

## 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>	

### 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:

- range (7) divided by 7 letter grades = 1

Step 3 – grades are assigned to each interval

- 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 NB = is 80% the Grade for this indicator would be D.

### Letter grading methodology for overall 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.

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.

**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.**

All indicators with stars at the end (\*) were also used in the New Brunswick Health System Report card 2010 (NBHC 2010).