# Environmental Scan 2015-2016


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## Foreword

Dates written in the form "2015" represent a calendar year from January 1 to December 31.
Dates written in the form "2015/16" represent a fiscal year from April 1 to March 31.
Dates written in the form of "2015 and 2016" 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) started 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)

## 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 2011 Statistics Canada census, the Western region's population continues to decrease and in 2011, the population was 77,980 compared to 79,460 in 2006 and 81,595 in 2001 (Community Accounts, 2016). Those aged 65 and older comprised 20% of the population, while in Newfoundland and Labrador (NL), 16% were over the age of 65, and in Canada, this percentage was 14.8%. Although the population in the Western region decreased, the provincial population increased from 505,470 in 2006 to 514,535 in 2011 (1.8% change). This is the first time that the population of NL has had a positive population change since the 1981-1986 Statistics Canada Census. 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 77,980 to 74,239 by 2035 in the Western region, with 34.4% of the population being over the age of 65 years (Government of NL, 2016).

Consideration should be given to ethnic background in the delivery of health care programs and services. According to Statistics Canada Projections of the Diversity of the Canadian Population, immigrants accounted for one fifth (19.8%) of the Canadian population in 2006 and it was projected that by 2031, the immigrant population would increase to at least 25% of Canada's population (Statistics Canada, 2016). 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, also called the healthy immigrant effect. With this expected increase in immigrant population, it is important to consider cultural diversity and the healthy immigrant effect in the provision of health care programs and services.

The Western region is unique in that there is a portion of the population that are 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 and cultural sensitivity must be considered in the provision of health care programs and services.

*Migration*

Based on public consultations, 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, in 2013, the Western region experienced a residual net migration of -.02% or -15 individuals. The residual net migration for NL was .17% or 880 individuals (Community Accounts, 2016). 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, 2016).

*Fertility*

According to the Newfoundland and Labrador Centre for Health Information (NLCHI), the birth rate in the Western region experienced an increase since 2013. The crude rate per 1000 in 2014 was 7.7, which is an increase compared to 7.5 in 2013, and 7.6 in 2012. The provincial rate in 2014 was 8.7 compared to 8.6 in 2013, and 8.5 in 2012 (NLCHI, 2016).

In 2013, the fertility rate for the Western region was 1.5 compared to the provincial rate of 1.4. Fertility rates are defined as the average number of children per woman (NLCHI, 2016).

*Mortality*

The median age of death in the Western region in 2014 was 76, compared to 74.6 in 2013. The provincial median age of death was 75.4 in 2014 compared to 75 in 2013. In 2014, there were 832 deaths in the Western region which makes up 16.8% of the 4947 deaths in NL (NLCHI, 2016).

*Income*

The gross income for individuals in the Western region continues to increase incrementally and 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 $27,100 in 2011, and $25,600 in 2010. 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, 2016).

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 2015, 9.8% (7805 individuals) in the Western region received income support assistance at some point during that year compared to 10.2% in 2013 and 10.9% in 2012. Provincially, 7.9% received income support assistance at some point during that year. The total number of children aged 0 to 17 in the Western region who were in families receiving income support assistance in 2015 was 1,910 (2,070 in 2013, and 2,430 in 2011). In NL, the number of children aged 0-17

who were in families receiving income support assistance was 9,975 (10,960 in 2013) (Community Accounts, 2016).

*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, 2016). The unemployment rate is defined by Statistics Canada as the ratio of unemployed individuals to the total labour force. According to Statistics Canada (2011), "Unemployed refers to persons 15 years of age and over, excluding institutional residents, who, during the week (Sunday to Saturday) prior to Census Day, were without paid work and were available for work and either had actively looked for work in the past four weeks, were on temporary lay-off and expected to return to their job, or had definite arrangements to start a new job in four weeks or less."

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, 36.2% of the labour force collected employment insurance at some point in 2014 compared to 28.2% in the province (Community Accounts, 2016). The percentage of those collecting employment insurance continues to decrease incrementally in both the Western region and the province.

*Marital Status*

Based on the 2011 Statistics Canada Census, there were 35,670 legally married (not separated), 5190 widowed, 4835 divorced, 1570 separated, and 30,715 single people (never legally married) in the Western region (Community Accounts, 2016).

*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, 2016).

Based on 2015/16 data from the Department of Education (retrieved from Community Accounts, 2016), 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 |
|---|---|---|---|
| **Total Students** | 9,730 | 9,615 | 9,466 |
| **Primary** | 2,645 | 2,675 | 2,694 |

| School Year | 2013-2014 | 2014-2015 | 2015-2016 |
|---|---|---|---|
| **Elementary** | 2,180 | 2,105 | 2,047 |
| **Junior High** | 2,295 | 2,280 | 2,261 |
| **Senior High** | 2,610 | 2,550 | 2,464 |

Data source: Community Accounts, 2016

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

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

Data source: Community Accounts, 2016

## *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 continue to 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 that was recently conducted by Western Health in 2016. Results of the survey indicate residents of the Western region report a strong sense of community belonging, where they feel they live in supportive communities and have access to numerous and varied community services.

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 said 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.

The performance of the mental health system is monitored through the following three indicators from the Canadian Institute for Health Information (CIHI): self-injury hospitalization, 30-day readmission rates and repeat hospitalization rates (Table 3). Recent results from the CHNRA survey indicate mental health and addictions issues are a major concern for the residents of the Western region since 37.9% of respondents indicated it is the second most concerning health problem.

**Table 3. Mental Health Performance Indicators**

| Indicator | Western Region | NL | Canada |
|---|---|---|---|
| Self-Injury Hospitalization (2011 standard population) Rate per 100,000 | 2012/13-**88**<br>2013/14-**97**<br>2014/15- **84** | 2012/13-**85**<br>2013/14-**98**<br>2014/15- **84** | 2012/13-**63**<br>2013/14- **64**<br>2014/15- **65** |
| 30-day readmission for mental illness. Risk adjusted rate. | 2012/13-**14.9**<br>2013/14- **12.9**<br>2014/15- **13.4** | 2012/13-**12.3**<br>2013/14- **11.2**<br>2014/15- **11.4** | 2012/13-**11.5**<br>2013/14- **11.5**<br>2014/15- **11.8** |
| Patients with repeat hospitalization for mental illness. Risk adjusted rate. | 2011/12-**17.9**<br>2012/13-**20.6**<br>2013/14- **14.4** | 2011/12-**13.1**<br>2012/13-**13.3**<br>2013/14- **11.0** | 2011/12-**11.1**<br>2012/13-**11.0**<br>2013/14- **11.2** |

Data source: CIHI Health Indicators Interactive Tool, 2016

Table 4 outlines the suicide rates per 100,000 population by Regional Health Authority (RHA) and the province of NL (NLCHI, 2016). Although the suicide rate peaked in 2011 in the Western region at 19.45, this rate decreased in 2012 to be more consistent with other years.

**Table 4. Annual Suicide Rates 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 | |
| 2010 | 11.78 | 9.21 | 11.11 | 33.06 | 12.70 |
| 2011 | 7.77 | 11.53 | 19.45 | 30.01 | 11.79 |
| 2012 | 9.82 | 5.78 | 11.15 | Data suppressed | 9.23 |

Data source: NLCHI, 2016

*Health Behaviors*

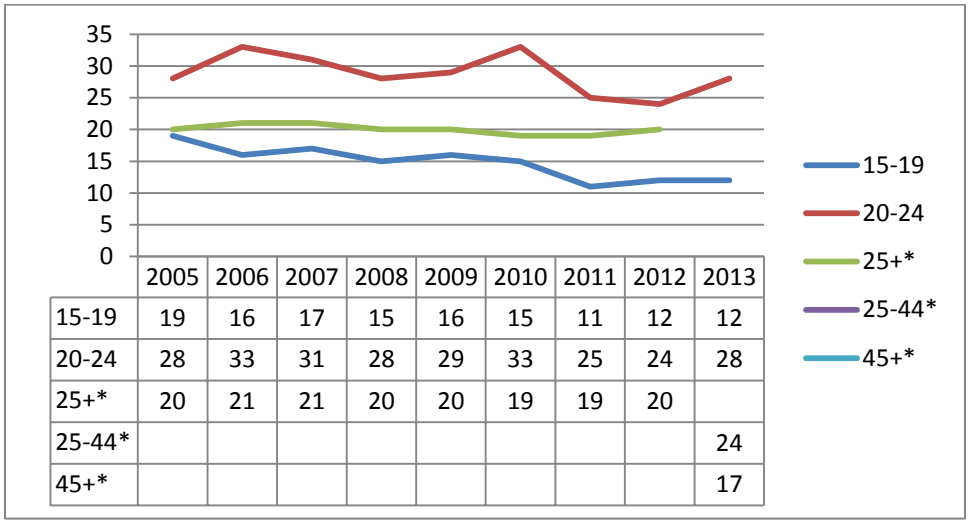
Several lifestyle behaviors contribute to health including alcohol, drug, and tobacco use, tobacco exposure, physical activity, diet, and helmet use.

***Alcohol use.*** 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. 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. The rate of alcohol use is widely identified as a cause for concern in the Western region. According to the CHNRA (2016) survey results, 39% of respondents identified alcohol use as a community problem.

***Drug use.*** According to the Canadian Tobacco Alcohol and Drugs Survey (CTADS) (2013), there has been a slight decrease in the number of people in NL who used cannabis in the past year and a slight increase in the national data. Nine point six percent of the people surveyed in NL reported using cannabis in the past year compared to 11% in 2012. In 2013 in Canada, 10.6% of those surveyed reported using cannabis in the past year compared to 10.2% in 2012. There was also a slight decrease 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 2013, 9.9% of NL respondents reported using one or more of these drugs compared to 11.1% in 2012. In Canada, this figure was 11.3%.

***Tobacco use.*** Although some increases in smoking behavior have been reported in the province (CTADS, 2013), the prevalence of students reporting having ever tried smoking a cigarette decreased since 2010-2011 in NL from 35% to 26% (Youth Smoking Survey, 2012-2013). Refer to Figure 1 for smoking behavior by age group in the province.

**Figure 1. Smoking Behavior by Age Group in NL (%)**




| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|
| 15-19 | 19 | 16 | 17 | 15 | 16 | 15 | 11 | 12 | 12 |
| 20-24 | 28 | 33 | 31 | 28 | 29 | 33 | 25 | 24 | 28 |
| 25+* | 20 | 21 | 21 | 20 | 20 | 19 | 19 | 20 | |
| 25-44* | | | | | | | | | 24 |
| 45+* | | | | | | | | | 17 |

* Note that the reporting by age groups has changed.
Data source: CTADS, 2015

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). For the first time, e-cigarette use in Canada is monitored and according to the latest information, 12.5% of NL residents have ever used an e-cigarette (Reid, Rynard, & Hammond, 2015).

***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 (2013) reported that 2.4% of children up to the age of 17 years in NL were regularly exposed to tobacco smoke compared to 3.1% in 2012, 5.5% in 2010, 6.0% in 2009, 8.2% in 2008, and 9.7% in 2007. In 2013, the national figure for children up to age 17 years being exposed to tobacco smoke was 3.9%, compared to 4.5% in 2012, 6.2% in 2010, 6.7% in 2009, and 8% in 2008.

***Physical activity and diet.*** Just over 53% of the population in the Western region reported being active, (CCHS, 2013 and 2014) (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**

| Personal Behaviors | Western | NL | Canada |
|---|---|---|---|
| % of population (aged 12+) who are moderately active or active | 2009 and 2010-**53.5**<br>2011 and 2012-**55.1** | 2009 and 2010-**47.4**<br>2011 and 2012-**50.3** | 2009 and 2010-**52.3**<br>2011 and 2012-**53.8** |

| Personal Behaviors | Western | NL | Canada |
|---|---|---|---|
| | 2013 and 2014-**53.8** | 2013 and 2014-**48.0** | 2013 and 2014-**54.4** |
| % population (aged 12+) that consume fruits and vegetables 5 times or more per day | 2009 and 2010-**37.5**<br>2011 and 2012-**24.0**<br>2013 and 2014-**29.1** | 2009 and 2010-**29.0**<br>2011 and 2012-**25.9**<br>2013 and 2014-**25.6** | 2009 and 2010-**44.2**<br>2011 and 2012-**40.5**<br>2013 and 2014-**40.2** |

Data source: CCHS, 2013 and 2014

***Helmet use.*** According to CCHS (2013 and 2014), 47.6% of the 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. Forty five point nine percent of the respondents in the province and 42.0% in the nation reported always wearing a helmet (CCHS, 2013 and 2014).

*Health Practices*

Indicators of health practice include cervical screening, mammography, and influenza vaccination uptake. Table 6 outlines statistics related to these health practices. Health practices of a population may be reflective of overall health.

The Western Health cervical screening rates for women aged 20 to 69 continue to decrease and in 2013 to 2015, this percent was 57%, compared to 59% in 2012-2014, 63% in 2011 to 2013, and 69% from 2009 to 2011.

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 2014/15, 93.9% of eligible girls received dose 1 of the vaccine, 93.8% received dose 2, and 90.5% received dose 3.

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

**Table 6. Western Region Health Practices**

| Health Practices | Data Source | Western Region |
|---|---|---|
| Cervical Screening | Western Health | 2011 to 2013-**63%**<br>2012 to 2014- **59%**<br>2013to 2015- **57%** |
| Mammography | Provincial Breast Screening Program | 2010/11- **60%**<br>2011/12- **58.5%**<br>2012/13- **59.4%** |
| Influenza Vaccination for staff of Western Health who received influenza vaccine | Western Health | 2013/14-**58%**<br>2014/15-**57%** |

| Health Practices | Data Source | Western Region |
|---|---|---|
| through employer | | 2015/16- **55%** |
| Influenza Vaccination for LTC residents | Western Health | 2012/13-**90%**<br>2013/14-**90%**<br>2014/15- **90%** |
| Population aged 12 and older receiving influenza vaccination less than one year ago | CCHS | 2009 and 2010-**23.9%**<br>2011 and 2012-**28.1%**<br>2013 and 2014-**30.4%** |

*Healthy Child Development*

Children born in low-income families are more likely than those born in high-income families to have low birth weights, to eat less nutritious food, and to have more difficulty in school. 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 obesity and diabetes is high in the Western region of NL and continues to increase. Literature indicates that breastfeeding is a strategy that can deter the incidence of obesity and diabetes through healthy feeding practices early in life. Based on statistics provided by the Perinatal Program Newfoundland and Labrador, the breastfeeding initiation rates in the Western region increased from 64.2% in 2013 to 72.4% in 2014 but decreased in 2015 to 61.9% (See Table 7).

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

| Year | Western Region | NL |
|---|---|---|
| 2013 | 64.2% | 69.6% |
| 2014 | 72.4% | 72.0% |
| 2015 | 61.9% | 72.8% |

Data source: Western Health, 2016

## *Chronic Disease*

*Health Outcomes*

Unhealthy practices are correlated with obesity and chronic diseases such as asthma, diabetes, cardiac disease, and cancer. As described in Table 8, 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. The incidence of chronic diseases produces poorer health outcomes and the Western region of NL has higher rates of asthma, diabetes and high blood pressure than the province and Canada (see Table 8).

**Table 8. Health Outcomes**

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

Data source: CCHS, 2013 and 2014

*Cancer Incidence*

The rates of cancer, specifically 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 the top health concern. Western Health continues to participate in the Provincial Colorectal Cancer Screening Initiative and the Provincial Endoscopy Initiative. It is important to note the most recent update of Statistics Canada CANSIM table 103-0553 was released September 28, 2015 which uses population estimates as of July 1, 2015. Therefore, previous versions of the environmental scan will differ in new cancer case rates than the ones presented in Table 9.

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

| Health Outcomes | NL | Canada |
|---|---|---|
| Lung and bronchus cancer new cases (age standardized rate per 100,000) | 2011-**52.8**<br>2012-**55.2**<br>2013-**55.5** | 2011-**52.7**<br>2012-**52.9**<br>2013-**51.6** |
| Breast cancer new cases (age standardized rate per 100,000) | 2011-**48.7**<br>2012-**50.1**<br>2013-**53.1** | 2011-**52.8**<br>2012-**51.4**<br>2013-**51.1** |

| Health Outcomes | NL | Canada |
|---|---|---|
| Colon, rectum and recto sigmoid junction new cancer cases (age standardized rate per 100,000) | 2011-**70.4**<br>2012-**72.6**<br>2013-**68.6** | 2011-**47.7**<br>2012-**47.2**<br>2013-**46.7** |
| Prostate cancer new cases (age standardized rate per 100,000, male population only) | 2011- **121.4**<br>2012- **103.9**<br>2013- **99.0** | 2011- **110.6**<br>2012- **96.7**<br>2013- **88.5** |
| Cervical cancer new cases (age standardized rate per 100,000, female population only) | 2011- **9.8**<br>2012- **6.7**<br>2013- **9.9** | 2011- **7.5**<br>2012- **7.2**<br>2013- **7.0** |

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

In Western Health's Strategic Plan (2014-2017), a goal related to enhancing cardiovascular programs and services in keeping with the expanded chronic care model was established. Given this focus, cardiovascular indicators, including those outlined in Table 10, are monitored.

**Table 10. Cardiovascular Indicator Rates**

| Indicator | Western Region | NL | Canada |
|---|---|---|---|
| Cardiac revascularization (2011 standard population)<br>Age-standardized rate per 100,000 | 2012/13-**248**<br>2013/14-**206**<br>2014/15- **204** | 2012/13-**290**<br>2013/14-**278**<br>2014/15- **277** | 2012/13-**276**<br>2013/14-**273**<br>2014/15- **269** |
| Coronary artery bypass graft (2011 standard population)<br>Age-standardized rate per 100,000 | 2012/13- **65**<br>2013/14-**77**<br>2014/15- **59** | 2012/13- **72**<br>2013/14-**77**<br>2014/15- **75** | 2012/13-**69**<br>2013/14-**69**<br>2014/15- **68** |
| Percutaneous coronary intervention (2011 standard population)<br>Age standardized rate per 100,000 | 2012/13-**183**<br>2013/14-**129**<br>2014/15-**147** | 2012/13-**220**<br>2013/14-**201**<br>2014/15-**203** | 2012/13-**208**<br>2013/14-**207**<br>2014/15-**204** |
| 30-day acute myocardial infarction readmission<br>Risk adjusted rate | 2012/13-**not available**<br>2013/14-**15.5**<br>2014/15- **12.5** | 2012/13-**not available**<br>2013/14-**10.5**<br>2014/15- **11.3** | 2012/13-**not available**<br>2013/14-**11.4**<br>2014/15- **11.0** |
| Hospitalized acute myocardial infarction event (2011 standard population)<br>Age standardized per 100,000 | 2012/13-**297**<br>2013/14-**296**<br>2014/15-**269** | 2012/13-**331**<br>2013/14-**329**<br>2014/15-**344** | 2012/13-**260**<br>2013/14-**256**<br>2014/15-**252** |
| Hospitalized stroke event (2011 standard population)<br>Age standardized per 100,000 | 2012/13-**148**<br>2013/14-**155**<br>2014/15- **192** | 2012/13-**159**<br>2013/14-**158**<br>2014/15-**166** | 2012/13-**149**<br>2013/14-**148**<br>2014/15-**151** |

Data source: CIHI, 2016

*Mortality*

According to NLCHI (2016), the total mortality rate in the Western region in 2013 was 1035.6, compared to 918.6 in NL, and 706.8 in Canada and 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). The mortality

indicators presented in Table 11 are age-standardized rates and therefore are different than mortality indicators listed in previous environmental scans which used crude rates.

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

| Indicator and Source | Western Region | NL | Canada |
|---|---|---|---|
| Age-standardized mortality rate (rate per 100,000)<br>NLCHI, 2016 | 2012-**587.1**<br>2013-**618.2**<br>2014-**607.1** | 2012-**598.9**<br>2013-**618.0**<br>2014-**619.7** | 2010-**501.0**<br>2011-**492.2**<br>2012-**490.0** |
| Life Expectancy (at birth) 2007-2009<br>Statistics Canada, Health Profile (2013) | **78.9** | **78.9** | **81.1** |

The leading causes of death for the province in 2012 were cancer (30.3%), diseases of the circulatory system (29.3%), and diseases of the respiratory system (9.1%). In the Western region, 30.5% of deaths were caused by cancer, 25.6% by disease of the circulatory system, and 11.8% by diseases of the respiratory system (NLCHI, 2016). 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**

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

Data source: NLCHI, 2016

## Internal Analysis

### *Internal Business Processes*

*Client/Patient Volumes*

Western Health continues to experience increases in such services as hemodialysis, specifically at the satellite sites at Sir Thomas Roddick Hospital (STRH) and Dr. Charles LeGrow Health Centre (LHC), emergency room visits at STRH, and the number of clients receiving home support. See Table 13 for client/patient volumes for select Western Health services.

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

| Service | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|
| Hemodialysis visits (WMRH) | 10,923 | 10,351 | 10,441 |
| Hemodialysis (STRH) | 3212 | 3871 | 4008 |
| Hemodialysis (LHC) | 1820 | 1833 | 1880 |
| Emergency room visits (WMRH) | 25,189 | 22,128 | 22,913 |
| Fast Track visits (WMRH) | 6852(opened October 2013) | 16,166 | 15,939 |
| Emergency room visits (STRH) | 28,248 | 29,919 | 33,273 |
| Fast Track visits (STRH) | N/A | N/A | 5,879 |
| Humberwood admissions | 192 | 183 | 189 |
| Long term care admissions (Approved placement LTC) | 238 | 237 | 214 |
| Client served home support (number of clients) | 1844 | 1915 | 2019 |
| BABIES (accepted and referred) | 290 | 269 | 299 |

Data source: Internal annual reports

*Performance Indicators*

CIHI updates performance indicators to assess health care appropriateness and effectiveness through the Your Health System (Table 14). Western Health is significantly lower than Canada on the percentage of all patients readmitted to hospital and significantly higher than Canada on ambulatory care sensitive conditions (CIHI, 2016). It is important to note that the Hospital Standardized Mortality Ratio (HSMR) was re-calculated after the 2013-2014 fiscal year.

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

| Indicator | Western Health | NL | Canada |
|---|---|---|---|
| Hospital Standardized Mortality Ratio (HSMR) | 2012/13-**90**<br>2013/14-**71**<br>2014/15-**93** | 2012/13-**110**<br>2013/14-**104**<br>2014/15-**113*** | 2012/13-**89**<br>2013/14-**85**<br>2014/15-**95** |
| All patients readmitted to hospital (%) | 2012/13-**8.0**<br>2013/14-**8.3** | 2012/13-**8.5**<br>2013/14-**8.4** | 2012/13-**8.8**<br>2013/14-**8.9** |

| Indicator | Western Health | NL | Canada |
|---|---|---|---|
| | 2014/15-**7.9*** | 2014/15-**8.6*** | 2014/15-**9.0** |
| Hospital deaths following major surgery (%) | 2012/13-**1.8**<br>2013/14-**1.4**<br>2014/15-**1.8** | 2012/13-**2.1**<br>2013/14-**2.0**<br>2014/15-**2.2*** | 2012/13-**1.8**<br>2013/14-**1.7**<br>2014/15-**1.6** |
| Medical patients readmitted to hospital (%) | 2012/13-**12.6**<br>2013/14- **12.1***<br>2014/15-**12.4** | 2012/13-**12.8***<br>2013/14-**12.0***<br>2014/15-**13.2** | 2012/13-**13.5**<br>2013/14-**13.5**<br>2014/15-**13.6** |
| Obstetric patients readmitted to hospital (%) | 2012/13-**1.3**<br>2013/14-**1.2**<br>2014/15-**1.8** | 2012/13-**2.4**<br>2013/14-**2.6***<br>2014/15-**2.5*** | 2012/13-**2.0**<br>2013/14-**2.0**<br>2014/15-**2.0** |
| Surgical patients readmitted to hospital (%) | 2012/13-**6.3**<br>2013/14-**8.4***<br>2014/15-**6.1** | 2012/13-**6.6**<br>2013/14-**7.0**<br>2014/15-**6.1*** | 2012/13-**6.7**<br>2013/14-**6.9**<br>2014/15-**6.8** |
| Patients 19 and younger readmitted to hospital (%) | 2012/13-**6.6**<br>2013/14-**6.4**<br>2014/15-**7.2** | 2012/13-**6.4**<br>2013/14-**7.4**<br>2014/15-**6.6** | 2012/13-**6.5**<br>2013/14-**6.7**<br>2014/15-**6.6** |
| Ambulatory care sensitive conditions (age standardized rate per 100,000) | 2012/13-**540***<br>2013/14-**496***<br>2014/15-**573*** | 2012/13-**419***<br>2013/14-**405***<br>2014/15-**475*** | 2012/13-**289**<br>2013/14-**283**<br>2014/15-**331** |

*Statistically different than Canada
Data source: (CIHI, 2016)

CIHI Safety Performance Indicators reported in the environmental scan over the past two years are being replaced by the Hospital Harm Indicator. This indicator captures unintended occurrences of harm that happen during a hospital stay. This is a new measure developed conjointly by CIHI and The Canadian Patient Safety Institute. It is designed to help organizations identify patient safety improvement priorities and track progress over time. The national 'big dot' rate will be included in an analytical report which is planned for public release in the fall of 2016. Efforts are ongoing within Regional Health Authorities to validate this indicator before public release. Due to the release of this report, some indicators were not available for the 2014/15 fiscal year.

**Table 15. Safety Performance Indicators**

| Indicator | Western Health | NL | Canada |
|---|---|---|---|
| In-hospital hip fractures Age 65+ (rate per 1000) | 2012/13-**1.1**<br>2013/14-**0.3**<br>2014/15-**not available** | 2012/13-**0.9**<br>2013/14-**0.7**<br>2014/15-**not available** | 2012/13-**0**<br>2013/14-**0.8**<br>2014/15-**not available** |
| 30-day acute myocardial infarction in-hospital mortality (risk adjusted rate %) | 2012/13-**7.4**<br>2013/14-**6.5**<br>2014/15-**not available** | 2012/13-**8.8**<br>2013/14-**8.3**<br>2014/15-**not available** | 2012/13-**6.7**<br>2013/14-**6.6**<br>2014/15-**not available** |
| 30-day Stroke In-hospital Mortality (rate per 100) | 2012/13-**10.2**<br>2013/14-**6.8**<br>2014/15-**not available** | 2012/13-**18.6**<br>2013/14-**17.5**<br>2014/15-**not available** | 2012/13-**14.2**<br>2013/14-**13.9**<br>2014/15-**not available** |

| Indicator | Western Health | NL | Canada |
|---|---|---|---|
| Nursing sensitive adverse events for medical conditions (rate per 1000) | 2012/13-**31.3**<br>2013/14-**21.2**<br>2014/15-**not available** | 2012/13-**32.8**<br>2013/14-**29.2**<br>2014/15-**not available** | 2012/13-**21.7**<br>2013/14-**28.8**<br>2014/15-**not available** |
| Nursing sensitive adverse events for surgical conditions (rate per 1000) | 2012/13-**34.9**<br>2013/14-**36.9**<br>2014/15-**not available** | 2012/13-**48.4**<br>2013/14-**45.9**<br>2014/15-**not available** | 2012/13-**25.6**<br>2013/14-**34.6**<br>2014/15-**not available** |
| Obstetric trauma (with instrument) rate per 100 (%) | 2012/13-**8.1**<br>2013/14-**7.8**<br>2014/15-**10.2** | 2012/13-**11.5**<br>2013/14-**10.4**<br>2014/15-**10.6** | 2012/13-**18.9**<br>2013/14-**18.9**<br>2014/15-**18.3** |

Data source: CIHI, 2016

*Efficiency*

Regional and site specific median wait times for placement into LTC from approval to placement are monitored (Table 16). The Corner Brook Long Term Care Home, Rufus Guinchard Health Centre, and the Bonne Bay Health Centre all experienced increases in median wait times while the Bay St. George Long Term Care Centre, Calder Health Centre, Dr. Charles LeGrow Health Centre, and the region overall, experienced decreases in median wait times.

**Table 16. Median Wait Times (days) to Access Institutionally Based LTC from Approval to Placement**

| Site | Median Wait Time 2013/14 | Median Wait Time 2014/15 | Median Wait Time 2015/16 |
|---|---|---|---|
| Corner Brook Long Term Care Home | 126 | 184 | 304.5 |
| Bay St. George Long Term Care Centre | 15 | 21 | 11 |
| Calder Health Centre | 6 | 8 | 6 |
| Dr. Charles LeGrow Health Centre | 4 | 5 | 2 |
| Rufus Guinchard Health Centre | 65 | 12 | 39 |
| Bonne Bay Health Centre | 97 | 81 | 231 |
| Overall | 21 | 25 | 19 |

Most responsible admitting diagnoses vary throughout Western Health facilities depending upon the program area. Further analyses of these diagnoses provide insight into the health and subsequent health needs of the population. The most responsible diagnosis within acute care programs has remained relatively stable for the past two years. The most responsible diagnoses within the Medicine Program are diseases and disorders of the heart, Chronic Obstructive Pulmonary Disorder (COPD), pneumonia, signs/symptom of the digestive system, and lower urinary tract infection. In the Surgery Program, the most responsible diagnoses are unilateral knee replacement, hysterectomy with non-malignant diagnosis, unilateral hip replacement, convalescence, and partial excision/destruction of prostate closed approach. Within the adult acute Mental Health Program, the most responsible diagnoses are depressive episode, schizophrenia/schizoaffective disorder, stress reaction/adjustment disorder, bipolar 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, in 2015/16 was 64.84 compared to 64.99 in 2014/15. Twenty one percent were 80 years or older, these trends have remained relatively stable over the past 3 fiscal years.

Patient flow becomes inefficient when organizations experience length of stay beyond the expected length of stay and a high percentage of alternate level of care (ALC) days. Inefficient patient flow has the potential to lead to longer stays in emergency departments, cancellation of services, and overflow areas. The number of admissions to Western Health acute care facilities has increased slightly from 8780 cases in 2013/14 to 8829 cases in 2015/16. Length of stay had an increasing trend over the past three years. The length of stay for acute care facilities within Western Health has increased on average by 0.47 days. Average length of stay was 11.32 days in 2015/16 compared with 10.85 in 2014/15 and 9.48 in 2013/14. ALC continues to utilize a significant portion of patient days within Western Health. In 2015/16 ALC days represent 34% of all the acute care days for Western Health, compared to 31% in 2014/15. In 2015/16, Western Health utilized 93.97 acute care beds for ALC care, compared to 82.54 beds in 2014/15. The average length of stay for ALC cases in 2015/16 was 68.45 days, compared to 82.54 days in 2014/15.

The cost of a standard hospital stay in the Western region was $5828.00 in 2014/15, slightly down from 2013/14 at $6227.00 (CIHI, 2016). In 2014/15, the provincial cost of a standard hospital stay was $6252.00 and the national cost was $5789.00 (See Table 17).

**Table 17. Cost of a Standard Hospital Stay (Dollars)**

| Indicator | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
|---|---|---|---|---|---|
| Western Health | 6194.00 | 6278.00 | 6380.00 | 6227.00 | 5828.00 |
| NL | 6461.00 | 6537.00 | 6299.00 | 5713.00 | 6252.00 |
| Canada | 5338.00 | 5409.00 | 5567.00 | 5632.00 | 5789.00 |

Data source: CIHI, 2016

An operational readiness framework was developed and highlighted the project management approach which will support operational improvements in transitioning to a new facility. The Operational Readiness Managers have commenced meetings with various branches to identify the changes required at a branch level. This work will support an organizational change map and guide the direction of future operational readiness work.

## *Finance*

*Financial Conditions and Infrastructure*

Financial Services and Budgeting was recently reviewed for HST compliance and the report issued by these reviewers identified very few areas where Western Health was overpaying HST

indicating the processes and controls implemented by the Finance team are working correctly. The statistical reporting accuracy and timeliness has increased significantly from the prior year as the result of both enhanced monitoring from Financial Services and support from Western Health leadership in improving data quality and reporting. The primary challenge for Financial Services and Budgeting in the upcoming year will be managing changes from the recent NL Provincial Budget implementation and maintaining related tracking and reporting forms.

Over the past fiscal year, Western Health has invested in capital equipment and construction such as significant structural repairs the balconies of the oldest section of Western Memorial Regional Hospital (WMRH), the installation of a new, larger biomedical waste cooler at WMRH, and complete renovation of the Emergency, Triage, and Emergency areas of STRH. Looking ahead to the 2016/17 fiscal year, Physical Infrastructure Support (PIS) will collaborate with Central, Labrador-Grenfell, and Eastern RHAs to invest and install a new Computerized Facilities and Asset Management (CAFM) platform. This will replace the current MP2 software and will enhance the user interface and provide much greater reporting and key performance indicators (KPIs) metrics, while improving PIS staff efficiencies.

## ***Human Resources***

*Human Resource Planning*

Western Health currently employs 2636 Full Time Equivalents (FTEs) and 3164 staff. As of March 31, 2016, 97 physicians were appointed to the medical staff at Western Health and 18 new physicians were hired during this fiscal year. Highlights from the Human Resources branch during the last fiscal year include completion of the Talent Management Plan, the implementation of the e-Recruit system, and increased roll-out of the WestnetMe and TimeKeeper Software packages.

Western Health adopted the Health Leadership Capabilities Framework, otherwise known as the LEADS framework and to date the LEADS assessment has been completed and shared with Senior Executive Team and the regional LEADS Committee and an action plan developed to address issues identified in the assessment. A roll out of LEADS training has taken place with members of the Senior Executive Team and the LEADS Steering Committee. This initiative has also been identified provincially and a provincial committee has been established to facilitate the implementation and continued rollout of the program at all RHAs.

In 2015, government announced its intention to create a shared services organization to consolidate administrative functions such as purchasing, supply chain, human resources, communications and information management. This announcement created much uncertainty for the staff and managers in these areas. Western Health has continued to move forward to improve quality of the human resources services provided while, at the same time, trying to move in a consistent direction as other RHAs to support a move toward shared services. Staff and managers in the identified areas participated in a workshop with the Shared Services Implementation Team and look forward to continued opportunities for engagement.

## *Learning and Growth*

*Best Practice*

Employee Development continued to support Western Health employees in their knowledge of best practices through the provision of education, training, and e-learning. E-Learning modules on topics including the NL Smokers' Helpline CARE program, hand hygiene, LEADS, and Understanding Dementia, continue to be developed and published for employees to access at their convenience.

The Western Health regional library provides information to employees and students to support evidence-informed decisions and best practice. The library performed 752 literature searches in the 2015/16 year.

Staff throughout Western Health continues to develop, review and update policies as appropriate to ensure best practices.

*Accreditation*

As a condition of the accreditation decision from the onsite survey visit in November 2013, Western Health provided evidence of action on priority criteria to Accreditation Canada in April 2015. This evidence was accepted by Accreditation Canada and completed the follow up requirements from the December 2013 onsite survey. Upon the request of Accreditation Canada, Western Health's next onsite survey visit originally scheduled for November 2017 will now take place in October 2018. Work has commenced in preparation for Accreditation 2018.

*Research and Evaluation*

Evaluation has become integral to program planning. Information and Quality staff collaborates with various programs and services within Western Health to provide research and evaluation support. In the 2015/16 fiscal year, 39 evaluations were initiated, continued or completed. Evaluations that were supported include blood glucose monitoring, use of antipsychotic medications, and patient order sets.

To enhance evidence informed decision making, survey administration and auditing are two methods used to gather information from residents and communities within Western Health. The electronic client/patient/resident (CPR) experience survey process was piloted in the emergency departments at WMRH and STRH, were evaluated, and recommendations for improvement were suggested to further support the process. The electronic CPR experience survey process commenced in long term care and will be implemented in acute care, emergency, and ambulatory and community based programs and services during the next fiscal year. The Community Health Needs Resources and Assessment (CHNRA) survey is an opportunity for the residents to provide feedback on health and community services and concerns within the region. It is distributed by Information and Quality in collaboration with Population Health and was available for completion between January 1 and February 29, 2016. The results of the survey were analyzed and summary reports are being prepared for internal and external release.

Information and Quality staff frequently collaborates with Population Health on a variety of program and services including the Comprehensive School Health Assessments, Youth Outreach Workers (YOW), and the evaluation of the new Community Health structure. To strengthen Population Health and Health Living, Information and Quality staff participated on the Cardiovascular Steering Committee, Regional Primary Health Care Management Committee, Bay St. George Primary Health Care Evaluation Committee, and the Bonne Bay Dialysis Needs Assessment Committee.

*Ethics*

A significant focus over the past year within the province was on medical assistance in dying. In collaboration with the Provincial Health Ethics Network of Newfoundland and Labrador (PHENNL), several ethics webinars were made available to Western Health staff. Provincial ethicists presented on topics such as "Physician Assisted Death: How did we get here and where to now", "Physician Assisted Dying- Discussing Implications for the Health Care System", and "What is Intolerable Psychological Suffering? The Practice of "Medical Aid" in Dying in Quebec." Other webinar topics were offered throughout the 2015/16 fiscal year including advance health care directives, responding to the mental health needs of our refugee communities, and eating disorders. An ethics consultation was facilitated in partnership with PHENNL which focused on the rights of staff and the resident and family.

*Employee Wellness/Health and Safety*

Western Health continues to support employees' health and safety through programs and services such as:

- Injury Prevention Program (Safe Resident Handling)
- Electronic monitoring system for employees conducting client home visits
- Employee Assistance Program
- Western Outstanding Work Awards
- Disability Management Program
- Years of Service Award
- Hiking for Health
- Influenza Vaccination Program

An action plan has been developed to integrate Psychological Health and Safety into priority areas of our Occupational Health and Safety (OHS) program. A significant part of the plan is to educate Managers and OHS Committees in "The Working Mind", a program designed to identify signs of distress in ourselves and others and how to intervene appropriately.

*Emergency Preparedness*

Western Health completed a number of exercises to test and improve its emergency preparedness and response capacity. Exercises were conducted throughout the region to test the various

Universal Code responses. Code Red and Green table top exercises were conducted at a number of WMRH units, Corner Brook Long Term Care Home (CBLTC) to review site evacuation procedures followed by functional exercises using the Med Sleds and Evacuation chairs. A Code Amber discussion based exercise was conducted at Maternal Newborn unit at WMRH that resulted in upgrading of the video surveillance system and policy revisions. Bay St. George Long Term Care (BSGLTC) conducted a Code Orange and Code Green discussion based exercises to evaluate their role in supporting a mass casualty event at the neighboring acute care facilities. The exercise will result in future discussion with community response agencies regarding their various roles. A Code Orange functional exercise was conducted at Bonne Bay Health Centre (BBHC) in partnership with local municipalities and the Department of Fire and Emergency Services in responding to a mass casualty event within Gros Morne National Park.

### *Clients/Patients/Residents*

*Best Practice*

Based on best practice evidence, several programs and initiatives have been implemented or continued in the last fiscal year:

- Optimizing the management of blood glucose monitoring for the frail elderly in LTC settings
- LEADS framework
- Implementation of Patient Order Sets
- Review of antipsychotic medication in LTC
- Community Action Referral Effort (CARE) referrals
- Falling Star falls prevention program
- Safe Resident Handling
- Use of Recovery model in Adult Mental Health
- Lean improvements

Many best practice initiatives resulted from Western Health's partnerships with external agencies such as Canadian Agency for Drugs and Therapeutics, Canadian Foundation of Health Care Improvement, and PHENNL.

Volunteer Resources continued to offer significant support to the organization with 1600 active volunteers. Some of the initiatives include: a greeter program at LHC, establishment of an Auxiliary at Rufus Guinchard Health Centre, the relocation of the Gift Shop at WMRH, updating of the Auxiliary By-Laws and the ongoing recruitment and retention of volunteers.

Audits are being completed throughout the organization and across the continuum of care to ensure best practice. Examples of audits completed include a number of medication related audits (e.g., medication reconciliation, high alert medications, venous thromboembolism), hand hygiene audit, Surgical Safety Checklist audit, and Employee Assistance File audit.

*Client/Patient/Resident Feedback*

The compliments and complaints reporting process is one method for clients/patients/residents to provide feedback. Compliments and complaints are monitored, trended, and disseminated to enhance service provision. Clients/patients/residents of Western Health also have an opportunity to provide feedback through experience surveys that are administered every three years. Work is ongoing to develop an integrated approach to client/patient/resident engagement within Western Health.

*Safety*

Client/patient/resident safety is a priority for all programs and services throughout Western Health. During the 2015/16 fiscal year, Western Health leadership meetings included a safety presentation. During the latter part of 2015-16, staff from Information and Quality and Medical Services participated on a provincial committee with representatives from the Department of Health and Community Services and the other regional health authorities to guide the development of patient safety legislation for the province of Newfoundland and Labrador. Work is ongoing with the development of the legislation. Other safety initiatives that are implemented across the continuum of care to reduce risk include:

- Falling Star Program
- Risk and Safety Management Alert System (RASMAS)
- Safe Resident Handling Program for LTC
- Antipsychotic medications in LTC
- Personal Care Home falls prevention program
- Venous Thromboembolism Prophylaxis
- Surgical Site Infections
- Medication Reconciliation
- Antimicrobial Stewardship Program
- Pyxis Machines

Work is ongoing with Information Management to achieve report development and generation of occurrence reports from the Clinical Safety Reporting System (CSRS) within the Cognos environment. Preliminary validation of data has been completed prior to moving the data into Cognos.

During the past year, work was ongoing to implement recommendations from the comprehensive review of patients and residents who experienced a fall with fracture completed in 2014-15. Results indicated that in 2015-16, there was a 30 percent reduction in falls resulting in a fracture, with a 65 percent reduction occurring in long term care. The prevention of falls and injury resulting from falls will continue to be a quality and safety priority for Western Health.

*Improving Population Health*

Western Health has partnered with many external organizations to enhance population health such as Royal Newfoundland Constabulary, Royal Canadian Mounted Police, Newfoundland English School District, Family Resource Centers, and many others. With the support of the Community Advisory Committees, grants provided by the Western Regional Wellness Coalition, and other internal and external partners, healthy behaviours and practices were promoted through initiatives including:

- Tobacco Free Network
- Lifestyle Awareness Workshops
- Western Regional Wellness Coalition
- Community Kitchens
- Improving Health My Way (IHMY)
- Physical Activity Working Group
- Action Bins Program
- Kids Live Well Marathon
- Student Wellness Action Teams (SWAT)
- Preventing Alcohol Related Trauma in Youth (PARTY)
- Safe Kids Week
- Friends for Life
- Healthy Choices in Gift Shops
- National Teen Driver Safety Week
- Safer Parties campaign
- Strengthening Families

Smoking cessation has been an area of focus in 2015-16. Processes were implemented to strengthen Western Health's existing referral processes to the provincial Smoker's Helpline (SHL) CARE referrals. An action plan was developed and implemented to target areas to increase referrals. In addition to policy updates, extensive promotion was completed with health care professionals and the SHL referral was incorporated into Meditech. In 2015-16, 142 referrals were made from the Western Health region, representing an increase of 158% from the previous year.

*Access*

According to the CCHS (2013 and 2014), 91.5% of residents in the Western region of NL reported having a regular medical doctor (89.5% in previous survey) compared to 89.0% in the province and 84.8% in Canada. The CHNRA survey results indicate 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.

Telehealth continues to grow within Western Health. There was a 26% increase in booked appointments in the region during 2015/16 with 3278 appointments held in the Western region.

Oncology continues to be the clinical program with highest utilization of telehealth, followed by Mental Health, and Surgery. Interestingly, in 2015/16, there was a threefold increase in the number of general practice visits completed using telehealth; most of this increase was in the Burgeo to Ramea and Francois area.

A notable highlight in 2015/16 was the completion of an IHMY telehealth pilot project, the first in the province of NL. Evaluation results were very positive, and indicated that with experienced leaders and supports, barriers such as distance and availability of trained leaders can be overcome. Evaluation results confirmed that the quality outcomes of the program were not compromised by the different method of delivery.

*Healthy Child Development*

The number of live births has increased from 560 in 2014/15 to 601 in 2015/16 in the Western region. Community Health Nurses continue to provide services to women and families of childbearing age from preconception to delivery through the Before Birth and Beyond: Information Education and Support Program (BABIES). The number of referred and accepted clients to the BABIES program increased during the last fiscal year to 299 from 269 in 2014/15. The Community Health program identifies and monitors 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*

New LTC indicators to assess appropriateness and effectiveness, safety, and health status have been developed and commenced in this fiscal year (CIHI, 2016). 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 18).

**Table 18. Long Term Care Indicators (%)**

| Indicator | Western Health | NL | Canada |
|---|---|---|---|
| Falls in the last 30 days in long term care | 2014/15-9.7* | 2014/15-11.2* | 2014/15-15.3 |
| Worsened pressure ulcer in long term care | 2014/15-2.0 | 2014/15-2.1* | 2014/15-3.1 |
| Potentially inappropriate use of anti-psychotics in long term care | 2014/15-40.7* | 2014/15-38.2* | 2014/15-27.6 |
| Improved physical functioning in long term care | 2014/15-35.7 | 2014/15-40.6* | 2014/15-32.0 |

| Indicator | Western Health | NL | Canada |
|---|---|---|---|
| Worsened physical functioning in long term care | 2014/15-34.4 | 2014/15-32.9 | 2014/15-33.6 |
| Worsened depressive mood in long term care | 2014/15-18.3* | 2014/15-18.1* | 2014/15-23.5 |
| Experiencing pain in long term care | 2014/15-13.3 | 2014/15-15.8* | 2014/15-9.5 |
| Experiencing worsened pain in long term care | 2014/15-14.5 | 2014/15-12.3* | 2014/15-11.0 |

*Statistically different than Canada
Data source: CIHI, 2016

Efforts have continued to improve positive images of aging, and ensure quality care and programs are delivered to older adults in the Western region. During 2015/16, work continued on improving staff understanding of the aging process, increasing staff skills to care for older adult with complex needs and promoting positive images of aging. An overall increase in Western Health staff completing the eLearning module on Age Related Changes has been observed. Additionally, in June an article was featured in Your Health Matters- regarding Nutrition and Food Safety with Age.

In keeping with ongoing efforts to promote positive images of aging, the annual Healthy Aging Calendar 2016 campaign was undertaken. The 2016 calendar also features helpful tips each month to promote safe, healthy aging. Western Health continues to receive positive feedback on the calendar. In recognition of Seniors Month, June 2015 saw many activities hosted by recreation and supported by volunteers to celebrate the many seniors residing in LTC homes in our region. These activities included Resident Art Shows, fashion shows, Lobster boils and garden parties. On October 15, 2015, Western Health observed International Day of the Older Person by sending cards of recognition to staff members 65 and older who continue to contribute to quality programs and services for our clients/residents/patients.

## Conclusion

*Opportunities and Challenges*

The review of various annual reports indicates similar opportunities and challenges including improving operational efficiency, improving access to Western Health programs and services, enhancing client and staff safety, and the health status of the residents of the Western region. While new facility planning continues, another upcoming challenge is to continue support operational improvements in transitioning to a new facility, as well as continuing to support the planning for the new shared services model. As this is the last year of the current Strategic Plan, much work will be done to meet the goals of the current plan and to establish a new Strategic Plan for 2017-2020.

*Strategic Plan Goals*

As Western Health staff continue to lead the organization in successes and accomplishments, new goals and priorities are established. The Western Health Strategic Plan (2014-2017) outlined the following goals:

1. By March 31, 2017, Western Health will have enhanced cardiovascular programs and services in keeping with the expanded chronic care model;
2. By March 31, 2017, Western Health will have enhanced medication safety to improve outcomes for clients, patients, residents and staff;
3. By March 31, 2017, Western Health will have improved access to emergency room services in keeping with the provincial strategy;
4. By March 31, 2017, Western Health will have enhanced access to information about programs and services through the implementation of a communication strategy.

*Operational Goal*

The following operational goal was also established:

By March 31, 2017 Western Health will continue to enhance work life culture through the introduction and continuation of programs and initiatives, to align with the National Standard for Psychological Health and Safety in the Workplace.

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