



# MACRO

# KEY PERFORMANCE INDICATORS

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System Performance – Decision Support Team

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## Indicator Summary

Category	Indicator Name	Indicator Description	Reporting Frequency	Annual Target	Current Performance (Period)	Previous Performance (Period)	Relative Performance
Access	Ambulatory Care Sensitive Conditions	Rate of Ambulatory Care Sensitive Conditions	Annual	334	355 FY 2014-15	297 FY 2013-14	+19% 
Access	Access to Family Physician	Percentage of individuals without access to a family physician	Annual	9.6%	10.6% CY 2014	9.7% CY 2013	+0.9% 
Access	ER Triage 4 & 5	Total volume of CTAS (triage) level 4 and 5	Quarterly	Total = 257,047	Total = 271,570 FY 2015-16	Total = 260,047 FY 2014-15	+4% 11,523 
Access	Wait List Volume for Home Care Services	Wait List Volume for Home Care Services	Quarterly	519 (25% reduction)	691 Q4 FY 2015-16	715 Q3 FY 2015-16	-3.3% 
Access	Wait time for Placement into LTC Nursing Home Care	Wait time for placement into long term care	Quarterly	227 days (25% reduction)	302 days Q1 FY 2015-16	353 days Q4 FY 2014-15	-14.45% 
Access	Patients placed into LTC from hospital	Percentage of individuals placed into long term care from hospital	Quarterly	35.4%	37.1% FY 2015-16	38.9% FY 2014-15	-1.8% 
Access	Knee replacements – within target	Percentage of individuals who receive their procedure within 182 days	Quarterly	39.47%	35.7% FY 2015-16	35.47% FY 2014-15	+0.23% 
Access	Knee Replacement – long waiters	Percentage of individuals waiting longer than one year	Quarterly	34.39%	38.81% FY 2015-16	36.14% FY 2014-15	+2.6% 

Category	Indicator Name	Indicator Description	Reporting Frequency	Annual Target	Current Performance (Period)	Previous Performance (Period)	Relative Performance
Access	Hip replacement – within target	Percentage of individuals who receive their procedure within 182 days	Quarterly	60.9% (Annual 5% increase)	51.9% FY 2015–16	50.8% FY 2014–15	+ 1.09% 
Access	Hip replacement – long waiters	Percentage of individuals waiting longer than one year	Quarterly	22.66% (Annual 5.3% reduction)	34% FY 2015–16	25% FY 2014–15	+9% 
Access	Mental Health Wait Time	Percentage of individuals who receive their mental health appointment within benchmark	Quarterly	90%	84.2% FY 2015–16	85.8% FY 2014–15	-1.6% 
Access	Emergency Department Length of Stay < 24hours	Percentage of admitted patient in the ED with a LOS of less than 24 hours	Quarterly	90%	76% FY 2015–16	75% FY2014–15	1% 
Safe Care	Hospital Standardized Mortality Ratio	Hospitalized Standardized Mortality Ratio	Annual	96	112 FY 2014–15	116 FY 2013–14	-4 
Safe Care	30 Day Unplanned Readmission	Rate of unplanned readmission to hospital within 30 days of discharge	Quarterly	8.0%	8% FY 2015–16 YTD	8.5% FY 2014–15	-0.5% 
Workforce	Workers Compensation Board Lost Time	A calculated rate of lost-time work-related injuries/events	Quarterly	1.82	1.14	NA	NA
Workforce	Vacancy Rate	Rate of positions posted but not filled	Quarterly	NA	15.39% Q3 2015–16	8.74% Q2 2015–16	6.65% 
Population	Chronic disease burden	Prevalence of individuals with self-reported five or more chronic conditions	Annual	5.09%	NA	5.34% CY 2013–14	NA
Population	Health human resources immunization rates	Percentage of workforce identifying as receiving influenza vaccination	Annual	60%	44.7% Flu Season 2015–16	44.8% Flu Season 2014–15	-0.1% 

Category	Indicator Name	Indicator Description	Reporting Frequency	Annual Target	Current Performance (Period)	Previous Performance (Period)	Relative Performance
Population	Population influenza vaccination	Percentage of population identified as receiving influenza vaccination	Annual	43.8%	NA	39.9% FY 2014-15	NA
Population	Grade 7 Meningococcal Vaccine	Percentage of grade 7 students identified as receiving Meningococcal Group C vaccination	Annual	90%	NA	94 % School Year 2015-16	NA
Experience of Care	Client Experience	Percentage of overall positive responses on client experience survey	Annual	90%	NA	81.9% (multi-year composite score)	NA
Stewardship	Budget variance	Budget variance	Quarterly	0%	0% Q4 2015-16	0% Q3 2015-16	0% 
Stewardship	Accumulated Depreciation to Fixed Asset Ratio	Accumulated Depreciation to Fixed Asset Ratio	Quarterly	50%	56.29% YTD 2015-16	56.37% FY 2014-15	- 0.08% 
Stewardship	Admin ratio	Ratio of total expense to administrative expense	Annual	4.58%	4.40% Q2 2015-16	4.69% FY 2014-15	-0.29% 
Innovation	Interdisciplinary projects	Rate of research projects with interdisciplinary involvement	Annual	First Year of Measurement	NA	NA	NA
Innovation	Research Funds	Total value of research funds attracted	Annual	1% Annual Increase	\$21,898,578 2015-16 YTD	\$27,482,371 2014-15	NA

## Introduction

Nova Scotia Health Authority's (NSHA's) Performance and Accountability Framework outlines the structure and accountabilities for indicator reporting and monitoring. The framework specifies three levels of Key Performance Indicators (KPIs) namely: macro, meso and micro. Within the framework, there is a two way relationship between planning and measurement such that plans at each level will influence what indicators should be measured, and in turn, the indicator / performance results may influence the focus of a plan. The macro level indicators detailed in this report are focused on whole system measures that are closely linked to NSHA strategic priorities and to the Department of Health and Wellness mandate and strategic plan.

The selection, development and refinement of NSHA macro Key Performance Indicators (KPIs) have been underway since the early phases of transitioning to NSHA. Through this process a set of 21 KPI categories, with 26 specific indicators has been finalized. This list of indicators will be re-assessed annually and particularly during the 2016-17 year based on the early experience of NSHA and an increased knowledge base as to which indicators are most reflective of system performance. In addition, with the amalgamation of 9 health authorities into one, it is expected that the ease and timeliness of reporting will improve over time as information systems and data collection & analytics capabilities are further refined. Reporting in relationship to some of the current list of indicators is incomplete or represent only first year measures as NSHA is in the process of collecting baseline data. For example, the first patient experience survey for NSHA, as an entity, will be completed in the Fall of 2016.

Combined, these indicators are intended to provide a multi-dimensional overview of the functioning of NSHA. Within this report indicator targets, NSHA's performance in the current reporting period and previous reporting period are outlined. A guide for interpreting results is as follows:

Act		Most recent validated result is unfavourable compared with the previous performance and in comparison to the target, action to improve performance is indicated
Assess		Results should be monitored, action to enhance performance is indicated
Celebrate		Most recent validated result is favourable compared with the previous performance and in comparison to the target Current period result meets the target

The KPIs are produced using various data sources, both internal and external to NSHA. As a result, the timeliness of the data on which the indicators are based differs. For example, those indicators that use data produced by the Canadian Institute of Health Information (CIHI) are retrospective, based on the previous fiscal year of data, whereas those indicators produced via NSHA finance system are based on current year-to-date information. To aid in interpretation of the KPIs, the year in which the data was collected is provided.

System performance monitoring and reporting are vital activities for every health organization and the results produced through these activities aim to improve quality and system performance, and enhance health and health system sustainability and accountability.

# Key Performance Indicators

## 1.1 Ambulatory Care Sensitive Conditions

### Why is it important?

Nova Scotians have high rates of chronic disease. This indicator helps in understanding how patients with chronic diseases access health services in Nova Scotia. Ambulatory Care Sensitive Conditions (ACSC) are chronic medical conditions that when treated effectively in community settings, should not, in most cases, lead to a hospital stay. Managing chronic diseases effectively in the community can improve patient outcomes while using fewer hospital in-patient services.

### What is being measured?

Ambulatory Care Sensitive Conditions include grand mal status and other epileptic convulsions, chronic obstructive pulmonary disease, asthma, diabetes, heart failure and pulmonary edema, hypertension, and angina. This indicator represents the rate of hospitalizations for these conditions per 100,000 population.

### What do we intend to achieve?

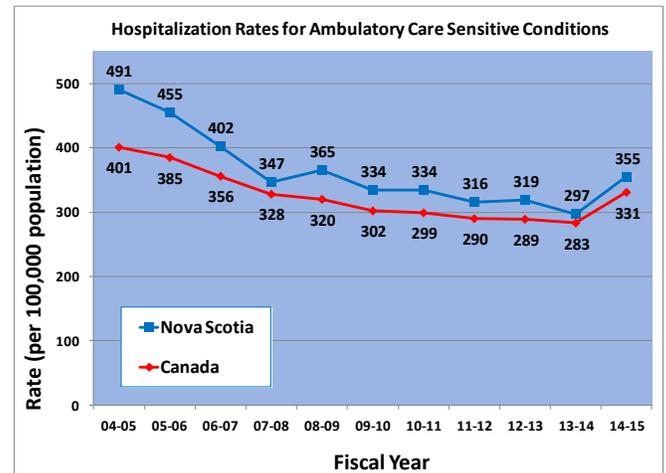
NSHA aims to provide timely, effective, community-based health services to patients experiencing chronic diseases. While there is no agreed-upon target for the ACSC rate, NSHA has set a goal to enhance primary care access, reduce hospitalization for chronic disease, and bring down the ACSC rate. Based on historical rates, NSHA set a target to return to the 2009-10 ACSC rate of 334, with a long term goal of continuous rate reduction.

### How are we doing?

There is no independently set or agreed on appropriate level of hospitalization for ACSCs. Across Canada, there are large regional variations in the rate of hospitalization for these conditions. Over the last eight years, the Nova Scotia trend mirrors the Canadian trend, in that both experienced steady decreases until 2013-14, and then an increase in 2014-15. The ACSC rate for Nova Scotia is higher than the national rate each year.

Current Performance: 355 FY 2014-15

Previous Performance: 297 FY 2013-14



### What are we doing about this?

Primary Health Care (PHC) and NSHA system partners currently offer many chronic disease prevention and management programs in the community to promote effective management of chronic conditions. NSHA's strategic plan sets a high priority on actions to continue building and enhancing community health care programs.

Collaborative work is currently underway to enhance primary care access for Nova Scotia. Some examples include:

- Review of current expectations for team and family physician roster size;
- Active recruitment of primary care providers
- Promotion of, and increase in, the number of collaborative Primary Health Care teams based on an assessment of community need.

## 2.1 Percentage of Individuals without a Family Doctor

### Why is it important?

This indicator is a proxy measure for access to a primary care provider or team, specifically, access to a family physician. Over time, it is expected that this indicator will be adapted to measure access to primary/community care collaborative teams. For many Canadians, the first point of contact for health service is their family doctor or primary care provider. Proactive primary/community health care employs preventative measures, manages chronic disease, and encourages self-care recommendations. Being without a regular primary care provider can impact an individual's ability to access early screening, prevention, and treatment of medical conditions. Research reveals links between lack of access to primary care, increased rates of unnecessary hospitalization (e.g., ambulatory care sensitive conditions), and inappropriate usage of emergency departments.

### What is being measured?

In the absence of a current validated measure for access to primary/community care provider or team, the current indicator measures the percentage of the population without access to a family physician. The data comes from the Canadian Community Health Survey, an annual self-report survey administered by Statistics Canada.

### What do we intend to achieve?

NSHA has a goal to enhance access to primary health physicians and care teams in Nova Scotia. Given the trajectory of the national and provincial rates, Nova Scotia's recent experience in relation to this indicator and the appropriate pace of change in relation to, NSHA aims to first stabilize and then improve performance in relation to this indicator. NSHA's target is to reverse the rising trend overtime. In future years, the target is to reduce the percentage of Nova Scotians without a family doctor or primary care team each year by one percentage point per year, with future target as follows: 9.6% in 2016, 8.6% in 2017, and 7.6% in 2018.

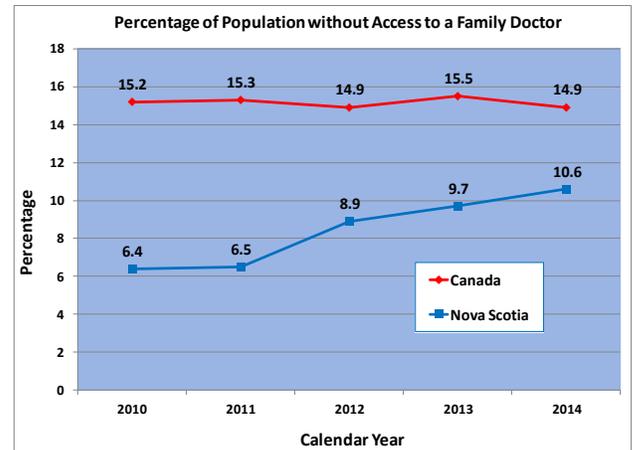
### How are we doing?

Since 2010, the percentage of Nova Scotians without access to a regular family doctor has increased as compared to the overall Canadian rate.

Current Performance: 10.6% CY 2014  
Previous Performance: 9.7% CY 2013



Updated information for the 2015 calendar year will be available in June of 2016. Comparisons against the set targets will be made at that time.



### What are we doing about this?

The actions necessary to positively impact this rate overlap with those activities geared toward decreasing the Ambulatory Care Sensitive Conditions indicator. Actions underway to increase the number of primary care physicians and to plan for and establish primary/community care teams are specifically geared toward addressing this indicator. Examples of activities underway to positively impact this indicator include:

- An enhanced vacancy replacement program;
- Recruitment and placement of alternate primary care providers where appropriate;
- Increased focus on and enhancement of NSHA's overall physician recruitment efforts; and
- Improved return of service arrangements with physicians for under-served areas of Nova Scotia.

## 2.2 Triage Level Four and Five Emergency Department Volumes

### Why is it important?

Patients seen in the emergency department (ED) with triage level four (semi-urgent) and five (non-urgent) conditions may, in many instances, be individuals who could be seen in a primary care setting. This indicator is viewed as a proxy indicator of primary care access since individuals with semi-urgent or non-urgent health concerns may present to the ED when primary care access is delayed or is not conveniently available. Assessing ED utilization patterns overtime, for semi-urgent and non-urgent patients provides valuable insight and information for primary health care planning purposes.

### What is being measured?

This indicator is the total of all ED visits that fall into the Canadian Triage and Acuity Scale (CTAS) levels four and five. Level four patients are those who present with semi-urgent conditions and level five patients are those who present with non-urgent conditions.

### What do we intend to achieve?

NSHA is committed to achieving accessible and appropriate primary care across Nova Scotia, including urgent appointments and after hours care. NSHA aims to reduce the number of patients with semi-urgent and non-urgent conditions seen in EDS by 3000 next year. This sets the NSHA 2015-16 target at 257,047.

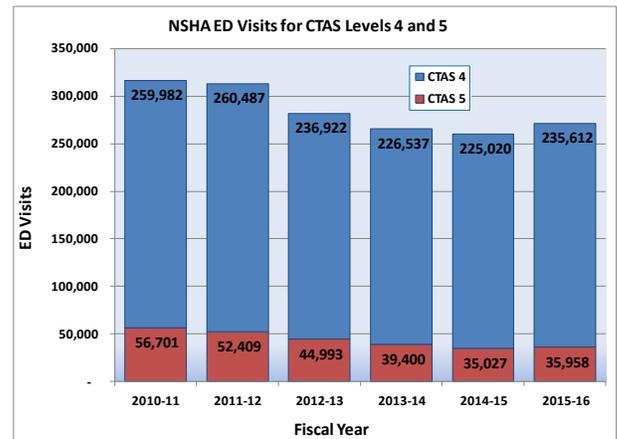
Current Performance: 271,570 FY 2015-16

Previous Performance: 260,047 FY 2014-15



### How are we doing?

In 2015-16, there was an increase in both triage level four and five ED visits. Triage level four rose from 225,020 to 235,612, and triage level five rose from 35,027 to 35,958. Combined, the sum of the two triage levels is 271,570, representing an increase of 11,523 visits compared to the previous year.



### What are we doing about this?

To positively impact this indicator, a multi-pronged strategy is being implemented including work around identifying and addressing the needs of frequent users of non-urgent emergency services, community education and efforts to increase accessible and appropriate primary health care services. Work continues to establish collaborative primary/community health care teams across Nova Scotia. A key objective is to build and implement a system that supports enhanced access, both for urgent appointments and after hours care. It is expected that individuals will rely less on hospital-based care when they have access to a range of health providers close to home; collaborative teams are designed to provide the most appropriate care to address patient needs and to take pressure off emergency services.

## 3.1 Wait List Volumes for Home Care Services

### Why is it important?

Home Care services consist of nursing services and home support services. Home support services supplement the informal supports people receive from their family, friends or community and include personal care, respite, meal preparation and essential housekeeping. Through provision of Home Care, people are able to remain as independent as possible, stay living in their homes and communities and yet still receive the services they require. Delay in receipt of Home Support services can lead to longer hospital stays (delays in discharges), or unplanned readmissions. Home Support Waitlist volumes provide a proxy measure for service supply and demand in any given area and can be used to inform future service planning.

### What is being measured?

This indicator is a measure of the number of people on the Home Support waitlist on the last report day per quarter. Over time, an indicator measuring the average wait time for home care services will be developed.

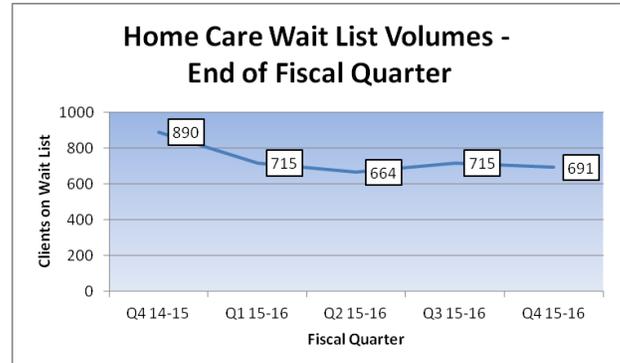
### What do we intend to achieve?

NSHA has a goal to maximize the support to individuals in the community through a continued focus on the Home First approach. This is supported by an objective to work collaboratively with home care providers to reduce the home support waitlist by 25% in 2015–16 and a further 50% in 2016–17 as we work towards the eventual elimination of the home support waitlist by 2017–18.

### How are we doing?

Waitlist reduction targets were close to being achieved in 2015–16. In the fourth quarter of 2014–15 there were 890 individuals waiting for Home Support services. In comparison, in the fourth quarter of 2015–16, the number of individuals waiting has been reduced to 691 – a 22% reduction. This positive trend is suggestive of the ability of NSHA to meet the 50% reduction target set for 2016–17.

Current Performance: 691 Q4 2015–16  
Previous Performance: 715 Q3 2015–16



### What are we doing about this?

To ensure that Home Care services are there for individuals when they need them, an action plan has been established. This includes strategic interventions in the following areas to achieve targeted reduction in Home Support waitlists:

- Improved communication with agencies through progress notes and committees/forums.
- Improved communication with clients and families through redesigned client information packages, including efforts to reduce cancelled visits.
- Greater system efficiencies including a plan to address client reassessments, increased use of technology, support to maximize scope of practice, and performance measurement.
- Consistent service authorization including implementation of audit processes, documentation of exceptions to policy, review of service authorization practices, revision to service authorization guidelines, and development of waitlist priority categories.

Since April 2015, NSHA has worked with VON and NSGEU to understand the reasons for and explore solutions to home support waitlists. This has resulted in the elimination of longstanding waitlists in Pictou County, Annapolis Valley, and Tri County (Digby, Yarmouth, Shelburne). Work with other agencies has resulted in the elimination of waitlists in Digby / Clare and Antigonish and a 43% reduction in the Halifax area.

## 4.1 Wait Times for Placement in Long Term Care

### Why is it important?

Timely access to the appropriate level of Long Term Care (LTC) is increasingly important given the aging population in Nova Scotia. For individuals who are medically stable, and when their needs cannot be met through home care, placement to a nursing home may be indicated.

### What is being measured?

This indicator measures the median number of days waited for placement into Nursing Home LTC facilities licensed and funded by Department of Health and Wellness (DHW). The start date is the date the patient/client completed the wait-time registration process and the end date is the date the patient/client accepts placement into LTC.

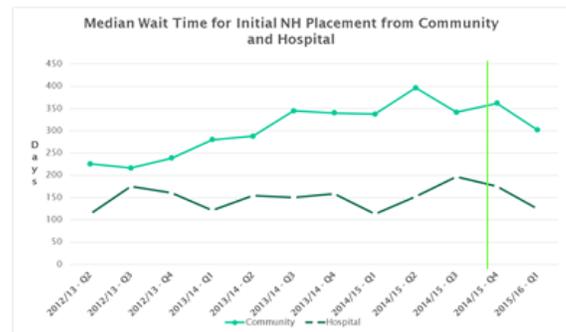
### What do we intend to achieve?

NSHA has a goal to ensure timely access to the appropriate level of LTC. Reducing the wait-time for placement to Nursing Home by 25% during the 2016–17 fiscal year is the target. Specifically, the target wait time for placement from a Community Setting is 226 days, and from Hospital Setting is 94 days.

### How are we doing?

Since January 1, 2015 there has been a 17% reduction in wait-time for placement into a Nursing Home from community setting, resulting in a median wait-time of 302 days. In addition, there was a 29% improvement in wait-times for individuals placed from a Hospital Setting, where the median wait-time is now 125 days. These results indicate that NSHA is on track to meet the target wait time reduction of 25% for the 2016–17 fiscal year.

Current Performance: 302 days Q1 2015–16  
Previous Performance: 353 days Q4 2014–15



### What are we doing about this?

On March 2, 2015, NSHA implemented important changes to the LTC placement policy and processes. Prior to this year, individuals on the waitlist for placement into LTC were able to defer placement, when an available bed was offered, for a variety of reasons. It was felt that this had a negative effect on the volume and length of time individuals were waiting, and as a result, post March 2, 2015, this option is no longer available. An individual who refuses placement in an available bed is now removed from the waitlist. In addition, care coordinators must explore all options to support the individual at home before seeking placement, and a standard response time of 6 days for filling vacant beds was introduced. It is anticipated that these changes will reduce both the volume and length of time individuals need to wait.

## 5.1 Percentage of Patients Placed into Long Term Care (LTC) from Hospital

### Why is it important?

Returning home, or avoiding an inpatient admission can be supported with an enhanced focus on the Home First approach. This approach aims to discharge elderly patients home after an acute episode in hospital instead of assuming that LTC is the only option. Returning to or remaining at home with necessary community supports allows elderly patients and their families to better judge what's best for them<sup>1</sup>, and also reduces the amount of time spent in an acute care institution.

### What is being measured?

This indicator is the percentage of patients placed into LTC from hospital rather than being placed there from the community.

### What do we intend to achieve?

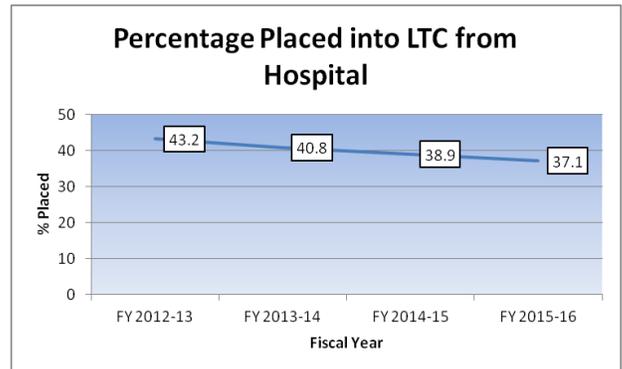
It is recognized that hospital is not the ideal environment from which to make major life decisions such as placement in LTC. The goal is to reduce significantly, over time, the number of patients placed there from hospital, while also ensuring that those individuals at the most risk and in the most need are prioritized for placement.

NSHA has a target to reduce LTC placement from hospital in 2015–16 to a rate of 35.4 %.

### How are we doing?

The four year trend, between 2012–13 and 2015–16 shows a steady reduction in the percentage of placements from hospital. The 2015–16 result of 37.1% represents continued improvement but falls short of meeting the target set at 35.4%.

Current Performance: 37.1% FY 2015–16  
Previous Performance: 38.9% FY 2014–15



### What are we doing about this?

Working with Department of Health and Wellness (DHW), NSHA is making further changes to the placement policy to ensure that those individuals at the most risk and in the most need are prioritized for placement. This new triaging system will be implemented in FY 2016/17. It will ensure timely access to LTC beds and has an additional goal of preventing caregiver burnout and crisis which can lead to presentation at hospitals. It will also provide assurance and confidence for clients and families being discharged home from hospital that placement to LTC can be facilitated quickly if needed.

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<sup>1</sup> Excellent Care For All.

[http://www.health.gov.on.ca/en/pro/programs/ecfa/action/community/com\\_homefirst.aspx](http://www.health.gov.on.ca/en/pro/programs/ecfa/action/community/com_homefirst.aspx)

## 6.1 Total Knee Replacement Surgery within Target

### Why is it important?

There is a very high demand in Nova Scotia for Total Knee Replacement (TKR) surgery. Delayed access to this surgery can negatively impact on a person's quality of life, physical and psychological health and may lead to a poorer long term prognosis.

### What is being measured?

TKR is a surgical procedure in which the weight-bearing surface of the knee joint is replaced to relieve the pain and disability of osteoarthritis. This indicator is the percentage of patients who had their knee replacement surgery within the benchmark time of 182 days.

### What do we intend to achieve?

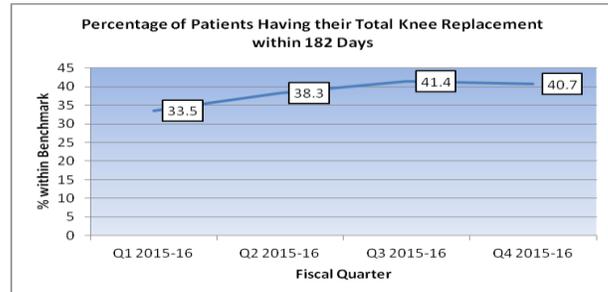
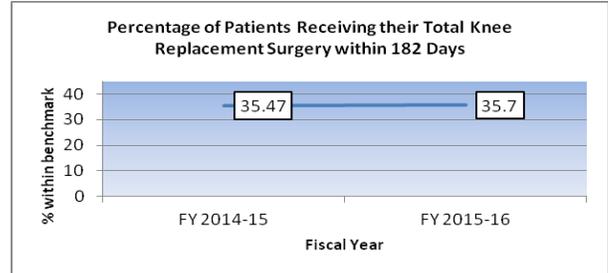
NSHA has a goal to meet the health services needs of Nova Scotians through timely access to safe, high-quality orthopaedic surgery. The Peri-Operative Program will increase access to TKR by capitalizing on the many efficiencies gained through comprehensive provincial planning, with an aim to achieve the national target of 90% over time through incremental increases. The target for FY 2015-16 is a 4% increase (39.47%).

### How are we doing?

When assessed on an annual basis, there is a 0.23% improvement, which falls below the 4% target. It should be noted however that the total volume of cases completed during the 2015-16 fiscal year rose by 110 over the previous year and the volume of clients waiting is at its lowest point in two fiscal years. Furthermore, in quarter four of 2015-16, 40.7% of individuals received their TKR surgery within 182 days. This is a decrease of 0.7% from the previous quarter.

Taken together this suggests that capacity is increasing at a pace equal to or greater than the increase in demand, yet the system struggles to address the challenge of a large waitlist backlog.

Current Performance: 35.7% FY 2015-16  
Previous Performance: 35.47% FY 2014-15



### What are we doing about this?

NSHA recognizes the long wait times for orthopedic procedures such as Total Knee Replacements. Going forward we will:

- Adopt a system-wide approach to ensure access to surgical beds occurs within a timely manner;
- Adopt a system-wide approach to program planning including OR time allocation based on population need;
- Increase capacity in the Orthopaedic Assessment Centres and standardize service offering to include the pre-hab exercise program offered in Sydney;
- Maximize the orthopaedic long waiter strategy money to perform 800 additional cases with a goal of increasing to 1200 in the following year.
- Review the long waiter lists and offer patients who are on a list outside their home zone access to services closer to home if the wait is less;
- Maximize the use of the unicondylar knee when appropriate, as this implant takes the place of the damaged area of the knee, leaving the other compartments intact - it is more of a partial replacement

## 6.2 Total Knee Replacement – Long Waiters

### Why is it important?

The elimination of the backlog of individuals waiting longer than 365 days (i.e., long waiters) for their surgery will refocus the system's efforts toward meeting the national benchmark of 182 days for new patients as they are placed on the waitlist. In essence, removing the need to "play catch up", maximizing system efficiency and improving patient outcomes.

### What is being measured?

This indicator measures the percentage of patients on the current waitlist waiting longer than 365 days at the end of each fiscal quarter. The wait time is measured as the time from when the orthopaedic surgeon confirms the patient requires a TKR to when the patient undergoes the surgery.

### What do we intend to achieve?

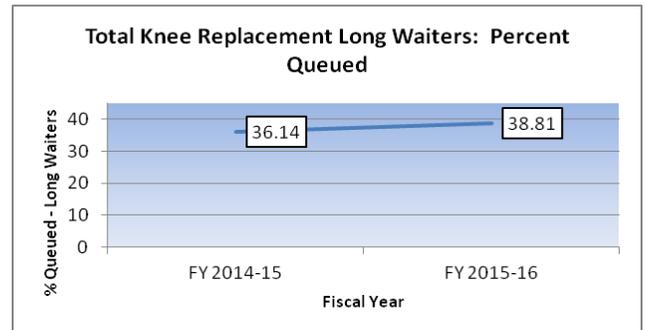
NSHA has a goal to bring surgical wait times for TKR under 365 days and then to the national standard. NSHA has established a goal of decreasing the wait list by 4% in FY 15/16 (34.39%).

### How are we doing?

Efforts have been underway for several years to decrease the wait time for TKR. Through these efforts there has been an increase in the number of procedures completed however the demand for this procedure has continued to rise. As a result, the change from 2014–15 to 2015–16 was an increase of 2.6%; however, the total volume of patients waiting longer than the 365 days has been reduced by 39 individuals.

Current Performance: 38.81% FY 2015–16

Previous Performance: 36.14% FY 2014–15



### What are we doing about this?

NSHA recognizes the long wait times for orthopedic procedures such as TKR. In addition to the general measures outlined for the Total Knee Replacement Within Target indicator NSHA is taking a multifaceted approach to this issue. Initiatives include:

- Wait list validation to make sure those on the waitlist are actually ready to have the surgery;
- Increase access to preventative rehabilitation to increase surgery readiness and slow the progression of illness to delay or eliminate the need for surgery; and
- Increase the volume of procedures performed through access to targeted resources from DHW as well as maximizing surgical capacity focused in areas with greatest need.

## 7.1 Total Hip Replacement Within Target

### Why is it important?

There is a very high demand in Nova Scotia for Total Hip Replacement (THR) surgery. Delayed access to this surgery can negatively impact on a person's quality of life, physical and psychological health, and may lead to a poorer long term prognosis.

### What is being measured?

Hip replacement is a surgical procedure in which the hip joint is replaced by a prosthetic implant. This indicator is the percentage of people having their THR surgery within the target wait time (182 days). The wait time is defined as the time between when the orthopaedic surgeon confirms the patient requires a THR to the time the patient undergoes the surgery.

### What do we intend to achieve?

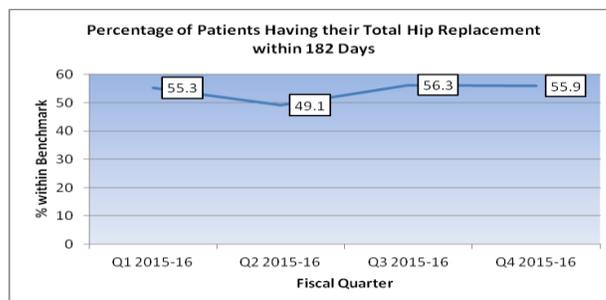
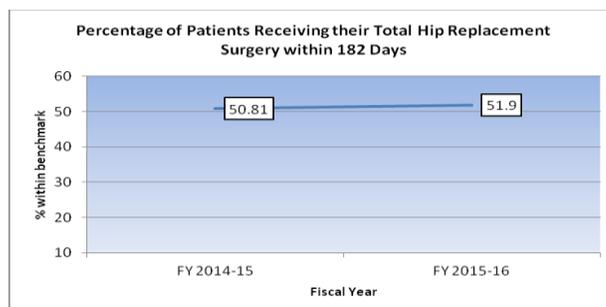
NSHA has a goal to meet the health services needs of Nova Scotians through timely access to safe, high-quality orthopaedic surgery. The Peri-Operative Program will increase access to THR by capitalizing on the many efficiencies gained through comprehensive provincial planning, with an aim to achieve the national target of 90% over time through incremental increases. The target for FY 2015-16 is a 5% increase (60.9%).

### How are we doing?

When assessing the data on an annual basis, a 1.09% improvement is seen in 2015-16. At the same time the total volume of procedures completed in 2015-16 increased by 104, yet the volume of clients awaiting hip replacement surgery remained stable. Furthermore, in quarter four of 2015-16 55.9% of individuals received their THR surgery within 182 days. This represents a decrease of 0.4% from the previous quarter.

Taken together this suggests that capacity is increasing at a pace equal to or greater than the increase in demand, yet as with knee replacements, the system struggles to address the challenge of a large waitlist backlog.

Current Performance: 51.9% FY 2015-16  
Previous Performance: 50.8% FY 2014-15



### What are we doing about this?

Actions required to address THR are consistent with those measures outlined for the TKR indicator and include:

- Adopting a system-wide approach to ensure access to surgical beds occurs within a timely manner;
- Adopting a system-wide approach to program planning including OR time allocation based on population need;
- Increasing capacity in the Orthopaedic Assessment Centres and standardize service offering to include the pre-hab exercise program offered in Sydney;
- Maximizing the orthopaedic long waiter strategy money to perform 800 additional cases with a goal of increasing to 1200 in the following year; and
- Reviewing the long waiter lists and offer patients who are on a list outside their home zone access to services closer to home if the wait is less.

## 7.2 Hip Replacement – Long Waiters

### Why is it important?

The elimination of the backlog of individuals waiting longer than 365 days (i.e., long waiters) for their surgery will refocus the system's efforts toward meeting the national benchmark of 182 days for new patients as they are placed on the waitlist. In essence, removing the need to "play catch up", maximizing system efficiency and improving patient outcomes.

### What is being measured?

Hip replacement is a surgical procedure in which the hip joint is replaced by a prosthetic implant. This procedure is generally done to relieve arthritis pain, or fix severe physical joint damage as part of hip fracture treatment. This indicator measures the percentage of patients on the current wait list waiting longer than 365 days at the end of each fiscal quarter.

### What do we intend to achieve?

NSHA has a goal to bring surgical wait times for THR under 365 days and then to the national standard.

NSHA has set a target to decrease the percentage of patients waiting longer than 365 days for their THR by 5.3% per year (FY 15/16, 22.66%).

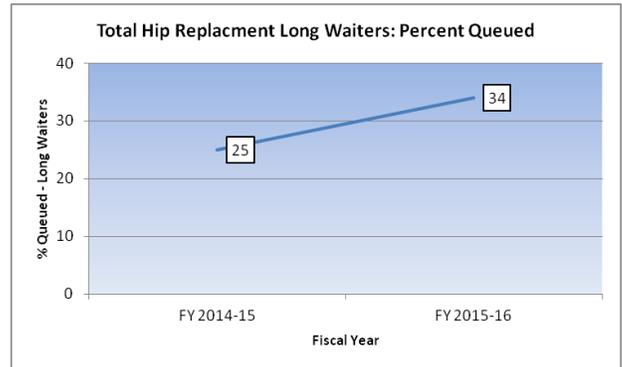
### How are we doing?

Efforts have been underway for several years to decrease the wait time for THR. Through these efforts there has been an increase in the number of procedures completed however the demand for this procedure has continued to rise. As a result, the change from 2014-15 to 2015-16 was an increase of 9%.

Current Performance: 34% FY 2015-16  
Previous Performance: 25% FY 2014-15



As discussed above, the total volume of total hip replacements increased by 104 compared to the previous year, and an additional six long waiters were completed in 2015-16 compared to 2014-15. As previously discussed, this trend is suggestive of challenges faced by the system in terms for addressing the existing backlog of patients awaiting their surgery.



### What are we doing about this?

Actions required to address this indicators align with the actions outlined for the Total Hip Replacement Within Target and Total Knee Replacement Within Target Indicators.

## 8.1 Mental Health Wait Time

### Why is it important?

For the many Nova Scotians who experience mental health concerns or illness, access to timely health services and supports may be required to achieve positive mental wellbeing. Delays in accessing necessary supports can impact an individual's ability to achieve positive health outcomes. In 2011, the Nova Scotia Mental Health Wait Time Advisory Committee developed wait time standards and a recommendation that 90% of clients receive service within the wait time target.

### What is being measured?

This indicator measures the waittime to the Choice / initial appointment. This measure aggregates wait times across all priority levels. As a result, NSHA is working on the development of an indicator specific to wait times for clients with an urgent priority level classification.

### What do we intend to achieve?

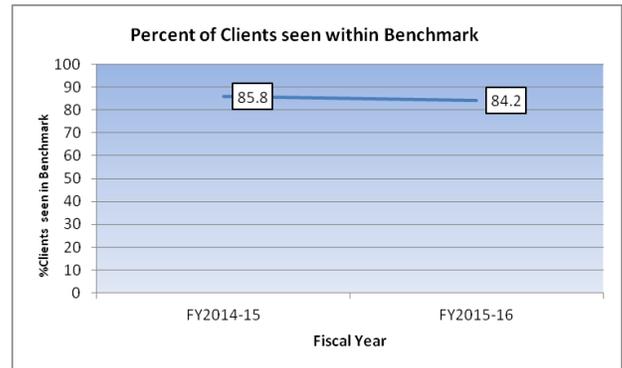
NSHA has a goal to improve access to quality, evidence-informed and appropriate mental health service across the spectrum of priority levels but particularly for clients with an urgent priority rating. NSHA has set a target at 90% of clients having a wait time that is within the target.

### How are we doing?

Performance in 2015-16 decreased slightly from 2014-15 to 84.2% of clients being seen within the target time frame, based on their priority.

Current Performance: 84.2 % FY 2015-16

Previous Performance: 85.8% FY 2014-15



### What are we doing about this?

Mental Health and Addictions is participating in extensive service planning to establish an evidence-based model of service delivery that is responsive to population health needs. This work will include implementing LEAN-based principles to intake and referral processes, patient flow through the system, identification of outpatient treatment goals, matching of client needs to clinician expertise, a strategic approach to continuing education and training, and monitoring of client/family/staff experience and outcomes. This, along with increased standardization of approaches across the province is expected to result in decreased wait times to the Choice / initial appointment.

## 9.1 Emergency Department Length of Stay

### Why is it important?

The time spent (length of stay) in the emergency department (ED) for admitted patients is an important strategic indicator of overall health system flow and functioning. According to the Emergency Care Standards<sup>2</sup> established by Nova Scotia in 2014, the time spent in the ED by admitted patients should be less than 24 hours. Research shows that when patients wait in the ED for admission to an inpatient unit there may be broad system impacts, including increases in: overall ED wait times and ambulance offload times; number of patients who choose to leave without being seen; patient safety incidents; inpatient lengths of stay; and overall costs.

### What is being measured?

This indicator measures the percentage of patients who had an ED length of stay of less than 24 hours, when length of stay is measured from time of triage to time of departure from the ED.

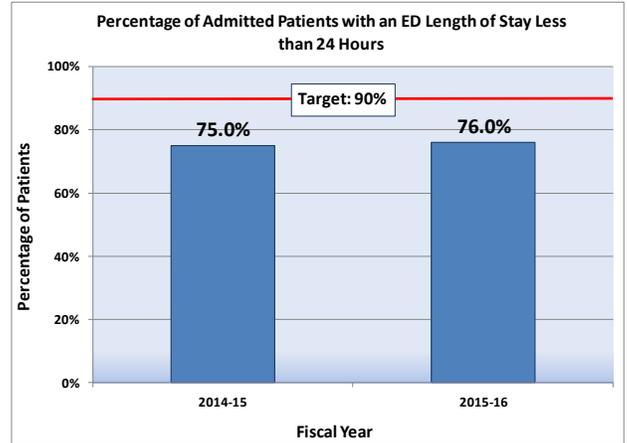
### What do we intend to achieve?

This indicator is used to focus improvements in the efficiency for in-flow, through-fare and outflow from EDs. Internal data and research shows that maximum impact can be achieved through a particular focus on out-flow. As such, there are numerous initiatives underway focused on improving integrated, hospital-wide patient flow and coordination of care. The goal is to shorten the ED length of stay to meet the target such that 90% of admitted patients will have an ED length of stay of less than 24 hours.

### How are we doing?

The percentage of admitted patients with an ED length of stay of less than 24 hours increased from 75% in 2014–15 to 76% in 2015–16. This is less than the target of 90% set in the Emergency Care Standards<sup>2</sup> but represents an improvement nonetheless.

Current Performance: 76.0% FY 2015–16  
Previous Performance: 75.0% FY 2014–15



### What are we doing about this?

There have been a number of initiatives focused on improving an integrated, hospital-wide patient flow / care coordination process. These include:

- 'Patient repatriation' or returning patients to their local hospital from an alternate facility when they no longer require the higher acuity services;
- Improved discharge planning within the hospital and enhanced community care capacity;
- Finalizing details for and implementing an 'overcapacity' protocol that will enable transferring admitted patients to inpatient units when critical thresholds have been exceeded in EDs;
- Implementation of a weekly NSHA collaborative, action oriented planning process, whereby patient flow leaders and coordinators in all zones will discuss patient flow pressures, actions taken or planned, and develop and implement coordinated processes; including regular reporting to senior leadership; and
- Implementation of an ED 'patient tracker' module to enable better monitoring of patients across the continuum of hospital-based service.

<sup>2</sup> Ross, J. (2010). Nova Scotia Emergency Care Standards.

## 10.1 Hospital Standardized Mortality Ratio (HSMR)

### Why is it important?

The hospital standardized mortality ratio (HSMR) is an important “big dot” strategic measure used to focus and inform quality improvement and patient safety initiatives in Canadian hospitals. The ratio provides a starting point to assess mortality rates and identify areas for improvement to help reduce hospital deaths. HSMR is intended to be used as an internal measure, tracking progress over time, and is not intended to be used to compare one hospital to another.

The HSMR can be used to track the overall change in mortality resulting from a broad range of factors, including changes in the quality and safety of services delivered.

### What is being measured?

HSMR is the ratio of the actual number of in-hospital deaths in a region or hospital to the number that would have been expected; based on the types of patients a region or hospital treats. It is important to note that HSMR cases include only those diagnosis groups that account for about 80% of all deaths in acute care hospitals. The HSMR adjusts for factors that affect in-hospital mortality rates, such as patient age, sex, diagnosis, and admission status. While the HSMR takes into consideration many of the factors associated with the risk of dying in hospital, it cannot adjust for every factor.

An HSMR above the year-to-date national average indicates that the hospital’s mortality rate is higher than the average rate. An HSMR below the year-to-date national average indicates that the hospital’s mortality rate is lower than the average rate.

### What do we intend to achieve?

NSHA’s ultimate goal is to lead Canada in relation to quality improvement indicators, including HSMR, and to seek international comparators for purposes of further advancing its quality improvement goals.

The more immediate goal is for NSHA to consistently achieve a low HSMR that is equal to or better than the annual Canadian rate (i.e., 96 2014–15).

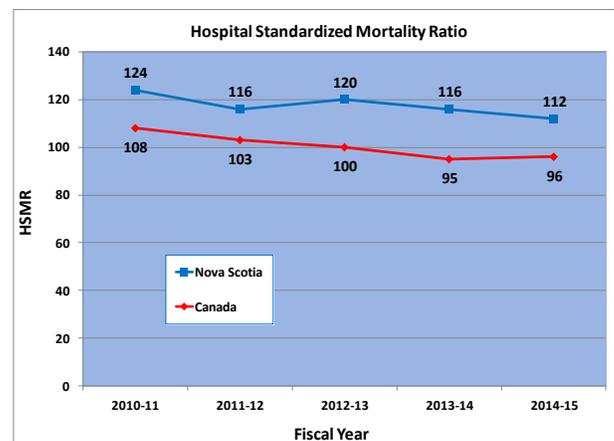
Current Performance: 112 FY 2014–15  
Previous Performance: 116 FY 2013–14



### How are we doing?

This indicator is released by the Canadian Institute of Health Information (CIHI) and there is a notable time lag in results, for example 2014–15 results are released in 2016–17.

Between 2010 and 2015 the HSMR has ranged from a high of 124 in 2010–11 to a low of 112 in 2014–15. This represents continuous improvement for Nova Scotia. The most recently available HSMR result 112 (2014–15) is higher than the Canadian rate of 96.



### What are we doing about this?

NSHA undertakes regular and thorough review of HSMR at the health authority, zone and facility level. This review includes in-depth data review, as well as quality review processes. Monitoring and examination of HSMR results has led to quality improvement work focused in numerous areas, such as: sepsis, heart failure, chronic obstructive pulmonary disease (COPD), quality review tools and processes, clinical documentation, coding and abstracting procedures, and more. These efforts will continue and be enhanced through the vehicle of an integrated NSHA Quality Framework and Oversight Structure.

## 11.1 Unplanned Readmission Rate to Hospital

### Why is it important?

Hospital readmission rates can be influenced by a variety of factors, including length of stay in hospital, discharge planning and timely follow-up services. Monitoring unplanned or potentially avoidable readmissions within approximately one month of discharge can be useful for hospital quality surveillance. This indicator can be combined with other indicators to provide additional information about the overall effectiveness and efficiency of health services across the continuum of care. Urgent readmissions to acute care facilities are increasingly being used to measure institutional or regional quality of care and care coordination.

### What is being measured?

This indicator measures the risk-adjusted rate of unplanned readmissions within 30 days of discharge for episodes of care for the following patient groups: obstetric, patients aged 19 and younger, surgical and medical.

### What do we intend to achieve?

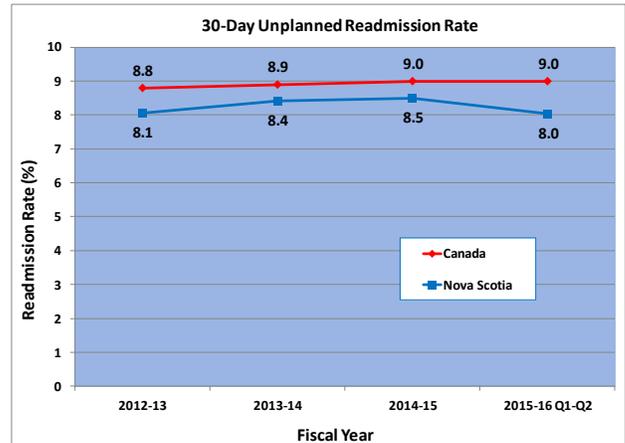
NSHA's goal is to have NSHA lead Canada in relation to this indicator through increased focus on comprehensive discharge planning, care coordination and appropriate levels of follow up after a hospital stay. With this in mind, NSHA aims to reduce the risk adjusted rate for readmissions in 2015-16 to a rate of 8.0%. This represents an absolute change in the rate of 0.5% when compared to the 2014-15 rate of 8.5%.

### How are we doing?

In the first two quarters of 2015-16, NSHA has reduced the re-admission rate from 8.5% to 8%, thereby meeting the 2015-16 target. This represents a reversal of the previous rising readmission rate, and also continues to perform better than the national average rate.

Current Performance: 8.0% 2015-16 Q2

Previous Performance: 8.5% FY 2014-15



### What are we doing about this?

Understanding the factors that are impacting on NSHA's readmission rates is important. Further review of the data on unplanned readmission rates will assist in identifying where we are doing well and how to learn from positive results for further improvement. This review will also guide the focus on quality improvement efforts to the most impacted areas and specific patient groups.

## 12.1 Workers Compensation Board Lost Time Frequency

### Why is it important?

Workplace safety incidents have significant and negative impacts on employees and also on system efficiency. They are largely preventable through an effective occupational health safety program. This Workers Compensation Board (WCB) lost time indicator relates to workplace safety, workplace efficiency, employee health and injury costs. Health and social services is the largest industry sector in the province and accounts for the highest volume of time-loss claims at 1,586 in 2014, which is more than twice as many as the next closest sector.

### What is being measured?

The WCB lost time frequency rate is a measure of how many injuries result in lost time (exceeding part of one normal shift) from the workplace. It is measured in the number of paid, time-loss days per 100 covered workers. Reporting on WCB Lost Time Frequency is done per zone at this time due to the WCB rate being set per zone. Recurrences of previous lost time injuries are included in the definition, if a new initiating event occurs.

### What do we intend to achieve?

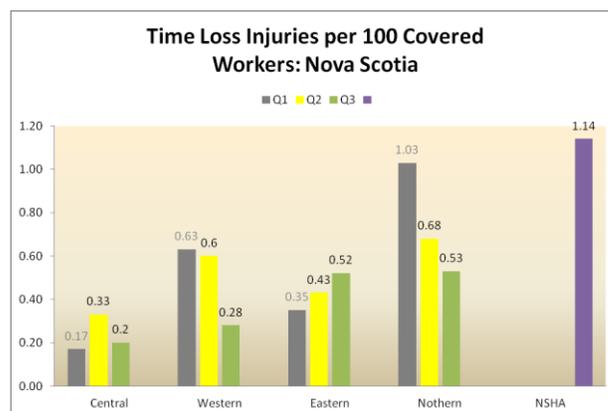
NSHA's goal is to be a high-performing workplace with a positive, healthy, safe and productive work culture and environment. To be high performing NSHA intends to be among the leaders in Canada and beyond for this and other workforce wellness factors which will be measured as part of our program/meso-levels indicators.

NSHA's shorter term goal is to achieve a rate for lost time injuries that is equal to or less than 1.82. This target rate of 1.82 represents the current Nova Scotia rate for time loss injuries for health and social sciences.

Current Performance: 1.14 FY 2015-16 YTD  
Previous Performance: NA

### How are we doing?

There is no historical data available for NSHA, as a consolidated entity, related to this indicator. 2015-16 will represent the first year of NSHA based data collection for this measure. Data is available for the first three quarters of 2015-16. For this time period, NSHA performance is below (better than) the Nova Scotia rate (1.82) for time loss injuries for the health and social sector. Comparisons over multiple years will provide best interpretation of these results.



### What are we doing about this?

Workforce safety is a key strategic priority for NSHA. The establishment of the NSHA People Services program, with leaders and teams dedicated to Health and Safety are key drivers in the pursuit a positive, healthy, safe and productive workplace. Numerous improvement initiatives are underway within the portfolio, including engagement with partners, injury prevention education programs, and process review and redesign.

## 13.1 Vacancy Rate

### Why is it important?

It is important to monitor and report on recruitment trends in order to target Human Resource strategies and talent/recruitment efforts. When positions are vacant, despite recruitment efforts, the system impacts may include higher overtime and sick time, increased workload for the existing employees, delays in processes or services, and overall system inefficiencies.

Our own internal data and various provincial reports, identify recruitment issues for hard to fill positions and difficulty recruiting to some communities as key challenges facing Nova Scotia's health system. It is anticipated that this will become more problematic as a growing number of health care providers retire.

### What is being measured?

This indicator is the job vacancy rate which is the percentage of jobs that are vacant or unfilled at the end of each fiscal quarter, out of all jobs posted in that fiscal quarter.

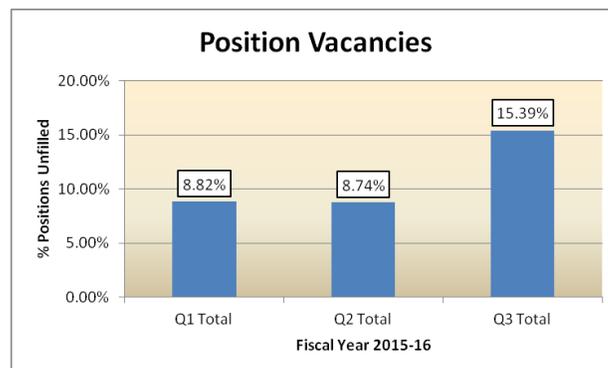
### What do we intend to achieve?

NSHA's goal is to achieve, as quickly as possible, a significantly lower vacancy rate. NSHA's specific, shorter term indicator target for vacancy rate will be set following the 2015-16 baseline year.

### How are we doing?

The vacancy rate of positions posted but not filled within the same fiscal quarter, varied over the first three fiscal quarters in 2015-16. Quarter one and two were consistent, with rates of 8.82% and 8.74%; the third quarter saw an increase to 15.39%. This may be the result of point in time considerations and is being analyzed for purposes of determining whether this is a one-time phenomenon. Historical information is not available for comparison; fiscal year 2015-16 serves as the baseline year for this data.

Current Performance: 15.39% Q3 2015-16  
Previous Performance: 8.74% Q2 2015-16



### What are we doing about this?

- Continuing to coordinate a centralized process for hiring new RN grads in order to meet NSHA demand;
- Developing and implementing specialized recruitment campaigns to fill critical hard-to-fill positions;
- Working, in conjunction with Work Force Analytics and clinical managers/directors, to predict potential vacancies, and implement pro-active strategies to deal with these predicted shortages;
- Attending job fairs to recruit graduates for nursing, health professionals, and specialty areas;
- Developing and implementing a recruitment-related social media presence to attract passive millennial job seekers;
- Implementing Success Factors (a technology solution), in tandem with the Provincial Government, and the School Board Sector, that will streamline the internal posting, external advertising, and administration of the hiring process;
- Standardizing all the hiring policies and procedures for NSHA, in order to increase administrative efficiency and ensure consistent candidate quality; and
- Continuing to support outreach to African Nova Scotian and Aboriginal high school students, in order to encourage them to consider professional health careers.

## 14.1 Chronic Disease Burden

### Why is it important?

Nova Scotia has some of the highest rates of chronic disease in the country, and also scores low on many of the social determinants of health, compounding an already poor provincial health profile, and highlighting the need for effective chronic disease management and primary prevention efforts. Evidence supports the assertion that high rates of chronic disease, coupled with poor chronic disease management, can lead to negative health outcomes and high health care costs. There is also a body of evidence to suggest that both of these outcomes are, for the most part, preventable.

### What is being measured?

This indicator is a measure of the percentage of a population who self-reported on the Canadian Community Health Survey (CCHS) that they have been diagnosed by a health professional as having five conditions from the following possibilities: Asthma, Arthritis, High Blood Pressure, COPD, Diabetes, Heart Disease, Cancer, Stroke, Dementia, Mood Disorder, or Anxiety.

### What do we intend to achieve?

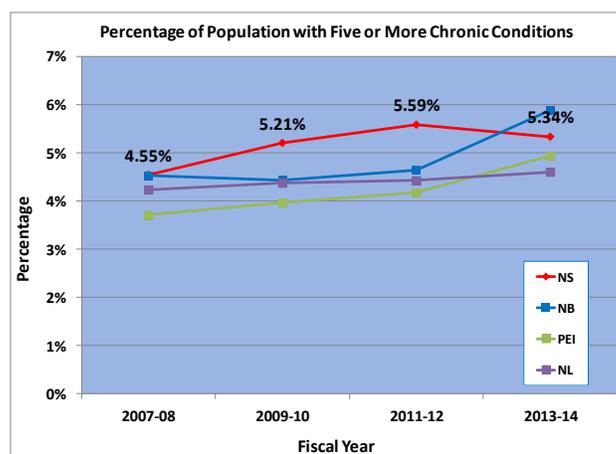
NSHA's three strategic priorities are geared toward the achievement of better health outcomes for Nova Scotians including those which can be impacted by the prevalence of chronic disease. Specifically, NSHA's community care and engagement strategies are focused on identification of and strategies to meet the health needs of communities and engagement with Nova Scotians to build a shared accountability for health and improvement in health status. Reversing the trend on the percentage of Nova Scotians with five or more chronic conditions will take time. Over time, NSHA's goal is to move Nova Scotia to be at the Canada average in relation to this indicator from its current ranking of being second to last in the country. In the shorter term, NSHA has set a target of 5.09% for 2015–16 which represent a continuation of the improvement trend observed since 2011–12.

Current Performance: NA

Previous Performance: 5.34% FY 2013–14

### How are we doing?

Nova Scotia has the second highest percentage of population with five or more chronic conditions compared to the other Atlantic Provinces, and also compared to the national average. However, the percentage of population with five or more chronic conditions decreased in Nova Scotia during the last survey cycle, whereas all other Atlantic Provinces experienced an increase, as did the National average. The next data release for Chronic Disease Burden is anticipated for the fall of 2016. This indicator will be updated at that time.



### What are we doing about this?

Multiple strategies and programs are in place across NSHA to support people living with chronic conditions. With the recent transfer of the provincial programs for Diabetes, Cancer, Renal and Cardiovascular Health, from the Department of Health and Wellness to NSHA, there are further opportunities to better understand the prevalence and most appropriate secondary prevention guidelines. The current planning for a strengthened community based system and NSHA's engagement strategy is aimed, in part, at achieving a coordinated approach to support wellness, prevent or delay the onset of chronic conditions, and best meet the needs of those living with chronic conditions.

## 15.1 Health Human Resources Immunization Rates

### Why is it important?

Immunization is one of the most effective public health interventions available—safe and effective vaccines prevent serious diseases and saves lives. Immunization of health human resources (HHR) decreases their own risk of illness, as well as the risk of death and other serious outcomes among the patients they serve. The National Advisory Committee on Immunization considers the provision of influenza vaccination to be an essential component of the standard of care for all HHRs for the protection of their patients.

### What is being measured?

This indicator is the percentage of health human resources who received the flu vaccine. The vaccine rate takes into account those HHR who received their vaccine through NSHA and by voluntary self-reporting for individuals who obtained the vaccine outside the workplace.

### What do we intend to achieve?

NSHA's target over the longer term would be to have all staff and physicians who do not have contraindications for vaccinations to be immunized. For 2015–16, NSHA has set a target to increase the rate of HHR influenza immunization, to achieve an overall rate of 60%.

### How are we doing?

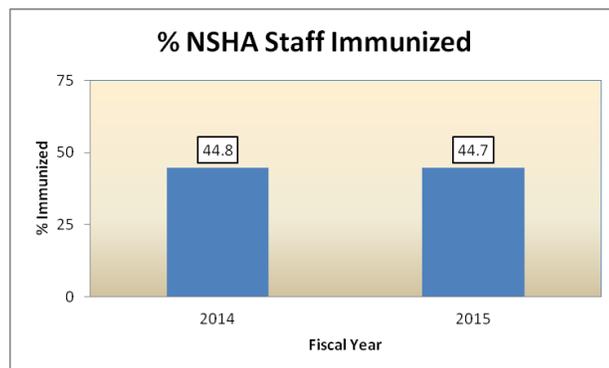
The flu vaccine rate for NSHA health human resources in acute care facilities for 2015–16 was 44.7%. This rate is minimally lower than the previous year's coverage and is also below the target of 60%.

Current Performance: 44.7% 2015–16 flu season  
Previous Performance: 44.8% 2014–15 flu season



These numbers are likely lower than actual since it is not possible to confirm that all vaccinations obtained outside NSHA's vaccination program are recorded. Reasons for low uptake are considered as follows:

- Mild winter
- Decrease in number of reported cases of influenza and serious complications during this season's flu
- Misinformation on the internet and in other media regarding the efficacy and risk of vaccine from previous years



### What are we doing about this?

NSHA in collaboration with IWK and DHW are currently working on a provincial strategy for HHR Influenza Immunization to improve vaccination coverage rates. Within NSHA collaboration among People Services – Health and Safety, Infection Prevention and Control, and Public Health continues with an aim to increase vaccine uptake through numerous initiatives such as: awareness and education campaigns, incentive programs, and leadership role modeling, etc.

## 15.2 Population Influenza Vaccination

### Why is it important?

Influenza is a serious disease that can lead to unnecessary hospitalizations, complications and in severe cases, death. It is also a preventable disease, and vaccination is one major factor influencing prevention. Knowing how many people in a given population have received a vaccination (also called coverage), helps determine if that population is protected from a particular disease. If coverage is high, it is less likely a disease will spread within the population.

### What is being measured?

This indicator is the percentage of Nova Scotians who received an influenza vaccination. It is derived by dividing the number of doses of flu vaccine distributed from Public Health by the population of Nova Scotia.

### What do we intend to achieve?

NSHA is actively engaging with Nova Scotians to talk about health. This includes engaging with the public on the safety and effectiveness of influenza vaccination with a goal to increase vaccine uptake so that all eligible Nova Scotians who do not have a contraindication are vaccinated. NSHA has set a target of increasing vaccination coverage to 43.8% for 2015–16.

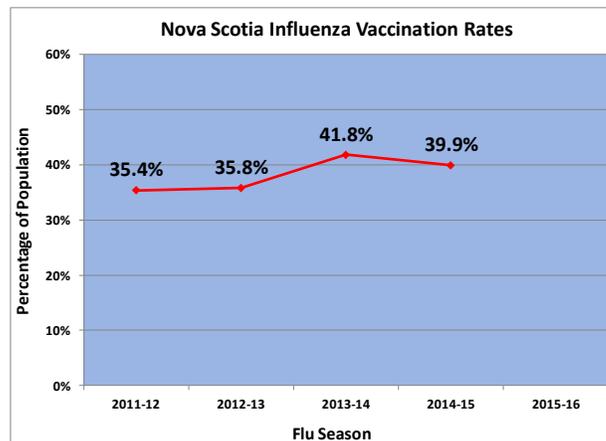
### How are we doing?

Vaccination rates for influenza in Nova Scotia have fluctuated over the course of the past four fiscal years, from a low of 35.4% in FY 2011–12 to a high of 41.8% in FY 2013–14, with a four year average of 38.2%.

The rate for 2015–16 should be available in the second quarter of 2016/17, and this indicator will be updated once that information becomes available.

Current Performance: N/A

Previous Performance: 39.9% 2014–15 flu season



### What are we doing about this?

In the lead up to influenza season in the fall of 2015, Public Health engaged with health system partners, including pharmacies, nursing agencies, and primary care providers to promote and enable influenza vaccination uptake. In addition, NSHA Public Health implemented a coordinated response using a health equity framework, such that Public Health was well positioned to focus on access to influenza vaccine for those individuals who struggle with health inequities. These efforts and opportunities to increase education through public engagement will continue over the coming year.

## 15.3 Meningococcal Group C Vaccination Rate

### Why is it important?

Invasive Meningococcal Disease (IMD) is a serious, potentially deadly disease, but is also preventable, and effective vaccination programs are a key factor in successful prevention strategies. IMD occurs sporadically worldwide and in focal epidemics. In Canada, IMD is endemic and reported year round with peaks in winter. Although people at any age can develop IMD, children younger than 5 are at the greatest risk, followed by people aged 15–19 years and 60 years and up

### What is being measured?

This indicator is the percentage of children in grade seven who receive the meningococcal group C vaccine.

### What do we intend to achieve?

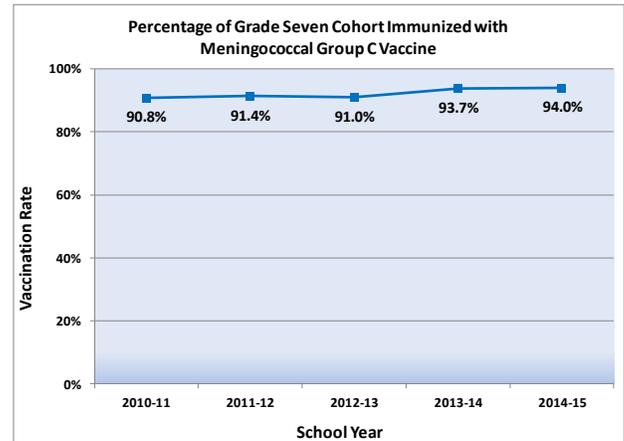
NSHA's aim is to successfully engage with youth, parents and the education sector with a have 100% of all eligible youth be immunized with meningococcal group C conjugate vaccine. NSHA's current target for vaccination coverage is set at 90%, which is in accordance with the national target.

### How are we doing?

The target of 90% vaccination coverage has been consistently achieved since the 2010–11 school year. From 2010–11 to 2012–13 the rate remained fairly stable at approximately 91%. School years 2013–14 and 2014–15 experienced increases up to 93.7% and 94.0% respectively. The rate for 2015–16 will be available at end of the school year.

Current Performance: NA

Previous Performance: 94.0% 2014–15 school year



### What are we doing about this?

Public Health launched the introduction of the quadravalent meningococcal vaccine in September 2015. As meningococcal vaccine is part of the school-based immunization program, we continue to engage schools, parents and youth in the importance of the program to improve uptake of the vaccine. Furthermore, in preparation for the 2015 school year focused education on best practices strategies was provided to Public Health staff.

## 16.1 Client Experience

### Why is it important?

Person-centred, high quality, safe and sustainable health and wellness is at the heart of NSHA. Effective understanding of the experiences of those we serve is necessary in order to achieve this. Client experience data can be used to improve person-centred care, increase safety, use resources more wisely, and ensure we meet the expectations of our client's and their families.

Accreditation Canada requires an assessment of client experience at minimum once every four years.

### What is being measured?

This indicator measures results of client experience surveys completed by a sample population. The questionnaires focus on assessing client experiences or interactions with the health system. Results of two specific questions will be reported. These questions are: 1) Would you recommend the facility/service to your family member or friend? and 2) What number would you use to rate this hospital/service during your stay/service, on a scale of 0-10?

### What do we intend to achieve?

Patient experience and public engagement are priorities for NSHA. NSHA has set a goal to enhance our client's experience of care and engagement in health service decision making. Historically, patient experience related to inpatient stay has been measured. As NSHA moves forward as one entity, the assessment of patient experience will be expanded to include additional programs and services. NSHA has set a performance target of 90% for client experience in two highest ranking on the client experience scale.

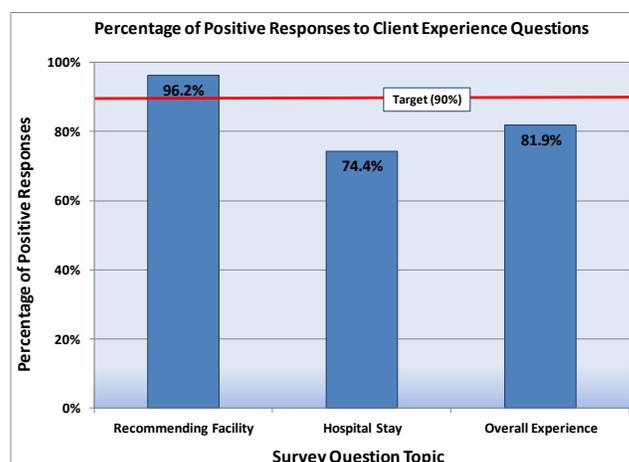
### How are we doing?

Historical data reveals that the majority (96.2%) of patients who complete an inpatient stay at one of the facilities in NSHA would recommend that facility to friends and family upon discharge. 74.4% rate their stay as positive on a

Current Performance: n/a  
Previous Performance: 81.9%

scale of 1 to 10. The overall client experience is created by combining these two questions which produces a positive response rate of 81.9%. This falls below the target of 90%.

The next result for this measure will be available in quarter four fiscal 2016-17, when the next client experience survey is conducted for Accreditation purposes.



### What are we doing about this?

NSHA is preparing to do the first NSHA-wide client / patient experience surveys, which will supply baseline data for these indicators and provide guidance on areas to improve upon.

Improvement work already underway includes: implementing a coordinated approach to patient and family centred care planning; conducting information sessions across NSHA which focus on approaches to engaging patients/clients and families in their care; and the development of a *Guide to Effective Engagement* which outlines the strategic positioning and practical tools for effective and meaningful engagement initiatives in NSHA.

## 17.1 Budget Variance

### Why is it important?

It is important to show how NSHA is performing financially compared to approved targets. It is a financial measure to ensure accountability towards our responsibility to deliver high quality health services with a focus on fiscal responsibility and sustainability. It is also a tool to ensure NSHA is meeting its legislative requirements for achieving a balanced budget each fiscal year.

### What is being measured?

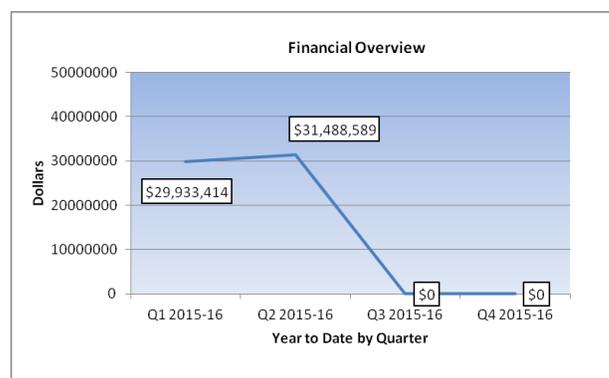
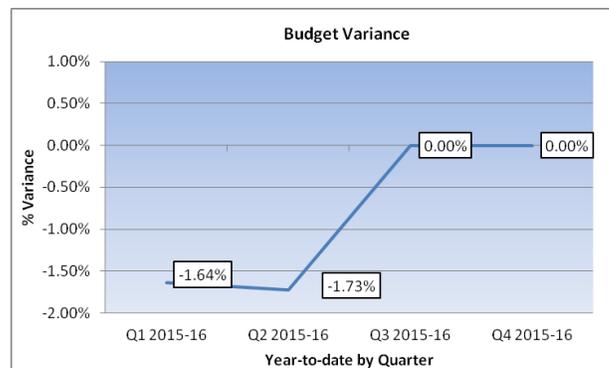
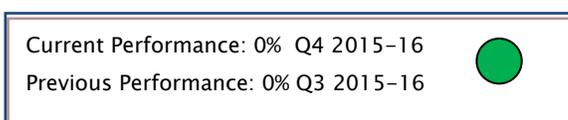
This indicator measures the amount by which total actual expenses are greater or less than NSHA's approved operational budget.  $\text{Budget Variance} = \frac{\text{Total Surplus/Deficit}}{\text{Total Operating Budget}} \times 100$ .

### What do we intend to achieve?

Through monthly forecasting and reporting measures and indicators, this reporting assists NSHA leaders in identifying areas and issues experiencing financial performance issues and opportunities. This information is then used to support leaders in determining solutions to address challenges and leverage opportunities, within their approved budget envelopes. NSHA has set an overall target for a budget variance of 0%.

### How are we doing?

NSHA achieved a balanced budget (variance of 0%) for fiscal 2015-16. Through extensive engagement and focus on financial management, NSHA leaders were provided with the financial support and analysis to help manage their budgets. There was some fluctuation by quarter and by service areas, but as the year proceeded and teams worked together, the organization was able to achieve an overall balance and 0% budget variance.



### What are we doing about this?

NSHA finished the fiscal 2015/16 year in a balanced position. On a go forward, a balanced 2016/17 business plan has been presented to the Department of Health and Wellness. Progress will be monitored through the forecasting process.

## 18.1 Accumulated Depreciation to Fixed Assets Ratio

### Why is it important?

It is important to show that we have the proper functioning physical assets (medical equipment & facilities) to support our patient care services. The accumulated depreciation to fixed assets ratio allows us to understand if NSHA is securing/allocating sufficient funds to replace aging infrastructure. Accumulated depreciation is a measure of age and useful life of an asset. Therefore, low ratios are desirable, as that generally means our assets are newer and not in need of replacement. Conversely, a higher ratio would mean our assets are aging faster than the organization can maintain or replace them. Other reasons the ratio may grow over time include:

- The organization's fixed assets have relatively long lives. For example, infrastructure investments may be in service for decades before needing replacement.
- The organization takes an aggressive approach to depreciation, expensing asset costs over the shortest timeframes possible, resulting in a rapid rise in accumulated depreciation relative to the age of the assets.

### What is being measured?

This indicator is a measure of the accumulated depreciation to fixed assets ratio. The measure provides overall assurance that medical equipment and facilities are in a stable risk free condition to ensure safe delivery of health care services.

### What do we intend to achieve?

The goal with this indicator is to assist with monitoring NSHA's efforts to implement a comprehensive, rigorous, evidence informed capital planning and asset management strategy to stay ahead of aging infrastructure. This approach includes collaboration with key partners, leveraging new funding sources, and enhancing asset management processes.

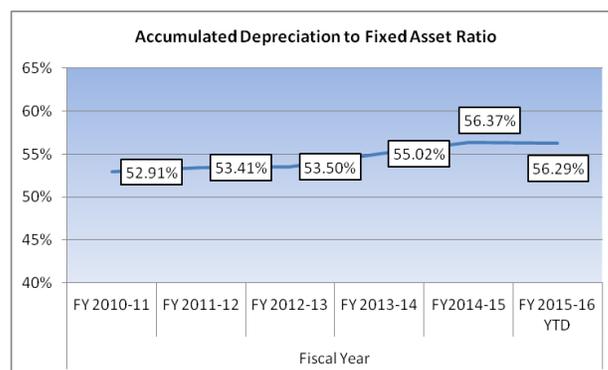
NSHA aims to manage resources and allocate funding such that the accumulated depreciation to fixed assets ratio is 50%.

Current Performance: 56.29% FY 2015-16 YTD  
Previous Performance: 56.37% FY 2014-15



### How are we doing?

Evidence shows that the NSHA physical infrastructure is aging for both our facilities and medical equipment. Over the past five fiscal years the accumulated depreciation to fixed asset ratio rose from 52.91% (2010-11) to 56.37% (2015-16). Year to date results for 2015-16 show a ratio of 56.29%, which is above the 50% target.



### What are we doing about this?

A new Capital Planning Prioritization process was launched in fiscal 2015-16 in conjunction with IWK. This process will identify key priorities to inform conversations with funding partners and stakeholders. More importantly, NSHA is launching a new five year planning process for Capital Priorities in fiscal 2016-17. This is the first time government has agreed to work with the health system on a multi-year planning approach, the goal of which is to leverage greater multi-year planning and buying strategies to achieve both greater breadth of asset issues addressed, and in a more efficient bulk purchase strategy spread over several years.

## 19.1 Administrative Ratio

### Why is it important?

The administrative ratio indicator provides insight in the distribution of funding among administrative areas as compared to clinical care, health and health service delivery. When the ratio is high, a larger portion of funding is consumed by administrative areas such as finance, leadership, human resources and communications. Monitoring this indicator over time provides insight into how resources are being directed to care vs. administration, and are they achieving the balance for both to operate effectively.

### What is being measured?

This indicator is produced by the Canadian Institute of Health Information (CIHI) and measures a legal entity's administrative expenses net of recoveries (including expenses for administration, finance, human resources and communications) divided by the total expenses net of recoveries. There is no agreed upon national target for this indicator however a lower ratio is desired.

### What do we intend to achieve?

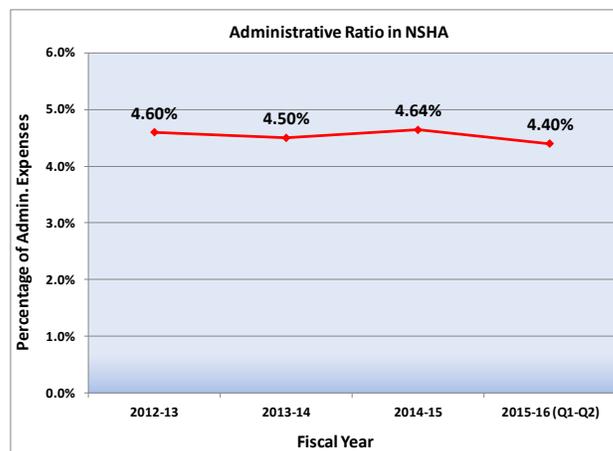
NSHA aims to ensure the administrative ratio is appropriate and responsible for the effective and efficient operations of the entire NSHA, care and administrative support. By employing a multifaceted approach to business planning, budget re-allocation and process redesign, NSHA leadership will ensure care services are resourced within approved budgets in the most efficient manner possible, while ensuring the administration is lean but responsive to supporting all care services. Taking into account the variations in ratios seen across Canada (e.g., Alberta 3.4%, New Brunswick 3.6%, Ontario 5.8%, Yukon 8.1%, etc.) and NSHA's historical ratios, the 2015-16 target is set at 4.58%.

### How are we doing?

A review of the historical rates for the last three fiscal years shows an overall increase of 0.04%, with a decrease from 2012-13 to 2013-14 and a subsequent increase from 2013-14 to 2014-15. All of the comparator provinces, except the Northwest Territories have experienced continuous decreases in their administrative ratios over the course of the past three years.

The 2015-16 year to date results show a ratio of 4.40% which is a desirable result compared to the 2014-15 fiscal year and the 2015-16 target of 4.58%.

Current Performance: 4.40% 2015-16 YTD  
Previous Performance: 4.64% FY 2014-15



### What are we doing about this?

NSHA continues to ensure the administrative ratio and costs inform the business planning and budget processes. Cost reduction strategies are focused firstly in administrative programs. The administrative ratio is measured and presented annually with the public release of our business plan. As NSHA's business planning process evolves to leverage evidence-based best practice, the planning cycle will adopt a process to redirect or realign existing budget based on these best practices. This process directed by principles and evidence will result in significant redirection of budget from administrative to clinical programs.

## 20.1 Research Projects with Interdisciplinary Involvement

### Why is it important?

When a research project involves an interdisciplinary team, the study findings tend to be applicable across multiple disciplines. As a result, the study findings are often more easily translated into practice, and the lag time associated with implementing research findings is greatly decreased. This means applying research into practice and the related improvement in health service delivery can happen more quickly.

### What is being measured?

This indicator represents the percentage of approved interdisciplinary research projects. 2016–17 represents the first year of measurement for this indicator and will serve as the baseline measure for NSHA.

### What do we intend to achieve?

NSHA has a goal of enhancing the quality of health services in Nova Scotia (and abroad) by focusing on, and increasing, interdisciplinary research participation. 2016–17 is the first year that this information will be collected, and as such will serve as the baseline year. 2016–17 data will be used to create informed targets for future years.

### How are we doing?

There is no data to report at this time.

Current Performance: N/A

Previous Performance: N/A

### What are we doing about this?

To encourage enhanced interdisciplinary collaboration on research programs, the Research Services Education Program is interdisciplinary in all training and education provided. *Translating Research into Care (TRIC)* grants (for the QE11 site only) now require interdisciplinary team involvement in order to qualify. Research Facilitators, representing diverse educational and professional backgrounds have been hired in Western, Eastern and Northern Zone.

## 21.1 Research Funds Attracted

### Why is it important?

The field of health services research is highly competitive, and the ability to attract and retain top quality researchers relies in part, on an organization's ability to obtain large, multi-year funding opportunities. Further, high quality, patient-oriented research programs are very expensive to establish and operate. Even with regular operating budgets from an organization, these programs are highly dependent on external funding to ensure success in this highly competitive area.

### What is being measured?

This indicator measures the total dollar value of research awards secured.

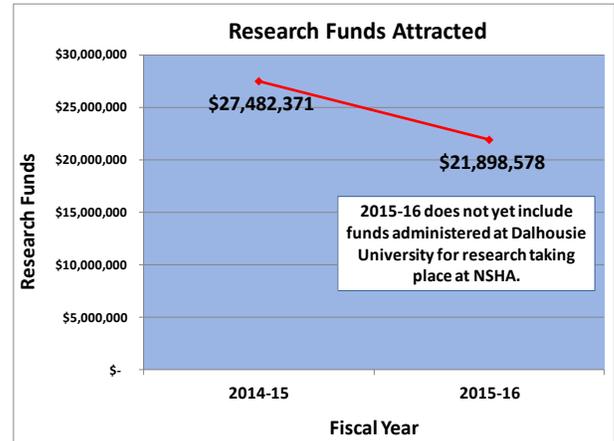
### What do we intend to achieve?

NSHA is committed to improving the delivery of quality health services by increasing province-wide, patient-oriented, outcomes-based research, with an emphasis placed on interdisciplinary research. NSHA has set a target to increase the total dollar value by 1% per year.

### How are we doing?

The baseline is the 2014-15 fiscal year when research funds totaled just under \$27.5 million. The tally so far for 2015-16 is just under \$22 million but this does not yet include funds administered at Dalhousie University for research taking place at NSHA. This information will be available by early July.

Current Performance: \$21.9 million FY 2015-16 YTD  
Previous Performance: \$27.5 million FY 2014-15



### What are we doing about this?

NSHA Research Service has expanded across the four NSHA zones, including the addition of Research Facilitators in Western, Northern and Eastern zones, to promote and support research throughout NSHA. Research Services is working with the IWK and Dalhousie to improve grant capture for health research. The Research Fund has been expanded to include all of NSHA; these awards will provide impetus for research to happen in all four zones.