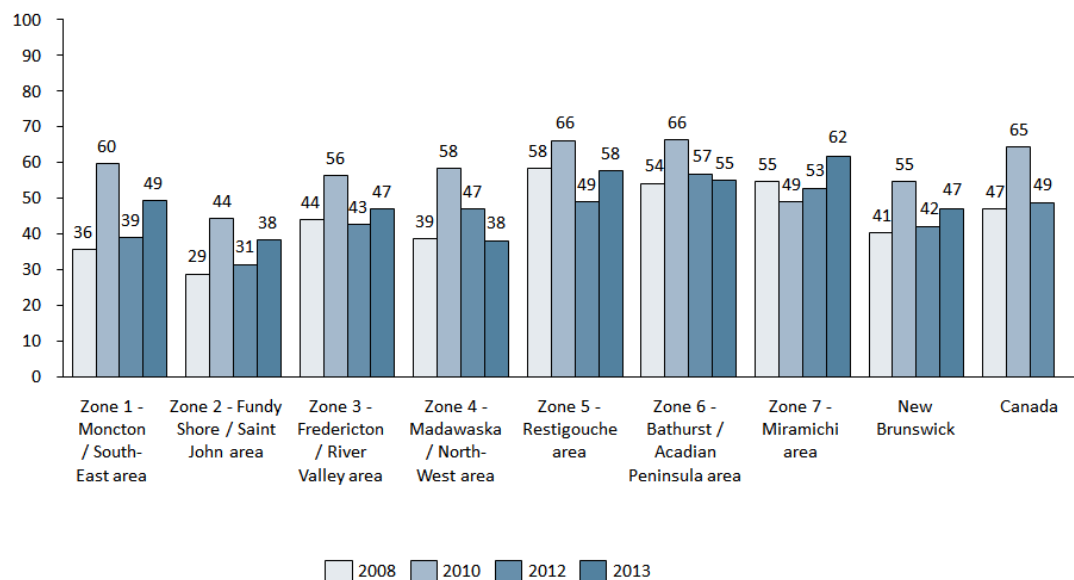


⁸ Statistics Canada. Canadian Community Health Survey, through Department of Health



Colorectal cancer screening in New Brunswick shows a trend in the right direction (comparing the year 2008 to 2013) (Figure 7), with most zones either moving in the right direction or showing no difference. Zone 7 demonstrates the highest screening rate at 62% and zones 2 and 4 with the lowest screening rates at 38%.

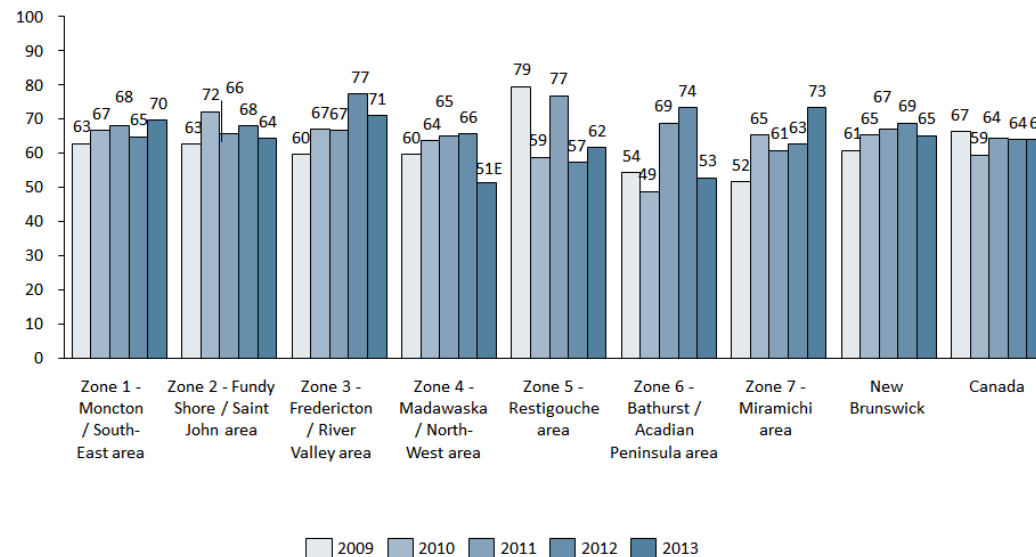
Figure 7. Colorectal cancer screening above age 50 (colonoscopy in the past 5 years or a fecal occult blood test in the past 2 years) (%)⁹



⁹ Statistics Canada. Canadian Community Health Survey, through Department of Health

Influenza among seniors is a health concern since over 50% of seniors who get influenza may require hospitalization. The self-reported **flu shot rates among seniors** for New Brunswick placed the province in 7th worst position out of ten provinces in 2009, with variability among zones ranging from a high of 79% to a low of 52% (Figure 8). Four years later, New Brunswick is demonstrating a higher or improved rate ranking 3rd out of the ten provinces, yet the large variability across the zones remains the same with a high of 73% to a low of 51%. Contributions to our overall provincial improved standing may be explained by year over year improvements in a number of zones particularly zones 3 and 7.

Figure 8. Percent of adults 65 and over who received their flu shot in the last year¹⁰



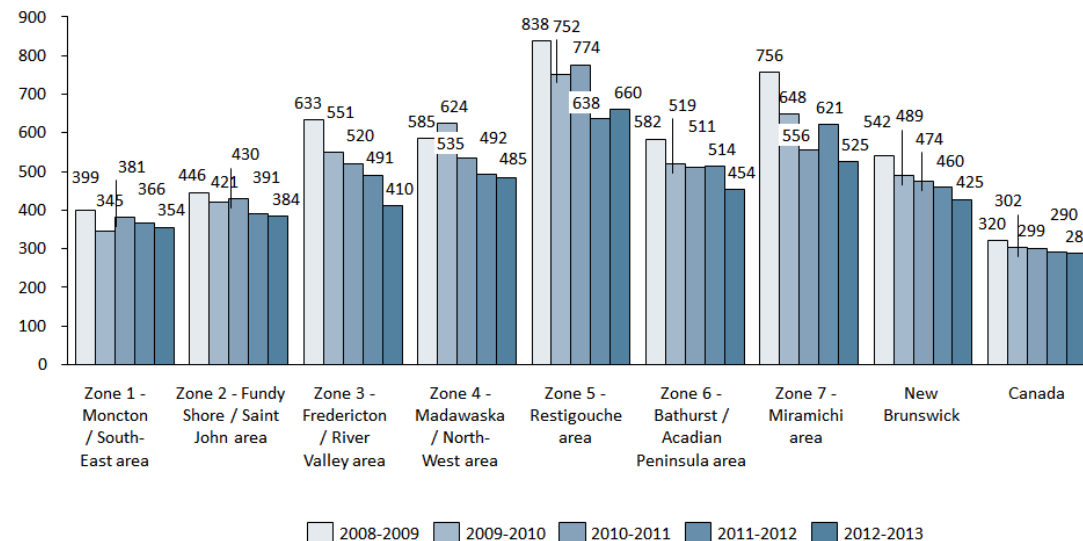
¹⁰ Statistics Canada, Table 105-0501, Canadian Community Health Survey



Effectiveness

The rate of **avoidable hospitalization** (for conditions that can be treated in the community) is one of the indicators of effectiveness of primary health services. These conditions (called ambulatory care sensitive conditions) include angina, asthma, chronic obstructive pulmonary disease, congestive heart failure, diabetes, epilepsy, and hypertensive disease. In 2008-2009, New Brunswick had one of the highest rates of hospitalizations for these conditions in Canada (10th worst out of 10 provinces) and the variability within New Brunswick ranged from 399 to 838 cases per 100,000 population (Figure 9). The national average was 320 cases per 100,000 population. Four years later, New Brunswick as well as all zones, demonstrates a trend in the right direction, but the overall New Brunswick rate still exceeds the national average, ranking 8 of 10 provinces. The regional variability continues but the spread is not as great from a low of 354 cases to a high of 660 cases per 100,000 population. Significant improvements and focus from all zones particularly zones 3, 5 and 7 may have contributed to the province's improved ranking.

Figure 9. *Avoidable hospitalizations -Age-standardized acute care hospitalization rate for ambulatory care sensitive conditions- (per 100,000, 2012-13)¹¹*

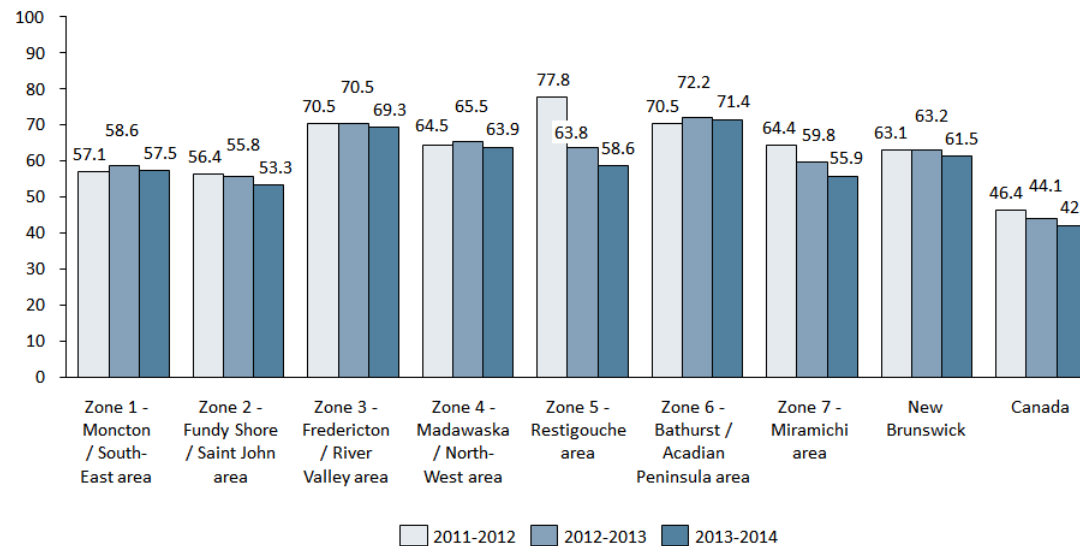


¹¹ Canadian Institute for Health Information, DAD, Demography division, Statistics Canada, MED-ÉCHO. The Health Indicators e-publication

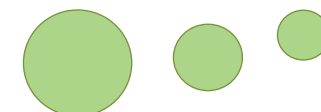
Efficiency

During the fiscal year 2009-2010, 65% of emergency room visits were used for non-urgent cases (**ER triage codes 4 and 5**), and the variability among the zones ranged from 55.6% to 81.5% which signaled an opportunity for review and improvement. In 2013-2014, the rate seems to be moving slowly in the right direction, but the large regional variability continues to persist with zones ranging from 53.3% to 71.4%. Most zones have experienced a decrease but significant decreases were achieved for Zone 5 and Zone 7 (Figure 10).

Figure 10. Percent of triage level 4 and 5 cases (Less urgent and Non-urgent) seen in the emergency room¹²



¹² New Brunswick and zones from Department of Health. Canada from CIHI National Ambulatory Care Reporting System (NACRS): Values based on ED visits from participating facilities in Prince Edward Island, Nova Scotia, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and Yukon

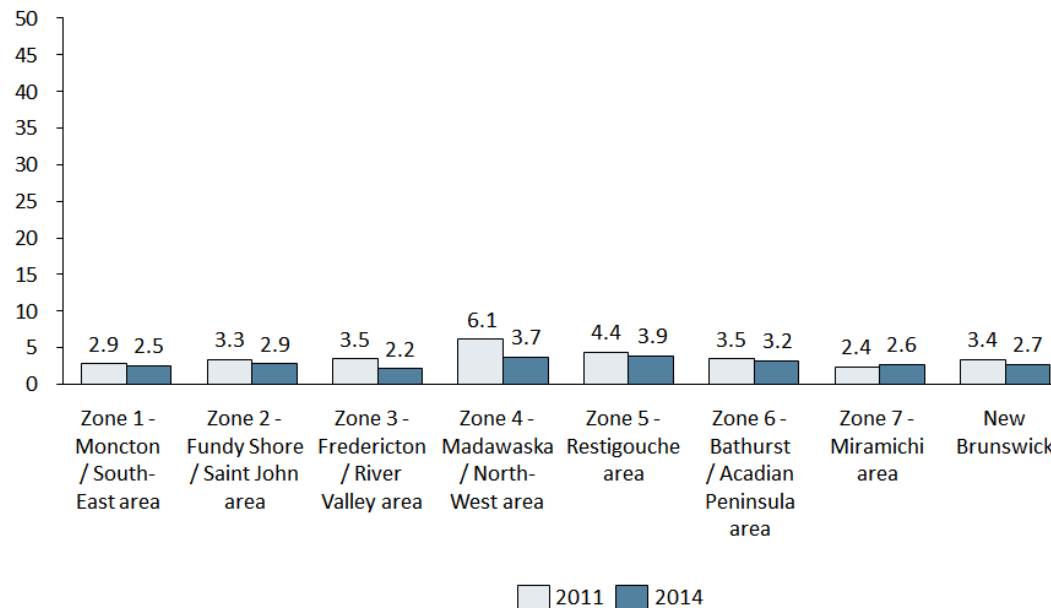


Safety

Safety in primary health services is an important dimension of quality, especially for a population with high prevalence rates of chronic health conditions. Minimizing potential safety risks and preventing errors or harm within the primary health services sector is foundational to the quality of any health service and in ensuring better health outcomes.

In 2011, New Brunswickers reported a 3.4% community errors or harm rate (as a results of health services received outside the hospital setting) (Figure 11) with a range of as low as 2.4% in Zone 7 to more than double that rate in Zone 4 at 6.1%. Four years later, the overall community error/harm rate has dropped to 2.7% provincially, with almost all zones exhibiting a decline and spread of variability among zones narrowing from a low of 2.2% to a high of 3.9%.

Figure 11. Community error / harm rate (excluding hospital stay) (%)¹³

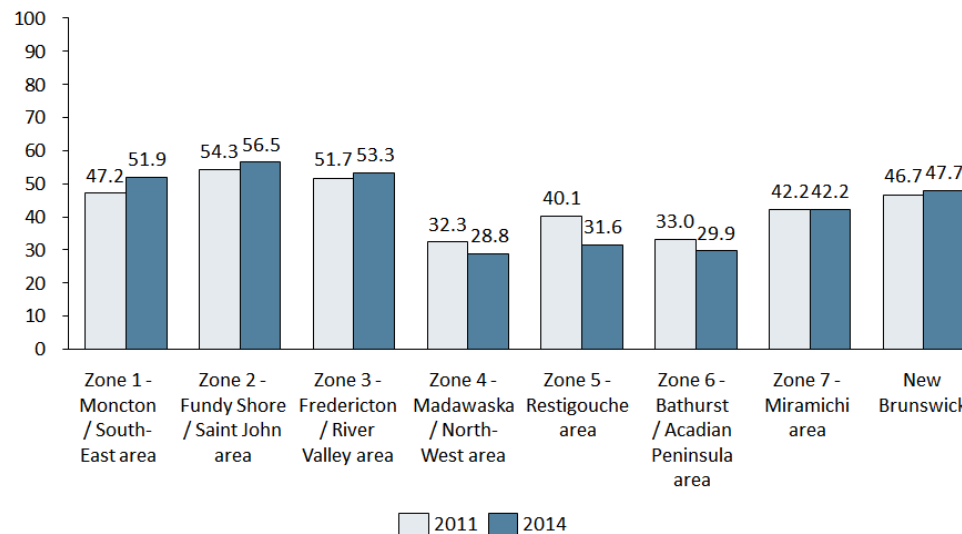


¹³ New Brunswick Health Council. Primary Health Survey (2011 & 2014)

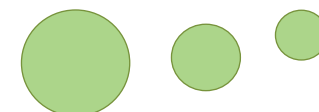
Awareness and understanding of medications can support compliance and improve health outcomes, whereas, the lack of understanding can be detrimental by exposing individuals to possible errors or harm.

More than half of the population in New Brunswick does not seem to be confident about **knowing what their prescribed medications are for** (47% in 2011). This has not changed after three years, and variability still exists among the different zones (Figure 12).

Figure 12. Percent of individuals with a chronic health condition (among 12) who know what each of their prescribed medications are for (% strongly agree)¹⁴

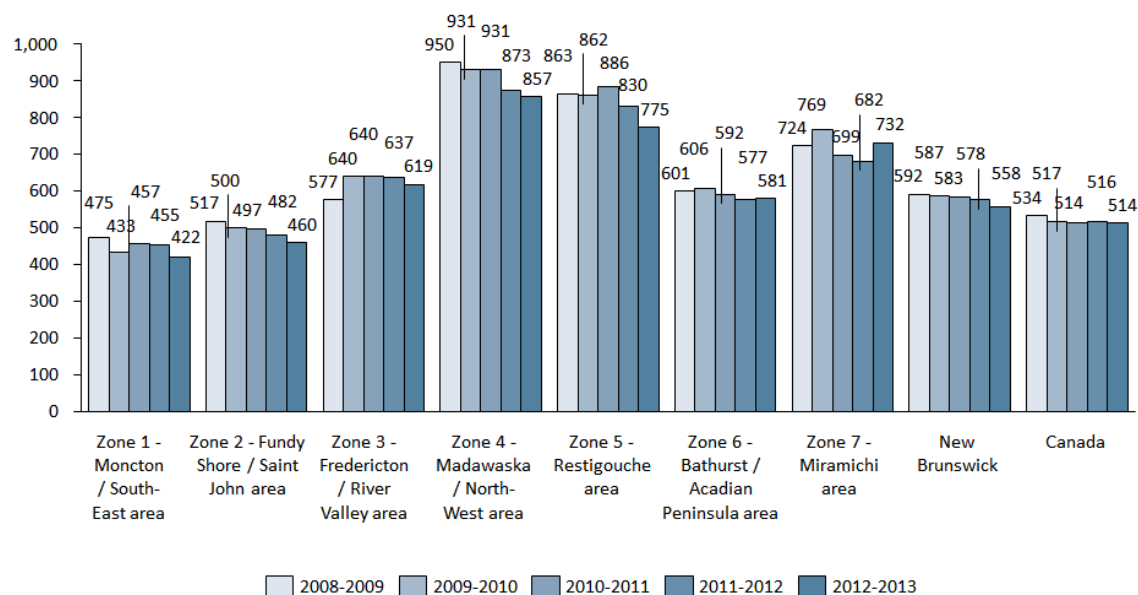


¹⁴ New Brunswick Health Council. Primary Health Survey (2011 & 2014)



Injury prevention is an element of primary prevention and safety. New Brunswick has higher rates of injury hospitalization when comparing to national average. Although the past five years is demonstrating a trend in the right direction, the large variability among the zones persists with zones 4, 5 and 7 having the highest rates (exceeding 700 hospitalized injuries per 100,000 population), in comparison to zones 1 and 2 showing the lowest rates (below 500 hospitalized injuries per 100,000 population) (Figure 13).

Figure 13. *Individuals who were injured that required hospitalization, age-adjusted (per 100,000)*¹⁵



¹⁵ Canadian Institute for Health Information. Health Indicators e-publication

Equity

The concept of equity in health care is complex and can be defined using four definitions; equality of utilization, distribution according to need, equality of access, and equality of health¹⁶. In New Brunswick a common agreed upon definition among all stakeholders has not yet been achieved. The NBHC has used the following description for “equity”:

Providing quality care to all, regardless of individual characteristics and circumstances, such as race, color, creed, national origin, ancestry, place of origin, language, age, physical disability, mental disability, marital status, family status, sexual orientation, sex, social status or belief or political activity.

In 2011, the NBHC’s recommendations to the Minister of Health highlighted geographic differences as a basis for equity (particularly for self-reported access and rates of screening of certain diseases).¹⁷

In the absence of a single definition for equity, geographic variability in quality of services has been our focus. This geographic level of analysis appears when reporting health outcomes as well as distribution of resources. Therefore for this report will use geographic inequity as the basis for the evaluation of equity for the primary health services sector.

Assessing the gap between the highest and lowest value for each of the indicators presented in this report, within each quality dimension, provides a measurable method to report on the degree of variability over the reviewed time period (Table 1).

¹⁶ Culyer, Anthony J. and A. Wagstaff (1993). Equity and Equality in Health and Health Care. *Journal of Health Economics*, 12(4): 431-457.

¹⁷ New Brunswick Health Council, Recommendations to the New Brunswick Health Minister, Moving towards a planned and citizen-centered publicly funded health care system (NBHC, 2011).



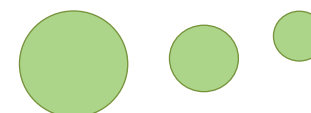
Table 1. *Calculated gaps among health zones in a given year.*

| Indicator | Year | Highest | Lowest | *Difference |
|---|---------------|---------|--------|-------------|
| Accessibility | Before | | | |
| | Latest | | | |
| Have a medical doctor | 2009 | 94 | 89 | 5 |
| | 2013 | 97 | 86 | 11 |
| Contact with medical doctor in the past 12 months | 2009 | 84 | 78 | 6 |
| | 2013 | 83 | 79 | 4 |
| Can get an appointment with family doctor in 5 days | 2011 | 63 | 34 | 29 |
| | 2014 | 68 | 42 | 26 |
| Receiving primary health services in the language of choice | 2011 | 97 | 78 | 19 |
| | 2014 | 97 | 70 | 27 |
| Appropriateness | Before | | | |
| | Latest | | | |
| Pap test | 2007-2008 | 87 | 71 | 16 |
| | 2013 | 81 | 70 | 11 |
| Mammogram | 2008 | 85 | 68 | 17 |
| | 2013 | 94 | 65 | 29 |
| Colorectal cancer screening | 2008 | 58 | 29 | 29 |
| | 2013 | 62 | 38 | 24 |
| Flu shots for seniors | 2009 | 79 | 52 | 27 |
| | 2013 | 73 | 53 | 20 |



| Indicator | Year | Highest | Lowest | *Difference |
|--|---------------|---------|--------|-------------|
| Effectiveness | Before | | | |
| | Latest | | | |
| Avoidable hospitalizations | 2008-2009 | 838 | 399 | 439 |
| | 2012-2013 | 660 | 354 | 306 |
| Efficiency | Before | | | |
| | Latest | | | |
| Emergency department triage cases (not urgent and less urgent) | 2011-2012 | 77.8 | 56.4 | 21.4 |
| | 2013-2014 | 71.4 | 53.3 | 18.1 |
| Safety | Before | | | |
| | Latest | | | |
| Community error | 2011 | 6.1 | 2.4 | 3.7 |
| | 2014 | 3.9 | 2.2 | 1.7 |
| Knowing what meds are for | 2011 | 54 | 32 | 22 |
| | 2014 | 57 | 29 | 28 |
| Injury hospitalization | 2008-2009 | 950 | 475 | 475 |
| | 2012-2013 | 857 | 422 | 435 |

* Difference between the highest value and the lowest value for each indicator among health zones in a specific year.



According to the differences above, and based on the indicators selected to evaluate the status of primary health services, we continue to see widening of gaps for some indicators and a narrowing of gaps for others. Indicators such as receiving services in the language of their choice, breast cancer screening, awareness about medications and having a regular medical doctor require further attention and analysis as the geographic equity gap seems to have increased over the given time periods. In addition, certain indicators within each dimension of quality continue to exhibit larger gaps than others such as:

- Safety: injury hospitalizations, knowing what meds are for, community error/harm rate
- Appropriateness: colorectal cancer screening
- Effectiveness: avoidable hospitalizations
- Access: appointment with family doctor within 5 days

Equity continues to be an area of improvement as efforts are always necessary to bridge gaps and reduce geographic variability in performance to ensure quality health services for all.



Discussion

In 2011, the NBHC took forward the citizens' concerns about the delivery of primary health services, and based on evidence and analysis, communicated recommendations to the Minister of Health, emphasizing the need for a review of the organization and delivery of primary health services in the province, focusing on ways to improve access to and quality of care, as well as the integration with other health services programs.

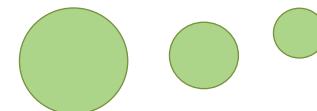
In 2014 the findings demonstrate the lack of overall improvement in the performance of primary health services for New Brunswick. Although we are noticing a modest and slow trend in the right direction for some indicators, the contributions of these improvements are not significant enough to compete with national trends.

Accessibility to primary health services does not demonstrate major improvements in 2014 as compared to the situation before 2011. This fact highlights the limited health system response to a key message from citizens regarding the need for improved accessibility to primary health services.

Appropriateness of primary health services does not appear to have witnessed significant improvements. Cervical cancer screening (pap smear test) seems to be trending in the wrong direction in New Brunswick overall; breast cancer screening rate (mammogram) has not shown a major difference but colorectal cancer screening rate and flu shots for seniors however seems to be trending in the right direction.

Effectiveness of primary health services as measured by the rate of avoidable hospitalizations (ambulatory care sensitive conditions) continues to trend in the right direction, and across all health zones. However, there is still significant room for improvement given that the provincial rate is still 1.5 times the Canadian average.

Efficiency in the provision of primary health services (as measured by the percent of less urgent and non-urgent cases showing up in the emergency room) does not demonstrate considerable improvement on average. The only exceptions worth noting are the decreases in zones 5 and 7 which merit further exploration in identifying the factors contributing to the improvement.



Safety of primary health services seems to be slowly trending in the right direction in general, with slightly fewer people reporting community error/ harm rates, and an overall modest decrease in the rate of injury hospitalizations.

Geographic **equity** in the quality of primary health services should receive more attention from health system leaders and managers. According to the selected indicators assessed for equity in this analysis, the widest inequity gaps seem to be in the effectiveness and safety of primary health services.

Despite the growing interest in primary health services and the different initiatives that have been launched since the Primary Care Summit in 2011, the observed trends do not signal a real shift or a fundamental shift towards primary health services reform in New Brunswick.

Additional evidence has been gathered to support these observations. Recently, the NBHC released its report on the “New Brunswickers’ Experiences with Primary Health Services 2014”, which echoed and supported the findings from this report. There was no improvement within the accessibility indicators except for a small increase in citizens of New Brunswick being able to access their family doctor within 5 days. Screening tests and measurements have decreased for certain chronic conditions. In terms of effectiveness, there was an improvement in citizens improving their confidence in being able to manage their chronic health conditions but not in knowing what their medications do. Lastly, the same proportion of citizens continue to use the hospital emergency department as the place to go most often when they are sick or in need of care from a health professional.



In order to complete the evaluation of the performance of the primary health services sector, the NBHC also reviewed programs and services expenditures since 2010 when citizens requested more transparency with respect to health system costs. In Figure 14, the NBHC displays the proportion of health expenditures being allocated to specific health service sectors over a five year period. All programs and services expenditures have been re-grouped into four categories to facilitate trending analysis over time: primary health, acute care, supportive/specialty and administrative costs (Table 2). The analysis reveals that the proportion of money being allocated and expensed to primary health services has not changed over the five year period despite the increase in the overall health system expenditures from 2.9 billion to 3.4 billion.

Figure 14. *Proportion of Total Provincial Health System Expenditures by Health Service Sector*

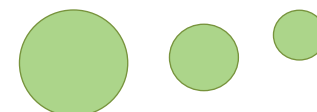
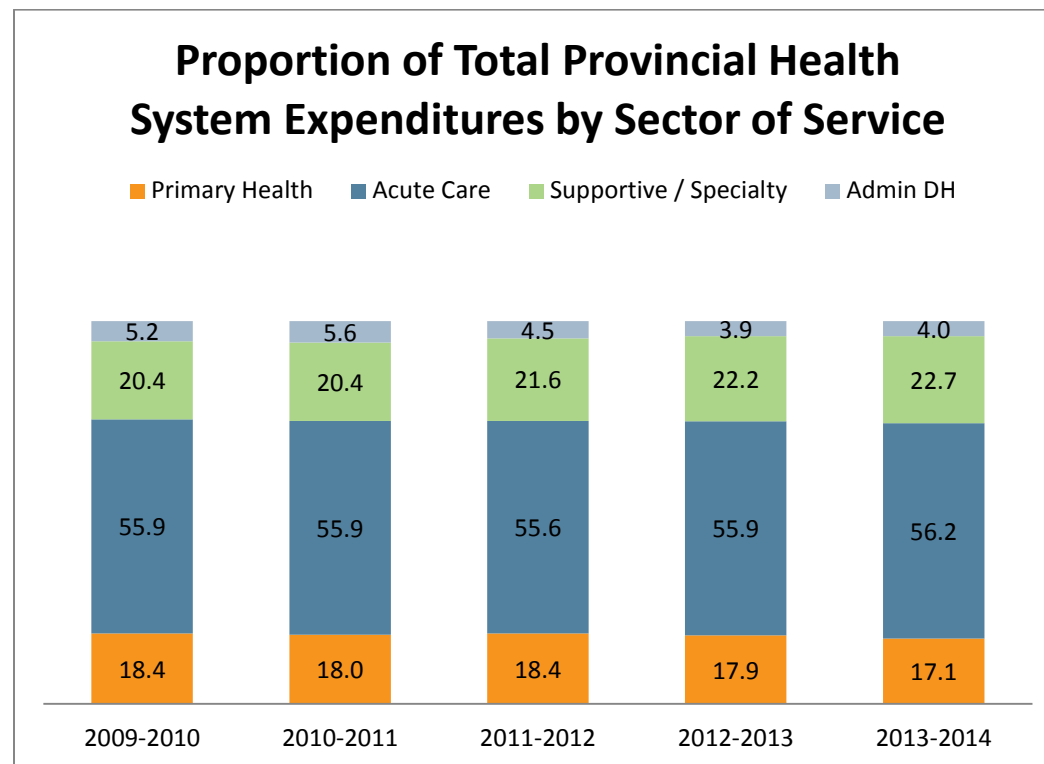


Table 2. *New Brunswick Health System Programs and Services*

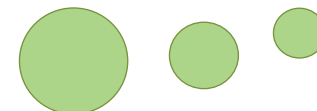
| | |
|---|--|
| <p>Primary Health</p> <p>Prescription drug program Ambulance Services</p> <p>Public Health: Provincial Epidemiology, Communicable disease control, Promotion of healthy lifestyles/healthy families, Injury / disease prevention initiatives</p> <p>Community Health Centres & Health Centres Primary Health Care (Chronic Disease Prevention/Management and Tele-Care) Physician Costs</p> <p>Wellness branch from Healthy and Inclusive Communities</p> | <p>Acute Care</p> <p>Hospital services Psychiatric Facilities</p> <p>Community Health Centre facilities providing subservices aligned with regional facilities such as beds, lab and diagnostic imaging</p> <p>Out of Province Hospital Payments Physician Costs Hospital services Psychiatric Facilities</p> |
| <p>Supportive/Specialty</p> <p>Addiction and Mental Health NB Extra-Mural Program Rehabilitation services</p> <p>Seniors Rehabilitative Equipment Program Physician Costs Long Term Care from Social Development</p> | <p>Department of Health - Administration Services</p> <p>Capital Equipment and Capital Construction Administration Services such as Corporate, Medicare, Hospital and Medical Education</p> |



Conclusion

The improvement in health system performance goes beyond just measuring health services quality. It is important to pursue health system performance by simultaneously reviewing costs or resources together with the quality of health services (as measured through our six dimensions of quality) and health outcomes in a planned and strategic manner. This performance management structure needs to acknowledge different levels of functions, alignment and accountability. These levels include: individual or staff lens measures, operational or site specific measures, tactical or regional measures, strategic or provincial measures and ultimately population health measures or public lens. It is important to note that in the absence of a performance management framework for the health system in New Brunswick, the NBHC has been limited to “status reporting” or data collection and analysis and not necessarily performance reporting. Performance measurement has greater relevance when there is an effective performance management structure in place.

Lack of integration and coordination of policies, plans, programs and initiatives in the field of primary health in New Brunswick, to support transformational change have contributed to the status quo in the distribution of resources, the quality of primary health services and the health outcomes being experienced by the citizens of New Brunswick.



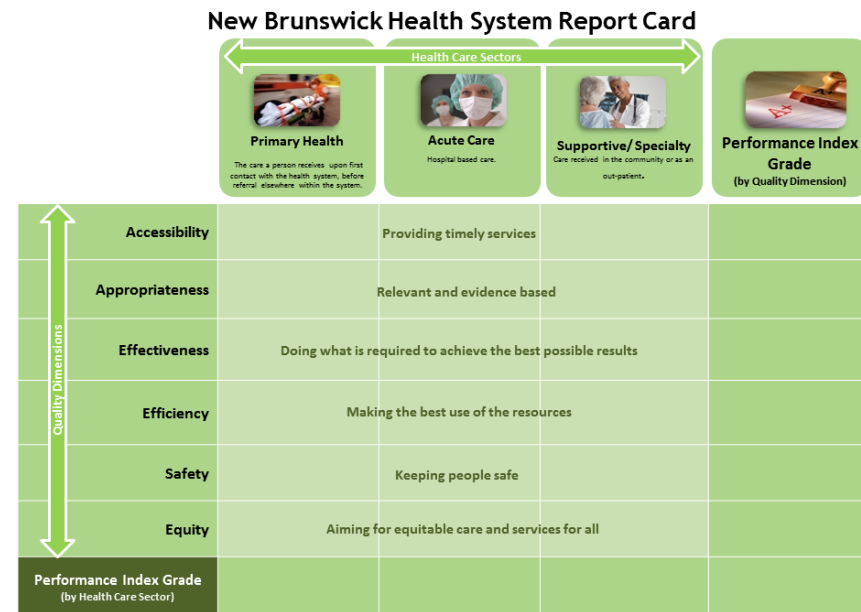
Development of the New Brunswick Health System Report Card:

Introduction

Just as student report cards provide parents with information on their child’s performance, the New Brunswick Health Council (NBHC) is committed to providing the citizens of New Brunswick with important information about the quality of health services being delivered in the province.

The *New Brunswick Health System Report Card* contains indicators of performance organized by sectors of care/services to highlight the importance of integrating programs and services. It also contains additional indicators to better reflect these programs and services that are being accessed by the citizens of New Brunswick. This is an effort to ensure that the citizen or patient remains the focus for improvement in health service quality as they must navigate through this health care system for effective management of their health.

The performance index grade compares New Brunswick’s performance to the highest possible value achieved nationally. A performance index grade should not be viewed in isolation from indicators upon which it is based for any policy and/or planning decisions. The use of performance index grades provides the public an opportunity to obtain a sense of how the health system is performing in a holistic way.





| Dimensions of quality | Descriptor |
|------------------------|--|
| Accessibility | The ability of patients/clients to obtain care/service at the right place and the right time, based on respective needs, in the official language of their choice. |
| Appropriateness | Care/service provided is relevant to the patients'/clients' needs and based on established standards. |
| Effectiveness | The care/service, intervention or action achieves the desired results. |
| Efficiency | Achieving the desired results with the most cost-effective use of resources. |
| Safety | Potential risks of an intervention or the environment are avoided or minimized. |
| Equity | Providing quality care/service to all, regardless of individual characteristics and circumstances, such as race, color, creed, national origin, ancestry, place of origin, language, age, physical disability, mental disability, marital status, family status, sexual orientation, sex, social status or belief or political activity. |



In this complex system of programs and services, it is important that individuals or groups perform further analyses to obtain a more accurate picture of what is occurring and that they become informed about the quality of health care and health policies. Health indicators that are reported clearly and openly to the public helps patients, families and other citizens get involved in improving the quality of health services.¹⁸ It is also important to note that the data for the safety dimension, equity dimension and the supportive/specialty sector are being reported in the report card but were unavailable for the first report card due to lack of standardization of the measures during production of the first report. Although this report card is better balanced to reflect all dimensions of quality and sectors, there is still room for improvement.

Performance measurement of the health system is extremely complex. For New Brunswick, it involves being able to measure, monitor and evaluate health services quality based on six dimensions of quality that the New Brunswick Health Council is required to report on. These dimensions of quality are: accessibility, appropriateness, effectiveness, efficiency, safety and equity.

In addition to these dimensions of quality, the council measures performance through the perspective of the citizen, this encourages integrated care across sectors. There are four sectors of care or services which make up the health care system.¹⁹

¹⁸ Health Council of Canada, A Citizen's Guide to Health Indicators, A Reference Guide for Canadians January 2011 (2011), [online], from <http://www.healthcouncilcanada.ca/docs/rpts/2011/indicators/HCC_Indicators_Bookmark_Accessible.pdf>.

¹⁹ We continue to be challenged on identifying indicators which will effectively measure the quality of the "end-of-life/palliative care sector". Since most of the services and programs are delivered either through hospital services (acute care), the Extra-Mural Program (supportive/specialty) or in a long term care facility (supportive/specialty), the challenge is data capture. Therefore, we will remove this sector for public reporting of the grades





Primary Health

• **PRIMARY HEALTH** is the care a person receives upon first contact with the health system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness.

• Some programs and services included in Primary Health are:
Public Health, Ambulance services, Community Health Centre, Family Physicians, Emergency Rooms, and Wellness.



Acute Care

• **ACUTE CARE** is the care provided in a hospital or a psychiatric facility.

• Some of the programs and services included in Acute Care are:
Hospital Services, Cardiac Care Program, Ambulatory Care Clinics, Dialysis Services, and Psychiatric facilities.



Supportive / Specialty

• **SUPPORTIVE/SPECIALTY** is the care received in the community or as an out-patient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and/or quality of life.

• Some of the programs and services included in Supportive/Specialty are:
Community Mental Health Programs and Services, Extra-Mural Programs, Rehabilitation Services (Stan Cassidy Centre), Addictions Services, Social Development-Long Term Care.



Palliative and End-of-life Care

• **PALLIATIVE and END-OF-LIFE CARE** is for anyone facing a life-threatening illness. It provides physical, emotional and spiritual care and support for individuals and their loved ones.

• Most palliative programs and services are given either in the hospital (Acute Care) setting, at home through the Extra-Mural Programs or in a long term care facility.

A *health care system or health system* includes all individuals, institutions and resources involved in the prevention, treatment and management of injury, illness and disability and the preservation of mental and physical well-being through the services offered in the Province by medical and allied health professions. Health care is defined as the combined functioning of public health and personal medical services.

In order for the NBHC to support transformational change in the system, the current model or framework allows the organizations in the system to identify themselves with the indicators being measured and create focus around the importance of citizen-centred integrated care. Therefore, the NBHC chose to use *Accreditation Canada's sector divisions of care*⁴ and marry it with the dimensions of quality for the creation of the grid.



Extensive research was performed to ensure that both the definition of dimensions and sectors were aligned with regional, provincial/territorial, national and international standards. In the first year over 400 indicators were discovered (compiled from international, national and provincial bodies responsible for reporting on health care quality such as: WHO, UK, Australia, USA, Canada, Ontario, Saskatchewan and New Brunswick) but only 48 were used. This year, similar to last year, there are 142 indicators. The expansion was based on stakeholder involvement requiring or requesting additional indicators and collective agreement through consultations for the majority of indicators selected. This approach facilitates the use of data for measuring and monitoring key programs and services.

The indicators chosen were based mainly on *outcome* and *system* level type indicators. These types of indicators are often strategic in nature and facilitate priority planning from a systems perspective. Most of the indicators were based on high-cost or high-volume program and service areas.

The indicators that the NBHC identified for use were those that were being collected from New Brunswick administrative databases and/or were available in the public domain: Canadian Institute for Health Information (CIHI), National Physician Survey, Statistics Canada and New Brunswick Department of Health.

The set of indicators were comprised of those that met our acceptable criteria list, that is²⁰:

- Relevant to the concerns of our main target audiences
- Easy to understand
- Reliable and valid
- Timely
- Easy to obtain and are periodically updated
- Obtained through an open, transparent and inclusive consultative review process
- Able to contribute to a coherent and comprehensive view of health system performance in New Brunswick

The method chosen for public reporting was the use of a report card which contained performance index grades.

²⁰ Accreditation Canada, [online], from <<http://www.accreditation.ca/>>.



| | # of indicators in 2010 Report Card (48 indicators) | # of indicators in 2011 Report Card (111 indicators) | # of indicators in 2012 Report Card (137 indicators) | # of indicators in 2013 Report Card (137 indicators) | # of indicators in 2014 Report Card (142 indicators) |
|----------------------------------|---|--|--|--|--|
| Dimensions of Quality | | | | | |
| Accessibility | 17 | 29 | 28 | 28 | 30 |
| Appropriateness | 11 | 15 | 16 | 16 | 19 |
| Effectiveness | 13 | 20 | 26 | 26 | 24 |
| Efficiency | 6 | 13 | 13 | 13 | 13 |
| Safety | 1 | 14 | 20 | 20 | 22 |
| Equity | 0 | 20 | 34 | 34 | 34 |
| Sector of Care/Service | | | | | |
| Primary Health | 19 | 51 | 51 | 51 | 54 |
| Acute Care | 21 | 40 | 51 | 51 | 51 |
| Supportive / Specialty | 8 | 20 | 35 | 35 | 37 |
| Palliative and End-of-life Care* | 0 | 0 | 0 | 0 | 0 |

**We continue to be challenged on identifying indicators which will effectively measure the quality of the “end-of-life/palliative care sector”. Since most of the services and programs are delivered either through hospital services (acute care), the Extra-Mural Program (supportive/specialty) or in a long term care facility (supportive/specialty), the challenge is data capture. Therefore, we will remove this sector for public reporting of the grades.*



Purpose of the New Brunswick Health System Report Card

The main purpose of the *New Brunswick Health System Report Card* is to provide New Brunswickers with a tool that would be easy to use for communicating and flagging key areas of focus as it relates to the quality of the health services being delivered.

To help frame the task at hand we can use the analogy of looking at the tip of an iceberg to attempt to explain the massiveness that lies beneath. The data presented in this report card assists in identifying how well New Brunswick performs in relations to other provinces in terms of health care quality.

Grading the health system based on overall dimensions of quality and sectors allows the public and decision-makers an opportunity to focus on some larger key areas in a very complex health care delivery system with numerous competing priorities. The deeper level of information or specific indicators within the performance index grade is intended for use by managers and others involved in measuring, monitoring and evaluating health services at the delivery end. It has the potential to allow organizations delivering the services to drill down to their own program-level indicators which have been aligned to the particular system indicator represented on the *Report Card*.

Yearly report cards can be used to monitor and track changes over time. Although this information is available in the system, having it organised in a way that provides decision-makers a holistic view of the health system is the advantage of our report card.

This view can provide opportunities to identify how changes in programs and services can affect other programs and services in other sectors of care/services. It can also provide a unique lens in service gaps for patients/citizens moving through the health system. An example of this is Primary Health, which received a “D” grade in the 2010 Report Card. This helped direct the choice of the next sector for surveying. The result was, *New Brunswickers’ Experiences with Primary Health Care, 2011 Survey* (NBHC 2011). The survey results have helped stakeholders focus on primary health services as an area of improvement (Fall 2011 Primary Care Stakeholder Summit).

The Report Card and indicators hold the potential to:

- *Guide quality improvement activities*
- *Redesign services*
- *Keep people and organizations accountable for their performance*
- *Change policy and practice*
- *Inspire public debate*



Development of Performance Index Grades

Indices or grades are commonly being used today by numerous organizations and institutions. CIHI has the *Wait Time Alliance Report Card*²¹, the Fraser Institute²² has report cards on hospitals and schools for select provinces in Canada, The Conference Board of Canada has a *How Canada Performs: A Report Card on Canada*²³ which assesses Canada's quality of life compared with that of its peer countries and the Institute of Well-being has the *Canadian Index of Well-being*²⁴ which is made up of domains related to well-being which are further made up of various indicators. Finally, there is also *The Frontier Centre for Public Policy, Canada Health Consumer Index 2010*²⁵ which produces reports on how well the ten provinces' health systems serve their residents.

The NBHC chose to follow suit with some of these examples and drawing on some of the methodologies in creating the performance index grades for the *New Brunswick Health System Report Card*.

²¹ Wait Time Alliance (WTA), *Unfinished business - Report Card on Wait Times in Canada June 2010(2010)*, [online], from < http://www.waittimealliance.ca/media/2010reportcard/WTA2010-reportcard_e.pdf >

²² Fraser Institute [online], from < <http://www.fraserinstitute.org/reportcards/hospitalperformance/> >

²³ The Conference Board of Canada, *How Canada Performs: A Report Card on Canada (2011)* [online], from < <http://www.conferenceboard.ca/hcp/Details/Health.aspx> >.

²⁴ Institute of Wellbeing, *The Canadian Index of Wellbeing (2010)*, [online], from < http://www.ciw.ca/Libraries/Documents/HealthyPopulation_DomainReport.sflb.ashx >.

²⁵ B. Eisen and A. Björnberg, *The Frontier Centre for Public Policy, Canada Health Consumer Index 2010*, (2010), [online], from < http://www.fcpc.org/files/1/PS98_CHCI-2010_DC13_FIB.pdf >



Letter grading methodology for individual indicators

The analysis is based on the indicators available when the report was completed. The letter grading is calculated by first identifying the lowest and highest values among provinces. The range is calculated and then divided by 7 to create cut-off points for grade separations. Grades are assigned to each of the ranges from A+, A, B, C, D, E, and F, in keeping with last year's grading method. A+ will correspond to the highest achievable interval and F to the lowest.

Example:

Step 1 – calculation of range:

i.e. range = the worse value (77%) minus better value (84%) = 7

Step 2 – calculation of interval:

i.e. range value of (7) divided by 7 letter grades = 1

Step 3 – grades are assigned to each interval

i.e. A+=84 to 83.1, A=83 to 82.1, B=82 to 81.1, C=81 to 80.1, D=80 to 79.1, E=79 to 78.1, F=78 to 77

In this case, if New Brunswick = is 80% the Grade for this indicator would be D.

When there is no grade associated to a specific indicator, either only local data was available or the two sources identified were not comparable for grading.



Equity grading methodology

The Equity Dimension grade is calculated by evaluating health inequities based on the importance that access to good quality services has as a determinant to health outcomes.²⁶

Certain characteristics of the populations which were chosen for comparison for health equity were based on geography, aboriginal descent, language of service preference, gender, age, education and income.

Step 1: Assign a value of 1 to all characteristics where a significant difference was found or inequity present.

Step 2: Sum all values of 1 to create an inequity score.

i.e. 14

Step 3: Total all characteristics for evaluation to create range.

i.e. 20

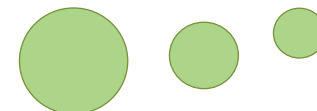
Step 4: Divide range by 7 equal cut-off points for Grade levels.

i.e. A+ = 0 - 2.9, A = 2.9 – 5.7, B = 5.7-8.6, C = 8.6-11.4, D = 11.4-14.3, E = 14.3-17.1, F = 17.1.-20

Step 5: Assign the inequity score to a grade level. Lower number of inequities equals a better grade.

i.e. 14 = D Grade.

²⁶ Dahlgren C. Whitehead M. Levelling up (part 2): a discussion paper on concepts and principles for tackling social inequalities in health. Copenhagen: WHO Regional Office for Europe, 2006



Letter grading methodology for overall performance index grade

To calculate score, grades are given values to be used for total scoring for trending over time and scoring is used to create overall grade and scoring is used to create overall grade A+ = 1, A = 2, B = 3, C = 4, D = 5, E = 6, F = 7.

Example: Accessibility overall Grade

Step 1 – list all individual grades

C, A+, B, B, D, D, E, F, C, A+, A+, D, D, A+, A+, B, A+, C, B

Step 2 – create average of overall grade using assigned scoring

$(4+1+3+3+5+5+6+7+4+1+1+5+5+1+1+3+1+4+3) / 19 = 3.3$

In this case, with a score of 3.3, accessibility would get an overall grade of B (rounding down).

In situations where it is a value reaches 0.5 (i.e. 3.5) we would round up to the next grade level (i.e. 3.5 = C).

IMPORTANT NOTES:

- *The overall grade should not be viewed in isolation from indicators on which it is based for any policy and/or planning decisions.*
- *Grades need to be considered in the context of the National comparison, and the Pan-Canadian range. An indicator scoring a higher grade only implies a better position in terms of performance in comparison to other provinces. Actual trend of performance can be observed through the “Value Trend”.*
- *Any analysis of “improvement” or “trend” remains limited in the absence of clear provincial performance targets*
- *All indicators with stars at the end (*) were also used in the New Brunswick Health System Report card 2010 (NBHC 2010).*

Please note that a grade does not equal better health results, it only speaks to the quality of services being provided when we compare New Brunswick to other provinces.

Listed here is an outline of some advantages and disadvantages to using indices. ^{27,28,29}

ADVANTAGES

1. Such indices provide simple targets facilitating the focus of attention and can lead to the development of better policies and programs.
2. The simplicity of a composite index facilitates necessary negotiations about its practical value and usefulness.
3. Such indices provide a means for simplifying complex, multi-dimensional measures.
4. They make it easier to measure and visually represent overall trends in several distinct dimensions over time.
5. Increases in the comparability of information leading to increases in the capacity to make holistic assessments and balanced judgments .
6. Increases in the capacity to make such holistic assessments and judgments reduce the likelihood of a public agenda being unduly influenced by the relatively narrow interests of a few at the expense of the broader interests of many.
7. Because indices require construction based on conventions agreed upon by potential users, inventors have considerable flexibility for including desired and excluding undesired features.

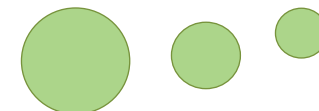
DISADVANTAGES

1. A single index must oversimplify complex issues.
2. A single index requires all issues to be significantly comparable.
3. Particular issues will be buried in composite figures, including changes in component variables that significantly increase or decrease the composite figures.
4. Inadvertent burying of some problems may produce overemphasis on others.
5. Accuracy and comparability of data will be open to challenge.
6. Index values have no clear meaning.
7. Values of domains, variables and indices vary over time.
8. Composite figures lack practical value, resulting from all their difficulties.

²⁷ C. Lance et al., "A Comparison Between Bottom-Up, Top-Down, and Bidirectional Models of Relationships Between Global and Life Facet Satisfaction," *Journal of Personality* 57, 3, (1989): pp 601-624.

²⁸ A. Saltelli, "Composite indicators between analysis and advocacy", *Social Indicators Research* 81, 1 (2007) pp.65-77.

²⁹ M. Nardo et al., "Handbook on Constructing Composite Indicators: Methodology and User Guide", *OECD Statistics Working Papers*, 2005/3, OECD Publishing



Changing / Current Indicators

Some of our indicators have changed as a result of changes in the source of data (e.g. differences in the questions covered by the National Physician Survey 2013; termination of some indicators by Statistics Canada, etc.), or changes in the methodology of some indicators (e.g. immunization rates, labour adjusted cost per weighted case, Hospital Standardized Mortality Ratio, etc.). These indicators are well indicated in the actual indicator tables.

The NBHC continues to aim at representing as many programs and services to provide a more complete performance measurement tool which also mirrors the allocation of funds based on current financial reporting or annual reporting of these services.

Continued Challenges

As we continue to monitor indicators for our health system report card, a number of challenges continue to present themselves. Some indicators continue to undergo methodology changes by the source, impeding the ability to trend from one year to the next. A continued challenge is the lack of national standardized benchmarks, limiting the possibility for grading, and eventually minimizes the contribution of those indicators to the overall grades by quality dimension, sector of care/service and the overall provincial grade.

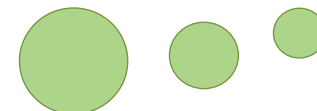
The equity dimension is the most difficult to address from a measurement perspective since there are a number of different approaches or areas of possible focus. In addition, there is little consensus about the meaning of the terms “health disparities,” “health inequalities,” or “health equity”. The definitions can have important practical consequences, determining the measurements that are monitored by governments and the activities that will be supported by resources earmarked to address health disparities/inequalities or health equity. For the NBHC, access to good quality health services is an important health determinant¹¹ and therefore, understanding whether there are disparities for these vulnerable groups in New Brunswick is not only important but valuable for planning and policy purposes. Choosing a methodology to analyze health inequity was based on the study of the differences in access to family physicians, quality of primary health care providers and places and quality of hospital services across demographic characteristics. Calculating the overall grade for the equity dimension also required a slightly different approach than the overall grading methodology for all other dimensions of quality. The release of the results of the *New Brunswickers’ Experiences with Primary Health Services Survey 2014* contributed to the update of the equity dimension within the acute care sector.



We continue to be challenged on identifying indicators which will effectively measure the quality of the “end-of-life/palliative care sector”. Since most of the services and programs are delivered either through hospital services (*acute care*), the Extra-Mural Program (*supportive/specialty*) or in a long term care facility (*supportive/specialty*), the challenge is data capture. Therefore, we have removed this sector for public reporting of the grades.

The next major challenge was in identifying indicators that were being collected for programs or services designated in our supportive/specialty sector which is more commonly referred to as “continuing care”. We identified four program areas: community mental health, home care, long term care and rehabilitation services. Although we were fairly successful at identifying and including indicators for at least three of these additional areas, finding provincial or international comparators was extremely limited.

The challenges continued, with being restricted to data or indicators that were able to provide flags for performance areas that require attention and that could drill down to zone level or even program level for further analysis and evaluation. In the first year, the 48 indicators were restricted to system or program level indicators from national databases in order to build comfort level with the use of the report card to create a common baseline performance picture.



New Brunswick Health System Report Card 2014*

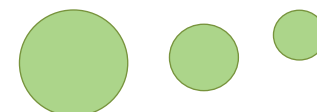
**We continue to be challenged on identifying indicators which will effectively measure the quality of the “end-of-life/palliative care sector”. Since most of the services and programs are delivered either through hospital services (acute care), the Extra-Mural Program (supportive/specialty) or in a long term care facility (supportive/specialty), the challenge is data capture. Therefore, we removed this sector for public reporting of the grades*



New Brunswick Health System Report Card 2014



| | | | | |
|---|------------------------|---|----------|----------|
| Quality Dimensions | Accessibility | Providing timely services | | C |
| | Appropriateness | Relevant and evidence based | | C |
| | Effectiveness | Doing what is required to achieve the best possible results | | D |
| | Efficiency | Making the best use of the resources | | D |
| | Safety | Keeping people safe | | C |
| | Equity | Aiming for equitable care and services for all | | C |
| Performance Index Grade (by Health Care Sector) | D | C | D | C |





Comparison 2012, 2013 and 2014



Trending New Brunswick Health System Report Card



| | | | | 2012 | 2013 | 2014 |
|--------------------|---|---|----------|----------|----------|----------|
| Quality Dimensions | Accessibility | Providing timely services | | C | C | C |
| | Appropriateness | Relevant and evidence based | | C | C | C |
| | Effectiveness | Doing what is required to achieve the best possible results | | C | D | D |
| | Efficiency | Making the best use of the resources | | C | D | D |
| | Safety | Keeping people safe | | A | A | C |
| | Equity | Aiming for equitable care and services for all | | C | C | C |
| 2012 | Performance Index Grade (by Health Care Sector) | D | B | B | C | |
| 2013 | | D | C | C | | |
| 2014 | | D | C | D | | |



Indicators by quality dimensions





New Brunswick Health System Report Card 2014

Value Trend:
 B Better performance
 ⇔ Same performance
 W Worse performance
 Bold: Updated indicator
 - Not Updated

Grade trend:
 Higher Grade (or same A+ grade)
 Same Grade
 Lower Grade
 * Core indicator since 2010

2014 - Indicators by Quality Dimension - ACCESSIBILITY

The ability of patients/clients to obtain care/service at the right place and the right time, based on respective needs, in the official language of their choice.
(Providing timely services)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|---|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - PRIMARY HEALTH: | | | | | | | |
| The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness. | | | | | | | |
| Contact with a medical doctor in the past 12 months (%) ^{*1} | 2013 | 79.6% | B | 76%-81.6% | B | C | ■ |
| Has a regular medical doctor (%) ^{*1} | 2013 | 92.0% | W | 74.9%-92.0% | A+ | A+ | ■ |
| Difficulties accessing routine or on-going care at any time of day (%) ^{*2(New source)} | 2013 | 14.9% | W | 20.6%-11.8% | B | D | ■ |
| Difficulties accessing immediate care for a minor health problem at any time of day (%) ^{*2(New source)} | 2013 | 14.0% | B | 27.9%-14% | A+ | A+ | ■ |
| Personal family doctor has an after-hour arrangement when office is closed (%) ³ | 2014 | 18.2% | W | Zones: 9.0%-26.7% | -- | -- | -- |
| Personal family doctor has extended office hours (after 5pm on a week day or during the weekend) (%) ^{(New)3} | 2014 | 16.2% | -- | Zones: 6.4%-19.2% | -- | -- | -- |
| Patients who were able to get an appointment with the personal family doctor on same day or next day (%) ^{(New) 4} | 2013 | 34.0% | -- | 31%-46% | E | -- | -- |
| Contact with dental professionals in the past 12 months (%) ^{*5} | 2013 | 63.6% | B | 57%-72.5% | D | C | ◆ |
| Average household expenditure on prescribed medicines and pharmaceutical products per household (% of household spending) ⁶ | 2012 | 0.87% | B | 0.87%-0.47% | F | E | ◆ |
| Left without being seen from the Emergency Room (%) ⁷ | 2013-2014 | 5.6% | W | Zones: 7.66%-3.84% | -- | -- | -- |
| Emergency calls done within the appropriate time (9 min –urban, 22 min – rural) for ambulance services (%) ⁸ | 2013-2014 | 95.5% | B | Target: 90.0% | -- | -- | -- |
| Emergency Room - Patients who are seen within 4 hours (%) ³ | 2014 | 73.9% | W | Zones: 61.4%-78.5% | -- | -- | -- |
| Population who received primary health services in the official language of their choice (%) ^{(New) 3} | 2014 | 89.5% | W | -- | -- | -- | -- |

1. Statistics Canada, Table 105-0501 - Statcan.gc.ca
 2. Statistics Canada, Table 105-3067, 105-3069 - Statcan.gc.ca
 3. New Brunswickers' Experiences with Primary Health Services, 2014 Survey Results (NBHC 2014) NBHC.ca/primary-health-survey-2014
 4. Commonwealth Fund: Commonwealth fund International Health Policy Survey of the General Public

5. Statistics Canada - Canadian Community Health Survey - available through the New Brunswick Department of Health - Statcan.gc.ca
 6. Statistics Canada, Table 203-0022 - Statcan.gc.ca
 7. New Brunswick Department of Health
 8. Ambulance New Brunswick. - AmbulanceNB.ca



New Brunswick Health System Report Card 2014

Value Trend:
B Better performance
 ⇔ Same performance
W Worse performance
Bold: Updated indicator
 -- Not Updated

Grade trend:
 ■ Higher Grade (or same A+ grade)
 ● Same Grade
 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Quality Dimension - ACCESSIBILITY

The ability of patients/clients to obtain care/service at the right place and the right time, based on respective needs, in the official language of their choice.
(Relevant and evidence based)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|--|-----------------|-----------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - ACUTE CARE: | | | | | | | |
| The care/service provided in a hospital or a psychiatric facility. | | | | | | | |
| Wait time for hip fracture surgery (proportion with surgery - within 48 hours) (%)*1(New Source) | 2013 | 84.0% | W | 75.0%-89.0% | B | A+ | ◆ |
| Wait time for hip replacement surgery (within 26 weeks) (%)*1 | 2013 | 69.0% | W | 58.0%-92.0% | D | C | ◆ |
| Wait time for knee replacement surgery (within 26 weeks) (%)*1 | 2013 | 60.0% | W | 43.0%-93.0% | D | C | ◆ |
| Wait time for high-risk cataract surgery (within 16 weeks) (%)*1 | 2013 | 88.0% | B | 54.0%-95.0% | A | A+ | ◆ |
| Wait time for Coronary Artery Bypass Graft Surgery –Level II (within 42 days) (%)*2 | 2013-2014 | 85.0% | ⇔ | -- | -- | -- | -- |
| Wait time for radiation therapy (within 28 days) (%)*1 | 2013 | 97.0% | B | 90.0%-100.0% | B | C | ■ |
| Population who received acute care services in the official language of their choice (%)(New)3 | 2013 | 87.1% | -- | Zones: 79.9%-93.4% | -- | -- | -- |
| Health care/service sector - SUPPORTIVE/SPECIALTY: | | | | | | | |
| The care/service received in the community or as an outpatient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life. | | | | | | | |
| Wait time for selected diagnostic tests: Magnetic Resonance Imaging (MRI), CAT (CT) scan, angiography (within 1 month) (%)*4 | 2013 | 51.1% | W | 42.8%-67.9% | D | E | ■ |
| Nursing home beds per 100 persons aged 75 and over (Rate per 100)*5 | 2014 | 8.1% | ⇔ | Zones: 7.4%-10.9% | -- | -- | -- |
| Wait time for specialist visits for a new illness or condition (within 1 month) (%)*6 | 2013 | 39.4% | W | 30.6%-48.7% | C | C | ● |
| Average number of days to long term care home placement (days)5 | 2013-2014 | 92.5 days | B | Zones: 161.5-61.6 | -- | -- | -- |
| Extra-Mural Program – Clients served per 10007 | 2013-2014 | 48.7% | W | Zones: 48.6%-62.9% | -- | -- | -- |
| Extra-Mural Program – % Referred from community (%)*7 | 2013-2014 | 70.1% | B | Zones: 61.2%-78.4% | -- | -- | -- |
| Extra-Mural Program – % Referred from hospital (%)*7 | 2013-2014 | 29.9% | B | Zones: 38.8%-21.6% | -- | -- | -- |
| Service delivery done within 30 days (from referral to first visit) for child and youth mental illness (%)*8 (Excluding St.Stephen and Caraquet for differences in reporting systems) | 2013-2014 | 52.6% | B | Zones: 27.0%-69.3% | -- | -- | -- |
| Population who received Extra-Mural Program services in the official language of their choice (%)(New)9 | 2012 | 96.3% | -- | -- | -- | -- | -- |
| Population who received Home Support services in the official language of their choice (%)(New)9 | 2012 | 95.5% | -- | Zones: 88.2%-97.7% | -- | -- | -- |
| Overall Accessibility Performance Index | | | | | C | C | ● |

1. Canadian Institute for Health Information – Wait Times for Priority Procedures in Canada, 2013 - WaitTimes.CIHI.ca
 2. Department of Health - Wait times in New Brunswick – www1.gnb.ca/0217/SurgicalWaitTimes/Reports/
 3. New Brunswick Health Council - Hospital Patient Care Experience in New Brunswick - NBHC.ca/2013-Acute-Care-Survey
 4. Statistics Canada - Canadian Community Health Survey - available through the New Brunswick Department of Health - Statcan.gc.ca
 5. NB Department of Social Development in combination with Census 2011 Statistics Canada Catalogue no. 99-004-XWE - Statcan.gc.ca

6. Statistics Canada - CANSIM table 105-3002 - Statcan.gc.ca
 7. New Brunswick Department of Health, Extra-Mural Program
 8. New Brunswick Department of Health, Mental Health. (range used is New Brunswick Health Zones)
 9. New Brunswick Health Council - Home Care Survey 2012 - NBHC.ca/what-we-do/2012-home-care-survey



New Brunswick Health System Report Card 2014

Value Trend:
 B Better performance
 ⇔ Same performance
 W Worse performance
 Bold: Updated indicator
 - Not Updated

Grade trend:
 ■ Higher Grade (or same A+ grade)
 ● Same Grade
 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Quality Dimension - APPROPRIATENESS

Care/service provided is relevant to the patients'/clients' needs and based on established standards.
(Relevant and evidence based)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|---|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - PRIMARY HEALTH: | | | | | | | |
| The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness. | | | | | | | |
| Pap smear within the last 3 years, for females aged 18 to 69 years (%)* ¹ | 2013 | 73.5% | B | 73.5%-79.0% | F | E | ◆ |
| Received a mammogram within the last 2 years, females aged 50 to 69 years (%)* ¹ | 2013 | 75.5% | B | 61.4%-75.5% | A+ | A | ■ |
| Breastfeeding initiation (%)* ² | 2013 | 79.6% | B | 79.6%-95.1% | F | C | ◆ |
| Colorectal cancer screening above age 50 (colonoscopy in the past 5 years or a fecal occult blood test in the past 2 years) (%)* ¹ | 2013 | 47.2% | B | 37.4%-65.2% | D | E | ■ |
| Proportion of kindergarten children meeting immunization requirements (%) ³ | 2012-2013 | 76.8% | B | Zones: 67.1%-97.0% | -- | -- | -- |
| Adult 65 and over who received their flu shot in the last year (%) ² | 2013 | 65.2% | W | 50.0%-74.2% | B | B | ● |
| Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Blood Pressure in the past 12 months (%)* ⁴ | 2014 | 91.3% | W | Zones: 85.9%-93.7% | -- | -- | -- |
| Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Cholesterol in the past 12 months (%)* ⁴ | 2014 | 76.3% | W | Zones: 70.4%-82.1% | -- | -- | -- |
| Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Blood Sugar in the past 12 months (%)* ⁴ | 2014 | 73.9% | W | Zones: 70.6%-77.4% | -- | -- | -- |
| Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Body Weight in the past 12 months (%)* ⁴ | 2014 | 59.3% | W | Zones: 55.0%-63.7% | -- | -- | -- |
| Personal family doctor coordinates the care from other health care providers and places (% always and often) ^{(New)⁵} | 2013 | 78.0% | -- | 68.0%-91.0% | C | -- | -- |

1. Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health
 2. Statistics Canada, Table 105-0501. Statcan.gc.ca
 3. New Brunswick Department of Health, Office of the Chief Medical Officer of Health (range used is New Brunswick Health Zones)

4. New Brunswickers' Experiences with Primary Health Services, 2014 Survey Results (NBHC 2014) NBHC.ca/primary-health-survey-2014
 5. Commonwealth Fund: Commonwealth fund International Health Policy Survey of the General Public



New Brunswick Health System Report Card 2014

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Bold: Updated indicator
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 ● Same Grade
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 * Core indicator since 2010

2014 - Indicators by Quality Dimension - APPROPRIATENESS

Care/service provided is relevant to the patients'/clients' needs and based on established standards.
(Relevant and evidence based)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|--|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - ACUTE CARE: | | | | | | | |
| The care/service provided in a hospital or a psychiatric facility. | | | | | | | |
| Hysterectomy age-standardized rate (rate per 100,000)*1 | 2011-2012 | 421 | -- | 469-285 | E | E | -- |
| Low-Risk Caesarean Sections (%) ^{(New)2} | 2012-2013 | 18.5% | -- | 20.0%-11.5% | E | -- | -- |
| Universal newborn and infant hearing screening (%) ³ | 2013-2014 | 92.2% | B | Zones: 78.8%-99.7% | -- | -- | -- |
| Patients with chronic conditions (Congestive Heart Failure/Chronic Obstructive Pulmonary Disease) discharged with home services (%) ^{(New)3} | 2013-2014 | 30.8% | -- | 12.0%-30.8% | A+ | -- | -- |
| Pan-Canadian Age-Standardized Mental Illness Separations rate (per 100,000) ^{(New)1} | 2012-2013 | 663 | W | 863-399 | C | C | ● |
| Score on the Care Transitions Measures (CTM) (coordination of hospital discharge care) ⁴ | 2013 | 38.8 | -- | Zones: 32.0 – 48.8 | -- | -- | -- |
| Health care/service sector - SUPPORTIVE/SPECIALTY: | | | | | | | |
| The care/service received in the community or as an outpatient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life. | | | | | | | |
| Proportion of mental health clients that had a screening assessment within 48 hours (%) ⁵ | 2013-2014 | 35.8% | W | Zones: 7.9%-79.7% | -- | -- | -- |
| Clients reporting that providers are informed about all care and treatment received at home by EMP (% always) ^{(New)6} | 2012 | 77.1% | -- | Zones: 71.9%–82.7% | -- | -- | -- |
| Overall Appropriateness Performance Index | | | | | C | C | ● |

1. Canadian Institute for Health Information - 2013 Health Indicators Report. <https://secure.cihi.ca/estore/productSeries.htm?pc=PCC140>
 2. Canadian Institute for Health Information - Your Health System: In Depth—All Data Export Report. YourHealthSystem.CIHI.ca
 3. New Brunswick Department of Health, DAD/3M / AHIM
 4. New Brunswick Health Council - Hospital Patient Care Experience in New Brunswick

5. New Brunswick Department of Health, Mental Health. (range used is New Brunswick Health Zones)
 6. New Brunswick Health Council - Home Care Survey - NBHC.ca/what-we-do/2012-home-care-survey



New Brunswick Health System Report Card 2014

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 * Core indicator since 2010

2014 - Indicators by Quality Dimension - EFFECTIVENESS

The care/service, intervention or action achieves the desired results.
(Doing what is required to achieve the best possible results)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|---|-----------------|------------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - PRIMARY HEALTH: | | | | | | | |
| The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness. | | | | | | | |
| Age-standardized acute care hospitalization rate for ambulatory care sensitive conditions (rate per 100,000)*1 | 2012-2013 | 425 | B | 435-258 | F | F | ● |
| Reported that they have been diagnosed by a health professional as having high blood pressure (%)*2 | 2013 | 23.0% | B | 23.5%-15.1% | F | F | ● |
| Average weekly work hours in providing direct patient care with a teaching component- Excluding on-call activities (hours) (As reported by physicians) ³ | 2014 | 5.28 hours | B | 5.28-9.62 | F | D | ◆ |
| Registered diabetes patients who are not in the optimal range of glycemic control less than 7% (%) ⁴ | 2012 | 52.0% | -- | To be determined | -- | -- | -- |
| Physician participating in interprofessional practices (%) ³ | 2014 | 10.1% | W | 9.3%-16.6% | F | F | ● |
| Hospitalized Stroke Event (aged-standardized rate per 100,000) ¹ | 2012-2013 | 132 | W | 112-137 | E | C | ◆ |
| Low weight babies (live birth less than 2,500 grams) ^{(New Source)⁵} | 2012-2013 | 6.2 | -- | 7.1-5.3 | C | -- | -- |

1. Canadian Institute for Health Information - Health Indicators e-publication - [CIHI Health Indicators Interactive Tool](#)
2. Statistics Canada, Table 105-0501 - [Statcan.gc.ca](#)
3. National Physician Survey - [Nationalphysiciansurvey.ca/nps](#)
4. New Brunswick Department of Health
5. Canadian Institute for Health Information - [Quick stats Online Tool](#)



New Brunswick Health System Report Card 2014

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2014 - Indicators by Quality Dimension - EFFECTIVENESS

The care/service, intervention or action achieves the desired results.
 (Doing what is required to achieve the best possible results)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|---|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - ACUTE CARE: The care/service provided in a hospital or a psychiatric facility. | | | | | | | |
| Risk-adjusted rate of 30-day acute myocardial infarction (AMI) in-hospital mortality (%)* ¹ | 2010-2012 | 7.3% | B | 8.5%-6.3% | C | D | ■ |
| Risk-adjusted rate of 30-day acute myocardial infarction (AMI) readmission (%)* ¹ | 2011-2012 | 14.2% | W | 14.2%-9.1% | F | -- | -- |
| Risk-adjusted rate of 30-day stroke in-hospital mortality (%)* ¹ | 2010-2013 | 15.5% | W | 20.4%-14.0% | A | B | ■ |
| 30-day in-hospital mortality following major surgery (%)(New) ² | 2012-2013 | 1.8% | -- | 2.5%-1.5% | B | -- | -- |
| 30-day readmission (Patients age 19 and younger). (Risk-adjusted, %) ² | 2012-2013 | 5.9% | B | 7.3%-5.8% | A+ | C | ■ |
| 30-day surgical readmission, (Risk-adjusted, %) ¹ | 2012-2013 | 6.8% | W | 7.5%-5.7% | D | C | ◆ |
| 30-day obstetric readmission (Risk-adjusted, %) ¹ | 2012-2013 | 2.0% | B | 2.7%-1.7% | B | C | ■ |
| 30-day Medical readmission (Risk-adjusted, %) ¹ | 2012-2013 | 13.5% | W | 14.8%-12.2% | C | C | ● |
| 30-day Readmission for mental illness (Risk-adjusted %) ¹ | 2012-2013 | 11.9% | B | 12.8%-9.2% | E | F | ■ |
| Five-year relative survival ratios for prostate cancer (relative survival ratio, %) ³ | 2006-2008 | 95.0% | -- | 90.0%-97.0% | B | A+ | -- |
| Five-year relative survival ratios for breast cancer (relative survival ratio, %) ³ | 2006-2008 | 89.0% | -- | 85.0%-89.0% | A+ | A | -- |
| Five-year relative survival ratios for colorectal cancer (relative survival ratio, %) ³ | 2006-2008 | 62.0% | -- | 61.0%-67.0% | E | B | -- |
| Five-year relative survival ratios for lung cancer (relative survival ratio, %) ³ | 2006-2008 | 17.0% | -- | 15.0%-21.0% | D | C | -- |

1. Canadian Institute for Health Information - 2013 Health Indicators Report - [Health Indicators Interactive Tool](#)
 2. Canadian Institute for Health Information - Your Health System: In Depth—All Data Export Report. [YourHealthSystem.CIHI.ca](#)
 3. Statistics Canada - Canadian Cancer Registry and Canadian Vital Statistics Death database and life tables



New Brunswick Health System Report Card 2014

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 * Core indicator since 2010

2014 - Indicators by Quality Dimension - EFFECTIVENESS

The care/service, intervention or action achieves the desired results.
 (Doing what is required to achieve the best possible results)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|--|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - SUPPORTIVE/SPECIALTY: | | | | | | | |
| The care/service received in the community or as an outpatient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life. | | | | | | | |
| Patients with repeat hospitalizations for mental illness (Risk adjusted, %) ¹ | 2011-2012 | 11.7% | ⇔ | 13.3%-9.3% | D | D | ● |
| Self-Injury Hospitalization (aged-standardized rate per 100,000) ¹ | 2012-2013 | 81 | B | 97-44 | D | F | ■ |
| Pain or discomfort that prevents activities (%) ² | 2013 | 16.3% | W | 19.1%-12.4% | D | B | ◆ |
| Extra-mural Program clients who were admitted to the hospital or had to visit ER during the time they were getting the EMP service (%) ^{(New)3} | 2012 | 43.8% | -- | -- | -- | -- | -- |
| Overall Effectiveness Performance Index | | | | | D | D | ● |

1. Canadian Institute for Health Information - 2013 Health Indicators Report - [Health Indicators Interactive Tool](#)
 2. Statistics Canada, Table 105-0501 - [Statcan.gc.ca](#)
 3. New Brunswick Health Council - Home Care Survey 2012 - [NBHC.ca/what-we-do/2012-home-care-survey](#)



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2014 - Indicators by Quality Dimension - EFFICIENCY

Achieving the desired results with the most cost-effective use of resources.

(Making the best use of the resources)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|---|-----------------|---------|-------------|---|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - PRIMARY HEALTH: | | | | | | | |
| The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness. | | | | | | | |
| Contact with telephone health line in the past 12 months (%)* ¹ | 2013 | 16.8% | B | 4.0%-25.7% | B | C | ■ |
| Use of Electronic Medical Records by primary care physicians (%) ² | 2012 | 26.0% | -- | 26.0%-74.0% | F | F | ● |
| Triage level 4 and 5 (Less urgent and Non-urgent) seen in the emergency room (%) ³ | 2013-2014 | 61.5% | B | Zones: 71.4%-53.3% | -- | -- | -- |
| Health care/service sector - ACUTE CARE: | | | | | | | |
| The care/service provided in a hospital or a psychiatric facility. | | | | | | | |
| Percentage of Alternate Level of Care (ALC) days to total inpatient days (%)* ³ | 2013-2014 | 24.3% | W | 24.3%-7.8% | F | F | ● |
| Age standardized Average Length of Stay (ALOS) (in days) ⁴ | 2012-2013 | 8.1 | W | 9.0-6.2 days | D | C | ◆ |
| Cost per weighted case – Labor Rate Adjusted (\$) ⁵ | 2012-2013 | \$6,504 | B | \$6,730-\$5,196 | E | F | ■ |
| Nursing Inpatient Services Total Personnel Worked Hours per Weighed Case (%) ⁵ | 2012-2013 | 57.2% | B | 63.2%-43.9% | D | E | ■ |
| Administrative Service Expense as a Percentage of Total Expense (%) ⁵ | 2011-2012 | 4.9% | -- | 5.9%-3.7% | C | C | -- |

1. Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health
 2. Commonwealth Fund: Common wealth Fund International Health Policy Survey of Primary Physicians 2012
 3. New Brunswick Department of Health
 4. Canadian Institute for Health Information – "DAD/HMDB Inpatient Hospitalizations: Volumes, Length of Stay, and Standardized Rates" - Under Quick stats - DAD/HMDB Inpatient Hospitalizations: Volumes, Length of Stay, and Standardized Rates

5. Canadian Institute for Health Information, Hospital Financial Performance Indicators



New Brunswick Health System Report Card 2014

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Grade trend:
 Higher Grade (or same A+ grade)
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 * Core indicator since 2010

2014 - Indicators by Quality Dimension - EFFICIENCY

Achieving the desired results with the most cost-effective use of resources.
(Making the best use of the resources)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|--|------------------|------------------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - SUPPORTIVE/SPECIALTY: | | | | | | | |
| The care/service received in the community or as an outpatient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life. | | | | | | | |
| Number of exams done by CAT (CT) scanners (rate per 1,000 population)* ¹ | 2011-2012 | 209 | -- | 89-209 | -- | -- | -- |
| Average number of Computed Tomography (CT) Exams per scanner (number) ¹ | 2011-2012 | 9,276 | -- | 6,206–9,782 | A+ | A+ | -- |
| Number of exams done by Magnetic Resonance Imaging (MRI) scanners (rate per 1,000 population)* ¹ | 2011-2012 | 50 | -- | 32-62 | -- | -- | -- |
| Average number of Magnetic Resonance Imaging (MRI) Exams per scanner (number) ¹ | 2011-2012 | 6,342 | -- | 3,772–8,643 | C | C | -- |
| Average number of days to complete long term care generic assessment (days, from initial contact to complete assessment)² | 2013-2014 | 59.0 days | W | -- | -- | -- | -- |
| Overall Efficiency Performance Index | | | | | D | D | ● |

1. Canadian Institute for Health Information – National Survey of Selected Medical Imaging Equipment, 2012.
 2. New Brunswick Department of Social Development



New Brunswick Health System Report Card 2014

Value Trend:
 B Better performance
 ⇔ Same performance
 W Worse performance
 Bold: Updated indicator
 - Not Updated

Grade trend:
 ■ Higher Grade (or same A+ grade)
 ● Same Grade
 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Quality Dimension - SAFETY

Potential risks of an intervention or the environment are avoided or minimized.

(Keeping people safe)

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|---|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Health care/service sector - PRIMARY HEALTH: | | | | | | | |
| The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness. | | | | | | | |
| Individuals with a chronic health condition (among 12) who know what each of their prescribed medications are for (% strongly agree) ¹ | 2014 | 47.7% | B | Zones: 28.7%-56.5% | -- | -- | -- |
| Individuals who were injured that required hospitalization (Rate/100 000 population) ² | 2012-2013 | 558 | B | 768-407 | B | C | ■ |
| Hospitalized hip fracture event rate (Age-standardized acute care hospitalization rate for fracture of the hip, per 100,000 population age 65 and older) ² | 2012-2013 | 460 | B | 529-387 | C | B | ◆ |
| Was harmed due to a medical error or mistake as a result of health care services received in the last year (excluding hospital stay)(%) ¹ | 2014 | 2.7% | B | Zones: 3.8%-2.1% | -- | -- | -- |
| Use exclusively electronic records to enter/ retrieve patient clinical notes ^{(New)³} | 2014 | 14.1% | -- | 10.2%-39.9% | F | -- | -- |
| Potentially inappropriate medication prescribed to seniors (%) ^{(New)⁴} | 2012 | 50.8% | -- | 50.8%-28.8% | F | -- | -- |
| Health care/service sector - ACUTE CARE: | | | | | | | |
| The care/service provided in a hospital or a psychiatric facility. | | | | | | | |
| Hospital Standardized Mortality Ratio (HSMR)* ⁴ | 2013-2014 | 88 | B | 104-81 | B | B | ● |
| Error rate - % in the community who believe they have suffered harm or error during their stay at an acute care hospital (%) ⁵ | 2013 | 5.1% | -- | Zones: 5.8%-4.1% | -- | -- | -- |
| Hand hygiene - % Compliance before Patient Contact (as reported by patients) (%) ⁵ | 2013 | 46.1% | -- | Zones: 39.6%-61.3% | -- | -- | -- |
| Patients who believed that the hospital takes their safety seriously (%) ⁵ | 2013 | 77.3% | -- | Zones: 74.0%-85.7% | -- | -- | -- |
| Inpatient Fall rate (reported falls in inpatient area per 1000 patient days) ⁶ | 2013-2014 | 5.63 | W | Zones: 7.12-3.90 | -- | -- | -- |

1. New Brunswickers' Experiences with Primary Health Care, 2014 Survey Results (NBHC 2014) NBHC.ca/nb_primary_care_health_survey.cfm
 2. Canadian Institute for Health Information - Health Indicators e-publication - CIHI.ca/hirpt/?language=en
 3. National Physician Survey. NationalPhysicianSurvey.ca/nps

4. Canadian Institute for Health Information - Our Health System tool - OurHealthSystem.ca
 5. New Brunswick Health Council - Hospital Patient Care Experience in New Brunswick - NBHC.ca/2013-Acute-Care-Survey
 6. Incident Reporting System, Horizon Health Network and Vitalité Health Network



New Brunswick Health System Report Card 2014

Value Trend:
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 Bold: Updated indicator
 - Not Updated

Grade trend:
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 ● Same Grade
 ● Lower Grade
 * Core indicator since 2010

| 2014 - Indicators by Quality Dimension - SAFETY | | | | | | | |
|--|------------------------------|-------|-------------|---|---------------|---------------|-------------|
| Potential risks of an intervention or the environment are avoided or minimized. (Keeping people safe) | | | | | | | |
| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
| | Year | Value | | | | | |
| Health care/service sector - ACUTE CARE: | | | | | | | |
| The care/service provided in a hospital or a psychiatric facility. | | | | | | | |
| In-Hospital Hip Fracture in Elderly (65+) Patients (rate per 1,000) ^{(New Source)1} | 2012-2013 | 0.90 | ⇔ | 1.49-0.6 | D | B | ◆ |
| Nursing-Sensitive Adverse Events for Medical Patients (rate per 1,000) ^{(New Methodology)1} | 2012-2013 | 22.5 | W | 34.5-22.5 | A+ | A+ | ■ |
| Nursing-Sensitive Adverse Events for Surgical Patients (rate per 1,000) ^{(New Methodology)1} | 2012-2013 | 24.4 | B | 48.4-21.4 | A+ | A+ | ■ |
| Staff perceptions of patient safety at the unit level (% very good or excellent) ² | 2012 | 70% | -- | Zones: 65.3-79.1 | -- | -- | -- |
| Clostridium Difficile Associated Disease Rate (rate per 1,000 patient days) ³ | 2013-2014 | 0.242 | B | Zones: 0.375-0.124 | -- | -- | -- |
| MRSA Infection Rate or Methicillin-resistant staphylococcus aureus specific infection rate (rate per 1,000 patient days) ³ | 2013-2014 | 0.039 | B | Zones: 0.09-0.01 | -- | -- | -- |
| VRE infection rate (rate per 1,000 patient days) ³ | 2013-2014 | 0.012 | W | Zones: 0.038-0 | -- | -- | -- |
| In-Hospital Sepsis, Risk adjusted (Rate per 1000) ^{(New)4} | 2012-2013 | 3.8 | -- | 5-2.7 | C | -- | -- |
| EMRAM SCORE (Electronic Medical Record Adoption Model score 0 to 7) ⁵ | 3 rd quarter 2014 | 3.058 | ⇔ | 0.614-4.285 | B | B | ● |
| Health care/service sector - SUPPORTIVE/SPECIALTY: | | | | | | | |
| The care/service received in the community or as an outpatient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life. | | | | | | | |
| Patients who reported staff talking about all the medications they were taking through EMP (%) ⁶ | 2012 | 72.3% | -- | Zones: 64.9%-87.2% | -- | -- | -- |
| Intentional self-harm (suicide) age-standardized mortality rate (rate per 100,000) ⁷ | 2011 | 12.6 | W | 13.3-6 | F | A | ◆ |
| Overall Safety Performance Index | | | | | C | A | ◆ |

1. Canadian Institute for Health Information – Data based on averages for the facilities’ rates as provided by CIHI
 2. Patient Safety Culture Survey (Accreditation Canada) – Horizon Health Network and Vitalité Health Network Health Network data
 3. Infection, Prevention and Control - Horizon Health Network and Vitalité Health Network

4. Canadian Institute for Health Information - YourHealthSystem.CIHI.ca
 5. HIMSS Analytics™ LLC. - HimssAnalytics.org/emram/scoreTrends.aspx
 6. New Brunswick Health Council - Home Care Survey 2012 - NBHC.ca/what-we-do/2012-home-care-survey
 7. Statistics Canada, Table 102-0552. <http://www.statcan.gc.ca>



New Brunswick Health System Report Card 2014

2014 - Indicators by Quality Dimension - EQUITY

Providing quality care/service to all, regardless of individual characteristics and circumstances, such as race, color, creed, national origin, ancestry, place of origin, language, age, physical disability, mental disability, marital status, family status, sexual orientation, sex, social status or belief or political activity.

(Aiming for equitable care and services for all)

| Indicators | NB Value | 1 = difference is statistically significant |
|---|----------|---|
| Health care/service sector - PRIMARY HEALTH: | | |
| The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness. | | |
| Has a family physician¹ (%) | 92.1% | -- |
| Rural | 92.2% | 0 |
| Urban | 91.9% | |
| Aboriginal | 90.6% | 0 |
| Non-aboriginal | 92.2% | |
| French | 93.8% | 1 |
| English | 91.4% | |
| Male | 90.5% | 1 |
| Female | 93.5% | |
| 18-34 | 88.1% | 1 |
| 35-54 | 91.9% | |
| 55-64 | 93.5% | |
| 65+ | 95.6% | |
| 8th grade or less | 93.0% | 0 |
| Some high-school | 92.3% | |
| High-school, GED | 91.0% | |
| College / trade diploma | 92.2% | |
| Undergraduate degree | 93.8% | |
| Graduate degree | 91.3% | |
| Income < \$25M | 90.4% | 1 |
| Income \$25M-\$60M | 92.6% | |
| Income >= \$60M | 92.5% | |

1. New Brunswicker's Experience with Primary Health Care, 2014 Survey Results (NBHC 2014). http://www.nbhc.ca/nb_primary_care_health_survey.cfm



New Brunswick Health System Report Card 2014

2014 - Indicators by Quality Dimension - EQUITY

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(Aiming for equitable care and services for all)

| Indicators | NB Value | 1 = difference is statistically significant |
|---|----------|---|
| Health care/service sector - PRIMARY HEALTH: | | |
| The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness. | | |
| Overall rating* of services from primary health care providers and places ¹ (Score) | | |
| Rural | 100.1 | 0 |
| Urban | 100.8 | |
| Aboriginal | 95.8 | 0 |
| Non-aboriginal | 100.3 | |
| French | 102.0 | 1 |
| English | 98.8 | |
| Male | 98.5 | 1 |
| Female | 101.3 | |
| 18-34 | 92.1 | 1 |
| 35-54 | 99.4 | |
| 55-64 | 103.9 | |
| 65+ | 107.6 | |
| 8th grade or less | 100.1 | 0 |
| Some high-school | 97.2 | |
| High-school, GED | 98.3 | |
| College / trade diploma | 100.5 | |
| Undergraduate degree | 101.3 | |
| Graduate degree | 102.5 | 1 |
| Income < \$25M | 91.7 | |
| Income \$25M-\$60M | 101.8 | |
| Income >= \$60M | 103.5 | |

* This score combines responses to 10 overall ratings of services, including personal family doctor, hospital emergency department, specialist, after-hours or walk-in clinic, alternative practitioner, community health centre, ambulance services, nurse practitioner, private clinic, and Tele-Care.



New Brunswick Health System Report Card 2014

2014 - Indicators by Quality Dimension - EQUITY

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(Aiming for equitable care and services for all)

| Indicators | NB Value | 1 = difference is statistically significant |
|--|----------|---|
| Health care/service sector - ACUTE CARE: | | |
| The care/service provided in a hospital or a psychiatric facility. | | |
| Overall hospital rating¹ (% 8, 9, or 10 on a scale of 0 to 10) | 75.4% | |
| Rural | 76.4% | 0 |
| Urban | 74.7% | |
| Aboriginal | 71.4% | 0 |
| Non-aboriginal | 75.3% | |
| French | 78.4% | 1 |
| English | 74.6% | |
| Male | 76.0% | 0 |
| Female | 74.8% | |
| Under 45 | 71.9% | 1 |
| 45-64 | 75.1% | |
| 65+ | 76.3% | |
| 8th grade or less | 81.8% | 1 |
| Some high-school | 78.9% | |
| High-school, GED | 74.8% | |
| College / trade diploma | 72.1% | |
| Undergraduate degree | 72.8% | |
| Graduate degree | 66.0% | |

1. Hospital Patient Care Experience in New Brunswick, 2013 Acute Care Survey Results (NBHC 2013) http://www.nbhc.ca/care_experience_survey.cfm



New Brunswick Health System Report Card 2014

2014 - Indicators by Quality Dimension - EQUITY

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(Aiming for equitable care and services for all)

| Indicators | NB Value | 1 = difference is statistically significant |
|---|----------|---|
| Health care/service sector - SUPPORTIVE/SPECIALTY: | | |
| The care/service received in the community or as an out-patient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life. | | |
| Overall rating for home healthcare services (EMP) received¹ (% 8, 9, or 10 on a scale of 0 to 10) | 96.7% | |
| Rural | 96.7% | 0 |
| Urban | 96.8% | |
| Aboriginal | 92.1% | 1 |
| Non-aboriginal | 96.9% | |
| French | 97.6% | 0 |
| English | 96.5% | |
| Male | 96.5% | 0 |
| Female | 96.8% | |
| Under 65 | 94.2% | 1 |
| 65-74 | 97.2% | |
| 75+ | 98.1% | |
| 8th grade or less | 97.9% | 1 |
| Some high-school | 97.8% | |
| High-school, GED | 97.4% | |
| Post-secondary | 95.4% | |
| Less than \$25,000 | 96.3% | 0 |
| \$25,000 or more | 97.0% | |



2014 - Indicators by Quality Dimension - EQUITY

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(Aiming for equitable care and services for all)

| Indicators | NB Value | 1 = difference is statistically significant |
|---|----------|---|
| Health care/service sector - SUPPORTIVE/SPECIALTY: | | |
| The care/service received in the community or as an out-patient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life. | | |
| Overall rating for home support services received ¹ (% 8, 9, or 10 on a scale of 0 to 10) | 87.9% | |
| Rural | 90.4% | |
| Urban | 85.2% | 1 |
| Aboriginal | 91.0% | |
| Non-aboriginal | 87.9% | 0 |
| French | 87.3% | |
| English | 88.2% | 0 |
| Male | 89.4% | |
| Female | 87.3% | 0 |
| Under 65 | 84.8% | |
| 65-74 | 90.2% | |
| 75-84 | 88.5% | 1 |
| 85+ | 90.0% | |
| 8th grade or less | 90.1% | |
| Some high-school | 90.4% | |
| High-school, GED | 84.0% | 1 |
| Post-secondary | 86.3% | |
| Less than \$25,000 | 87.8% | |
| \$25,000 or more | 87.2% | 0 |

| Overall Performance Index | 2014 Grade | 2013 Grade | Grade Trend |
|---------------------------|------------|------------|-------------|
| | C | C | ● |

1. New Brunswick Health Council. Home Care Survey (2012). <http://www.nbhc.ca/what-we-do/2012-home-care-survey>



Indicators by sectors of care / services





New Brunswick Health System Report Card 2014

Value Trend:
B Better performance
 ⇔ Same performance
W Worse performance
Bold: Updated indicator
 - Not Updated

Grade trend:
 ■ Higher Grade (or same A+ grade)
 ● Same Grade
 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Health care sector - PRIMARY HEALTH

The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|---|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – ACCESSIBILITY: The ability of patients/clients to obtain care/service at the right place and the right time, based on respective needs, in the official language of their choice. (<i>Providing timely services</i>) | | | | | | | |
| Contact with a medical doctor in the past 12 months (%) ^{*1} | 2013 | 79.6% | B | 76.0%-81.6% | B | C | ■ |
| Has a regular medical doctor (%) ^{*1} | 2013 | 92.0% | W | 74.9%-92.0% | A+ | A+ | ■ |
| Difficulties accessing routine or on-going care at any time of day (%) ^{*2(New source)} | 2013 | 14.9% | W | 20.6%-11.8% | B | D | ■ |
| Difficulties accessing immediate care for a minor health problem at any time of day (%) ^{*2(New source)} | 2013 | 14.0% | B | 27.9%-14% | A+ | A+ | ■ |
| Personal family doctor has an after-hour arrangement when office is closed (%) ³ | 2014 | 18.2% | W | Zones: 9.0%-26.7% | -- | -- | -- |
| Personal family doctor has extended office hours (after 5pm on a week day or during the weekend) (%) ^{(New)3} | 2014 | 16.2% | -- | Zones: 6.4%-19.2% | -- | -- | -- |
| Patients who were able to get an appointment with the personal family doctor on same day or next day (%) ⁴ | 2013 | 34.0% | -- | 31%-46% | E | -- | -- |
| Contact with dental professionals in the past 12 months (%) ^{*5} | 2013 | 63.6% | B | 57%-72.5% | D | C | ◆ |
| Average household expenditure on prescribed medicines and pharmaceutical products per household (% of household spending) ⁶ | 2012 | 0.87% | B | 0.87%-0.47% | F | E | ◆ |
| Left without being seen from the Emergency Room (%) ⁷ | 2013-2014 | 5.6% | W | Zones: 7.66%-3.84% | -- | -- | -- |
| Emergency calls done within the appropriate time (9 min –urban, 22 min – rural) for ambulance services (%) ⁸ | 2013-2014 | 95.5% | B | Target: 90.0% | -- | -- | -- |
| Emergency Room - Patients who are seen within 4 hours (%) ³ | 2014 | 73.9% | W | Zones: 61.4%-78.5% | -- | -- | -- |
| Population who received primary health services in the official language of their choice (%) ^{(New) 3} | 2014 | 89.5% | W | -- | -- | -- | -- |

1. Statistics Canada, Table 105-0501 - Statcan.gc.ca
 2. Statistics Canada, Table 105-3067, 105-3069 - Statcan.gc.ca
 3. New Brunswickers' Experiences with Primary Health Services, 2014 Survey Results (NBHC 2014) NBHC.ca/primary-health-survey-2014
 4. Commonwealth Fund: Commonwealth fund International Health Policy Survey of the General Public

5. Statistics Canada - Canadian Community Health Survey - available through the New Brunswick Department of Health - Statcan.gc.ca
 6. Statistics Canada, Table 203-0022 - Statcan.gc.ca
 7. New Brunswick Department of Health
 8. Ambulance New Brunswick. - AmbulanceNB.ca



New Brunswick Health System Report Card 2014

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 B Better performance
 ⇔ Same performance
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 Bold: Updated indicator
 -- Not Updated

Grade trend:
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 ● Same Grade
 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Health care sector - PRIMARY HEALTH

The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade Trend |
|--|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – APPROPRIATENESS: Care/service provided is relevant to the patients'/clients' needs and based on established standards. <i>(Relevant and evidence based)</i> | | | | | | | |
| Pap smear within the last 3 years, for females aged 18 to 69 years (%) ^{*1} | 2013 | 73.5% | B | 73.5%-79.0% | F | E | ◆ |
| Received a mammogram within the last 2 years, females aged 50 to 69 years (%) ^{*1} | 2013 | 75.5% | B | 61.4%-75.5% | A+ | A | ■ |
| Breastfeeding initiation (%) ^{*2} | 2013 | 79.6% | B | 79.6%-95.1% | F | C | ◆ |
| Colorectal cancer screening above age 50 (colonoscopy in the past 5 years or a fecal occult blood test in the past 2 years) (%) ^{*1} | 2013 | 47.2% | B | 37.4%-65.2% | D | E | ■ |
| Proportion of kindergarten children meeting immunization requirements (%) ³ | 2012-2013 | 76.8% | B | Zones: 67.1%-97.0% | -- | -- | -- |
| Adult 65 and over who received their flu shot in the last year (%) ² | 2013 | 65.2% | W | 50.0%-74.2% | B | B | ● |
| Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Blood Pressure in the past 12 months (%) ^{*4} | 2014 | 91.3% | W | Zones: 85.9%-93.7% | -- | -- | -- |
| Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Cholesterol in the past 12 months (%) ^{*4} | 2014 | 76.3% | W | Zones: 70.4%-82.1% | -- | -- | -- |
| Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Blood Sugar in the past 12 months (%) ^{*4} | 2014 | 73.9% | W | Zones: 70.6%-77.4% | -- | -- | -- |
| Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Body Weight in the past 12 months (%) ^{*4} | 2014 | 59.3% | W | Zones: 55.0%-63.7% | -- | -- | -- |
| Personal family doctor coordinates the care from other health care providers and places (% always and often) ^{(New)⁵} | 2013 | 78.0% | -- | 68.0%-91.0% | C | -- | -- |

1. Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health
 2. Statistics Canada, Table 105-0501. Statcan.gc.ca
 3. New Brunswick Department of Health, Office of the Chief Medical Officer of Health (range used is New Brunswick Health Zones)

4. New Brunswickers' Experiences with Primary Health Services, 2014 Survey Results (NBHC 2014) NBHC.ca/primary-health-survey-2014
 5. Commonwealth Fund: Commonwealth fund International Health Policy Survey of the General Public



New Brunswick Health System Report Card 2014

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 W Worse performance
 Bold: Updated indicator
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 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Health care sector - PRIMARY HEALTH

The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
|---|-----------------|------------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – EFFECTIVENESS: The care/service, intervention or action achieves the desired results. <i>(Doing what is required to achieve the best possible results)</i> | | | | | | | |
| Age-standardized acute care hospitalization rate for ambulatory care sensitive conditions (rate per 100,000)*1 | 2012-2013 | 425 | B | 435-258 | F | F | ● |
| Reported that they have been diagnosed by a health professional as having high blood pressure (%)*2 | 2013 | 23.0% | B | 23.5%-15.1% | F | F | ● |
| Average weekly work hours in providing direct patient care with a teaching component- Excluding on-call activities (hours) (As reported by physicians)3 | 2014 | 5.28 hours | B | 5.28-9.62 | F | D | ◆ |
| Registered diabetes patients who are not in the optimal range of glycemic control less than 7% (%)*4 | 2012 | 52.0% | -- | To be determined | -- | -- | -- |
| Physician participating in interprofessional practices (%)*3 | 2014 | 10.1% | W | 9.3%-16.6% | F | F | ● |
| Hospitalized Stroke Event (aged-standardized rate per 100,000)1 | 2012-2013 | 132 | W | 112-137 | E | C | ◆ |
| Low weight babies (live birth less than 2,500 grams)(New Source)5 | 2012-2013 | 6.2 | -- | 7.1-5.3 | C | -- | -- |
| Quality Dimension – EFFICIENCY: Achieving the desired results with the most cost-effective use of resources. <i>(Making the best use of the resources)</i> | | | | | | | |
| Contact with telephone health line in the past 12 months (%)*6 | 2013 | 16.8% | B | 4.0%-25.7% | B | C | ■ |
| Use of Electronic Medical Records by primary care physicians (%)*7 | 2012 | 26.0% | -- | 26.0%-74.0% | F | F | ● |
| Triage level 4 and 5 (Less urgent and Non-urgent) seen in the emergency room (%)*4 | 2013-2014 | 61.5% | B | Zones: 71.4%-53.3% | -- | -- | -- |

1. Canadian Institute for Health Information - Health Indicators e-publication - [CIHI Health Indicators Interactive Tool](#)
 2. Statistics Canada, Table 105-0501 - [Statcan.gc.ca](#)
 3. National Physician Survey - [Nationalphysiciansurvey.ca/nps](#)
 4. New Brunswick Department of Health

5. Canadian Institute for Health Information - [Quick stats Online Tool](#)
 6. Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health
 7. Commonwealth Fund: Common wealth Fund International Health Policy Survey of Primary Physicians 2012



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2014 - Indicators by Health care sector - PRIMARY HEALTH

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| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
|---|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – SAFETY: Potential risks of an intervention or the environment are avoided or minimized. <i>(Keeping people safe)</i> | | | | | | | |
| Individuals with a chronic health condition (among 12) who know what each of their prescribed medications are for (% strongly agree) ¹ | 2014 | 47.7% | B | Zones: 28.7%-56.5% | -- | -- | -- |
| Individuals who were injured that required hospitalization (Rate/100 000 population) ² | 2012-2013 | 558 | B | 768-407 | B | C | ■ |
| Hospitalized hip fracture event rate (Age-standardized acute care hospitalization rate for fracture of the hip, per 100,000 population age 65 and older) ² | 2012-2013 | 460 | B | 529-387 | C | B | ◆ |
| Was harmed due to a medical error or mistake as a result of health care services received in the last year (excluding hospital stay)(%) ¹ | 2014 | 2.7% | B | Zones: 3.8%-2.1% | -- | -- | -- |
| Use exclusively electronic records to enter/ retrieve patient clinical notes ^{(New)3} | 2014 | 14.1% | -- | 10.2%-39.9% | F | -- | -- |
| Potentially inappropriate medication prescribed to seniors (%) ^{(New)4} | 2012 | 50.8% | -- | 28.8%-50.8% | F | -- | -- |

1. New Brunswickers' Experiences with Primary Health Care, 2014 Survey Results (NBHC 2014) NBHC.ca/nb_primary_care_health_survey.cfm
 2. Canadian Institute for Health Information - Health Indicators e-publication - CIHI.ca/hirpt/?language=en

3. National Physician Survey. NationalPhysicianSurvey.ca/nps
 4. Canadian Institute for Health Information - Our Health System tool - OurHealthSystem.ca



New Brunswick Health System Report Card 2014

2014 - Indicators by Health care sector - PRIMARY HEALTH

The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness

Quality Dimension – EQUITY: Providing quality care/service to all, regardless of individual characteristics and circumstances, such as race, color, creed, national origin, ancestry, place of origin, language, age, physical disability, mental disability, marital status, family status, sexual orientation, sex, social status or belief or political activity. *(Aiming for equitable care and services for all)*

| Indicators | NB Value | 1 = difference is statistically significant |
|---|----------|---|
| Has a family physician (%)¹ | 92.1% | -- |
| Rural | 92.2% | 0 |
| Urban | 91.9% | |
| Aboriginal | 90.6% | 0 |
| Non-aboriginal | 92.2% | |
| French | 93.8% | 1 |
| English | 91.4% | |
| Male | 90.5% | 1 |
| Female | 93.5% | |
| 18-34 | 88.1% | 1 |
| 35-54 | 91.9% | |
| 55-64 | 93.5% | |
| 65+ | 95.6% | |
| 8th grade or less | 93.0% | 0 |
| Some high-school | 92.3% | |
| High-school, GED | 91.0% | |
| College / trade diploma | 92.2% | |
| Undergraduate degree | 93.8% | |
| Graduate degree | 91.3% | |
| Income < \$25M | 90.4% | 1 |
| Income \$25M-\$60M | 92.6% | |
| Income >= \$60M | 92.5% | |

1. New Brunswicker's Experience with Primary Health Care, 2014 Survey Results (NBHC 2014)



2014 - Indicators by Health care sector - PRIMARY HEALTH

The care/service a person receives upon first contact with the health system, before referral elsewhere within the system. It focuses on health promotion, illness and injury prevention, and the diagnosis and treatment of illness

Quality Dimension – EQUITY: Providing quality care/service to all, regardless of individual characteristics and circumstances, such as race, color, creed, national origin, ancestry, place of origin, language, age, physical disability, mental disability, marital status, family status, sexual orientation, sex, social status or belief or political activity. *(Aiming for equitable care and services for all)*

| Indicators | NB Value | 1 = difference is statistically significant |
|---|----------|---|
| Overall satisfaction with services from primary health care providers and places (score)¹ | | -- |
| Rural | 100.1 | 0 |
| Urban | 100.8 | |
| Aboriginal | 95.8 | 0 |
| Non-aboriginal | 100.3 | |
| French | 102.0 | 1 |
| English | 98.8 | |
| Male | 98.5 | 1 |
| Female | 101.3 | |
| 18-34 | 92.1 | 1 |
| 35-54 | 99.4 | |
| 55-64 | 103.9 | |
| 65+ | 107.6 | |
| 8th grade or less | 100.1 | 0 |
| Some high-school | 97.2 | |
| High-school, GED | 98.3 | |
| College / trade diploma | 100.5 | |
| Undergraduate degree | 101.3 | |
| Graduate degree | 102.5 | |
| Income < \$25M | 91.7 | 1 |
| Income \$25M-\$60M | 101.8 | |
| Income >= \$60M | 103.5 | |

| Overall Performance Index | 2014 Grade | 2013 Grade | Grade Trend |
|---------------------------|------------|------------|-------------|
| | D | D | ● |

1. New Brunswicker's Experience with Primary Health Care, 2014 Survey Results (NBHC 2014)



New Brunswick Health System Report Card 2014

Value Trend:
 B Better performance
 ⇔ Same performance
 W Worse performance
 Bold: Updated indicator
 - Not Updated

Grade trend:
 ■ Higher Grade (or same A+ grade)
 ● Same Grade
 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Health care sector - ACUTE CARE

The care/service provided in a hospital or a psychiatric facility.

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
|---|-----------------|--------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – ACCESSIBILITY: The ability of patients/clients to obtain care/service at the right place and the right time, based on respective needs, in the official language of their choice. <i>(Providing timely services)</i> | | | | | | | |
| Wait time for hip fracture surgery (proportion with surgery - within 48 hours) (%)*1(New Source) | 2013 | 84.0% | W | 75.0%-89.0% | B | A+ | ◆ |
| Wait time for hip replacement surgery (within 26 weeks) (%)*1 | 2013 | 69.0% | W | 58.0%-92.0% | D | C | ◆ |
| Wait time for knee replacement surgery (within 26 weeks) (%)*1 | 2013 | 60.0% | W | 43.0%-93.0% | D | C | ◆ |
| Wait time for high-risk cataract surgery (within 16 weeks) (%)*1 | 2013 | 88.0% | B | 54.0%-95.0% | A | A+ | ◆ |
| Wait time for Coronary Artery Bypass Graft Surgery –Level II (within 42 days) (%)*2 | 2013-2014 | 85.0% | ⇔ | -- | -- | -- | -- |
| Wait time for radiation therapy (within 28 days) (%)*1 | 2013 | 97.0 % | B | 90.0%-100.0% | B | C | ■ |
| Population who received acute care services in the official language of their choice (%)(New)3 | 2013 | 87.1% | -- | Zones: 79.9%-93.4% | -- | -- | -- |
| Quality Dimension – APPROPRIATENESS: Care/service provided is relevant to the patients'/clients' needs and based on established standards. <i>(Relevant and evidence based)</i> | | | | | | | |
| Hysterectomy age-standardized rate (rate per 100,000)*4 | 2011-2012 | 421 | -- | 469-285 | E | E | -- |
| Low-Risk Caesarean Sections (%)(New)5 | 2012-2013 | 18.5% | -- | 20.0%-11.5% | E | -- | -- |
| Universal newborn and infant hearing screening (%)*6 | 2013-2014 | 92.2% | B | Zones: 78.8%-99.7% | -- | -- | -- |
| Patients with chronic conditions (CHF/COPD) discharged with home services (%)(New)6 | 2013-2014 | 30.8% | -- | 12.0%-30.8% | A+ | -- | -- |
| Pan-Canadian Age-Standardized Mental Illness Separations rate (per 100,000)(New)4 | 2012-2013 | 663 | W | 863-399 | C | C | ● |
| Score on the Care Transitions Measures (CTM) (coordination of hospital discharge care)7 | 2013 | 38.8 | -- | Zones: 32.0-48.8 | -- | -- | -- |

1. Canadian Institute for Health Information – Wait Times for Priority Procedures in Canada, 2013 - WaitTimes.CIHI.ca
 2. Department of Health - Wait times in New Brunswick – www1.gnb.ca/0217/SurgicalWaitTimes/Reports/
 3. New Brunswick Health Council - Hospital Patient Care Experience in New Brunswick - NBHC.ca/2013-Acute-Care-Survey

4. Canadian Institute for Health Information - 2013 Health Indicators Report. <https://secure.cihi.ca/estore/productSeries.htm?pc=PCC140>
 5. Canadian Institute for Health Information - Your Health System: In Depth – All Data Export Report. YourHealthSystem.CIHI.ca
 6. New Brunswick Department of Health, DAD/3M / AHIM
 7. New Brunswick Health Council - Hospital Patient Care Experience in New Brunswick



New Brunswick Health System Report Card 2014

Value Trend:
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 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Health care sector - ACUTE CARE

The care/service provided in a hospital or a psychiatric facility.

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
|---|-----------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – EFFECTIVENESS: The care/service, intervention or action achieves the desired results. <i>(Doing what is required to achieve the best possible results)</i> | | | | | | | |
| Risk-adjusted rate of 30-day acute myocardial infarction (AMI) in-hospital mortality (%)* ¹ | 2010-2012 | 7.3% | B | 8.5%-6.3% | C | D | ■ |
| Risk-adjusted rate of 30-day acute myocardial infarction (AMI) readmission (%)* ¹ | 2011-2012 | 14.2% | W | 14.2%-9.1% | F | -- | -- |
| Risk-adjusted rate of 30-day stroke in-hospital mortality (%)* ¹ | 2010-2013 | 15.5% | W | 20.4%-14.0% | A | B | ■ |
| 30-day in-hospital mortality following major surgery ^{(New)²} | 2012-2013 | 1.8% | -- | 2.5%-1.5% | B | -- | -- |
| 30-day readmission (Patients age 19 and younger). (Risk-adjusted, %) ² | 2012-2013 | 5.9% | B | 7.3%-5.8% | A+ | C | ■ |
| 30-day surgical readmission (Risk-adjusted, %) ¹ | 2012-2013 | 6.8% | W | 7.5%-5.7% | D | C | ◆ |
| 30-day obstetric readmission (Risk-adjusted, %) ¹ | 2012-2013 | 2.0% | B | 2.7%-1.7% | B | C | ■ |
| 30-day Medical readmission (Risk-adjusted, %) ¹ | 2012-2013 | 13.5% | W | 14.8%-12.2% | C | C | ● |
| 30-day Readmission for mental illness (Risk-adjusted rate, %) ¹ | 2012-2013 | 11.9% | B | 12.8%-9.2% | E | F | ■ |
| Five-year relative survival ratios for prostate cancer (relative survival ratio, %) ³ | 2006-2008 | 95.0% | -- | 90.0%-97.0% | B | A+ | -- |
| Five-year relative survival ratios for breast cancer (relative survival ratio, %) ³ | 2006-2008 | 89.0% | -- | 85.0%-89.0% | A+ | A | -- |
| Five-year relative survival ratios for colorectal cancer (relative survival ratio, %) ³ | 2006-2008 | 62.0% | -- | 61.0%-67.0% | E | B | -- |
| Five-year relative survival ratios for lung cancer (relative survival ratio, %) ³ | 2006-2008 | 17.0% | -- | 15.0%-21.0% | D | C | -- |

1. Canadian Institute for Health Information - 2013 Health Indicators Report - [Health Indicators Interactive Tool](#)
 2. Canadian Institute for Health Information - Your Health System: In Depth—All Data Export Report. [YourHealthSystem.CIHI.ca](#)
 3. Statistics Canada - Canadian Cancer Registry and Canadian Vital Statistics Death database and life tables



New Brunswick Health System Report Card 2014

Value Trend:
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 ◆ Lower Grade
 * Core indicator since 2010

2014 - Indicators by Health care sector - ACUTE CARE

The care/service provided in a hospital or a psychiatric facility.

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
|--|-----------------|---------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension –EFFICIENCY: Achieving the desired results with the most cost-effective use of resources. <i>(Making the best use of the resources)</i> | | | | | | | |
| Percentage of Alternate Level of Care (ALC) days to total inpatient days (%)* ¹ | 2013-2014 | 24.3% | W | 24.3%-7.8% | F | F | ● |
| Age standardized Average Length of Stay (ALOS) (in days) ² | 2012-2013 | 8.1 | W | 9.0-6.2 days | D | C | ◆ |
| Cost per weighted case – Labor Rate Adjusted (\$) ³ | 2012-2013 | \$6,504 | B | \$6,730-\$5,196 | E | F | ■ |
| Nursing Inpatient Services Total Personnel Worked Hours per Weighed Case (%) ³ | 2012-2013 | 57.2% | B | 63.2%-43.9% | D | E | ■ |
| Administrative Service Expense as a Percentage of Total Expense (%) ³ | 2011-2012 | 4.9% | -- | 5.9%-3.7% | C | C | -- |

1. New Brunswick Department of Health
 2. Canadian Institute for Health Information – "DAD/HMDB Inpatient Hospitalizations: Volumes, Length of Stay, and Standardized Rates" - Under Quick stats - DAD/HMDB Inpatient Hospitalizations: Volumes, Length of Stay, and Standardized Rates
 3. Canadian Institute for Health Information, Hospital Financial Performance Indicators



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2014 - Indicators by Health care sector - ACUTE CARE

The care/service provided in a hospital or a psychiatric facility.

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
|---|------------------------------|-------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – SAFETY: Potential risks of an intervention or the environment are avoided or minimized. <i>(Keeping people safe)</i> | | | | | | | |
| Hospital Standardized Mortality Ratio (HSMR)* ¹ | 2013-2014 | 88 | B | 104-81 | B | B | ● |
| Error rate - % in the community who believe they have suffered harm or error during their stay at an acute care hospital (%) ² | 2013 | 5.1% | -- | Zones: 5.8%- 4.1% | -- | -- | -- |
| Hand hygiene - % Compliance before Patient Contact (as reported by patients) (%) ² | 2013 | 46.1% | -- | Zones: 39.6%-61.3% | -- | -- | -- |
| Patients who believed that the hospital takes their safety seriously (%) ² | 2013 | 77.3% | -- | Zones: 74.0%-85.7% | -- | -- | -- |
| Inpatient Fall rate (reported falls in inpatient area per 1000 patient days) ³ | 2013-2014 | 5.63 | W | Zones: 7.12-3.90 | -- | -- | -- |
| In-Hospital Hip Fracture in Elderly (65+) Patients (rate per 1,000) ^(New Source) ⁴ | 2012-2013 | 0.90 | ⇔ | 1.49-0.6 | D | B | ◆ |
| Nursing-Sensitive Adverse Events for Medical Patients (rate per 1,000) ^(New Methodology) ⁴ | 2012-2013 | 22.5 | W | 34.5-22.5 | A+ | A+ | ■ |
| Nursing-Sensitive Adverse Events for Surgical Patients (rate per 1,000) ^(New Methodology) ⁴ | 2012-2013 | 24.4 | B | 48.4-21.4 | A+ | A+ | ■ |
| Staff perceptions of patient safety at the unit level (% very good or excellent) ⁵ | 2012 | 70.0% | -- | Zones: 65.3–79.1 | -- | -- | -- |
| Clostridium Difficile Associated Disease Rate (rate per 1,000 patient days) ⁶ | 2013-2014 | 0.242 | B | Zones: 0.375-0.124 | -- | -- | -- |
| MRSA Infection Rate or Methicillin-resistant staphylococcus aureus specific infection rate (rate per 1,000 patient days) ⁶ | 2013-2014 | 0.039 | B | Zones: 0.09-0.01 | -- | -- | -- |
| VRE infection rate (rate per 1,000 patient days) ⁶ | 2013-2014 | 0.012 | W | Zones: 0.038-0 | -- | -- | -- |
| In-Hospital Sepsis, Risk adjusted (rate per 1000) ^(New) ⁷ | 2012-2013 | 3.8 | -- | 5-2.7 | C | -- | -- |
| EMRAM SCORE (Electronic Medical Record Adoption Model score 0 to 7) ⁸ | 3 rd quarter 2014 | 3.058 | ⇔ | 0.614-4.285 | B | B | ● |

1. Canadian Institute for Health Information - Our Health System tool - OurHealthSystem.ca
 2. New Brunswick Health Council - Hospital Patient Care Experience in New Brunswick - NBHC.ca/2013-Acute-Care-Survey
 3. Incident Reporting System, Horizon Health Network and Vitalité Health Network
 4. Canadian Institute for Health Information – Data based on averages for the facilities’ rates as provided by CIHI

5. Patient Safety Culture Survey (Accreditation Canada) - Horizon Health Network and Vitalité Health Network data
 6. Infection, Prevention and Control - Horizon Health Network and Vitalité Health Network
 7. Canadian Institute for Health Information - YourHealthSystem.CIHI.ca
 8. HIMSS Analytics™ LLC. - HimssAnalytics.org/emram/scoreTrends.aspx



2014 - Indicators by Health care sector - ACUTE CARE
 The care/service provided in a hospital or a psychiatric facility.

Quality Dimension – EQUITY: Providing quality care/service to all, regardless of individual characteristics and circumstances, such as race, color, creed, national origin, ancestry, place of origin, language, age, physical disability, mental disability, marital status, family status, sexual orientation, sex, social status or belief or political activity. *(Aiming for equitable care and services for all)*

| Indicators | NB Value | 1 = difference is statistically significant |
|--|----------|---|
| Overall hospital rating (%)¹ | 75.4% | |
| Rural | 76.4% | 0 |
| Urban | 74.7% | |
| Aboriginal | 71.4% | 0 |
| Non-aboriginal | 75.3% | |
| French | 78.4% | 1 |
| English | 74.6% | |
| Male | 76.0% | 0 |
| Female | 74.8% | |
| Under 45 | 71.9% | 1 |
| 45-64 | 75.1% | |
| 65+ | 76.3% | |
| 8th grade or less | 81.8% | 1 |
| Some high-school | 78.9% | |
| High-school, GED | 74.8% | |
| College / trade diploma | 72.1% | |
| Undergraduate degree | 72.8% | |
| Graduate degree | 66.0% | |

| Overall Performance Index | 2014 Grade | 2013 Grade | Grade Trend |
|---------------------------|------------|------------|-------------|
| | C | C | -- |

1. Hospital Patient Care Experience in New Brunswick, 2013 Acute Care Survey Results (NBHC 2013) http://www.nbhc.ca/care_experience_survey.cfm



New Brunswick Health System Report Card 2014

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2014 - Indicators by Health care sector - SUPPORTIVE/SPECIALTY

The care/service received in the community or as an out-patient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life.

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
|---|-----------------|-----------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – ACCESSIBILITY: The ability of patients/clients to obtain care/service at the right place and the right time, based on respective needs, in the official language of their choice. <i>(Providing timely services)</i> | | | | | | | |
| Wait time for selected diagnostic tests: Magnetic Resonance Imaging (MRI), CAT (CT) scan, angiography (within 1 month) (%) ^{*4} | 2013 | 51.1% | W | 42.8%-67.9% | D | E | ■ |
| Nursing home beds per 100 persons aged 75 and over (Rate per 100) ^{*5} | 2014 | 8.1% | ⇔ | Zones: 7.4%-10.9% | -- | -- | -- |
| Wait time for specialist visits for a new illness or condition (within 1 month) (%) ^{*6} | 2013 | 39.4% | W | 30.6%-48.7% | C | C | ● |
| Average number of days to long term care home placement (days) ⁵ | 2013-2014 | 92.5 days | B | Zones: 161.5–61.6 | -- | -- | -- |
| Extra-Mural Program – Clients served per 1000 ⁷ | 2013-2014 | 48.7% | W | Zones: 48.6%-62.9% | -- | -- | -- |
| Extra-Mural Program – % Referred from community (%) ⁷ | 2013-2014 | 70.1% | B | Zones: 61.2%-78.4% | -- | -- | -- |
| Extra-Mural Program – % Referred from hospital (%) ⁷ | 2013-2014 | 29.9% | B | Zones: 38.8%-21.6% | -- | -- | -- |
| Service delivery done within 30 days (from referral to first visit) for child and youth mental illness (%) ⁸ (Excluding St.Stephen and Caraquet for differences in reporting systems) | 2013-2014 | 52.6% | B | Zones: 27.0%-69.3% | -- | -- | -- |
| Population who received Extra-Mural Program services in the official language of their choice (%) ^{(New)9} | 2012 | 96.3% | -- | -- | -- | -- | -- |
| Population who received Home Support services in the official language of their choice (%) ^{(New)9} | 2012 | 95.5% | -- | Zones: 88.2%-97.7% | -- | -- | -- |
| Quality Dimension – APPROPRIATENESS: Care/service provided is relevant to the patients'/clients' needs and based on established standards. <i>(Relevant and evidence based)</i> | | | | | | | |
| Proportion of mental health clients that had a screening assessment within 48 hours (%) ⁵ | 2013-2014 | 35.8% | W | Zones: 7.9%-79.7% | -- | -- | -- |
| Clients reporting that providers are informed about all care and treatment received at home by EMP (% always) ^{(New) 6} | 2012 | 77.1% | -- | Zones: 71.9%–82.7% | -- | -- | -- |

1. Statistics Canada - Canadian Community Health Survey - available through the New Brunswick Department of Health - Statcan.gc.ca
 2. NB Department of Social Development in combination with Census 2011 Statistics Canada Catalogue no. 99-004-XWE - Statcan.gc.ca
 3. Statistics Canada - CANSIM table 105-3002 - Statcan.gc.ca
 4. New Brunswick Department of Health, Extra-Mural Program
 5. New Brunswick Department of Health, Mental Health. (range used is New Brunswick Health Zones)
 6. New Brunswick Health Council - Home Care Survey 2012 - NBHC.ca/what-we-do/2012-home-care-survey



New Brunswick Health System Report Card 2014

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2014 - Indicators by Health care sector - SUPPORTIVE/SPECIALTY

The care/service received in the community or as an out-patient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life.

| Indicators | NB Value (2014) | | Value Trend | Range of values from other provinces (worse to better value) Or benchmark/target | 2014 RC Grade | 2013 RC Grade | Grade trend |
|---|-----------------|-----------|-------------|--|---------------|---------------|-------------|
| | Year | Value | | | | | |
| Quality Dimension – EFFECTIVENESS: The care/service, intervention or action achieves the desired results. <i>(Doing what is required to achieve the best possible results)</i> | | | | | | | |
| Patients with repeat hospitalizations for mental illness (Risk adjusted, %) ¹ | 2011-2012 | 11.7% | ⇔ | 13.3%-9.3% | D | D | ● |
| Self-Injury Hospitalization (aged-standardized rate per 100,000) ¹ | 2012-2013 | 81 | B | 97-44 | D | F | ■ |
| Pain or discomfort that prevents activities (%) ² | 2013 | 16.3% | W | 19.1%-12.4% | D | B | ◆ |
| Extra-mural Program clients who were admitted to the hospital or had to visit ER during the time they were getting the EMP service (%) ^{(New)3} | 2012 | 43.8% | -- | -- | -- | -- | -- |
| Quality Dimension – EFFICIENCY: Achieving the desired results with the most cost-effective use of resources. <i>(Making the best use of the resources)</i> | | | | | | | |
| Number of exams done by CAT (CT) scanners (rate per 1,000 population)* ⁴ | 2011-2012 | 209 | -- | 89-209 | -- | -- | -- |
| Average number of Computed Tomography (CT) Exams per scanner (number) ⁴ | 2011-2012 | 9,276 | -- | 6,206–9,782 | A+ | A+ | -- |
| Number of exams done by Magnetic Resonance Imaging (MRI) scanners (rate per 1,000 population)* ⁴ | 2011-2012 | 50 | -- | 32-62 | -- | -- | -- |
| Average number of Magnetic Resonance Imaging (MRI) Exams per scanner (number) ⁴ | 2011-2012 | 6,342 | -- | 3,772–8,643 | C | C | -- |
| Average number of days to complete long term care generic assessment (days, from initial contact to complete assessment) ^{(New Methodology)5} | 2013-2014 | 59.0 days | W | -- | -- | -- | -- |
| Quality Dimension – SAFETY: Potential risks of an intervention or the environment are avoided or minimized. <i>(Keeping people safe)</i> | | | | | | | |
| Patients who reported staff talking about all the medications they were taking through EMP(%) ⁶ | 2012 | 72.3% | -- | -- | -- | -- | -- |
| Intentional self-harm (suicide) age-standardized mortality rate (rate per 100,000) ⁷ | 2011 | 12.6 | W | 13.3–6 | F | A | ◆ |

1. Canadian Institute for Health Information - 2013 Health Indicators Report - [Health Indicators Interactive Tool](#)
 2. Statistics Canada, Table 105-0501 - [Statcan.gc.ca](#)
 3. New Brunswick Health Council - Home Care Survey 2012 - [NBHC.ca/what-we-do/2012-home-care-survey](#)

4. Canadian Institute for Health Information – National Survey of Selected Medical Imaging Equipment, 2012.
 5. New Brunswick Department of Social Development
 6. New Brunswick Health Council - Home Care Survey 2012 - [NBHC.ca/what-we-do/2012-home-care-survey](#)
 7. Statistics Canada, Table 102-0552. <http://www.statcan.gc.ca>



New Brunswick Health System Report Card 2014

2014 - Indicators by Health care sector - SUPPORTIVE/SPECIALTY

The care/service received in the community or as an out-patient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life.

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| Indicators | NB Value | 1 = difference is statistically significant |
|---|----------|---|
| Overall rating for home healthcare services (EMP) received (% 8, 9, or 10 on a scale of 0 to 10)¹ | 96.7% | |
| Rural | 96.7% | 0 |
| Urban | 96.8% | |
| Aboriginal | 92.1% | 1 |
| Non-aboriginal | 96.9% | |
| French | 97.6% | 0 |
| English | 96.5% | |
| Male | 96.5% | 0 |
| Female | 96.8% | |
| Under 65 | 94.2% | 1 |
| 65-74 | 97.2% | |
| 75+ | 98.1% | |
| 8th grade or less | 97.9% | 1 |
| Some high-school | 97.8% | |
| High-school, GED | 97.4% | |
| Post-secondary | 95.4% | |
| Less than \$25,000 | 96.3% | 0 |
| \$25,000 or more | 97.0% | |

1. New Brunswick Health Council. Home Care Survey (2012). <http://www.nbhc.ca/what-we-do/2012-home-care-survey>



Grade trend:
■ Higher Grade (or same A+ grade)
● Same Grade
◆ Lower Grade
 -- Not Updated

2014 - Indicators by Health care sector - SUPPORTIVE/SPECIALTY
 The care/service received in the community or as an out-patient to prevent, control, or relieve complications and/or side effects and to improve the citizen's comfort and quality of life.

Quality Dimension – EQUITY: Providing quality care/service to all, regardless of individual characteristics and circumstances, such as race, color, creed, national origin, ancestry, place of origin, language, age, physical disability, mental disability, marital status, family status, sexual orientation, sex, social status or belief or political activity. *(Aiming for equitable care and services for all)*

| Indicators | NB Value | 1 = difference is statistically significant |
|--|----------|---|
| Overall rating for home support services received (% 8, 9, or 10 on a scale of 0 to 10)¹ | 87.9% | |
| Rural | 90.4% | |
| Urban | 85.2% | 1 |
| Aboriginal | 91.0% | |
| Non-aboriginal | 87.9% | 0 |
| French | 87.3% | |
| English | 88.2% | 0 |
| Male | 89.4% | |
| Female | 87.3% | 0 |
| Under 65 | 84.8% | |
| 65-74 | 90.2% | |
| 75-84 | 88.5% | 1 |
| 85+ | 90.0% | |
| 8th grade or less | 90.1% | |
| Some high-school | 90.4% | |
| High-school, GED | 84.0% | 1 |
| Post-secondary | 86.3% | |
| Less than \$25,000 | 87.8% | |
| \$25,000 or more | 87.2% | 0 |

| Overall Performance Index | 2014 Grade | 2014 Grade | Grade Trend |
|---------------------------|------------|------------|-------------|
| | D | C | -- |

1. New Brunswick Health Council. Home Care Survey (2012). <http://www.nbhc.ca/what-we-do/2012-home-care-survey>