Environmental Scan 2017-2018

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Foreword

Dates written in the form "2018" represent a calendar year from January 1 to December 31.
Dates written in the form "2017/18" represent a fiscal year from April 1 to March 31.
Dates written in the form of “2017 and 2018” represent the two calendar years.
Dates written in the form of “2016 to 2018” represent combined data for the three calendar years.

Many indicators presented in this version of the environmental scan use updated population data, indicator calculations, and changes to coded data. Therefore, data and indicators reported in previous versions of the environmental scan will differ than the information presented here.

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

Our People and Communities

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. According to Table 1, the population of the Western region in 2016 was 77,720 which was a 0.3% decrease from 77,980 in 2011 (Statistics Canada Census, 2016). Although the population in the Western region has decreased, the provincial population increased from 514,535 in 2011 to 519,715 in 2016 (Community Accounts, 2017). The median age in 2016 for the Western region was 50 compared to 46 for Newfoundland and Labrador (NL), and according to Statistics Canada (2018), 23% of the Western region population was over the age of 65 in 2016, compared to 19.4% in NL, and 16.9% in Canada.

Table 1. Population

	Census 2011	Census 2016	% Change	Median Age 2016
Western Region	77,980	77,720	0.3	50
NL	514,535	519,715	1	46

Source: Statistics Canada Census 2011 and 2016 (Retrieved from Community Accounts October 2018)

Migration

In 2015, 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, 2018).

According to Community Accounts NL (2018) in 2015, the Western region experienced a residual net migration of 0.31% or 245 individuals while the same statistic for the province was 0.63% or 3235 individuals (Table 2). 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, 2018).

Table 2. Residual Net Migration

	2015
Western Region	0.31% (245 individuals)
Province	0.63% (3235 individuals)

Source: Statistics Canada, 2015 (Retrieved from Community Accounts October 2018)

Births and Fertility Rate

According to Community Accounts NL (2018), the birth rate (per 1000) in the Western region increased from 6.7 in 2015 to 6.9 in 2016. Provincially, the birth rate in 2016 was 8.6. Table 3 shows there were 535 births in the Western region in 2015 and 545 in 2016 representing a 1.9% increase.

Table 3. Birth Rates

	Number of Births		% Change	Total Birth Rate	
	2015	2016		2015	2016
Western Region	535	545	1.9	6.7	6.9

Source: Statistics Canada (Retrieved from Community Accounts October 2018)

Based on statistics obtained from Community Accounts NL (2018), the fertility rate of women in the Western region decreased to 1.3 in 2015 from 1.5 in 2013. The provincial rate was 1.5 in 2015 compared to 1.4 in 2013. Fertility rates are defined as the average number of children per woman (Community Accounts NL, 2018).

Mortality

According to Table 4, 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 880 deaths in the Western region compared to 860 deaths in 2015 (Community Accounts NL, 2018).

Table 4. Number of Deaths

	Number of Deaths		% Change	Median Age of Death	
	2015	2016		2015	2016
Western Region	860	880	2.3	78	78
Province	n/a	n/a	n/a	78	77

Source: Statistics Canada (Retrieved from Community Accounts October 2018)

According to the Canadian Institute for Health Information (CIHI), from 2014 to 2016, the life expectancy at birth for residents of the Western region was 79.1 years, compared to 79.4 for NL, and 82 for Canada. The life expectancy at age 65 for Western region residents between 2014 and 2016 was 18.9 years, compared to 18.8 for NL, and 20.8 for Canada (CIHI, 2018).

Income and Income Support

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 2015, the gross personal income per capita for the Western region was $31,600, compared to $29,600 in 2013 (Table 5). In 2015, the average couple family income was $90,300 for the Western region compared to $108,600 provincially and $112,800 nationally (Community Accounts, 2017).

Table 5. Income and Employment

	Western Region	Province
Gross personal income per capita (2015)	$31,600	$37,000
After tax personal income per capita (2015) (adjusted for inflation)	$20,000	$22,800
Average Couple Income (2015)	$90,300	$108,600
Self-Reliance Ratio (2015)	75.6%	82.2%
Unemployment rate (2011)	29.4%	22.9%
Income Support Assistance rate (2017)	9.4%	7.7%
Employment Insurance rate (2017)	40.2%	32.4%

Source: Canada Revenue Agency (Retrieved from Community Accounts October 2018)

According to Table 5, at some point in 2017, 9.4% of the population received income support assistance compared to 9.5% in 2016. Provincially, 7.7% received income support assistance at some point during 2017. The employment insurance incidence (the percentage of the labour force in the Western region that collected employment insurance at some point in 2017) was 40.2%, compared to 32.4% for NL (Community Accounts, 2018).

Education

Based on 2017/18 data from the Department of Education (retrieved from Community Accounts, 2018), overall student enrolment in the Western region increased slightly from the 2016/17 school year. This trend was also consistent with provincial enrollment (Table 6).

Table 6. Education Enrollment

	Western Region		Province	
	2016/17	**2017/18**	**2016/17**	**2017/18**
Primary	2,702	2,701	19,995	19,882
Elementary	2,005	2,120	15,111	15,805
Junior High	2,232	2,171	15,139	15,409
Senior High	2,368	2,362	16,078	16,306
Total	9,307	9,354	66,323	67,402

Source: Department of Education and Early Childhood Development (Retrieved from Community Accounts October 2018)

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. According to Table 7, in the Western region 12% of people aged 25 to 64 had a bachelor's degree or higher compared to 16.4% provincially (Community Accounts, 2018).

Table 7. Highest Level of Education 2011

	Western Region	Province
Highest level of education- high school (age 15+)	66.7%	72%
Highest level of education- certificate, diploma, or degree (age 15-65)	9.5%	13.3%
Percent population that do not have a high school diploma (age 25-54)	25.6%	20.3%
Highest level of education- bachelor's degree (age 25-54)	12%	16.4%

Source: National Household Survey, 2011 (Retrieved from Community Accounts October 2018)

Health and Wellness

Well-Being

According to the Canadian Community Health Survey (CCHS) (2015 and 2016), 82.8% of respondents in the Western region reported a stronger sense of community belonging, which is an increase from 2013-2014 (80.8%). According to Table 8, respondents in the Western region feel a stronger sense of community belonging compared to respondents in the province (79.1%) and Canada (68.4%). This is supported by results from the Community Health Needs and Resource Assessment (CHNRA) survey conducted by Western Health in 2016. Survey respondents 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.

Table 8. Well-Being Indicators 2015 and 2016

	Western Region	Province	Canada
Perceived life stress- extreme or quite a bit	12.3%	13.3%	21.5%
Satisfaction with life in general as satisfied or very satisfied	91%	92%	92.9%
Sense of belonging to community as very or somewhat strong	82.8%	79.1%	68.4%
Self-assessed health status as very good or excellent	56.5%	62%	61.5%
Perceived mental health as very good or excellent	70.6%	70.9%	71.6%

Source: Canadian Community Health Survey 2015 and 2016 (Retrieved from Statistics Canada October 2018)

The CCHS posed questions on perceived life stress and 12.3% of Western region indicated perceived life stress as extreme or quite a bit, which is similar to 13.3% for NL, but lower compared to 21.5% for Canada. According to Table 8, general life satisfaction in the Western region is at 91% compared to 92% in NL, and 92.9% in Canada (CCHS, 2015 and 2016).

A major indicator of well-being is how a person rates his or her own health and mental health. According to the CCHS (2015 and 2016), 56.5% of individuals in the Western region rated their health status as being very good or excellent compared to 62% of individuals in the province, and 61.5% in Canada. According to Table 8, 70.6% of respondents in the Western region rated their mental health as excellent compared to 70.9% of the respondents in the province, and 71.6% in Canada. 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 9 outlines the three indicators that assess the performance of the mental health and addictions system (CIHI, 2018): self-injury hospitalization, repeat hospitalization rates for mental illness, and hospitalizations entirely caused by alcohol. CIHI recently began reporting hospitalizations entirely caused by alcohol, and both the Western region and NL are significantly lower than Canada.

Table 9. Mental Health and Addictions Performance Indicators

Indicator	Western Region	NL	Canada
Self-Injury Hospitalization (per 100,000)	2014/15- **84** 2015/16-**118** 2016/17- **147**	2014/15- **84** 2015/16-**85** 2016/17- **105**	2014/15- **65** 2015/16-**66** 2016/17- **68**
Repeat hospital stays for mental illness	2013/14- **14.4** 2014/15-**17.8** 2016/17- **16.8**	2013/14- **11.0** 2014/15-**13.5** 2016/17- **13.1**	2013/14- **11.2** 2014/15-**11.5** 2016/17- **12.1**
Hospitalizations entirely caused by alcohol (per 100,000)	2016/17- **157**	2016/17- **179**	2016/17- **242**

Data source: CIHI, 2018

Health Status

Indicators such as physical activity participation, consumption of fruits and vegetables, smoking rates, alcohol consumption, and breastfeeding initiation are considered indicators that contribute to health status of a population. Table 10 includes most recent data on these indicators for the Western region NL, and Canada.

Table 10. Health Status Indicators (Percent of Population) 2015 and 2016

	Western Region	Province	Canada
Physical activity, 150 minutes per week, adult (age 18+)	43%	49.8%	57.7%
Physical activity, 60 minutes per day, for youth (age 12-17)	50.7%	57.6%	59.8%
Fruit and vegetable consumption, 5 times or more per day	20.9%	20.4%	30.8%
Current smoker, daily	20.3%	17.9%	12.4%
Cannabis use in the last year (2015) Source: CTADS, 2018	n/a	9.9%	12.3%
Heavy drinking- having 5 (males) or 4 (females) drinks on one occasion in the past 12 months	26.4%	25.7%	19.1%
Breastfeeding initiation Source: Perinatal Program NL, 2018	68.8%	70.5%	89.4% (2011-2012)

Source: Canadian Community Health Survey 2015 and 2016 (Retrieved from Statistics Canada October 2018)

Heavy drinking refers to males who reported having 5 or more drinks, or women who reported having 4 or more drinks, on one occasion, in the past 12 months. According to Table 10, 26.4% of residents of the Western region are heavy drinkers, compared to 25.7% in NL, and 19.1% in

Canada. This is an increase from 23.9% in 2013 and 2014 for the Western region and 25% for NL. Alcohol use was reported to be a community problem by 39% of respondents in the CHNRA (2016).

The Canadian Tobacco Alcohol and Drugs Survey (CTADS) (2015) reported a slight increase in the number of people in NL and Canada who used cannabis in from 2013 to 2015. In NL, 9.9% of the people surveyed 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. Given the upcoming legalization of cannabis in Canada on October 17, 2018, this indicator will be closely monitored to determine how this legislation has affected use of cannabis.

There has been a decrease in the reported percentage of daily smokers of the Western region from 24% in 2013 and 2014 to 20.3% in 2015 and 2016 (CCHS, 2015 and 2016). This decrease has also been seen in NL from 20.8% in 2013 and 2014 to 17.9% in 2015 and 2016.

According to Table 10, residents of the Western region participate in less physical activity compared to NL for both youth and adult age groups. However, the percentage of Western region residents who consume 5-10 portions of fruits and vegetables a day is comparable to the rest of NL (20.9% and 20.4% respectively) but lower than Canada (30.8%).

Studies indicate that breastfed children have a lower risk of developing childhood obesity than those who were not breastfed. Based on Table 10, the breastfeeding initiation rate for the Western region is 68.8%, which is an increase from 59.3% in 2013 and 2014.

Health Practices

Table 11. Health Practices (Percent of Population) 2015 and 2016

	Western Region	Province	Canada
Has a regular health care provider	88.2%	89.1%	83.6%
Contact with a medical doctor in the past 12 months	81.8%	81.1%	73.4%
Had at least one colonoscopy or sigmoidoscopy	46.7%	42.2%	37.4%
Influenza vaccination in the past 12 months	32.2%	28.5%	32.4%
Influenza vaccination for LTC residents (2017-18) Source: Western Health (2018)	88.8%	n/a	n/a

Source: Canadian Community Health Survey 2015 and 2016 (Retrieved from Statistics Canada October 2018)

Influenza vaccination, cancer screening, and contact with health care providers are examples of health practice indicators which may have affect health outcomes (Table 11). Within the

Western region, 88.2% of residents report having a regular health care provider, which is comparable to NL (89.1%) and higher than Canada (83.6%). In the past 12 months, 81.8% of Western region residents report having contact with a medical doctor, which is comparable to NL (81.1%), but higher than Canada (73.4%) (CCHS, 2015 and 2016).

Appropriate cancer screening is an important health practice. According to the CCHS 2015-2016, for those aged 50 to 74 in the Western region, 46.7% of residents report having had at least one colonoscopy or sigmoidoscopy which an important test for colon cancer screening (Community Accounts, 2018).

Within Western Health, in 2016/17 88% of long term care (LTC) residents availed of the annual influenza vaccine. This percentage is relatively consistent over the past three fiscal years (86.7% in 2015/16, and 90% in 2014/15). Influenza vaccination rates for the general population continue to increase and in the 2015 and 2016 CCHS survey, 32.2% of the population aged 12 and older reported being vaccinated, compared to 30.4% in 2013 and 2014 (CCHS, 2015 and 2016).

Health Outcomes

Newfoundland and Labrador has a high incidence of chronic disease such as high blood pressure, diabetes, and COPD. According to Table 12, the population of the Western region report having higher rates of all the listed indicators compared to NL and Canada.

Table 12. Health Outcomes (Percent of Population) 2015 to 2016

Health Outcome	Western Region	NL	Canada
Arthritis	32.4%	29%	20.5%
Diabetes	12.4%	10.1%	6.9%
Asthma	10.2%	7.8%	8.5%
COPD (age 35 years and over)	5.7%	4.3%	4.1%
High blood pressure	26.9%	23.7%	17.3%

Source: Canadian Community Health Survey 2015 and 2016 (Retrieved from Statistics Canada October 2018)

As part of Western Health's Strategic Plan 2014-2017, there was significant work and progress on cardiovascular programs and services through the goal related to enhancing cardiovascular programs and services in keeping with the expanded chronic care model. CIHI indicators for hospitalized heart attacks and strokes are listed in Table 13.

Table 13. Cardiovascular Indicators

Indicator	Western Health	NL	Canada
Hospitalized heart attacks (per 100,000)	2016/17- **307***	2016/17- **350***	2016/17- **247**
Hospitalized Strokes (per 100,000)	2016/17-**158**	2016/17- **166***	2016/17- **144**

Source: CIHI, 2018

*Statistically different than Canadian average

Cancer

According to Table 14, in 2015 the most common cancer type for NL was colon and rectum, followed by lung and bronchus, breast, prostate, and cervical (Statistics Canada, 2018). The CHNRA (2016) survey results found that 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 several 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. Western Health continues to participate in the Provincial Colorectal Cancer Screening Initiative and the Provincial Endoscopy Initiative to reduce colon cancer.

Table 14. Number of new cases and age-standardized rates (per 100,000) of primary cancer in NL

Cancer Type	Number of New Cases	Cancer Incidence
Colon and rectum	2012- **565** 2013- **550** 2014- **585** 2015- **585**	2012- **96.5** 2013- **90.5** 2014- **94.9** 2015- **92.6**
Lung and bronchus	2012- **435** 2013- **465** 2014- **505** 2015- **465**	2012- **73** 2013- **75.4** 2014- **79.3** 2015- **71**
Breast	2012- **385** 2013- **420** 2014- **410** 2015- **485**	2012- **64.5** 2013- **69.6** 2014- **66.6** 2015- **78.1**
Cervix uteri	2012- **20** 2013- **30** 2014- **40** 2015- **30**	2012- **3.7** 2013- **5.4** 2014- **6.4** 2015- **5.9**
Prostate	2012- **410**	2012- **65.9**

Cancer Type	Number of New Cases	Cancer Incidence
	2013- **415** 2014- **445** 2015- **405**	2013- **64.7** 2014- **68** 2015- **60.3**

Data source: Statistics Canada Canadian Cancer Registry 2018 (Retrieved October 2018)

Mortality

According to Newfoundland and Labrador Centre for Health Information (NLCHI), in 2015 the leading causes of death for Western Health are malignant neoplasms, cerebrovascular diseases, chronic lower respiratory disease, and unspecific dementia. Table 15 outlines the top three causes of death for Western Health, NL, and Canada.

Table 15. Top 3 Causes of Death- Western Health, NL, & Canada

Rank	Western Health	NL	Canada
1	Malignant neoplasms	Malignant neoplasms	Malignant neoplasms
2	Cerebrovascular diseases	Diseases of the heart	Diseases of the heart
3	Chronic lower respiratory disease AND Unspecified dementia	Unspecified dementia	Cerebrovascular diseases

Our Organization

Introduction

Western Health employs over 3,100 employees; 80% of which are female. Western Health's medical staff is comprised of 160 physicians, and there are approximately 1,600 volunteers who actively participate in enhancing the quality of health care delivery for client, patients, residents, and families. The organization has an operating budget of $373 million, which includes the operation of 2 acute care hospitals, 4 rural health centres, 2 long term care centres, 4 protective community residences (enhanced assisted living for individuals with mild to moderate dementia), 26 medical centres, and 26 community offices. Within these facilities, Western Health has 448 inpatient beds, 434 long term care beds, 14 restorative care beds, and 40 protective community residence beds. Western Health also operates the Humberwood (inpatient addiction) and the Western Regional School of Nursing provincial programs.

Safety

Client, Patient, Resident, and Family

Western Health is committed to providing safe health care to residents of the Western region. Safety is integrated into all programs and services and several safety initiatives have been implemented across the continuum of care including: medication reconciliation, Situation Background Assessment Recommendation (SBAR), anti-microbial stewardship, safety huddles, and Falling Star program.

For long LTC, safety indicators are reported by the Canadian Institute for Health Information (CIHI) including falls in the last 30 days, and worsened pressure ulcers. For 2017/18, there was an increase in the fall rate to 13.4% from 13.3% in 2016/17, but a decrease in the rate for worsened pressure ulcer to 0.7% in 2017/18 from 1.3% in 2016/17. Both indicators are considered statistically lower than the Canadian average. In LTC reducing falls and its associated injuries continues to be a priority area. Efforts continue to be focused on improving compliance with Vitamin D supplementation, the use of hip protectors, and compliance with the least restraint policy.

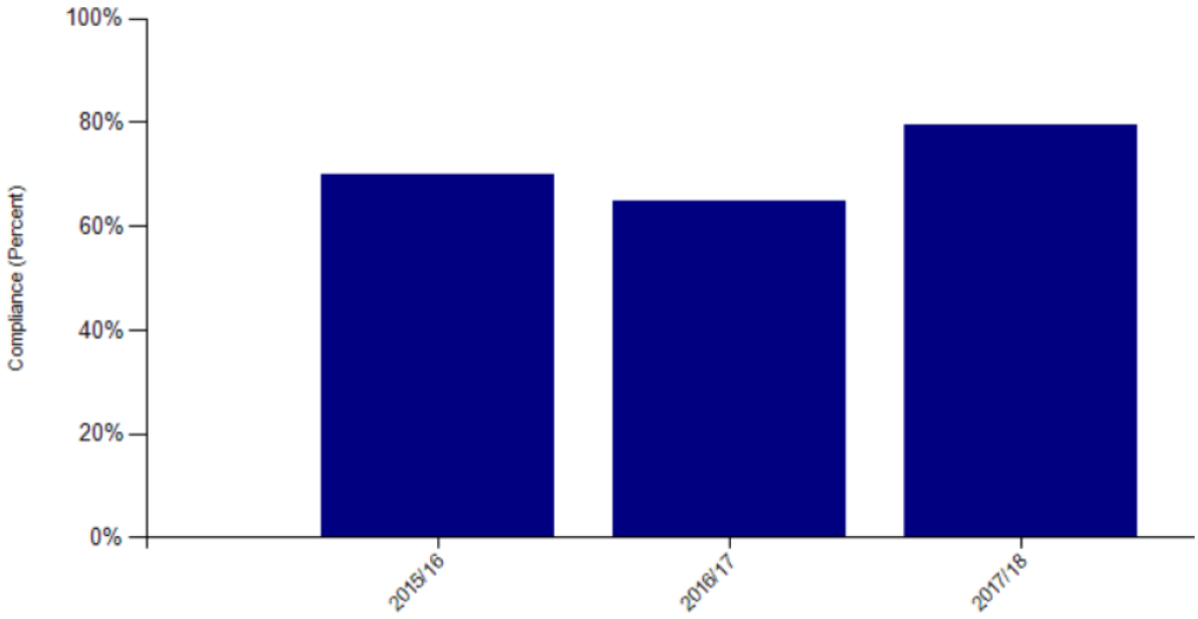
In acute care, CIHI reports the development of in-hospital sepsis (per 1,000) and obstetric trauma (with instrument). For 2017/18, Western Health's in-hospital sepsis rate of 3.2 is considered statistically the same as the Canadian average of 4.0 (CIHI, 2018). The rate of obstetric trauma (with instrument) in 2017/18 was 8.8% which is considered statistically the same as the Canadian average of 18.4%. It's important to note that other indicators previously reported in CIHI's Hospital Harm indicators such as nursing sensitive adverse events, were not available.

The *Patient Safety Act* was proclaimed within the Province of Newfoundland and Labrador on March 21, 2017. To enhance awareness and education related to the *Patient Safety Act*, education sessions were provided to leadership, the Board of Trustees and Regional Medical

Advisory Council (RMAC). Work has been ongoing to support compliance with the *Patient Safety Act* and implementation of mandatory policy elements from the Department of Health and Community Services. Existing policies were reviewed and revised to support compliance with the *Patient Safety Act* including the Occurrence Reporting (6-02-15) and Disclosure of Occurrences (6-02-16) policies.

As an organization, improving hand hygiene compliance was a significant success story. The 2017/18 fiscal year saw a significant increase in the number of hand hygiene observations that took place and overall compliance (Figure 1). The overall target for hand hygiene compliance for 2017/18 was 80% and the year-end compliance rate was 79.4% which was a significant improvement from 65% in the previous fiscal year. Several auditor training sessions took place with over 100 staff participating. To continue improvements in hand hygiene compliance, compliance rates are being reported to the public via the Western Health website and being made more accessible to staff via a variety of communication methods such as posting in high traffic areas, the newsletter, and intranet.

Figure 1. Regional Hand Hygiene Compliance- Annual Trends



	2015/16	2016/17	2017/18
Compliance	70.0%	64.9%	79.4%
Observations	1099	3927	11195

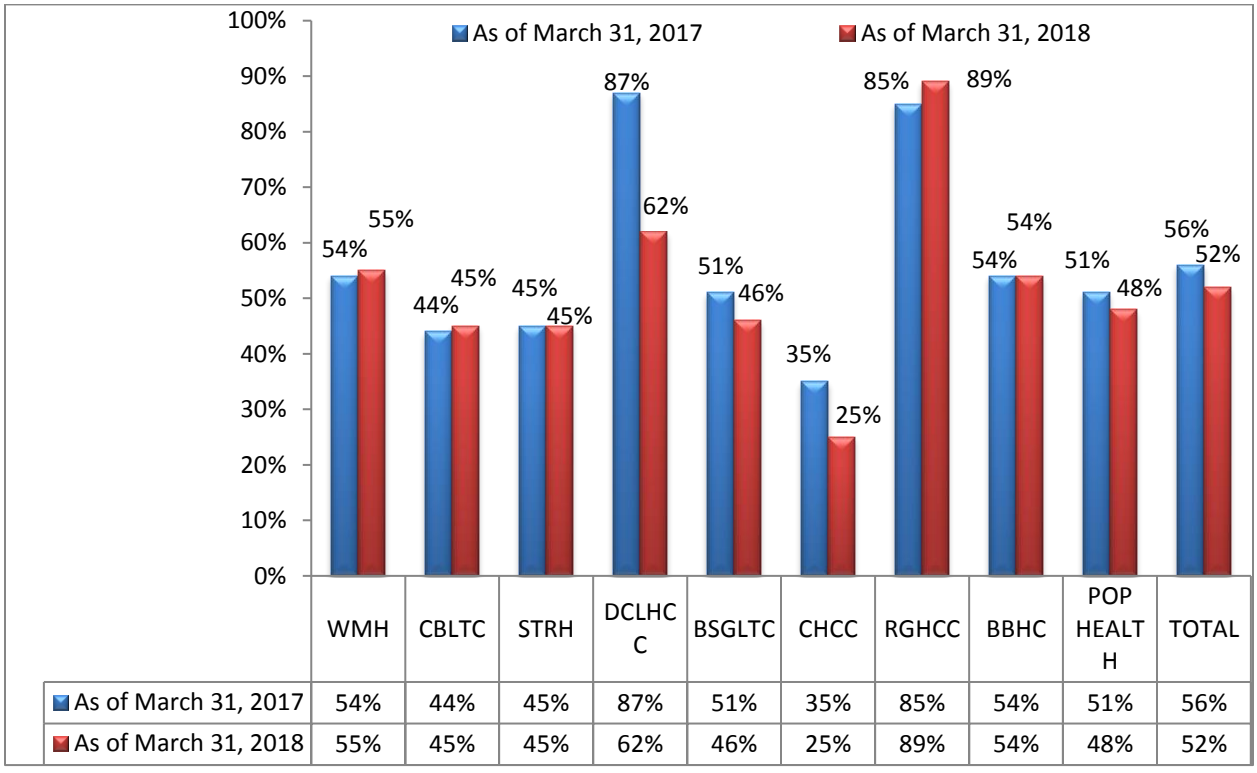
Data source: Western Health

Staff

Western Health is also committed to providing a safe environment for all staff. Several staff safety initiatives were implemented during the 2017/18 fiscal year including the Provincial Incident Employee Reporting System (PIERS) program, and the development of a Business Continuity Framework. Safety pauses or moments are also included in Leadership meeting agendas, and Senior Management participates in safety walkabouts at sites and facilities throughout the region. Of note is Western Health's focus on employee psychological health and wellness through the roll out of the Working Mind program.

As health care providers, it is important to take measures to protect ourselves and the public from influenza. Western Health offers influenza vaccination to all employees throughout the region. Figure 2 demonstrates uptake of the vaccination by site and overall for the last two fiscal years. There has been a decrease to 52% uptake in 2017/18 from 56% in 2016/17. Employee Health and Wellness at Western Health continues to promote staff uptake of the vaccination by providing flu shots via mobile carts and setting up drop in clinics at all locations.

Figure 2. Staff Influenza Vaccination Uptake



	WMH	CBLTC	STRH	DCLHCC	BSGLTC	CHCC	RGHCC	BBHC	POP HEALTH	TOTAL
As of March 31, 2017	54%	44%	45%	87%	51%	35%	85%	54%	51%	56%
As of March 31, 2018	55%	45%	45%	62%	46%	25%	89%	54%	48%	52%

Data source: Western Health

Access

CIHI defines access as getting needed care at the right time, without financial, organizational, or geographical barriers. According to the CCHS (2015 and 2016) most Western regional respondents reported having a regular medical doctor (88.2%) and the Western region has seen a notable increase in the number of practicing family physicians, specifically in the Corner Brook area. The number of family physicians who provide inpatient care and/or participate in afterhours call rotation has also increased this fiscal year to 15 compared to 7 in 2016/17.

To address geographic barriers to health care delivery, Western Health continues to support the spread of Telehealth. Geographic boundaries were reported as being a barrier to health care in the 2016 CHNRA survey. Respondents reported road conditions, poor weather, and distance as obstacles to receiving health care. Telehealth is a tool that has enabled improved access and its use continues to grow within the organization. There was an 18% increase in booked appointments in the region during 2017/18 with 6287 appointments held in the Western region. Oncology and Mental Health programs comprise 73% of all telehealth appointments. The number of appointments hosted by Western Health continues to expand; in 2017/18 the total number of hosted appointments was 1996, which was a 20% increase from the previous year fiscal year. During 2017/18, the application of tele-home care to support Applied Behavioral Therapy (ABA) was implemented. Of the 1996 telehealth appointments in the Western region, 927 appointments were hosted by medical staff. During 2017/18, two new physicians in Burgeo began using telehealth to reduce travel and increase access to services for the residents of Ramea.

With overwhelming evidence of an aging population in the Western region, a new Long Term Care facility was announced for the Corner Brook area. During 2017/18 significant work was completed on the new facility planning for the new long term care home. The new facility, which will include 120 long term care beds, 15 palliative care beds and 10 rehabilitative care beds, is scheduled to open in spring 2020. The new home will be built and maintained by private contractors but staffed by public sector employees, who will provide nursing care, housekeeping, and dietary services. Planning for the new acute care facility continues with a Request for Qualifications (RFQ) issued to determine a short list to solicit proposals to design, build, finance, and maintain the new facility. A Request for Proposal for Procurement (RFP) is the next phase. The Operational Readiness team will continue to lead work in the identifying opportunities for improvement within program areas and preparations for the transitions between facilities.

Client and patient volumes continue to be monitored throughout Western Health facilities. Table 16 outlines patient volumes for Emergency Departments (ED) at Western Memorial Regional Hospital (WMRH), Sir Thomas Roddick Hospital (STRH), Dr. Charles LeGrow Health Centre (LHC), Calder Health Centre (CHC), Bonne Bay Health Centre (BBHC), and Rufus Guinchard Health Centre (RGHC). It's important to note that WMRH, STRH, and LHC are the only sites that have standardized Canadian Triage and Acuity Scale (CTAS) level reporting.

Table 16. ED Volumes by Site

ED Site	2015/16	2016/17	2017/18
WMRH Total	38,232	39,843	**40,097**
Fast Track	15,939	16,583	**17,890**
ED Only	22,293	23,260	**22,207**
STRH Total	39,152	33,005	**30,361**
Fast Track	5,879	5,045	**6,287**
ED Only	33,273	27,960	**24,074**
LHC	8,138	7,535	**6,932**
CHC	1,518	1,284	**1,501**
BBHC	4,315	4,248	**4,597**
RGHC	5,838	6,749	**7,021**

Data source: Western Health

Of note in Table 16 is that STRH has the highest number of volumes for ED only in the region. Part of the work of the PHC Strategic Goal for 2017-2020 will focus on improving accessibility to primary health care in the Stephenville/Bay St. George area. Other initiatives within the organization that aim to improve access include DoorWays, reporting of wait times on the Western Health website, and a new model for the outpatient physiotherapy waitlist.

Regional and site-specific median wait times for placement into LTC from approval to placement are monitored (Table 17). Despite changes to policies and the new admission process in the 2016/17 fiscal year, the median wait time has increased to 140 days in 2017/18 compared to 110.5 in 2016/17. There continues to be concerns with the point of entry to LTC being primarily through acute care. During, 2017/18, 70% of all admissions to LTC were admitted from hospital, 9% from home, and 21% from facility-based care such as personal care homes, or PCRs. The percentage of residents whose point of entry was from hospital-based care from the Western region exceeded the provincial measure of 55.1% and the national measure of 43.2% (CIHI, 2018). During 2017/18, there has been a strategic focus on implementation of a Home First strategy. It is anticipated that point of entry for admission to LTC will be more closely aligned with the overall provincial measure.

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

Site	2015/16	2016/17	2017/18
Corner Brook Long Term Care Home	304.5	170.5	**179.5**
Bay St. George Long Term Care Centre	11	96	**54**
Calder Health Centre	6	8	**40**
Dr. Charles LeGrow Health Centre	2	3	**5.5**
Rufus Guinchard Health Centre	39	259	**45**
Bonne Bay Health Centre	231	594	**568.5**
Overall	19	110.5	**140**

Data source: Western Health

Significant work was also completed to accurately capture wait time data for Mental Health and Addictions services, and the data available have provided valuable information to help inform staff. Wait times for many services have decreased and the median wait time for clients seen (excluding client related delays) was 30 days in 2017/18 compared to 41 days in 2016/17. This can be attributed to clinical efficiency efforts related to flow, increased sessions per day, the DoorWays program, Therapy Assistance Online (TAO), and Strongest Families, along with a continued focus on terminating inactive clients, regularly reviewing caseloads in clinical supervision, monitoring of CRMS/MIS reports and adhering to the client contact policy.

During the 2017/18 fiscal year, there has been significant work to improve access to community support services. Access to community support services prevents unnecessary hospital admissions, supports patients when they are discharged from hospital, and allows clients to receive essential services in the comfort of their own home. Table 18 shows the number of seniors and clients with physical disabilities assessed using the Resident Assessment Instrument-Home Care Assessments (RAI-HC) completed, and scores for key outcome measures such as Cognitive Performance Scale (CPS) and Method for Assigning Priority Levels (MAPLe) from 2017/18 compared to 2016/17. This provides information on the needs of clients as these indicators guide the development of support plans for clients but also provide information to facilitate decision making for organizational policy and programs.

Table 18. Community Support Indicators

Indicator	Western Health	NL	Canada
Number of assessments total	2016/17- **2555** 2017/18- **2123**	2016/17- **8,998** 2017/18- **8,891**	2016/17- **283,657** 2017/18- **283,327**
Assessed in hospital	2016/17- **420** 2017/18- **356**	2016/17- **1,350** 2017/18- **1,224**	2016/17- **23,695** 2017/18- **21,222**
Assessed in community	2016/17- **2135** 2017/18- **1767**	2016/17- **7,648** 2017/18- **7,667**	2016/17- **259,962** 2017/18- **262,105**
CPS (%)	2016/17- **49** 2017/18-**51**	N/A	N/A
MAPLe (%)	2016/17- **33** 2017/18- **34**	N/A	N/A

Data source: Western Health

Appropriateness and Effectiveness

Appropriateness and effectiveness is defined by CIHI as providing care to only those who could benefit, thus reducing the incidence, duration, intensity, and consequences of health problems (CIHI, 2018). CIHI monitors and updates performance indicators to assess health care appropriateness and effectiveness (Table 19). Compared to Canada, Western Health is performing on average for Hospital Standardized Mortality Ratio (HSMR), obstetric patients readmitted to hospital, surgical patients readmitted to hospital, patients 19 and younger readmitted to hospital, and hospital deaths following major surgery, but performing better for all patients readmitted to hospital, and medical patients readmitted to hospital when compared to Canada. Western Health is significantly higher than the rest of Canada and the province on, Ambulatory Care Sensitive Conditions (ACSC), low risk caesarean sections, potentially inappropriate use of anti-psychotics in LTC, restraint use in LTC, and high users of hospital beds (CIHI, 2018).

Table 19. CIHI Appropriateness and Effectiveness Performance Indicators

Indicator	Western Health	NL	Canada
Hospital Standardized Mortality Ratio (HSMR)	2015/16-**89** 2016/17- **108*** 2017/18- **87**	2015/16-**109*** 2016/17- **118*** 2017/18- **109***	2015/16-**93** 2016/17- **91** 2017/18- **89**
All patients readmitted to hospital (%)	2015/16-**8.7** 2016/17- **8.3** 2017/18- **8.2***	2015/16-**8.8** 2016/17- **9.0** 2017/18- **9.1**	2015/16-**9.1** 2016/17- **9.1** 2017/18- **9.1**
Hospital deaths following major surgery (%)	2015/16-**1.2** 2016/17- **2.4** 2017/18- **1.4**	2015/16-**2.1*** 2016/17-**2.0** 2017/18- **2.0***	2015/16-**1.6** 2016/17- **1.6** 2017/18- **1.6**
Medical patients readmitted to hospital (%)	2015/16-**13.4** 2016/17- **12.4** 2017/18- **12.2***	2015/16-**13.4** 2016/17- **13.4** 2017/18- **13.9**	2015/16-**13.7** 2016/17- **13.7** 2017/18- **13.7**

Indicator	Western Health	NL	Canada
Obstetric patients readmitted to hospital (%)	2015/16-**2.7** 2016/17- **1.3** 2017/18- **1.3**	2015/16-**2.7** 2016/17- **2.4** 2017/18- **2.3**	2015/16-**2.1** 2016/17- **2.1** 2017/18- **2.1**
Surgical patients readmitted to hospital (%)	2015/16-**5.6** 2016/17- **6.3** 2017/18- **6.6**	2015/16-**5.9** 2016/17- **6.8** 2017/18- **6.5**	205/16-**6.9** 2016/17-**6.9** 2017/18- **6.8**
Patients 19 and younger readmitted to hospital (%)	2015/16-**8.4** 2016/17- **9.0** 2017/18- **6.6**	2015/16-**7.8** 2016/17- **7.1** 2017/18- **6.6**	2015/16-**6.7** 2016/17- **6.8** 2017/18- **6.8**
Ambulatory care sensitive conditions (ACSC) (per 100,000)	2014/15-**573*** 2015/16-**588*** 2016/17- **548***	2014/15-**475*** 2015/16-**458*** 2016/17- **442***	2014/15-**331** 2015/16-**326** 2016/17- **325**
Low-Risk Caesarean Sections (%)	2014/15-**19.7** 2015/16-**22.7** 2016/17- **25.4***	2014/15-**19.4** 2015/16-**18.4** 2016/17- **16.5**	2014/15-**14.1** 2015/16-**14.3** 2016/17- **15.6**
Potentially Inappropriate Use of Antipsychotics in Long Term Care (%)	2015/16-**41.4*** 2016/17- **36.6*** 2017/18- **32.4***	2015/16-**37.5*** 2016/17- **38.3*** 2017/18- **35.4***	2015/16-**23.9** 2016/17- **21.9** 2017/18- **21.1**
Restraint Use in Long Term Care (%)	2015/16- **21.1*** 2016/17- **19.9*** 2017/18- **9.0***	2015/16- **12.1*** 2016/17- **14.2*** 2017/18- **12.1***	2015/16- **7.4** 2016/17- **6.5** 2017/18- **5.7**
High users of Hospital Bed (per 100)	2016/17- **5.4***	2016/17- **4.6**	2016/17- **4.5**

Source: CIHI, 2018

*Statistically different than Canadian average

Western Health is involved in many initiatives to improve the above indicators thus ensuring services are appropriate and effective. Significant work has been completed to prepare for the implementation of a new primary health care clinic in Corner Brook. This clinic will focus on providing evidence-based collaborative care to clients with ACSC without a regular family physician. The aim of the clinic is to use the BETTER (Building on Existing Tools to Improve Chronic Disease Prevention and Screening in Primary Care) screening tool to provide primary care to clients with ACSC so their conditions can be managed at home to reduce unnecessary admissions to hospital. Work will continue to establish this clinic in the upcoming fiscal year. Another initiative that aims to keep clients in their homes is the Home First approach. This approached is a shift from acute care and institutional-based care to the enhancement of home and community-based integrated care. It is a person centered, evidence informed approach to support individuals with complex needs in their own homes and communities. Since July 2017, this approach has supported successful patient discharge from acute care or avoided hospital admissions for 305 clients.

Within acute care, significant work has done to improve patient flow to reduce delays in health care delivery and increase the efficiency with which a patient moves through acute care. The Bed Management project was initiated to reduce time between a patient discharge and the bed

being cleaned and available for the next admission. A regional committee was established to analyze current discharge processes and identify gaps in the notification of patient discharge. The project occurred in a phased approach. First, a standard process for electronic documentation of discharge was developed, and staff were educated in this new process. Prior to project implementation the average time between actual discharge and documented discharge was 40 minutes, following implementation of the project, period February to June 2018, this time decreased to an average of 20.6 minutes, and 72% of the discharge cases had a discharge notification time of less than 10 minutes. Second, electronic solutions were implemented to standardize the way housekeeping is notified of a dirty bed as well as the communication of bed status to clinical staff. With a more efficient process implemented, beds can be cleaned soon after a patient is discharged and ready for the next patient admission. This second phase of the project was implemented at WMRH in March 2018.

To support the appropriate utilization or resources through the reduction of no shows in clinical areas, Western Health collaborated with the Department of Health and Community Services, and the other three regional health authorities (RHA), to support the implementation of the Automated Notification System (ANS). The purpose of this system is to notify and remind clients of upcoming appointments to reduce the number of no shows. Currently, this system is implemented in the endoscopy unit and medical imaging. An evaluation of the implementation in endoscopy was conducted in partnership with the Newfoundland and Labrador Centre for Health Information (NLCHI) indicated Western Health delivered 4083 telephone reminders and 95% of clients who received calls were satisfied with the reminder call they received. While there are multiple factors contributing to no show rates, Western Health's endoscopy no show rate decreased to 0.6% post ANS implementation.

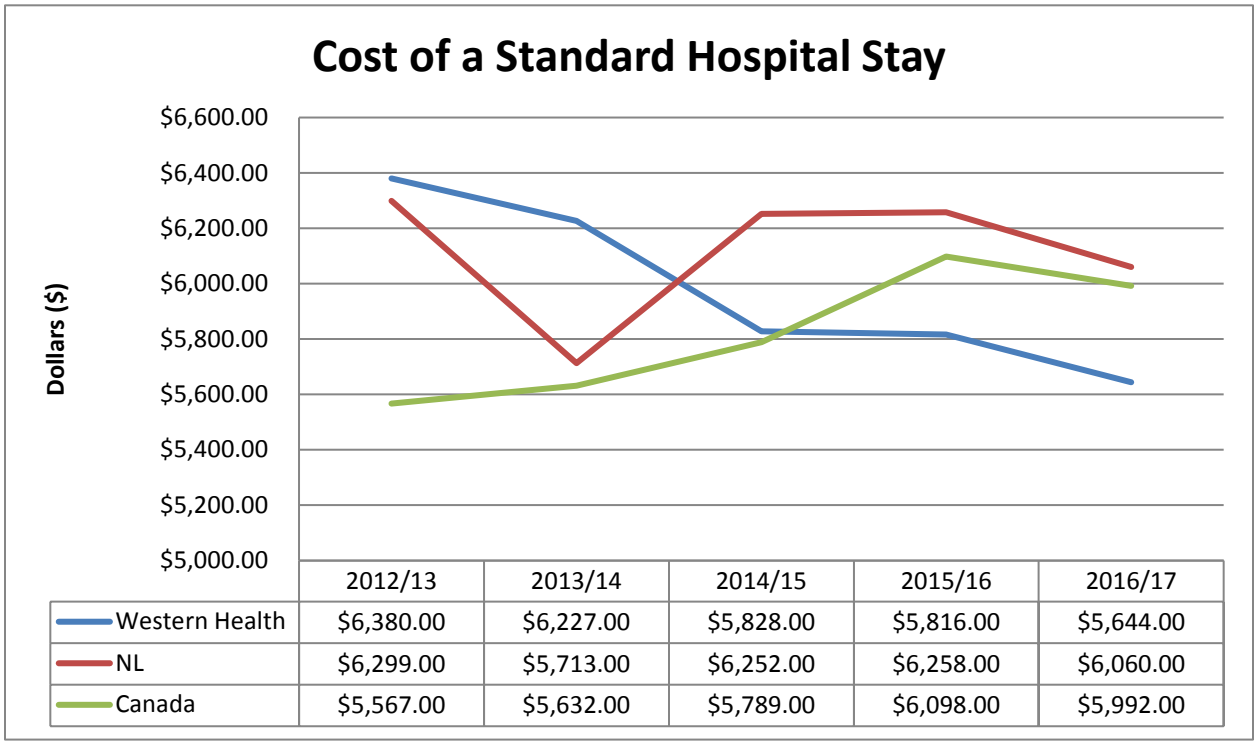
While Western Health saw a decrease in the potentially inappropriate use of anti-psychotics in LTC to 32% in 2017/18 from 36% in 2016/17 and 41% in 2015/16, this is still considered above the Canadian average of 22% in 2016/17. To address this opportunity for improvement, significant collaboration was undertaken with Canadian Federation for Health Care Improvement (CFHI), the other RHAs and the Government of NL to plan for the introduction of a provincial collaborative- The Quality of Life for Residents in Long Term Care: The Appropriate Use of Antipsychotic Collaborative. It began in January 2018 and will continue for approximately 18 months. In Western Health, all LTC homes, and alternate level of care (ALC) units at WMRH and STRH are included in the collaborative and have signed individual facility Memorandums of Understanding. All sites have established implementation teams to guide their work. During 2017/18 the *Deprescribing of Antipsychotic Medications in LTC Policy*: 17-01-140 and the *LTC Deprescribing of Antipsychotic Medication Order Set* were finalized. To support education, the fourth module on Dementia was finalized and an e-learning on the Dementia Observation Scale was implemented. These training resources will be instrumental to reducing inappropriate antipsychotic usage.

Ensuring all health care services are appropriate and effective is a national priority. According to Choosing Wisely Canada, up to 30% of tests, treatments, and procedures in Canada are potentially unnecessary. When unnecessary tests take place, they place patients in unnecessary harm, can cause unwarranted distress, and waste time and resources (Choosing Wisely Canada, 2018). Western Health is participating in the national campaign as a collaborative partner of Quality of Care NL/Choosing Wisely NL. This collaboration aims to ensure the right treatments get to the right patients at the right time. It uses national guidelines and recommendations based on evidence-based health care research from Choosing Wisely Canada to encourage patients and health care providers to discuss the best course of treatment by promoting the recommended guidelines, tools, and resources. Western Health supported a Choosing Wisely NL initiative to reduce inappropriate antibiotic usage for urinary tract infections (UTI) in LTC. This improvement initiative was enabled by engagement and education of staff in best practices related to asymptomatic bacteriuria provided by Infection Prevention and Control, introduction of a resident order set acute cystitis, introduction of new policy related to hydration, implementation of hydration carts and rounds in larger nursing homes and collaboration with families and physicians.

Efficiency

Newfoundland and Labrador spends more on health care than the national average (CIHI, 2014), and the average cost of a hospital stay in NL is consistently above the national average (Figure 4). While Western Health's average cost of a hospital stay is lower than NL and Canada, and has continuously decreased, there exists opportunities to improve efficiency within the organization.

Figure 4. Cost of Standard Hospital Stay



	2012/13	2013/14	2014/15	2015/16	2016/17
Western Health	$6,380.00	$6,227.00	$5,828.00	$5,816.00	$5,644.00
NL	$6,299.00	$5,713.00	$6,252.00	$6,258.00	$6,060.00
Canada	$5,567.00	$5,632.00	$5,789.00	$6,098.00	$5,992.00

Data source: CIHI, 2018

According to the Government of NL's Way Forward document (Department of Health and Community Services, 2016), better value can be achieved through lowering cost while improving patient outcomes through appropriateness of care and appropriate utilization of resources. To support the strategic direction of better value through improvement, Western Health's operational goal for 2017-2020 is to improve efficiency within the organization: *By March 31, 2020, Western Health will have implemented and evaluated processes and strategies to enhance operational efficiency in priority areas.* Based on a scan and review of efficiency within Western Health, three priority areas were identified as opportunities for efficiency:

1. Appropriateness of care:
    a. Increasing client/patient/resident/family awareness of appropriateness of care
    b. Engaging clients/patients/residents in appropriateness of care.
2. Delivery of health care services:
    a. Increase staff awareness of system wide transformation
    b. Continue to strengthen efficiency through continued expansion of the automated reminder system (ANS)
    c. Support appropriateness of care through a reduction in acute care length of stay
3. Decreasing unnecessary test and procedures
    a. Continue to decrease unnecessary testing within laboratory services
    b. Continue to decrease unnecessary testing in perioperative services

c. Continue to decrease inappropriate medication usage

Work will continue to address these priority areas and the objectives of the operational goal in the upcoming fiscal year.

Western Health continues to support ongoing quality improvement focused on efficiency through education of staff in Lean process improvement methodology. In 2017/18, an introduction to Lean concepts and tools was delivered to 200 staff members, two staff members have received Lean black belt certification, 14 staff members have received yellow belt education, and 11 staff members received green belt education. Work is ongoing to mentor staff in the completion of green belt project work to meet the requirements for green belt certification.

Western Health is involved in other initiatives to ensure health care is as efficient as possible, while continuing to deliver safe and quality programs and services to the residents of the Western region. These include use of the use of Position Control Numbers (PCN), paperless charts through Meditech scanning, and the integration of lab, diagnostic imaging, medical record, and encounter history reports into HealthE NL viewer.

Provincially, to create efficiencies within the health care system, the NL government has adopted a Shared Services Model to consolidate certain health care services under one entity. Significant work has been completed during 2017/18 to establish provincial shared services supply chain model which will be managed by Central Health. This approach is also being explored for both Information Management and Human Resources. A challenge for the upcoming fiscal year will be managing these processes.

Engagement

Client, Patient, Resident, and Family

Engaging clients and families as partners at all levels of the health care system is important to ensure their input is integrated into the design, planning, implementation, and evaluation of programs and services within Western Health. During 2017/18, significant work was completed to integrate a Person and Family Centered (PFCC) approach within the organization. To support this, a PFCC strategy and workplan was developed. A component of this strategy was to create a PFCC steering committee, comprised of both client advisors and Western Health staff focused on identifying and supporting organizational priorities to enhance client and family experience. The PFCC Steering Committee held its first meeting in March 2018. To date, five family/client representatives have been recruited as advisors. An overview of the PFCC strategy was presented to both Nursing Professional Practice and the leadership group in February 2018 and to Regional Medical Advisory Committee (RMAC) in March 2018. There is significant ongoing work to embed this required culture change within the organization.

To continuously engage clients in the design, planning, implementation, and evaluation of Western Health programs and services, client feedback is sought through client experience surveys. During 2017/18 patients receiving acute care and clients receiving community-based care were asked to complete experience surveys to assess their satisfaction with the services they receive. Through the Community Health Needs and Resources Assessment (CHNRA) focus groups were held to seek public feedback on important health issues such as mental health promotion and addictions prevention, immunization, and care of the older person. Feedback received from both the client experience surveys and CHNRA focus groups is used to support program/organizational planning and improvement activities.

To support compliance with provincial policy to provide a standardized process for the effective and timely management of complaints, Western Health has worked toward providing a central mechanism for soliciting and receiving feedback. This will be a new central point of intake to promote enhanced transparency/accessibility for the public. While clients/patients/residents and families will continue to initiate feedback at the point of care where service was provided, they will now have the option to contact a new Regional Client Relations Manager through a dedicated confidential toll-free telephone or email address. This position will provide support for managers handling compliments/complaints whether they are initiated at the point of care or through the client relations office. The information collected through compliments and complaints will also be integrated into the design, planning, implementation, and evaluation of Western Health programs and services.

Staff

Western Health Talent Management "Growing the We in Western Health" plan is a set of integrated organization Human Resource processes designed to attract, develop, motivate, and

retain productive and engaged employees. To support employee engagement the Talent Management plan has achieved several accomplishments related to its four objectives:

1. Promote Western Health as a place people want to work and volunteer:
    - "Our Stories" page was created for the Western Health website
2. Foster Learning and Development:
    - 1579 staff completed the LEADS e-learning
3. Create a Health Organization:
    - Employee health nurses trained in BETTER screening tool
4. Increase Senior Executive Visibility and Accessibility:
    - 15% increase in Senior Management site visit attendance

Other accomplishments relating to employee engagement include the implementation of a volunteer experience survey, the expansion of the years of service pins, the Gnome challenge, and the Why We Stay survey. Western Health has also adopted the LEADS framework to guide leadership development within the organization. During 2017/18, four Western Health staff received LEADS facilitator certification. These four staff have provided LEADS training of which 41 managers have completed. Promoting staff engagement will continue to be a priority for the organization and address the opportunities identified in the AON Hewitt Engagement survey conducted in 2016/17.

Quality Improvement

To facilitate quality improvement within the organization, Western Health participates in several key quality improvement initiatives such as research and evaluation. Western Health staff collaborate to support evaluation initiatives, and during the 2017/18 fiscal year, 32 evaluations were initiated, continued or completed. These include the evaluation of safe resident handling, the professional practice framework, patient order sets, rural health team effectiveness, patient safety act education session, francophone services, community paramedicine program, mental health and addictions waiting room, maternal newborn falls risk assessment, and many others.

Research is another important quality improvement initiative and Western Health participates in and facilitates research within the organization. The Regional Research Review Committee reviewed and approved 11 outside research applications to be conducted within the organization. Western Health is also involved in research projects, including "Care of frail, acutely ill older persons: Making health care work like a system" in association with the University of Waterloo, and "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.

To address ethical dilemmas, Western Health has an ethical framework to guide clients, patients, residents, families, and staff which includes information about ethical decision making, Western

Health's Ethics Committee, the ethics consultation service, and Western Health's code of ethics. During 2017/18, the ethics framework was evaluated and revised with input from Western Health staff. Based on the identified opportunities for improvement, a workplan was developed to increase awareness of the ethics committee and framework, to promote ethics education, and to increase client, patient, resident, and family awareness of ethics support. During the past fiscal year, two ethics consultations took place in collaboration with the Provincial Health Ethics Network of NL (PHENNL) and Western Health has also participated on several provincial ethical consultations. The Medical Assistance in Dying (MAiD) legislation continues to be a prominent ethical issue, and the upcoming legalization of cannabis will be a key ethics issue to monitor.

A significant quality improvement activity within the organization is the participation and preparation for Accreditation Canada's onsite survey in October 2018. The organization completed the self-assessment process and the Patient Safety Culture survey. Results from both surveys identified successes and opportunities for improvement that need to be addressed within the organization. A key focus for the organization has been to ensure the Required Organizational Practices (ROP) set out by Accreditation Canada are met and to continue to achieve the 51 unmet criteria from the 2013 survey visit. Significant work and challenges ahead will be to continue to address the key activities set out in the critical path leading up to Accreditation 2018.

Western Health regularly engages in best practice and evidence-based initiatives to foster quality improvement. Some of these include the change management framework, the Archibus program, staff onboarding, Making Memories project, closed intensive care model, hazard vulnerability analysis, trophon-high level disinfection, and Improving Health My Way program.

The organization completed significant work to achieve the objectives outlined in the three strategic goals of the 2017-2020 cycle:

1. Enhanced mental health promotion and addictions prevention based on best practice
2. Enhanced primary health care services to address the needs of residents of the Western region
3. Enhanced programs and services to improve outcomes for older adults

For more information on the strategic goals and status updates for year one (2017/18), please refer to Western Health's annual report.

Conclusion

Western Health had many accomplishments and successes during the 2017/18 such as the increase in hand hygiene compliance, new facility planning, and continued implementation of the automated notification system. The organization also has several opportunities for improvement and challenges that are common across the organization's branches such as an aging population, high incidence of chronic disease, operational efficiency, staff engagement, patient safety, improving access to health services, and integration of person and family centred care. Addressing key issues, opportunities for improvement, and challenges will largely inform the work of the upcoming 2018/19 fiscal year.

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