

# Environmental Scan 2016-2017



Western  
Health

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## Foreword

Dates written in the form "2016" represent a calendar year from January 1 to December 31.  
Dates written in the form "2016/17" represent a fiscal year from April 1 to March 31.  
Dates written in the form of "2016 and 2017" represent the two calendar years.  
Dates written in the form of "2014 to 2016" represent combined data for the three calendar years.

Although indicator reporting years vary throughout the report, the most recent available data is reported.

The Canadian Institute for Health Information (CIHI) began using the 2011 census population data to calculate indicator rates, therefore, reported rates will differ from previous versions of the environmental scan. The following indicators are affected:

- Self-injury hospitalization (Table 3)
- Cardiac revascularization (Table 10)
- Coronary artery bypass graft (Table 10)
- 30-day acute myocardial infarction (Table 15)
- 30-day stroke in-hospital mortality (Table 15)

Statistics Canada data on cancer rates in Newfoundland and Labrador (NL) and Canada (new cases) outlined in CANSIM Table 103-553 was released on September 28, 2015 which uses population estimates as of July 1, 2015. It must be noted that as a result of this, previous versions of the environmental scan will differ in new cancer case rates than the ones presented in this document.

Breastfeeding initiation rates were previously reported by calendar year and are now reported by fiscal year. As such, previous versions of the environmental scan have different breastfeeding rates from those presented in this document.

Patient flow data noted on page 21 of this document are slightly different from previous versions of the environmental scan. Edits to coded data made subsequent to the 2015-16 environmental scan reporting would account for the slight variations in data provided from previous fiscal years.

## External Analysis

### *Demographics*

#### *Population*

The Western Regional Health Authority geographical boundaries are from Port aux Basques, southeast to Francois, northwest to Bartlett's Harbour, and on the eastern boundary north to Jackson's Arm. Based on the 2015 Statistics Canada census, the Western region's population continues to decline and in 2015, the population was 77,328 compared to 77,980 in 2011 and 79,460 in 2006 (Statistics Canada, 2017). Those aged 65 and older comprised 21.8% of the Western regional population, while in Newfoundland and Labrador (NL), 18.4% were over the age of 65, and in Canada, this percentage was 16.6%. Although the population in the Western region decreased, the provincial population increased from 514,535 in 2011 to 527,756 in 2015. The medium scenario is considered to be the "most likely" and is utilized in population predictions. Applying medium scenario assumptions, the Government of NL is projecting that the population will decline from the current 77,328 to 71,622 by 2036 in the Western region, with 35% of the population being over the age of 65 years (Government of NL, 2017).

Cultural sensitivity is important in the delivery of health care programs and services. According to Statistics Canada Projections of the Diversity of the Canadian Population (2011), immigrants accounted for 20.7% of the Canadian population in 2011, the highest proportion since 1871. Based on the population projections, immigrants would represent between 24.5% and 30% of Canada's population by 2036. Health research indicates that immigrants' health is generally better than that of the Canadian-born, but tends to decline the longer they live in Canada, known as the healthy immigrant effect. With an expected and continued increase in immigrant population, it is important to consider cultural diversity in the provision of health care programs and services.

According to the 2011 Statistics Canada census, about 3% of the Canadian Aboriginal population live in NL and make up 7% of the total population of this province, and 18.5% in the Western region. In fact, NL has the largest Aboriginal population of all the Atlantic Provinces. The Western region is unique in the population also includes members of the Qalipu Mi'kmaq band. The segment of the population who are members has not been determined given the delays in processing the applications for membership. However, the aboriginal population is a significant proportion of the population that must be considered in the provision of health care programs and services.

#### *Migration*

The Government of NL released a population growth strategy: Live Here, Work Here, Belong Here, A Population Growth Strategy for Newfoundland and Labrador, 2015-2025. The strategy focuses on the workforce, families, communities and immigration. According to the strategy, there was a consistent decrease in the population of NL in the 15 years since the northern cod moratorium in 1992. Between 2008 and 2013, the province's population began to grow and can

be widely attributed to migration from other provinces and international migration (Government of NL, 2015).

According to Community Accounts NL (2017), in 2014, the Western region experienced a residual net migration of -.17% or -130 individuals while the same statistic for the province was +.38% or +1,945 individuals. While the population of NL increased slightly, the population of the Western region continues to decline. Net migration is calculated by using the residual method of subtracting the current population from the population in the previous year and then removing the affect that births and deaths has on the population. The remainder or residual is the number of people who migrated into or out of the area (Community Accounts, 2017).

### *Fertility*

According to Community Accounts NL (2017), the birth rate in the Western region increased from 2012 to 2014, however, it has since decreased. The birth rate per 1000 in 2015 was 6.7 compared to 7.7 in 2014 (7.5 in 2013 and 7.6 in 2012). The provincial rate in 2015 remained the same as 2014 at 8.7 (8.6 in 2013 and 8.5 in 2012). In 2015 there were 535 births in the Western region representing a 11.6% decrease since 2014 when there were 605 births.

Based on statistics obtained from Community Accounts NL (2017), fertility rates of women in the Western region continue to decrease. In 2015, the rate was 1.3 (1.5 in 2013) compared to the provincial rate of 1.5 (1.4 in 2013). Fertility rates are defined as the average number of children per woman (Community Accounts NL, 2017).

### *Mortality*

In 2016, the median age of death for residents in the Western region was 78 compared to 77 provincially. In 2015, the regional and provincial median age of death was 78. In 2016, there were 879 deaths in the Western region compared to 856 deaths in 2015 (NLCHI, 2017).

### *Income*

The gross income for individuals in the Western region continues to increase incrementally. Research indicates that higher income is typically associated with better health. In 2013, the gross income (gross personal income per capita) for the Western region was \$29,600 compared to \$28,500 in 2012, and \$27,100 in 2011. In 2013, the average couple family income was \$85,100 for the Western region compared to \$101,300 provincially and \$105,600 nationally (Community Accounts, 2017).

In 2013, the median income for persons aged 55 and over in the Western region was \$24,400 compared to \$26,300 provincially, while persons aged 65 and over had a median income of \$19,700 compared to \$20,400 for all of NL.

### *Income Support*

In 2016, 9.5% (7,535 individuals) received income support assistance at some point during that year compared to 9.8% in 2015, and 10.1% in 2014. Provincially, 7.8% received income support assistance at some point during 2016. The total number of children aged 0 to 17 in the Western region who were in families receiving income support assistance in 2016 was 1,835 (1,910 in 2015, and 1,965 in 2014). In NL, the number of children aged 0-17 who were in families receiving income support assistance in 2016 was 9610 (9,975 in 2015) (Community Accounts, 2017).

### *Employment*

In 2011, the unemployment rate for the Western region was 21.1%, compared to 14.6% in the province and 7.8% in Canada (Community Accounts, 2017). The unemployment rate is defined by Statistics Canada as the ratio of unemployed individuals to the total labour force.

Employment Insurance Incidence is the number of people receiving Employment Insurance during the year divided by the number of people in the labour force. In the Western region, 37.4% of the labour force collected employment insurance at some point in 2015 (36.2% in 2014) compared to 29.6% in the province (28.2% in 2014) (Community Accounts, 2017). While the percentage of those collecting employment insurance continued to decrease incrementally up to 2014 in both the Western region and the province, these percentages increased from 2014 to 2015.

### *Marital Status*

Based on the 2011 Statistics Canada Census, 46.1% of individuals in the Western region were legally married (not separated), 6.7% widowed, 6.3% divorced, 2.0% separated, and 39.7% single (never legally married) (Community Accounts, 2017). It must be noted that 44% of the single people were 17 years of age or younger in 2011.

### *Education*

Highest level of schooling data is available from the National Household Survey (NHS) 2011, which reported that 25.6% of people 25 to 64 years of age in the Western region do not have a high school diploma compared to 20.3% provincially. In the Western region, the NHS (2011) reported that 12% of people aged 25 to 64 had a Bachelor's Degree or higher compared to 16.4% provincially (Community Accounts, 2017).

Based on 2015/16 data from the Department of Education (retrieved from Community Accounts, 2017), overall student enrolment in the Western region continues to decline, however, the number of primary students increased since the last fiscal year (Table 1). This trend was consistent with provincial figures (Table 2).

**Table 1. Student Enrolment in the Western Region**

School Year	2013-2014	2014-2015	2015-2016
<b>Total Students</b>	9,730	9,615	9,466
<b>Primary</b>	2,645	2,675	2,694
<b>Elementary</b>	2,180	2,105	2,047
<b>Junior High</b>	2,295	2,280	2,261
<b>Senior High</b>	2,610	2,550	2,464

Data source: Community Accounts, 2017

**Table 2. Student Enrolment in the Province**

School Year	2013-2014	2014-2015	2015-2016
<b>Total Students</b>	67,435	67,295	66,800
<b>Primary</b>	19,945	20,145	20,282
<b>Elementary</b>	14,860	14,795	14,846
<b>Junior High</b>	15,615	15,380	15,165
<b>Senior High</b>	17,015	16,975	16,507

Data source: Community Accounts, 2017

## *Wellness*

### *Well-Being*

According to the Canadian Community Health Survey (CCHS) (2013 and 2014), 80.8% of respondents in the Western region reported a stronger sense of community belonging, which is a decrease from the 2011 and 2012 percentage of 84.3%. However, respondents in the Western region feel a stronger sense of community belonging compared to respondents in the province (77%) and Canada (66.2%). This is supported by results from the Community Health Needs and Resource Assessment (CHNRA) survey recently conducted by Western Health in 2016. Survey respondents of the CHNRA reported that their communities are supportive and that they have access to numerous and varied community services. A focus group facilitated to gain insight into this finding revealed three themes related to community belonging: the importance of partnerships with Western Health and community groups to create awareness about services and the connection between belonging and wellness; the connection to community groups to foster community belonging and thereby promote wellness; and working together to ensure that people are aware of and have access to community services and programs.

The heightened sense of community belonging was reported in rates of giving, volunteering and participating within the province. According to the 2013 Canada Survey of Giving, Volunteering and Participating, 87.5% of those 15 years of age or older in NL donated money in the past year and continues to be the highest in the country and above the national average of

82.4%. Both percentages are down from the 2010 Survey with 92% in NL and 84% in Canada. Just over 46.4% of those respondents in NL indicated they volunteered during the past year, compared to 43.6% in Canada. These numbers continue to decrease as well.

Perceived life stress can result in negative health outcomes and Western region respondents in the last CCHS survey reported slightly increased life stress. Fifteen point five percent of respondents in the Western region reported quite a lot of life stress (CCHS, 2013 and 2014) compared to 12.6% in 2011 and 2012. While provincially the percentage of those perceiving quite a lot of life stress also increased, the national percentage slightly decreased. Fifteen point six percent of respondents in the province reported quite a lot of life stress compared to 23% in Canada. The same survey indicated a slight increase in life satisfaction in the Western region and the province; 92.6% of respondents from the Western region (92.3% in 2011 and 2012) reported being satisfied or very satisfied with life compared to 93.1% in NL (92.5% in 2011 and 2012) and 92.0% in Canada (92.3% in 2011 and 2012).

### *Health Status*

A major indicator of well-being is how a person rates his or her own health and mental health. According to the CCHS (2013 and 2014), 58.5% of individuals in the Western region rated their health status as being very good or excellent compared to 61.5% of individuals in the province and 59.2% in Canada. Seventy point three percent of respondents in the Western region rated their mental health as very good or excellent compared to 72.2% in the previous survey. In the same survey, 73.4% of the respondents in the province reported their mental health to be very good or excellent, compared to 71.1% in Canada.

Although a high percentage of people in the Western region reported that their mental health is very good or excellent, results from the 2016 CHNRA survey indicated that mental health and addictions issues are a major concern for the residents of the Western region. Nearly 38% of respondents reported mental health and addictions to be the second most concerning health problem.

Table 3 outlines the three indicators that assess the performance of the mental health system (CIHI, 2017): self-injury hospitalization, 30-day readmission rates and repeat hospitalization rates. There has been significant improvement in 30-day readmission for mental illness within the Western region from 2014/15 to 2015/16.

**Table 3. Mental Health Performance Indicators**

Indicator	Western Region	NL	Canada
<b>Self-Injury Hospitalization (2011 standard population) Rate per 100,000</b>	2013/14- <b>97</b> 2014/15- <b>84</b> 2015/16- <b>118</b>	2013/14- <b>98</b> 2014/15- <b>84</b> 2015/16- <b>85</b>	2013/14- <b>64</b> 2014/15- <b>65</b> 2015/16- <b>66</b>
<b>30-day readmission for mental illness. Risk adjusted rate.</b>	2013/14- <b>12.9</b> 2014/15- <b>13.4</b> 2015/16- <b>11.0</b>	2013/14- <b>11.2</b> 2014/15- <b>11.4</b> 2015/16- <b>10.3</b>	2013/14- <b>11.5</b> 2014/15- <b>11.8</b> 2015/16- <b>12.0</b>
<b>Patients with repeat hospitalization for mental illness. Risk adjusted rate.</b>	2011/12- <b>17.9</b> 2012/13- <b>20.6</b> 2013/14- <b>14.4</b> 2014/15- <b>17.8</b>	2011/12- <b>13.1</b> 2012/13- <b>13.3</b> 2013/14- <b>11.0</b> 2014/15- <b>13.5</b>	2011/12- <b>11.1</b> 2012/13- <b>11.0</b> 2013/14- <b>11.2</b> 2014/15- <b>11.5</b>

Data source: CIHI Health Indicators Interactive Tool, 2017

The rate of deaths by suicide (per 100,000 population) for each Regional Health Authority (RHA) and the province of NL are outlined in Table 4 (NLCHI, 2017). The rate within the Western region decreased in 2012 but higher than other RHAs, excluding Labrador-Grenfell Health and the province.

**Table 4. Rate of deaths by suicide per 100,000 Population for Ages 10 and Older by RHA (2010-2012)**

Year of death	Regional Health Authority				Province
	Eastern	Central	Western	Labrador-Grenfell	
<b>2010</b>	11.78	9.21	11.11	33.06	12.70
<b>2011</b>	7.77	11.53	19.45	30.01	11.79
<b>2012</b>	9.82	5.78	11.15	Data suppressed	9.23

Data source: NLCHI, 2017

### *Health Behaviors*

Alcohol, drug and tobacco use, tobacco exposure, physical activity, diet, and helmet use are lifestyle behaviors that contribute to health.

**Alcohol use.** According to the CCHS (2013 and 2014), 23.9% of people in the Western region reported heavy drinking compared with 25.0% in NL and 18.4% in Canada. Alcohol use was reported to be a community problem by 39% of respondents in the CHNRA (2016). Heavy drinking refers to males who reported having 5 or more drinks, or women who reported having 4 or more drinks, on one occasion, at least once a month in the past year.

**Drug use.** According to the Canadian Tobacco Alcohol and Drugs Survey (CTADS) (2015), there has been a slight increase in the number of people in NL and Canada who used cannabis in the past year. Nine point nine percent of the people surveyed in NL in 2015 reported

using cannabis in the past year compared to 9.6% in 2013. In 2015, in Canada, 12.3% of those surveyed reported using cannabis in the past year compared to 10.6% in 2013. There was also a slight increase in the percentage of NL respondents who reported using cannabis, cocaine/crack, methamphetamine/crystal methamphetamine, ecstasy, hallucinogens, salvia, inhalants, heroin, pain relievers, stimulants, and/or sedatives to get high. In 2015, 10.2% of NL respondents reported using one or more of these drugs compared to 9.9% in 2013. In Canada, this figure was 12.6% in 2015 and 11.3% in 2013.

**Tobacco use.** Based on the CTADS (2015), there have been decreases from 2013 to 2015 in those aged 20-24 (28 to 25.2) and 25-44 (24 to 18.2) in NL who report smoking, while the reported smoking for those aged 45 plus increased from 17 to 18.5. The 2014-2015 Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS), previously called the Youth Smoking Survey, reported that 23.3% of students tried smoking a cigarette compared to 26% in 2011. According to the CCHS (2013 and 2014), 24% of respondents in the Western region reported being a currently daily or occasional smoker compared to 27.1% in the previous survey. Twenty point eight percent of respondents in NL reported being daily smokers and 18.7% of respondents in Canada reported being daily smokers (CCHS, 2013 and 2014).

**Tobacco exposure.** The percentage of children up to age 17 years in NL who are regularly exposed to tobacco smoke continues to decrease which is a significant success for health promotion efforts across the country. The CTADS (2015) reported that 2.3% of children up to the age of 17 years in NL were regularly exposed to tobacco smoke compared to 2.4% in 2013, and 3.1% in 2012. In 2015, the national figure for children up to age 17 years being exposed to tobacco smoke was 2.9% compared to 3.9% in 2013, and 4.5% in 2012.

**Physical activity and healthy eating.** According to the CCHS (2013 and 2014), just over 53% of the population in the Western region reported being active which is higher than the provincial rate (48%) and slightly lower than the national rate (54%) (See Table 5). The percentage of individuals in the Western region who report consuming 5 to 10 vegetables a day is higher than the provincial percentage and lower than the national percentage, however, has increased since the 2011 and 2012 CCHS survey.

**Table 5. Personal Behaviors**

<b>Personal Behaviors</b>	<b>Western</b>	<b>NL</b>	<b>Canada</b>
<b>% of population (aged 12+) who are moderately active or active</b>	2009 and 2010- <b>53.5</b> 2011 and 2012- <b>55.1</b> 2013 and 2014- <b>53.8</b>	2009 and 2010- <b>47.4</b> 2011 and 2012- <b>50.3</b> 2013 and 2014- <b>48.0</b>	2009 and 2010- <b>52.3</b> 2011 and 2012- <b>53.8</b> 2013 and 2014- <b>54.4</b>
<b>% population (aged 12+) that consume fruits and vegetables 5 times or more per day</b>	2009 and 2010- <b>37.5</b> 2011 and 2012- <b>24.0</b> 2013 and 2014- <b>29.1</b>	2009 and 2010- <b>29.0</b> 2011 and 2012- <b>25.9</b> 2013 and 2014- <b>25.6</b>	2009 and 2010- <b>44.2</b> 2011 and 2012- <b>40.5</b> 2013 and 2014- <b>40.2</b>

Data source: CCHS, 2013 and 2014

**Helmet use.** According to the CCHS (2013 and 2014), nearly 48% of respondents over the age of 12 in the Western region reported always wearing a helmet when riding a bicycle in the last 12 months compared to 47% in the previous survey. In comparison, 45.9% of the respondents in the province and 42.0% in the nation reported always wearing a helmet (CCHS, 2013 and 2014).

### *Health Practices*

Cervical screening and influenza vaccination uptake are examples of health practice indicators (See Table 6). Health practices of a population may reflect general health.

The Western Health cervical screening rates for women aged 20 to 69 continued to decrease and in 2013 to 2015, this percent was 57%, compared to 59% in 2012-2014 and 63% in 2011 to 2013.

In the prevention of cervical cancer, the Human Papilloma Virus (HPV) vaccination is offered to eligible girls in grade six. The HPV vaccine is delivered in three doses: an initial dose, a second dose at two months and a third dose at six months. In 2015/16, 95% of eligible girls received dose 1 of the vaccine and 94% received dose 2.

Within Western Health, staff and long term care (LTC) resident influenza vaccination/immunization rates remained relatively consistent over the past three fiscal years (See Table 6). Within the Western region, influenza vaccinations/immunization rates in the general population continue to increase and in the 2013 and 2014 CCHS survey, 30.4% of the population aged 12 and older reported being vaccinated.

**Table 6. Western Region Health Practices**

<b>Health Practices</b>	<b>Data Source</b>	<b>Western Region</b>
<b>Cervical Screening</b>	Western Health	2012 to 2014- <b>59%</b> 2013 to 2015- <b>57%</b> 2014 to 2016- <b>60%</b>
<b>Influenza Vaccination for staff of Western Health who received influenza vaccine through employer</b>	Western Health	2014/15- <b>57%</b> 2015/16- <b>55%</b> 2016/17- <b>53%</b>
<b>Influenza Vaccination for LTC residents</b>	Western Health	2013/14- <b>90%</b> 2014/15- <b>90%</b> 2015/16- <b>86.7%</b>
<b>Population aged 12 and older receiving influenza vaccination less than one year ago</b>	CCHS	2009 and 2010- <b>23.9%</b> 2011 and 2012- <b>28.1%</b> 2013 and 2014- <b>30.4%</b>

### *Healthy Child Development*

Income level impacts on child development in relation to birth weight, diet, and school performance. Half of the lone parent families in the Western region had incomes of less than \$32,500 in 2013 compared to \$30,900 in 2011, \$29,000 in 2010 and \$28,000 in 2009 (compiled by the Community Accounts Unit based on Canada Customs and Revenue Agency, Statistics Canada). In 2013, half of the lone parent families in the province had incomes less than \$35,500 while the national figure was \$40,000 (Community Accounts, 2016).

The incidence of childhood obesity is a concern in the Western region of NL. In 2016/17, 21.7% of children at 3 years 9 months within the Western region were identified as overweight and/or obese. Studies indicate that breastfed children have a lower risk of childhood obesity than those who were not breastfed. Based on statistics provided by the Perinatal Program NL (2017), breastfeeding initiation rates in the Western region continued to increase incrementally (See Table 7).

**Table 7. Provincial and Western Region Breastfeeding Initiation Rates**

<b>Year</b>	<b>Western Region</b>	<b>NL</b>
<b>2013/14</b>	52.9%	61.4%
<b>2014/15</b>	54.6%	63.1%
<b>2015/16</b>	58.3%	64.8%

Data source: Perinatal Program NL, 2017

### *Chronic Disease*

#### *Health Outcomes*

Unhealthy practices are correlated with chronic diseases such as asthma, diabetes, cardiac disease, and cancer which result in poor health outcomes. According to the CCHS (2013 and 2014), the percentage of the adult and youth population in the Western region who reported being obese or overweight is lower than NL but higher than Canada (See Table 8). The population of the Western region of NL report having higher rates of asthma, diabetes and high blood pressure than the province and Canada (see Table 8).

**Table 8. Health Outcomes**

<b>Health Outcomes</b>	<b>Western Region</b>	<b>NL</b>	<b>Canada</b>
<b>Asthma % (aged 12+)</b>	2009 and 2010- <b>8.1</b> 2011 and 2012- <b>8.4</b> 2013 and 2014- <b>8.3</b>	2009 and 2010- <b>8.4</b> 2011 and 2012- <b>8.3</b> 2013 and 2014- <b>8.3</b>	2009 and 2010- <b>8.3</b> 2011 and 2012- <b>8.3</b> 2013 and 2014- <b>8.0</b>
<b>Diabetes % (aged 12+)</b>	2009 and 2010- <b>9.3</b> 2011 and 2012- <b>9.4</b> 2013 and 2014- <b>11.9</b>	2009 and 2010- <b>8.2</b> 2011 and 2012- <b>9.4</b> 2013 and 2014- <b>8.8</b>	2009 and 2010- <b>6.2</b> 2011 and 2012- <b>6.3</b> 2013 and 2014- <b>6.6</b>
<b>High blood pressure % (Aged 12+)</b>	2009 and 2010- <b>24.5</b> 2011 and 2012- <b>26.9</b> 2013 and 2014- <b>28.0</b>	2009 and 2010- <b>22.9</b> 2011 and 2012- <b>22.5</b> 2013 and 2014- <b>24.0</b>	2009 and 2010- <b>17.0</b> 2011 and 2012- <b>17.5</b> 2013 and 2014- <b>17.7</b>
<b>% youth population (aged 12-17) self-reported body mass index, overweight or obese</b>	2009 and 2010- <b>42.4</b> 2011 and 2012- <b>20.6</b> 2013 and 2014- <b>27.3</b>	2009 and 2010- <b>31.3</b> 2011 and 2012- <b>34.7</b> 2013 and 2014- <b>39.5</b>	2009 and 2010- <b>19.9</b> 2011 and 2012- <b>21.1</b> 2013 and 2014- <b>21.9</b>
<b>% adult population (18 years and over) self-reported body mass index, overweight or obese (Excludes pregnant women)</b>	2009 and 2010- <b>63.7</b> 2011 and 2012- <b>65.5</b> 2013 and 2014- <b>66.4</b>	2009 and 2010- <b>63.9</b> 2011 and 2012- <b>66.2</b> 2013 and 2014- <b>68.3</b>	2009 and 2010- <b>52.0</b> 2011 and 2012- <b>52.3</b> 2013 and 2014- <b>53.8</b>

Data source: CCHS, 2013 and 2014

### *Cancer Incidence*

The rates of bronchus and lung, colon, prostate, and cervical cancers are higher in the province than the rest of Canada (See Table 9). According to the CHNRA (2016) survey results, 43.3% of respondents indicated cancer was their top health concern. A focus group on chronic disease, including cancer, was facilitated in the Burgeo area. Participants indicated a number of challenges in relation to living with a chronic disease including communication about appointments and services, travel difficulties as a result of travel time, weather, and cost, long wait times, and that the local hospital is not being utilized to its full potential. An example provided with regard to the local hospital not being utilized to its fullest potential was that chemotherapy is no longer provided on site. Western Health continues to participate in the Provincial Colorectal Cancer Screening Initiative and the Provincial Endoscopy Initiative in an effort to reduce colon cancer.

**Table 9. Cancer Rates in NL and Canada**

<b>Health Outcomes</b>	<b>NL</b>	<b>Canada</b>
<b>Lung and bronchus cancer new cases (age standardized rate per 100,000)</b>	2011-52.8 2012-55.2 2013-55.5	2011-52.7 2012-52.9 2013-51.6
<b>Breast cancer new cases (age standardized rate per 100,000)</b>	2011-48.7 2012-50.1 2013-53.1	2011-52.8 2012-51.4 2013-51.1
<b>Colon, rectum and recto sigmoid junction new cancer cases (age standardized rate per 100,000)</b>	2011-70.4 2012-72.6 2013-68.6	2011-47.7 2012-47.2 2013-46.7
<b>Prostate cancer new cases (age standardized rate per 100,000, male population only)</b>	2011- 121.4 2012- 103.9 2013- 99.0	2011- 110.6 2012- 96.7 2013- 88.5
<b>Cervical cancer new cases (age standardized rate per 100,000, female population only)</b>	2011- 9.8 2012- 6.7 2013- 9.9	2011- 7.5 2012- 7.2 2013- 7.0

Data source: Statistics Canada Canadian Cancer Registry CANSIM Table 103-0553

Cardiovascular performance indicators are regularly monitored (Table 10). There has been significant work and progress on cardiovascular programs and services over the last three years, in part, as a result of Western Health's Strategic Plan (2014-2017) and the goal related to enhancing cardiovascular programs and services in keeping with the expanded chronic care model.

**Table 10. Cardiovascular Indicator Rates**

Indicator	Western Region	NL	Canada
<b>Cardiac revascularization (2011 standard population)</b> Age-standardized rate per 100,000	2013/14- <b>206</b> 2014/15- <b>204</b> 2015/16- <b>238</b>	2013/14- <b>278</b> 2014/15- <b>277</b> 2015/16- <b>303</b>	2013/14- <b>273</b> 2014/15- <b>269</b> 2015/16- <b>269</b>
<b>Coronary artery bypass graft (2011 standard population)</b> Age-standardized rate per 100,000	2013/14- <b>77</b> 2014/15- <b>59</b> 2015/16- <b>71</b>	2013/14- <b>77</b> 2014/15- <b>75</b> 2015/16- <b>71</b>	2013/14- <b>69</b> 2014/15- <b>68</b> 2015/16- <b>67</b>
<b>Percutaneous coronary intervention (2011 standard population)</b> Age standardized rate per 100,000	2013/14- <b>129</b> 2014/15- <b>147</b> 2015/16- <b>168</b>	2013/14- <b>201</b> 2014/15- <b>203</b> 2015/16- <b>234</b>	2013/14- <b>207</b> 2014/15- <b>204</b> 2015/16- <b>205</b>
<b>30-day acute myocardial infarction readmission</b> Risk adjusted rate	2013/14- <b>15.5</b> 2014/15- <b>12.5</b> 2015/16- <b>13.5</b>	2013/14- <b>10.5</b> 2014/15- <b>11.3</b> 2015/16- <b>10.8</b>	2013/14- <b>11.4</b> 2014/15- <b>11.0</b> 2015/16- <b>10.8</b>
<b>Hospitalized acute myocardial infarction event (2011 standard population)</b> Age standardized per 100,000	2013/14- <b>296</b> 2014/15- <b>269</b> 2015/16- <b>289</b>	2013/14- <b>329</b> 2014/15- <b>344</b> 2015/16- <b>358</b>	2013/14- <b>256</b> 2014/15- <b>252</b> 2015/16- <b>244</b>
<b>Hospitalized stroke event (2011 standard population)</b> Age standardized per 100,000	2013/14- <b>155</b> 2014/15- <b>192</b> 2015/16- <b>174</b>	2013/14- <b>158</b> 2014/15- <b>166</b> 2015/16- <b>172</b>	2013/14- <b>148</b> 2014/15- <b>151</b> 2015/16- <b>145</b>

Data source: CIHI, 2017

### *Mortality*

According to NLCHI (2017), the total mortality rate in the Western region in 2016 was 898.8 compared to 851.5 in NL. National data is not available from 2014 to 2016. The life expectancy at birth for the Western region and NL was the same at 78.9, compared to 81.1 for Canada (Table 11).

**Table 11. Total Mortality and Life Expectancy**

Indicator and Source	Western Region	NL	Canada
<b>Age-standardized mortality rate (rate per 100,000)</b> NLCHI, 2017	2012- <b>832.1</b> 2013- <b>874.7</b> 2014- <b>890.1</b> 2015- <b>886.9</b> 2016- <b>898.8</b>	2012- <b>861.8</b> 2013- <b>896.2</b> 2014- <b>894.9</b> 2015- <b>918.2</b> 2016- <b>851.5</b>	2012- <b>693.7</b> 2013- <b>686.2</b> 2014-not available 2015-not available 2016-not available
<b>Life Expectancy (at birth) 2007-2009</b> CIHI (2013)	<b>78.9</b>	<b>78.9</b>	<b>81.1</b>

The leading causes of death for the province in 2013 were cancer (31.1%), diseases of the circulatory system (29.2%), and diseases of the respiratory system (8.9%). In the Western region, 34.0% of deaths were caused by cancer, 26.7% by disease of the circulatory system, and 8.4% by diseases of the respiratory system (NLCHI, 2017). Table 12 outlines mortality rates and cancer, cerebrovascular, circulatory, and total mortality and life expectancy in NL and Canada.

**Table 12. Mortality Rates by Disease in NL and Canada**

<b>Indicator and Source</b>	<b>NL</b>	<b>Canada</b>
<b>Lung cancer</b> Age standardized per 100,000	2010- <b>45.9</b> 2011- <b>42.8</b> 2012- <b>44.5</b>	2010- <b>43.1</b> 2011- <b>41.7</b> 2012- <b>41.5</b>
<b>Prostate cancer</b> Age standardized per 100,000	2010- <b>7.5</b> 2011- <b>9.3</b> 2012- <b>8.5</b>	2010- <b>7.8</b> 2011- <b>7.3</b> 2012- <b>7.2</b>
<b>Breast cancer</b> Age standardized rate per 100,000	2010- <b>14.9</b> 2011- <b>13.0</b> 2012- <b>12.1</b>	2010- <b>10.8</b> 2011- <b>10.5</b> 2012- <b>10.4</b>
<b>Colorectal cancer</b> Age standardized rate per 100,000	2010- <b>25.3</b> 2011- <b>22.7</b> 2012- <b>20.2</b>	2010- <b>16.8</b> 2011- <b>17.0</b> 2012- <b>16.5</b>
<b>Major cardiovascular diseases</b> Age standardized rate per 100,000	2010- <b>184.6</b> 2011- <b>170.2</b> 2012- <b>169.4</b>	2010- <b>132.7</b> 2011- <b>125.1</b> 2012- <b>124.7</b>
<b>Cerebrovascular disease</b> Age standardized rate per 100,000	2010- <b>39.3</b> 2011- <b>34.9</b> 2012- <b>33.4</b>	2010- <b>26.6</b> 2011- <b>24.8</b> 2012- <b>24.3</b>
<b>Other disorders of the circulatory system</b> Age standardized rates per 100,000	2010- <b>0.7</b> 2011- <b>0.7</b> 2012- <b>0.9</b>	2010- <b>1.3</b> 2011- <b>1.0</b> 2012- <b>0.7</b>

Data source: NLCHI, 2017

## Internal Analysis

### *Internal Business Processes*

#### *Client and Patient Volumes*

Client and patient volumes continue to be monitored throughout Western Health facilities. Table 13 outlines client/patient volumes for select services including hemodialysis at Western Memorial Regional Hospital (WMRH), Sir Thomas Roddick Hospital (STRH), and Dr. Charles LeGrow Health Centre (LHC), emergency room visits at WMRH and STRH, fast track visits at WMRH and STRH, and admissions to Humberwood.

**Table 13. Client/Patient Volumes for Select Western Health Services**

<b>Service</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>
<b>Hemodialysis visits (WMRH)</b>	10,351	10,441	<b>10,137</b>
<b>Hemodialysis (STRH)</b>	3,871	4,008	<b>4112</b>
<b>Hemodialysis (LHC)</b>	1,833	1,880	<b>1,897</b>
<b>Emergency room visits (WMRH)</b>	22,128	22,913	<b>23,260</b>
<b>Fast Track visits (WMRH)</b>	16,166	15,939	<b>16,583</b>
<b>Emergency room visits (STRH)</b>	29,919	33,273	<b>27,960</b>
<b>Fast Track visits (STRH)</b>	N/A	5,879	<b>5,045</b>
<b>Emergency room visits (RGHC)</b>	6,135	5,838	<b>6,749</b>
<b>Emergency room visits (BBHC)</b>	4,481	4,315	<b>4,248</b>
<b>Emergency room visits (LHC)</b>	7,992	8,138	<b>7,535</b>
<b>Emergency room visits (CHC)</b>	1,409	1,518	<b>1,284</b>
<b>Admissions to Humberwood</b>	183	189	<b>173</b>

Data source: Internal annual reports

Note: N/A references a period when fast track service was not available at this site.

#### *Performance Indicators*

CIHI updates performance indicators to assess health care appropriateness and effectiveness through the Your Health System (Table 14). Compared to Canada, Western Health is performing on average, if not better, on many of the appropriateness and effectiveness performance indicators such as hospital standardized mortality ratio and patient readmission to hospital. Western Health continues to be significantly higher than the rest of Canada and the province on the percentage of patients aged 19 years and younger readmitted to hospital and ambulatory care sensitive conditions (CIHI, 2017).

**Table 14. Appropriateness and Effectiveness Performance Indicators**

<b>Indicator</b>	<b>Western Health</b>	<b>NL</b>	<b>Canada</b>
<b>Hospital Standardized Mortality Ratio</b>	2013/14- <b>71</b> 2014/15- <b>93</b> 2015/16- <b>89</b>	2013/14- <b>104</b> 2014/15- <b>113*</b> 2015/16- <b>109*</b>	2013/14- <b>85</b> 2014/15- <b>95</b> 2015/16- <b>93</b>
<b>All patients readmitted to hospital (%)</b>	2013/14- <b>8.3</b> 2014/15- <b>7.9*</b> 2015/16- <b>8.7</b>	2013/14- <b>8.4</b> 2014/15- <b>8.6*</b> 2015/16- <b>8.8</b>	2013/14- <b>8.9</b> 2014/15- <b>9.0</b> 2015/16- <b>9.1</b>
<b>Hospital deaths following major surgery (%)</b>	2013/14- <b>1.4</b> 2014/15- <b>1.8</b> 2015/16- <b>1.2</b>	2013/14- <b>2.0</b> 2014/15- <b>2.2*</b> 2015/16- <b>2.1*</b>	2013/14- <b>1.7</b> 2014/15- <b>1.6</b> 2015/16- <b>1.6</b>
<b>Medical patients readmitted to hospital (%)</b>	2013/14- <b>12.1*</b> 2014/15- <b>12.4</b> 2015/16- <b>13.4</b>	2013/14- <b>12.0*</b> 2014/15- <b>13.2</b> 2015/16- <b>13.4</b>	2013/14- <b>13.5</b> 2014/15- <b>13.6</b> 2015/16- <b>13.7</b>
<b>Obstetric patients readmitted to hospital (%)</b>	2013/14- <b>1.2</b> 2014/15- <b>1.8</b> 2015/16- <b>2.7</b>	2013/14- <b>2.6*</b> 2014/15- <b>2.5*</b> 2015/16- <b>2.7</b>	2013/14- <b>2.0</b> 2014/15- <b>2.0</b> 2015/16- <b>2.1</b>
<b>Surgical patients readmitted to hospital (%)</b>	2013/14- <b>8.4*</b> 2014/15- <b>6.1</b> 2015/16- <b>5.6</b>	2013/14- <b>7.0</b> 2014/15- <b>6.1*</b> 2015/16- <b>5.9</b>	2013/14- <b>6.9</b> 2014/15- <b>6.8</b> 2015/16- <b>6.9</b>
<b>Patients 19 and younger readmitted to hospital (%)</b>	2013/14- <b>6.4</b> 2014/15- <b>7.2</b> 2015/16- <b>8.4</b>	2013/14- <b>7.4</b> 2014/15- <b>6.6</b> 2015/16- <b>7.8</b>	2013/14- <b>6.7</b> 2014/15- <b>6.6</b> 2015/16- <b>6.7</b>
<b>Ambulatory care sensitive conditions (age standardized rate per 100,000)</b>	2013/14- <b>496*</b> 2014/15- <b>573*</b> 2015/16- <b>588*</b>	2013/14- <b>405*</b> 2014/15- <b>475*</b> 2015/16- <b>458*</b>	2013/14- <b>283</b> 2014/15- <b>331</b> 2015/16- <b>326</b>

\*Statistically different than Canada

Data source: (CIHI, 2017)

The Hospital Harm Indicator was publically released in 2015/16 and replaced CIHI's Safety Performance Indicators. This indicator captures unintended occurrences of harm that occur during a hospital stay and is designed to help organizations identify patient safety improvement priorities and monitor progress over time. Table 15 outlines some of the Hospital Harm Indicators being monitored. Western Health has lower rates for obstetric trauma (with instrument), 30-day stroke mortality, in-hospital hip fractures, and nursing sensitive adverse events for medical conditions, compared to NL and Canada.

**Table 15. Hospital Harm Indicators**

<b>Indicator</b>	<b>Western Health</b>	<b>NL</b>	<b>Canada</b>
<b>In-hospital hip fractures Age 65+ (rate per 1000)</b>	2013/14- <b>1.43</b> 2014/15- <b>1.22</b> 2015/16- <b>.35</b>	2013/14- <b>.59</b> 2014/15- <b>1.00</b> 2015/16- <b>.5</b>	2013/14- <b>0.8</b> 2014/15- <b>.7</b> 2015/16- <b>.7</b>
<b>30-day acute myocardial infarction in-hospital mortality (risk adjusted rate %)</b>	2012/13- <b>7.4</b> 2013/14- <b>6.5</b> 2014/15- <b>5.5</b>	2012/13- <b>8.8</b> 2013/14- <b>8.3</b> 2014/15- <b>8.2</b>	2012/13- <b>6.7</b> 2013/14- <b>6.6</b> 2014/15- <b>6.4</b>
<b>30-day Stroke In-hospital Mortality (rate per 100)</b>	2012/13- <b>10.2</b> 2013/14- <b>6.8</b> 2014/15- <b>6.0</b>	2012/13- <b>18.6</b> 2013/14- <b>17.5</b> 2014/15- <b>15.2</b>	2012/13- <b>14.2</b> 2013/14- <b>13.9</b> 2014/15- <b>13.4</b>
<b>Nursing sensitive adverse events for medical conditions (rate per 1000)</b>	2013/14- <b>12.7</b> 2014/15- <b>16.8</b> 2015/16- <b>15.4</b>	2013/14- <b>24.9</b> 2014/15- <b>27.4</b> 2015/16- <b>19.2</b>	2013/14- <b>28.8</b> 2014/15- <b>28.0</b> 2015/16- <b>27.3</b>
<b>Nursing sensitive adverse events for surgical conditions (rate per 1000)</b>	2013/14- <b>21.1</b> 2014/15- <b>55.8</b> 2015/16- <b>35.7</b>	2013/14- <b>41.0</b> 2014/15- <b>39.9</b> 2015/16- <b>30.5</b>	2013/14- <b>34.6</b> 2014/15- <b>33.5</b> 2015/16- <b>33.5</b>
<b>Obstetric trauma (with instrument) rate per 100 (%)</b>	2013/14- <b>7.8</b> 2014/15- <b>10.2</b> 2015/16- <b>6.1</b>	2013/14- <b>10.4</b> 2014/15- <b>10.6</b> 2015/16- <b>8.8</b>	2013/14- <b>18.9</b> 2014/15- <b>18.3</b> 2015/16- <b>18.7</b>
<b>Low risk c-Section (%)</b>	2013/14- <b>17.8</b> 2014/15- <b>19.7</b> 2015/16- <b>22.7</b>	2013/14- <b>20.7</b> 2014/15- <b>19.4</b> 2015/16- <b>18.4</b>	2013/14- <b>13.8</b> 2014/15- <b>14.1</b> 2015/16- <b>14.3</b>

Data source: CIHI, 2017

LTC indicators to assess appropriateness and effectiveness, safety, and health status have been developed and are in the second year of monitoring (CIHI, 2017). These indicators include: restraint use, potentially inappropriate use of antipsychotics, falls in the last 30 days, worsened pressure ulcers, worsened depressive mood, improved physical functioning, worsened physical functioning, experiencing pain, and experiencing worsened pain (Table 16). Western Health is significantly lower than Canada on falls in the last 30 days in LTC, worsened depressive mood in LTC, and worsened pain in LTC. Opportunities for improvement include potentially inappropriate use of anti-psychotics in LTC and experience of pain in LTC. Western Health continues to collaborate with the Centre for Health Improvement in reducing inappropriate use of anti-psychotics in LTC as it is currently being implemented throughout the organization.

**Table 16. Long Term Care Indicators (%)**

<b>Indicator</b>	<b>Western Health</b>	<b>NL</b>	<b>Canada</b>
<b>Falls in the last 30 days in long term care</b>	2014/15-9.7* 2015/16-10.1*	2014/15-11.2* 2015/16-11.2*	2014/15-15.3 2015/16-15.7
<b>Worsened pressure ulcer in long term care</b>	2014/15-2.0 2015/16-2.1	2014/15-2.1* 2015/16-1.7*	2014/15-3.1 2015/16-2.9
<b>Potentially inappropriate use of anti-psychotics in long term care</b>	2014/15-40.7* 2015/16-41.4*	2014/15-38.2* 2015/16-37.5*	2014/15-27.6 2015/16-23.9
<b>Improved physical functioning in long term care</b>	2014/15-35.7 2015/16-36.9*	2014/15-40.6* 2015/16-39.8*	2014/15-32.0 2015/16-31.7
<b>Worsened physical functioning in long term care</b>	2014/15-34.4 2015/16-32.8	2014/15-32.9 2015/16-31.6*	2014/15-33.6 2015/16-33.1
<b>Worsened depressive mood in long term care</b>	2014/15-18.3* 2015/16-15.3*	2014/15-18.1* 2015/16-16.4*	2014/15-23.5 2015/16-22.3
<b>Experiencing pain in long term care</b>	2014/15-13.3 2015/16-15.5*	2014/15-15.8* 2015/16-14.7*	2014/15-9.5 2015/16-8.5
<b>Experiencing worsened pain in long term care</b>	2014/15-14.5 2015/16-6.7*	2014/15-12.3* 2015/16-11.5*	2014/15-11.0 2015/16-10.5

\*Statistically different than Canada

Data source: CIHI, 2017

### *Efficiency*

Regional and site specific median wait times for placement into LTC from approval to placement are monitored (Table 17). There has been an increase in median wait times at all LTC sites throughout the region with the exception of Corner Brook Long Term Care Home. On a regional level, 182 individuals had a median wait time of 110.5 days for placement to LTC which is an increase from a median wait time of 19 days in 2015/16. This increase may be attributed to a greater range in patient wait times prior to placement in LTC, as well as occupancy rates. For the 2016/17 fiscal year, the occupancy rate was 100%.

**Table 17. Median Wait Times (days) to Access Institutionally Based LTC from Approval to Placement**

<b>Site</b>	<b>Median Wait Time 2014/15</b>	<b>Median Wait Time 2015/16</b>	<b>Median Wait Time 2016/17</b>
<b>Corner Brook Long Term Care Home</b>	184	304.5	<b>170.5</b>
<b>Bay St. George Long Term Care Centre</b>	21	11	<b>96</b>
<b>Calder Health Centre</b>	8	6	<b>8</b>
<b>Dr. Charles LeGrow Health Centre</b>	5	2	<b>3</b>
<b>Rufus Guinchard Health Centre</b>	12	39	<b>259</b>
<b>Bonne Bay Health Centre</b>	81	231	<b>594</b>
<b>Overall</b>	25	19	<b>110.5</b>

Most responsible admitting diagnoses vary throughout Western Health facilities depending upon the program area. The most responsible diagnosis within the Medicine Program continues to be Chronic Obstructive Pulmonary Disorder (COPD). COPD is followed by myocardial infarction, and viral/unspecified pneumonia. In the Surgery Program, the three most responsible diagnoses are unilateral knee replacement, hysterectomy with non-malignant diagnosis, and convalescence. Within the adult acute Mental Health Program, the top three most responsible diagnoses are depressive episode, schizophrenia/schizoaffective disorder, and substance abuse with other state.

The average age of the adult population accessing acute care services, excluding admissions related to pregnancy and childbirth, was 62 compared to 65 in 2015/16. Twenty percent were 80 years or older, these trends have remained relatively consistent over the past 4 fiscal years. The largest demographic group accessing acute care services were between the ages of 60 to 79 at 43.8%.

Patient flow continues to pose challenges for health care organizations including Western Health. Length of stay beyond expected length of stay and alternate level of care impact on patient flow. Inefficient patient flow has the potential to lead to longer stays in emergency departments, cancellation of services, and use of overflow areas. The number of admissions to Western Health acute care facilities decreased to 8,511 cases in 2016/17, from 8,820 cases in 2015/16 and 8,789 in 2013/14. The ELOS (Expected Length of Stay) for Western Health has decreased incrementally to 5.28 in 2016/17 days from 5.37 days in 2015/16 and 5.66 in 2014/15. However, over the past three fiscal years, length of stay has continued to increase incrementally. Average length of stay in 2016/17 was 11.63 days, compared to 11.32 days in 2015/16 and 10.85 in 2014/15. Alternate Level of Care (ALC) continues to utilize a significant portion of patient days within Western Health. In 2016/17, there were 516 ALC cases which represent 32,421 ALC days or 33% of all acute care days for Western Health. This has increased from 2015/16, in which there were 452 ALC cases and 30,872 ALC days representing 31% of acute care days. Western Health utilized 98.69 acute care beds for ALC care, compared to 93.97 in 2015/16, and 82.54 in 2014/15. The average length of stay for ALC cases in 2016/17 was 62.83 compared to 68.30 in 2015/16 and 61.26 days in 2014/15.

The cost of a standard hospital stay in the Western region was \$5816.00 in 2015/16, slightly down from 2014/15 at \$5828.00 (CIHI, 2017). In 2015/16, the cost of a standard hospital stay at Western Health was lower than the province at \$6258.00 and the national cost at \$6098 (See Table 18).

**Table 18. Cost of a Standard Hospital Stay (Dollars)**

<b>Indicator</b>	<b>2012/13</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>
<b>Western Health</b>	<b>6380.00</b>	<b>6227.00</b>	<b>5828.00</b>	<b>5816.00</b>
<b>NL</b>	<b>6299.00</b>	<b>5713.00</b>	<b>6252.00</b>	<b>6258.00</b>
<b>Canada</b>	<b>5567.00</b>	<b>5632.00</b>	<b>5789.00</b>	<b>6098.00</b>

Data source: CIHI, 2017

To further enhance efficiency as well as support for transitioning to a new facility, Western Health completed an organizational change map in 2016/17. Work commenced to address the identified priorities and will continue into the next fiscal year.

### *Finance*

#### *Infrastructure*

Western Health partnered with the provincial government and other Regional Health Authorities to purchase an electronic medication reconciliation software application. This software will support patient safety by ensuring accurate comprehensive medication information is communicated consistently across transitions of care.

Western Health has collaborated with Honeywell in a number of energy renovation projects which are expected to have significant energy saving costs. Another example of infrastructure investment to support clients/patients/residents is the relocation of the Stress 2 Lab. Over the past fiscal year, the Cardio Diagnostic area at WMRH was renovated to include the relocation of Stress 2 Lab to be adjacent to Stress Test 1 resulting in enhanced privacy for patients during the registration process and a more efficient space for staff to provide care.

Western Health partnered with the provincial government on the development of a request for qualifications for the new bed long term care facility for Corner Brook. The proposed 145 bed facility includes 120 long term care beds, 15 palliative care beds and 10 adult rehabilitation beds.

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## ***Human Resources***

### ***Human Resource Planning***

Western Health currently employs 2612 Full Time Equivalents (FTEs) and 3103 staff. There are also currently approximately 1600 active volunteers within Western Health. As of March 31, 2017, the medical staff includes 121 physicians and 22 new physicians were hired during this fiscal year. This is higher than a medical staff of 97 physicians and 18 new physicians in 2015/16. Highlights from the Human Resources branch during the last fiscal year include the implementation of the Talent Management Plan and e-Recruit system, initiatives to support enhanced work life culture such as employee recognition and wellness activities, staff safety programs, and new equipment to support training and access to training.

Through the development of Western Health's Talent Management Plan, a number of achievements were accomplished in the last fiscal year. These include an increase in use of social media to promote Western Health as a place people want to work and volunteer, the completion of the AON Hewitt staff engagement survey, the completion of regional staff engagement sessions, training in "The Working Mind", the development of an onboarding program, the evaluation of the Performance Management framework, established processes for compiling Exit Interview Data, and commencement of revisions to the Reward and Recognition Policy.

The 2015 provincial government announcement related to shared services and downsizing continues to create uncertainty for staff and leadership. However, Western Health continues to move forward to improve workplace wellness and engagement.

## ***Learning and Growth***

### ***Best Practice***

Best practice information is provided to Western Health employees through education, training, E-learning, and the regional library services. To enhance access to best practice information, E-learning modules continue to be developed and published for employees. In 2016/17, new modules were introduced to provide an orientation to the Regional Library services and resources including tutorials for health databases, to provide an overview of new Regional Cardiac Care Program, and to improve awareness around Pressure Ulcer Prevention. In addition, technology such as Polycon Real Presence software continues to support staff education and engagement.

Staff throughout Western Health continues to develop, review and revise policies in keeping with best practices. Many policies have been revised/revised and/or developed during the past year as available on the Western Health intranet site.

### *Accreditation*

Western Health's next onsite survey visit originally scheduled for November 2017, will now take place in October 2018. Work has been ongoing to prepare for Accreditation 2018, including completion of the AON Hewitt Engagement and the Canadian Patient Safety Culture surveys. The online self-assessment questionnaires are in the process of being completed, and administration of the client/patient/resident experience surveys has continued in keeping with the planning cycle.

### *Research and Evaluation*

Research and evaluation continues to be an integral component of planning. Staff throughout Western Health collaborates to support research and evaluation initiatives. In the 2016/17 fiscal year, 53 evaluations were initiated, continued or completed such as evaluations of the Western Health Website, Pastoral Care, Policies and Procedures, Risk and Safety Management Alert System (RASMAS), Vision and Values, Telehealth Applied Behavioral Analysis (ABA) Program, the Automated Notification System, Professional Practice Framework, and many others. Auditing is incorporated into evaluations as a means to ensure best practice implementation and compliance.

Western Health staff facilitates research within programs to ensure best practices for clients/patients/residents. As an example, Western Health was selected as one of five sites across Canada to participate in the DIVERT-CARE (Collaboration Action Research & Evaluation) Trial: A Multi-provincial Pragmatic Trial of Cardio-Respiratory Management in Home Care Project with McMaster University and Department of Health and Community Services. Western Health's experiences and learnings from this trial will be utilized to implement a provincial approach to providing access to proactive care to maintain client's health at home and avoid unnecessary hospitalization and visits to the emergency department related to COPD/CHF/CAD.

### *Ethics*

Medical Assistance in Dying (MAiD) continued to be a focus over the past year throughout the province. In collaboration with the Provincial Health Ethics Network of Newfoundland and Labrador (PHENNL), several ethics webinars and teleconferences were made available to Western Health staff. Webinars included "*The Ethical Imperative to Serve Marginalized Populations*", "*Duty of Care in Risky Situations*", "*Competency and Capacity Demystified*", "*MAiD in Newfoundland and Labrador*", and "*The Doctor as Patient: A Diagnostic Odyssey*". In addition, Western Health provided a MAiD presentation to regional health care providers. Two ethics consultations were facilitated in partnership with PHENNL which focused on the rights and best interests of staff and our clients/patients/residents and their families.

### *Employee Wellness/Health and Safety*

Employee wellness, health and safety, and enhanced work life culture are supported by Western Health through a number of initiatives such as:

- Western Outstanding Work Awards
- Recognition pins
- Four Weeks of Wellness Activity
- Fall Food Fest Challenge
- Summer Bucket List
- Injury Prevention Program (Safe Resident Handling)
- Hazard Recognition, Evaluation, and Control exercises
- The Working Mind Training
- Influenza Vaccination Program

### *Emergency Preparedness*

Business continuity and emergency plans have been established within Western Health. These plans were implemented and successful in Burgeo at which time the road was closed. Programs throughout Western Health continue to review code policies and procedures. Staff at Bay St. George Long Term Care Center participated in an inaugural annual code education day and LTC Corner Brook hosted its second annual code education day. Codes red, blue, white and yellow exercises were held at sites throughout the region.

### *Clients/Patients/Residents*

#### *Best Practice*

Several best practice initiatives were implemented and/or continued in 2016/17:

- Antipsychotic medication reduction in LTC
- Patient Order Sets
- Regional Cardiac Care Program
- Model of Nursing Clinical Practice
- PRIISME model
- TOR-BSST© dysphagia screening tool
- Multi-dose medication packaging in LTC
- Automated Notification System
- Finding Balance Program
- Breathing Room
- Color It Up Program

Several best practice initiatives resulted from Western Health's many partnerships with external agencies including the Department of Health and Community Services, Canadian Agency for Drugs and Therapeutics, Canadian Foundation for Health Care Improvement, PHENNL, and the Health Research Ethics Authority.

Volunteer Resources continued to offer significant support to the organization. In 2016/17, Pastoral/Spiritual Care introduced a new volunteer training program: "Caring for the Human Spirit." Thirty-eight participants completed the training which included topics such as: Becoming a Pastoral care volunteer, Listening and Communication, Understanding the Patient, Death and Grief and Visitation.

### *Client/Patient/Resident Feedback*

Clients/Patients/Residents have several ways to provide feedback to Western Health. One such means is through the compliments and complaints reporting process. Compliments and complaints are monitored, trended, and disseminated to enhance service provision and identify opportunities for improvement. Clients/patients/residents of Western Health also have an opportunity to provide feedback through experience surveys that are administered every three years. An engagement framework has been drafted for Western Health and work is ongoing to further integrate client/patient/resident engagement within Western Health.

The Community Health Needs Resources and Assessment (CHNRA) survey provides another mechanism for residents of the Western region to provide feedback about health needs and resources. The survey results were utilized to support the identification of organizational strategic goals. The primary health care area and regional reports have been shared with staff as well as the general public through the Western Health intranet and internet. Based on the CHNRA survey outcomes, focus groups were identified and initiated and/or completed to gain further insight into the survey results. The success of these two components of the CHNRA is supported by a strong partnership between the Information and Quality and Population Health branches.

### *Safety*

Staff at Western Health integrates client/patient/resident safety into all programs and services. Safety is also included on leadership and staff meeting agendas. In addition, Western Health staff participate on a provincial committee with representatives from the Department of Health and Community Services and the other regional health authorities to develop and guide the implementation of the patient safety legislation for the province of Newfoundland and Labrador.

A number of safety initiatives have been implemented across the continuum of care to reduce risk such as the Falling Star Program, antipsychotic medication reduction in LTC, Naloxone Take Home Kit program, Medication of the Week, a formulary for the home infusion program, and Multi-dose medication packaging in LTC. To further support safe and timely access to Clinical Safety Reporting System (CSRS) data, information can now be accessed within the Cognos environment.

## *Improving Population Health*

Partnerships are critical in the development and delivery of programs and services in an effort to improve population health. Some examples of Western Health partnerships are with the Western Regional Wellness Coalition, Tobacco Free Alliance for the Control of Tobacco, the Alzheimer's Society of NL, the Heart and Stroke Foundation, the Royal Newfoundland Constabulary, Royal Canadian Mounted Police, NL Provincial Perinatal Program, Qalipu First Nations Band, Western Injury Prevention Coalition, Community Advisory Committees, and many others. As a result of these partnerships, healthy behaviours and practices were promoted through initiatives including:

- Kids Live Well Marathon
- Vegetable and Fruit Campaign
- Color It Up program
- School Gardens
- Safe Kids Week
- Break It Off
- Best Sex in Years: Sex Over 50 resource booklet
- Survivor Challenge

A significant achievement in 2016-17 was the enhanced referrals to NL Smoker's Helpline from the Western Health region. There were 359 CARE referrals in the last fiscal year representing a 153% increase from 2015-16. As a result, Western Health staff were presented a provincial award for most CARE referrals in the province.

## *Access*

While the majority of Western regional respondents in the CCHS (2013 and 2014) reported having a regular medical doctor (91.5%), the CHNRA survey results indicated that the residents of the Western region experience difficulties accessing medical services. According to the survey results, 69.9% of respondents who use specialist services indicated they are not satisfied with those services. A focus group related to access to primary care services was conducted and five themes were identified; patient centered care, continuity of care, access, team-based care, and technology. Participants indicated that telehealth is a positive approach to enhancing access appointments and needs to become the norm in service delivery.

Telehealth is a strategy that has been implemented throughout the Western region to increase access to health care services. Telehealth continues to be promoted and has been increasing in many programs and services. For example, there was a 51% increase in telehealth utilization with Mental Health and Addictions. Oncology and mental health programs comprise 73% of all telehealth appointments. In the last fiscal year, the overall number of telehealth appointments increased by 14% (1,655 appointments) from the previous year.

In addition to Telehealth, Western Health increased the use of social media such as Twitter. Twitter has been utilized by branches throughout Western Health as a means to enhance communication and awareness. For example, Health Promotion consultants utilized Twitter to

educate the public about the important of vegetable and fruit consumption, and falls prevention. Mental Health and Addictions have utilized technology to increase reach such as the e-health solution, *The Strongest Families*, and websites and apps related to *Bridge the gAPP*.

### *Healthy Child Development*

The number of live births increased by 71 in the last fiscal year (601 in 2015/16). The goal is to see expectant mothers earlier in pregnancy, and 86% of mothers were referred to the prenatal program in the first or second trimester. Staff within the Community Health program continue to identify and monitor areas of concern related to healthy child development through Child Health Clinics, the Comprehensive School Health program, and the Health Beginnings/Health Beginnings Long Term program.

### *Healthy Aging*

Staff throughout Western Health continue to ensure quality programs and services to older adults within the Western region and promote positive images of aging. Nearly 60% of permanent staff have completed the eLearning module on Age Related Changes. An article was published in the local newspaper, the Western Star, with information about Alzheimer's, other related dementias, and the Western Health Alzheimer's Support Group. Also, all hospitals, health centers and long term care homes now have Senior Friendly Parking. The Healthy Aging Calendar continues to be successful and a means to promote health aging.

## **Conclusion**

### *Opportunities and Challenges*

The review of Western Health's annual reports indicates similar opportunities and challenges across branches including operational efficiency, improving access to Western Health programs and services, enhancing client and staff safety, and engaging staff, clients/patients/residents. In addition to these challenges, Western Health is continuing to support the planning for the new shared services model and operational readiness in transitioning to the new facility. Western Health will support the Government of NL in its implementation of *The Way Forward* document (Government of NL, 2016) as well as other provincial priorities.

### *Strategic Plan*

Western Health completed the 2014-2017 Strategic Plan, with significant achievements and successes. Western Health's new strategic plan for 2017-2020 was approved and tabled in the provincial House of Assembly on June 30, 2017. A new vision and values for Western Health were developed as part of the strategic planning process with feedback from front line staff, leadership and members of the Board of Trustees.

The new vision for Western Health is: Our People, Our Communities - Healthy Together. This new vision highlights the important role that residents and communities throughout the Western region play in achieving and promoting good health.

Western Health's core values offer principles and a guiding framework for all employees. The new values are:

- Accountability: We follow through on our responsibilities with a focus on quality and safety.
- Care: We are compassionate and client centered.
- Collaboration: We work together with clients, patients, residents, families, and/or communities to enhance health.
- Excellence: We strive to be and do our best.
- Respect: We are courteous to and considerate of all individuals.
- Transparency: We are open and honest while respecting privacy and confidentiality.

Western Health's strategic plan for 2017-2020 outlines the priorities for the organization and is in keeping with the strategic directions set by the Department of Health and Community Services. The three strategic issues for 2017-2020 are:

- Mental Health Promotion and Addictions Prevention
- Primary Health Care Services
- Programs and Services for Older Adults

#### *Operational Goal*

Western Health's operational goal for 2017-20 will focus on the implementation of processes and strategies to enhance operational efficiency in priority areas.

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