

***New Brunswick  
Health System  
Report Card  
2011***



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

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

# About us:

## Who we are:

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 performance and recommending improvements to health system partners.

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# Executive Summary

The New Brunswick Health Council is proud to deliver its second *New Brunswick Health System Report Card* as part of our commitment to providing the citizens of New Brunswick with important information about the quality of health services being delivered in the province.

The second New Brunswick Health System Report Card is an attempt to expand on the first baseline picture of the health system which was used for measuring, monitoring and evaluating changes to the quality of health service and to assist with recommendations for improvements, some of which can be found in our most recent, **“Recommendations to the New Brunswick Minister of Health, Moving towards a planned and citizen-centered publicly funded health care system (NBHC, 2011).”**

The current report card has gone through a few enhancements while continuing to ensure that the citizen or patient remains the focus for improvement in health service quality as they must navigate through the health care system for effective management of their health. These changes include additional indicators of performance that were strategic in nature and facilitate priority planning from a system’s perspective. Most of the indicators were based on high-cost or high-volume program and service areas and better reflect the sectors of care: Primary Health, Acute Care and Supportive/Specialty (commonly known as “Continuing Care”).

## *What did we learn?*

- There are significant clinical areas where New Brunswick is being effective with respect to specific health outcomes such as Cancer, Pulmonary/Respiratory, and Labour and Delivery, which are represented by cancer survival rates, asthma readmission rates and infant low birth weights/infant mortality. Effectiveness is measured when interventions or actions are achieving the desired result.
- There are other clinical areas where New Brunswick does not appear to be as effective, such as: Cardiac, Endocrinology, Pulmonary (COPD), Mental Health, Bone and Joint, Women’s Health and Urology. These are represented by the high rates of high blood pressure, higher rates of hospitalizations for stroke, readmission rates for acute MI (heart attack) and in-hospital mortality for acute MI, percent of individuals with diabetes not in control, high rates of COPD admissions and readmissions, mental health self-injury hospitalizations and readmissions within 30 days, repeat readmissions within a year and higher



suicide rates, high rates of pain or discomfort that prevents activities, high injury admissions and premature deaths from injuries, higher rates of hysterectomies and hysterectomy readmissions and higher rates of cesarean sections, and Prostatectomy readmission rates.

- The efficiency dimension performance grade highlights a major area for review and focus for health system improvement and a possible starting point for system transformational change. Efficiency has been defined as “achieving the desired results with the most cost-effective use of resources” by the New Brunswick Health Council. There are three significant system level indicators in the efficiency dimension that points to areas of quality improvement: Ambulatory Care Sensitive Conditions, Readmission Rates and Alternate Level of Care days. Each one of these when examined or drilled further are identifying systemic issues that are contributing to inefficiencies and impact on the quality of care and health outcomes.
- Ambulatory Care Sensitive Conditions. Why this one? When this indicator is high, it can have significant cost implication on the hospital sector. While not all admissions for ambulatory care sensitive conditions (grand mal status and other epileptic convulsions, chronic obstructive pulmonary disease (COPD), asthma, heart failure and pulmonary edema, hypertension, angina) are avoidable, it is assumed that appropriate prior ambulatory care could prevent the onset of this type of illness or condition, control an acute episodic illness or condition, or manage a chronic disease or condition. Admissions can be influenced by <sup>A</sup> :
  1. *Population Lifestyles/Social Economic Status* - In New Brunswick, we have significantly higher rates for certain risk factors such as smoking, obesity and alcohol consumption where we rank among the top three worst provinces. In addition, we cannot ignore that we have the third highest unemployment rate and that nearly 30% of our population does not have some form of private health insurance coverage.
  2. *Physician Practice Behaviour* - From our Primary Health Care Survey in 2011 and the National Physician Survey 2010, we learned that patients have one of the highest levels of access to a primary care provider. However, when it comes to getting an urgent or non-urgent appointment in a timely fashion, New Brunswick ranks as one of the lowest among the provinces on accessibility; worse in inter-collaborative practices; and direct patient care with a teaching component, screening for cholesterol, sugars and weights are less than favourable. Furthermore, New Brunswick physicians are still utilizing paper charting in their offices to a large degree.



3. *Population tendency to use healthcare* - In New Brunswick, 12% of the people use the emergency room as their regular place of care but the range varies among our 28 communities from 4% to 59%. Men, those living in a rural area, younger New Brunswickers, lower income individuals, citizens with a lower education level and those who prefer French as their language of service use the emergency room more often as their regular place of care. There was no significant difference for Aboriginals. In general, New Brunswick has lower rates of using telephone help lines (10%) when we compare to Canada and other countries that can range as high as 24% in Canada or 29% in the United Kingdom.

4. *Disease prevalence* - When it comes to disease prevalence rates it is important to note that for COPD and high blood pressure, we have the second highest rates among the provinces. For diabetes and arthritis, we have the third highest rates and with asthma we are only 8<sup>th</sup> worst, which can be associated to the better performance noted with respect to asthma readmission rates.

- What factors have been known to affect readmission rates? We can start with patient frailty and chronic health diseases which might increase the chances of a patient getting readmitted. Improper post discharge treatment may lead to readmission of the patient (evidenced by the number of individuals who reported poor care transition to home and/or discharge instructions both written and verbal from the 2010 NBHC Acute Care Experience Survey). In addition, lack of proper planning for follow-up for these high risk individuals can often lead to readmissions. Literacy and socio-economic status and support cannot be ignored especially for these high risk individuals. Bed availability can also contribute to readmission rates (in hospitals where there is limited bed availability, patients may be discharged too early and in areas where there are available beds, choosing to admit a complex or chronic disease patient is enhanced).
- In the acute care sector, we find that 22.5% of our hospital beds are being used for alternate level of care. Alternate level of care (ALC) identifies a patient who has completed the acute care phase of his or her treatment but remains in the acute care bed<sup>B</sup>. As a province, we currently rank the worst among the provinces and the best result sits at 8.2%. This creates a huge bed utilization issue. In addition, we have some of the longest average length of stays in our hospital beds and in terms of productivity, New Brunswick is ranked as the lowest in unit producing personnel. We do see that our cost per weighted case provincially is lower than many provinces but the question remains, are we investing in the right places? This is important to note since often cost cutting is used instead of systematic planning, redeployment strategies or core service reviews which



target roles and responsibilities and enhancing scopes of practice. In addition, in the absence of proper focus, monitoring, evaluation and accountability, efficiencies will be difficult to achieve. What can be done?

Based on this year's *Health System Report Card*, the current overall performance grade is a "C" and shows no change from the previous year. It is important to note that the same 48 baseline indicators were used to evaluate any change in quality measures. In terms of the dimensions of quality: accessibility improved from an overall grade of "C" to a "B" on this year's report card and appropriateness dropped in grade from "C" to a "D". As for overall effectiveness and efficiency, both remained the same at a "C" grade. This year's report card is starting to depict a sobering picture that,

**until we reduce the demand on our health services, it will be difficult to change outcomes.**

At the **patient or citizen level**, there needs to be a focus on overall "patient first" philosophy for any health services delivery and actively engaging the citizens of New Brunswick in being well.

At the **hospital services level**, improved communication, increased responsiveness of staff to patients, use of detailed discharge plans, timely follow-up appointments and medication reconciliation can improve quality and outcomes.

At the **system level**, some strategies identified in the literature to improve systemic failures include: improving accessibility in community for primary care, better synergy for population health initiatives across departments, integrated delivery system (IDS), electronic medical records (EMRs) and better patient follow-through plans (improved access to identified "at risk, vulnerable populations" to community programs and services).

A - Hossain MM, Laditka JN. Using hospitalization for ambulatory care sensitive conditions to measure access to primary healthcare: an application of spatial structural equation modeling. *Int J Health Geogr.* 2009 Aug 28; 8:51

B - Canadian Institute for Health Information, *Alternate Level of Care in Atlantic Canada 2009-2010* [http://secure.cihi.ca/cihiweb/products/alc\\_aib\\_january2011\\_e.pdf](http://secure.cihi.ca/cihiweb/products/alc_aib_january2011_e.pdf)





## 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 second *New Brunswick Health System Report Card* is an attempt to expand on the first baseline picture of the health system which was used for measuring, monitoring and evaluating changes to health services over time and to assist with recommendations for improvements, some of which can be found in our most recent, **“Recommendations to the New Brunswick Health Minister, Moving towards a planned and citizen-centered publicly funded health care system (NBHC, 2011).”**

The 2011 *Report Card* contains indicators of performance organized by sectors of care 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 new performance index grade has been modified in this report to reflect New Brunswick’s ability to achieve the highest possible value when being compared to nationally and at times internationally when national value is not available. 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.

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

New Brunswick Health System Report Card					
	Health Care Sectors				
	Primary Health	Acute Care	Supportive/ Specialty	Palliative and End-of-life Care	Performance Index Grade (By Quality Dimension)
Accessibility		Providing timely services			
Appropriateness		Relevant and evidence based			
Effectiveness		Doing what is required to achieve the best possible results			
Efficiency		Making the best use of the resources			
Equity		Aiming for equitable care and services for all			
Safety		Keeping people safe			
Performance Index Grade (By Health Care Sector)					



the quality of health services.<sup>1</sup> 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 second 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.



## Development of the *New Brunswick Health System Report Card*:

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<sup>2</sup>. These dimensions of quality are: *Accessibility, Appropriateness, Effectiveness, Efficiency, Equity and Safety*.

Dimensions of quality	Descriptor
<b>Accessibility</b>	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.
<b>Appropriateness</b>	Care/service provided is relevant to the patients'/clients' needs and based on established standards.
<b>Effectiveness</b>	The care/service, intervention or action achieves the desired results.
<b>Efficiency</b>	Achieving the desired results with the most cost-effective use of resources.
<b>Equity</b>	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.
<b>Safety</b>	Potential risks of an intervention or the environment are avoided or minimized.

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 which make up the Health Care System.



A *Health Care System or Health System*<sup>3</sup>, 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*<sup>3</sup> 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*<sup>4</sup> 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,



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 there are 111 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<sup>5</sup>, that is:

1. Relevant to the concerns of our main target audiences,
2. Easy to understand,
3. Reliable and valid,
4. Timely,
5. Easy to obtain and are periodically updated,
6. Obtained through an open, transparent and inclusive consultative review process, and
7. 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.



	# of indicators in 2010 Report Card	# of indicators in 2011 Report Card
Dimensions of Quality		
Accessibility	17	29
Appropriateness	11	15
Effectiveness	13	20
Efficiency	6	13
Equity	0	20
Safety	1	14
Sector of Care		
Primary Health	19	79
Acute Care	21	51
Supportive / Specialty	8	20
Palliative and End-of-life Care*	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.*



## 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. 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 care 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*<sup>6</sup>, the Fraser Institute<sup>7</sup> 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*<sup>8</sup> 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*<sup>9</sup> 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*<sup>10</sup> 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*.

### *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<sup>11</sup>.

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”.

i.e. 14

Step 3: Total all characteristics for evaluation and subtract 1 to create range.

i.e.  $20-1=19$

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

i.e.  $A+ = 1 - 3.7$ ,  $A = 3.7 - 6.4$ ,  $B = 6.4 - 9.1$ ,  $C = 9.1 - 11.8$ ,  $D = 11.8 - 14.5$ ,  $E = 14.5 - 17.2$ ,  $F = 17.2 - 19.97$ .

Step 5: Assign numbers of inequities to a grade level. Lower number of inequities equals a better grade.

i.e. 14 = D Grade.

### ***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 NOTE:* The overall grade should not be viewed in isolation from indicators on which it is based for any policy and/or planning decisions.

*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.<sup>12, 13, 14</sup>

#### 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.
8. A single composite index representing a single value is an excellent communications tool for use with the public, including the news media, general public, and elected and unelected key decision-makers.

#### 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.



## Changing / Current Indicators:

Some of our indicators have changed to take advantage of new sources that can produce an improved picture of the health system. These indicators are well indicated in the actual indicator tables.

63 new indicators have been added. Some have been developed with the help of stakeholders such as Mental Health leadership committee, Social Development, extra-mural leadership committee, Provincial Patient Safety Committee, key representatives from Horizon Health Network, Vitalité Health Health Network, Ambulance NB and Department of Health, while others have been researched internally to reflect the national direction. The addition of these new indicators will make the dimensions and sectors more inclusive and representative of the programs and services in New Brunswick.

In this second report card, the primary focus for new indicators were the safety and equity dimensions with expansion to the supportive/specialty sector (more commonly referred to as “continuing care”). The NBHC has tried to represent 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.

## Challenges:

As we identify new indicators for our health system report card, a number of challenges continued to present themselves.

The first challenge occurred when trying to identify how to measure the safety and equity dimensions soon after the initial report card was released. Bringing together the Department of Health representatives on patient safety and major stakeholders from both regional health authorities was key. A comprehensive draft of safety indicators from all three current sectors was presented and discussed to get consensus on those indicators, which the group felt were the most standardized and responded to the significant types of errors or adverse events that were being reported through incident reports, complaints and through the 2010 New Brunswick Acute Care Experience Survey. This work required a number of meetings and iterations to produce 14 safety indicators. In addition, this created an opportunity to collectively agree on a few more indicators that would be prioritized for the 2012 report card. The equity dimension was much more 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 determinant<sup>11</sup> 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.

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.

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. Most indicators for quality or performance measurement are still quite hospital based mainly because of the more sophisticated measurement capabilities and standardization of the indicators. The new indicators required a number of stakeholder meetings and the same process was used to identify and develop consensus for these additional indicators as was used with the safety dimension. Although discussions occurred with those stakeholders responsible for rehabilitation services, without standardized data collection, the work would be quite manual and time consuming.

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.



## Key Trends / Observations:

### *Accessibility :*

Accessibility has improved overall from last year, going from a “C” to a “B” grade. Access to a regular medical doctor continues to improve receiving an A+. The other areas receiving high grades are primarily in wait times, specifically: coronary artery bypass surgeries, high-risk cataract surgeries, radiation therapy as well as access to specialists and diagnostic tests. When it comes to access to emergency care, whether it is required from ambulances or emergency rooms or immediate care, NEW BRUNSWICK performs at a least a “B” or higher.

Areas of access that continue to trail are primarily around contact with dental professionals and accessibility to services beyond emergency situations or requiring a first time referral to a specialist or community mental health centre.

### *Appropriateness :*

Appropriateness is defined as the care or service provided that is relevant to the patients’/clients’ needs and based on established standards. This year’s report card has shown a significant decline in this particular dimension of quality, dropping from a “C” to a “D” grade. This section measures how well New Brunswick is performing in providing the necessary screening or testing guidelines or preventative care that can have an impact on health outcomes.

Flu shots improved (possibly due to H1N1 in the same time period) and mammography continues to improve but blood sugar testing, cholesterol measurements and body weight measurements are not reaching the levels of attention they should considering the significant impact they are having on New Brunswicker’s health outcomes.

The grade performances “F” and “E” respectively for hysterectomy and cesarean section continue to be an area of concern since it exposes women to potentially unnecessary interventions.

### *Effectiveness :*

From a health system perspective, this dimension of quality provided the most insight on outcomes of care and the significant gaps that exist to deliver an integrated system. Effectiveness is often reflective of outcomes on patients since the intervention or action should achieve the desired result. The grade on effectiveness is a “C”, but it will be important to analyze the trends by sectors of care. If we start with



Primary Health, we notice that it is in this area where the quality of care requires significant attention. New Brunswick ranks quite low in participating in intercollaborative practices, direct patient care with a teaching component, diabetes control, and the high rates of high blood pressure.

We appear to be improving with surgery wait times for coronary and we do a lot of coronary interventions (cardiac revascularization, PCI, CABG etc) but readmission rates for acute MI and in-hospital mortality for acute MI are placing New Brunswick in an unfavorable position on outcomes of care with grades of “D” and “F”.

In the acute care sector, effectiveness indicator grades are at polar extremes. We either perform exceptionally better, as is the case with 30-day stroke in-hospital mortality, asthma readmission rates, low birth weight babies and cancer survival rates, or New Brunswick performs rather poorly; the indicators which are receiving “Ds” and “Fs” are prostatectomy, hysterectomy and mental health readmissions within 30 days.

In the supportive/specialty sector, self-injury hospitalization rates are also extremely high, which illustrates further that gaps in care are occurring between sectors and these gaps are negatively impacting mental health patients/clients.

A positive trend to be celebrated is the A+ for the Electronic Medical Record (EMR) adoption model scores when compared nationally, but New Brunswick has a long way to go before being fully integrated. Since the integration across sectors of care is still not fully available, innovative approaches to reduce gaps in care and reduce the possibility of adverse events must be encouraged.

### *Efficiency :*

When it comes to efficiency, the trending is not favorable. If we review the most significant cost drivers in this dimension, (Ambulatory Care Sensitive Conditions , doctors in New Brunswick using paper charts only in their office, rates of less-urgent (triage 4) and non-urgent (triage 5) emergency visits, rates of alternate level of care bed use, length of hospital stays and unit producing personnel) the grades reflect mainly “Es” and “Fs”.

### *Equity :*

In terms of equity, an overall grade is assigned based on a scoring system using only provincial data. In this report, inequities are observed in access and quality of primary health care and acute care services, and can be based on gender, age, language of service



preference, Aboriginal/non-Aboriginal, education, rural/urban and income. Inequities are mostly observed for gender and age, with older New Brunswickers having better access to a personal family doctor and reporting a higher satisfaction with primary health care and acute care services. Inequities are also observed for Aboriginals who have poorer access to a personal family doctor and are less satisfied with the quality of primary health care services. No inequities are observed for income with respect to primary health care such as access to a personal family doctor and overall satisfaction with services. For rural/urban, no inequities were observed for overall satisfaction with primary health care and acute care services and interestingly, rural New Brunswickers have better access to a personal family doctor. Citizens who prefer French as the language of service have better access to a personal family doctor and report having a higher satisfaction with primary health care services.

### ***Safety :***

From a primary care sector, safety appears to be better than in the acute care setting, whether it is on experiencing error or harm or in hip fractures rate and the improvement of physicians being able to at least access hospital patient information from their offices.

The acute care sector needs improvement in a number of areas which appear to have a significant impact on readmissions or potential adverse events. These areas are: improving our response to patient's needs, improving the level of communication, preparing patients better for discharge, helping them understand what their meds are for including possible side-effects, as well as improving hand hygiene among staff.

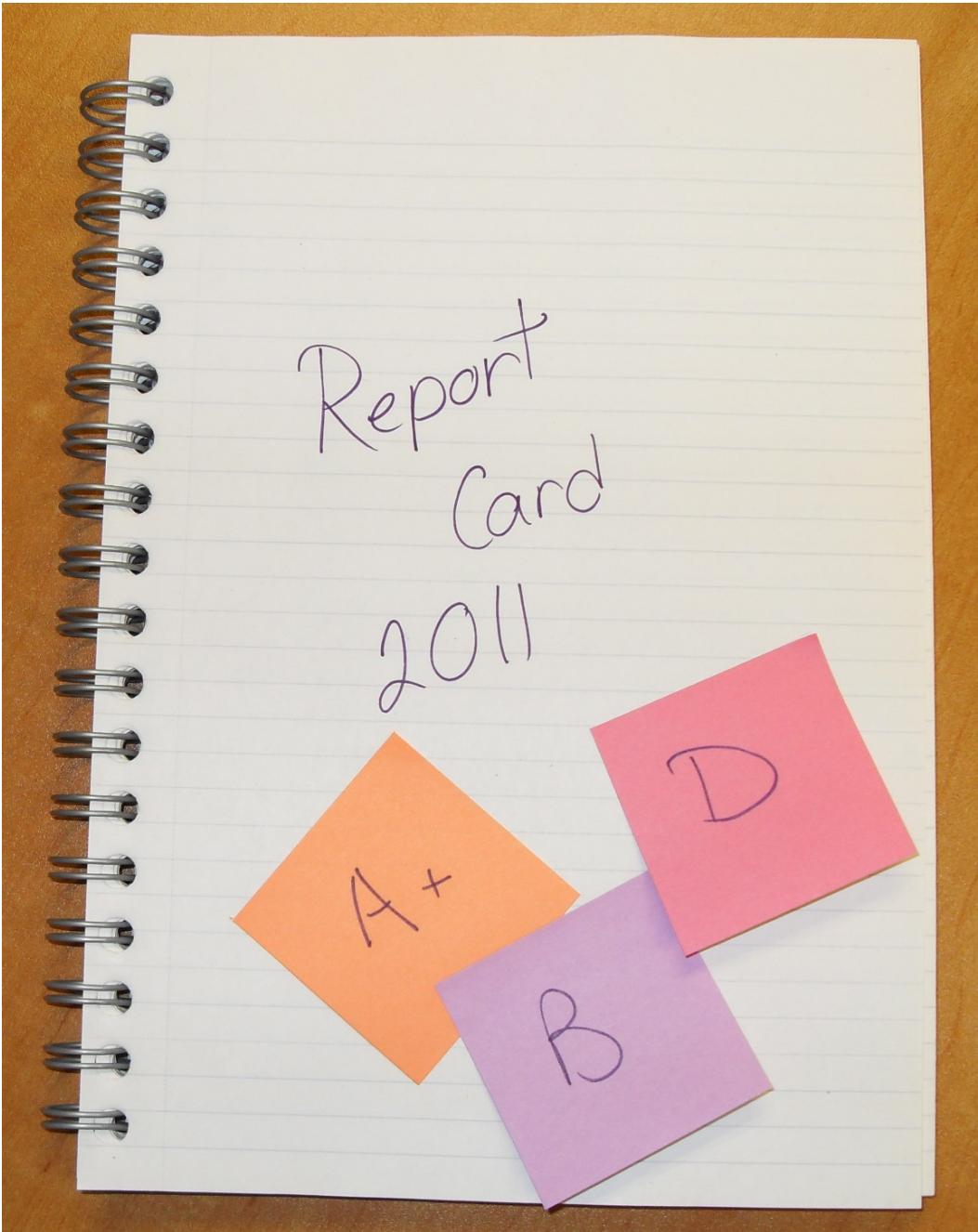
### ***Supportive specialty:***

Receiving an "F" for suicide rate warrants significant concern as a system measure because it can reflect serious gaps in care such as poor early accessibility of prevention (crisis centres, community centres etc), poor social support and lack of integrated service delivery<sup>15</sup>.













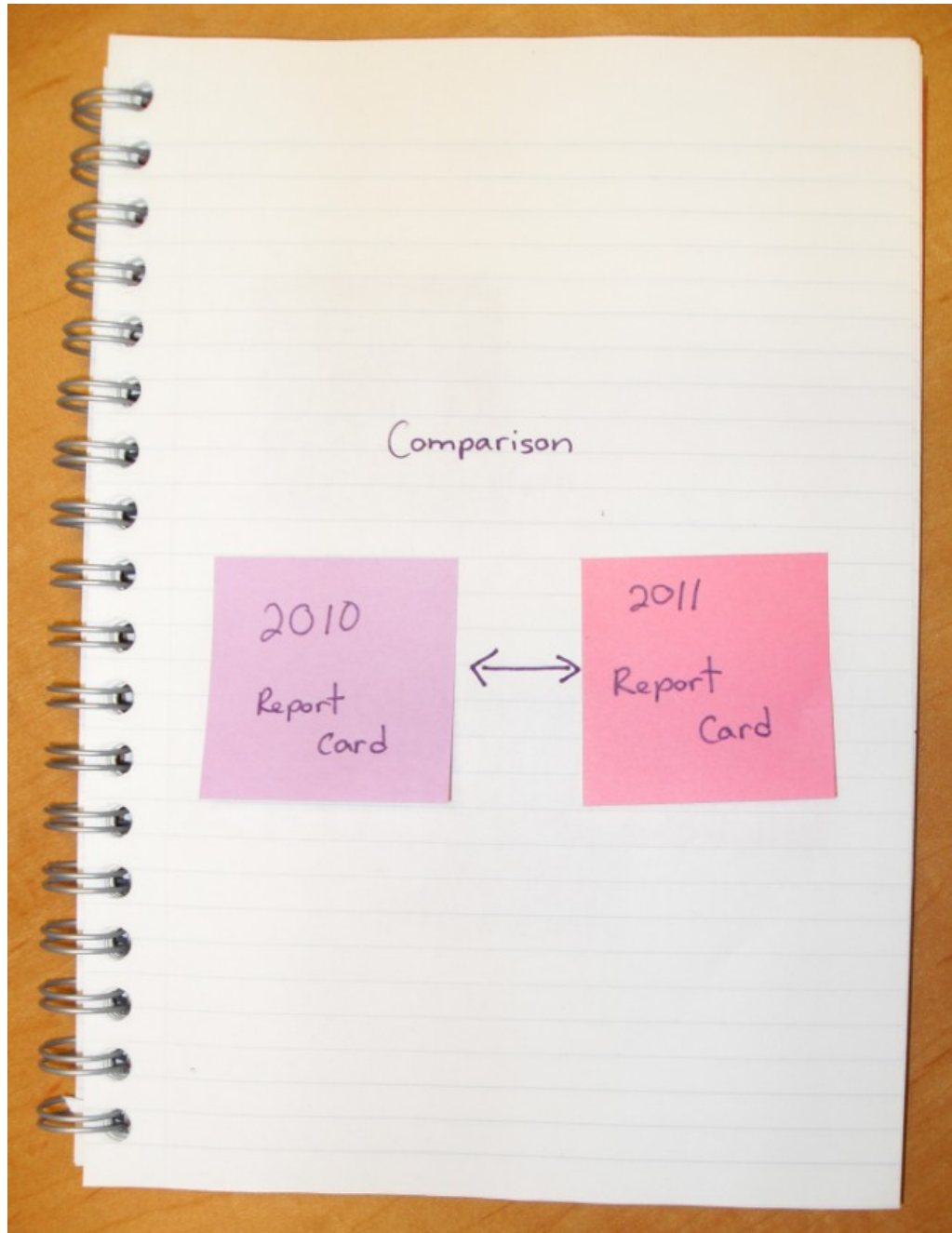
# 2011 New Brunswick Health System Report Card



**Performance Index Grade**  
(by Quality Dimension)

 Quality Dimensions	<b>Accessibility</b>	Providing timely services			<b>B</b>
	<b>Appropriateness</b>	Relevant and evidence based			<b>D</b>
	<b>Effectiveness</b>	Doing what is required to achieve the best possible results			<b>C</b>
	<b>Efficiency</b>	Making the best use of the resources			<b>C</b>
	<b>Equity</b>	Aiming for equitable care and services for all			<b>D</b>
	<b>Safety</b>	Keeping people safe			<b>B</b>
	<b>Performance Index Grade</b> (by Health Care Sector)	<b>C</b>	<b>C</b>	<b>B</b>	Not available at the moment







# 2011 New Brunswick Health System Report Card




**Performance Index Grade**  
(by Quality Dimension)

Quality Dimensions

<b>Accessibility</b>
<b>Appropriateness</b>
<b>Effectiveness</b>
<b>Efficiency</b>
<b>Equity</b>
<b>Safety</b>

	2010	2011
<b>Providing timely services</b>	C	B
<b>Relevant and evidence based</b>	C	D
<b>Doing what is required to achieve the best possible results</b>	C	C
<b>Making the best use of the resources</b>	C	C
<b>Aiming for equitable care and services for all</b>	Not available	D
<b>Keeping people safe</b>	A	B
<b>Performance Index Grade (by Health Care Sector)</b>	2010: D	2011: C
	2010: C	2011: B
	Not available at the moment	







## 2011 - 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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
<b>Health care sector - PRIMARY HEALTH:</b>				
The care 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 (percentage)*	(2009-2010) <b>80.8%</b>	77.4% - 83.5%	<b>C</b>	Statistics Canada, Table 105-0502 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Has a regular medical doctor (percentage)*	(2009-2010) <b>92.2%</b>	74.2% - 93.2%	<b>A+</b>	Statistics Canada, Table 105-0502 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Difficulties accessing routine or on-going care at any time of day (percentage)*	(2009) <b>11.0%</b>	22.1% - 11.0%	<b>B</b>	Statistics Canada, Table 105-3067 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Difficulties accessing immediate care for a minor health problem at any time of day (percentage)*	(2009) <b>17.5%</b>	28.7% - 12.9%	<b>B</b>	Statistics Canada, Table 105-3069 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Family practitioner and general practitioners who provide extended office hours regularly (percentage)	(2011) <b>21.6%</b>	7.0% - 31.3%	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a>
Patients who contact or are referred to their family physicians or general practitioners URGENTLY, can have an appointment the same day (percentage) (as reported by physicians)	(2010) <b>41.8%</b>	35.2% - 57.0%	<b>D</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Percentage of patients seen within 1 week for NON-URGENT visit with family physician or general practitioners (percentage) (as reported by physicians)	(2010) <b>18.3%</b>	9.3% - 34.2%	<b>D</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
First available appointment - from patient contacts with physicians office or referred to office by another physician – URGENT only (mean number of days) (percentage) (as reported by physicians)	(2010) <b>3.43 days</b>	3.66 days - 2.26 days	<b>E</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Contact with dental professionals in the past 12 months (percentage)*	(2007-2008) <b>54.7%</b>	53.6% - 69.4%	<b>F</b>	NEW SOURCE: Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health
Spending on prescription drugs greater than 3% of after tax income (percentage)*	(2008) <b>9.1%</b>	13.3% - 4.6%	<b>C</b>	Statistics Canada, Table 109-5012 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Left without being seen from the Emergency Room (percentage)	(2010-2011) <b>5.8%</b>	--	--	New Brunswick Department of Health
% of emergency calls done within the appropriate time (9 min –urban, 22 min – rural) for ambulance services (percentage)	(2010-2011) <b>95.7%</b>	Target 90%	<b>A+</b>	Ambulance New Brunswick <a href="http://www.ambulancenb.ca/">http://www.ambulancenb.ca/</a>
Emergency Room - Patients who are seen within 4 hours (percentage)	(2011) <b>75.0%</b>	(2007) 73.0% - 96.0%	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> In combination with the Commonwealth fun 2007 (for range)

### Health care sector - ACUTE CARE:

The care provided in a hospital or a psychiatric facility.

Wait time for hip fracture surgery (proportion with surgery - within 48 hours) (percentage)*	(2009-2010) <b>82.9%</b>	68.8% - 82.9%	<b>A+</b>	Canadian Institute for Health Information - 2010 Health Indicators Report <a href="http://www.cihi.ca/CIHI-ext-portal/internet/EN/SubTheme/health+system+performance/indicators/cihi010653">http://www.cihi.ca/CIHI-ext-portal/internet/EN/SubTheme/health+system+performance/indicators/cihi010653</a>
Wait time for hip replacement surgery (within 26 weeks) (percentage)*	(Oct 2010 – Sept 2011) <b>71.0%</b>	57.0% - 91.0% (2010)	<b>D</b>	NEW SOURCE: Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a> in combination (for ranges) with Surgical wait times in New Brunswick <a href="http://www1.gnb.ca/0217/surgicalwaittimes/Reports/02-e.aspx">http://www1.gnb.ca/0217/surgicalwaittimes/Reports/02-e.aspx</a>
Wait time for knee replacement surgery (within 26 weeks) (percentage)*	(Oct 2010 – Sept 2011) <b>57.8%</b>	42.0% - 89.0% (2010)	<b>D</b>	NEW SOURCE: Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a> in combination (for ranges) with Surgical wait times in New Brunswick <a href="http://www1.gnb.ca/0217/surgicalwaittimes/index-e.aspx">http://www1.gnb.ca/0217/surgicalwaittimes/index-e.aspx</a>
Wait time for high-risk cataract surgery (within 16 weeks) (percentage)*	(2010) <b>89.0%</b>	48.0% - 89.0%	<b>A+</b>	NEW SOURCE: Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a>
Wait time for Coronary Artery Bypass Graft Surgery (within 2 to 26 weeks) (percentage)*	(2010) <b>100.0%</b>	95.0% - 100.0%	<b>A+</b>	NEW SOURCE: Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a>
Wait time for radiation therapy (within 28 days) (percentage)*	(Nov 2010 – Oct 2011) <b>94.8%</b>	85.0% - 100.0% (2010)	<b>B</b>	Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a> In combination with wait times in New Brunswick <a href="http://www.gnb.ca/0051/cancer/pdf/NBCN_wait_time_update_E.pdf">http://www.gnb.ca/0051/cancer/pdf/NBCN_wait_time_update_E.pdf</a>

### Health care sector - SUPPORTIVE/SPECIALTY:

The care 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) (percentage)*	(2009) <b>70.5%</b>	47.8% - 70.5%	<b>A+</b>	Statistics Canada, Table 105-3004 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Residents over 75 years of age that have access to long-term care beds (percentage)*	(2010-2011) <b>8.7%</b>	To be determined	To be determined	NB Department of Social Development 2010-2011 in combination with Statistics Canada – Online catalogue 92-591-XWE <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Wait time for specialist visits for a new illness or condition (within 1 month) (percentage)*	(2009) <b>44.3%</b>	36.0% - 55.6%	<b>C</b>	Statistics Canada, Table 105-3002 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Experience difficulties getting specialist care (Percentage with fair or poor access) (percentage)	(2010) <b>14.3%</b>	30.7% - 13.8%	<b>A+</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>

Median number of day to long term Care Home placement (days)	(2010-2011) <b>125 days</b>	To be determined	To be determined	NB Department of Social Development 2010-2011
Extra-Mural Program – Clients served per 1000	(2010-2011) <b>51.3</b>	To be determined	To be determined	New Brunswick Department of Health, Extra-Mural Program
Extra-Mural Program – % Referred from community (percentage)	(2010-2011) <b>68.0%</b>	To be determined	To be determined	New Brunswick Department of Health, Extra-Mural Program
Extra-Mural Program – % Referred from hospital (percentage)	(2010-2011) <b>32.0%</b>	To be determined	To be determined	New Brunswick Department of Health, Extra-Mural Program
Proportion of mental health clients that had a screening assessment within 48 hours (percentage)	(2010-2011) <b>37.0%</b>	67.0% - 11.0%	--	New Brunswick Department of Health, Mental Health (range used is New Brunswick Health Zones)
Percentage of service delivery done within 30 days (from referral to first first visit) for child and youth mental illness (percentage)	(2010-2011) <b>44.8%</b>	16.4% - 69.4%	--	New Brunswick Department of Health, Mental Health (range used is New Brunswick Health Zones)
<b>Overall Performance Index</b>			<b>B</b>	

## 2011 - 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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
<b>Health care sector - PRIMARY HEALTH:</b>				
The care 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 (percentage)*	(2007-2008) <b>78.9%</b>	70.7% - 87.0%	--	Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health, (range used is New Brunswick Health Zones)
Received a mammogram within the last 2 years, females aged 50 to 69 years (percentage)*	(2009-2010) <b>76.8%</b>	68.5% - 76.8%	<b>A+</b>	<i>NEW SOURCE:</i> Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health
Breastfeeding initiation (percentage)*	(2009-2010) <b>82.0%</b>	62.4% - 93.3%	<b>B</b>	<i>NEW SOURCE:</i> Statistics Canada, Table 105-0502 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Colorectal cancer screening above age 50 (colonoscopy in the past 5 years or a fecal occult blood test in the past 2 years) (percentage)*	(2008) <b>40.5%</b>	31.3% - 64.3%	<b>E</b>	Statistics Canada, Table 105-0541 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Proportion of kindergarten children meeting immunization requirements (percentage)	(2009-2010) <b>91.4%</b>	88.1% - 99.0%	--	New Brunswick Department of Health, Office of the Chief Medical Officer of Health (range used is New Brunswick Health Zones)
% of adult 65 and over who received their flu shot in the last year (percentage)	(2009-2010) <b>63.2%</b>	50.65 - 73.1%	<b>C</b>	Statistics Canada, Table 105-0502 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Age-Standardized Percent of Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Blood Pressure in the past 12 months (percentage)*	(2011) <b>93.3%</b>	88.0% - 97.0% (2008)	<b>B</b>	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> in combination with Canadian Institute of Health Information-Experiences With Primary Health Care in Canada 2009(for range) <a href="http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E">http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E</a>
Age-Standardized Percent of Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Cholesterol in the past 12 months (percentage)*	(2011) <b>79.8%</b>	78.0 - 86.0% (2008)	<b>E</b>	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> in combination with Canadian Institute of Health Information-Experiences With Primary Health Care in Canada 2009(for range) <a href="http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E">http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E</a>

Age-Standardized Percent of Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Blood Sugar in the past 12 months (percentage)*	(2011)	<b>76.6%</b>	75.0% - 85.0% (2008)	<b>E</b>	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> in combination with Canadian Institute of Health Information- Experiences With Primary Health Care in Canada 2009(for range) <a href="http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E">http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E</a>
Age-Standardized Percent of Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Body Weight in the past 12 months (percentage)*	(2011)	<b>64.3%</b>	66.0% - 80.0% (2008)	<b>E</b>	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> in combination with Canadian Institute of Health Information- Experiences With Primary Health Care in Canada 2009(for range) <a href="http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E">http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E</a>
<b>Health care sector - ACUTE CARE:</b> The care provided in a hospital or a psychiatric facility.					
Hysterectomy age-standardized rate (rate per 100,000)*	(2009)	<b>436</b>	437 - 298	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Proportion of women delivering babies in acute care hospitals by Caesarean section (percentage)*	(2009)	<b>28.9%</b>	31.5% - 20.2%	<b>E</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Universal newborn and infant hearing screening (percentage)	(2009-2010)	<b>87.8%</b>	70.1% - 99.5%	--	New Brunswick Department of Health, DAD/#M / AHIM
Aged-standardized mental illness hospitalization rate (age-standardized rate per 100,000)	(2009-2010)	<b>607</b>	927 - 364	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
<b>Health care sector - SUPPORTIVE/SPECIALTY:</b> 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 quality of life.					
Patients with repeat hospitalizations for mental illness (Risk adjusted percentage)	(2008-2009)	<b>11.9%</b>	13.8% - 9.9%	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
<b>Overall Performance Index</b>				<b>D</b>	

## 2011 - 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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
<b>Health care sector - PRIMARY HEALTH:</b>				
The care 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.				
Reported that they have been diagnosed by a health professional as having high blood pressure (percentage)*	(2009-2010) <b>21.3%</b>	22.9% - 14.9%	<b>E</b>	Statistics Canada, <i>Table 105-0502</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Family physician or general practitioner who provides direct patient care with a teaching component based on the total worked hours per week (as reported by physician) (percentage)*	(2010) <b>4.5%</b>	4.5% - 8.6%	<b>F</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
% of registered diabetes patients are not in the optimal range of glycemic or sugar control of 7% or less (HBA1C less than 7%)(percentage)	(2006) <b>63.0%</b>	To be determined	To be determined	New Brunswick Department of Health
Physician participating in interprofessional practices (percentage)	(2010) <b>21.3%</b>	16.2% - 31.6%	<b>D</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Hospitalized Stroke Event (aged-standardized rate per 100,000)	(2009-2010) <b>131</b>	141 - 116	<b>D</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
<b>Health care sector - ACUTE CARE:</b>				
The care provided in a hospital or a psychiatric facility.				
Low weight babies (live birth less than 2,500 grams) (percentage) *	(2008) <b>5.2%</b>	6.8% - 5.0%	<b>A+</b>	Statistics Canada, <i>Table 102-4509</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Risk-adjusted rate of acute myocardial infarction (AMI) readmission (percentage)*	(2007-2010) <b>4.8%</b>	5.5% - 3.6%	<b>D</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Risk-adjusted rate of 30-day acute myocardial infarction (AMI) in-hospital mortality (percentage)*	(2007-2010) <b>8.2%</b>	8.4% - 6.8%	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Risk-adjusted rate of 30-day stroke in-hospital mortality (percentage)*	(2007-2010) <b>17.3%</b>	20.4% - 14.9%	<b>A</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Risk-adjusted rate of asthma readmission (percentage)*	(2007-2010) <b>2.2%</b>	6.2% - 2.2%	<b>A+</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>

Risk-adjusted rate of prostatectomy readmission (percentage)*	(2007-2010) <b>3.1%</b>	3.2% - 1.7%	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Risk-adjusted rate of hysterectomy readmission (percentage)*	(2007-2010) <b>1.5%</b>	1.7% - 1.1%	<b>D</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
30 - day Readmission for mental illness (Risk-adjusted rate %)	(2009-2010) <b>11.7%</b>	12.9% - 9.6%	<b>D</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Five-year relative survival ratios for prostate cancer (relative survival ratio, percentage)	(2004-2006) <b>99.0%</b>	91.0% – 99.0%	<b>A+</b>	Canadian Cancer registry database at Statistics Canada, 2011
Five-year relative survival ratios for breast cancer (relative survival ratio, percentage)	(2004-2006) <b>87.0%</b>	83.0% - 88.0%	<b>A</b>	Canadian Cancer registry database at Statistics Canada, 2011
Five-year relative survival ratios for colorectal cancer (relative survival ratio, percentage)	(2004-2006) <b>63.0%</b>	65.0% - 59.0%	<b>B</b>	Canadian Cancer registry database at Statistics Canada, 2011
Five-year relative survival ratios for lung cancer (relative survival ratio, percentage)	(2004-2006) <b>16.0%</b>	14.0% - 18.0%	<b>C</b>	Canadian Cancer registry database at Statistics Canada, 2011
<b>Health care sector - SUPPORTIVE/SPECIALTY:</b>				
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 quality of life.				
EMR SCORE (Electronic Medical Record Adoption Model score 0 to 7)	(2 <sup>nd</sup> quarter 2011) <b>3.048</b>	0.322 - 3.048	<b>A+</b>	HIMSS Analytics™ LLC <a href="http://www.himssanalytics.org/">http://www.himssanalytics.org/</a>
Self-Injury Hospitalization (aged-standardized rate per 100,000)	(2009-2010) <b>81</b>	81 - 58	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Pain of discomfort that prevents activities (percentage)	(2009-2010) <b>14.3%</b>	15.1% - 10.4%	<b>E</b>	Statistics Canada, <i>Table 105-0502</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
<b>Overall Performance Index</b>			<b>C</b>	



## 2011 - 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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
<b>Health care sector - PRIMARY HEALTH:</b>				
The care 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)*	(2009-2010) <b>489</b>	497 - 251	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Contact with telephone health line in the past 12 months (percentage)*	(2011) <b>10.0%</b>	3.0% - 29.0%	--	NEW SOURCE: New Brunswicker's Experience with Primary Health Care, 2011 Survey Results (NBHC 2011)
Record keeping of physicians in their main patient care setting - use of paper charts only (percentage)	(2010) <b>45.0%</b>	55.8% - 28.8%	<b>D</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
% triage level 4 and 5 (Less urgent and Non-urgent) seen in the emergency room (percentage)	(2011) <b>62.8%</b>	79.6% - 55.4%	--	New Brunswick Department of Health
<b>Health care sector - ACUTE CARE:</b>				
The care provided in a hospital or a psychiatric facility.				
Percentage of Alternate Level of Care (ALC) days to total inpatient days (percentage)*	(2010) <b>22.5%</b>	22.5% – 8.2%	<b>F</b>	New Brunswick Department of Health
Average length of stay (ALOS)(in days)*	(2009-2010) <b>8.8 days</b>	9.4 days – 6.6 days	<b>E</b>	Canadian Institute for Health Information – <i>Highlights of 2007–2008 Inpatient Hospitalizations and Emergency Department Visits</i> <a href="http://secure.cihi.ca/cihiweb/products/Quickstats_Highlight_document_20100113_en.pdf">http://secure.cihi.ca/cihiweb/products/Quickstats_Highlight_document_20100113_en.pdf</a>
Cost per weighted case (\$)	(2009-2010) <b>\$5,138</b>	\$6,075 - \$4,912	<b>A</b>	Canadian Institute for Health Information, Hospital Financial Performance Indicators
Nursing Inpatient Services Total Personnel Worked Hours per Weighed Case (percentage)	(2009-2010) <b>56.1%</b>	61.2% - 46.3%	<b>D</b>	Canadian Institute for Health Information, Hospital Financial Performance Indicators

### Health care sector - SUPPORTIVE/SPECIALTY:

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 quality of life.

Number of exams done by CAT (CT) scanners (rate per 1,000 population)*	(2009-2010) <b>197</b>	110 - 197	--	Canadian Institute for Health Information – <i>Health Services - Diagnostic imaging</i> <a href="http://www.cihi.ca/CIHI-ext-portal/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2">http://www.cihi.ca/CIHI-ext-portal/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2</a>
Average number of Computed Tomopgraphy (CT) Exams per Scanner (number)	(2008-2009) <b>11,199</b>	5,965 – 11,199	<b>A+</b>	Canadian Institute for Health Information – National Survey of Selected Medical Imaging Equipment 2009 <a href="http://www.cihi.ca/cihi-ext-portal/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2">http://www.cihi.ca/cihi-ext-portal/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2</a>
Number of exams done by Magnetic Resonance Imaging (MRI) scanners (rate per 1,000 population)*	(2009-2010) <b>45</b>	25 - 51	--	Canadian Institute for Health Information – <i>Health Services - Diagnostic imaging</i> <a href="http://www.cihi.ca/CIHI-ext-portal/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2">http://www.cihi.ca/CIHI-ext-portal/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2</a>
Average number of Magnetic Resonance Imaging (MRI) Exams per Scanner (number)	(2008-2009) <b>4,623</b>	3,706 – 7,873	<b>E</b>	Canadian Institute for Health Information – National Survey of Selected Medical Imaging Equipment 2009 <a href="http://www.cihi.ca/cihi-ext-portal/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2">http://www.cihi.ca/cihi-ext-portal/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2</a>
Average number of days to complete long term care generic assessment (days)	(2010-2011) <b>27.8 days</b>	--	--	New Brunswick Department of Social Development
<b>Overall Performance Index</b>			<b>C</b>	

## 2011 - Quality Dimension – 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.

(Aiming for equitable care and services for all)

Indicators	NB Value	1 = difference is statistically significant	Source
<b>Health care sector - PRIMARY HEALTH:</b>			
The care 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.			
<b>Has a family physician (percentage)</b>	<b>92.6%</b>	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a>
rural	93.9%	1	
urban	90.9%		
Aboriginal	87.5%	1	
non-aboriginal	92.7%		
French	96.0%	1	
English	93.4%		
Male	90.5%	1	
Female	94.4%		
18-34	88.6%	1	
35-54	92.2%		
55-64	95.3%		
65+	96.5%		
8th grade or less	92.6%	0	
some high-school	94.2%		
high-school, GED	91.1%		
College / trade diploma	93.7%		
Undergraduate degree	92.4%		
Graduate degree	92.2%		
Income < \$25M	91.7%	0	
Income \$25M-\$60M	92.7%		

Income >= \$60M	92.7%		
<b>Overall satisfaction with services from primary health care providers and places (Score)</b>			
rural	100.3	0	
urban	99.6		
Aboriginal	90.7	1	
non-aboriginal	100.4		
French	102.4	1	
English	99.1		
Male	97.7	1	
Female	101.5		
18-34	94	1	
35-54	97.4		
55-64	105.8		
65+	109.8		
8th grade or less	105.5	1	
some high-school	99.2		
high-school, GED	97.8		
College / trade diploma	98.9		
Undergraduate degree	103.1		
Graduate degree	102.5		
Income < \$25M	99	0	
Income \$25M-\$60M	100.6		
Income >= \$60M	99.8		

New Brunswickers' Experiences with Primary Health Care, 2011 Survey  
 Results (NBHC 2011)  
[http://www.nbhc.ca/nb\\_primary\\_care\\_health\\_survey.cfm](http://www.nbhc.ca/nb_primary_care_health_survey.cfm)

**Health care sector - ACUTE CARE:**  
 The care provided in a hospital or a psychiatric facility.

<b>Overall hospital rating (percentage)</b>	<b>75.9%</b>		
rural	77.0%	0	
urban	75.0%		
Aboriginal	75.0%	0	
non-aboriginal	73.0%		
French	76.6%	0	
English	75.7%		
Male	78.3%	1	
Female	74.0%		

Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey  
 Results (NBHC 2010) [http://www.nbhc.ca/care\\_experience\\_survey.cfm](http://www.nbhc.ca/care_experience_survey.cfm)

Under 45	58.8%	1	
45-64	75.8%		
65+	79.2%		
8th grade or less	80.0%	1	
some high-school	80.8%		
high-school, GED	74.8%		
College / trade diploma	72.6%		
Undergraduate degree	70.3%		
Graduate degree	69.5%		

**Health care sector - SUPPORTIVE/SPECIALTY:**

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 quality of life.

Indicators not available at the moment

**Overall Performance Index**

**D**

## 2011 - Quality Dimension – SAFETY:

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

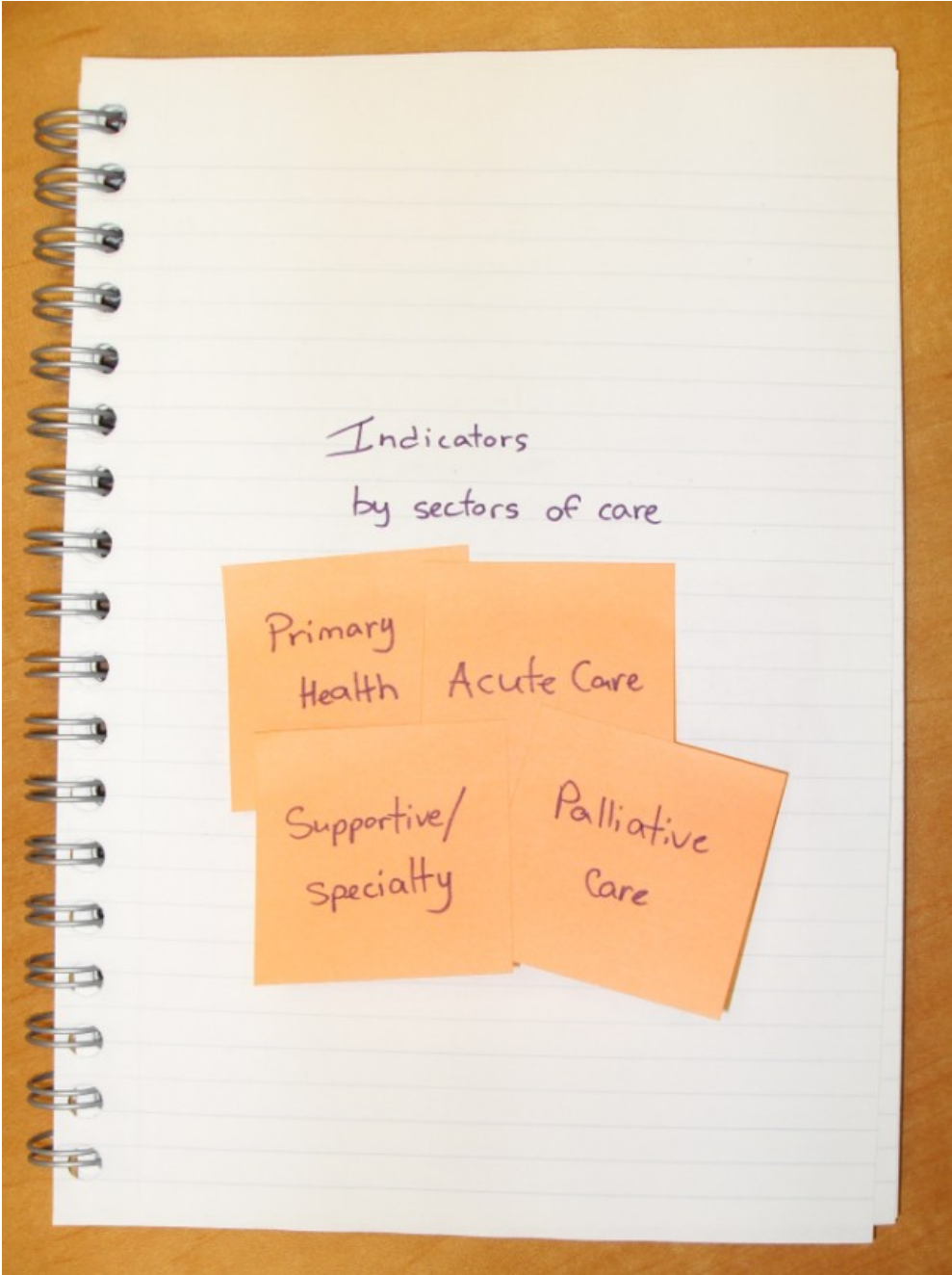
(Keeping people safe)

Indicators	NB Value	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
<b>Health care sector - PRIMARY HEALTH:</b>				
The care 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.				
Physician who have access to electronic records in various locations, the records in these locations are electronically connected to each other to allow for access of the same electronic record from different settings (percentage)	(2010) <b>33.3%</b>	21.4% - 45.0%	<b>C</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Percent of individuals who know what their medications are for (percentage)	(2011) <b>46.7%</b>	25.7% - 56.1%	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011)
Individuals who were injured that required hospitalization (Rate/100 000 population)	(2009-2010) <b>587</b>	784 - 406	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Hospitalized hip fracture event rate (Age-standardized acute care hospitalization rate for fracture of the hip, per 100,000 population)	(2009-2010) <b>442</b>	581-404	<b>A</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Community error / harm rate (excluding hospital stay) (percentage)	(2011) <b>3.4%</b>	6.7% - 1.2%	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011)
<b>Health care sector - ACUTE CARE:</b>				
The care provided in a hospital or a psychiatric facility.				
Hospital Standardized Mortality Ratio (HSMR)*	(2008-2009) <b>84</b>	117- 62	<b>B</b>	Canadian Institute for Health Information – 2009 HSMR Results
Error rate - % in the community who believe they have suffered harm or error during their stay at an acute care hospital (percentage)	(2010) <b>5.1%</b>	8.9% - 0	--	Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010)
Score on the Care Transitions Measures (CTM) (coordination of hospital discharge care)	(2010) <b>36.1</b>	24.5 – 64.5	--	Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010)
Hand hygiene - % Compliance before Patient Contact (as reported by patients) (percentage)	(2010) <b>47.5%</b>	36.5% - 65.0%	--	Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010)
% patients who believed that the hospital takes their safety seriously (percentage)	(2010) <b>76.3%</b>	67.6% - 93.8%	--	Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010)

Risk-adjusted rate of in-hospital hip fracture among acute care inpatients, (rate per 1,000 discharges)	(2007-2010) <b>0.9</b>	0.7 – 1.1	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
CDAD Infection Rate or Clostridium difficile rate (rate per 1,000 patient days)	(Oct 2009 – Jun 30 2010) <b>0.16</b>	Target 0.6	<b>A+</b>	Accreditation Canada Caution – only 23 hospital facilities participated within the 9 months timeframe
MRSA Infection Rate or Methicillin-resistant staphylococcus aureus specific infection rate (rate per 1,000 patient days)	(Oct 2009 – Jun 30 2010) <b>0.37</b>	Target 0.6	<b>A+</b>	Accreditation Canada Caution – only 23 hospital facilities participated within the 9 months timeframe
<b>Health care sector - SUPPORTIVE/SPECIALTY:</b> 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 quality of life.				
Intentional self-harm (suicide) age-standardized mortality rate (rate per 100,000)	(2008) <b>13.2</b>	13.7 – 7.3	<b>F</b>	Statistics Canada, Table 102-0552 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
<b>Overall Performance Index</b>			<b>B</b>	









## 2011 - Health care sector - PRIMARY HEALTH:

The care 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 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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Contact with a medical doctor in the past 12 months (percentage)*	(2009-2010) <b>80.8%</b>	77.4% - 83.5%	<b>C</b>	Statistics Canada, <i>Table 105-0502</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Has a regular medical doctor (percentage)*	(2009-2010) <b>92.2%</b>	74.2% - 93.2%	<b>A+</b>	Statistics Canada, <i>Table 105-0502</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Difficulties accessing routine or on-going care at any time of day (percentage)*	(2009) <b>11.0%</b>	22.1% - 11.0%	<b>A+</b>	Statistics Canada, <i>Table 105-3067</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Difficulties accessing immediate care for a minor health problem at any time of day (percentage)*	(2009) <b>17.5%</b>	28.7% - 12.9%	<b>B</b>	Statistics Canada, <i>Table 105-3069</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Family practitioner and general practitioners who provide extended office hours regularly (percentage)	(2011) <b>21.6%</b>	7.0% - 31.3%	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a>
Patients who contact or are referred to their family physicians or general practitioners URGENTLY, can have an appointment the same day (percentage) (as reported by physicians)	(2010) <b>41.8%</b>	35.2% - 57.0%	<b>D</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Percentage of patients seen within 1 week for NON-URGENT visit with family physician or general practitioners (percentage) (as reported by physicians)	(2010) <b>18.3%</b>	9.3% - 34.2%	<b>D</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
First available appointment - from patient contacts with physicians office or referred to office by another physician – URGENT only (mean number of days) (percentage) (as reported by physicians)	(2010) <b>3.43 days</b>	3.66 days - 2.26 days	<b>E</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Contact with dental professionals in the past 12 months (percentage)*	(2007-2008) <b>54.7%</b>	53.6% - 69.4%	<b>F</b>	<i>NEW SOURCE:</i> Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health
Spending on prescription drugs greater than 3% of after tax income (percentage)*	(2008) <b>9.1%</b>	13.3% - 4.6%	<b>C</b>	Statistics Canada, <i>Table 109-5012</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Left without being seen from the Emergency Room (percentage)	(2010-2011) <b>5.8%</b>	--	--	New Brunswick Department of Health
% of emergency calls done within the appropriate time (9 min –urban, 22 min – rural) for ambulance services (percentage)	(2010-2011) <b>95.7%</b>	Target 90%	<b>A+</b>	Ambulance New Brunswick <a href="http://www.ambulancenb.ca/">http://www.ambulancenb.ca/</a>
Emergency Room - Patients who are seen within 4 hours (percentage)	(2011) <b>75.0%</b>	(2007) 73.0% - 96.0%	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> In combination with the Commonwealth fun 2007 (for range)

**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Pap smear within the last 3 years, for females aged 18 to 69 years (percentage)*	(2007-2008) <b>78.9%</b>	70.7% - 87.0%	--	Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health, (range used is New Brunswick Health Zones)
Received a mammogram within the last 2 years, females aged 50 to 69 years (percentage)*	(2009-2010) <b>76.8%</b>	68.5% - 76.8%	<b>A+</b>	<i>NEW SOURCE:</i> Statistics Canada, Canadian Community Health Survey, available through the New Brunswick Department of Health
Breastfeeding initiation (percentage)*	(2009-2010) <b>82.0%</b>	62.4% - 93.3%	<b>B</b>	<i>NEW SOURCE:</i> Statistics Canada, <i>Table 105-0502</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Colorectal cancer screening above age 50 (colonoscopy in the past 5 years or a fecal occult blood test in the past 2 years) (percentage)*	(2008) <b>40.5%</b>	31.3% - 64.3%	<b>E</b>	Statistics Canada, <i>Table 105-0541</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Proportion of kindergarten children meeting immunization requirements (percentage)	(2009-2010) <b>91.4%</b>	88.1% - 99.0%	--	New Brunswick Department of Health, Office of the Chief Medical Officer of Health (range used is New Brunswick Health Zones)
% of adult 65 and over who received their flu shot in the last year (percentage)	(2009-2010) <b>63.2%</b>	50.65 - 73.1%	<b>C</b>	Statistics Canada, <i>Table 105-0502</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Age-Standardized Percent of Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Blood Pressure in the past 12 months (percentage)*	(2011) <b>93.3%</b>	88.0% - 97.0% (2008)	<b>B</b>	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> in combination with Canadian Institute of Health Information- <i>Experiences With Primary Health Care in Canada 2009(for range)</i> <a href="http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E">http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E</a>
Age-Standardized Percent of Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Cholesterol in the past 12 months (percentage)*	(2011) <b>79.8%</b>	78.0 - 86.0% (2008)	<b>E</b>	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> in combination with Canadian Institute of Health Information- <i>Experiences With Primary Health Care in Canada 2009(for range)</i> <a href="http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E">http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E</a>
Age-Standardized Percent of Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Blood Sugar in the past 12 months (percentage)*	(2011) <b>76.6%</b>	75.0% - 85.0% (2008)	<b>E</b>	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> in combination with Canadian Institute of Health Information- <i>Experiences With Primary Health Care in Canada 2009(for range)</i> <a href="http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E">http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E</a>
Age-Standardized Percent of Adults With One or More of Four Select Chronic Conditions Who Had Measurements for Body Weight in the past 12 months (percentage)*	(2011) <b>64.3%</b>	66.0% - 80.0% (2008)	<b>E</b>	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a> in combination with Canadian Institute of Health Information- <i>Experiences With Primary Health Care in Canada 2009(for range)</i> <a href="http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E">http://www.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_2991_E</a>

**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Reported that they have been diagnosed by a health professional as having high blood pressure (percentage)*	(2009-2010) <b>21.3%</b>	22.9% - 14.9%	<b>E</b>	Statistics Canada, <i>Table 105-0502</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Family physician or general practitioner who provides direct patient care with a teaching component based on the total worked hours per week (as reported by physician) (hours)*	(2010) <b>4.5</b>	4.5 - 8.6	<b>F</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
% of registered diabetes patients are not in the optimal range of glycemic or sugar control of 7% or less (HBA1C less than 7%)(percentage)	(2006) <b>63.0%</b>	To be determined	To be determined	New Brunswick Department of Health
Physician participating in interprofessional practices (percentage)	(2010) <b>21.3%</b>	16.2% - 31.6%	<b>D</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Hospitalized Stroke Event (aged-standardized rate per 100,000)	(2009-2010) <b>131</b>	141 - 116	<b>D</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>

**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Age-standardized acute care hospitalization rate for ambulatory care sensitive conditions (rate per 100,000)*	(2009-2010) <b>489</b>	497 - 251	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Contact with telephone health line in the past 12 months (percentage)*	(2011) <b>10.0%</b>	3.0% - 29.0%	--	NEW SOURCE: New Brunswicker's Experience with Primary Health Care, 2011 Survey Results (NBHC 2011)
Record keeping of physicians in their main patient care setting - use of paper charts only (percentage)	(2010) <b>45.0%</b>	55.8% - 28.8%	<b>D</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
% triage level 4 and 5 (Less urgent and Non-urgent) seen in the emergency room (percentage)	(2011) <b>62.8%</b>	79.6% - 55.4%	--	New Brunswick Department of Health

**Quality Dimension – 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.

*(Aiming for equitable care and services for all)*

Indicators	NB Value	1 = difference is statistically significant	Source
<b>Has a family physician (percentage)</b>	<b>92.6%</b>	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011) <a href="http://www.nbhc.ca/nb_primary_care_health_survey.cfm">http://www.nbhc.ca/nb_primary_care_health_survey.cfm</a>
rural	93.9%	1	
urban	90.9%		
Aboriginal	87.5%	1	
non-aboriginal	92.7%		
French	96.0%	1	
English	93.4%		
Male	90.5%	1	
Female	94.4%		
18-34	88.6%	1	
35-54	92.2%		
55-64	95.3%		
65+	96.5%		
8th grade or less	92.6%	0	
some high-school	94.2%		
high-school, GED	91.1%		
College / trade diploma	93.7%		
Undergraduate degree	92.4%		
Graduate degree	92.2%		
Income < \$25M	91.7%	0	
Income \$25M-\$60M	92.7%		
Income >= \$60M	92.7%		
<b>Overall satisfaction with services from primary health care</b>	<b>75.9%</b>	--	
rural	100.3	0	
urban	99.6		
Aboriginal	90.7	1	
non-aboriginal	100.4		
French	102.4	1	
English	99.1		
Male	97.7	1	
Female	101.5		

18-34	<b>94</b>	1	
35-54	<b>97.4</b>		
55-64	<b>105.8</b>		
65+	<b>109.8</b>		
8th grade or less	<b>105.5</b>	1	
some high-school	<b>99.2</b>		
high-school, GED	<b>97.8</b>		
College / trade diploma	<b>98.9</b>		
Undergraduate degree	<b>103.1</b>		
Graduate degree	<b>102.5</b>	0	
Income < \$25M	<b>99</b>		
Income \$25M-\$60M	<b>100.6</b>		
Income >= \$60M	<b>99.8</b>		

**Quality Dimension – SAFETY:**

Potential risks of an intervention or the environment are avoided or minimized.  
(Keeping people safe)

Indicators	NB Value	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Physician who have access to electronic records in various locations, the records in these locations are electronically connected to each other to allow for access of the same electronic record from different settings (percentage)	(2010) <b>33.3%</b>	21.4% - 45.0%	<b>C</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Percent of individuals who know what their medications are for (percentage)	(2011) <b>46.7%</b>	25.7% - 56.1%	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011)
Individuals who were injured that required hospitalization (Rate/100 000 population)	(2009-2010) <b>587</b>	784 - 406	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Hospitalized hip fracture event rate (Age-standardized acute care hospitalization rate for fracture of the hip, per 100,000 population.)	(2009-2010) <b>442</b>	581-404	<b>A</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Community error / harm rate (excluding hospital stay) (percentage)	(2011) <b>3.4%</b>	6.7% - 1.2%	--	New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011)
<b>Overall Performance Index</b>			<b>C</b>	

## 2011 - Health care sector - ACUTE CARE:

The care provided in a hospital or a psychiatric facility.

### 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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Wait time for hip fracture surgery (proportion with surgery - within 48 hours) (percentage)*	(2009-2010) <b>82.9%</b>	68.8%-82.9%	<b>A+</b>	Canadian Institute for Health Information - 2010 Health Indicators Report <a href="http://www.cihi.ca/CIHI-ext-portal/internet/EN/SubTheme/health+system+performance/indicators/cihi010653">http://www.cihi.ca/CIHI-ext-portal/internet/EN/SubTheme/health+system+performance/indicators/cihi010653</a>
Wait time for hip replacement surgery (within 26 weeks) (percentage)*	(Oct 2010 – Sept 2011) <b>71.0%</b>	57.0% - 91.0% (2010)	<b>D</b>	NEW SOURCE: Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a> in combination (for ranges) with Surgical wait times in New Brunswick <a href="http://www1.gnb.ca/0217/surgicalwaittimes/Reports/02-e.aspx">http://www1.gnb.ca/0217/surgicalwaittimes/Reports/02-e.aspx</a>
Wait time for knee replacement surgery (within 26 weeks) (percentage)*	(Oct 2010 – Sept 2011) <b>57.8%</b>	42.0% - 89.0% (2010)	<b>D</b>	NEW SOURCE: Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a> (Oct 2010 – Sept 2011)
Wait time for high-risk cataract surgery (within 16 weeks) (percentage)*	(Oct 2010 – Sept 2011) <b>92.0%</b>	48.0% - 89.0% (2010)	<b>A+</b>	NEW SOURCE: Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a> in combination (for ranges) with Surgical wait times in New Brunswick <a href="http://www1.gnb.ca/0217/surgicalwaittimes/Reports/02-e.aspx">http://www1.gnb.ca/0217/surgicalwaittimes/Reports/02-e.aspx</a>
Wait time for Coronary Artery Bypass Graft Surgery (within 2 to 26 weeks) (percentage)*	(2010) <b>100.0%</b>	95.0% - 100.0%	<b>A+</b>	NEW SOURCE: Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a>
Wait time for radiation therapy (within 28 days) (percentage)*	(Nov 2010 – Oct 2011) <b>94.8%</b>	85.0% - 100.0% (2010)	<b>B</b>	Canadian Institute for Health Information – Wait times in Canada – A comparison by province, 2011 <a href="http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf">http://secure.cihi.ca/cihiweb/products/Wait_times_tables_2011_en.pdf</a> In combination with wait times in New Brunswick <a href="http://www.gnb.ca/0051/cancer/pdf/NBCN_wait_time_update_E.pdf">http://www.gnb.ca/0051/cancer/pdf/NBCN_wait_time_update_E.pdf</a>



**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Hysterectomy age-standardized rate (rate per 100,000)*	(2009) <b>436</b>	437 - 298	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Proportion of women delivering babies in acute care hospitals by Caesarean section (percentage)*	(2009) <b>28.9%</b>	31.5% - 20.2%	<b>E</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Universal newborn and infant hearing screening (percentage)	(2009-2010) <b>87.8%</b>	70.1% - 99.5%	--	New Brunswick Department of Health, DAD/#M / AHIM
Aged-standardized mental illness hospitalization rate (age-standardized rate per 100,000)	(2009-2010) <b>607</b>	927 – 364	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>

**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Low weight babies (live birth less than 2,500 grams) (percentage) *	(2008) <b>5.2%</b>	6.8% - 5.0%	<b>A+</b>	Statistics Canada, <i>Table 102-4509</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Risk-adjusted rate of acute myocardial infarction (AMI) readmission (percentage)*	(2007-2010) <b>4.8%</b>	5.5% - 3.6%	<b>D</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Risk-adjusted rate of 30-day acute myocardial infarction (AMI) in-hospital mortality (percentage)*	(2007-2010) <b>8.2%</b>	8.4% - 6.8%	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Risk-adjusted rate of 30-day stroke in-hospital mortality (percentage)*	(2007-2010) <b>17.3%</b>	20.4% - 14.9%	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Risk-adjusted rate of asthma readmission (percentage)*	(2007-2010) <b>2.2%</b>	6.2% - 2.2%	<b>A+</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>

Risk-adjusted rate of prostatectomy readmission (percentage)*	(2007-2010) <b>3.1%</b>	3.2% - 1.7%	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Risk-adjusted rate of hysterectomy readmission (percentage)*	(2007-2010) <b>1.5%</b>	1.7% - 1.1%	<b>D</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
30 - day Readmission for mental illness (Risk-adjusted rate %)	(2009-2010) <b>11.7%</b>	12.9% - 9.6%	<b>D</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Five-year relative survival ratios for prostate cancer (relative survival ratio, percentage)	(2004-2006) <b>99.0%</b>	91.0% – 99.0%	<b>A+</b>	Canadian Cancer registry database at Statistics Canada, 2011
Five-year relative survival ratios for breast cancer (relative survival ratio, percentage)	(2004-2006) <b>87.0%</b>	83.0% - 88.0%	<b>A</b>	Canadian Cancer registry database at Statistics Canada, 2011
Five-year relative survival ratios for colorectal cancer (relative survival ratio, percentage)	(2004-2006) <b>63.0%</b>	65.0% - 59.0%	<b>B</b>	Canadian Cancer registry database at Statistics Canada, 2011
Five-year relative survival ratios for lung cancer (relative survival ratio, percentage)	(2004-2006) <b>16.0%</b>	14.0% - 18.0%	<b>C</b>	Canadian Cancer registry database at Statistics Canada, 2011

**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Percentage of Alternate Level of Care (ALC) days to total inpatient days (percentage)*	(2010) <b>22.5%</b>	22.5% – 8.2%	<b>F</b>	New Brunswick Department of Health
Average length of stay (ALOS)(in days)*	(2009-2010) <b>8.8 days</b>	9.4 days – 6.6 days	<b>E</b>	Canadian Institute for Health Information – <i>Highlights of 2009–2010 Inpatient Hospitalizations and Emergency Department Visits</i> <a href="http://secure.cihi.ca/cihiweb/products/Quickstats_Highlight_document_20100113_en.pdf">http://secure.cihi.ca/cihiweb/products/Quickstats_Highlight_document_20100113_en.pdf</a>
Cost per weighted case (\$)	(2009-2010) <b>\$5,138</b>	\$6,075 - \$4,912	<b>A</b>	Canadian Institute for Health Information, Hospital Financial Performance Indicators
Nursing Inpatient Services total Personnel Worked Hours per Weighed Case (percentage)	(2009-2010) <b>56.0%</b>	61.2% - 46.3%	<b>D</b>	Canadian Institute for Health Information, Hospital Financial Performance Indicators

**Quality Dimension – 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.

*(Aiming for equitable care and services for all)*

Indicators	NB Value	1 = difference is statistically significant	Source
<b>Overall hospital rating (percentage)</b>	<b>75.9%</b>		Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010) <a href="http://www.nbhc.ca/care_experience_survey.cfm">http://www.nbhc.ca/care_experience_survey.cfm</a>
rural	77.0%	0	
urban	75.0%		
Aboriginal	75.0%	0	
non-aboriginal	73.0%		
French	76.6%	0	
English	75.7%		
Male	78.3%	1	
Female	74.0%		
Under 45	58.8%	1	
45-64	75.8%		
65+	79.2%		
8th grade or less	80.0%		
some high-school	80.8%		
high-school, GED	74.8%	1	
College / trade diploma	72.6%		
Undergraduate degree	70.3%		
Graduate degree	69.5%		

**Quality Dimension – SAFETY:**

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

*(Keeping people safe)*

Indicators	NB Value	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Hospital Standardized Mortality Ratio (HSMR)*	(2009-2010) <b>77</b>	120- 67	<b>A</b>	Canadian Institute for Health Information – 2011 HSMR Results
Error rate - % in the community who believe they have suffered harm or error during their stay at an acute care hospital (percentage)	(2010) <b>5.1%</b>	8.9% - 0	--	Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010)
Score on the Care Transitions Measures (CTM) (coordination of hospital discharge care)	(2010) <b>36.1</b>	24.5 – 64.5	--	Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010)
Hand hygiene - % Compliance before Patient Contact (as reported by patients) (percentage)	(2010) <b>47.5%</b>	36.5% - 65.0%	--	Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010)
% patients who believed that the hospital takes their safety seriously (percentage)	(2010) <b>76.3%</b>	67.6% - 93.8%	--	Hospital Patient Care Experience in New Brunswick, 2010 Acute Care Survey Results (NBHC 2010)

Risk-adjusted rate of in-hospital hip fracture among acute care inpatients, (rate per 1,000 discharges)	(2007-2010) <b>0.9</b>	0.7 – 1.1	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
CDAD Infection Rate or Clostridium difficile rate (rate per 1,000 patient days)	(Oct 2009 – Jun 30 2010) <b>0.16</b>	Target 0.6	<b>A+</b>	Accreditation Canada Caution – only 23 hospital facilities participated within the 9 months timeframe
MRSA Infection Rate or Methicillin-resistant staphylococcus aureus specific infection rate (rate per 1,000 patient days)	(Oct 2009 – Jun 30 2010) <b>0.37</b>	Target 0.6	<b>A+</b>	Accreditation Canada Caution – only 23 hospital facilities participated within the 9 months timeframe
<b>Overall Performance Index</b>			<b>C</b>	

## 2011 - Health care sector - SUPPORTIVE/SPECIALTY:

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 quality of life.

### 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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Wait time for selected diagnostic tests: Magnetic Resonance Imaging (MRI), CAT (CT) scan, angiography (within 1 month) (percentage)*	(2009) <b>70.5%</b>	47.8% - 70.5%	<b>A+</b>	Statistics Canada, Table 105-3004 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Residents over 75 years of age that have access to long-term care beds (percentage)*	(2010-2011) <b>8.7%</b>	To be determined	To be determined	NB Department of Social Development 2010-2011 in combination with Statistics Canada – Online catalogue 92-591-XWE <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Wait time for specialist visits for a new illness or condition (within 1 month) (percentage)*	(2009) <b>44.3%</b>	36.0% - 55.6%	<b>C</b>	Statistics Canada, Table 105-3002 <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
Experience difficulties getting specialist care (Percentage with fair or poor access) (percentage)	(2010) <b>38.6</b>	31.3% - 43.3%	<b>B</b>	National Physician Survey <a href="http://www.nationalphysiciansurvey.ca/nps">http://www.nationalphysiciansurvey.ca/nps</a>
Median number of day to long term Care Home placement (days)	(2010-2011) <b>125 days</b>	To be determined	To be determined	NB Department of Social Development 2010-2011
Extra-Mural Program – Clients served per 1000	(2010-2011) <b>51.3</b>	To be determined	To be determined	New Brunswick Department of Health, Extra-Mural Program
Extra-Mural Program – % Referred from community (percentage)	(2010-2011) <b>68.0%</b>	To be determined	To be determined	New Brunswick Department of Health, Extra-Mural Program
Extra-Mural Program – % Referred from hospital (percentage)	(2010-2011) <b>32.0%</b>	To be determined	To be determined	New Brunswick Department of Health, Extra-Mural Program
Proportion of mental health clients that had a screening assessment within 48 hours (percentage)	(2010-2011) <b>37.0%</b>	67.0% - 11.0%	--	New Brunswick Department of Health, Mental Health (range used is New Brunswick Health Zones)
Percentage of service delivery done within 30 days (from referral to first first visit) for child and youth mental illness (percentage)	(2010-2011) <b>44.8%</b>	16.4% - 69.4%	--	New Brunswick Department of Health, Mental Health (range used is New Brunswick Health Zones)

**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Patients with repeat hospitalizations for mental illness (Risk adjusted percentage)	(2008-2009) <b>11.9%</b>	13.8% - 9.9%	<b>C</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>

**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
EMR SCORE (Electronic Medical Record Adoption Model score 0 to 7)	(2 <sup>nd</sup> quarter 2011) <b>3.048</b>	0.322 - 3.048	<b>A+</b>	HIMSS Analytics™ LLC <a href="http://www.himssanalytics.org/">http://www.himssanalytics.org/</a>
Self-Injury Hospitalization (aged-standardized rate per 100,000)	(2009-2010) <b>81</b>	81 - 58	<b>F</b>	Canadian Institute for Health Information - 2011 Health Indicators Report <a href="https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635">https://secure.cihi.ca/estore/productFamily.htm?locale=en&amp;pf=PFC1635</a>
Pain of discomfort that prevents activities (percentage)	(2009-2010) <b>14.3%</b>	15.1% - 10.4%	<b>E</b>	Statistics Canada, <i>Table 105-0502</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>

**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	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Number of exams done by CAT (CT) scanners (rate per 1,000 population)*	(2009-2010) <b>197</b>	110 - 197	<b>--</b>	Canadian Institute for Health Information – <i>Health Services - Diagnostic imaging</i> <a href="http://www.cihi.ca/CIHI-external/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2">http://www.cihi.ca/CIHI-external/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2</a>
Average number of Computed Tomopgraphy (CT) Exams per Scanner (number)	(2008-2009) <b>11,199</b>	5,965 – 11,199	<b>A+</b>	Canadian Institute for Health Information – National Survey of Selected Medical Imaging Equipment 2009 <a href="http://www.cihi.ca/CIHI-external/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2">http://www.cihi.ca/CIHI-external/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2</a>

Number of exams done by Magnetic Resonance Imaging (MRI) scanners (rate per 1,000 population)*	(2009-2010) <b>45</b>	25 - 51	--	Canadian Institute for Health Information – <i>Health Services - Diagnostic imaging</i> <a href="http://www.cihi.ca/CIHI-external/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2">http://www.cihi.ca/CIHI-external/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2</a>
Average number of Magnetic Resonance Imaging (MRI) Exams per Scanner (number)	(2008-2009) <b>4,623</b>	3,706 – 7,873	E	Canadian Institute for Health Information – National Survey of Selected Medical Imaging Equipment 2009 <a href="http://www.cihi.ca/cihi-external/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2">http://www.cihi.ca/cihi-external/internet/en/document/types+of+care/specialized+services/medical+imaging/release_22jul2010_tab2</a>
Average number of days to complete long term care generic assessment (days)	(2010-2011) <b>27.8 days</b>	--	--	New Brunswick Department of Social Development

**Quality Dimension – 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.

*(Aiming for equitable care and services for all)*

Indicators	NB Value	1 = difference is statistically significant	Source
<b>Indicators not available at the moment</b>			

**Quality Dimension – SAFETY:**

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

*(Keeping people safe)*

Indicators	NB Value	Range of values from other provinces (worse to better value) Or benchmark/target	2011 NB Grade	Source
Intentional self-harm (suicide) age-standardized mortality rate (rate per 100,000)	(2008) <b>13.2</b>	13.7 – 7.3	F	Statistics Canada, <i>Table 102-0552</i> <a href="http://www.statcan.gc.ca">http://www.statcan.gc.ca</a>
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