



CODE CRITICAL

*A review of the Growing Problem of Overcrowding at the QEII through
the eyes of the staff who work there.*

March 2017

CODE CRITICAL

TABLE OF CONTENTS

NSGEU REVIEW OF CODE CENSUS	1
CODE CENSUS.....	1
TAB 1 CDHA CODE CENSUS POLICY.....	1
A BLIND EYE.....	3
TIME FOR A NEW APPROACH.....	3
TAB 2 CODE CENSUS CALLS – YEARLY AND MONTHLY TOTALS 2010 TO 2017	2
ACCOUNTABILITY.....	3
TAB 3 HOSPITAL OVERCROWDING IS - Xpress - LAMBIE - MAR 9 2017	3
TAB 4 NSGEU FEB 15 NSHA FOIPOP	4
TAB 5 EMERGINDICATORS_DGH_CCHCJAN2017	4
TAB 6 QEII EMERGENCY DEPARTMENT VISITS	4
TAB 7 DHW EHS EMAIL CORRESPONDENCE	4
RECORD NUMBERS OF PATIENTS.....	5
A KEY STATISTIC.....	6
TAB 8 SIR OCTOBER 2016.....	7
THE AMBULANCE PROBLEM.....	7
TAB 9 MONTHLY DHW REPORT VOL-LOS-BLOS-AHA JAN 2017	8
PATIENT SAFETY	8
AT CAPACITY EVERYWHERE.....	9
THE VETERANS’ MEMORIAL BUILDING	10
TAB 10 NORWEGIAN WAR HERO – CBC – GORMAN – JUNE 24 2016.....	10
TAB 11 FUTURE UNCERTAIN - CTV - MARCH 13 2015	10
THE PEI PROBLEM.....	11
COBEQUID PATIENTS	12
TAB 12 COBEQUID TRANSFERS AT CLOSE SUMMARY	12
HI ED, A CLOSER LOOK	13
CONCLUSION	15
SUMMARY OF RECOMMENDATIONS	16

NSGEU Review of Code Census At the Halifax Infirmary Emergency Department (HI ED)

On January 31, 2017, NSGEU was informed by its members that Code Census was leading to the placement of patients in hallways and family rooms at the Halifax Infirmary. Furthermore, it was leading to double and triple-booking patients in rooms designed and equipped for one or two patients.

In one instance, two patients were placed in a private room separated by a sheet of brown paper.

Nurses and health care workers raised concerns with the Union because they believed what was happening was unsafe for patients.

NSGEU President Jason MacLean announced the Union would conduct a review of the issues being raised by its members in order to better understand the problem and to find out whether NSGEU members who work as staff at the Halifax Infirmary had suggestions that might help address the issue.

In the days that followed, the NSGEU sought further information from the Nova Scotia Health Authority (NSHA) and NSGEU members who are on staff at the hospital. Although the NSHA has limited data available to the public on-line, it helpfully supplied information in response to questions from NSGEU researcher Brandon Rose. In addition, the NSHA continues to pursue information for the Union in response to a Freedom of Information request made by the Union.

NSGEU members who serve as staff at the Halifax Infirmary, including the Emergency Department and other services, met with NSGEU staff, legal counsel and First Vice-President Sandra Mullen on Friday, February 10. Members met again with NSGEU staff on February 27.

It is clear from these meetings and discussions that Code Census calls are the result of serious capacity shortages not just at the QEII and the HI ED, but at hospitals across the province. Nothing short of the provincial government making overcrowding a priority and providing the necessary funding will truly alleviate the problems.

This review looks at the issue through the eyes of the people on the front-lines of healthcare. The recommendations are theirs. These are reasonable suggestions for changes within the existing system that employees believe will help make the problem more manageable and make their patients safer.

Code Census

The current Code Census protocol originated with a decision made by an Emergency Department doctor eight years ago. In January of 2009 there was severe overcrowding at the Halifax Infirmary Emergency Department. Sixteen patients were in the ED awaiting a hospital bed. Some had been there for 24 hours.

Emergency Department Doctor John Ross called a Code Orange, an unusual alert reserved for potential mass casualty events like airplane or bus crashes. Code Orange forced staff on in-patient floors to find room to accept patients from the Emergency Department in order to reduce the overcrowding.

Following the Code Orange call, hospital administrators recognized the need to create a process that would allow the same urgent clearing of the Emergency Department in the event it ever became so overcrowded again.

Instead of the mass casualty alert, they created a new alert which they called Code Census. Code Census allows ED staff to alleviate pressure when there is over-crowding by forcing units throughout the hospital to accept patients from the ED. The warning tells in-patient floors to prepare for ED patients by, among other things, preparing appropriate patients for discharge (See Code Census Policy, Tab 1).

When Code Census is called, in-patient units must prepare to receive one or more patients from the ED. ED patients waiting for an inpatient bed may be moved to the appropriate in-patient floors within 30 minutes of a Code Census call. According to hospital policy, in-patient floors cannot refuse an ED patient sent while the hospital is in Code Census.

A Blind Eye

The Code Census policy was designed to deal with overcrowding in the Halifax Infirmary ED. Staff in both the ED and on in-patient floors did not dispute the need for Code Census to help deal with this chronic problem.

But staff point out that Code Census simply moves overcrowding from the Emergency Department to in-patient floors.

Moreover, for many years hospital administrators seemed satisfied with shifting the problem of overcrowding within the hospital.

The Code Census policy and procedure for the NSHA has a section entitled Expected Outcomes. That section focuses solely on the impact of Code Census on the Emergency Department. The policy makes no mention of what happens on in-patient floors when a Code Census is called.

The policy states that in-patient nursing units and support departments “are to have a plan in place to respond to Code Census.” But it gives no direction for the creation of that plan. For example:

The policy fails to establish a process that would give consideration for increased staffing for in-patient floors that are being forced into over-capacity.

The policy fails to identify appropriate locations for patients being rushed up from the Emergency Department. It could be that administrators wanted to avoid issuing written directives to inpatient floors to place patients in hallways, family waiting rooms and other locations that could be unsafe.

The NSHA Code Census policy has, effectively, turned a blind eye to the impact of Code Census on in-patient floors.

Recommendation #1; the current Code Census policy must be reviewed and updated to consider impacts on in-patient floors including detailing when more staffing is required and where patients should be placed and how they should be cared for.

Time for a New Approach

Increases in Emergency Department visits and ongoing capacity issues at the Halifax Infirmary and other hospitals across the province have led to Code Census becoming routine. Staff told us Code Census is so routine in 2017 that it almost feels unusual to have a day when it is not called.

The time of year affects the number of calls, but the number of calls has risen steadily and reached its highest monthly total in January of 2017. Currently, there is no publicly reported and up-to-date measure of the frequency of Code Census calls at the HI ED. Emergency Department and in-patient floor staff describe Code Census as the norm in 2017.

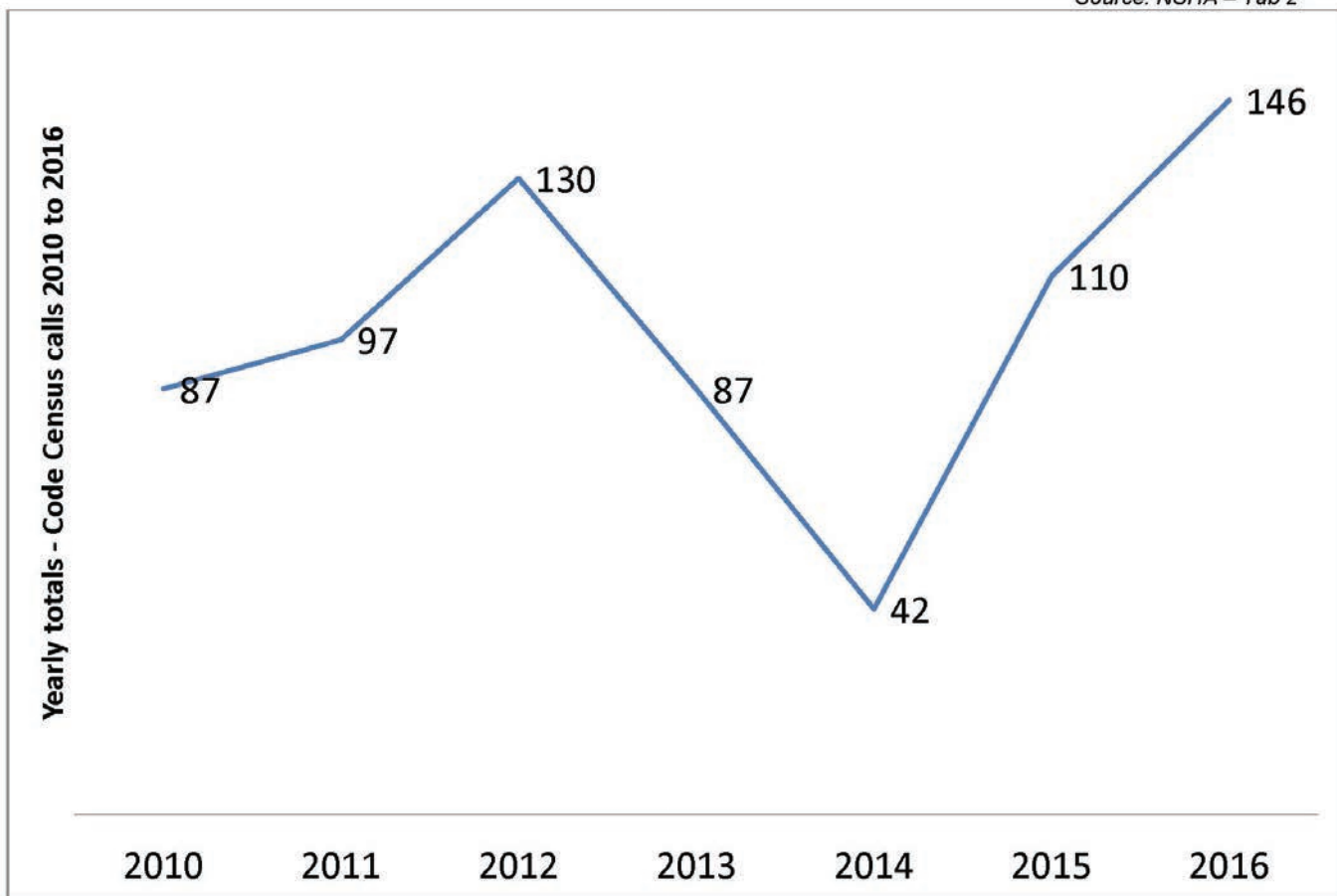
Hospital administrators and staff report that it is sometimes called twice a day. And that is despite the fact that Code Census cannot be called between the hours of 7pm and 7am according to the policy.

“Code Census is pretty much being called every single day,” one ED nurse told us. She said it is not uncommon to have it called five out of seven days in a week.

Data released by the NSHA to the Union through Freedom of Information (FOIPOP) support that claim.

That data shows Code Census calls have increased since 2010 and reached record high numbers in 2016.

In 2010 there were 87 Code Census calls at the Halifax Infirmary Emergency Department. In 2016, that number grew to 146 (Tab 2).



The HI ED saw a record 23 Code Census calls in just 31 days in January 2017. In February there were 16 more calls, the second-worst February in seven years (2017 is not yet reflected on the chart above, but if January and February of 2017 are any indication, 2017 looks to be the worst year yet).

Interestingly, the data released by NSHA shows the frequency of Code Census calls at the Dartmouth General Emergency Department is even higher. For example, Code Census was called at the Dartmouth General 56 times between October and December of 2016 alone. This shows that overcrowding is affecting more than just the Halifax Infirmary.

In its discussions with the administration and staff, NSGEU concluded there is a genuine desire among all involved to address the growing overcrowding problem at the Halifax Infirmary. Simply put, the problem stems from continued growing demands on a system that has no capacity to handle the increase.

Accountability

Accountability comes in many forms. Public accountability will cause politicians, and by extension bureaucrats and administrators, to act. Dr. Ross's decision to call a Code Orange did just that in 2009. According to hospital staff, it is time to call Code Orange on Code Census.

"Without an accountability framework, there is little hope for a high-functioning system," Dr. Grant Innes, department of emergency medicine, University of Calgary writing in the Canadian Journal of Emergency Medicine.

"They have no reason to improve their efficiency or anything because they've removed any pressure that tells them how far behind they are," Dr. Sam Campbell, Local Xpress, February 2017 (Tab 3).

NSGEU was able to locate very little publicly-reported information about overcrowding in the Halifax Infirmary Emergency Department and on in-patient floors. The data that is publicly available is no longer being updated by NSHA.

Historical data has either been removed from NSHA websites or was placed behind a password protected area of the site.

For example, the former CDHA used to publish a document on its website outlining important indicators on wait times and patient safety. It stopped doing that in 2016.

NSHA and the Department of Health do not publicly report ongoing and up-to-date data on any of the following:

- How often Code Census is called at the Halifax Infirmary;
- How many patients are in Halifax Infirmary beds awaiting placement in Alternative Level Care (ALC) and Long Term Care (LTC) facilities;
- How many people show up for treatment at the Halifax Infirmary Emergency Department and whether or not that number is increasing;
- How many available beds are there at the Halifax Infirmary and Victoria General;
- How often in-patient floors are operating above capacity and where those patients are kept (ie, in hallways, family waiting rooms or over-capacity in private and semi-private rooms) and
- How often and for how long ambulances wait at the Emergency Department to offload patients because of overcrowding in the ED.

When NSGEU researcher Brandon Rose asked for this information from the NSHA, the NSHA confirmed it was not publicly reported. As a result, NSGEU had to make a Freedom of Information request (Tab 4).

"[NSHA officials] are not aware of any other place that the numbers are publicly accessible.

In terms of the code census numbers, the information is not a report that is pulled and posted to any site. The data is pulled manually (upon request) but not in a report that is pulled regularly," wrote the NSHA Freedom of Information Officer.

The NSGEU has requested this data by month going back to 2009 in order to determine the extent of the overcrowding and whether it is getting worse. NSHA has partially responded to that request, as mentioned earlier in this report, and that data is included in this report (Tab 5).

To its credit, the NSHA also responded quickly to the Union by providing other important information outside of the FOIPOP process. Emergency Department Monthly Visit data (see Tabs 5 and 6) provided by the NSHA supports staff claims about the increase in ED visits. By almost any measure the numbers show increases beyond the natural fluctuations that occur with the time of year. Data from the information supplied by NSHA is discussed in the next section of this report.

NSHA also referred the Union to the former Capital District Health Authority website, now the Central Zone Health Authority website. As mentioned above, that site used to contain a useful report entitled Central Zone's Strategic Indicator's report. NSHA informed the Union it stopped producing that report in October of 2016.

Emergency Medical Care Inc (EMC) is a privately-owned company "that manages and operates ground ambulance, medical communications centre and air medical transport operations in Nova Scotia," according to its website.

When the NSGEU's Brandon Rose contacted the Department of Health and Wellness in order to obtain EMC Data on Ambulance wait times, he was informed his request would require Research Ethics Board approval. *"If this is a research project that will eventually become publicly accessible data, or require access to patient identifiable data, then approval in writing must be obtained from the Ethics Board before we can proceed with this request,"* Mr. Rose was informed (Tab 7).

The data requested does not contain patient identifiable information and was made publicly available in previous years.

While NSGEU's report was being completed, Nova Scotia's Auditor General raised concerns about a lack of accountability regarding NSHA on February 22, 2017.

"The Nova Scotia Health Authority completed two (29%) of the seven recommendations from our audit of surgical waitlist and operating room utilization," the Auditor General wrote. "Important recommendations, such as setting specific targets for short-term surgery wait times and publicly reporting against those targets, are not complete." (emphasis added)

Cancelled surgeries can be directly related to overcrowding on in-patient floors. Some elective surgeries cannot proceed when Intensive Care Units (ICUs), Intermediate Intensive Care Units (IMCUs) and floors are over capacity. Again, NSHA does not publicly report data on surgeries cancelled or delayed as a result of over-capacity and code census.

Failing to publish regularly updated statistics hides a serious overcrowding problem at the Halifax Infirmary. It also means there is no public accountability for NSHA and the provincial government. Without accountability, this problem will not be solved.

Recommendation #2; publish on-line and update weekly the following key statistics in order to develop a system of public accountability for Code Census and hallway medicine:

- 1. How many times Code Census is called.**
- 2. How many patients were placed above census on in-patient floors and where those patients were kept (ie, in hallways, family waiting rooms or over-capacity in private and semi-private rooms).**
- 3. How many ALC and LTC patients are in Halifax Infirmary beds awaiting placement.**
- 4. How many people show up for treatment at the Halifax Infirmary ED on a daily basis.**
- 5. How often and for how long do ambulances wait at the Emergency Department to offload patients because of overcrowding in the ED.**
- 6. How many surgeries are cancelled monthly?**

Data like this is commonly published in other provinces. Some of this information used to be published by the NSHA. Should DHW and NSHA not voluntarily agree to routinely report this data on a public website, NSGEU will file monthly Freedom of Information requests and report the information on its own website.

Record Numbers of Patients at the Emergency Department

The NSGEU was able to obtain important facts and anecdotal information from the NSHA, hospital administrators and NSGEU members. This information gives a clear picture of a serious and growing problem caused by a substantial increase in the number of daily visitors to the HI Emergency Department.

Clearly, the winter flu season impacts the number of ED visits each year. But all involved say that is not the real problem. The real problem is that more people than ever before are going to the Halifax Infirmary ED throughout the year and those people are requiring more attention because of the complexity of their cases. As Dr. Campbell said in 2015, an increase in the volume of older, sicker patients is reversing any progress made following the 2009 Code Orange changes (See tab 3).

In February, hospital administrators reported to the Union that the flu season hadn't yet hit in force. The already high number of ED visitors is going to spike even higher if and when the winter flu hits the city. Administrators told us they are worried about what they will do when this happens.

To truly measure the growth in HI ED visits, the Union obtained HI ED statistics from 2009. That data allowed us to establish a baseline in the year in which Dr. Ross called a Code Orange. We were then able to measure how a bad problem has gotten much worse.

The data paints an alarming picture of steady year-over-year increases in patients who show up at the HI ED.

The totals show there were almost 14,000 more patients showing up at the HI ED last year than there were in fiscal 2008-09.

That's a 23 per cent increase in HI ED patients since the original Code Orange call.

And the problem is getting worse. Statistics for 2016-2017 are not yet complete, but the HI ED is on pace for another record year of patient visits. August, October and January of this fiscal year were the worst three months ever recorded with about 6,500 patient visits each month.

HI ED Visits by Fiscal Year

Source: NSGEU members and NSHA

Fiscal Year	Total Patients
2008-09	58,851
2009-10	60,508
2010-11	63,204
2011-12	Unable to obtain data
2012-13	69,195
2013-14	70,617
2014-15	72,336
2015-16	72,388
2016-17	62,464*

**with February & March 2017 not yet reported*

The average number of patients showing up each day at the HI ED has grown from 161 to 204 in the last eight years. In January of this year the average jumped to 221 patients per day.

That's the average. Administrators say the Emergency Department often has more than 240 visits per day. Staff told the NSGEU the same thing. They say they are routinely getting 250 patients a day.

Data obtained by the NSGEU shows that in 2016-2017 the HI ED had its busiest October, December and January ever.

Staff could only speculate about why the numbers continue to rise. Nova Scotia's aging population, poor provincial health standards, a population increase in the downtown core and in the catchment area for the ED were some of the reasons cited. But staff did not know for certain why this was happening or whether the trend would continue.

But it's not just the numbers, it's also the condition of the patients. Staff say the patients visiting the ED are sicker and are more complex than in the past.

A Key Statistic

Of course, record numbers of patients at the HI ED and limited capacity there and on in-patient floors mean record wait times. In 2016, an average of 161 patients per month waited more than 24 hours in the HI ED, according to data obtained by NSGEU. It is not uncommon for people to wait over 100 hours between registration to discharge or being transferred to floor, according to staff.

One of the most relevant and compelling statistics uncovered during the research for this report was in the NSHA's

Central Zone’s Strategic Indicators Report which was last published in October 2016 (Tab 8).

The report identified ED wait times from triage to admission to an in-patient unit as “...the most important surrogate indicator for quality in the ED and as a surrogate marker for overall hospital functioning.”

The NSHA, in its own report, goes on to say exactly what members who staff the ED, operating rooms and in-patient floors told us:

“Patients waiting in the ED for admissions to an inpatient unit increase the overall ED wait times, the percentage of patients leaving the ED without being seen, and ambulance offload intervals, and are also associated with increased adverse events, mortality, inpatient lengths of stay, and overall costs,” wrote the NSHA.

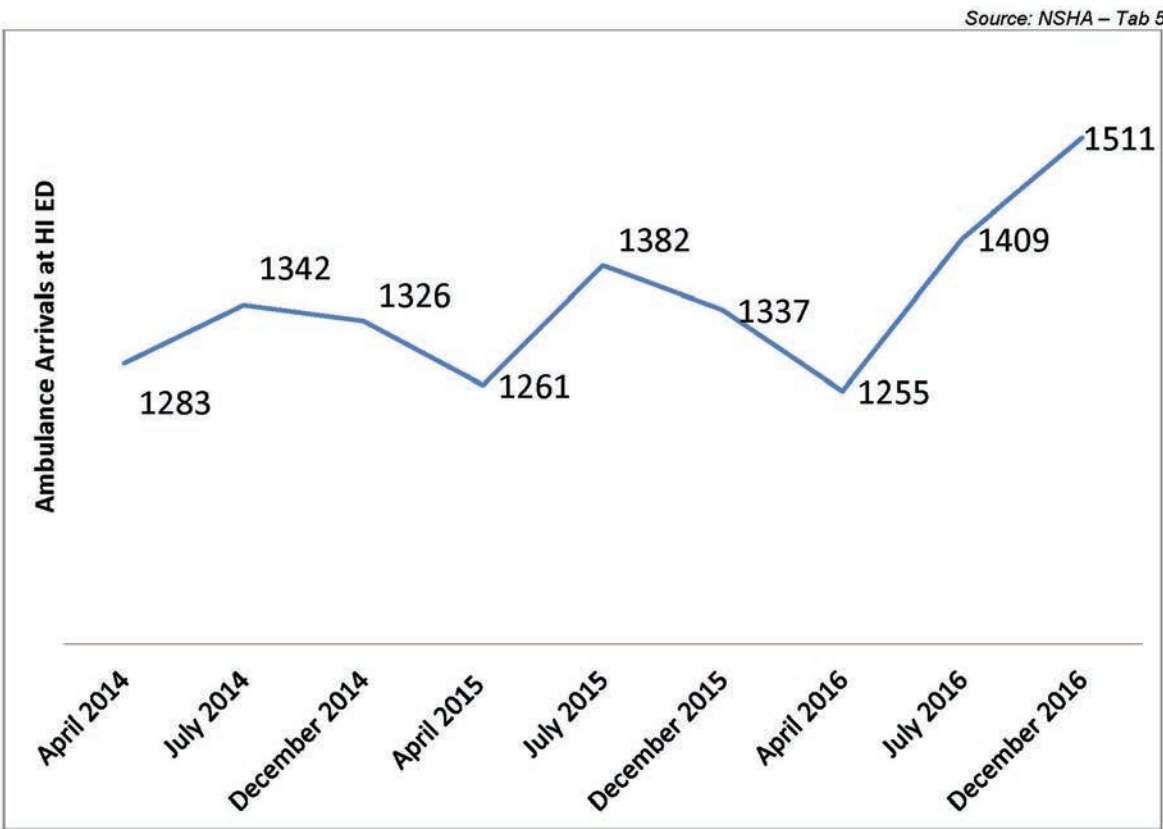
So how is the Halifax Infirmary doing? It is failing.

From September 2014 to August 2016 the wait times from triage to admission at the HI ED were almost always at least three times and occasionally four times higher than the NSHA’s own eight-hour target.

Ninety per cent of those patients who require admission to an area such as an in-patient floor wait more than a day from the time they are triaged to the time they are admitted, according to the data. And, according to staff, some are never admitted due to overcrowding on in-patient floors. Instead they spend their whole treatment time in the HI ED.

NSHA’s target for the time between triage at the HI ED and seeing a physician is 30 minutes. The actual wait time is often more than five times the target (CTAS Level 3 - see Tab 8, SIR pg. 20).

The Ambulance Problem



The number of ambulance arrivals at the HI ED has steadily increased since 2014. In December of 2016 there were 1,511 ambulance arrivals at the HI ED. That was the highest number of any month in the previous two years.

In a 2015 Metro article, Dr. Campbell reported that on March 2 “...there were 12 ambulances waiting to off-load patients (with) nowhere to put them.”

NSGEU Emergency Department staff told us it was common to have multiple ambulances waiting while paramedics stayed in the Emergency Department hallway with their patients. One nurse reported a recent incident where there were 14 ambulances backed up while paramedics waited with patients.

When ambulances are waiting to offload patients at the ED, ambulance coverage around the Halifax Regional Municipality suffers. Ambulances are sometimes pulled from around the province to cover for Halifax. Sometimes ambulances which have transported patients from Cape Breton to the QEII are required to stay and provide coverage in Halifax because so many ambulances are waiting at the HI ED.

The number of ambulances backed up is one serious concern. The length of time ambulances are backed up is another. Sometimes so many ambulances are lined up waiting that paramedics will double-up patients so that one ambulance can leave for another call.

The NSGEU was able to obtain ambulance discharge times for the HI ED from January 2016 to January 2017 (Tab 9).

The Union was required to FOIPOP historical data on ambulance discharge times. We have not yet received that data, so cannot determine whether the problem is getting worse. However, it only stands to reason that like Code Census calls and HI ED visits, ambulance discharge times are likely considerably worse than previous years.

A key statistic is called “the 90th percentile”, that is the time that 90 per cent of the ambulances who attended at the HI ED had to wait to offload a patient.

During December of 2016, 90 per cent of ambulances who took patients to the HI ED had to wait almost three hours before they could discharge their patients. Some waited much longer. January of this was significantly worse, but the final data is not in yet.

This information is consistent with what we learned in conversations with staff and administrators. In early February, the ED had a “good day” where ambulances were only held up for 57 minutes according to administrators. But the daily average ambulance off-load wait at the HI ED in the month of January was often between “6.5 to 8 hour”, according to administrators.

The information the NSGEU has gathered shows that the Halifax Infirmary Emergency Department is routinely unable to meet the health care demands placed on it. The only response to date has been to shift those demands from the ED to overburdened in-patient floors where staff are forced to place patients in hallways and family waiting rooms.

Recommendation #3; The Department of Health and Wellness should immediately conduct a study to determine the reasons why there is such large increase in the number of patients showing up at the HI ED since 2009. That study should determine if the number of visits will stay at the new high level of 240-250 patients per day, if they will decline or if they will increase. This information is critical if the NSHA is to plan for future demands on the system.

Recommendation #4; The NSHA should publish updated triage to admission wait times on its website and report each month on steps it is taking to reduce those times in order to meet its stated goal of eight-hours.

Patient Safety

From our discussions with NSGEU Health Care and Nursing members, it is clear that patient safety is their primary concern and the reason why they spoke out about the overcrowding and hallway medicine brought on by Code Census calls.

“We had to put a patient in a family waiting room for the evening. We gave the patient a cell phone and our number and said call us if there are any concerns. The patient had to use a public washroom, and there’s no oxygen or suction,” said one registered nurse at an inpatient floor at the Halifax Infirmary.

Staff are concerned that hallways do not provide oxygen or suction for patients who are ill enough to require hospitalization. As well, private and semi-private rooms don’t have enough call bells or specialized equipment for the number of patients they sometimes house.

Hospital administrators understand and share staff concerns. However, administrators also maintain hallway medicine is safe for patients in the ED and on in-patient floors.

“We... have identified hall spaces with appropriate barriers and what have you, where we do care for patients in hallways...” Brian Butt, Health Services Director, NSHA on CBC News, February 7, 2017

Staff believe that overcrowding not only compromises the safety of those being crowded into rooms and hallways, it creates an internal back log that compromises the safety of other patients in the hospital who cannot be placed in appropriate care areas.

One Intensive Care Unit nurse reported the following example. There are three Intensive Care Units (ICUs) at the Halifax Infirmary. They are known as the CVICU, the CCU and the Med Surg Neuro ICU.

Patients often transition from an ICU to an Intermediate Intensive Care Unit (IMCU) and then to a unit floor depending on the level of care they require. Those most in need of care will be placed in an ICU where there is a higher degree of care. Those placed in a bed on a unit floor include those who will soon be well enough to be discharged from hospital.

“Sometimes patients already on the floor start to decompensate which requires that they be sent to the ICU. But the ICU is full so there is no bed for them. So they call a Code Blue and a Code Team responds to the floor,” the ICU nurse reported.

This means less staff in the ICU to attend to the most seriously ill patients.

“If the Code Team stabilizes the patient temporarily, we need to get them to the ICU immediately but there’s a delay because of Code Census because the floor is full so no one from the ICU can get out. It can take an hour or up to five hours to get the patient into the ICU. The whole time the staff are out of the ICU and must stay with the patient. And we have had some very critical incidents like doing CPR in the elevator and so on.”

At Capacity Everywhere

Patients are admitted to the HI for medical care and surgery. In-patient medical and surgery floors are often at capacity. When the HI Emergency Department determines it has a patient requiring admission to an in-patient floor, that person often faces an extended wait in the ED for an in-patient floor bed to free up.

But what is happening on those in-patient floors that leads to such over-crowding there? That’s an interesting question, and one of the answers is no surprise to anyone who has followed healthcare challenges in Nova Scotia the past 15 years.

Patients in transitional care beds awaiting discharge to Alternative Level Care (ALC) and Long Term Care (LTC) facilities are part of the problem. Administrators reported that in February there were 17 beds at the HI for patients in transitional care awaiting placement and all were often full. There are 50 such patients over the entire Central Zone. This past December there were 70 patients in transitional care beds in the Central Zone, the largest number reported in the last two years.

One nurse reported that her floor had two ALC patients. One patient had been there since September of 2016 awaiting placement and another had been there since March of 2016. Discussion with other staff led us to believe

that it is not uncommon for ALC patients to have extended stays including up to a year or even longer.

"Every single bed makes a difference," the nurse said.

Recommendation #5; The NSHA should conduct an automatic review of any ALC or LTC patient whose stay on an in-patient floor has exceeded four months with the objective of placing that patient in an appropriate facility within 30 days.

The Veterans' Memorial Building

The Veterans' Memorial Building (VMB) houses war veterans in need of long term care. A reduction in the number of veterans requiring the service has led to a gradual reduction in the number beds required for the care of veterans.

In June of 2016 all that changed. A decorated Norwegian-Canadian war hero, Petter Blindheim had sought access to the VMB but was refused access by Veteran's Affairs. The federal department said he didn't meet the criteria because he had enlisted during the German occupation of Norway and fought as part of the resistance and because he was able to stay at other existing long term care facilities (Tab 10).

In June of 2016, public pressure caused the department to change its criteria and allow any veteran in need of care at a community facility to apply to the VMB.

The VMB has also seen an influx of patients as a result of construction at the Dartmouth General Hospital. The NSHA now has a contract with Veterans Affairs to house appropriate long term care patients from Dartmouth General during construction.

The VMB is adjacent to the Halifax Infirmary. HI staff suggested using any extra beds at the VMB to house long term care patients currently being kept on in-patient floors at the HI and at the ER. This arrangement would be much better than being forced to place patients in hallways and family waiting rooms.

The VMB is much busier than it has been in years. However, in January and February of 2017 the VMB had an average of 6 vacant beds available every week. Code Census was called 39 times during this period.

If the practice of allowing any veteran in need of care at a community facility to apply to the VMB will end in June of this year. That process may continue, and we hope that it does, but if it does not, there will be further capacity for LTC patients currently housed on in-patient floors at the HI.

Dartmouth General renovations are expected to be complete in August of 2017. At that time, the hospital's contract with VMB to house some of its LTC patients will end. That will create an opportunity for those vacated beds to be occupied by LTC or HI ED patients.

It's been done before. In 2015, CTV reported that the VMB was being used to alleviate the HI ED overcrowding by placing some patients in the facility (Tab 11).

Recommendation # 6; The NSHA should ensure all the appropriate existing capacity at the VMB is being used to house HI ED or LTC patients.

Recommendation #7; The NSHA should come to agreement with Veterans Affairs to place appropriate LTC patients from the HI at the VMB after the Dartmouth General repairs are complete. This would free up beds on in-patient floors at the HI in advance of what are traditionally the worst months for Code Census at the HI ED.

The PEI Problem

A closer examination of the patients awaiting discharge from the HI reveals other issues. As the leading quaternary and tertiary care facility in Atlantic Canada, the QEII receives patients from across Nova Scotia and the Maritimes.

After treatment, it is often difficult to send patients who still require hospitalization, back to their home hospitals. That's because overcrowding isn't just a QEII problem, it is a problem everywhere in Atlantic Canada. Many home hospitals in PEI are small and are often full and unable to repatriate patients.

New Brunswick has a practice of returning its patients to that province within 24 hours of the time a physician deems them ready to leave the QEII.

PEI has no such policy. HI staff report longer stays for PEI patients due to ongoing difficulties sending those patients back to their home province. NSGEU was told PEI has two PEI Liaison Nurses who work Monday to Friday. Their job is to repatriate patients back to the Island.

"The PEI system has roadblocks," one HI nurse reported. Nova Scotia nurses have taken on the role of repatriating PEI patients on weekends when the PEI liaison nurses are not working.

Staff report that the PEI Liaison Nurses appear to want to ensure PEI patients are placed in hospitals in their home community. If that small home community hospital is full, the PEI patient will wait at the QEII for a bed to free up in their community instead of being placed in an Island hospital that is a reasonable travel distance from their home community.

In addition, PEI Liaison Nurses appear to only be allowed to place a patient on a wait list for a single Island hospital, rather than looking for the first available bed by placing them on multiple lists.

"We have to wait for their home hospital to come up with a bed or wait for them to be well enough to go home, then we have to wait for people to come and get them," the nurse reported.

The nurse reported that this blocks beds at the QEII. And blocked beds back up the entire system right out to the ambulance bays.

The lack of VON services and lack of understanding and access to homecare on PEI means it can be more difficult to send non-ambulatory patients back to the Island. There are limited services for patients in PEI who require medical home care such as having dressings changed.

In many cases, Island patients are only sent to their homes if they are ambulatory and able to transport themselves to medical care for things like changing dressings. NSGEU staff report that they do not have a clear understanding of the level of home care services available on the Island or even how to access it. That work is left to the PEI Liaison Nurses through the week, but even they appear to struggle with accessing home care.

NSGEU nurses report they are able to arrange home care services quickly for Nova Scotia patients.

A nurse reported that her floor will often have three patients from PEI at any one time. Sometimes there aren't any on the floor and sometimes there are as many as five. There are 31 beds on the floor where this nurse works.

There is no readily available data on the numbers of PEI patients in QEII hospital beds. Nor is there any readily available data on average wait times for PEI patients after they have been medically cleared to leave the QEII. However, PEI liaison staff informed one staff member they have had as many as 30-40 PEI patients between the IWK and the QEII. That number fluctuates, of course. And, again, it is not known how many of those patients have been medically cleared to return home and are awaiting a hospital bed.

On occasion family members of a PEI patient have moved into a family waiting room at the HI, including spending nights there, waiting for their family member to be discharged, in order to avoid the cost of a hotel room.

Repatriating PEI patients also depends on the availability of an ambulance from the Island. That availability may be determined by the cost of bringing a patient back to the Island.

PEI pays for off-Island ambulance transfers for Island residents. The cost for non-PEI residents is \$1,383.90 for a return trip of more than two hours. Recently one nurse working on a full floor that was at capacity contacted Island EMS at 11am to pick up a patient for 1pm. But Island EMS did not want to send an ambulance until the start of a new shift at 7pm.

Halifax Infirmary staff were left with the impression that Island EMS wanted to wait in order to ensure their paramedics making the eight-hour round-trip did not have to work past the end of their regularly scheduled shift and incur overtime.

“They wanted to coordinate it with the timing of the shift change,” the nurse reported. “In the meantime we had someone in the Emergency Department waiting for a bed on our floor. They were late getting the Island patient so that patient spent the day in emerg, then another 15 minutes in our hallway.”

Recommendation #8; NSHA and the Department of Health and Wellness should conduct a review of the practice of repatriating patients to PEI when they have been medically cleared to return home. This should include a review of the practices of the PEI Liaison Nurses and Island EMS to ensure they are making every effort to repatriate patients as quickly as possible.

Recommendation #9; In their review, the NSHA and the Department of Health and Wellness should require that PEI patients be placed on multiple Island hospital bed waiting lists and accept the first available bed which is within a reasonable travelling distance to their home.

Recommendation #10; The review should also examine how QEII staff and PEI liaison staff can more efficiently access home care on the Island for faster discharge of Island patients.

The objective of these recommendations is to ensure that Island patients are repatriated to their home hospitals as quickly as New Brunswick patients.

Cobequid Patients

The Emergency Department at the Cobequid Community Health Centre is open from 7am to midnight every day. HI ED staff report that they begin receiving an influx of Cobequid ED patients around 8 pm every night as that ED prepares to close. Sometimes patients are asked to drive themselves because Cobequid staff can't immediately get an ambulance as the ambulances are tied up at the HI ED.

Staff report and the data again confirms, that the vast majority of patients from the Cobequid ED go to the HI ED at closing time (see chart right, and Tab 12).

In January 2016 to February 2017, about 1,070 patients left the Cobequid at closing who required further care. Of those, 973 went to the HI ED. Sixty-two went to the IWK, 34 went to Hants and three went to the Dartmouth General.

Given that staff at the HI ED cannot call Code Census during the evenings, the arrival of Cobequid patients at the HI ED places another heavy burden on staff every night.

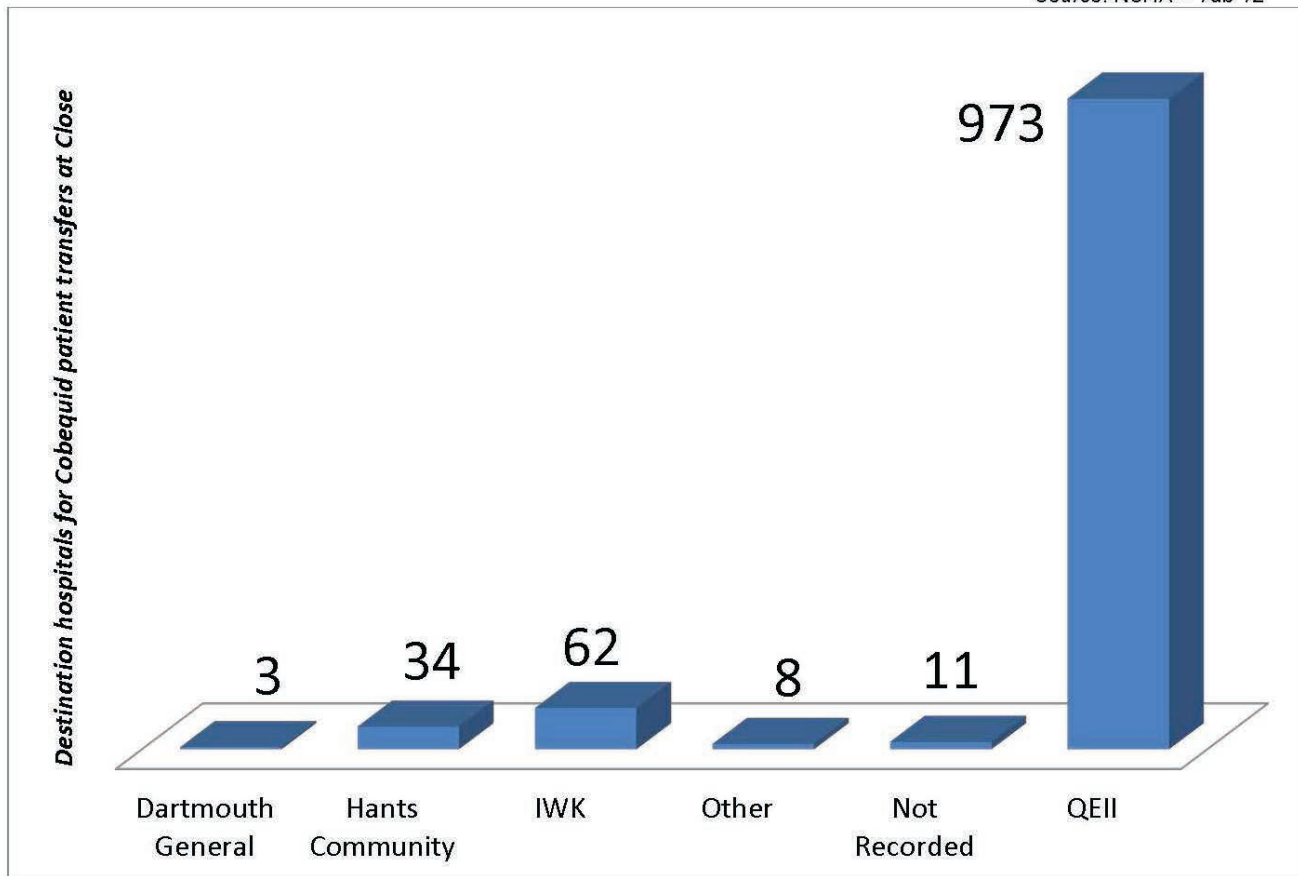
In 2009, the Department of Health considered keeping the Cobequid ED open 24-hours a day. In 2011, the Department decided not to. Staffing issues, costs and usage all factored into that decision.

But things have changed. Data obtained by NSGEU shows a dramatic increase in demand for services at the Cobequid ED since 2012.

Cobequid ED registrations are growing faster than visits to the HI ED. They have gone from 33,379 in 2012-13 to 40,497 in 2015-16. That's a 21 per cent increase (see Tab 2).

It doesn't stop there. The most recent data shows Cobequid ED registrations for 2016-17 will be 7 per cent higher than in 2015-16.

With the HI and Cobequid EDs experiencing steep increases in patient visits and with the HI and Dartmouth



General ED's each calling a Code Census almost daily, it makes sense to take a closer look at the Cobequid. If lack of capacity is the main problem, using capacity that is already available has to be part of the solution.

HI ED staff suggested that the Cobequid be required to keep some patients overnight for treatment the following morning when that ED re-opens.

Recommendation #11; NSHA and Department of Health and Wellness, working with the affected Unions, need to reconsider the role of the Cobequid ED in helping to alleviate pressure on the HI ED and in-patient floors. This should include giving consideration to keeping some patients at the Cobequid overnight during high patient volume times at the HI ED or extending the hours of the Cobequid ED.

Recommendation #12; In the meantime, there should be an assessment done each evening to determine which nearby Emergency Department is most able to deal with Cobequid patients rather than simply sending nearly all patients to the HI.

HI ED, A Closer Look

The operations of the HI ED were given close examination in the weeks following Dr. Ross's decision to call a Code Orange in 2009. As Dr. Campbell pointed out in a March 2015 article in the Metro, the HI ED has already enacted most Emergency Department innovations. *"In fact... we are way ahead,"* Dr. Campbell said at the time.

By all accounts, that is true. In addition, more physicians were recently assigned to work at the ED. However, some practices and problems that have grown up over time may warrant a closer look.

For example, there are non-ED physicians who sometimes have their clinic patients report to them at the Emergency Department for follow-up to a clinic visit instead of seeing them again at a clinic. While follow-up is certainly an important medical practice, it does raise the question whether following up clinic visits in the

Emergency Department put a further strain on an already overtaxed system.

The Rapid Assessment Unit (RAU) at the ED was designed to accept patients who were deemed stable and would soon be admitted to an in-patient bed or in some cases discharged. Many of these patients by-pass the ED and go straight to the RAU as they have already been seen by a physician at their home hospital. However, the RAU closes at midnight and any patients in the RAU are moved back to the ED where they must wait to be admitted or wait for the RAU to re-open at 8am.

The RAU operates for shorter hours on weekends and holidays. The expansion of RAU times to include the weekends was cited by the NSHA in its 2016 Central Zone Strategic Indicators Report as an important strategy to reduce ED wait times from triage to admission and from triage to seeing a physician. However, instead of expanding RAU hours, the NSHA reduced the RAU operating time on the Saturday and Sunday from twelve hours a day to eight hours. It's believed this was done because of staffing shortages.

Finally, discharge planning nurses are a key component of the HI ED. They organize the discharge of patients to their homes or other care facilities by ensuring proper supports are in place. Staff informed the Union that the discharge planning nurse works 7am to 7pm from Monday to Saturday and from 7am to 3pm on Sundays at the HI ED and there is no discharge planning on holidays.

Staff suggested consideration should be given to having the ED discharge planning nurse work extended hours, particularly on Sundays.

Code Census is called on most Mondays because the HI ED becomes backlogged during the weekend, in part because discharge planning is more difficult to coordinate during the weekend. NSHA data shows Code Census was called for eight out of nine Monday mornings from January to February of this year (see Tab 2).

Recommendation #13; The HI ED should review the utilization of its existing facilities to ensure they are being used appropriately by physicians in the hospital and in the community.

Recommendation #14; The NSHA, working with the Union, should consider whether to staff the RAU unit for 24 hours during the week and for 12 hours on Saturdays and Sundays.

Recommendation #15; the NSHA, working with the NSGEU, should consider whether it would be beneficial to increase the discharge planning capacity at the HI ED by increasing the number of discharge planning staff and expanding their hours.

Conclusion

NSGEU members working at the Halifax Infirmary have told us that the frequent Code Census calls at the hospital result from a host of causes. Code Census affects many staff across much of the QEII including nurses, health care workers, support services and administrative professional members.

There is not enough capacity at the ED to deal with the rapidly increasing number of patients who require care. There are patients occupying beds at the hospital who could receive care elsewhere. Care needs are becoming more complex. Through their experiences, Halifax Infirmary staff have identified some solutions that will help alleviate the immediate problems of overcrowding and reduce reliance on hallway medicine.

However, staff recognize these are only stopgap measures. The NSGEU believes the NSHA is genuinely interested in trying to make the situation better for patients and staff. Indeed, hospital administrators seemed keen to receive a copy of these recommendations from their staff.

There are going to be costs associated with some of these recommendations. Those costs are minimal compared to the costs associated with increasing the capacity at the HI ED in order to comprehensively deal with the chronic and growing overcrowding in the health care system. But they are costs nonetheless and as a result the Province must become a partner in implementing these recommendations

The NSGEU believes the Province of Nova Scotia is well aware of the difficult and worsening conditions the NSHA and its staff face on in-patient floors and in the HI Emergency Department almost every day. The Union urges the province to acknowledge that work needs to be done and money invested to fix this problem. Public pressure may be required to make that happen.

Summary of Recommendations:

#1; the current Code Census policy must be reviewed and updated to consider impacts on in-patient floors including detailing when more staffing is required and where patients should be placed and how they should be cared for.

#2; publish on-line and update weekly the following key statistics in order to develop a system of public accountability for Code Census and hallway medicine:

- How many times Code Census is called.
- How many patients were placed above census on in-patient floors and where those patients were kept (ie, in hallways, family waiting rooms or over-capacity in private and semi-private rooms).
- How many ALC and LTC patients are in Halifax Infirmary beds awaiting placement.
- How many people show up for treatment at the Halifax Infirmary ED on a daily basis.
- How often and for how long do ambulances wait at the Emergency Department to offload patients because of overcrowding in the ED.
- How many surgeries are cancelled monthly.

#3; The Department of Health and Wellness should immediately conduct a study to determine the reasons why there is such large increase in the number of patients showing up at the HI ED since 2009. That study should determine if the number of visits will stay at the new high level of 240-250 patients per day, if they will decline or if they will increase. This information is critical if the NSHA is to plan for future demands on the system.

#4; The NSHA should publish updated triage to admission wait times on its website and report each month on steps it is taking to reduce those times in order to meet its stated goal of eight-hours.

#5; The NSHA should conduct an automatic review of any ALC or LTC patient whose stay on an in-patient floor has exceeded four months with the objective of placing that patient in an appropriate facility within 30 days.

#6; The NSHA should ensure all the appropriate existing capacity at the VMB is being used to house HI ED or LTC patients.

#7; The NSHA should come to agreement with Veterans Affairs to place appropriate LTC patients from the HI at the VMB after the Dartmouth General repairs are complete. This would free up beds on in-patient floors at the HI in advance of what are traditionally the worst months for Code Census at the HI ED.

#8; NSHA and the Department of Health and Wellness should conduct a review of the practice of repatriating patients to PEI when they have been medically cleared to return home. This should include a review of the practices of the PEI Liaison Nurses and Island EMS to ensure they are making every effort to repatriate patients as quickly as possible.

#9; In their review, the NSHA and the Department of Health and Wellness should require that PEI patients be placed on multiple Island hospital bed waiting lists and accept the first available bed which is within a reasonable travelling distance to their home.

#10; The review should also examine how QEII staff and PEI liaison staff can more efficiently access home care on the Island for faster discharge of Island patients.

#11; NSHA and Department of Health and Wellness, working with the affected Unions, need to reconsider the role of the Cobequid ED in helping to alleviate pressure on the HI ED and in-patient floors. This should include giving consideration to keeping some patients at the Cobequid overnight during high patient volume times at the HI ED or extending the hours of the Cobequid ED.

#12; In the meantime, there should be an assessment done each evening to determine which nearby Emergency Department is most able to deal with Cobequid patients rather than simply sending nearly all patients to the HI.

#13; The HI ED should review the utilization of its existing facilities to ensure they are being used appropriately by physicians in the hospital and in the community.

#14; The NSHA, working with the Union, should consider whether to staff the RAU unit for 24 hours during the week and for 12 hours on Saturdays and Sundays.

#15; the NSHA, working with the NSGEU, should consider whether it would be beneficial to increase the discharge planning capacity at the HI ED by increasing the number of discharge planning staff and expanding their hours.



Capital Health

ADMINISTRATIVE MANUAL

Policy & Procedure

TITLE: DGH Code Census	NUMBER: CH 01-065 B
Date Issued: March 2010	Page 1 of 4
Applies To: CDHA – Dartmouth General Hospital	

During periods of hospital over census, patients requiring admission to hospital remain in the emergency department; this overcrowding consequently leads to impaired emergency care and safety standards for existing patients and new patients arriving.

POLICY

1. The DGH Code Census policy will permit one over capacity patient per unit for a total of 3 patients (3East/3West/4West) during periods of overcrowding, thus maintaining adequate emergency care for the community.
2. Code Census is to be implemented:
 - 2.1. Monday to Friday 0730 hours until 2300 hours, and Saturday and Sunday from 0730 hours until 1930 hours when the situation within the Emergency Department:
 - 2.1.1. is considered unsafe by both the Emergency Department Charge Physicians and the Clinical Leader/Charge Nurse (NEDOCS 130% or greater),
 - 2.1.2. there are six or more admitted patients in the Emergency Department.
3. During a Code Census, there will be a “non-refusal” policy in place.
 - 3.1. Patients are to be accepted to assigned services/units within the 30 minute timeframe and are not to be delayed due to breaks, change of shift and/or other unit activity.
 - 3.2. The Administrative Coordinators/Utilization Coordinators, in consultation with the managers, are the only individuals that can make an exception to this practice if patient safety on a unit is an issue.
4. Relevant inpatients nursing units and appropriate support departments are to have a plan in place to respond to Code Census.
5. The followings patients are **not** appropriate for transfer when Code Census is activated:
 - 5.1. Unstable Telemetry

This is a CONTROLLED document for internal use only. Any documents appearing in paper form are not controlled and should be checked against the electronic file version prior to use.

- 5.2. ICU
- 5.3. Requiring high flow oxygen
- 5.4. BiPAP, CPAP, or ventilated
- 5.5. Requiring 1:1 nursing care
- 5.6. Significant behavioral issues
- 5.7. Require Private Room

EXPECTED OUTCOMES

- 1. Admitted patients, as well as new patients arriving to the DGH Emergency Department, will receive appropriate emergency care in a timely manner.
- 2. Implementation of this policy:
 - 2.1. Facilitates over census patients getting to the inpatient unit within 30 minutes of over census being announced based on established criteria.
 - 2.2. Reduces time to emergency assessment and treatment.
 - 2.3. Reduces the number of acutely ill patients left in the ED waiting room or hallway during Code Census situations.
 - 2.4. Reduces the number of patients that leave without care.
 - 2.5. Reduces delay in off loading EHS patients.

PROCEDURE

- 1. Once the Emergency Department Physician (EP) and the Clinical Leader/Charge Nurse (CL/CN) determine that the situation in the ED is over capacity and unsafe (using the above criteria), dial 3333 and inform Locating of Code Census in the DGH ED.
- 2. Locating notifies Security.
- 3. Locating notifies the following team members:
 - 3.1. Utilization Coordinator/Administrative Coordinator (after hours)
 - 3.2. DGH Health Services Managers
 - 3.3. DGH Health Services Site Director
 - 3.4. DGH Site Chief of Staff
 - 3.5. Site Chief Anesthesiology
 - 3.6. Site Chief Emergency Department
 - 3.7. Site Chief Family Medicine
 - 3.8. Site Chief ICU
 - 3.9. Site Chief Internal Medicine

This is a CONTROLLED document for internal use only. Any documents appearing in paper form are not controlled and should be checked against the electronic file version prior to use.



- 3.10. Site Chief Dept Surgery
- 3.11. Head Hospitalist
- 3.12. VP's Person Centred Care
- 3.13. VP Medicine
- 3.14. Corporate Communications
4. Security announces overhead that a Code Census has been initiated by the hospital.
5. The ED CL/CN, in collaboration with the ED staff RN and Utilization Coordinator/
Administrative Coordinator, determines which patients are the most appropriate for immediate transfer.
 - 5.1. The ED RN faxes the receiving unit to provide information on the patient.
6. The service inpatient areas prepare the designated over capacity area.
7. ED transfers the patient to the in-patient area within 30 minutes of Code Census activation.
8. The Utilization Coordinator/Administrative Coordinator or designate ensures transfers occur as planned.

RELATED CAPITAL HEALTH DOCUMENTS

[Appendix A](#) – Algorithm: Process for Implementing Code Census

* * *

Appendix A

Process for Implementing **CODE CENSUS**

Situation in the Emergency Department considered unsafe by Charge EDP and CL/CN
(NEDOCS 130% and 6 or more admitted patients in the Emergency Department)



Code Census activated by calling 3333

Security notified by pager → → → → → → → → → →

The following team members are notified by email:

- Utilization Coordinator/Administrative Coordinator (after hours)
- DGH Health Service Managers
- DGH Health Service Site Director
- DGH Site Chief of Staff
- Site Chief Dept Anesthesiology
- Site Chief Emergency Department
- Site Chief Family Medicine
- Site Chief ICU
- Site Chief Internal Medicine
- Site Chief Dept Surgery
- Head Hospitalist
- VP's Person Centred Care
- VP Medicine
- Corporate Communications

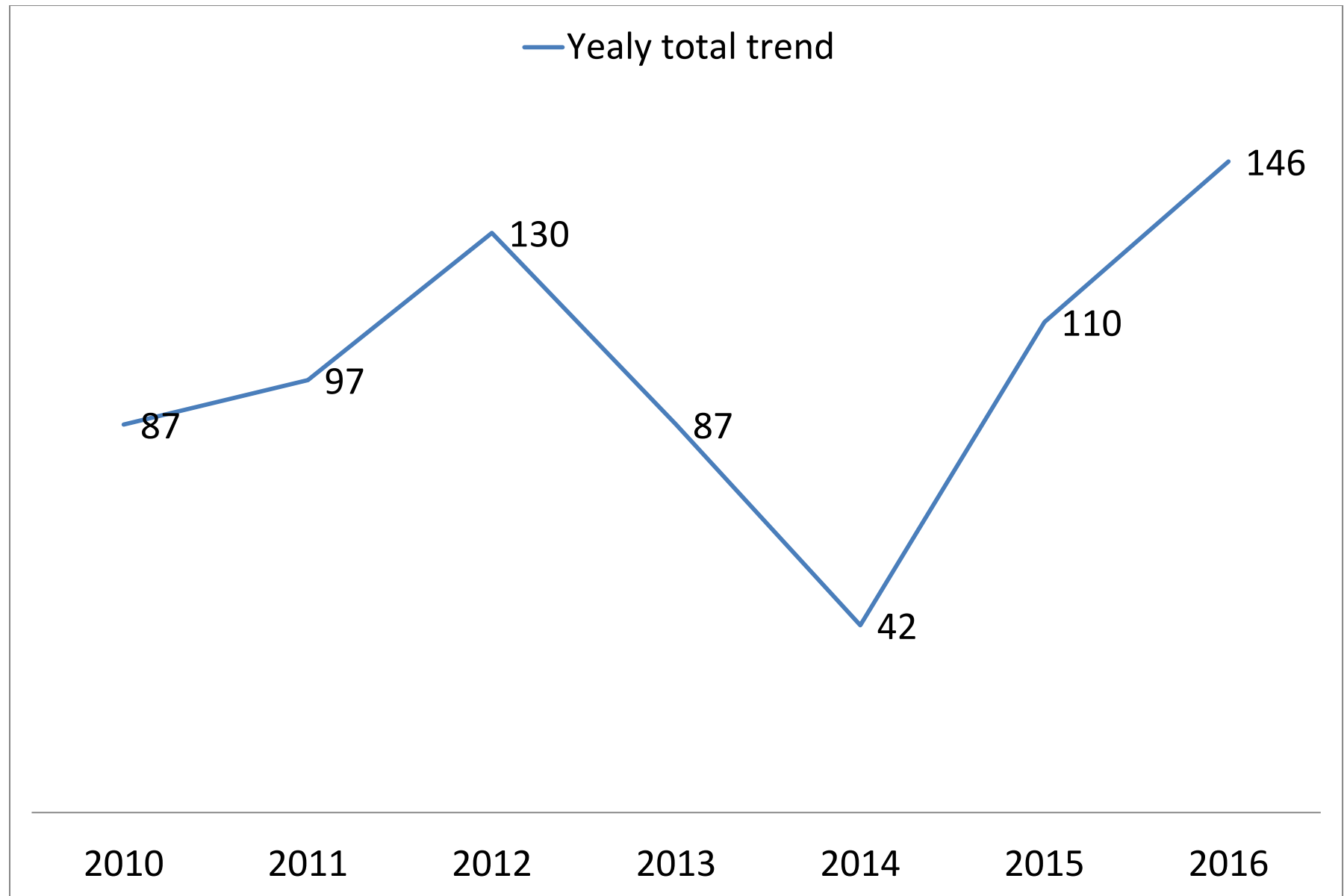
Security initiates
overhead page.

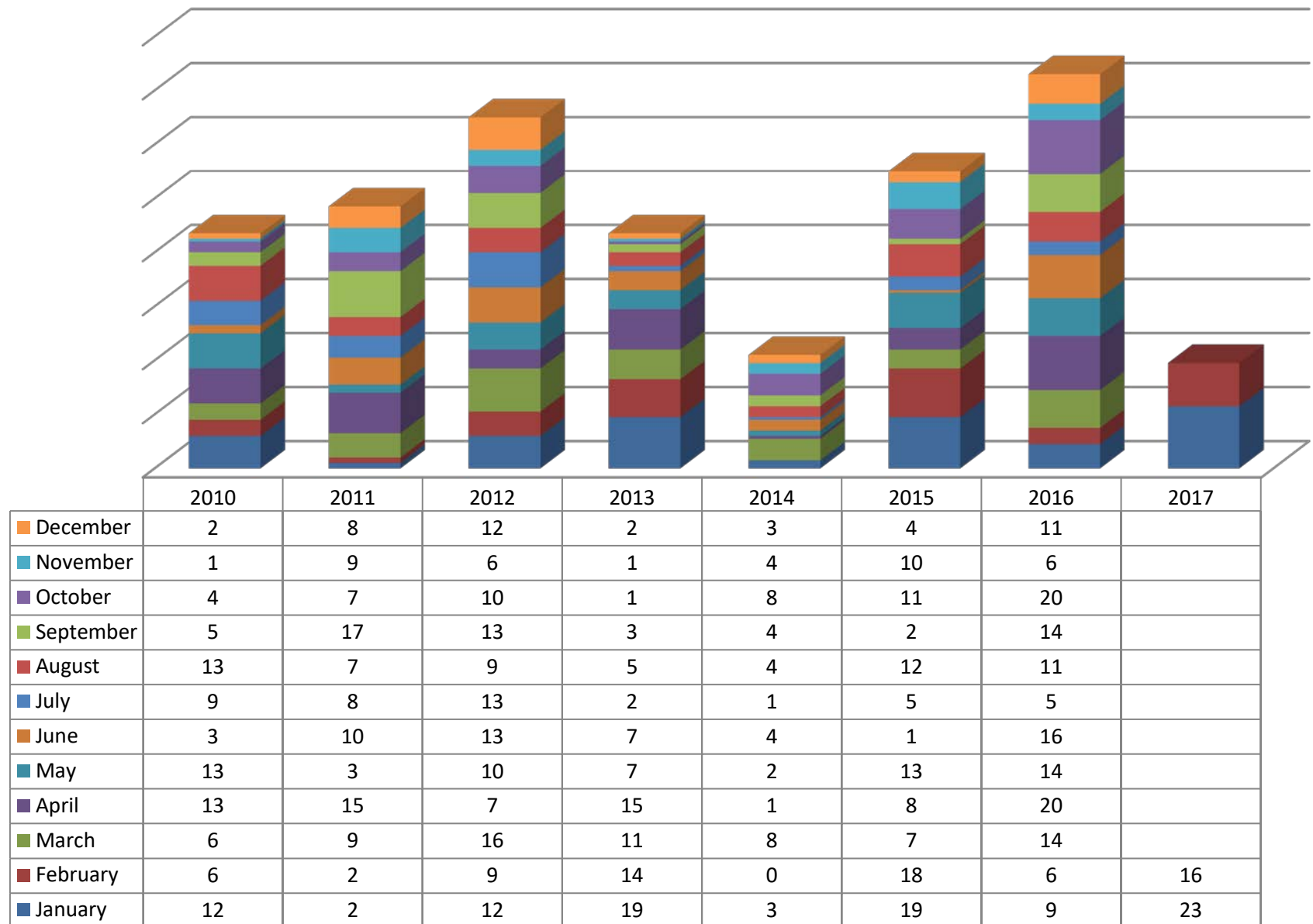


- In-patient units prepare designated area to receive one patient (as determined by individual units).
- The service inpatient areas (when appropriate) will receive one patient each.
- Patients move to in-patient units within 30 minutes of activation of Code Census
- Transfer of patients occurs with a no-refusal policy (exception only by Utilization Coordinator or Administrative Coordinator for patient safety issue).

The following patients are not appropriate for transfer when Code Census is activated:

- Unstable Telemetry
- ICU
- Requiring high flow oxygen
- BiPAP, CPAP, or ventilated
- Requiring 1:1 nursing care
- Significant behavioral issues
- Require Private Room





Code Census QEII 2010

<u>Date</u>	<u>Time</u>
January 3rd	15:42
January 4th	11:15
January 4th	15:00
January 4th	18:35
January 5th	12:57
January 5th	15:46
January 7th	8:09
January 13th	13:43
January 19th	12:42
January 25th	12:34
January 26th	12:34
January 27th	12:27
February 9th	12:42
February 10th	14:54
February 11th	11:27
February 15th	13:31
February 16th	17:48
February 26th	11:19
March 1st	9:59
March 2nd	10:59
March 5th	10:41
March 25th	12:45
March 26th	8:06
March 29th	12:41
April 1st	13:00
April 5th	11:24
April 6th	11:33
April 7th	13:14
April 7th	8:33
April 14th	11:49
April 16th	7:50
April 19th	11:49
April 20th	8:52
April 20th	12:14
April 26th	12:22
April 27th	11:39
April 30th	8:00
May 2nd	16:45
May 3rd	11:18
May 10th	12:20
May 10th	17:33
May 11th	7:34
May 12th	12:16
May 13th	16:27
May 16th	15:54
May 17th	8:11
May 18th	13:29
May 19th	13:42

May 20th	9:56
May 23rd	14:26
June 16th	11:50
June 18th	14:08
June 29th	9:56
July 8th	10:51
July 9th	10:18
July 12th	18:42
July 13th	9:45
July 14th	13:25
July 19th	10:44
July 22nd	11:40
July 27th	14:03
July 30th	12:14
August 2nd	17:38
August 3rd	10:14
August 5th	11:46
August 8th	17:28
August 10th	9:33
August 11th	12:43
August 12th	8:22
August 13th	12:49
August 23rd	14:27
August 24th	14:29
August 25th	8:41
August 26th	9:02
August 26th	9:04
September 7th	8:30
September 10th	8:45
September 16th	14:18
September 20th	10:01
September 27th	12:22
October 4th	14:59
October 6th	8:17
October 10th	13:23
October 11th	17:06
November 22nd	12:03
December 1st	18:04
December 3rd	14:57

Code Census QEII

2011

<u>Date</u>	<u>Time</u>
January 4th	8:26
January 19th	14:06
February 21st	13:43
February 25th	13:29
March 3rd	9:55
March 3rd	10:36
March 9th	14:30
March 10th	13:27
March 11th	13:16
March 12th	13:47
March 21st	14:45
March 30th	8:44
March 31st	8:48
April 2nd	13:19
April 3rd	11:12
April 4th	10:15
April 6th	14:37
April 7th	9:27
April 8th	10:52
April 11th	7:39
April 11th	14:08
April 12th	13:13
April 13th	7:30
April 15th	9:37
April 17th	10:56
April 26th	11:03
April 27th	10:05
April 29th	15:20
May 5th	9:53
May 24th	10:46
May 29th	11:00
June 1st	10:06
June 2nd	7:49
June 3rd	10:21
June 4th	9:24
June 6th	9:26
June 7th	8:41
June 9th	9:37
June 13th	10:18
June 14th	11:03
June 20th	12:49
July 3rd	9:33
July 4th	7:57
July 6th	12:37
July 7th	9:47
July 12th	10:30
July 19th	11:12
July 25th	10:07

July 29th	14:08
August 11th	10:16
August 19th	10:18
August 22nd	10:06
August 23rd	9:59
August 24th	11:36
August 25th	7:28
August 30th	12:31
September 2nd	14:40
September 3rd	15:09
September 7th	15:17
September 8th	16:54
September 9th	10:58
September 12th	11:11
September 13th	7:25
September 14th	10:26
September 15th	12:28
September 15th	16:26
September 16th	10:37
September 20th	10:46
September 22nd	10:32
September 23rd	13:56
September 27th	17:45
September 28th	12:22
September 29th	10:02
October 4th	9:52
October 5th	10:51
October 11th	12:27
October 14th	7:48
October 19th	8:55
October 23rd	15:23
October 24th	7:26
November 1st	9:17
November 2nd	9:51
November 3rd	9:55
November 4th	11:17
November 9th	9:57
November 10th	8:29
November 25th	13:16
November 27th	13:26
November 28th	10:16
December 4th	8:42
December 5th	11:48
December 11th	17:23
December 12th	10:22
December 13th	9:58
December 14th	7:40
December 15th	10:13
December 17th	10:51

Code Census QEII

2012

<u>Date</u>	<u>Time</u>
January 1st	7:56
January 2nd	10:14
January 3rd	10:13
January 9th	10:58
January 15th	13:23
January 16th	11:35
January 17th	15:04
January 18th	11:01
January 23rd	9:54
January 25th	7:58
January 26th	10:30
January 30th	13:19
February 2nd	10:44
February 5th	9:44
February 6th	12:12
February 8th	12:28
February 9th	14:55
February 10th	8:38
February 14th	11:02
February 22nd	13:00
February 27th	10:38
March 1st	14:47
March 2nd	10:38
March 3rd	7:40
March 5th	12:47
March 6th	9:53
March 14th	10:37
March 15th	10:09
March 15th	17:30
March 16th	10:08
March 18th	15:38
March 19th	10:21
March 21st	10:25
March 25th	11:49
March 27th	11:47
March 29th	11:17
March 30th	14:31
April 2nd	12:57
April 4th	13:33
April 9th	12:20
April 12th	10:53
April 13th	13:47
April 16th	10:27
April 23rd	12:33
May 2nd	10:47
May 4th	10:37
May 8th	12:00
May 11th	14:45

May 14th	19:21
May 15th	9:29
May 16th	13:59
May 17th	14:19
May 18th	12:51
May 28th	11:36
June 4th	10:53
June 5th	10:23
June 8th	12:39
June 9th	8:53
June 11th	12:24
June 14th	9:56
June 15th	14:59
June 18th	11:51
June 20th	13:16
June 21st	15:22
June 22nd	10:18
June 26th	10:38
June 29th	10:02
July 1st	14:58
July 3rd	11:10
July 5th	9:01
July 6th	11:59
July 9th	14:20
July 12th	10:42
July 13th	10:25
July 16th	12:08
July 20th	11:31
July 22nd	19:19
July 23rd	13:18
July 24th	10:45
July 30th	10:01
August 7th	11:38
August 17th	10:22
August 21st	14:27
August 22nd	11:18
August 24th	12:45
August 25th	18:46
August 27th	10:16
August 28th	11:50
August 30th	12:47
September 4th	11:54
September 5th	14:46
September 12th	10:17
September 14th	10:45
September 16th	8:26
September 16th	22:26
September 17th	10:25
September 24th	8:48
September 25th	10:30
September 26th	11:11
September 27th	16:40

September 28th	10:20
September 30th	11:39
October 1st	9:59
October 2nd	10:35
October 3rd	7:41
October 4th	13:06
October 15th	11:07
October 16th	12:53
October 18th	12:04
October 22nd	10:39
October 23rd	14:04
October 29th	11:43
November 5th	10:06
November 6th	10:47
November 9th	11:07
November 12th	11:10
November 14th	10:10
November 14th	19:15
December 3rd	11:27
December 4th	9:50
December 9th	12:00
December 10th	16:09
December 12th	11:28
December 17th	9:49
December 17th	19:08
December 18th	10:32
December 20th	10:05
December 26th	11:58
December 27th	14:43
December 31st	10:00

Code Census QEII

20132015 2013

<u>Date</u>	<u>Time</u>
January 2nd	10:05
January 3rd	12:08
January 4th	10:37
January 5th	12:06
January 6th	9:23
January 7th	10:58
January 8th	13:53
January 8th	14:12
January 9th	9:52
January 10th	11:56
January 13th	12:40
January 14th	10:25
January 21st	10:17
January 22nd	9:59
January 23rd	10:28
January 24th	9:57
January 25th	10:06
January 27th	10:13
January 29th	10:05
February 1st	14:34
February 7th	13:23
February 10th	13:17
February 11th	10:03
February 13th	9:47
February 17th	18:03
February 18th	10:36
February 19th	11:14
February 20th	11:31
February 21st	10:26
February 22nd	9:55
February 24th	20:37
February 25th	10:40
February 28th	19:35
March 1st	10:20
March 11th	13:25
March 12th	11:50
March 13th	12:28
March 16th	15:37
March 17th	9:51
March 18th	8:20
March 22nd	10:53
March 25th	10:36
March 25th	19:40
March 26th	10:17
April 2nd	11:27
April 3rd	10:41
April 4th	10:34
April 7th	7:38
April 8th	10:45
April 9th	10:24
April 10th	7:08

April 11th	10:18
April 15th	7:48
April 16th	8:02
April 17th	12:37
April 18th	11:41
April 25th	16:30
April 29th	12:06
April 30th	10:10
May 1st	11:31
May 6th	8:51
May 7th	10:17
May 9th	11:26
May 13th	11:36
May 16th	8:05
May 19th	9:12
June 2nd	7:58
June 9th	12:44
June 10th	11:09
June 11th	10:33
June 12th	10:01
June 17th	15:56
June 18th	10:31
July 2nd	7:33
July 29th	9:31
August 3rd	20:47
August 12th	16:22
August 20th	7:34
August 21st	9:39
August 26th	9:54
September 18th	13:06
September 19th	11:22
September 23rd	9:52
October 16th	10:09
November 18th	9:59
December 2nd	12:40
December 16th	11:54

<u>Date</u>	<u>Time</u>
January 7th	19:36
January 9th	10:00
January 27th	11:06
March 3rd	14:12
March 10th	11:09
March 11th	11:20
March 17th	11:08
March 24th	9:57
March 24th	10:23
March 31st	16:57
March 31st	17:11
April 28th	15:52
May 5th	10:38
May 6th	14:08
June 5th	7:39
June 6th	10:54
June 8th	7:16
June 12th	9:48
July 29th	9:56
August 6th	14:03
August 7th	10:15
August 11th	12:38
August 18th	10:54
September 8th	15:52
September 22nd	3:21
September 22nd	10:41
September 29th	10:38
October 6th	10:19
October 10th	13:17
October 14th	12:40
October 15th	12:35
October 17th	11:34
October 20th	7:03
October 23rd	9:54
October 27th	11:45
November 3rd	7:40
November 10th	10:32
November 12th	9:54
November 29th	9:14
December 1st	16:57
December 2nd	7:47
December 28th	7:39

<u>Date</u>	<u>Time</u>
January 5th	10:16
January 6th	16:20
January 7th	7:24
January 9th	11:02
January 11th	12:14
January 12th	9:56
January 13th	10:17
January 13th	10:42
January 14th	11:44
January 15th	12:16
January 16th	9:54
January 20th	12:28
January 21st	10:37
January 22nd	7:04
January 26th	10:06
January 26th	19:32
January 28th	8:24
January 29th	8:28
January 29th	20:38
February 4th	9:54
February 10th	10:14
February 10th	10:46
February 11th	11:42
February 12th	15:00
February 12th	19:20
February 15th	7:36
February 15th	8:10
February 16th	15:10
February 18th	7:25
February 19th	7:12
February 20th	7:17
February 22nd	13:31
February 23rd	10:08
February 23rd	19:17
February 25th	8:31
February 26th	8:53
February 27th	10:07
March 3rd	7:08
March 3rd	9:43
March 13th	9:48
March 15th	14:16
March 16th	8:49
March 17th	15:01
March 21st	16:27
April 10th	10:50
April 13th	11:38
April 15th	10:57
April 19th	16:41
April 20th	9:57
April 25th	7:39
April 26th	18:06

April 30th	8:56
May 3rd	13:07
May 4th	11:33
May 11th	8:33
May 12th	12:44
May 13th	11:53
May 15th	17:37
May 18th	14:25
May 19th	9:56
May 21st	10:02
May 22nd	17:47
May 24th	9:42
May 25th	12:46
May 26th	10:51
June 15th	18:35
July 14th	10:25
July 15th	11:19
July 16th	14:34
July 24th	19:27
July 27th	9:42
August 5th	11:07
August 11th	11:06
August 20th	12:02
August 23rd	7:21
August 24th	12:19
August 25th	12:53
August 25th	13:07
August 26th	13:38
August 26th	20:31
August 27th	13:22
August 28th	7:38
August 31st	12:19
September 10th	16:30
September 15th	8:43
October 5th	11:53
October 6th	13:32
October 13th	11:03
October 14th	9:34
October 15th	9:55
October 18th	8:53
October 19th	10:58
October 20th	7:17
October 22nd	11:57
October 30th	10:44
October 31st	7:41
November 2nd	9:43
November 4th	10:16
November 8th	7:29
November 8th	7:52
November 8th	17:20
November 9th	8:31
November 10th	9:48
November 13th	13:39
November 14th	7:46
November 16th	9:58

December 7th	10:35
December 8th	11:06
December 9th	13:38
December 14th	9:41

<u>Date</u>	<u>Time</u>
January 2nd	9:49
January 3rd	7:46
January 4th	8:36
January 5th	12:41
January 11th	17:27
January 16th	11:02
January 28th	11:59
January 29th	7:50
January 30th	11:52
February 1st	9:25
February 15th	12:25
February 16th	10:04
February 23rd	10:59
February 24th	10:47
February 26th	16:25
March 1st	14:48
March 7th	8:39
March 8th	7:38
March 9th	8:13
March 10th	9:42
March 14th	12:18
March 14th	13:17
March 15th	11:16
March 20th	14:40
March 21st	15:20
March 22nd	9:48
March 24th	11:44
March 29th	18:58
March 31st	10:56
April 1st	13:03
April 3rd	15:29
April 4th	14:29
April 5th	7:35
April 6th	11:50
April 7th	10:08
April 8th	7:29
April 10th	11:49
April 12th	7:24
April 15th	12:16
April 17th	11:13
April 18th	10:54
April 19th	7:49
April 20th	10:07
April 21st	7:20
April 23rd	7:37
April 25th	10:13
April 26th	10:04
April 27th	12:08
April 28th	11:28
May 3rd	16:54
May 9th	11:58

May 10th	10:44
May 11th	10:38
May 16th	9:47
May 18th	10:32
May 22nd	7:35
May 23rd	10:54
May 25th	7:31
May 26th	8:44
May 29th	15:59
May 30th	11:52
May 30th	12:12
May 31st	8:39
June 1st	15:40
June 3rd	7:11
June 5th	10:49
June 6th	10:38
June 7th	9:56
June 8th	8:42
June 10th	11:21
June 11th	12:48
June 16th	13:12
June 21st	14:00
June 22nd	10:17
June 23rd	7:36
June 24th	12:48
June 27th	14:15
June 28th	10:34
June 29th	12:34
July 4th	13:01
July 18th	9:35
July 20th	12:23
July 25th	17:07
July 26th	9:42
August 18th	16:43
August 20th	13:52
August 21st	7:12
August 22nd	15:12
August 24th	8:51
August 25th	12:10
August 26th	8:25
August 28th	7:13
August 29th	9:40
August 30th	7:02
August 31st	8:03
September 1st	8:52
September 5th	11:03
September 6th	8:51
September 7th	10:07
September 9th	13:59
September 11th	16:16
September 12th	11:15
September 13th	13:12
September 14th	11:30
September 15th	15:58
September 19th	12:04

September 20th	7:15
September 21st	9:38
September 27th	10:25
October 3rd	17:09
October 4th	14:49
October 5th	14:45
October 6th	9:36
October 11th	7:11
October 13th	14:56
October 14th	11:33
October 17th	7:37
October 17th	7:53
October 18th	17:08
October 19th	10:09
October 20th	11:13
October 24th	10:28
October 25th	9:23
October 26th	10:03
October 26th	19:24
October 27th	9:04
October 28th	11:42
October 30th	15:38
October 31st	9:52
November 3rd	12:04
November 7th	10:01
November 8th	12:49
November 14th	13:15
November 15th	10:07
November 23rd	12:26
December 1st	11:42
December 5th	14:22
December 7th	12:13
December 8th	10:51
December 11th	15:04
December 12th	12:24
December 13th	7:32
December 14th	9:27
December 15th	7:35
December 19th	8:52
December 23rd	12:43

<u>Date</u>	<u>Time</u>
January 2nd	7:24
January 4th	11:32
January 5th	10:09
January 6th	9:40
January 7th	8:50
January 9th	12:40
January 10th	11:39
January 11th	13:40
January 12th	12:02
January 13th	12:19
January 16th	10:17
January 17th	9:43
January 18th	8:47
January 19th	15:18
January 20th	10:08
January 23rd	12:49
January 25th	14:29
January 26th	8:40
January 27th	11:51
January 28th	12:42
January 29th	9:28
January 30th	10:09
January 31st	10:00
February 1st	12:58
February 2nd	12:30
February 3rd	10:12
February 4th	17:05
February 5th	11:10
February 6th	9:55
February 7th	11:26
February 13th	10:56
February 14th	15:50
February 15th	13:20
February 17th	10:09
February 19th	9:14
February 20th	12:02
February 21st	7:49
February 22nd	7:09
February 28th	7:55

Hospital overcrowding is an accountability problem, say emergency doctors

Feb 8, 2017 7:11 PM by: Chris Lamble



Patients were crammed into the hallways at the Halifax Infirmary this week, putting their safety at risk, the Nova Scotia Government & General Employees Union said earlier this week.

Overcrowded hospitals have more to do with accountability than any particular seasonal virus outbreak, says the chief emergency doctor at the Halifax Infirmary.

Patients were crammed into hallways this week and sometimes triple-bunked in rooms, putting their safety at risk, according to a statement issued Tuesday by the Nova Scotia Government & General Employees Union. It blames the problem on what's dubbed Code Census, a practice where non-emergency patients are moved out of the emergency department to other units.

"They're sitting in hallways downstairs without seeing a doctor to try and get the people that have seen a doctor and have been admitted to hospital to go into a hallway upstairs," Dr. Sam Campbell told Local Xpress.

Trouble is, people responsible for treating patients can say, "Sorry, we're full, and basically close the door," said Campbell, who works at the Queen Elizabeth II Health Sciences Centre's Summer Street site.

"They have no reason to improve their efficiency or anything because they've removed any pressure that tells them how far behind they are," he said.

The Infirmary's emergency department isn't backed up worse than normal for this time of year, Campbell said.

"Every January or February everyone gets so excited and says, 'Who would have believed it? We had a flu epidemic?' This time of year, people get sick. But we're chronically overwhelmed. There's either a shortage of capacity or a shortage of efficiency. I'm not sure which it is."

Campbell stressed his department is overcrowded.

"But it's not overcrowded with emergency patients, it's overcrowded with people who have been admitted to hospital and don't leave the emergency. There's nowhere to put the emergency patients."

The NSGEU plans to strike a working group Friday "to address concerns from nurses about the Nova Scotia health authority's decision to strictly enforce a directive that requires patients be admitted to floors where there is no space for them when the hospital is in 'Code Census.'"

"Our hospitals are overcrowded, and as a result, the safety of patients and front-line staff is being put at risk," union vice-president Sandra Mullen said in a news release.

Campbell points to an article about patient blocking that appeared last March in the Canadian Journal of Emergency Medicine.

"Emergency department overcrowding is the number 1 operational and safety concern in (emergency departments) across North America, Australia and western Europe," Dr. Grant Innes, of the department of emergency medicine at the University of Calgary, writes in the paper titled Sorry — we're full! Access block and accountability failure in the health care system.

"Overcrowding is increasing, often reaching crisis proportions in urban hospitals. Although 'emergency overcrowding' is the usual descriptor, the problem is not overcrowding, and it does not originate in (emergency departments). A more appropriate term is access block, the inability of patients to access care in a reasonable time frame."

Our hospitals suffer from widespread access block, Innes argues, with many patients waiting in the wrong place for too long.

"Patients referred for long-term care placement wait in acute care hospital beds, compromising access for newly admitted patients. Patients waiting for hospital beds are blocked in (emergency department) stretchers, compromising emergency access. In domino fashion, emergency patients are left in hallways or waiting rooms without care."

The latter leads to prolonged hospital stays, "inadequate pain management and increased patient mortality," Innes writes. "Whereas related ambulance offload delays and diversions compromise our pre-hospital and disaster response systems."

The root cause of this is "a system-level failure to define accountability for patient care and lack of planning to address care gaps," he writes. "In our system, accountability is vague. When patients cannot access the care they need, there is rarely a backup plan, and it is not clear where to look for solutions."

The problem persists "because the rewards for blocking access are profound," Innes writes.

"Workload is controlled; waiting patients are out of sight and out of mind; staff stress is reduced; budgetary challenges are mitigated; and the program is protected from evolutionary stressors that would otherwise mandate innovation and system change. Without an accountability framework, there is little hope for a high-functioning system."

Nurses and doctors focus too much on the patients in front of them, rather than the system as a whole, he argues.

"We focus on perfect care for the single patient and offer all treatment options, regardless of cost, and no matter how small the chance of benefit," Innes writes. "In a system with infinite resources, this may be feasible. When beds, tests, and provider time are constrained, such an approach conflicts with the needs of the many."

Ineffective patient care is "pervasive," he writes.

"Hospital days that do not improve outcomes, imaging procedures that do not drive beneficial management changes, physician and nurse activities that do not reduce patient disability, 'routine' laboratory testing, expensive drug selection, wasted supplies, avoidable interventions, cardiac monitors for stable patients and stretchers for people who do not need them are all examples of ineffective care."

Gaps to emergency care "could be eliminated by flow adjustments, efficiency improvements or thoughtful reallocation of care," Innes writes.

"If we accept that our accountability is to all patients, not merely those already in care, we might reconsider how we deliver services, what services we provide to whom, and how we match care capacity with collective patient need."

Doctors and nurses tend to share a common belief that more care is better, he writes.

But there's a "sweet spot" for health care, beyond which that often isn't true.

"Simple measures provide substantial benefit at low cost, whereas complex and invasive measures generally provide incrementally less benefit at higher cost," Innes writes. "In our attempts to provide

ideal care, it is easy to push through the zone of diminishing returns into an area of ineffective or even harmful care."

The aim should be matching care to what's required, he writes.

"By blocking access, we can preserve preferred care practices (sometimes under the guise of 'quality') and focus resources on the subset of patients we have accepted. Rather than matching care delivered to care required, this often leads to perverse allocation where acutely ill patients who have not yet been assessed, diagnosed, or stabilized are left without care in waiting rooms or ambulance stretchers."

Hospitals need an "accountability framework," he writes.

"Accountabilities must be established for all programs because failures in any one area will have a domino effect, compromising other components of a highly interdependent system," Innes writes.

"Care delays will not be solved until someone is accountable to solve them, and people who are unaware of their accountabilities are unlikely to fulfill them. Physicians, nurses, and other care providers must understand who is in their waiting room (accountability zone) and recognize that accepting accountability for the many may require modifying the allocation of health resources. They should critically evaluate their practices and eliminate ineffective care wherever possible."

Comments

3 Comments

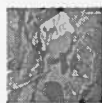
Sort by **Oldest**

Add a comment...

**Kate Dwyer** · Atlantic School of Theology

At this time, a patient safety audit should be conducted in the Hospitals, since the Administration and governing bodies of hospitals have not seen fit to complete a patient safety audit when the Nursing Staff have declared the situation at times in the hospitals is/are unsafe!!! I challenge the hospital to conduct a patient bed audit immediately, and easily done expo facto, by admission and discharge sheets, and discharge instructions from physicians on the pt's medical charts. The challenge is, estimating that the inpatient population exceeds 20% of patients that are medically discharged a... See More

Like · Reply · Feb 9, 2017 2:11pm · Edited

**Kate Dwyer** · Atlantic School of Theology

Pt. safety audit needed, immediately!!!

Like · Reply · Feb 9, 2017 2:14pm

**Joy Blackburn**

Ever thought of building more long term care facilities. That has been a problem since forever. Does'nt matter if you hire more nurses or Dr's.

Like · Reply · 1 · Feb 9, 2017 9:16pm

Facebook Comments Plugin

**About the Author:** Chris Lambie

Chris Lambie is a journalist based in Halifax, Nova Scotia. He has worked at newspapers from Newfoundland to the Northwest Territories.

[Read more >](#)

Form 1
Application for Access to a Record
Province of Nova Scotia
Freedom of Information and Protection of Privacy Act
Subsection 6(1)

TO: [REDACTED]

Privacy Officers, NSHA

*(Address to the Deputy Minister or
senior administrative officer of the
public body where the record is filed
or deposited.)*

1. This is an application pursuant to the Freedom of Information and Protection of Privacy Act for access to (check one):

- ____ (a) applicant's own personal information; or
 X (b) other information; or
____ (c) both applicant's own personal information and other information.

2. I am applying for access to the following record:

Please provide us with the following, in respect of each date between January 20, 2009 and February 15, 2017 (inclusive):

- (i) the number of surgeries cancelled [shown annually, monthly and by unit];
(ii) the number of code censuses called [shown annually and monthly];
(iii) average length of a hospital stays [shown annually, monthly and by unit];
(iv) the number of patients admitted through the Emergency Department (ED) to other units of the hospital [shown monthly and to which unit];
(v) the number of patients in hospital (HI / QEII) waiting: (a) to be moved to Long Term Care (LTC); (b) discharged home; (c) to be repatriated to other provinces (please identify destination province); and (d) to be moved to rehabilitation units;
(vi) the number of patients who came to the ED and were admitted through the ED with and without a family physician;
(vii) for all patients admitted to the ED from LTC facilities, the names of those facilities;
(viii) the number of times in-patient floors have been deemed at or above capacity; and
(ix) daily total figures reporting how often and for how long ambulances have waited at the emergency department to discharge patients because of overcrowding in the ED (for ambulance stays greater than one hour).

3. I wish to (check one):

- ☐ (a) examine the record; or
☒ (b) receive a copy of the record.

4. I understand that I may be required to pay a fee before obtaining access to the record.

Date: February 15, 2017

Signature of Applicant:



Print Full Name of Applicant: Brandon Rose

Mailing Address of Applicant: 255 John Savage Avenue

(Street/Apartment No./R.R. No.)

Dartmouth, NS

(Community/County)

B3B 0J3

(Postal Code)

Telephone Numbers of Applicant: 902 424 4063

(Residence) / (Business)

Fax Number of Applicant: 902 424 4832

Request to Waive Fees

I hereby request to be excused from paying fees related to the above application because:

- ☐ (a) I cannot afford to pay fees; or
☐ (b) *(specify any other reason)* _____

For office use only

Date Received _____ Application No. _____

QEII Health Sciences Centre Emergency Department Monthly Report

Up to December 2016

Report Production Date: January 11, 2017

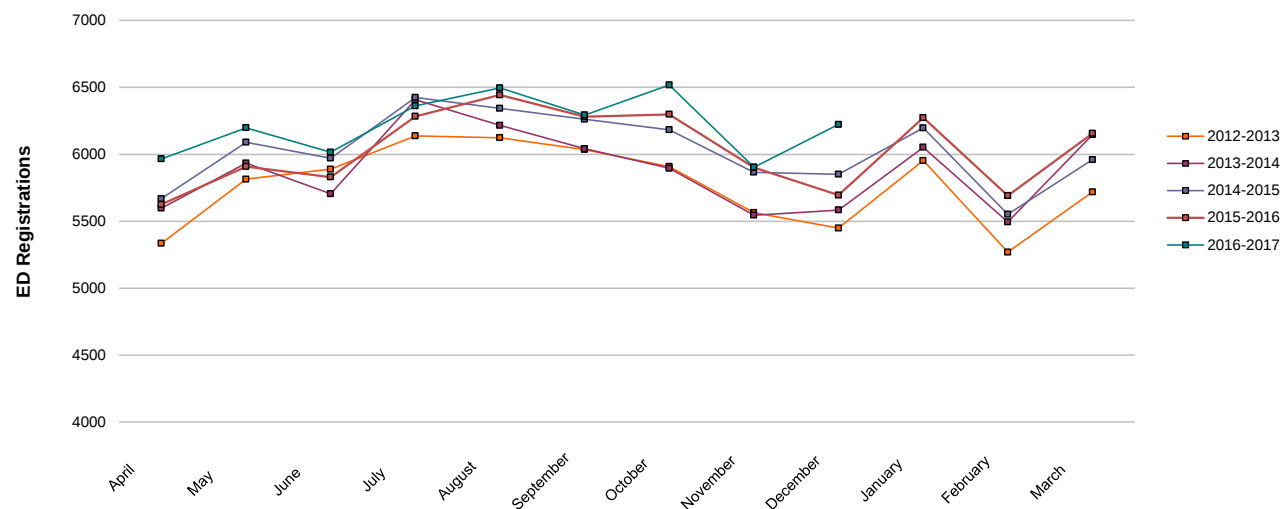
Table of Contents

Use the hyperlinks below to go directly to a report

- [1. Registrations](#)
- [1. Daily Registrations](#)
- [2. Admissions-Table](#)
- [2. Admissions-Graph](#)
- [2. Daily Admissions](#)
- [3. Ambulance-Table](#)
- [3. Ambulance-Graph](#)
- [3. Daily Ambulance Arrivals](#)
- [4. LWBS-Table](#)
- [4. LWBS-Graph](#)
- [4. Daily LWBS](#)
- [5. CTAS-Table](#)
- [5. CTAS-Graph #](#)
- [5. CTAS-Graph %](#)
- [6. ED LOS Tri-Disp Table](#)
- [6. ED LOS Tri-Disp Graph](#)
- [7. LOS Order to Disp-Table](#)
- [7. LOS Order to Disp-Graph](#)
- [8. LOS Tri-Phys Table](#)
- [8. LOS Tri-Phys Graph](#)
- [9. Tri-Disp \(Admitted\) Table](#)
- [9. Tri-Disp \(Admitted\) Graph](#)
- [10. LOS 24 Hrs-Table](#)
- [10. LOS 24 Hrs-Graph](#)
- [11. LOS 24 Hrs \(Adm\) Table](#)
- [11. LOS 24 Hrs \(Adm\) Graph](#)
- [12. Volume by Age](#)
- [13. Volume by Age \(Admitted\)](#)

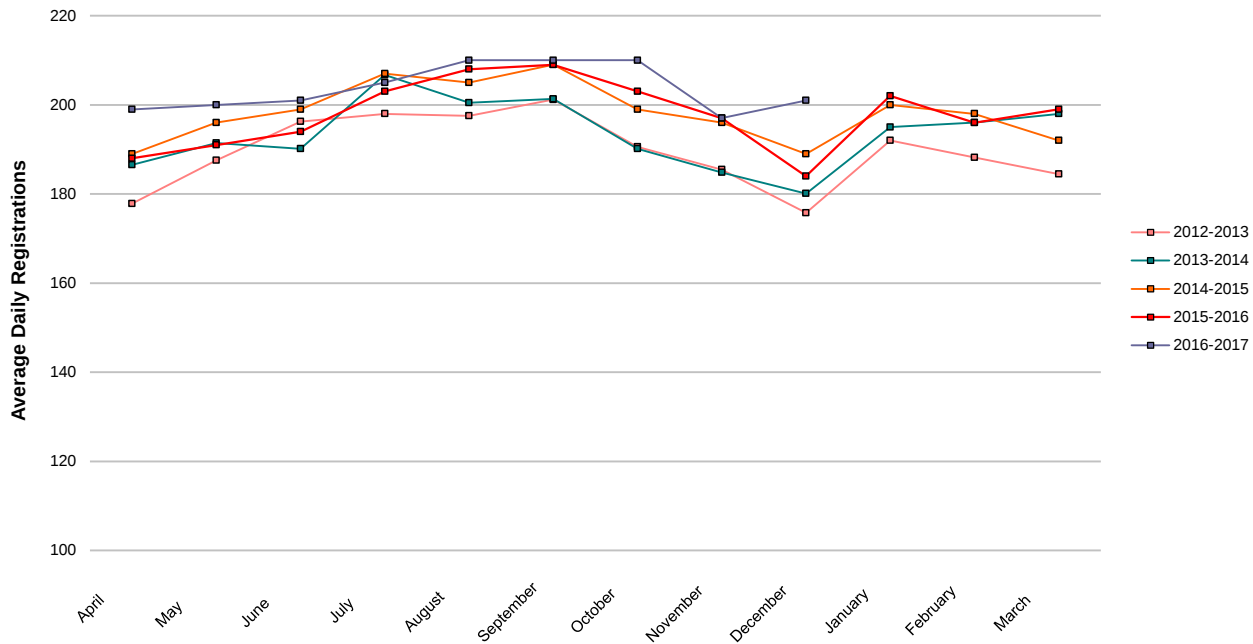
QEII Emergency Department Registrations

Fiscal Year	April	May	June	July	August	September	October	November	December	January	February	March	Fiscal Total
2012-2013	5,335	5,814	5,888	6,138	6,124	6,035	5,908	5,564	5,448	5,953	5,269	5,719	69,195
2013-2014	5,597	5,934	5,705	6,408	6,216	6,041	5,895	5,545	5,584	6,052	5,494	6,146	70,617
2014-2015	5,668	6,090	5,971	6,424	6,343	6,262	6,183	5,866	5,850	6,197	5,552	5,960	72,366
2015-2016	5,625	5,909	5,830	6,283	6,443	6,281	6,298	5,902	5,695	6,274	5,691	6,157	72,388
2016-2017	5,966	6,198	6,015	6,362	6,495	6,294	6,517	5,903	6,223				55,973



QEII Emergency Department Average Daily Registrations

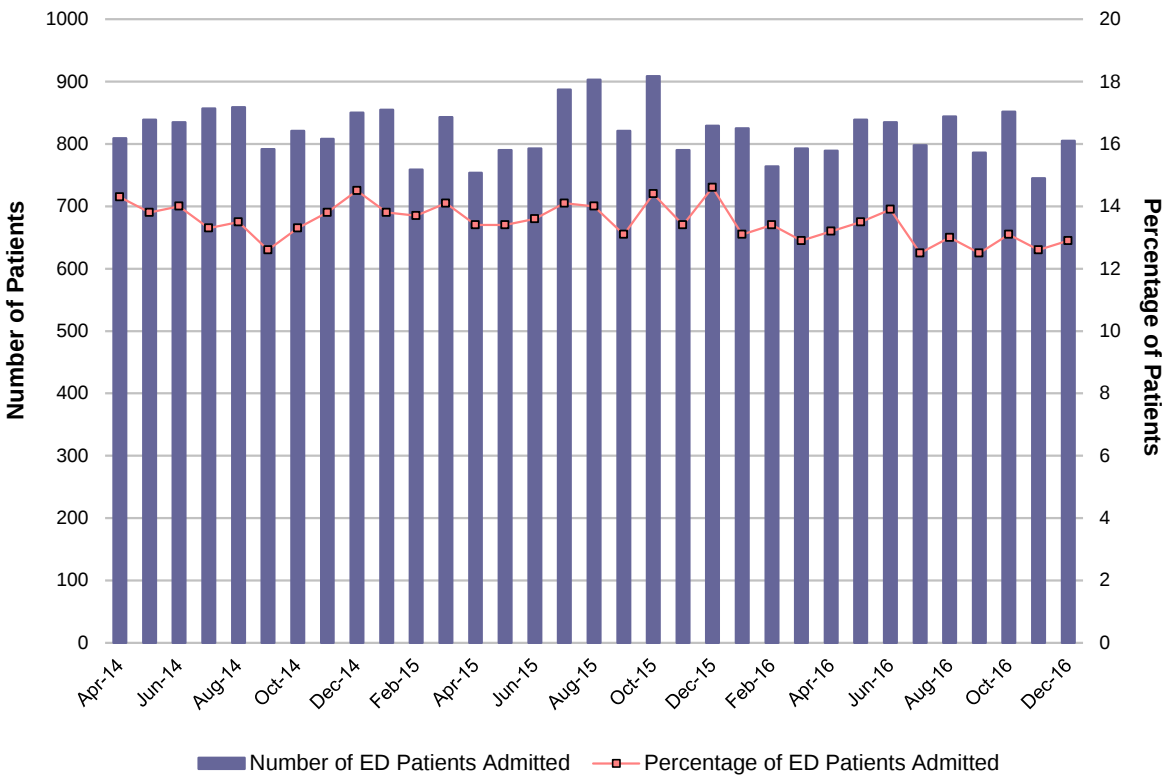
Fiscal Year	April	May	June	July	August	September	October	November	December	January	February	March
2012-2013	178	188	196	198	198	201	191	185	176	192	188	184
2013-2014	187	191	190	207	200	201	190	185	180	195	196	198
2014-2015	189	196	199	207	205	209	199	196	189	200	198	192
2015-2016	188	191	194	203	208	209	203	197	184	202	196	199
2016-2017	199	200	201	205	210	210	210	197	201			



**QEll Emergency Department
Inpatient Admissions through the Emergency Dept**

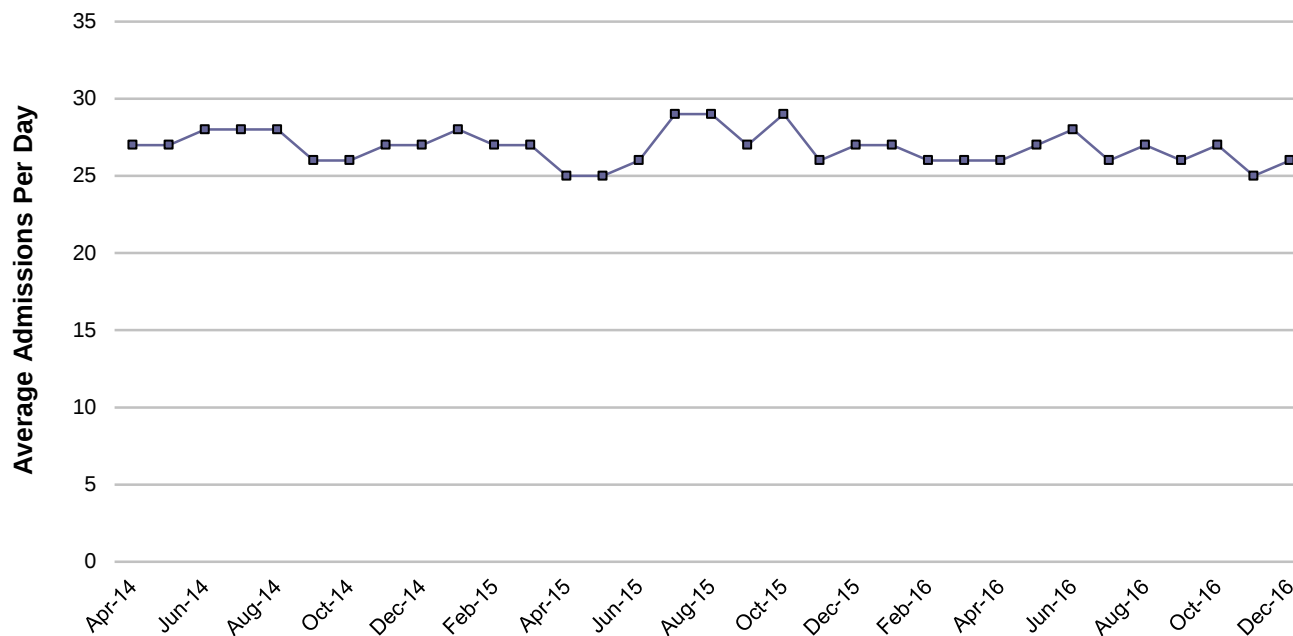
Month	Number of ED Patients Admitted	Percentage of ED Patients Admitted	Avg Daily Admissions
Apr-14	809	14.3	27
May-14	839	13.8	27
Jun-14	835	14.0	28
Jul-14	857	13.3	28
Aug-14	859	13.5	28
Sep-14	792	12.6	26
Oct-14	821	13.3	26
Nov-14	808	13.8	27
Dec-14	850	14.5	27
Jan-15	855	13.8	28
Feb-15	759	13.7	27
Mar-15	843	14.1	27
Apr-15	754	13.4	25
May-15	790	13.4	25
Jun-15	793	13.6	26
Jul-15	887	14.1	29
Aug-15	903	14.0	29
Sep-15	821	13.1	27
Oct-15	909	14.4	29
Nov-15	790	13.4	26
Dec-15	829	14.6	27
Jan-16	825	13.1	27
Feb-16	764	13.4	26
Mar-16	793	12.9	26
Apr-16	789	13.2	26
May-16	839	13.5	27
Jun-16	835	13.9	28
Jul-16	798	12.5	26
Aug-16	844	13.0	27
Sep-16	786	12.5	26
Oct-16	852	13.1	27
Nov-16	745	12.6	25
Dec-16	805	12.9	26

**QEI Emergency Department
Inpatient Admissions through the Emergency Dept**



QEI Emergency Department

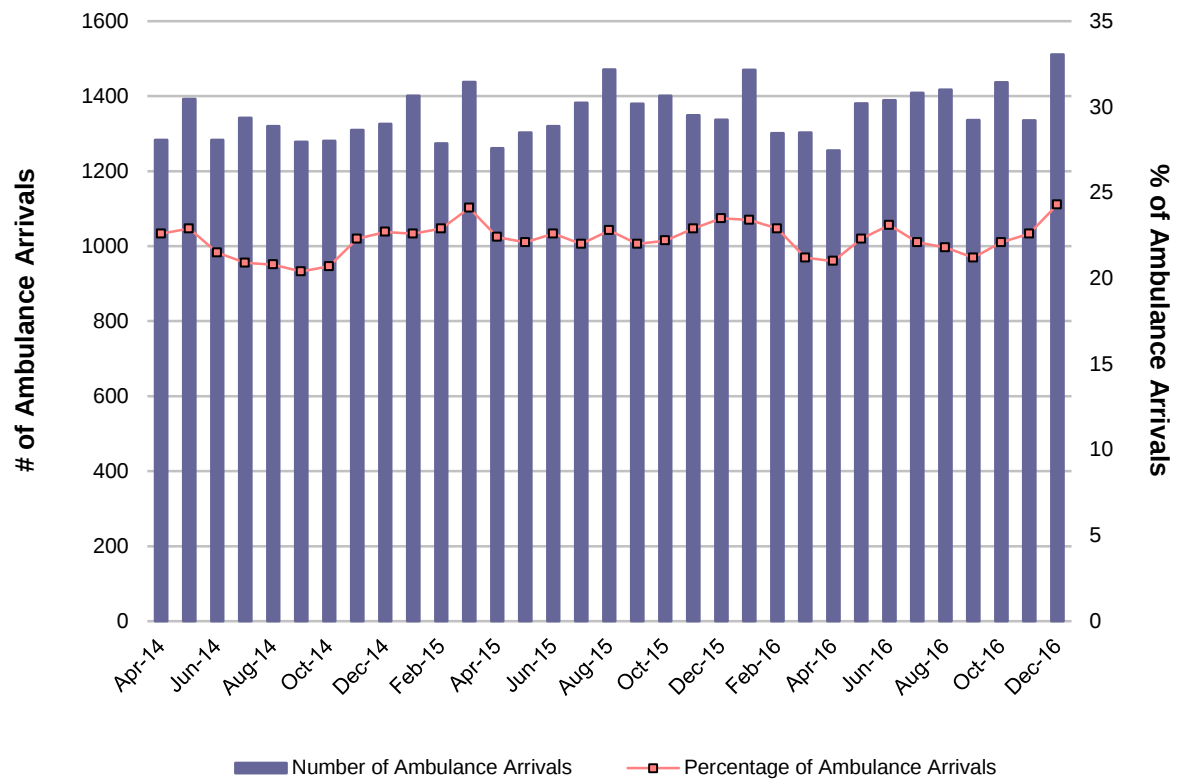
Average Daily Inpatient Admissions through the Emergency Dept



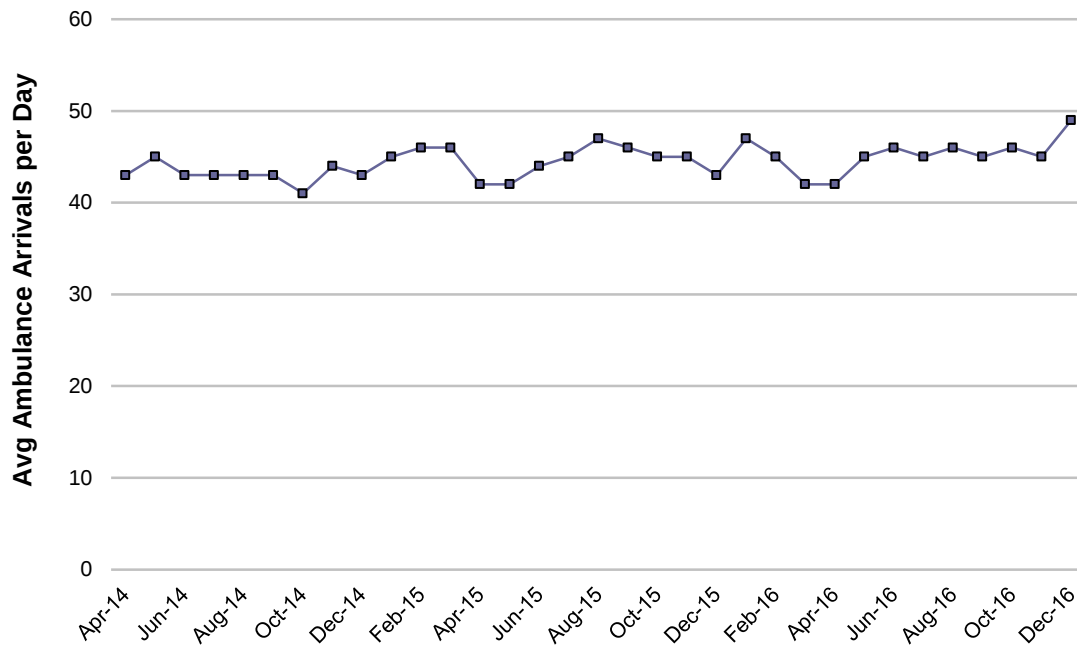
**QEI Emergency Department
Ambulance Arrivals (EHS Ground)**

Month	Number of Ambulance Arrivals	Percentage of Ambulance Arrivals	Average Ambulance Arrivals per Day
Apr-14	1,283	22.6	43
May-14	1,393	22.9	45
Jun-14	1,283	21.5	43
Jul-14	1,342	20.9	43
Aug-14	1,320	20.8	43
Sep-14	1,278	20.4	43
Oct-14	1,281	20.7	41
Nov-14	1,310	22.3	44
Dec-14	1,326	22.7	43
Jan-15	1,401	22.6	45
Feb-15	1,274	22.9	46
Mar-15	1,438	24.1	46
Apr-15	1,261	22.4	42
May-15	1,303	22.1	42
Jun-15	1,320	22.6	44
Jul-15	1,382	22.0	45
Aug-15	1,471	22.8	47
Sep-15	1,380	22.0	46
Oct-15	1,401	22.2	45
Nov-15	1,349	22.9	45
Dec-15	1,337	23.5	43
Jan-16	1,470	23.4	47
Feb-16	1,301	22.9	45
Mar-16	1,303	21.2	42
Apr-16	1,255	21.0	42
May-16	1,381	22.3	45
Jun-16	1,389	23.1	46
Jul-16	1,409	22.1	45
Aug-16	1,417	21.8	46
Sep-16	1,336	21.2	45
Oct-16	1,437	22.1	46
Nov-16	1,335	22.6	45
Dec-16	1,511	24.3	49

QEI Emergency Department Ambulance Arrivals (EHS Ground)



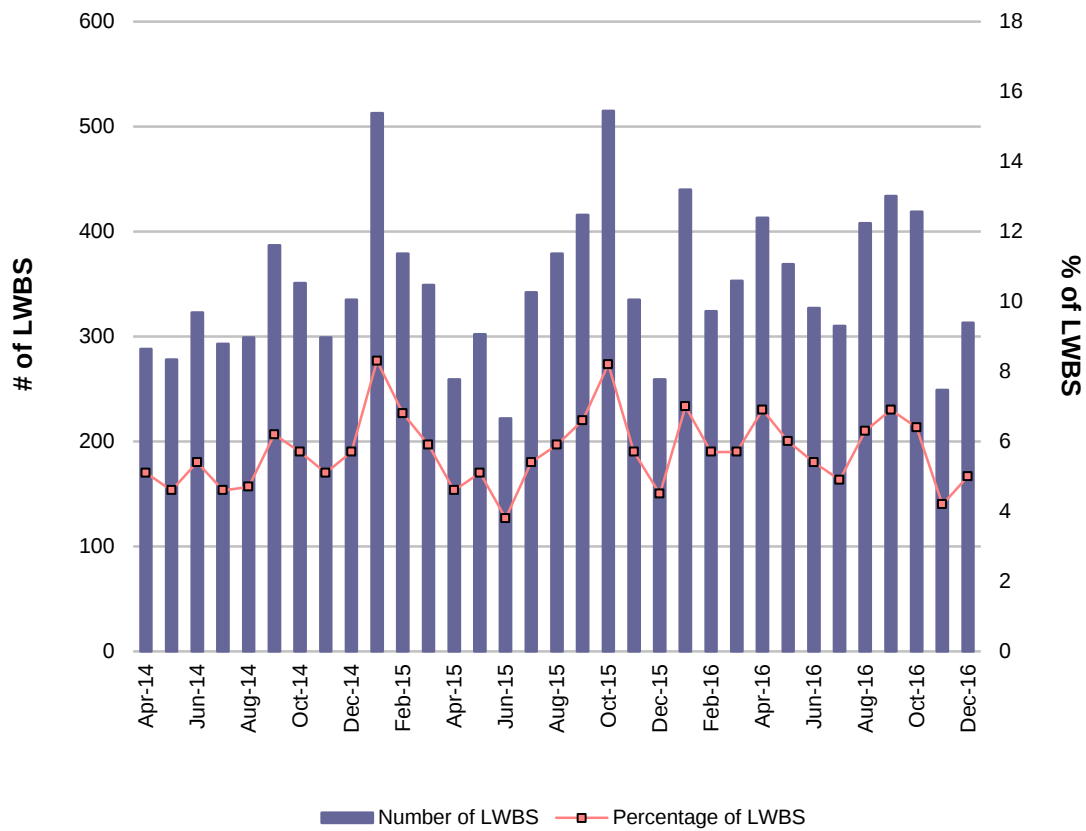
QEII Emergency Department
Average Daily Ambulance Arrivals (EHS Ground)



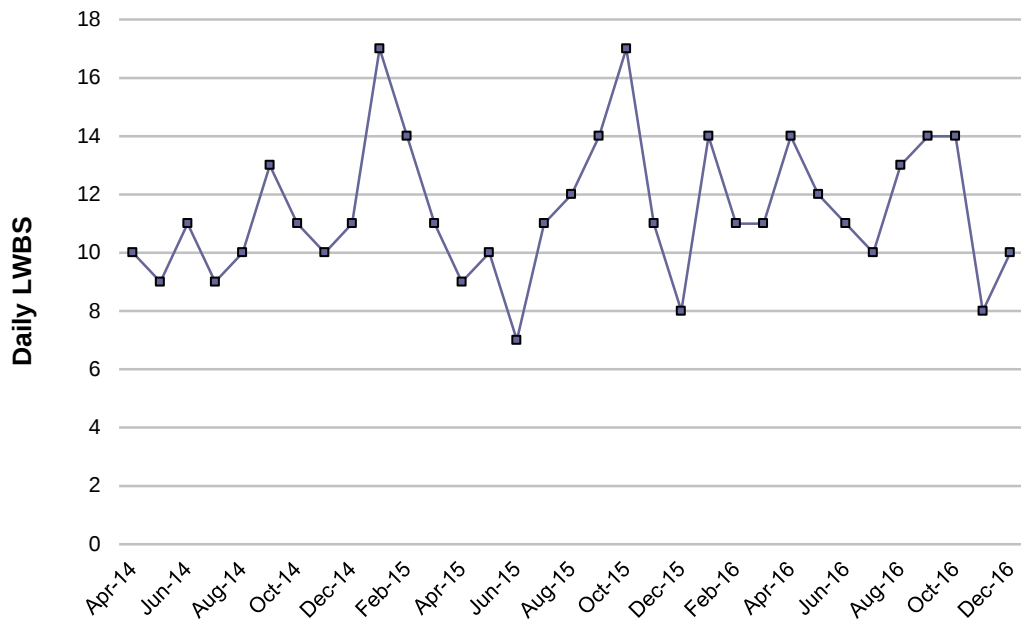
QEII Emergency Department
Emergency Dept Patients Left Without Being Seen (LWBS)

Month	Number of LWBS	Percentage of LWBS	Avg Daily LWBS
Apr-14	288	5.1	10
May-14	278	4.6	9
Jun-14	323	5.4	11
Jul-14	293	4.6	9
Aug-14	299	4.7	10
Sep-14	387	6.2	13
Oct-14	351	5.7	11
Nov-14	299	5.1	10
Dec-14	335	5.7	11
Jan-15	513	8.3	17
Feb-15	379	6.8	14
Mar-15	349	5.9	11
Apr-15	259	4.6	9
May-15	302	5.1	10
Jun-15	222	3.8	7
Jul-15	342	5.4	11
Aug-15	379	5.9	12
Sep-15	416	6.6	14
Oct-15	515	8.2	17
Nov-15	335	5.7	11
Dec-15	259	4.5	8
Jan-16	440	7.0	14
Feb-16	324	5.7	11
Mar-16	353	5.7	11
Apr-16	413	6.9	14
May-16	369	6.0	12
Jun-16	327	5.4	11
Jul-16	310	4.9	10
Aug-16	408	6.3	13
Sep-16	434	6.9	14
Oct-16	419	6.4	14
Nov-16	249	4.2	8
Dec-16	313	5.0	10

QEI Emergency Department Emergency Dept Patients Left Without Being Seen (LWBS)



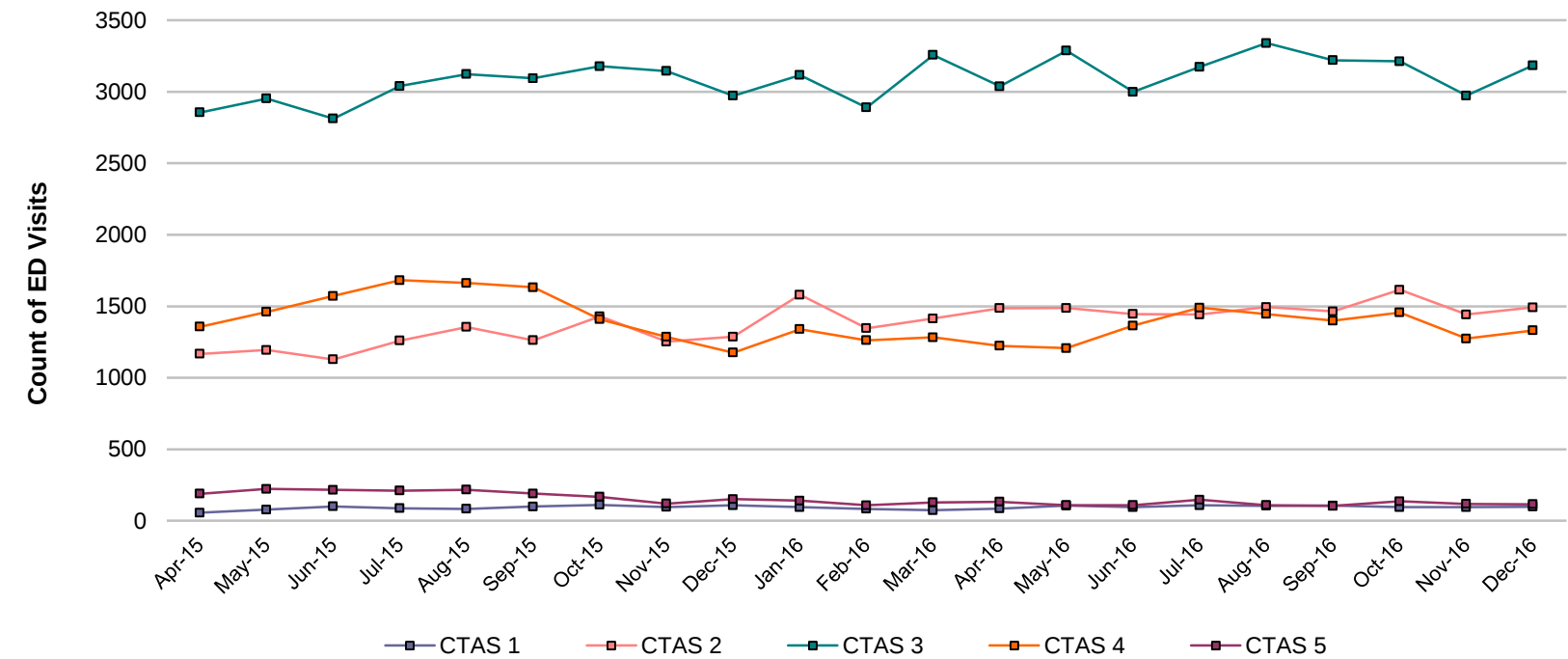
QEI Emergency Department Average Daily Left Without Being Seen (LWBS)



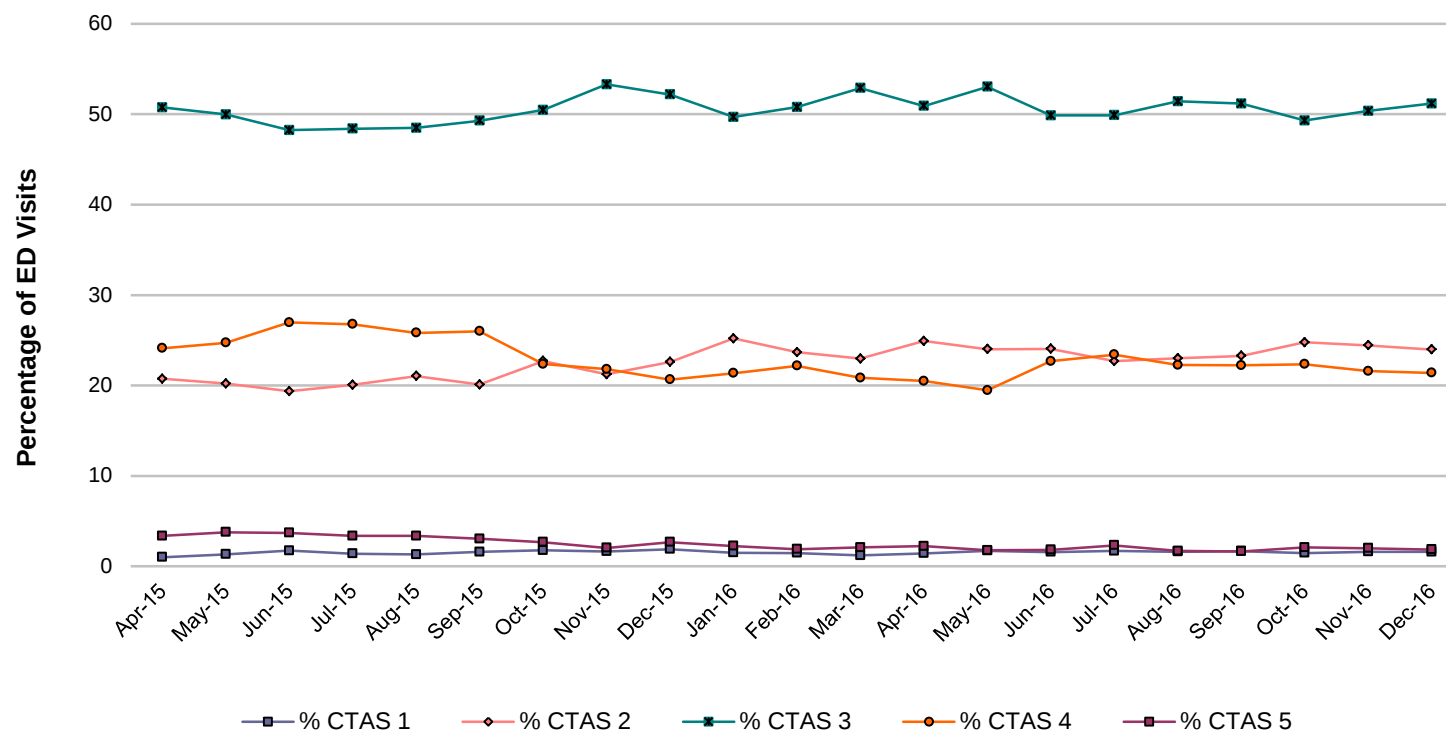
**QEI Emergency Department
Number and Percent of ED Visits by CTAS**

Month	CTAS 1	CTAS 2	CTAS 3	CTAS 4	CTAS 5	Total Count	% CTAS 1	% CTAS 2	% CTAS 3	% CTAS 4	% CTAS 5
Apr-15	57	1,167	2,855	1,357	189	5,625	1.0	20.7	50.8	24.1	3.4
May-15	78	1,194	2,953	1,461	223	5,909	1.3	20.2	50.0	24.7	3.8
Jun-15	101	1,129	2,812	1,572	216	5,830	1.7	19.4	48.2	27.0	3.7
Jul-15	88	1,260	3,040	1,682	211	6,281	1.4	20.1	48.4	26.8	3.4
Aug-15	84	1,355	3,123	1,663	217	6,442	1.3	21.0	48.5	25.8	3.4
Sep-15	100	1,262	3,094	1,632	191	6,279	1.6	20.1	49.3	26.0	3.0
Oct-15	112	1,430	3,178	1,409	168	6,297	1.8	22.7	50.5	22.4	2.7
Nov-15	97	1,253	3,145	1,286	120	5,901	1.6	21.2	53.3	21.8	2.0
Dec-15	108	1,287	2,972	1,176	152	5,695	1.9	22.6	52.2	20.6	2.7
Jan-16	95	1,581	3,117	1,340	141	6,274	1.5	25.2	49.7	21.4	2.2
Feb-16	84	1,347	2,890	1,262	108	5,691	1.5	23.7	50.8	22.2	1.9
Mar-16	74	1,414	3,257	1,283	129	6,157	1.2	23.0	52.9	20.8	2.1
Apr-16	86	1,487	3,038	1,223	133	5,967	1.4	24.9	50.9	20.5	2.2
May-16	106	1,488	3,287	1,207	110	6,198	1.7	24.0	53.0	19.5	1.8
Jun-16	95	1,446	2,999	1,365	110	6,015	1.6	24.0	49.9	22.7	1.8
Jul-16	108	1,443	3,174	1,490	147	6,362	1.7	22.7	49.9	23.4	2.3
Aug-16	105	1,494	3,340	1,446	110	6,495	1.6	23.0	51.4	22.3	1.7
Sep-16	106	1,464	3,220	1,399	104	6,293	1.7	23.3	51.2	22.2	1.7
Oct-16	96	1,615	3,213	1,457	136	6,517	1.5	24.8	49.3	22.4	2.1
Nov-16	95	1,443	2,973	1,274	118	5,903	1.6	24.4	50.4	21.6	2.0
Dec-16	99	1,492	3,185	1,331	116	6,223	1.6	24.0	51.2	21.4	1.9

QEI Emergency Department
Number of ED Visits by CTAS



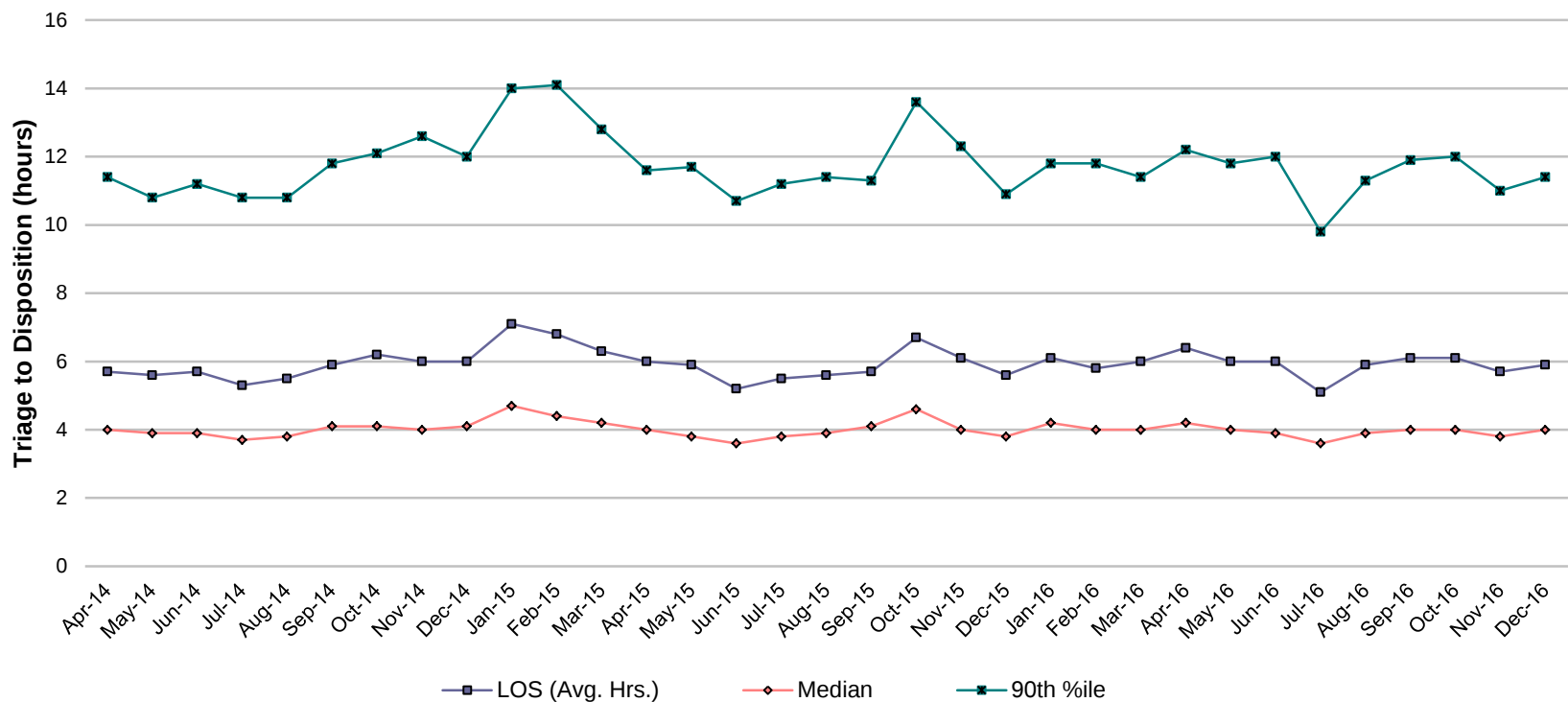
QEI Emergency Department Percent of ED Visits by CTAS



**QEI Emergency Department
ED LOS (Hours) - Triage to Disposition
Average, Median and 90th Percentile
(Excludes Patients who Left Without being Seen)**

Month	LOS (Avg. Hrs.)	Median	90th %ile
Apr-14	5.7	4.0	11.4
May-14	5.6	3.9	10.8
Jun-14	5.7	3.9	11.2
Jul-14	5.3	3.7	10.8
Aug-14	5.5	3.8	10.8
Sep-14	5.9	4.1	11.8
Oct-14	6.2	4.1	12.1
Nov-14	6.0	4.0	12.6
Dec-14	6.0	4.1	12.0
Jan-15	7.1	4.7	14.0
Feb-15	6.8	4.4	14.1
Mar-15	6.3	4.2	12.8
Apr-15	6.0	4.0	11.6
May-15	5.9	3.8	11.7
Jun-15	5.2	3.6	10.7
Jul-15	5.5	3.8	11.2
Aug-15	5.6	3.9	11.4
Sep-15	5.7	4.1	11.3
Oct-15	6.7	4.6	13.6
Nov-15	6.1	4.0	12.3
Dec-15	5.6	3.8	10.9
Jan-16	6.1	4.2	11.8
Feb-16	5.8	4.0	11.8
Mar-16	6.0	4.0	11.4
Apr-16	6.4	4.2	12.2
May-16	6.0	4.0	11.8
Jun-16	6.0	3.9	12.0
Jul-16	5.1	3.6	9.8
Aug-16	5.9	3.9	11.3
Sep-16	6.1	4.0	11.9
Oct-16	6.1	4.0	12.0
Nov-16	5.7	3.8	11.0
Dec-16	5.9	4.0	11.4

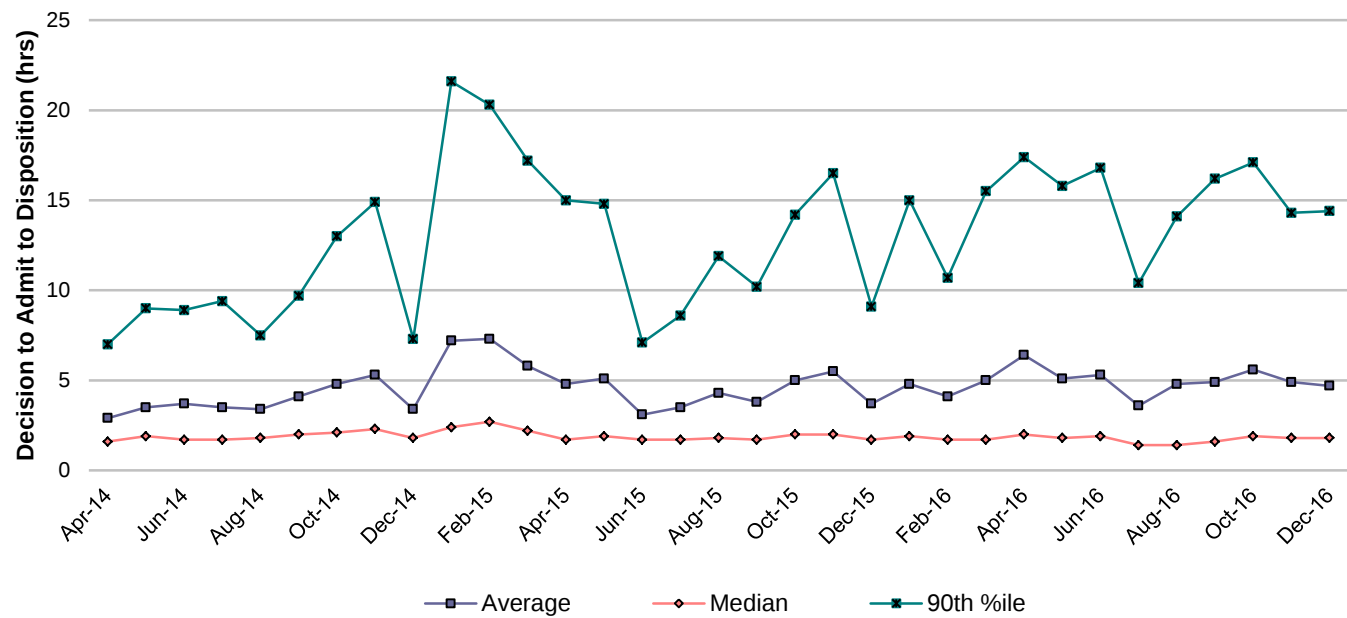
QEII Emergency Department
ED LOS (Hours) - Triage to Disposition Average, Median and 90th Percentile
 (Excludes Patients who Left Without being Seen)



QEI Emergency Department
ED LOS - Decision To Admit to ED Disposition (Hours)
Average, Median and 90th Percentile
(Admitted Patients)

Month	Average	Median	90th %ile
Apr-14	2.9	1.6	7.0
May-14	3.5	1.9	9.0
Jun-14	3.7	1.7	8.9
Jul-14	3.5	1.7	9.4
Aug-14	3.4	1.8	7.5
Sep-14	4.1	2.0	9.7
Oct-14	4.8	2.1	13.0
Nov-14	5.3	2.3	14.9
Dec-14	3.4	1.8	7.3
Jan-15	7.2	2.4	21.6
Feb-15	7.3	2.7	20.3
Mar-15	5.8	2.2	17.2
Apr-15	4.8	1.7	15.0
May-15	5.1	1.9	14.8
Jun-15	3.1	1.7	7.1
Jul-15	3.5	1.7	8.6
Aug-15	4.3	1.8	11.9
Sep-15	3.8	1.7	10.2
Oct-15	5.0	2.0	14.2
Nov-15	5.5	2.0	16.5
Dec-15	3.7	1.7	9.1
Jan-16	4.8	1.9	15.0
Feb-16	4.1	1.7	10.7
Mar-16	5.0	1.7	15.5
Apr-16	6.4	2.0	17.4
May-16	5.1	1.8	15.8
Jun-16	5.3	1.9	16.8
Jul-16	3.6	1.4	10.4
Aug-16	4.8	1.4	14.1
Sep-16	4.9	1.6	16.2
Oct-16	5.6	1.9	17.1
Nov-16	4.9	1.8	14.3
Dec-16	4.7	1.8	14.4

QEll Emergency Department
ED LOS - Decision To Admit to ED Disposition (Hours) Average, Median and 90th Percentile
(Admitted Patients)

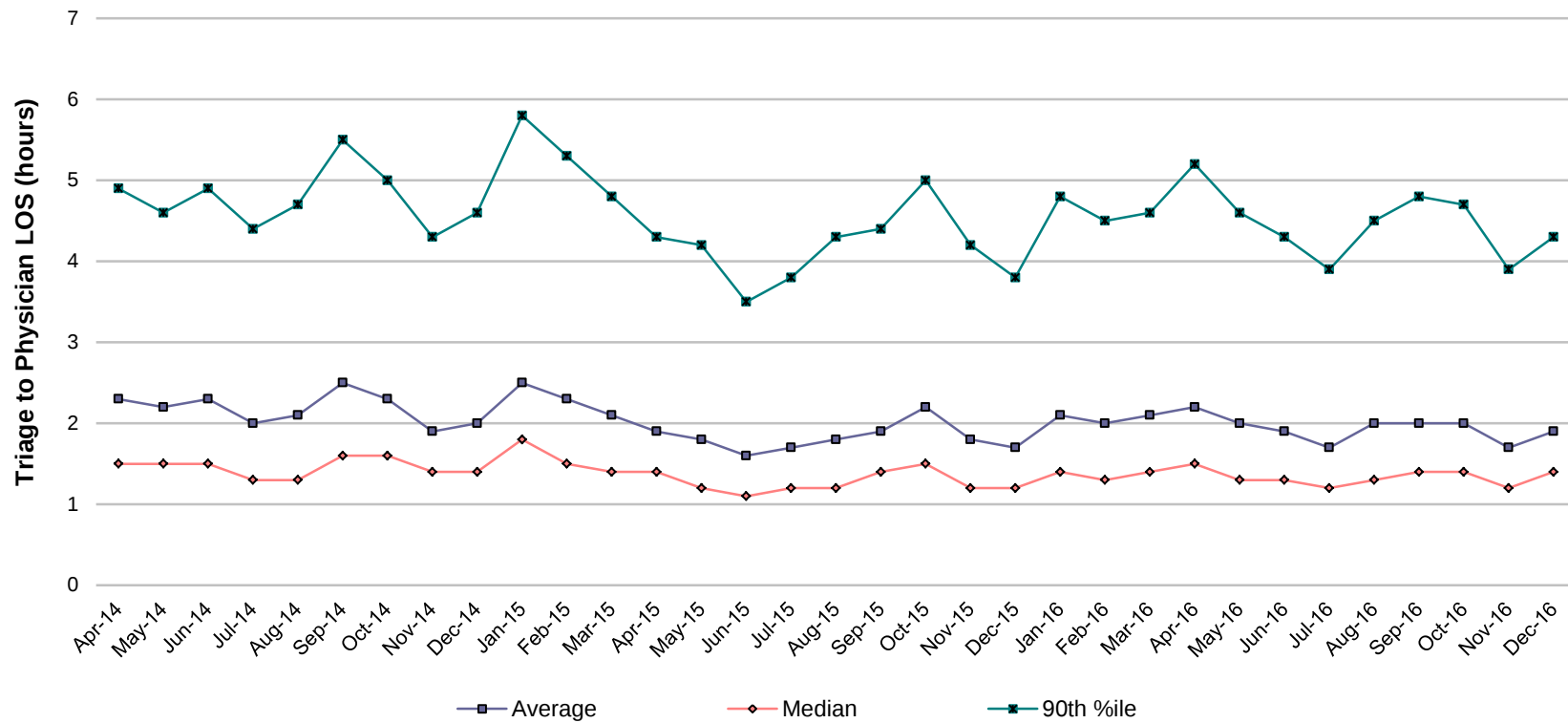


**QEII Emergency Department
ED LOS (Hours) - Triage to Physician
Average, Median and 90th Percentile**

Month	Average	Median	90th %ile
Apr-14	2.3	1.5	4.9
May-14	2.2	1.5	4.6
Jun-14	2.3	1.5	4.9
Jul-14	2.0	1.3	4.4
Aug-14	2.1	1.3	4.7
Sep-14	2.5	1.6	5.5
Oct-14	2.3	1.6	5.0
Nov-14	1.9	1.4	4.3
Dec-14	2.0	1.4	4.6
Jan-15	2.5	1.8	5.8
Feb-15	2.3	1.5	5.3
Mar-15	2.1	1.4	4.8
Apr-15	1.9	1.4	4.3
May-15	1.8	1.2	4.2
Jun-15	1.6	1.1	3.5
Jul-15	1.7	1.2	3.8
Aug-15	1.8	1.2	4.3
Sep-15	1.9	1.4	4.4
Oct-15	2.2	1.5	5.0
Nov-15	1.8	1.2	4.2
Dec-15	1.7	1.2	3.8
Jan-16	2.1	1.4	4.8
Feb-16	2.0	1.3	4.5
Mar-16	2.1	1.4	4.6
Apr-16	2.2	1.5	5.2
May-16	2.0	1.3	4.6
Jun-16	1.9	1.3	4.3
Jul-16	1.7	1.2	3.9
Aug-16	2.0	1.3	4.5
Sep-16	2.0	1.4	4.8
Oct-16	2.0	1.4	4.7
Nov-16	1.7	1.2	3.9
Dec-16	1.9	1.4	4.3

**QEI Emergency Department
ED LOS (Hours) - Triage to Physician**

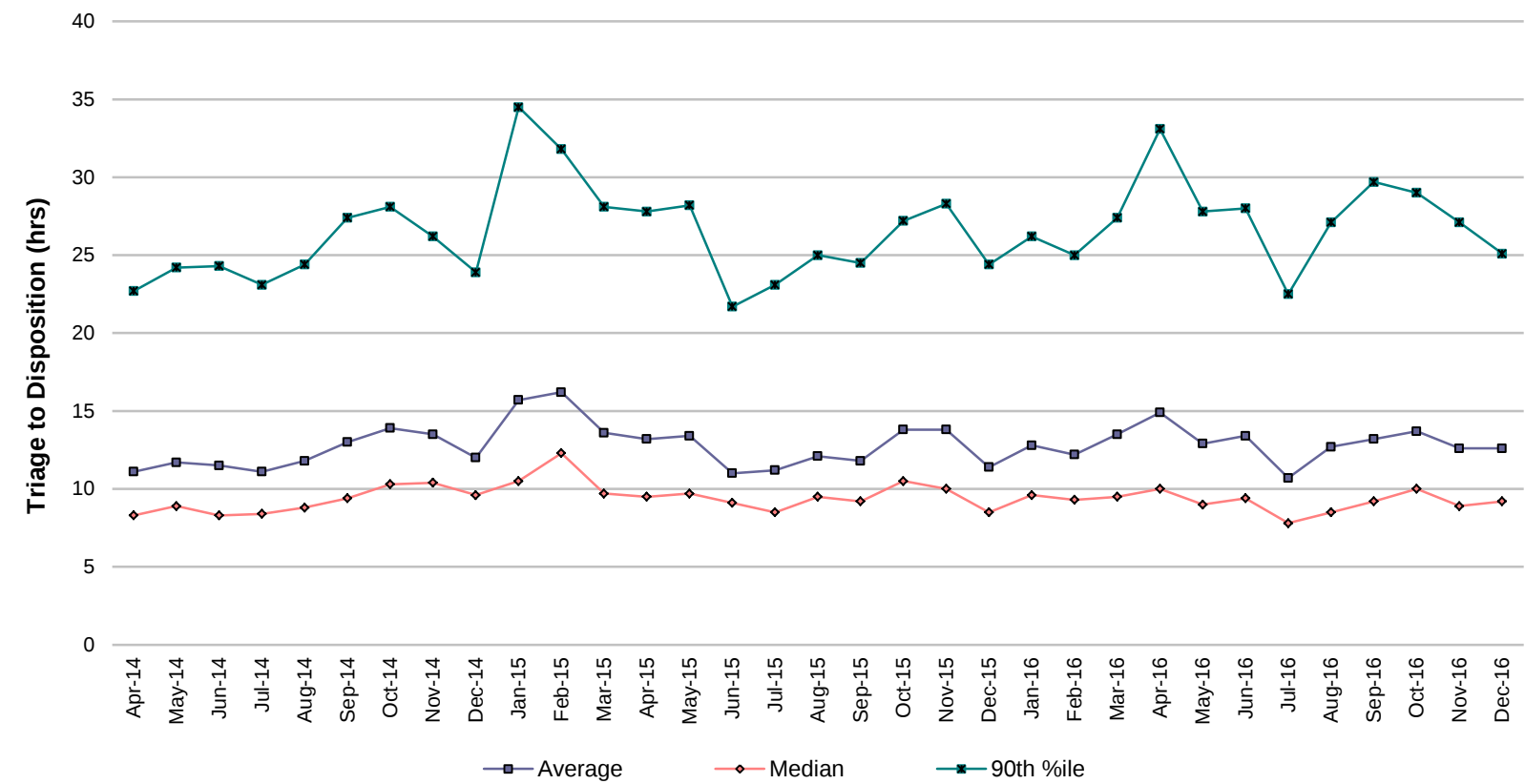
Average, Median and 90th Percentile



**QEI Emergency Department
ED LOS (Hours) Triage to Disposition
Average, Median and 90th Percentile
Admitted Patients**

Month	Average	Median	90th %ile
Apr-14	11.1	8.3	22.7
May-14	11.7	8.9	24.2
Jun-14	11.5	8.3	24.3
Jul-14	11.1	8.4	23.1
Aug-14	11.8	8.8	24.4
Sep-14	13.0	9.4	27.4
Oct-14	13.9	10.3	28.1
Nov-14	13.5	10.4	26.2
Dec-14	12.0	9.6	23.9
Jan-15	15.7	10.5	34.5
Feb-15	16.2	12.3	31.8
Mar-15	13.6	9.7	28.1
Apr-15	13.2	9.5	27.8
May-15	13.4	9.7	28.2
Jun-15	11.0	9.1	21.7
Jul-15	11.2	8.5	23.1
Aug-15	12.1	9.5	25.0
Sep-15	11.8	9.2	24.5
Oct-15	13.8	10.5	27.2
Nov-15	13.8	10.0	28.3
Dec-15	11.4	8.5	24.4
Jan-16	12.8	9.6	26.2
Feb-16	12.2	9.3	25.0
Mar-16	13.5	9.5	27.4
Apr-16	14.9	10.0	33.1
May-16	12.9	9.0	27.8
Jun-16	13.4	9.4	28.0
Jul-16	10.7	7.8	22.5
Aug-16	12.7	8.5	27.1
Sep-16	13.2	9.2	29.7
Oct-16	13.7	10.0	29.0
Nov-16	12.6	8.9	27.1
Dec-16	12.6	9.2	25.1

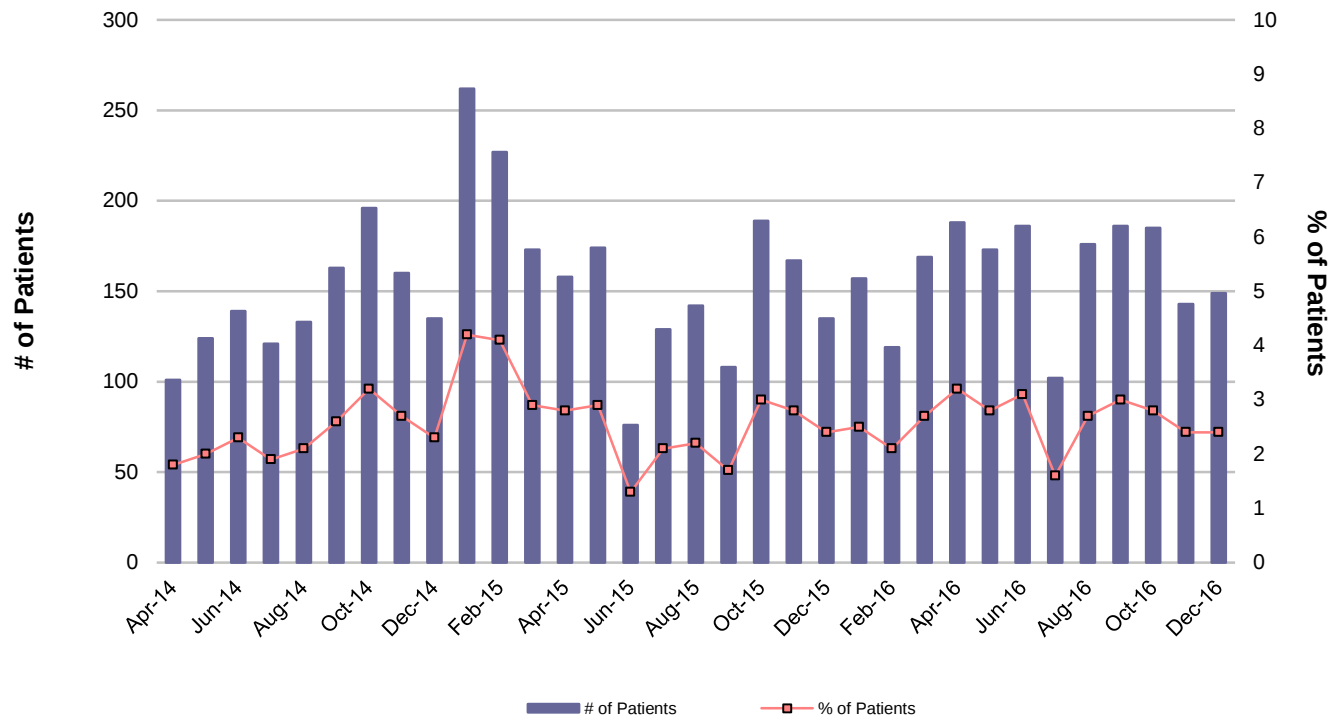
QEll Emergency Department
ED LOS (Hours) - Triage to Disposition Average, Median and 90th Percentile
Admitted Patients



**QEII Emergency Department
ED Patients with LOS >24 Hours**

Month	# of Patients	% of Patients
Apr-14	101	1.8
May-14	124	2.0
Jun-14	139	2.3
Jul-14	121	1.9
Aug-14	133	2.1
Sep-14	163	2.6
Oct-14	196	3.2
Nov-14	160	2.7
Dec-14	135	2.3
Jan-15	262	4.2
Feb-15	227	4.1
Mar-15	173	2.9
Apr-15	158	2.8
May-15	174	2.9
Jun-15	76	1.3
Jul-15	129	2.1
Aug-15	142	2.2
Sep-15	108	1.7
Oct-15	189	3.0
Nov-15	167	2.8
Dec-15	135	2.4
Jan-16	157	2.5
Feb-16	119	2.1
Mar-16	169	2.7
Apr-16	188	3.2
May-16	173	2.8
Jun-16	186	3.1
Jul-16	102	1.6
Aug-16	176	2.7
Sep-16	186	3.0
Oct-16	185	2.8
Nov-16	143	2.4
Dec-16	149	2.4

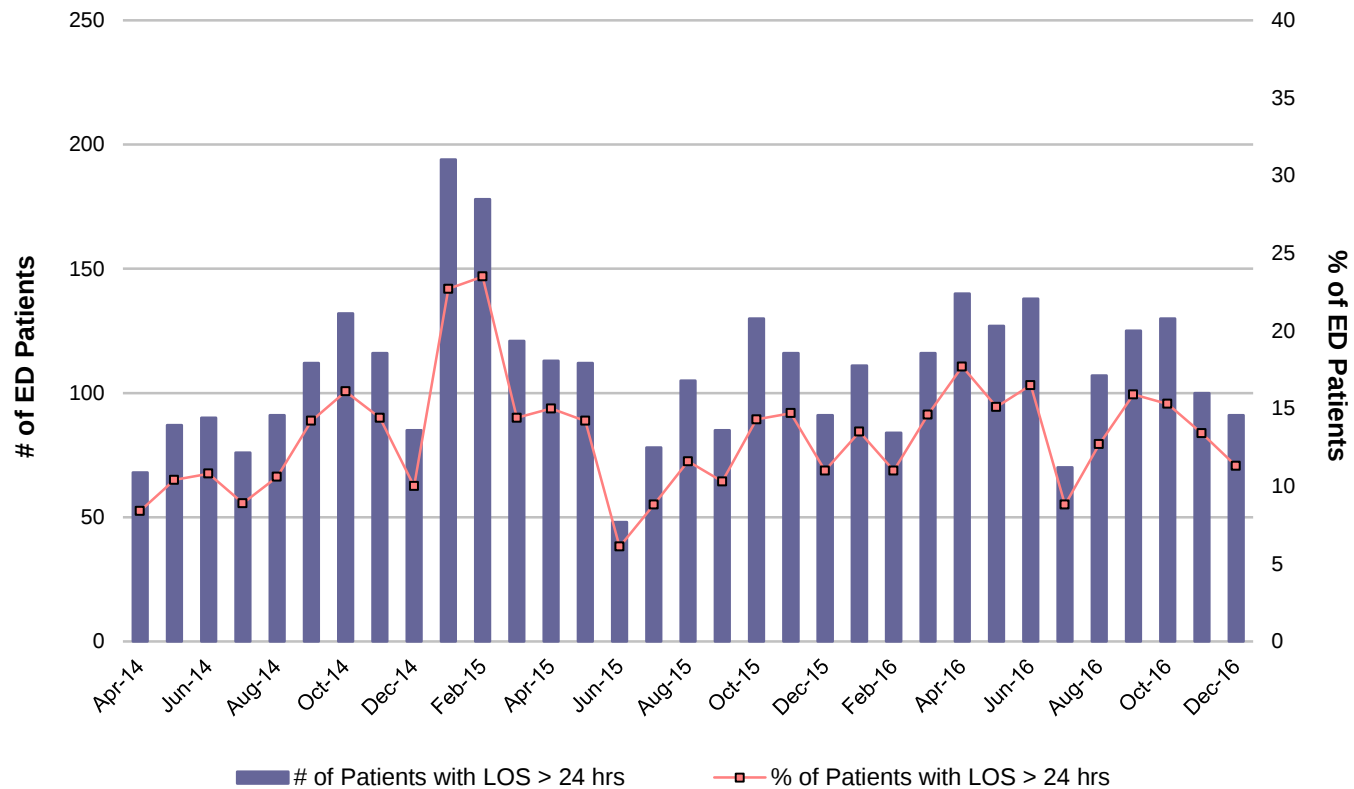
QEII Emergency Department ED Patients with LOS >24 Hours



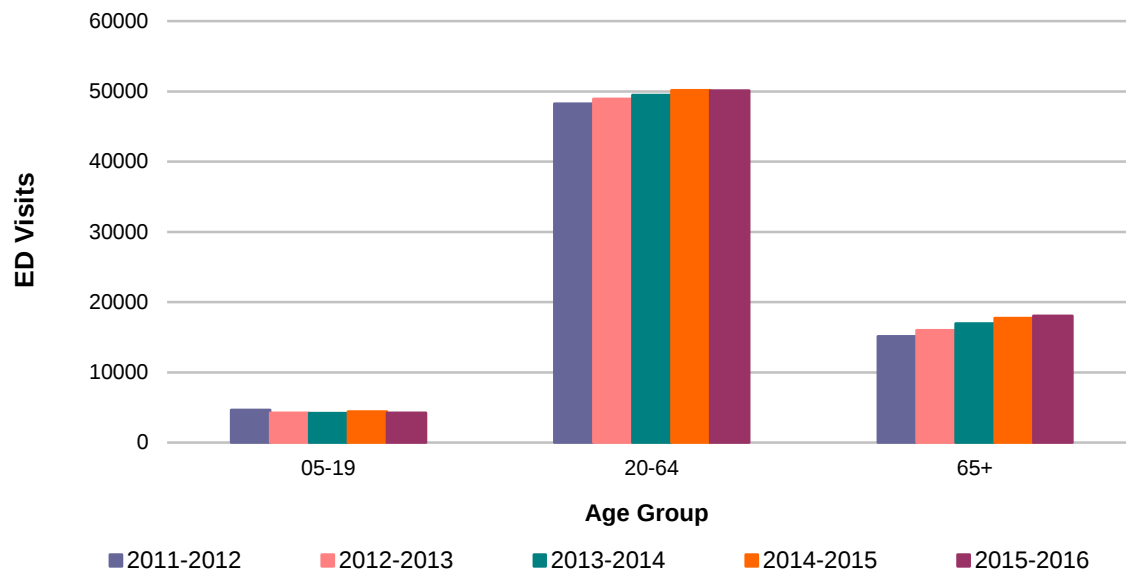
**QEI Emergency Department
ED Patients with LOS >24 Hours (Admitted)**

Month	# of Patients with LOS > 24 hrs	Total Admitted Patients	% of Patients with LOS > 24 hrs
Apr-14	68	809	8.4
May-14	87	839	10.4
Jun-14	90	835	10.8
Jul-14	76	858	8.9
Aug-14	91	859	10.6
Sep-14	112	791	14.2
Oct-14	132	821	16.1
Nov-14	116	808	14.4
Dec-14	85	850	10.0
Jan-15	194	856	22.7
Feb-15	178	759	23.5
Mar-15	121	843	14.4
Apr-15	113	755	15.0
May-15	112	790	14.2
Jun-15	48	793	6.1
Jul-15	78	887	8.8
Aug-15	105	903	11.6
Sep-15	85	822	10.3
Oct-15	130	909	14.3
Nov-15	116	790	14.7
Dec-15	91	829	11.0
Jan-16	111	825	13.5
Feb-16	84	764	11.0
Mar-16	116	792	14.6
Apr-16	140	789	17.7
May-16	127	839	15.1
Jun-16	138	835	16.5
Jul-16	70	798	8.8
Aug-16	107	844	12.7
Sep-16	125	786	15.9
Oct-16	130	852	15.3
Nov-16	100	745	13.4
Dec-16	91	805	11.3

QEI Emergency Department ED Patients with LOS >24 Hours (Admitted)

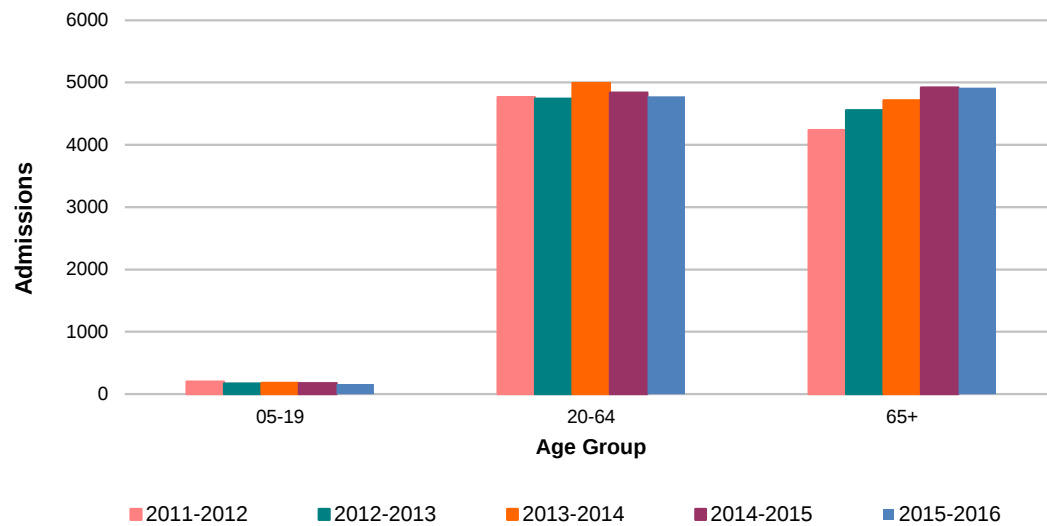


Number of QEII Emergency Department Visits by Age Group



Fiscal Year	05-19	20-64	65+
2011-2012	4,654	48,239	15,118
2012-2013	4,263	48,931	16,000
2013-2014	4,188	49,483	16,946
2014-2015	4,456	50,175	17,734
2015-2016	4,239	50,107	18,042

Number of QEII Emergency Department Visits by Age Group (Admitted Patients)



Fiscal Year	05-19	20-64	65+
2011-2012	201	4,763	4,236
2012-2013	170	4,741	4,555
2013-2014	182	4,993	4,716
2014-2015	173	4,835	4,919
2015-2016	163	4,777	4,917

QEII Emergency Department visits – 2009 to 2016

Calendar year	Patient volume	Percentage change from 2009
2009	60,088	-
2010	61,771	2.8%
2011	66,875	11.3%
2012	69,312	15.35%
2013	69,866	16.27%
2014	72,349	20.4%
2015	71,975	19.78%
2016	74,095	23.31%

QEI Emergency Department

Calendar Year	Patient Volume
2,009	60,088
2,010	61,771
2,011	66,875
2,012	69,312
2,013	69,866
2,014	72,349
2,015	71,975
2,016	74,095

Brandon Rose

Subject: RE: EHS Data Request

From: [REDACTED]@novascotia.ca]

Sent: February 24, 2017 1:19 PM

To: Brandon Rose

Subject: RE: EHS Data Request

Hi Brandon,

Thanks for the quick response.

One thing, I note on the form it says that this data is for research, however, there is not Research Ethics Board approval. If this is a research project that will eventually become publicly accessible data, or require access to patient identifiable data, then approval in writing must be obtained from the Ethics Board before we can proceed with this request.

If this is the case and you have the approval letter and can forward it, that would be great. Please advise.

Thanks,
[REDACTED]

From: Brandon Rose [mailto:[REDACTED]]
Sent: Friday, February 24, 2017 12:45 PM
To: [REDACTED]@novascotia.ca>
Subject: RE: EHS Data Request

Hello [REDACTED],

As requested, you'll find my filled-out request attached to this note.

If you have any questions or need anything else from me please let me know. My cell is [REDACTED].

Thanks for your help,

Brandon

Brandon Rose

Information Analyst

NSGEU

255 John Savage Ave.

Dartmouth, Nova Scotia B3B 0J3

[REDACTED]

Phone 902.424.4063 | Toll-Free 1.877.556.7438 | Fax 902.424.4832

www.nsgeu.ca



This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender. Finally, the recipient should check this email and any attachments for the presence of viruses. The NSGEU accepts no liability for any damage caused by any virus transmitted by this email.

Please consider the environment before printing this email.

From: [REDACTED]@novascotia.ca]

Sent: February 24, 2017 11:04 AM

To: Brandon Rose

Subject: EHS Data Request

Hello,

In follow up to our phone conversation, please find attached the EHS Request for Information form.

Please complete the attached and return it to me via email. I have already forwarded the questions to our contractor, Emergency Medical Care Inc. They will review the request and provide an timeline for turnaround as soon as possible. Once I have that information I will follow up with you.

Best regards,

[REDACTED]

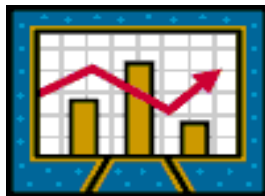
Emergency Health Services
NS Department of Health and Wellness

T. [REDACTED]
F. [REDACTED]

[REDACTED]@novascotia.ca

CENTRAL ZONE'S STRATEGIC INDICATORS REPORT

OCTOBER 2016



Prepared by Decision Support
November 2, 2016

Table of Contents and Indicator Summary

The indicators in this report are summarized in the table below. A short description of the current status is also provided. Note the icons below used in the summary under the “Target” column. A summary of indicators related to patient safety can be found in Appendix A and a summary of indicators related to access (wait times) can be found in Appendix B.

- | | |
|---|--|
|  Meeting target or on track to meet target |  Trending toward target |
|  Not meeting or will not meet target | B Baseline measure only |
|  Caution – needs work to meet target |  Being tracked but with no established target |

[* Click on an indicator name to go directly to that section *](#)

Target	Indicator Name	Status / Comment	Page
Transforming the Person-Centred Health Care Experience			
Access Indicators			
	Surgery Cancellation Rates	In June 2016, the resource-related surgery cancellation rate was 1.7%. This is right on the target rate.	8
	Wait Times – Elective CT	The September 2016 wait time for CT was 42 days—longer than the target of 28 days.	10
	Wait Times – Elective MRI	In September 2016, the average wait time for MRI was 142 days—longer than the target of 28 days, but the shortest it has been since 2011.	11
	Wait Times - Radiotherapy Treatment	In August 2016, wait times were meeting targets for both intermediate and urgent cases.	12
	Wait Times – Hip Fracture Surgery	In Q1 of 2016/17, 85% of cases met the target wait time of 48 hours.	14
	Wait Times – Hip Replacement	In Q1 of 2016/17, 52% of cases met the target time of 182 days.	15
	Wait Times – Knee Replacement	In Q1 of 2016/17, 27% of cases met the target time of 182 days	16
	Wait Times – Cataract Surgery	In Q1 of 2016/17, 67% of cases met the target wait time of 16 weeks.	17
	Wait Times – Open Heart Surgery	In August 2016, none of the urgency categories was meeting its target wait time, although scheduled cases were very close.	18
	Wait Times – From Triage to Admission in the ED	Both the QEII and DGH are above the 8-hour target for the 90 th percentile wait time (unfavourable).	19
	Wait Times – From Triage to Physician in the ED	None of the four sites is meeting the target of 30 minutes.	20
	Wait Times – Priority Interventions	None of the four priority interventions is meeting its target.	21

Target	Indicator Name	Status / Comment	Page
Patient Safety Indicators			
	Incidence Rates – MRSA	Central Zone rates are below the 2012 national rate.	22
	Incidence Rate – VRE	Central Zone rates are below the 2012 national rate.	23
	Infection Rate – C. difficile	Central Zone rates are below the 2012 national rate.	24
	Hand Hygiene Compliance	For the first six months of the 2016 calendar year, the overall rate was 75%—short of the target of 80%. The “before” rate was 64% (short of the target) and the “after” rate was 83% (exceeding the target).	25
	Hospital Standardized Mortality Ratio	In 2014/15, CDHA’s HSMR showed no statistically significant difference from the national average.	26
	Patient Experience Survey	In 2014/15, the positive response target of 90% was exceeded in five of eight patient experience dimensions.	27
	Patient Safety Culture	No target set. The 2012 survey shows improvement over the 2010 and 2006 surveys.	29
	Completion of Patient Safety Training	For 2015/16, 63% completed at least one patient safety training course. This is short of the target of 100%.	30
Additional Transforming the Person-Centred Health Care Experience Indicators			
	Length of Stay – Number of Conservable Days	If the trend in the first ten months of 2015/16 continues for the rest of the fiscal year, conservable days will be over target (unfavourable).	31
	Occupancy Rates	For Apr–Sep of 2016/17, the QEII was meeting the target of 90%, but the DGH was not.	32
	Emergency Department – Left Without Being Seen	For September 2016, each of the four sites was over the 2% target (unfavourable), but Hants was very close at 2.1%.	34
B	Strengthen Community-Based Care for Chronic Disease	Baseline measurement only at this time. No change from baseline planned until 2015/16. Deliverables are on track for completion.	35
	Improve Quality of Care in Transitions	The 2013/14 discharge summary reports audit showed a 60% compliance rate. This exceeds the 25% target.	36
	Build a Culture of Customer Service	The results are short of the 2013/14 targets and even slightly lower than the baseline results in 2012/13.	37

Target	Indicator Name	Status / Comment	Page
Citizen and Stakeholder Engagement and Accountability			
B	Partner with the Public so Individuals and Communities can Play a Key Role in Managing Their Own Health	Baseline measurement only at this time. No measure for 2013/14. Work has been done to identify target populations and approaches.	39
	Involve Patients Directly in Their Care	In 2013/14, the percentage of respondents who agreed they or their family were consulted in making decisions about their care was 78.9%—just over the target of 78.8%.	40
B	Lead Dialogue with the Public Addressing Appropriateness of Care	This goal area received no funding in year one to implement any of the initiatives identified in the original action plan so little-to-no progress was made on the action plan and a follow-up survey to measure progress was not contracted.	41
Transformational Leadership			
	Absenteeism	For April to September, 2016, the average number of monthly sick hours per employee was 6.87. This is higher than the target of 6.15 (unfavourable).	43
	Overtime	For April to August of 2016, the rate was 1.22% which is below the target of 1.89% (favourable).	44
◆	Employee Survey	Pride, trust in peers, & spiritual wellness are areas to celebrate. Areas for improvement include psychological safety, involvement in decision making, & trust in management.	45
◆	Employee Survey – Accreditation Canada Worklife Pulse	Employee ratings of ‘job satisfaction’ and ‘clarity about expectations’ remained high for 2012. However, there were slight increases in the number of ‘unfavourable’ responses in almost all dimensions.	46
◆	Physician Survey	Of the 6 sections presented, trust in colleagues and respect had the highest percentage of favourable responses, while trust in Central Zone management and engagement with Central Zone had the lowest.	47
	Strengthen Accountability of Employees and Physicians.	The 2013/14 target was not met. Results actually showed a decline from the 2012/13 baseline.	48
Innovating Health and Learning			
◆	Research Funds from Grants & Contracts	For 2015/16, funds from contracts were up from the previous year while funds from grants were down.	50
B	Focus on Innovation that has Benefits for Patients & Aligns with Our Mission.	The attainment of this year’s goal is directly related to having a Health Technology assessment capability in the Central Zone and that is in turn directly related to conversations provincially on health technology assessment.	51
B	Strengthen Partnerships with Learning Institutions	Baseline measurement only at this time. An update for 2013/14 was not provided.	52
	Build our Capacity for Interprofessional Research and Interprofessional Education	The 2013/14 target was met for education. Update for research results was not provided.	53

Target	Indicator Name	Status / Comment	Page
Sustainability			
	Innovate Systems and Processes for Greater Efficiency	For Q1–Q2 of 2015/16, the rate for the three CMGs combined was 44%—short of the target of 60%.	54
B	Develop Funding Models Based on our Priorities	Approximately \$1.5M–\$2M has been allocated towards <i>Our Promise in Action</i> action plans in the 2014/15 fiscal year's budget.	55
	Be Better Environmental Stewards	For 2013/14, there was a decrease from the baseline kWh of 5.8%. This is better than the target of a 5% reduction for 2013/14.	56
n/a	Implementation of the Electronic Health Record	Central Zone's efforts to implement an EHR have stalled due to the province's desire to have a single health information solution.	57
	Focus on Sustainability	Percentage of approved funding requests was below target for infrastructure, clinical equipment, and equipment.	58
	Improve Population Health	In 2013-14, the Central Zone actively contributed to five major public policies. This exceeds the target of two.	59

Appendices	Page
Appendix A: Patient Safety Scorecards	60
Appendix B: Access Score Card (Wait Times)	61
Appendix C: Strategic Streams	62
Appendix D: Quality and Patient Safety Framework	63
Appendix E: Our Promise in Action Poster	65
Appendix F: Contributors	66

Introduction

Central Zone's Strategic Indicators Report is a stimulus for quality improvement as it provides multi-year data on key indicators identified by Central Zone stakeholders. Over the summer and fall of 2009, leaders within the Central Zone were asked to identify strategic indicators which would aid in their work to fulfill "Our Promise" to become a world-leading haven for people-centred health, healing, and learning. This process resulted in the creation of the Central Zone Indicator Development document which itemizes indicators by five Strategic Streams:

1. **Transforming Person-Centred Health Care Experience**
2. **Sustainability**
3. **Transformational Leadership**
4. **Citizen and Stakeholder Engagement & Accountability**
5. **Innovating Health & Learning**

Appendix C provides a detailed description of the strategic streams. Indicators in this report fall under these five streams.

The Quality and Patient Safety Framework (Appendix D) is also based around these five strategic streams (as well as the eight Qmentum Quality Dimensions outlined by Accreditation Canada).

The *Our Promise Milestones* timeline came to an end in March 2013 and the final reporting on their progress was done in the July 2013 version of this report. Even though the time frame for the Milestones has ended, several of the milestones are being carried forward in this report for continued monitoring.

Strategic Plan Renewal: Beyond 2013

With the input of hundreds of patients, family members, citizens, staff and physicians, Central Zone's strategic plan has been renewed for the subsequent three years (2013 to 2016). The renewed plan, entitled "Our Promise in Action," remains anchored around the same five key streams or strategies mentioned above.

Details surrounding these five strategies, as well as the 14 Areas of Focus within the strategies, are outlined in the "Our Promise in Action" poster which can be found in Appendix E. Each of the 14 Areas of Focus is presented in this report under its own section.

For additional information on the Central Zone's "Our Promise in Action", please visit the Central Zone website at <http://www.cdha.nshealth.ca/our-promise-action>

Indicator Sections

Each indicator in this report is summarized by answering the following four questions:

1. What is being measured?
2. Why is it important?
3. How are we doing?
4. What are we doing about this?

Progress for each indicator is also shown visually on an accompanying graph.

As well, the following icons appear at the top of selected indicator pages:



The **Patients First** icon specifies a **patient safety** indicator.



The **Our Promise in Action** icon specifies an **Area of Focus** indicator

This report provides a consistent set of key strategic indicators and an analysis of the results. All indicators will be reported in each publication, although some indicators will be updated less frequently. For example, data regarding research funds from grants and contracts are updated annually; however, the indicator will remain in each publication. This will ensure regular, consistent access to key strategic indicators. Where possible, indicators are reported at the district level to provide an overall picture of district-wide activities. The Central Zone Strategic Indicators Report will be posted on the Central Zone's website to ensure easy and broad access.

High level, overview summaries of patient safety indicators and access (wait times) indicators are provided in Appendices E and F respectively. The most recent measures as well as colour coding with respect to meeting targets are provided.

Data Quality and Revisions

The numbers presented in the graphs, tables, and narratives of this report come from a variety of sources. Every effort is made to ensure the data are accurate at the time of publication. Each publication only provides updated data for the most recently available time periods. Data from past time periods are not revised each time the report is published, so changes or corrections made to historical source data are not reflected in this report. Historical changes are carried over to the report when indicator definitions or data collection methods are changed. It should be noted that when such changes are made, they are not made to older versions of this report.

External Links

This report may provide links to other Internet sites only for the convenience of readers. Central Zone is not responsible for the availability or content of these external sites and cannot guarantee that the information is current or accurate. This information is provided as a public service. Readers should verify the information before acting on it. Central Zone does not endorse, warrant or guarantee the products, services or information described or offered at any other Internet sites. Central Zone does not assume and is not responsible for any liability whatsoever arising from the linking to any linked website, the operation or content (including the right to display such information) of any linked website, or for any of the information, interpretation, comments, or opinions expressed in any linked website. Any comments or inquiries regarding the linked websites are to be directed to the organization operating the website.

Contributors

This report would not be possible without the contributions of data, background information, and insights provided by many Central Zone people. Those who are to be acknowledged for their valued contributions are listed in Appendix F.

1 Transforming the Person-Centred Health Care Experience

Access Indicators

1.1 Surgery Cancellation Rates

What is being measured?

Cancelled surgeries are classified into two categories: 1) those cancelled for reasons originating in the hospital (resource related or preventable) and 2) those cancelled for reasons originating from the patient.

The cancellation rate (%) is calculated by dividing the number of patient- or hospital-related cancellations by the total number of elective surgical cases and then multiplying by 100.

The *Our Promise: 2013 Milestone* was to decrease *preventable* (resource-related) cancellations by 50% by 2012/13 (target of a 1.8% cancellation rate). January 2010 is the baseline time period when there was a cancellation rate of 3.4%.

How are we doing?

The graph below shows monthly cancellation rates for the most recent two-year period. The rate of resource-related cancellations (green line on graph) has been higher than target (unfavorable). It was higher in April 2015 related to sterilization challenges in SPD and in September 2015 related to the flood in the Centennial Building. In August 2016, the rate was 2.4%—just over the target of 1.7%.

Three key contributing factors to resource-related cancellations in Sept 2015 were:

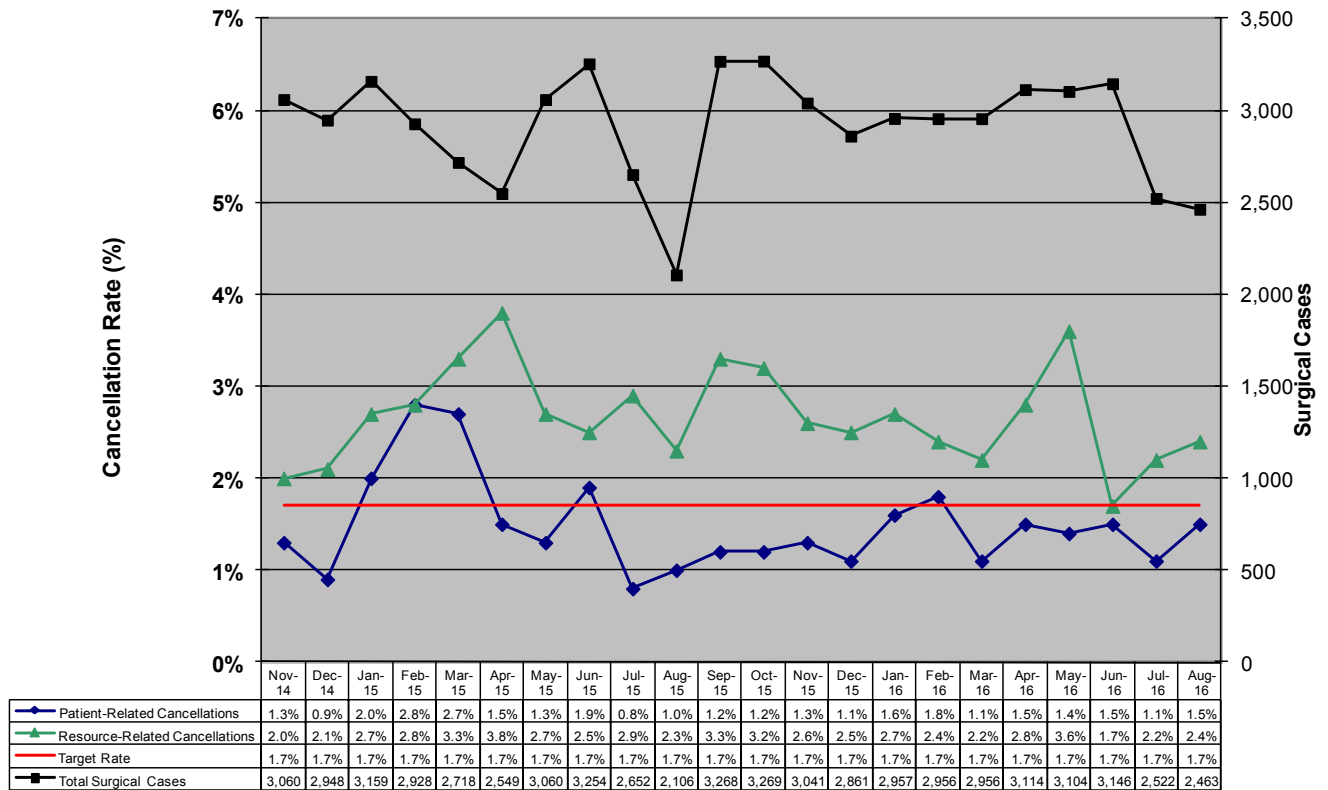
- Emergency bumps (32 cases) – there were 13 cases at the HI (CVS/ortho/plastics/gen surgery/neuro) and 10 cases at the VG (ENT/thoracic/ophthalmology/urology) and 3 at DGH (ortho).
- Lack of elective time and previous case over run (28 cases) – much dispersed across 3 sites VG/HI/DGH and specific service. Reminder these are often associated with emergency bumps.
- Further evaluation (12 cases)
- Centennial Building Flood: 91 cases

Patient-related cancellations (blue line on graph) have been below the target rate of 1.7% since April 2014; however, in January to March of 2015, the rate was over target, mostly related to inclement weather and patient travel issues. From July 2015 to August 2016, the rates were below target (favourable) with the exception of February 2016.

What are we doing about this?

A recovery plan was developed following the sterilization challenges in April at the QEII which included realignment of OR time and additional OR rooms. As a result of this recovery plan, all canceled surgeries were rebooked and completed. [Text last updated November 2015].

Central Zone Surgical Cancellation Rates Resource- & Patient-Related Reasons



Patient- and Hospital-Related Surgical Cancellation Rates & Total Surgeries for Recent Months

Facility	July 2016			August 2016		
	Patient-Related Cancellations	Resource-Related Cancellation	Total Surgeries	Patient-Related Cancellations	Resource-Related Cancellations	Total Surgeries
HI	0.5%	2.7%	935	0.3%	3.0%	893
VG	0.7%	1.5%	1,154	1.3%	1.6%	1,192
DGH	2.9%	3.7%	350	4.7%	3.3%	364
HCH	4.8%	1.2%	83	7.1%	0.0%	14

Frequency of Data Updates: Monthly

Data Last Updated: Oct. 2016

Next Data Update Expected: Nov. 2016

1.2 Wait Times – Elective CT

What is being measured?

Computed tomography (CT) is a special radiographic technique that uses a computer to assimilate multiple x-ray images into a two-dimensional cross-sectional image. This can reveal many soft tissue structures not shown by conventional radiography. Scans may also be dynamic in which movement of a dye within the body is tracked.

This indicator is the weighted average wait time for elective CT (weighted as 23% cranial, 7% spine, 19% chest, 25% musculoskeletal and 25% abdominal).

Why is it important?

In order to support the health and wellbeing of our community, it is critical to provide timely access to supportive diagnostic procedures. Central Zone is committed to reducing wait times and providing better health care for you and your family. Shorter wait times are important to you and it's a priority for us. CT scans serve a very important role in the identification and proper diagnosis of many health conditions. Early access to diagnostic services allows health providers to make timely decisions about further care options and can make a real difference in the outcome for the patient.

How are we doing?

The Canadian Association of Radiologists released National Maximum Wait Time Access Targets for medical imaging (MRI & CT) in 2013. Exams are prioritized as:

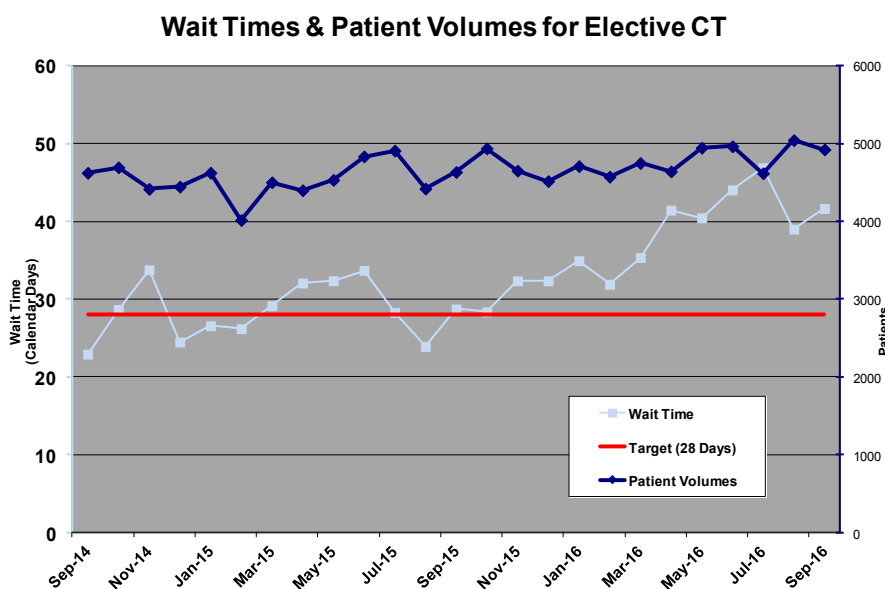
- Priority 1 (Emergent): Same day – max. 24 hours
- Priority 2 (Urgent): max. 7 calendar days
- Priority 3 (Semi-Urgent): max. 30 calendar days
- Priority 4 (Non-Urgent): max. 60 calendar days

The graph below shows the wait times and patient volumes for elective CT in the Central Zone. This is the average for the QEII, Dartmouth General, and the Cobequid Community Health Centre combined. The target wait time is 28 days and the September 2016 wait time was 42 days.

To see recent wait times for elective CT at all locations in Nova Scotia click [here](#).

What are we doing about this?

Central Zone continues to work to reduce wait times for CT exams by maximizing the benefits of the Central Booking process and have recently adjusted schedules to ensure the wait times for enhanced cases and non-enhanced cases were the same. Patients are booked for examinations using a standardized process that ensures a patient will be booked at the earliest acceptable time throughout the district. In June 2016, the CT service in Central Zone will be managed by one manager and further standardization and optimization of the services will be implemented. [Last updated May 2016]



Graph Update Frequency: Monthly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Nov. 2016

1.3 Wait Times – Elective MRI

What is being measured?

Magnetic Resonance Imaging (MRI) is a special imaging technique used to image internal structures of the body, particularly the soft tissues. MRI uses a powerful magnet, radio frequency waves, and computers to produce detailed images of the body in any plane. It provides much greater contrast between the different soft tissues of the body than does computed tomography (CT).

The average time from referral until procedure is weighted (72% neuro, 15% bone, and 13% body). Waits do not include Central Zone patients who have elective MRI procedures performed at the IWK. The target wait time is 28 days.

Why is it important?

In order to support the health and wellbeing of our community, it is critical to provide timely access to supportive diagnostic procedures. Central Zone is committed to reducing wait times and providing better health care for you and your family. Shorter wait times are important to you and it's a priority for us. MRI scans serve a very important role in the identification and proper diagnosis of many health conditions. Early access to diagnostic services allows health providers to make timely decisions about further care options and can make a real difference in the outcome for the patient.

How are we doing?

The Canadian Association of Radiologists (CAR) released National Maximum Wait Time Access Targets for Medical Imaging (MRI and CT) in 2013. Exams are prioritized in 4 categories:

- Priority 1 (Emergent): same day, max. 24 hours
- Priority 2 (Urgent): max. 7 calendar days
- Priority 3 (Semi-Urgent): max. 30 calendar days
- Priority 4 (Non-Urgent): max. 60 calendar days

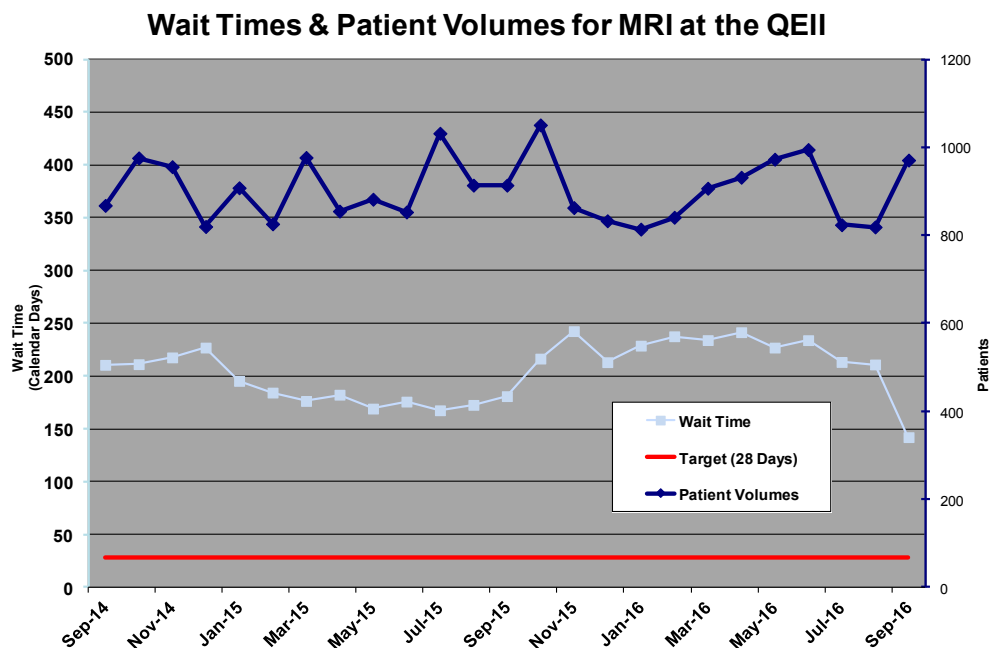
In September 2016, the average wait time for MRI was 142 days—longer than the target of 28 days, but the shortest it has been since April 2011.

All requests for MRI exams are triaged by radiologists for appropriateness and urgency level.

To see recent wait times for elective MRI at locations in Nova Scotia click [here](#).

What are we doing about this?

In December 2014, the Central Zone's new high field strength 3 Tesla (3T) MRI unit became operational at the Halifax Infirmary. This unit is shared part time with research and currently allows for an additional 18.75 hours per week of clinical scan time. The 3T unit provides increased flexibility in managing urgent and inpatient demands as well as providing increased capacity to help lower the elective waitlist over time. In September 2016, additional resources have been added to MRI to address the backlog of requests. It is anticipated that an additional 200 patients will have their MRI scan performed every month at the QEII [Last updated Sept, 2016]



Graph Update Frequency: Monthly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Nov. 2016

1.4 Wait Times - Radiotherapy Treatment

What is being measured?

This indicator measures the wait time, in days, from date of receipt of referral for radiation therapy to the date that the treatment starts. Values shown are the average wait times for a one-month period.

Why is it important?

In radiotherapy (also called radiation therapy), high-energy photons are used to damage cancer cells and stop them from growing and dividing. Target wait times for radiotherapy treatment are based on acuity level. Patients are assigned to an acuity level based on assessment by a radiation oncologist, a specialist in radiation therapy.

Examples of criteria for intermediate cases are inpatients in hospital for radiation services or patients having head and neck tumors. Subacute neurological dysfunction, tumor hemorrhage or severe uncontrolled pain are examples of cases requiring urgent radiotherapy.

How are we doing?

The two graphs below show the average monthly wait times for patients in the urgent and intermediate categories. Patient volumes are also shown.

The average wait time for *intermediate* cases in August 2016 was 14 days. This is right on the target. The wait time has been on a notable downward trend (favourable) since March 2016 and is the lowest it has been since July 2013.

For *urgent* cases the average wait time in August 2016 was six days. This is below the target (favourable).

In January 2014, the wait time for *urgent* cases was slightly higher than the target because in early January, flooding in the Dickson Building affected the CT simulator used for radiotherapy treatment planning.

To see recent wait times for radiotherapy treatment at locations across Nova Scotia click [here](#).

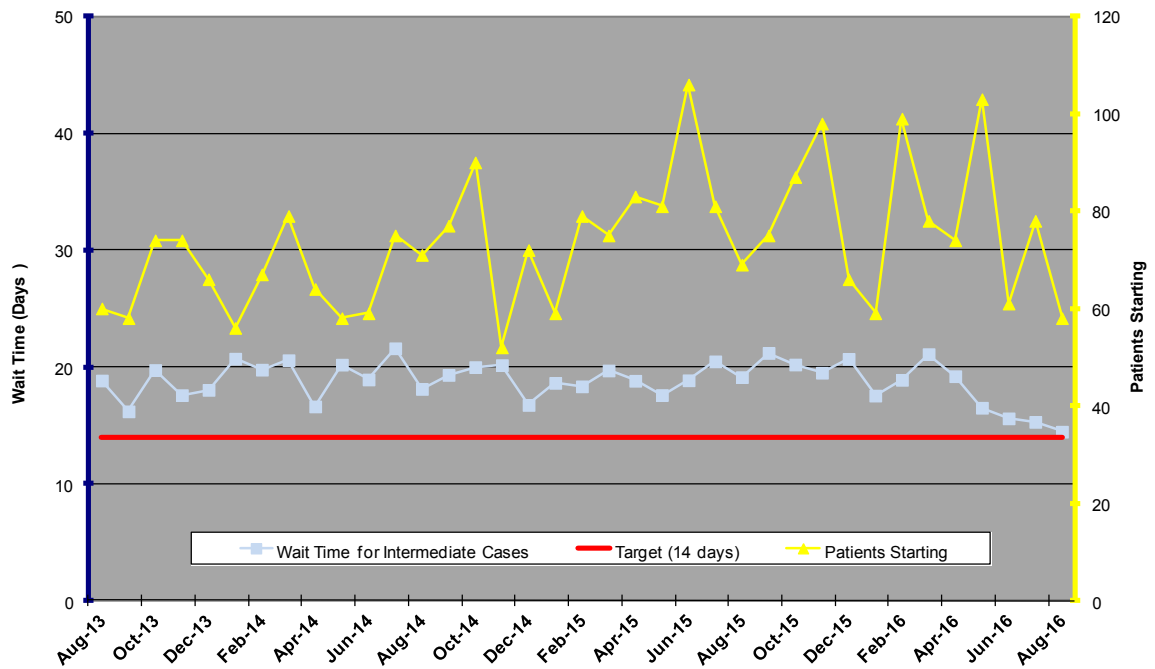
What are we doing about this?

The opening of the James and Edna Claydon Radiation Therapy Clinic in October 2012 provided additional radiation therapy capacity along with state of the art radiation therapy equipment. With the implementation of all of the new equipment by end of April 2013, it is expected wait times for intermediate and standard cases will decrease over the 2013/14 fiscal year.

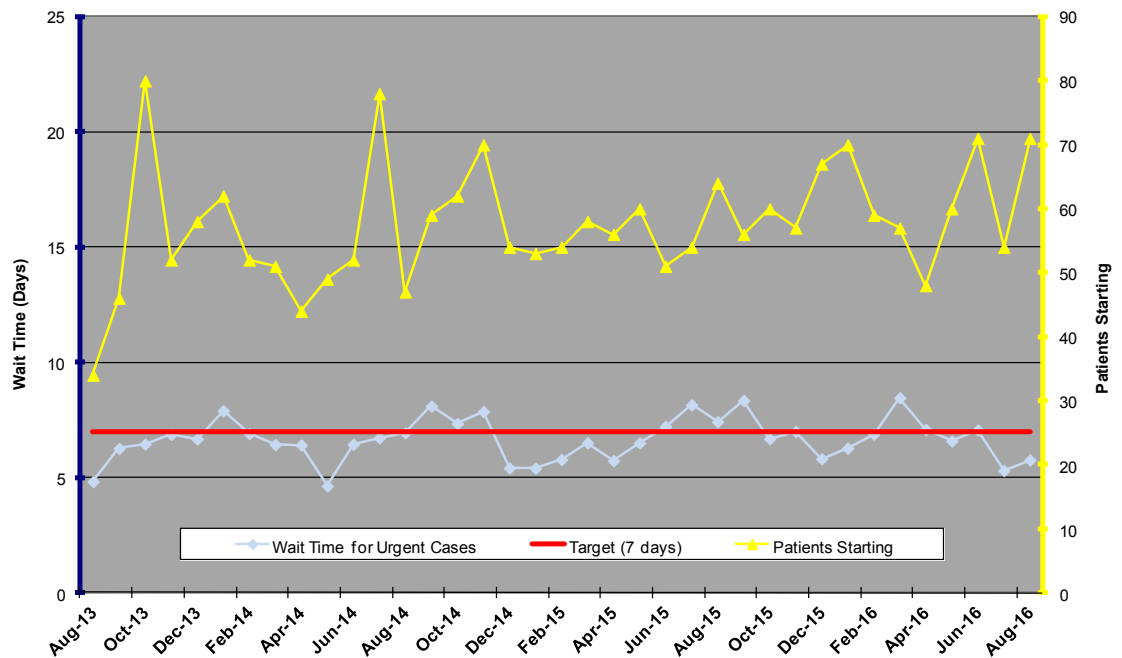
The new radiotherapy machines are more technologically advanced with better imaging. This will allow a decrease in patient treatment time along with a decrease in the number of fractions per patient, which means more patients can be treated and many patients will be on treatment for a shorter time. In addition, several process improvements, as well as an electronic medical record, have been implemented to reduce wait times.

[Last updated April 2013]

Wait Times and Patient Volumes for Radiotherapy Treatment - *Intermediate*



Wait Times and Patient Volumes for Radiotherapy Treatment - *Urgent*



Frequency of Graph Updates: Monthly

Graphs Last Updated: Oct. 2016

Next Graph Update Expected: Nov. 2016

1.5 Wait Times – Hip Fracture Surgery

What is being measured?

This indicator is the percentage of patients who have fractured their hip and received repair surgery within the national benchmark target of 48 hours. Hip fracture repair is a procedure to fix a fracture of the femur bone (thigh bone) near the hip joint. The majority of cases are due to a fall or minor trauma in a person with weakened osteoporotic bones.

Why is it important?

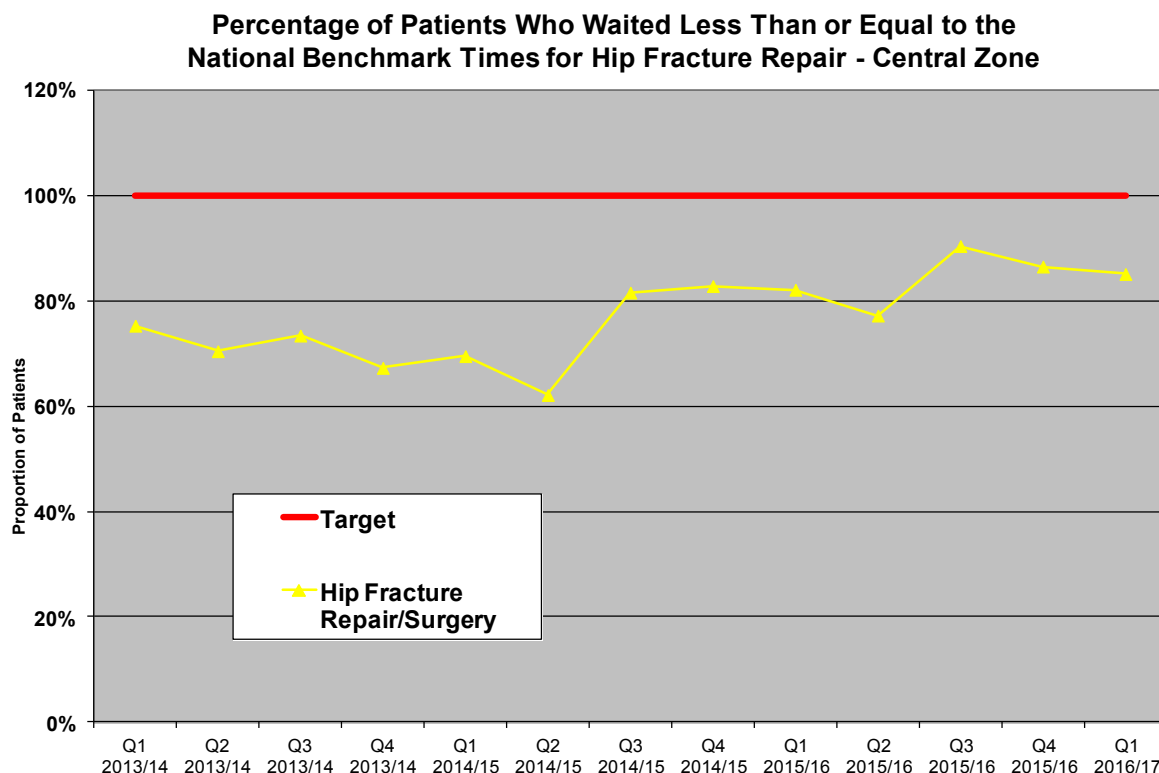
When a patient fractures their hip, clinical evidence shows patients have better clinical outcomes if surgical repair of the hip fracture takes place within 48 hours. The national benchmark for hip fracture repair is 48 hours.

How are we doing?

The target is to have 100% of all cases of hip fracture repair receive their surgery within 48 hours. In Q1 of 2016/17, 85% of cases met the target (see graph below).

What are we doing about this?

The key change that has lead to improvement is the realignment of one room per week of OR time to orthopedics. When Ortho waitlist volumes go above 12-14 cases, additional Ortho OR time is realigned and/or elective cases are postponed. Waitlist volumes for Ortho have been smaller than normal this winter which has also helped reduce wait times. [Last updated Feb 2016]



Frequency of Graph Updates: Quarterly

Graph Last Updated: Sep. 2016

Next Graph Update Expected: Dec. 2016

1.6 Wait Times – Hip Replacement

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. Measuring the time between when the orthopedic surgeon confirms the patient requires a hip replacement to the time the patient undergoes hip replacement surgery (wait time 2) is an important indicator of access to healthcare services. The national benchmark for wait time for hip replacement surgery is 182 days.

Why is it important?

National benchmarks express the amount of time that clinical evidence shows is appropriate to wait for a procedure. Over the past decade, wait times for several surgical procedures such as hip replacement have become a focus in Canadian healthcare as these wait times are a measure of access to healthcare services for Canadians.

How are we doing?

The graph below shows the percentage of patients who had their hip replacement surgery within the target wait time of 182 days. The target is to have 100% of hip replacement surgeries completed within this target time. In Q1 of 2016/17, 52% of patients had their surgery within the benchmark of 182 days.

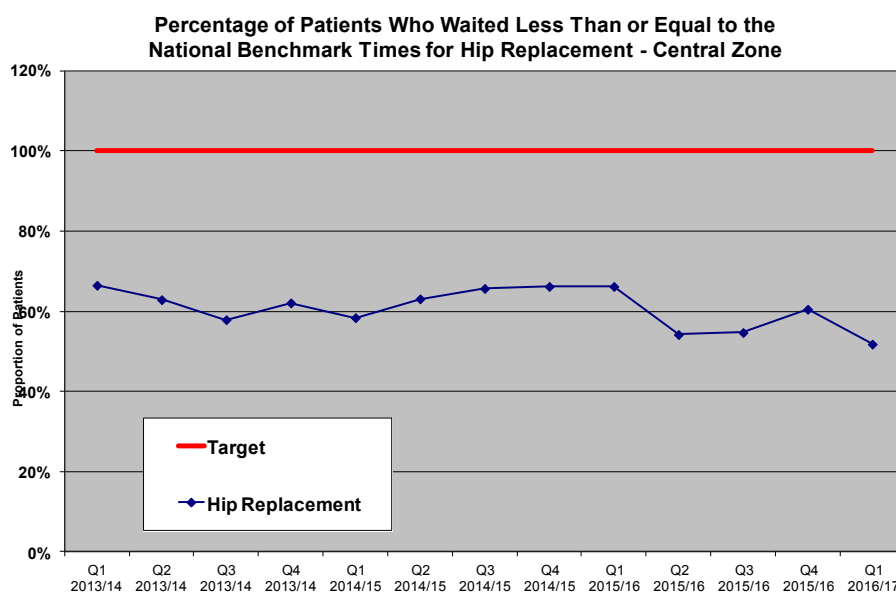
To see recent wait times for hip replacement surgery at different locations across Nova Scotia click [here](#).

What are we doing about this?

Several strategies are being undertaken:

- Commitment made from staff and surgeons to consistently book one 4 joint room a day starting Sept 2015. Meeting this target has been a challenge with bed capacity alerts across the central zone.
- Ortho Leadership meetings take place on a monthly basis (with the managers and Dr. Amirault) during which discussions take place related to long-stay patients; challenges with discharges; and resident rounds for each of the three units ensuring accuracy of discharge orders, prescriptions, and care that may be required upon discharge in the community.
- Meeting to review target with Division Chief & set more realistic staggered targets will be held (Auditor General recommendation). The target is Sept. 2015.
- OR Executive and Ortho Leadership working to realign HI surgical services to create capacity for increased arthroplasty surgery. This work is part of the overall clinical services planning for the QEII.
- Long Waiter Proposal for Arthroplasty Surgery submitted to DOHW and has received approval.

[Text last updated Nov. 2015]



Frequency of Graph Updates: Quarterly

Graph Last Updated: Sep. 2016

Next Graph Update Expected: Oct. 2016

1.7 Wait Times – Knee Replacement

What is being measured?

Knee replacement is a surgical procedure in which the weight-bearing surface of the knee joint is replaced to relieve the pain and disability of osteoarthritis. Measuring the time between when the orthopedic surgeon confirms the patient requires a knee replacement to the time the patient undergoes the surgery (wait time 2) is an important indicator of access to healthcare services. The national wait time benchmark for knee replacement surgery is 182 days.

Why is it important?

National benchmarks express the amount of time that clinical evidence shows is appropriate to wait for such a procedure. Over the past decade wait times for several surgical procedures including knee replacement surgery have become a focus in Canadian healthcare as these wait times measure access to healthcare services for Canadians.

How are we doing?

The graph below shows the percentage of patients who had their knee replacement surgery within the target wait time of 182 days. The goal is to have 100% of all patients' knee replacement surgeries performed within this target time. In Q1 of 2016/17, only 27% of patients had their knee replacement surgery within the target time.

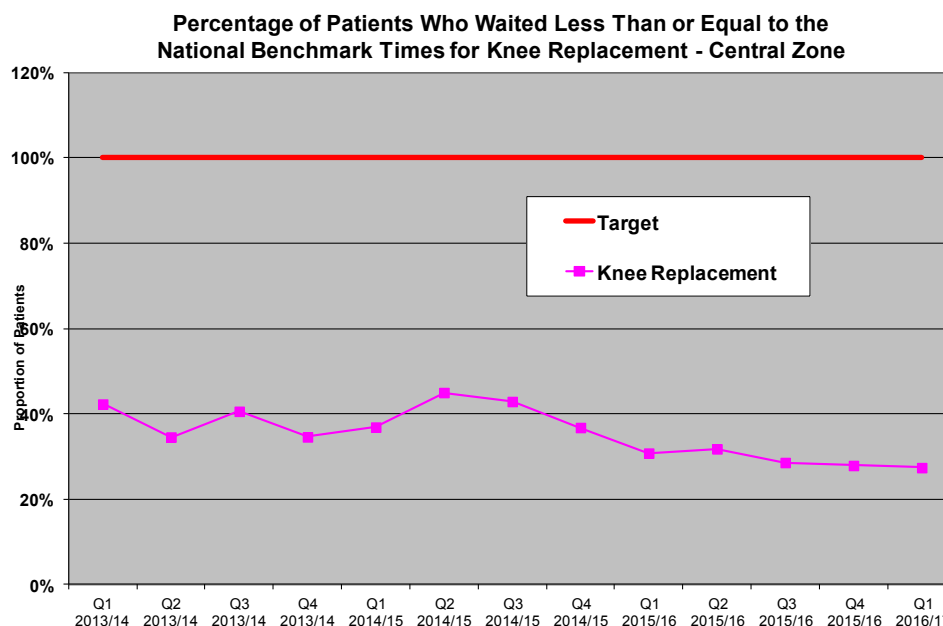
To see recent wait times for knee replacement surgery at different locations across Nova Scotia click [here](#).

What are we doing about this?

Several strategies are being undertaken:

- Commitment made from staff and surgeons to consistently book one 4 joint room a day starting Sept 2015. This target has been a challenge to meet with bed capacity issues across the Central Zone resulting in case cancellations
- Ortho Leadership meetings take place on a monthly basis (with the managers and Dr. Amirault) during which discussions take place related to long-stay patients; challenges with discharges; and resident rounds for each of the three units ensuring accuracy of discharge orders, prescriptions, and care that may be required upon discharge in the community.
- Meeting to review target with Division Chief & set more realistic staggered targets will be held (Auditor General recommendation). Target is Sept. 2015.
- OR Executive and Ortho Leadership working to realign HI surgical services to create capacity for increased arthroplasty surgery. Target fall 2015 and Jan. 2015. This work is ongoing and now part of the overall central zone clinical services planning.
- Long Waiter Proposal for Arthroplasty Surgery submitted to DOHW has been approved.

[Last updated Nov. 2015]



Frequency of Graph Updates: Quarterly

Graph Last Updated: Sep 2016

Next Graph Update Expected: Oct. 2016

1.8 Wait Times – Cataract Surgery

What is being measured?

Cataract surgery is the removal of a clouded lens (or cataract) from the eye to improve vision. The nationally recognized benchmark wait time for cataract surgery is 16 weeks. This indicator is the number of patients who had their procedure done in a given quarter who waited less than or equal to the national benchmark time frame, divided by the total number of patients who had the procedure completed in the given month, multiplied by 100.

Why is it important?

National benchmarks express the amount of time that clinical evidence shows is appropriate to wait for a procedure. Over the past decade, wait times for several surgical procedures, including cataract surgery, have become a focus in Canadian healthcare because these wait times are a means of measuring access to healthcare services for Canadians.

How are we doing?

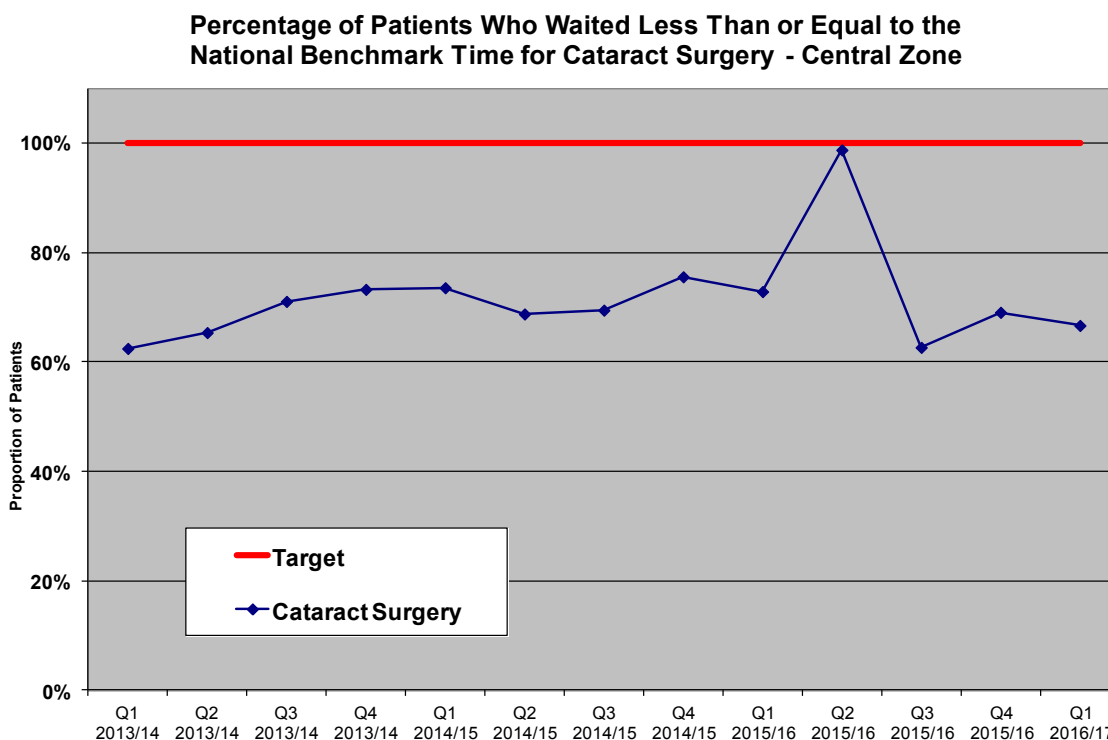
The goal is to have 100% of patients have their cataract surgery within the benchmark wait time of 16 weeks. The graph below shows the quarterly percentages of patients who had their cataract surgery within the benchmark wait time. In Q1 of 2016/17, 67% of patients had their cataract surgery within the target time.

To see recent wait times for cataract surgery at different locations across Nova Scotia click [here](#).

What are we doing about this?

- A new OR schedule was implemented in Q2 of 2014/15 that included a cataract fast-track room (a pilot project was completed & was successful).
- Continuing to book 14-day cataract rooms.
- Patient volumes increased in September 2015 but faced some cancellations related to the Centennial Building flood so there may be an impact to Q3 numbers as a result of the flood.

[Last updated Feb. 2016]



Frequency of Graph Updates: Quarterly

Graph Last Updated: Sep. 2016

Next Graph Update Expected: Oct. 2016

1.9 Wait Times – Open Heart Surgery

What is being measured?

This indicator is the median wait time for coronary artery bypass graft (CABG) procedures. Median wait time is the time half of the patients waited for their procedure.

Why is it important?

The chances of dying or having a heart attack increase as wait times exceed standards. Longer wait lists impact on the quality of life for patients awaiting surgery. An article published August 21, 2001 in the Canadian Medical Association Journal found a significant decrease in physical and social functioning, both before and after surgery, for patients waiting more than three months for their surgery. Patients waiting greater than three months also had a higher perioperative event rate than those waiting less than three months. Longer wait lists are associated with

reduced likelihood of returning to gainful employment and thus lost productivity to society.

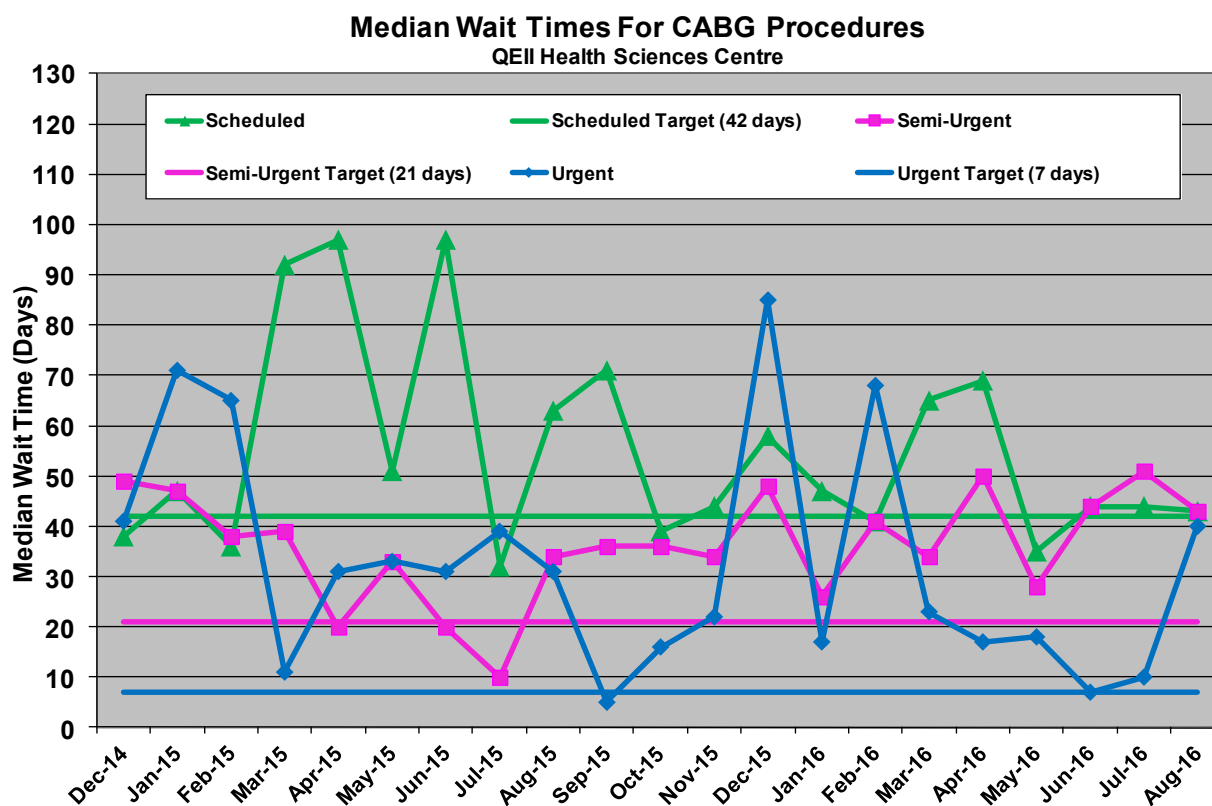
How are we doing?

Median wait times for the three urgency categories of CABGs are shown in the graph below. In August 2016, none of the urgency categories was meeting its target wait time, although scheduled cases were very close.

What are we doing about this?

Bed capacity is the most challenging factor affecting these wait times. Options for managing long-term ventilated patients and model of care for ICUs are being explored.

[Last updated October 2014]



Frequency of Graph Updates: Monthly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Nov. 2016

1.10 Wait Times – From Triage to *Admission* in the ED

What is being measured?

This indicator is the 90th percentile emergency department (ED) wait time from the time of triage to the time of admission. The 90th percentile wait time is the time in which 90% of patients wait. Clinical Decision Unit patients are not included.

Why is it important?

In 2010, the Institute of Clinical Evaluative Sciences identified the ED 90th percentile length of stay for admitted patients as the most important strategic indicator for quality in the ED and as a surrogate marker of overall hospital functioning.

Patients waiting in the ED for admission to an inpatient unit increase the overall ED wait times, the percentage of patients leaving the ED without being seen, and ambulance offload intervals, and are also associated with increased adverse events, mortality, inpatient lengths of stay, and overall costs.

How are we doing?

The goal is to have the 90th percentile wait time meet the target of eight hours—as outlined in *Better Care Sooner*, the plan to improve emergency care in Nova Scotia. Both the QEII & DGH sites have 90th percentile waits that are longer than the target of eight hours. See the graph below.

For additional emergency-department indicators, click [here](#) to go to the Central Zone ED Quarterly Performance Reports web page.

What are we doing about this?

Since January 2012 the staffing levels at the DGH ED have slowly improved. In the spring of 2012, various initiatives to focus on improving wait times were implemented: 1) a nurse liaison role

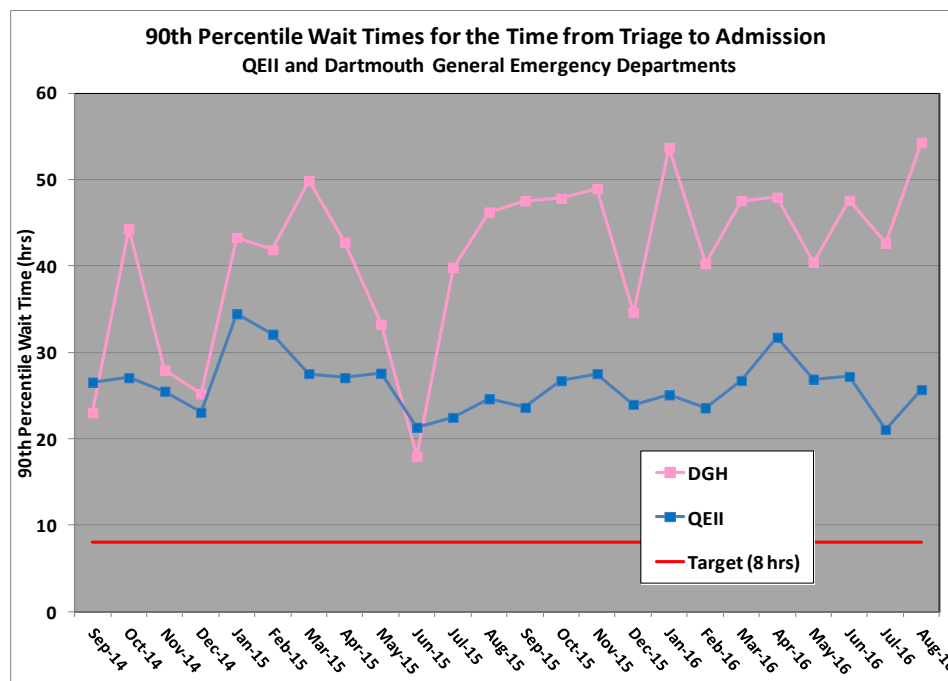
was implemented which provides a second assessment point for patients in the waiting room. This nurse begins to complete blood work and ECGs for patients ensuring test results are available when the patient is seen by the physician. 2) In October of 2013, a new process for transferring admitted patients and their information to inpatient units was implemented which should significantly decrease the time it takes for patients to leave the department when inpatient beds are assigned.

The Flow Committee continues to look at flow within the ED and make changes to how beds are filled and how patients no longer requiring beds can receive follow-up care in alternative locations, thus freeing beds for those who need them.

The following changes have been implemented at the HI ED:

- Expansion of the patient flow manager role to 7 days a week
- Wait times & patients leaving without being seen are addressed by a triage RN role and having Pod 5 hours extended since Sep. 2013. The care model now includes CTAs to allow flexibility to increase bed capacity as necessary.
- Off-load initiatives continue to reduce off-load times
- Expansion of the Rapid Assessment Area to include weekend access
- District initiation for ambulance smoothing
- Collaboration with services for rapid access clinics i.e., atrial fibrillation and TIA's
- Protocols in place for stroke and STEMI access and care

[Last updated September 2014]



Frequency of Graph Updates: Monthly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Nov. 2016

1.11 Wait Times – From Triage to *Physician* in the ED

What is being measured?

This indicator is the average emergency department (ED) wait time from the time of triage to the time seen by a physician for Canadian Triage and Acuity Scale (CTAS) level III cases only.

Why is this important?

CTAS Level III cases are considered urgent because they could potentially progress to a serious problem.

How are we doing?

The graph below shows the average wait times from triage to physician for CTAS Level III for the last three years. A breakdown by ED site is provided. All sites have average wait times longer than the target of 30 minutes.

For additional ED indicators, click [here](#) to go to the Central Zone ED Quarterly Performance Reports web page.

What are we doing about this?

Since January 2012 the staffing levels at the DGH ED have slowly improved. In the spring of 2012, various initiatives to focus on improving wait times were implemented: 1) A nurse liaison role was implemented which provides a second assessment point for patients in the waiting room. This nurse begins to complete blood work and ECGs for patients ensuring test results are available

when the patient is seen by the physician. 2) In October of 2013, a new process for transferring admitted patients to inpatient beds was implemented which should significantly decrease the time it takes for patients to leave the department when inpatient beds are assigned. 4) While this indicator shows average wait time for CTAS 3 patients, there has been a significant reduction in wait times for CTAS 4 & 5 patients by changing processes in the fast track area where lower acuity patients are seen faster, thus reducing door-to-physician time & their total ED length of stay. HI ED pod 5 continues to assist with wait times for CTAS 4 and 5 patients.

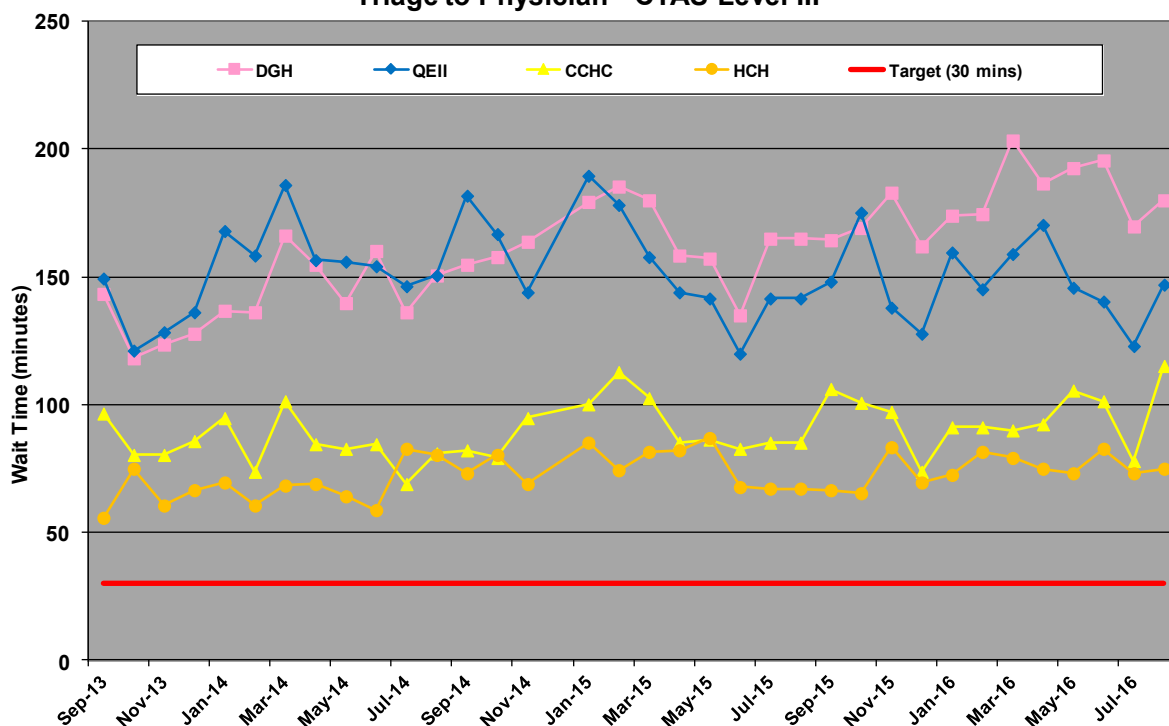
The Flow Committee continues to look at flow within the department and make changes to how beds are filled and how patients no longer requiring beds can receive follow-up care in alternative locations, thus freeing beds up for those in need.

The following changes have been implemented at the HI ED:

- Continuous process improvements in the use of Pod 1
- Physician role and schedule alterations based on flow patterns
- Expansion of RAU hours to include weekend access

[Text last updated September 2014]

**Average Emergency Wait Times
Triage to Physician - CTAS Level III**



Frequency of Graph Updates: Monthly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Nov. 2016



1.12 Wait Times – Priority Interventions

Strategy: Patient-Centred Health Care

Goal: Meet national benchmarks for service access

Measure: Access wait times for designated clinical areas (MRI, hip, knee, and ED (triage to admission))

What is being measured?

Indicators in this section are average, 90th percentile wait times, or the percentage of cases completed with the target time.

Why is it important?

National benchmarks express the amount of time that clinical evidence shows is appropriate to wait for such a procedure. Over the past decade wait times for several surgical procedures such as hip and knee replacement surgery, MRIs and emergency waits have become a focus of Canadian healthcare as these wait times are a means of measuring access to healthcare services for Canadians.

How are we doing?

The table below shows the wait time results for MRI, hip replacement, knee replacement, and for triage to admission in the ED. None of these wait times is meeting its target.

To see recent wait times for key health interventions at different locations across Nova Scotia click [here](#).

What are we doing about this?

All of the vacant MR positions have now been filled. New staff is being oriented to Central Zone and we will see increased capacity in early April 2014. As well, Dalhousie University implemented an MRI Specialty Practice Program

in July 2013 and the first student is expected to graduate from the program in May 2014.

Several strategies are in place to increase the number of patients with hip fractures who receive surgery within 48 hours including:

- Any last minute available OR time is being realigned to support orthopedic trauma
- Inpatient Ortho Leadership meetings take place on a monthly basis during which discussions take place related to long-stay patients, challenges with discharges, resident rounds for each of the three units ensuring accuracy of discharge orders, prescriptions, and care that may be required upon discharge in the community

Strategies are being undertaken to reduce the wait time for knee replacement surgery including:

- Between November 2013 & March 2014 a total of 130 additional hip/knee joint patients that were long waiters were completed – 35 above target.
- A proposal for 2014/15 joints will be submitted to the Department of Health and Wellness.
- A team gets daily updates on the waitlist and what can be completed that day. This continues on the units to ensure discharges are done in a timely manner.

[Last updated July 2014]

LEGEND			
	Not meeting target	Almost meeting target	Meeting target
Treatment / Procedure	Target Wait Time	Location	Wait Times for August 2016 (except where noted)
Magnetic Resonance Imaging (MRI)	28 days	QEII	211 days (average)
Hip Replacement	100% of cases completed within 26 weeks	Central Zone	52% of cases completed within 26 weeks (Q1 2016/17)
Knee Replacement	100% of cases completed within 26 weeks	Central Zone	27% of cases completed within 26 weeks (Q1 2016/17)
ED – 90 th Percentile Wait Time from Triage to Admission	8 hours	QEII	26 hours (90 th percentile)
		DGH	54 hours (90 th percentile)

Table Update Frequency: Monthly

Table Last Updated: Oct. 2016

Next Table Update Expected: Nov. 2016

Patient Safety Indicators

1.13 Incidence Rates – MRSA

What is being measured?

This indicator measures the rate of newly identified cases of MRSA among patients admitted to a Central Zone facility over a defined period of time.

Why is it important?

MRSA is one of the most significant antibiotic-resistant organisms that can cause healthcare-associated infections. If an infection occurs, antibiotic treatment choices are limited and the infection may be more difficult to treat.

In the health care setting, MRSA is primarily transmitted on the unwashed hands of caregivers, breaches in isolation precautions, and patient contact with contaminated and improperly cleaned communal equipment. MRSA is not airborne. MRSA does not cause one specific type of infection, but it may cause a variety of infections such as pneumonia, surgical wound infection, and urinary tract infection.

Careful hand hygiene before and after contact with the patient with MRSA or their environment is one of the most important control measures for health care providers in preventing MRSA transmission.

How are we doing?

In 2012, according to the Canadian Nosocomial Infection Surveillance Program (CNISP) the national incidence rate was 11

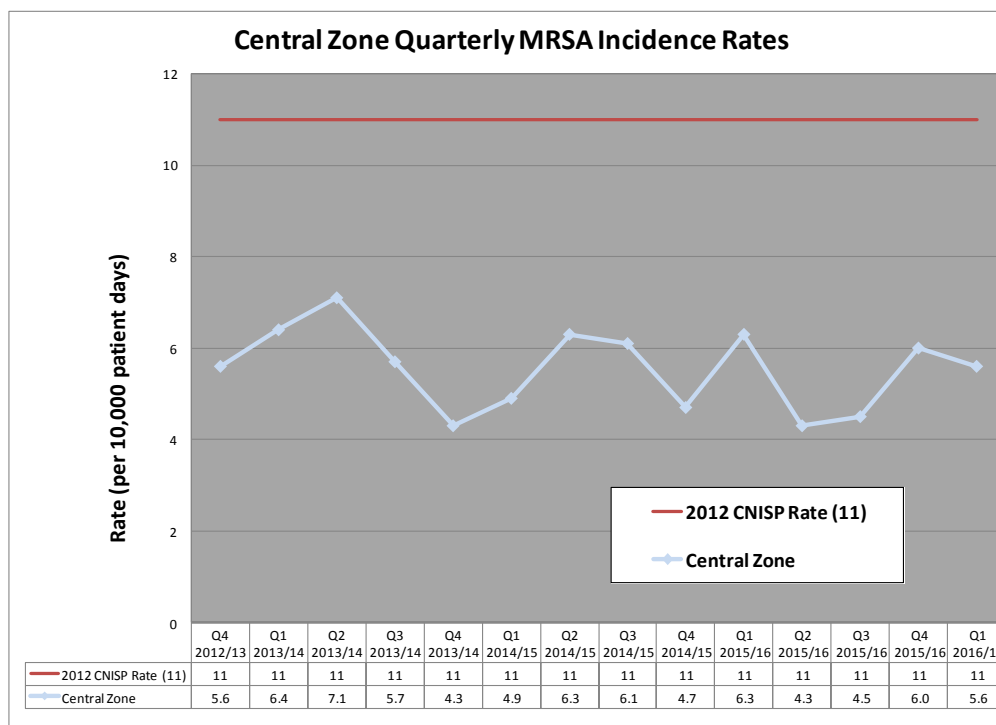
per 10,000 patient days. Central Zone rates have consistently been below this national rate (favourable).

What are we doing about this?

The following prevention and control measures are in place in the Central Zone:

- All patients with MRSA are provided with a single room with dedicated toileting facilities. If a private room is not available, patients are co-horted, based on risk assessment with Infection Control.
- Staff and visitors are to wear a gown & gloves (no mask) when providing care or are in close contact with the patient/patient environment.
- Dedicate patient equipment (if this is not possible, clean and disinfect shared equipment after patient use). Thoroughly clean & disinfect all touch surfaces and equipment within the patient environment.
- Inform receiving departments/caregivers that Contact Precautions are required. Ensure that Transfer and Discharge Swabs are completed as per policy.
- Housekeepers spend extra time cleaning the environment after patients are discharged.
- Targeted approach to promote good Hand Hygiene.

[Text last updated Sept 2013]



Graph Update Frequency: Quarterly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Jan. 2017

1.14 Incidence Rate – VRE

What is being measured?

This indicator measures the rate of newly identified cases of VRE among patients admitted to a Central Zone facility over a defined period of time.

Why is it important?

VRE can cause a variety of infections, most commonly surgical site infection and urinary tract infections. VRE is, however, one of the most significant antibiotic-resistant organisms. So if an infection occurs, antibiotic treatment choices are limited and the infection can be more difficult to treat.

VRE is spread in health care settings primarily by the hands of health care workers, from breaches in isolation precautions, and from contact with contaminated equipment, or other surfaces. It is not airborne. Careful hand hygiene before and after contact with the infected patient or their environment is the most important control measure in preventing transmission.

How are we doing?

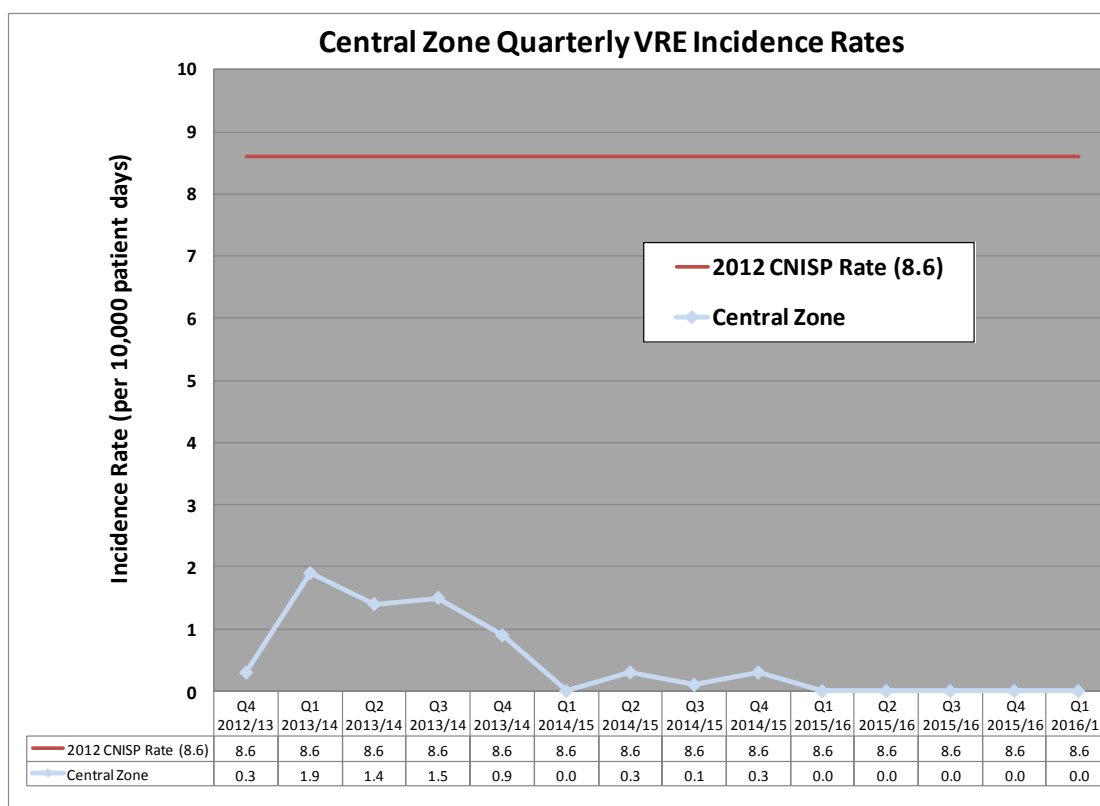
According to the Canadian Nosocomial Infection Surveillance Program (CNISP), the most recent national rate was 8.6 per 10,000 patient days (2012). The rates in Central Zone have been consistently below this national rate. See the graph below.

What are we doing about this?

The following prevention and control measures are in place in the Central Zone:

- All patients with VRE are provided with a single room with dedicated toileting facilities. If a private room is not available, patients are co-horted, based on risk assessment with Infection Control.
- Staff and visitors are to wear a gown & gloves (no mask) when providing care or are in close contact with the patient/patient environment. Discard before leaving the room.
- Dedicate patient equipment (if this is not possible, clean and disinfect shared equipment after patient use). Thoroughly clean & disinfect all touch surfaces and equipment within the patient environment.
- Inform receiving departments/caregivers that Contact Precautions are required. Ensure that Transfer and Discharge Swabs are completed as per policy.
- Housekeepers spend extra time cleaning the environment and follow stringent protocols. VRE is tenacious and it is killed by regular hospital disinfectants but is hardy so we have to scrub to destroy it with enhanced cleaning protocols.

[Text last updated Sept 2013]



Graph Update Frequency: Monthly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Jan. 2017

1.15 Infection Rate – *C. difficile*

What is being measured?

This indicator measures the incidence (number of new infections over a defined period of time) of *C. difficile* among hospitalized patients in the Central Zone.

Why is it important?

C. difficile is a type of bacteria that causes diarrhea. It is the most common cause of infectious diarrhea in hospitalized patients. It is also one of the most common infections in hospitals and long-term care facilities. The use of antibiotics increases the chances of developing *C. difficile* diarrhea.

C. difficile infections can range from uncomplicated diarrhea to severe illness that requires prolonged treatment with antibiotics and sometimes surgery. In rare situations, a *C. difficile* infection can result in death.

How are we doing?

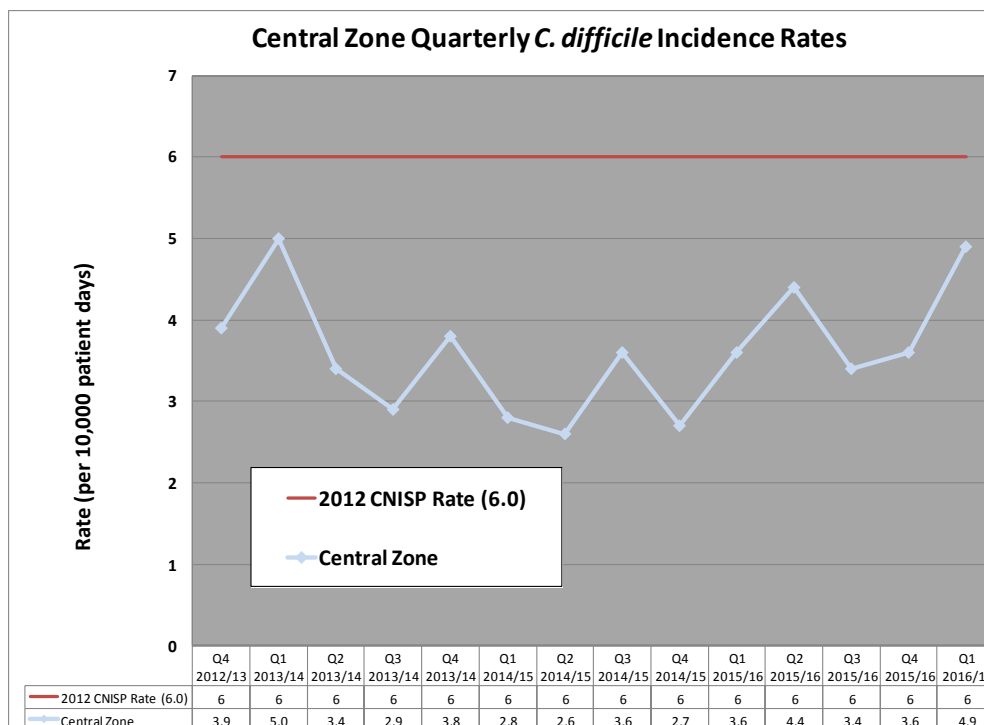
The 2012 national rate reported by the Canadian Nosocomial Infection Surveillance Program (CNISP) was 6.0 per 10,000 patient days. The Central Zone quarterly rate has been consistently below this national rate. See the graph below.

What are we doing about this?

The following interventions have been instituted to prevent and manage *C. difficile* infections:

- Infection Control Practitioners review all new CDI cases to ensure appropriate precautions & interventions are in place & treatment is being considered when required.
- Antimicrobial handbook developed by pharmacy to optimize the appropriate use of antibiotics
- Environmental & housekeeping auditing with feedback
- Room cleaning checklist
- Enhanced Infection Control Measures outlined in new policy and procedure (based on national guidelines) to prevent transmission of *C. Difficile*.
- Infection Control recommendations for design of future infrastructure include decentralized bedpan waste disposal, dedicated hand hygiene sinks, and single rooms
- Improved technology and modified cleaning procedures

[Text last updated Sept 2013]



Graph Update Frequency: Quarterly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Jan. 2017

1.16 Hand Hygiene Compliance

What is being measured?

Measuring adherence and providing feedback with accepted hand hygiene practices is an important quality improvement tool. The Accreditation Canada Qmentum Program now includes hand hygiene audits as one of the required organizational practices within the Infection Prevention and Control Standards. As a part of Accreditation, Central Zone is required to audit compliance with hand hygiene practices, share these results, and use the results to make improvements to current practices. The audit (and compliance) is based on the Four Moments for Hand Hygiene, the times at which hand hygiene should occur:

1. Before initial patient/patient environment contact
2. Before aseptic procedure
3. After body fluid exposure risk
4. After patient/ patient environment contact

Why is it important?

Promoting hand hygiene is considered the cornerstone of infection prevention and control programs and of preventing healthcare-associated infections. The World Health Organization has suggested improvements in hand hygiene compliance can prevent 50% of hospital-associated infections, making it the single most important practice in reducing the rate of such infections. As caregivers move from patient to patient and room to room caring for people, their hands pick up microorganisms which can cause infections. Hand hygiene works by interrupting this transmission of microorganisms.

How are we doing?

For the first three months of the 2015 calendar year, the overall rate was 74%—short of the target of 80%. The “before” rate was 62% (short of the target) and the “after” rate was 83% (exceeding the target). Results are shown in the graph below.

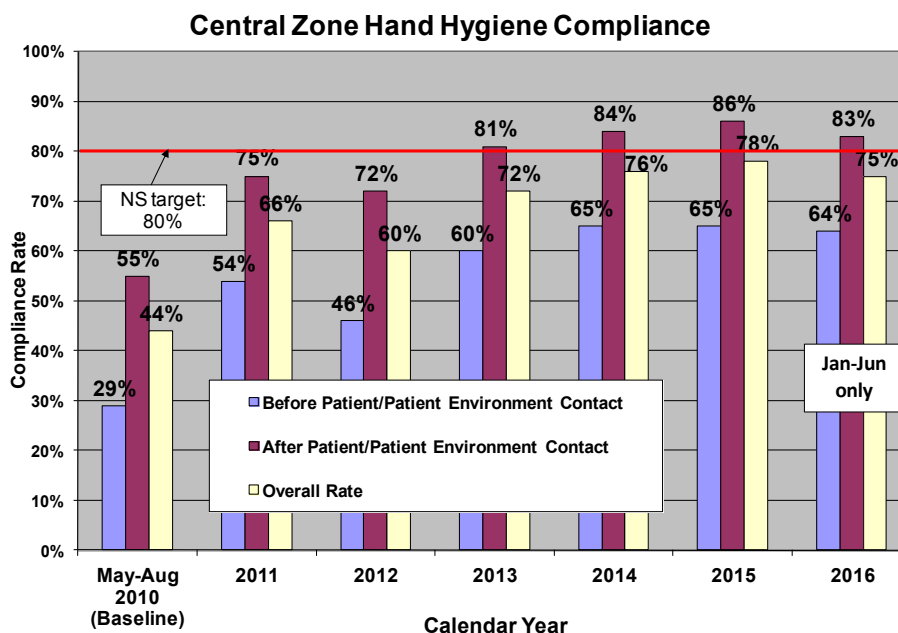
What are we doing about this?

A targeted focus on Hand Hygiene practices will continue. Ongoing efforts include advancing staff and physician training across Central Zone. Patients are being educated through pamphlets and signage and are encouraged to wash hands when visiting the organization. A multi-modal campaign is ongoing and includes:

- Launch of new LMS (SHN) training module
- 2012/13 Hand Hygiene campaign (poster, screen saver, etc.)
- Targeted intervention for work groups
- Stop and Clean your hands day!
- Placement of alcohol-based hand rub product available at point of care
- Continued use of the automated hand hygiene audit tool
- “One stop shop”: educational supports through videos, guides, and additional information on the IPAC intranet site
- Facilitated access to compliance reports and enhanced the data available for front line leaders
- Just-in-time feedback to front line staff
- Patient Education pamphlet: Hand Hygiene
- Patient & Family Engagement Pilot Project (implementation late 2013/early 2014)

As well, a small amount of random audits are done in Ambulatory Care by front line staff trained by Infection Control. These are done as work commitments allow.

Several inpatient areas have worked with infection control to develop information sheets that are now being used on the units to advise both patients, families, and staff about the importance of hand washing. [Text last updated Sept. 2013]



Graph Update Frequency: Quarterly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Jan. 2017

1.17 Hospital Standardized Mortality Ratio

What is being measured?

Hospital standardized mortality ratio (HSMR) is the ratio of actual deaths to expected deaths, multiplied by 100. This indicator is calculated by the Canadian Institute for Health Information (CIHI).

The HSMR compares the actual number of deaths in a hospital with the average Canadian experience, after adjusting for several factors that may affect in-hospital mortality rates, such as differences in age, sex, length of stay, admission category (planned vs. urgent/emergent), diagnosis group, selected comorbidities, and transfer from another acute care institution. CIHI calculates the ratios using data submitted from hospitals across the country. It only includes the 72 diagnosis groups that account for the top 80% of in-hospital deaths in Canada.

In 2015, CIHI updated HSMR scores to be based on the national average for the 2012/13 baseline year—designating the 2012/13 national average as 100. CIHI also updated the HSMR statistical analyses to compare scores to the national average of the same year rather than to only the baseline national average of 100, as was done previously. This new technique ensures a more meaningful comparison is done each year.

Why is it important?

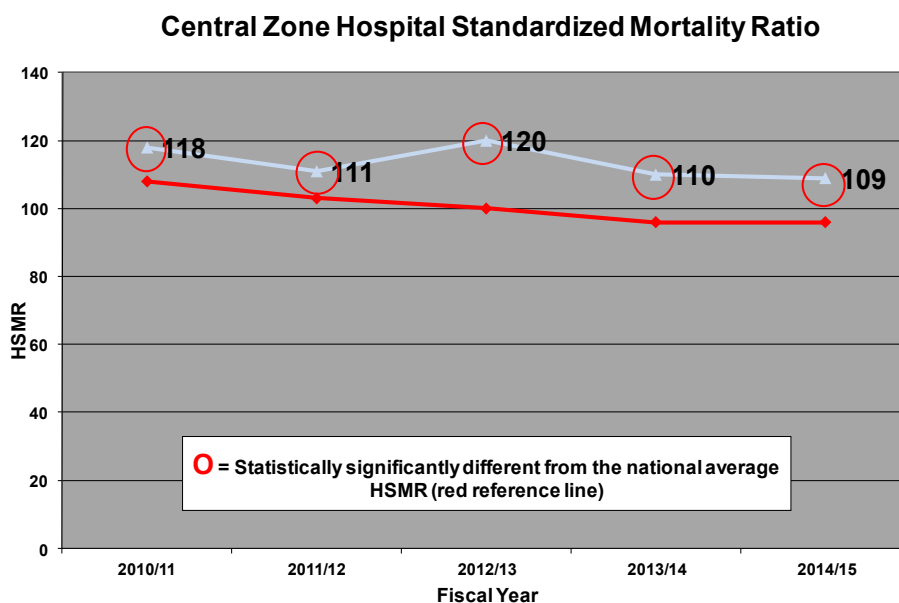
HSMR is a high-level measure that can be influenced by a wide variety of factors, some of which are beyond the control of an individual hospital. Nevertheless, it provides an important means for a hospital or health region to compare their patient outcomes over time and in this way provides a starting point for identifying potential areas for improving the quality of care.

How are we doing?

The graph below shows the HSMR for the Central Zone for fiscal years 2010/11 to 2014/15 (Q1-Q2). Having an HSMR that is higher than the national HSMR indicates the mortality rate is higher than the national rate. It can be seen that Central Zone had HSMR scores that were statistically significantly higher (unfavourable) than the national average for each year shown.

What are we doing about this?

Central Zone has developed a process to review HSMR data results in further detail. Based on findings from this initial review, further assessment is done with co-leads and quality teams to better understand circumstances and practice related issues which may affect the cases contributing to the HSMR. Findings from the review inform the development of quality improvement initiatives. [Text last updated April 2013]



Graph Update Frequency: Annually

Graph Last Updated: Dec. 2015

Next Graph Update Expected: 2016

1.18 Patient Experience Survey

What is being measured?

Throughout the year, patients in inpatient, ambulatory and rehabilitation services are randomly sampled to partake in the patient experience survey and the results are reported annually. This indicator shows the proportion of “agree” or “disagree” responses in a particular dimension or section of the survey. The data presented here summarizes the Inpatient and Ambulatory Patient Experience Surveys. Mental Health & Addictions, Cancer Care and Emergency Department patients are not included; they are surveyed separately using different tools. Complete results can be found on our public site by clicking [here](#).

Why is it important?

The survey results can be used to identify strengths and opportunities for quality improvement initiatives and accreditation requirements. Our positive patient experience target has been set at 90%.

How are we doing?

In 2014/15 we exceeded our positive response target of 90% in five of eight patient experience dimensions. (see graph below).

From an inpatient perspective we saw increases reflected in 50% of our survey questions; 45% remained steady (less than a 1% change); and two questions decreased: Satisfaction with Surgery Wait Times (from 89% to 84%) and Interpreter Services (consideration should be given to the limitations of an English survey to obtain feedback on this question).

Our highest inpatient gains were experienced in the following areas:

- Concern for safety (all questions rated higher by 2–5%)
- Satisfaction with food (from 55% to 60%)
- Bathroom was kept clean (from 76% to 82%)

This year we focused specific attention on improving our Continuity of Care processes. Gains were made in:

- Information received regarding who to contact if a problem arose (from 87% to 89%)
- Information received in writing regarding symptoms to monitor (from 55% to 60%)

Ambulatory Care patient experience results remained fairly stable as compared to 2013/14 results with no change in 77% of the questions; 15% or 6 questions increased; and 8% or 3 questions decreased. Questions that were rated lower include:

- Emotional support and counseling provided (from 90% to 88%)
- Hospital staff described possible side effects in a way that was understandable (from 86% to 85%)
- Personal references taken into account (from 97% to 95%)

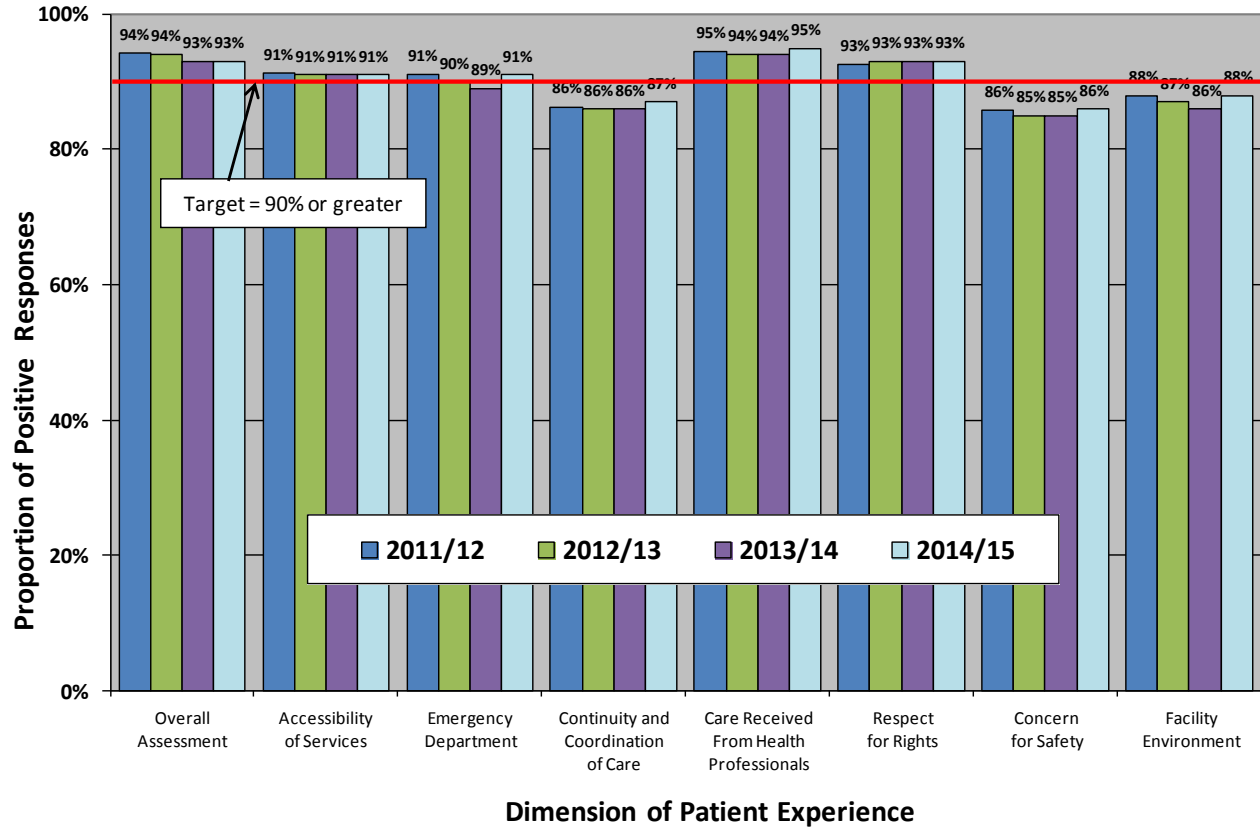
Areas that saw improvements include:

- Received Information regarding who to contacts if a problem arose (from 91% to 93%)
- Conversation regarding supports at home upon discharge (from 69% to 71%)
- Facility cleanliness (from 91% to 94%)

What are we doing about this?

Results from the Patient Experience survey are used to guide improvement projects and assess progress at both the organizational and team levels. Service or unit level results and patient comments are brought back to the teams. They use this feedback to guide their specific quality plans and activities. The teams focus their efforts on items patients indicated need improvement within their specific area. Teams are encouraged to share their successful practices with our Quality Leaders group so that others have an opportunity to benefit from their experiences and determine if similar practice might work for their patients. Quality and Patient Safety Leads provide support by meeting with teams to review results and assist in developing improvement initiatives. Support services such as housekeeping, food services and maintenance are provided with patient comments specific to efforts. Specific results are also shared during orientation sessions and quality presentations to highlight the impact our actions can have in areas such as communication. Additional patient feedback is gathered through the Mental Health Patient Survey, the Camp Hill Veterans Services program. [Last Updated September 2015]

Patient Experience Survey Results: Inpatient & Ambulatory Services



Graph Update Frequency: Yearly

Graph Last Updated: Sept. 2015

Next Graph Update Expected: Summer 2016

1.19 Patient Safety Culture

What is being measured?

Patient safety culture measures and assesses staff awareness about patient safety. Patient safety culture exists when people within a health care organization are compelled to take action when faced with safety challenges, and consistently work towards changes that improve patient safety. Accreditation Canada's Patient Safety Culture Survey was first administered to staff and physicians in 2006, and repeated in 2010 and 2012. It consists of 40+ questions about the culture of patient safety within our organization. Of particular interest within this survey is the question: "Please give the organization an overall grade on patient safety" with five possible responses: Excellent, Very Good, Acceptable, Poor, or Failing.

Why is it important?

Culture is widely recognized and accepted as an essential element in changing both behaviour and expectations in order to improve patient safety in health care organizations. This measure is important as it helps to identify strengths and areas for patient safety culture improvement in our organization. It also helps examine trends in patient safety culture change over time. Staff perceptions of the 'overall patient safety' measure provides insight into the degree to which patient safety culture exists, and further evaluates the cultural impact of patient safety initiatives and interventions.

How are we doing?

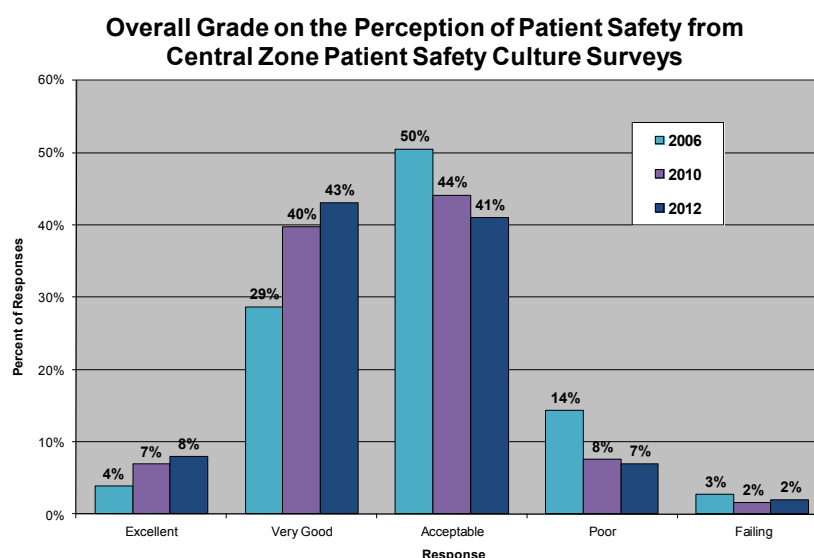
In all years, the majority of survey responses fell under the "Very Good" and "Acceptable" response categories. Over time, there has been a trend of a decreasing proportion of "Acceptable", "Poor", and "Failing" responses, and an increasing proportion of "Excellent" and "Very Good" responses. See the graph below.

What are we doing about this?

The focus on developing a strong culture of patient safety continues. Ongoing efforts include multiple educational opportunities for staff and physicians related to patient safety. The multi-pronged approach also includes:

- An integrated Quality and Patient Safety Plan for the entire organization, which includes a campaign to raise awareness related to *just culture*.
- Bi-weekly Leadership Safety Rounds in which staff members on individual patient care areas address patient safety issues with representatives from multiple areas within the organization, including a representative from the executive team.
- Patient Safety Culture Flash discussion cards and an accompanying resource manual have been developed for use at the service level and have been presented to quality team leaders and managers across the organization.
- Fifteen patient safety modules in the LMS which are applicable to physicians and employees throughout the organization.
- Patient Safety First brochures and posters were refreshed and information added on inpatient and ambulatory falls, and safety tips for preventing falls.
- Quality rounds focused on patient safety culture.
- Patient Safety Week and Quality Week events which showcase the leadership and team specific actions in various service areas across the organization.
- Support for Patient Safety Action Plans at the team level.

[Last updated August 2014]



Frequency Tracked: Every two years

Graph Last Updated: October 2012

Next Graph Update Expected: 2015

1.20 Completion of Patient Safety Training

What is being measured?

One of Accreditation Canada's Required Organizational Practices is the delivery of client safety training and education at least annually to employees. A required organizational practice (ROP) is an essential practice organizations must have in place to enhance patient/client safety and minimize risk. To fulfill this ROP, Central Zone requires all employees and volunteers to annually complete at least one patient safety course.

Why is it important?

Everyone working in the Central Zone has a role in patient safety. Therefore, completion of annual patient safety training is a vital component of patient safety and quality improvement. Patient safety training has been shown to enhance patient care and minimize potential safety risks within the organization.

How are we doing?

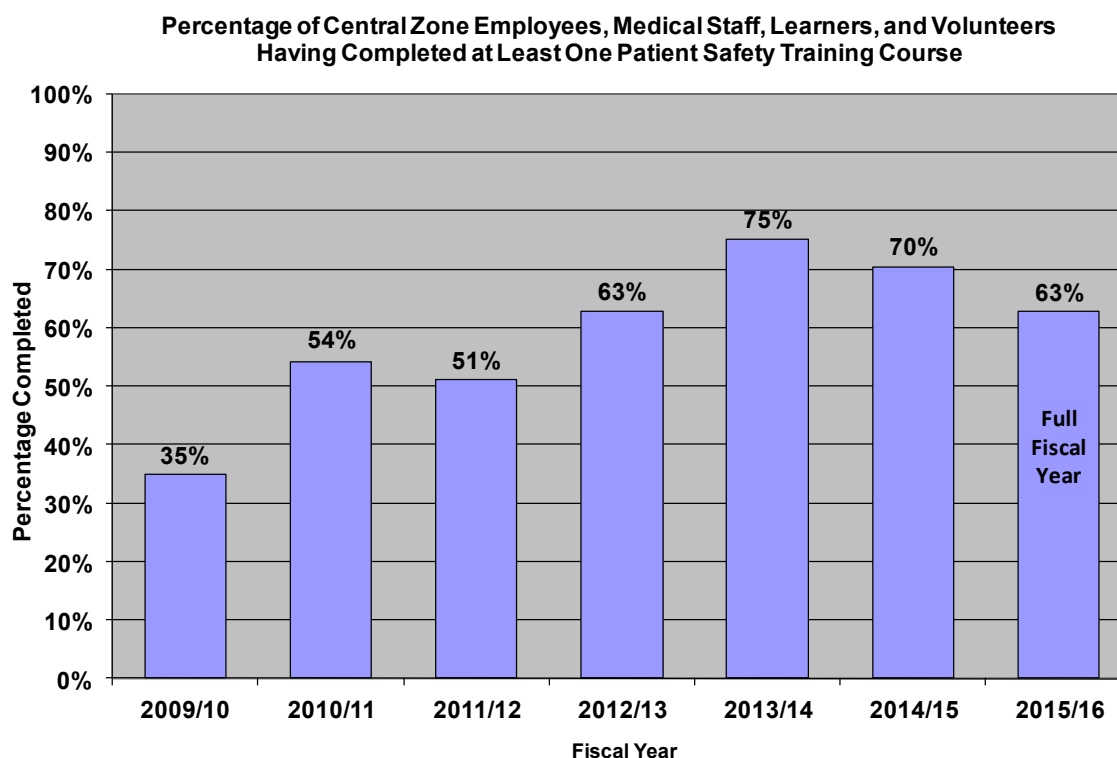
The graph below shows the percentage of Central Zone employees, medical staff, learners, and volunteers who

completed at least one patient safety course. The annual target is to reach 100%. For the 2015-16 fiscal year, 63% completed a patient safety training course. This is a decrease from the previous two years.

What are we doing about this?

Annual education on patient safety is made available to the organization's leaders, staff, service providers, and volunteers, and Central Zone identifies specific patient safety focus areas such as safe medication use, using the reporting system for adverse events, human factors training, techniques for effective communication, equipment and facility sterilization, hand washing and hand hygiene, and infection prevention and control. Most employees can fulfill this requirement by completing one of the six online patient safety courses using the Learning Management System (LMS). Others, such as volunteers, are provided the training as part of orientation packages and presentations.

[Text last updated December 2012]



Graph Update Frequency: Quarterly

Graph Last Updated: Apr. 2016

Next Update Expected: Summer 2016

Additional Transforming the Person-Centred Health Care Experience Indicators

1.21 Length of Stay – Number of Conservable Days

What is being measured?

This indicator is the number of conservable days which is the average length of stay (ALOS) minus the expected length of stay (ELOS) multiplied by the total number of cases.

Why is it Important?

Conservable Days is a measure of the days that patients remain in hospital beyond the expected ALOS expected for their diagnosis. Tracking of this information provides an indication of the hospitals success in discharging patients against an established benchmark.

How are we doing?

Conservable days for typical cases are shown in the graph below. The target is 6,188 or fewer in a one-year period. For the full 2014/15 fiscal year, conservable days totaled 4,324. This was better than the target. For the first ten months of 2015/16, there were 13,460 conservable days. If this trend continues for the rest of the fiscal year, the target will not be met.

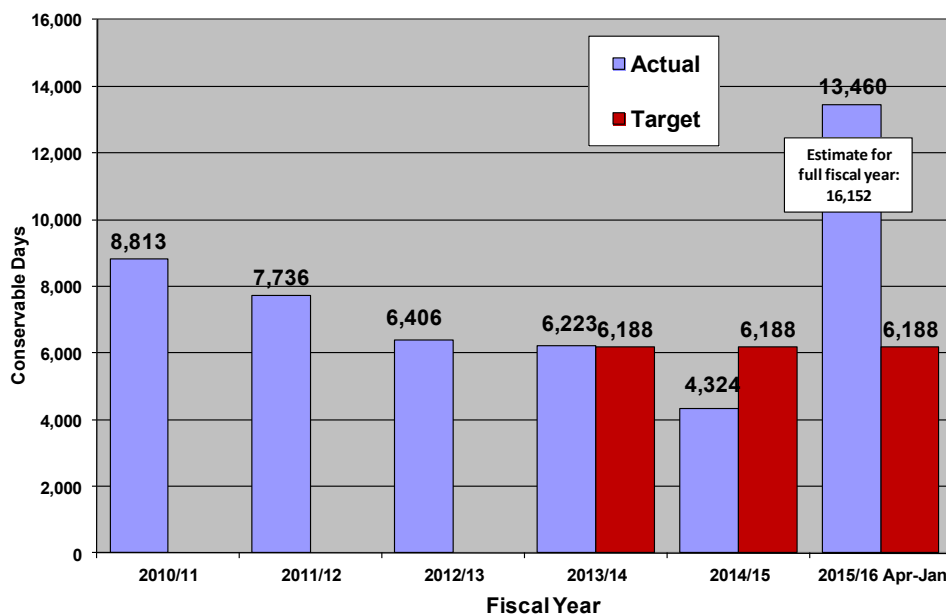
What are we doing about this?

Improvement initiatives include:

- A Bed Utilization Management Process (BUMP) has been implemented in all acute medical/surgical care units, Intermediate Care Units and Critical Care Units across the district. Information from this tool is used daily to focus efforts on patient flow, and discharge planning.
- Home First strategies and community based supports have been implemented to promote home and community based care as an option to hospitalization.
- Patient Flow Management on a 24/7 basis has been implemented to leverage all opportunities to improve flow across systems at QEII.
- Physician models have been realigned especially in Internal Medicine and Community Medicine to address specific areas of patient flow.

At Hants, white boards and bullet rounds have been implemented to improve discharge planning and improve occupancy and length of stay. With this, staff feels there has been an increase in earlier discharge.
[Last updated October 2013]

Conservable Days for Typical Cases in the Central Zone



Graph Update Frequency: Monthly

Graph Last Updated: May 2016

Next Graph Update Expected: Oct. 2016

1.22 Occupancy Rates

What is being measured?

Occupancy rate is patient days (census days) divided by available hospital days, multiplied by 100. Total occupancy rates for this indicator do not include long term care/transitional care. This is because the occupancy rate target for long term care is 99% which differs from the target occupancy rates. Occupancy rates are also calculated for individual units and services.

Why is it important?

Occupancy rate is used to show the actual utilization of the hospital for a given period of time and has a direct affect on inpatient and emergency department flow.

How are we doing?

Central Zone's target is to decrease the occupancy rate to 90%.

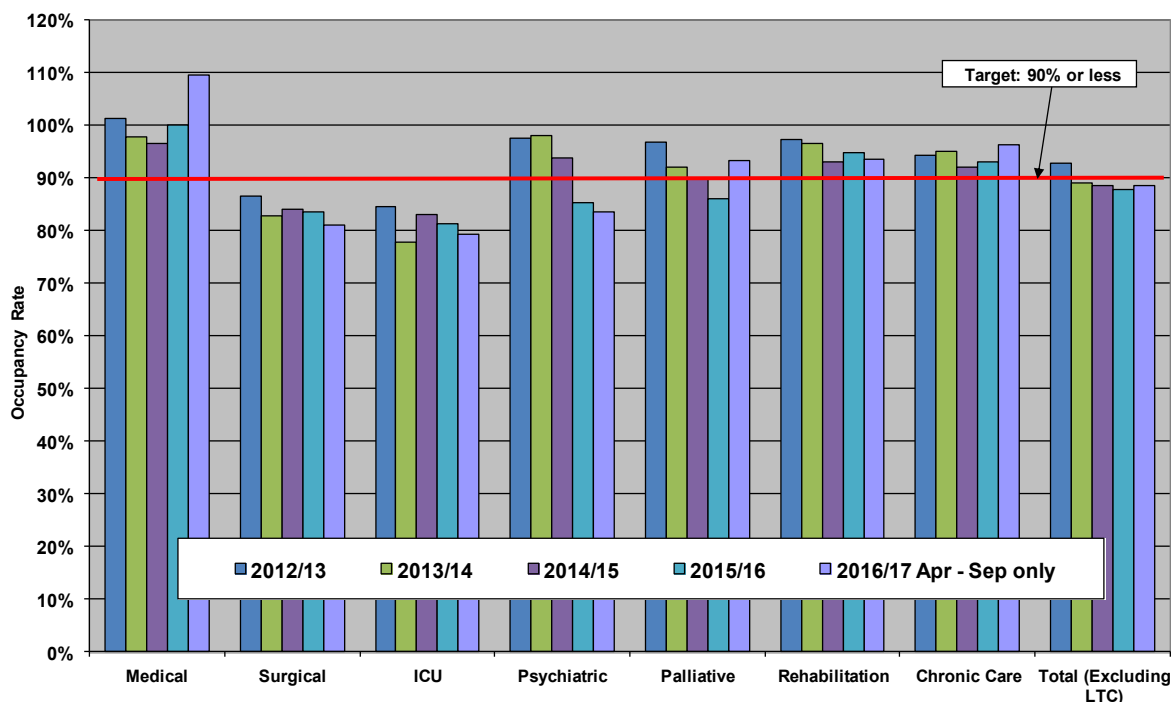
The graphs below show the yearly occupancy rates for services at the QEII and the Dartmouth General. For fiscal year 2015/16, the following services were at or below the target of 90% (favourable):

- QEII Surgical
- QEII ICU
- QEII Psychiatric
- QEII Palliative Care

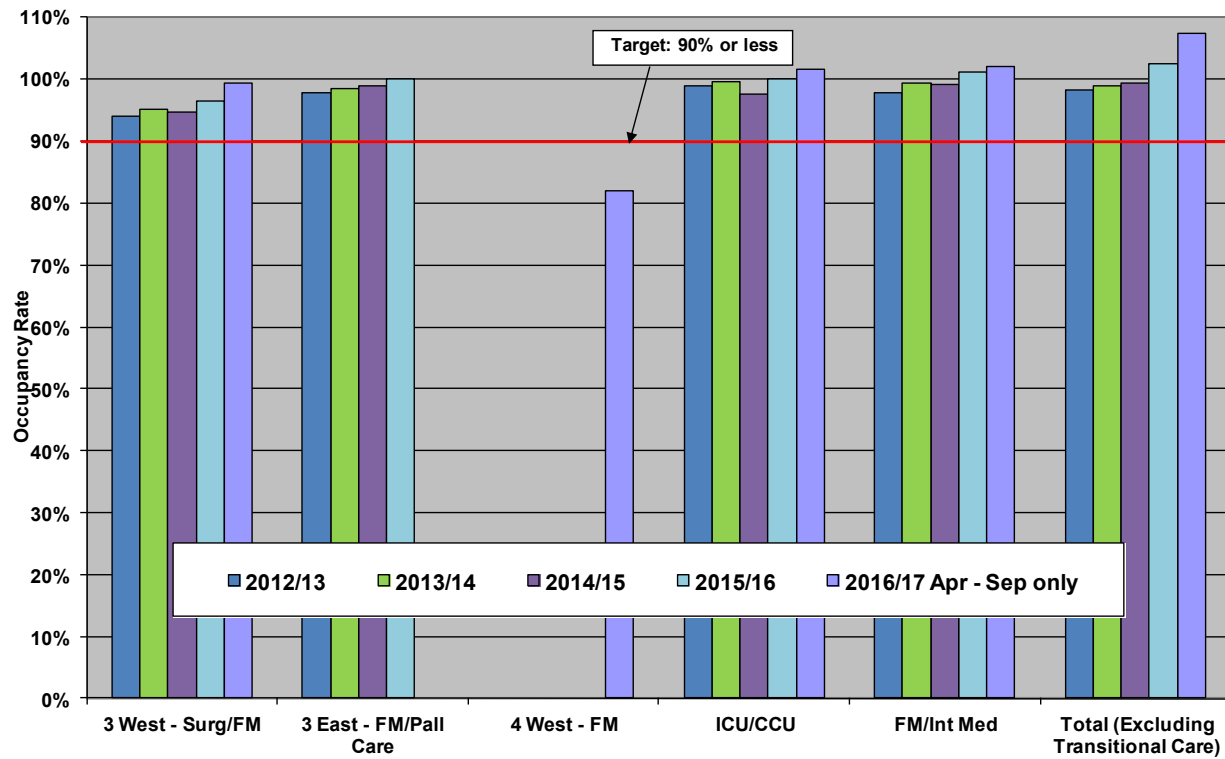
All other services were above the target (unfavourable). The overall rate for the QEII was below the target (favourable) while the overall rate at the Dartmouth General was above target for this period.

Results for the first six months of 2016/17 are also shown in the graphs below. For this time period, the QEII was meeting the target of 90%, but the DGH was not.

Occupancy Rates at the QEII



Occupancy Rates at the Dartmouth General



Graph Update Frequency: Monthly

Graphs Last Updated: Sep. 2016

Next Graph Update Expected: Oct. 2016

1.23 Emergency Department – Left Without Being Seen

What is being measured?

This indicator is the number of patients who left the emergency department without being seen by a physician divided by the total number of emergency registrations. The count of patients who left without being seen does not include those patients who were seen by a nurse in the emergency department instead of being seen by a physician.

Why is it important?

Each month, hundreds of patients who arrive at emergency departments across Central Zone subsequently leave without being seen by a physician. While many of these patients may have symptoms or conditions that can be safely dealt with by alternative means, it is a concern that someone with a significant problem may leave and the consequences could be serious. At the Dartmouth General, a discharge planning nurse keeps a record of patients who leave without being seen and calls patients to provide follow up suggestions.

How are we doing?

The graph below shows the percentage of patients who left the emergency department without being seen (all

triage acuity levels combined). A breakdown by emergency department site is shown. The target is to keep walkouts below 2% across Central Zone. All sites are over the 2% target (unfavourable), although in September 2016, Hants was very close at 2.1%.

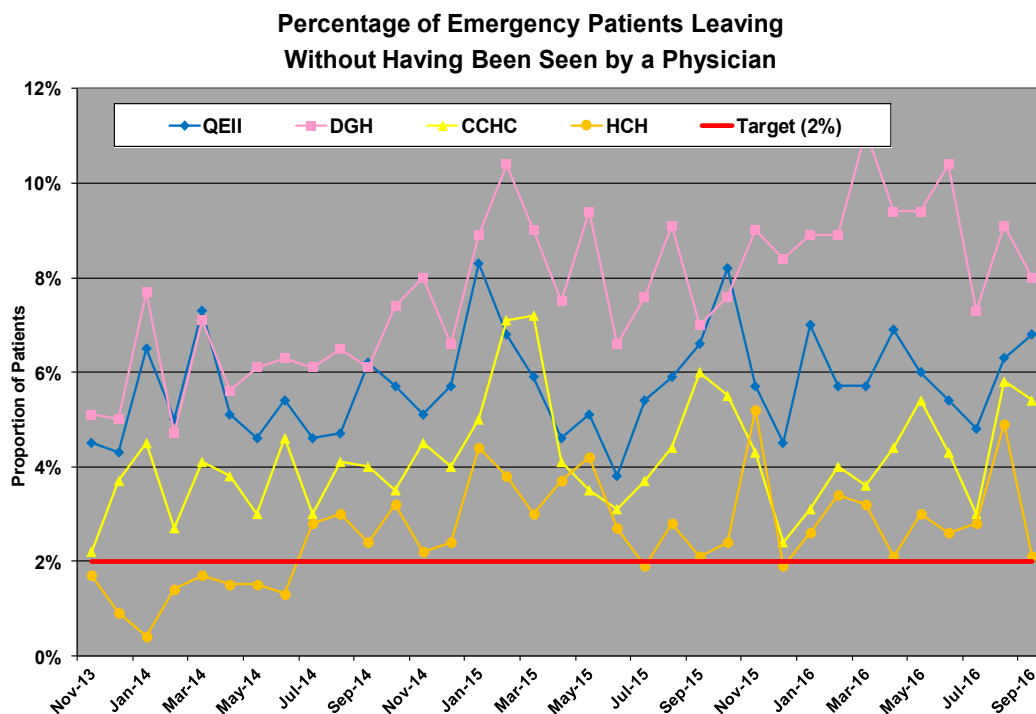
For additional emergency-department indicators, click [here](#) to go to the Central Zone Emergency Departments Quarterly Performance Reports web page.

What are we doing about this?

The following initiatives have been implemented at Hants:

- Nurse-initiated protocols allow nurses to start patient care prior to being seen by a physician. One example is for the treatment of sepsis patients.
- Waiting room rounds to improve communication between triage area, the department, and waiting room patients in an effort to keep patients who are waiting better informed and to allow them to make more informed decisions, increase patient satisfaction and decrease rates of patients leaving without being seen.

[last updated April 2014]



Graph Update Frequency: Monthly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Nov. 2016



1.24 Strengthen Community-Based Care for Chronic Disease

Strategy: Transforming Person-Centred Health Care Experience

Goal: Significant increase over baseline of chronic disease management in the community where appropriate

Measure: 5% reduction in the number of return outpatient visits annually at selected clinics in relation to hypertension, heart disease, COPD, and diabetes.

What is being measured?

An increase of chronic disease management occurring in the community will translate into, and will best be measured by, a reduction in the number of return clinic visits related to key chronic diseases.

The focus will be on the most common chronic diseases – hypertension, heart disease, COPD, and diabetes.

The target is to achieve a 5 % reduction, or 425 fewer return visits, by 2015/16. This will indicate success in diverting patients from the hospital into a community setting. The goal is to avoid bringing stable patients into the hospital when they can be better supported in the community.

We have been projecting a 5 to 10% increase demand at Central Zone clinics, so the 5% net reduction from the baseline calls for an effective decrease (from projections) of 10 to 15 %. Given the aging population and the rising rates of chronic disease, this is felt to be a challenging target.

Why is it important?

The aging population and growth in chronic disease means that community-based models are crucial. There is a need to move out to the community, upstream, and care for patients with chronic diseases as a single

person—in their entirety—in a way that is convenient and empowering.

How are we doing?

As a baseline, total return visits to the clinics directly related to hypertension, heart disease, COPD, and diabetes in 2011/12 was 8,500.

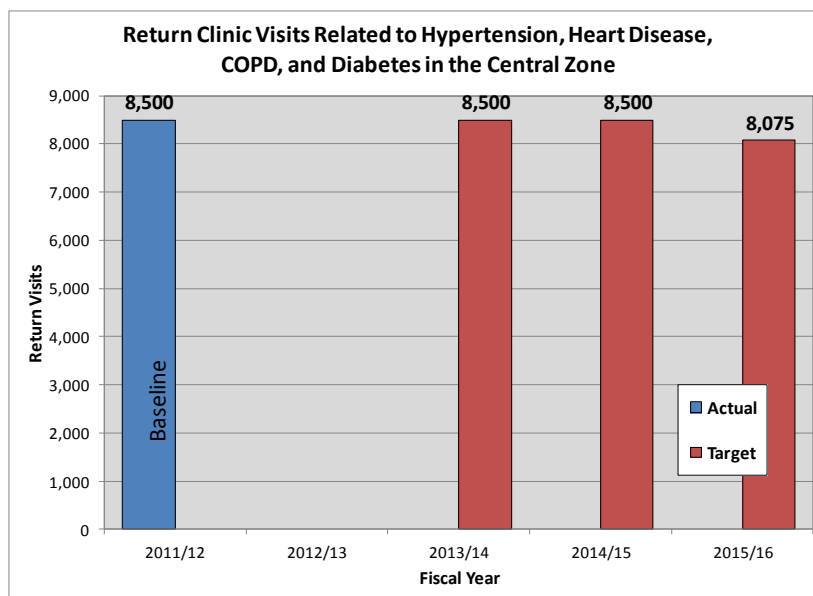
What are we doing about this?

The indicator for this area of focus requires a district CDM strategy to be developed that will impact care across the continuum of care with a specific focus on primary health care and ambulatory care. In order to develop a strategy that will have impact, it requires:

1. Data collection to assess gaps
2. Asset Mapping
3. Buy-in of key stakeholders;
4. Development of strategy;
5. Implementation
6. Measurement.

Significant gains have been made on items 1, 2, 3, and 4. Implementation is not a deliverable for this fiscal time period as noted in the action plan. Based on the action plan, deliverables are on track for completion. There are no significant changes to the action plan at this time.

[Last updated: June 2014]





1.25 Improve Quality of Care in Transitions

Strategy: Transforming Person-Centred Health Care Experience

Goal: Care teams will improve achievement in meeting established standards in the quality of care at key transition points substantially over 2012 baseline levels.

Measure: 50 per cent compliance in documenting patient instructions on the discharge summary.

What is being measured?

We audited 1000 discharge summary reports to determine compliance on five mandatory key quality elements required to be included in the report: final diagnosis, outcome of care, arrangements for follow-up, medications and patient instructions/education.

Our results for the first four elements are considerably higher than the last. Compliance on including patient instructions in the discharge summary report is low at just 22.5 per cent. It is also an area highlighted in our patient experience survey results as one that needs focus.

We want to more than double this result in three years, bringing it up to a 50 per cent compliance rate. This will require a substantial change in practice and culture. We're already making some progress and undertaking a lot of work in this area. For example, we're making these items required computer entry fields when completing a discharge.

Why is it important?

Transitions are a major challenge for health care systems everywhere, and the Central Zone is no exception. Everyone wants their loved one to receive the best possible care, including seamless, complete "hand-offs" between departments and care facilities.

Transitions are a "big dot" indicator of the performance of the system in terms of patient safety and quality – many experts

across the country believe it is one of the most important, and it is covered in an Accreditation Required Organizational Practice.

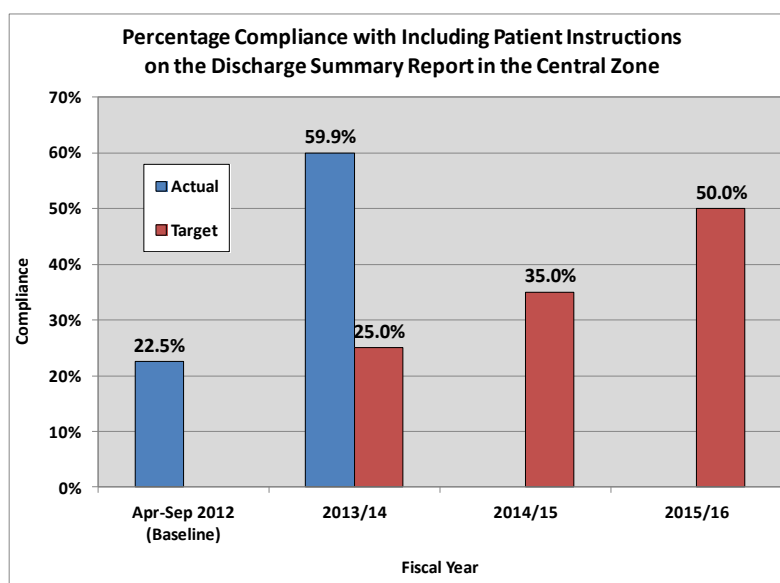
How are we doing?

A baseline audit of 1000 discharge summary reports from April to September 2012 was performed. Overall results for compliance on five mandatory key quality elements required to be included in the discharge summary reports for the QEII and DGH were 22.5%. For 2013/14, the same kind of audit showed a 60% compliance rate.

What are we doing about this?

Catherine Gaulton, VP of Performance Excellence and Dr. Steven Soroka, VP of Medicine are leading a steering committee to co-ordinate and guide the work already in progress. Its focus is on three initiatives: Safe Patient Information Transfer focusing on education and processes; implementation of an on-line eDischarge Report; and working with the IWK to improve transitions of care from the child-based to the adult-based health care system for individuals with chronic conditions. The group will continue to work through existing committees and structures (e.g. District Medical Advisory Committee, Grand Rounds, orientation, etc.) to embed quality transition practices across the organization. The results of the audit will be used to identify education opportunities and gaps. The eDischarge reporting tool will be implemented in all interested services.

There are no significant changes to the action plan at this time.
[last updated June 2014]



Graph Update Frequency: Yearly

Graph Last Updated: Jan. 2015

Next Update Expected: Summer 2015



1.26 Build a Culture of Customer Service

Strategy: Transforming Person-Centred Health Care Experience

Goal: Patients, families and communities report customer service interactions with Central Zone employees and physicians meet or exceed their expectations.

Measure: 20 point increase in the percentage of patients responding most favourably on customer service related survey questions.

What is being measured?

We currently collect data on patients' assessment of customer service through our patient experience survey. We started with an item on the survey that most closely relates to customer service—whether patients feel they have been treated with courtesy and respect. We then did a correlation analysis to find other items that most closely link to it, and ended up with a cluster of customer service related items on which we already collect data.

We have chosen to focus on patient responses at the top of the positive scale, in other words “strongly agree” or “4 out of 4.” Research in other industries has shown that the difference in customer loyalty between those responding at the top of the customer service scale and those responding one step down can be as much as six times difference.

The issues and results are quite different between the inpatient setting and ambulatory care. For example, in ambulatory care, key issues are the availability of parking and ease of registration. The inpatient setting is far more complex, involving everything from cleanliness to whether the care provider voices complaints about working conditions. Overall, our goal is to ensure everyone experiences better customer service in the Central Zone. Our target of 20% is essentially a proxy for that. It's a challenging and achievable goal, which will require focused attention on the various issues.

Why is it important?

This goal really speaks to our commitment to the “relentless pursuit of excellence in care and service.” Excellent customer service is founded on being treated with dignity and respect.

How are we doing?

The graph below shows the 2012/13 baseline, 2013-14 results, as well as future targets. It should be noted that an error was discovered in the original baseline figures (February 2012 data were analyzed rather than February 2013 data). Accordingly, February 2013 data have been used to revise the baselines to 61.9% (Ambulatory) and 29.1% (Inpatient).

In 2013, 29.1% of respondents responded most favourably on inpatient surveys and 61.9% of respondents answered most favourably on ambulatory care surveys. These results are short of the 2013 targets and even slightly lower than the baseline results in 2012.

What are we doing about this?

There are three elements to the Build a culture of customer service action plan: 1) training and supports, 2) care redesign, and 3) sustaining and embedding the new culture.

The focus in 2013-14 has been on the first of these. A regular schedule of training accompanied by job aids, manager supports, communications and change management activities was launched in February 2014.

Initiatives for fiscal 2013-14 were implemented more or less according to plan; however we did not make concrete progress in training and supporting staff and in redesigning patient care experiences until the fourth quarter was not made and it was too late in the year to have an impact on the patient satisfaction survey data gathered in February. As well, the monthly volume of learners being trained in the Communicate with Heart[®] program is approximately 50% of what is required to have full participation by September 2015.

With the slight decline in results from the baseline, in order to achieve the 2014-15 goal (10 point increase), there needs to be an overall increase of 16 to 16.7 points by March 31, 2015.

This slower than expected uptake of the training program coupled with the decline in patient-reported customer service means efforts have to be accelerated in 2014-15 and 2015-16.

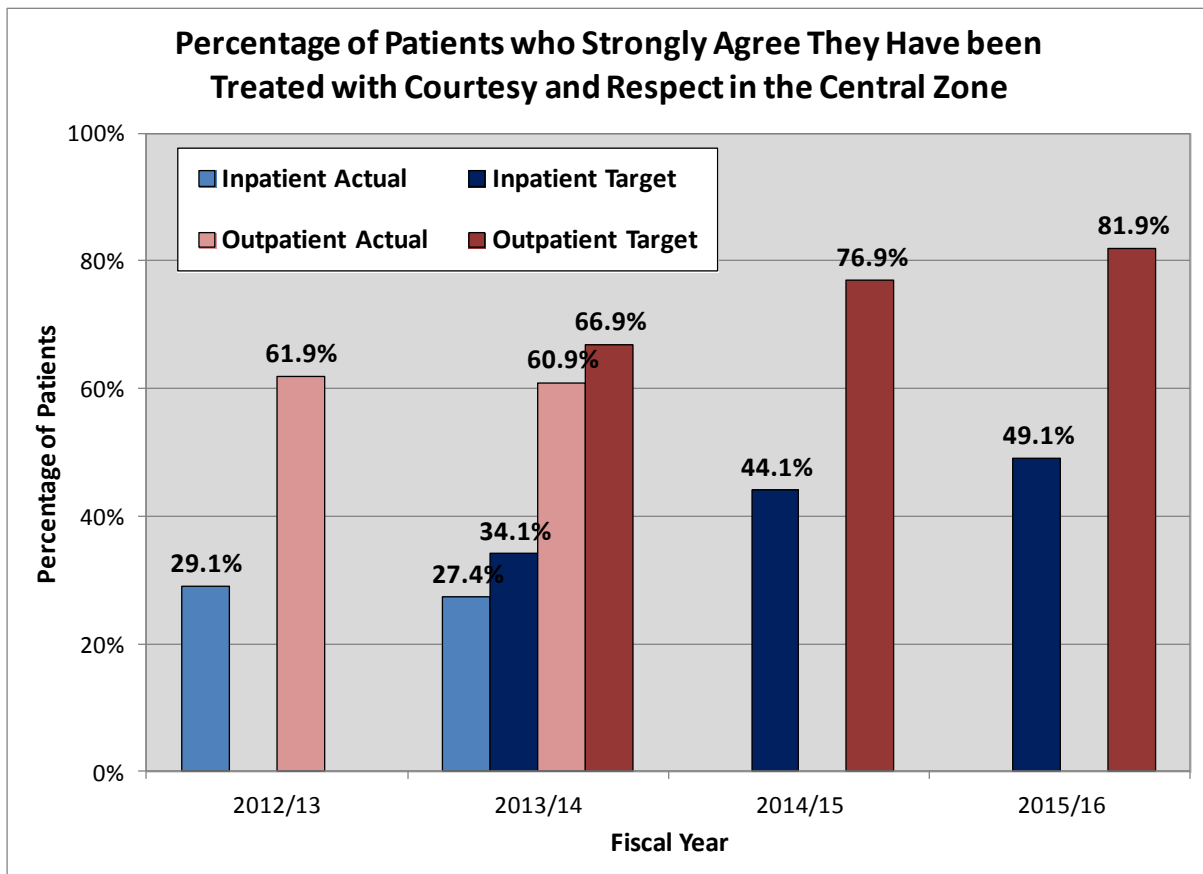
The action plan will not require modification except to accelerate activities and achievement of process targets. In particular, there will be greater emphasis on the Patient Care Redesign initiative in 2014-15.

As planned, and in keeping with new developments in the field, it is proposed Central Zone's definition of “quality” to encompass the three dimensions of Clinical Effectiveness, Safety, and Patient Experience be redefined. With this new perspective in place, capacity will be developed among Quality Teams to redesign patient experiences using Experience-Based Design (EBD) methodology.

A rapid, compressed version of EBD will be adopted. Quality Team efforts will be supported, monitored and reported on to complete redesign initiatives.

In short, the major change to the action plan is to leverage existing Quality & Safety resources and infrastructure using a faster version of the methodology to accelerate progress on this initiative.

[Last updated June 2014]



Graph Update Frequency: Yearly

Graph Last Updated: Jan. 2015

Next Update Expected: Summer 2015

2 Citizen and Stakeholder Engagement and Accountability



2.1 Partner with the Public so Individuals and Communities can Play a Key Role in Managing Their Own Health

Strategy: Citizen and Stakeholder Engagement and Accountability

Goal: Significant increase in number of individuals reporting that Central Zone has supported them in playing a key role in managing their own health.

Measure: 10 point increase in percentage of residents who say they have received support in managing their own health.

What is being measured?

In 2013, we carried out a telephone survey of Central Zone residents. The survey provided data for the “Managing own health” baseline and also the “Appropriateness of care” baseline.

We spent a lot of time considering how to get at what the public understands, rather than what health care providers understand. We decided that the key question was “In the past 12 months have you received any support related to managing your own health?”

We’d like to see the percentage of respondents who say they have received support in managing their own health rise by 10 points. That would be a significant shift in our citizens’ experience of being supported in health and with illness.

Why is it important?

This is about empowering people to take ownership of their own health, including prevention of illness and maintenance of well-being. We can help by providing them with direct support, and by supporting others who provide support, such as providers and family members.

We need to educate those we serve about what care is available to them in their own community.

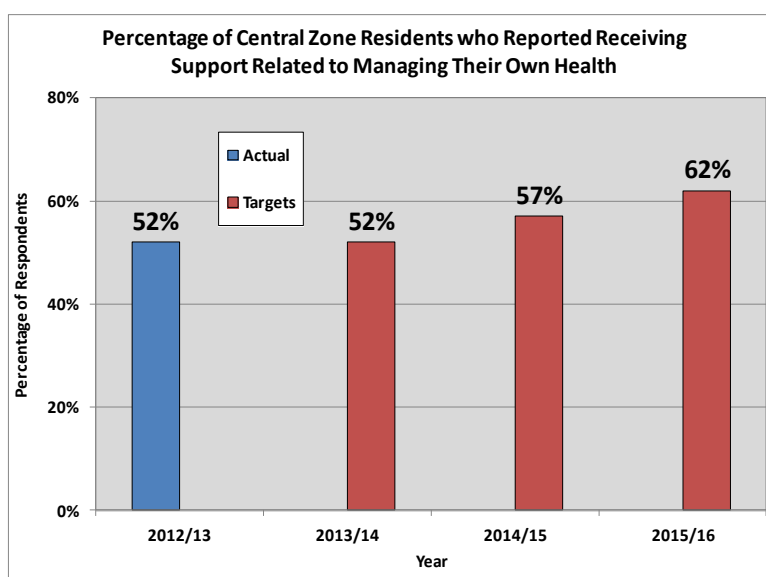
How are we doing?

In 2013, Thinkwell Research conducted a field survey in which 52% of 655 respondents indicated they had received support related to managing their own health. The survey was not repeated in 2013/14 so a measure is not available.

What are we doing about this?

Considerable work has been done by the committee to identify target populations and approaches to support people in managing their own health. Survey data showed the population of young adults (age 18 - 34) relies heavily on web-based health information, so we have focused on the identification of topics appropriate for adaptive technologies (mobile and/or desktop) for this population. Pregnancy and early parenting have been identified as points of entry for young people who may not have had significant involvement with the health system until that point, and have identified (with provincial partners) a potential opportunity to leverage current work happening provincially. This may impact timelines and process, but there is no significant change to the action plan.

[Last updated June 2014]



Graph Update Frequency: Yearly

Graph Last Updated: Jan. 2015

Next Update Expected: Summer 2015



2.2 Involve Patients Directly in Their Care

Strategy: Citizen and Stakeholder Engagement and Accountability

Goal: Patients or their surrogates report that their involvement in decision-making related to their care met or exceeded their expectations.

Measure: 10 point increase in the percentage of patients responding positively to a survey question about being consulted in decision-making about their care.

What is being measured?

We currently collect data on patients' assessment of their involvement in decision-making through our patient experience survey.

Why is it important?

This goal is about culture shift. Patients need to know we want them to be involved in key decisions related to their care. Staff need to understand we are encouraging patients to ask to be included in their own care.

Communications and customer service will be the key to success. Listening well to patients has been shown to improve care quality and patient perceptions of quality.

How are we doing?

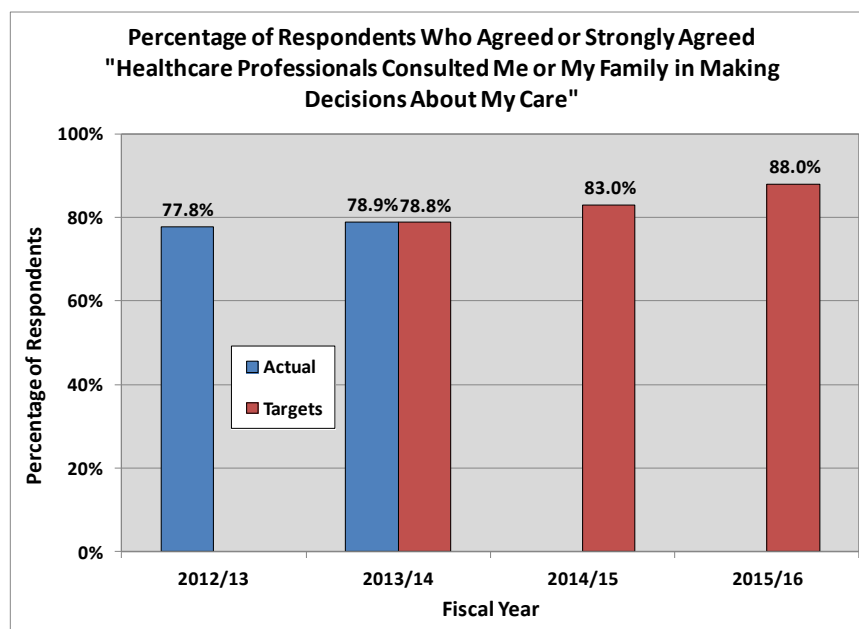
The baseline results showed 77.8% of respondents agreed they or their family were consulted in making decisions about their care. The target was to increase this by one percentage point to 78.8% in 2013/14. The graph below shows the 2013/14 measure was 78.9%, thus the target was met.

What are we doing about this?

This priority area was able to achieve the targeted goals as the approach to ensuring success involved imbedding activities and practices in the day-to-day operations which collectively contributed to positively impacting on the question in the patient satisfaction survey. The question measures patient perception of involvement in their care decision making. It is specifically worded as: "Patients or their surrogates report that their involvement in decision-making related to their care met or exceeded their expectations."

There is no significant change in parameters of the action plan. The intent is to proceed with the systematic approach to implementing and integrating care planning practice across all clinical areas, continue to develop and implement unit-level criteria to inform and guide clinical teams involving patients and surrogates in care decisions, and develop related communication and education materials for clinical teams to outline why this work and approach is critical to our day-to-day delivery of care.

[Last updated July 2014]



Graph Update Frequency: Yearly

Graph Last Updated: Jan. 2015

Next Update Expected: Summer 2015



2.3 Lead Dialogue with the Public Addressing Appropriateness of Care

Strategy: Citizen and Stakeholder Engagement and Accountability

Goal: Improve public awareness of quality of life issues related to appropriateness of care.

Measure: 20 percentage point increase in the percentage of Central Zone residents surveyed who report a high degree of familiarity with the concept of appropriateness of care.

What is being measured?

In 2013, we carried out a public opinion survey that included questions designed to establish a benchmark for the “managing own health” goal and the “appropriateness of care” goal. A total of 655 citizens responded.

Awareness of the concept of “appropriateness of care” is much more important than awareness of the healthcare jargon we use to label it. One in five of those surveyed responded that they are “very familiar” with the concept of appropriateness of care, once it was described to them.

As a challenging and achievable target, we want to double the percentage of residents who are “very familiar” with the concept of appropriate of care, anticipating that this will pull the whole curve of respondents upward.

Why is it important?

Appropriateness of care refers to care that is right for the individual being treated, taking into consideration their expectations and who they are as a whole person.

Conversations about appropriateness of care have been taking place behind closed doors for years. We need to educate people so we can have these conversations out in the open, and well in advance of the point of care, so we are enabling informed decision-making on issues related to quality of life.

How are we doing?

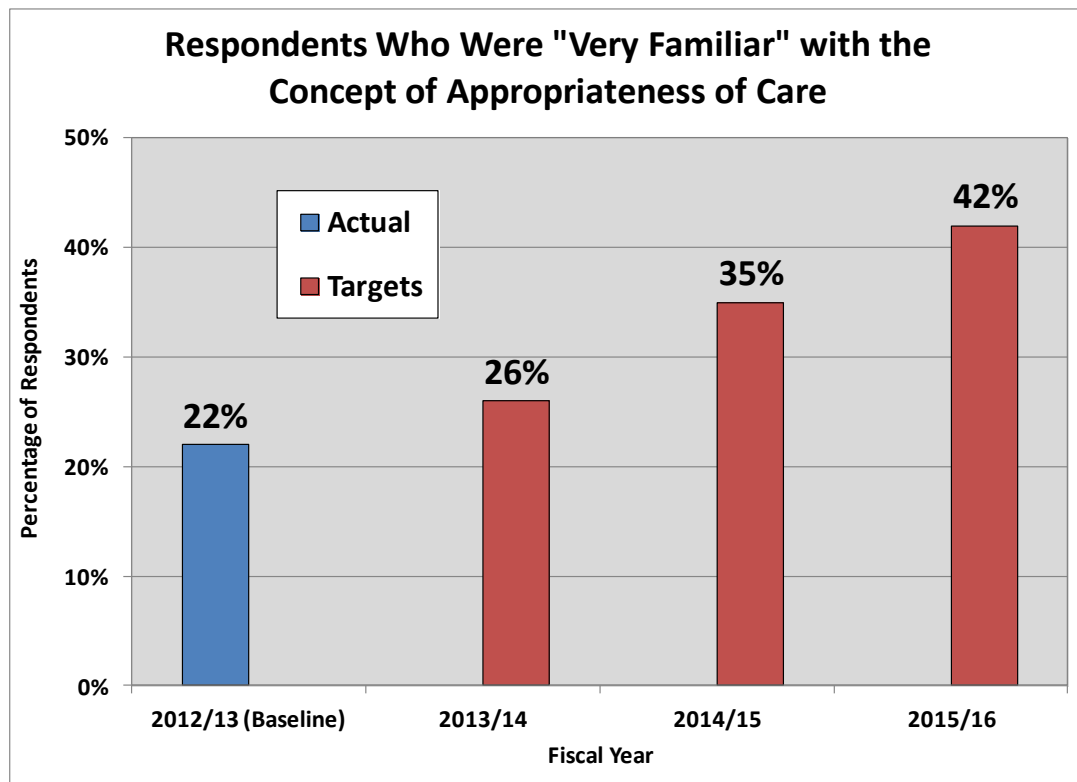
In 2012, 22% of 655 respondents indicated they were “very familiar” with the concept of appropriateness of care. See the graph below. No results are available for 2013/14.

What are we doing about this?

The target for this goal focused on shifting public opinion and as such the original action plan identified the resources necessary to do that. The level of resources needed was beyond the capacity of the organization to meet. This goal area received no funding in year one to implement any of the initiatives identified in the original action plan. As a result, little-to-no progress was made on the action plan for this goal. It was decided by the action team in consultation with the executive sponsors that contracting a follow up survey was not a wise use of resources when there was little likelihood of seeing any change in the numbers. Furthermore, the primary focus of the action plan shifted from the public to that of physicians. While communication efforts will be publicly targeted, shifting public awareness of appropriateness of care is now considered a secondary objective.

The action plan was revised in consultation with the executive sponsors. Communication efforts are now targeted at physicians and other health professionals. The Central Zone has committed to adopt and promote the Choosing Wisely Canada campaign as its primary vehicle to promote more appropriate care to physicians as well as patients. And finally, partnership and collaboration with other key stakeholders in this issue is a major focus—for example, working closely with Doctors Nova Scotia, Choosing Wisely Canada and Dalhousie Medical School's Value-Added Care Committee.

The goal statement and measures for this strategic goal need to change to reflect the move away from public awareness and the move towards provider awareness and actions. [last updated June 2014].



Graph Update Frequency: Yearly

Graph Last Updated: Jan. 2015

Next Update Expected: Summer 2015

3 Transformational Leadership

3.1 Absenteeism

What is being measured?

This indicator is the average amount of employee paid ill time away from work per month. Employee ill time is an illness of the employee and covered under general illness, sick banks, and short term illness. It is not time away for family illness or preventative appointment time. It includes paid sick time (NSNU employees), paid general illness (all other employees), short term illness, and grandfather illness long term disability at 100%.

Why is it important?

Employees who are not at work due to illness affect a team's workload and patient care. Absenteeism results in managers paying overtime which results in increased expenses as well as employee burnout, which can impact patient care.

How are we doing?

A graph of the average sick hours per eligible employee per month in the Central Zone is shown below. The target is to have 6.15 or fewer per month.

The organization is currently experiencing a high rate of absenteeism. This is during a time in which there are hiring challenges for nursing positions throughout the organization. These challenges result in more staff having to work even more overtime.

What are we doing about this?

Employee Health has Rehabilitation Consultants working with employees who are off ill greater than five days of absence. People Services is working to fill vacancies and most recently

completed a mass hiring of graduate nurses. While these nurses fill the FTE they are, still junior in experience and will require mentoring to build skills and knowledge. The impact of these staff on the units will be more evident in coming years.

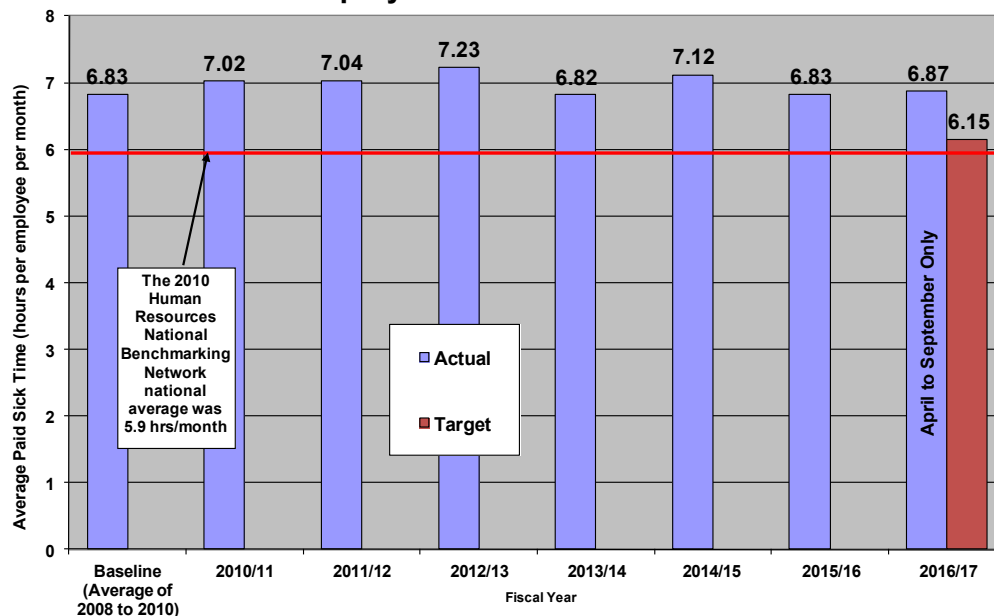
Healthy Workplace along with Wellness and Safety services have combined forces to provide educational programs for frontline managers to enable them to recognize signs of workplace fatigue attributed to stress. An October 2011 workshop on mental health at work was scheduled as education for senior leaders. In the fall of 2012, communications were sent to employees in the Patient Centred Care Portfolios thanking them for their attendance, while ensuring accountability around sick time usage.

People Services has also teamed up with Wellness and Safety to help deliver education opportunities to assist managers with the utilization of employment contracts around culpable sick time, improving accessibility by means of identification/promotion of services. Relevant quality operational indicators are being identified and will be used to determine the best services available to meet these goals. Measures have been put in place to make pre-hire OH screening mandatory prior to hiring to ensure the new hire is a fit for the position.

The Heart Health Program/Ambulatory Care at the Halifax Infirmary has 28 staff members on Attendance Management Program.

[Last updated April 2014].

Average Monthly Paid Sick Hours per Eligible Employee in Central Zone



Graph Update Frequency: Monthly

Graph Last Updated: Oct. 2016

Next Graph Update Expected: Nov. 2016

3.2 Overtime

What is being measured?

This indicator is total hours worked overtime divided by the total hours worked, multiplied by 100.

Why is it important?

The amount of OT incurred by a unit and the organization at large is costly from a few points of view. There is a higher financial cost to the organization and the entire health care system, employee have a decreased work life balance and time to recharge from working, potential risks to patient care due to employee fatigue.

How are we doing?

The graph below shows the percentage of overtime worked in the Central Zone. In 2015/16, the percentage of overtime hours worked was 1.25%. This was below the target of 1.89% (favourable). For April to August of 2016, the rate was 1.22%.

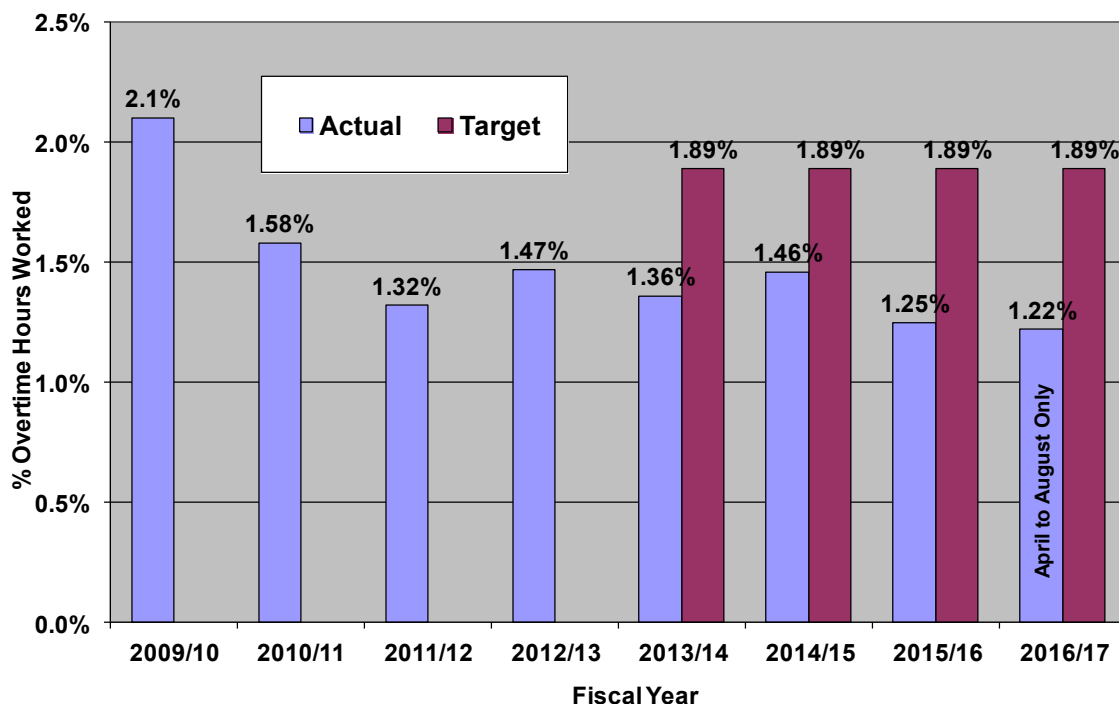
What are we doing about this?

There are many different overtime initiatives across the organization to help reduce the amount of time used. Some examples are:

- Manager scrutiny of budget reports
- Newly developed Nursing Resource Team, this will take a couple of years to fully establish positive impacts on overtime.
- Central Staffing Office at the QEII site
- Rollout of the Kronos Staff scheduling system at the QEII site for the central staffing office.
- Review of Models of Care to ensure we have the right resources doing the right jobs at the right time.
- Managers review a newly developed monthly overtime report to monitor overtime in a more timely fashion.

[Last updated August 2014]

Percentage of Overtime Hours Worked in Central Zone



Graph Update Frequency: Monthly

Graph Last Updated: Oct. 2016

Next Update Expected: Nov. 2016

3.3 Employee Survey

What is being measured?

This indicator is the percentage of favorable, neutral, and unfavorable responses in various sections of the employee surveys conducted in 2009 and 2011.

Why is it important?

At Central Zone, we have made a promise to be a world-leading haven for people-centred health, healing, and learning. We can only achieve Our Promise if each of us experiences Central Zone as a rewarding, satisfying, and healthy place to work. That's why every two years, an employee survey is conducted. The survey allows the measurement of progress and the answers the following questions: How are we doing? Where could we be doing better? What will we celebrate?

How are we doing?

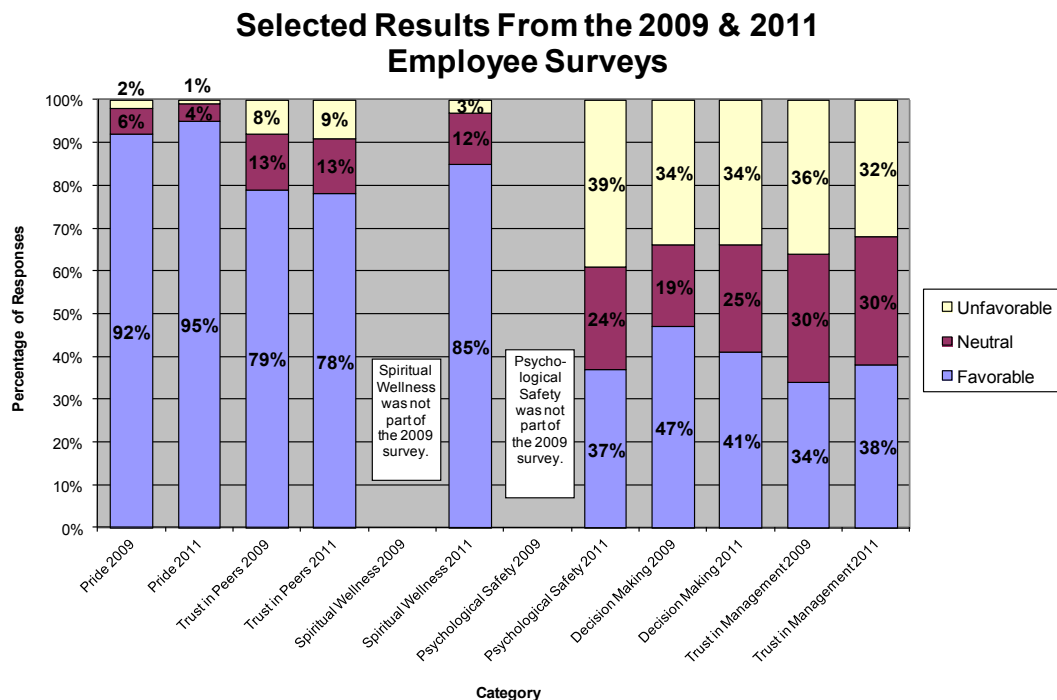
The graph below shows a selection of the results of the 2009 and 2011 Central Zone Employee Surveys. The selection of results presented in this report are meant to highlight a sample of areas to be celebrated and areas where improvements could be made.

From the graph it can be seen that both pride and trust in peers had very high percentages of favorable

responses in both 2009 and 2011. Spiritual wellness was not part of the 2009 survey, but had a very high percentage of favorable responses in 2011. Some of the areas for improvement include psychological safety, involvement in decision making, and trust in management.

What are we doing about this?

Teams throughout the Central Zone will receive team reports in June 2011, have conversations, and implement action on ways to improve their workplace. This process is the most meaningful for staff as each unit or department is unique and will have unique interests and ideas that the organizational response to survey results may not address. The 2011 survey team will make one to two recommendations based on analysis of the organizational survey results—looking at statistical and practical significance of the results and the relationships among the survey measures. The team will look for leverage opportunities based on this analysis and the prospect of alignment with existing or planned strategies within the Central Zone and our larger community.



3.4 Employee Survey – Accreditation Canada Worklife Pulse

What is being measured?

The Worklife Pulse Tool helps organizations identify strengths and opportunities for improvement in their work environments, plan appropriate interventions to improve the quality of worklife, and develop a clearer understanding of how quality of worklife influences the capacity of an organization to meet its strategic goals. The survey takes the “pulse” of quality of worklife, providing a quick and high-level snap shot. The survey is intended to complement the organization’s full-scale employee survey.

Why is it important?

It is widely recognized that the health care environment is one of the most challenging within which to work due to the physical and emotional nature of work, the high risk of work-related injury, heavy workloads and work schedules, and the high rate of change in the work environment. For this reason, the concept of quality of worklife is central to the Accreditation Canada Qmentum program. Worklife is one of the quality dimensions of Qmentum, with content throughout the core standards, Required Organizational Practices (ROPs), and the Worklife Pulse Tool.

How are we doing?

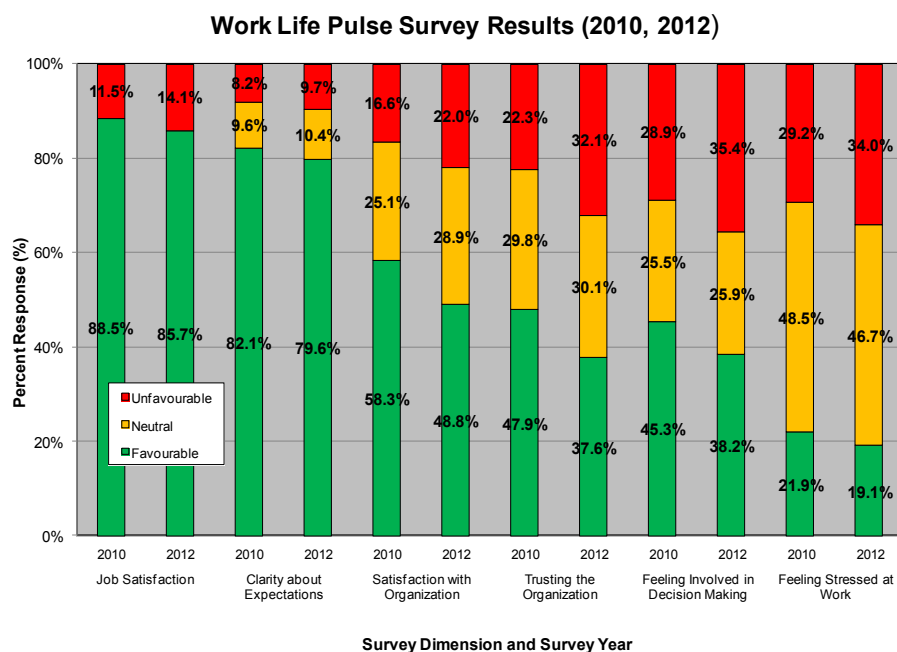
Employee ratings of ‘job satisfaction’ and ‘clarity about expectations’ remained high for 2012. However, there were slight increases in the number of ‘unfavourable’ responses in almost all dimensions – see graph below.

What are we doing about it?

Analysis of the 2012 results led to a number of actions at the organizational level. Leadership intentionally engaged employees in the process of renewing the strategic plan including identifying organizational priorities for 2013-2016. In order to provide clarity and more succinct direction, the numbers of areas of focus in the new strategic plan were narrowed from 35 to 14.

Results of analysis also showed that engagement of employees for sustainable change required action at the interdisciplinary team level. In order to support improved employee satisfaction at the “front-line” of care and service provision, a toolkit with individualized data was created, and facilitation was provided to teams for action planning based on these more specific results. As of June 1, all Quality and Patient Safety Teams had identified two- to three-item key areas for improvement based on their individual Worklife Pulse results.

[Last updated September 2013]



Frequency Tracked: Every two years

Last Updated: Sept. 2013

Next Update Expected: 2015

3.5 Physician Survey

What is being measured?

This section presents the percentage of favorable, neutral, and unfavorable responses in selected sections of the physician survey. The 2011 Central Zone Physician Survey was created by Physician Services in consultation with several department chiefs, and the presidents of both DMSA and DMAC. In January and February 2011, physicians from all medical staff categories (active, resident, fellow, associate, consulting, courtesy, clinical associate, clinical trainee, and locum tenens) were invited to complete a survey. The survey data were collected through ClearPicture, an independent survey firm. The response rate was 54%.

Why is it important?

The information uncovered through this survey process will assist the Central Zone in further developing and strengthening relationships with physicians for the sake of improved patient centered care.

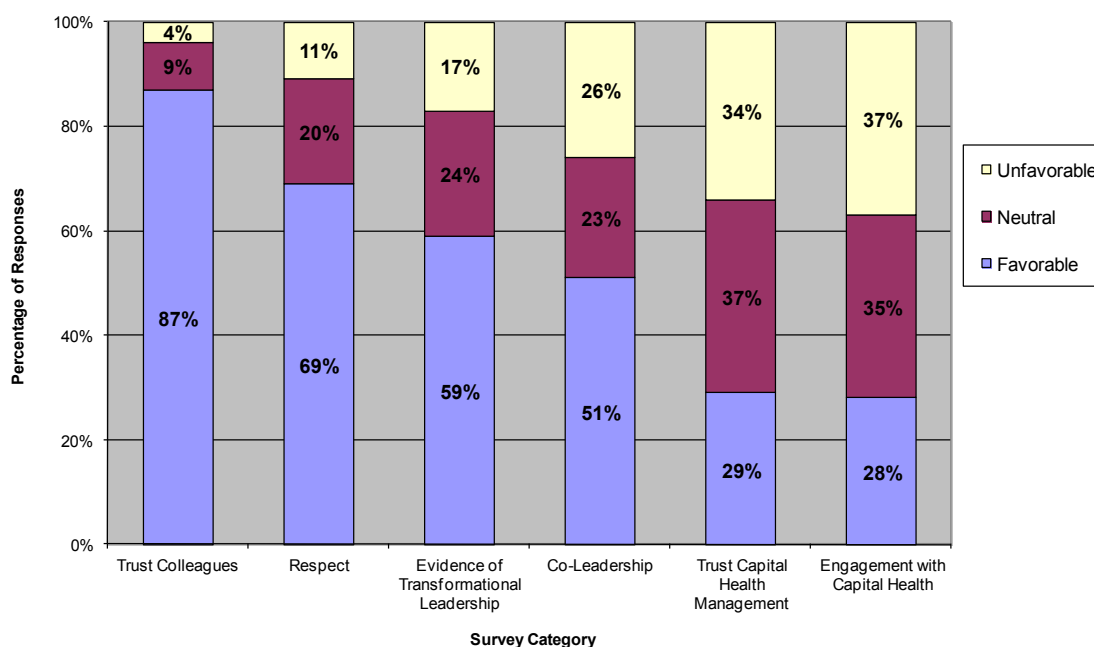
How are we doing?

The graph below shows the results for six selected sections of the physician survey. Of the six shown, trust in colleagues and respect had the highest percentages of favorable responses, while trust in Central Zone management and engagement with Central Zone had the lowest percentages of favorable responses. Transformational leadership and co-leadership fell in between.

What are we doing about this?

Initiatives such as Co-Leadership have been established to increase physician involvement in leadership in the Central Zone. Co-Leadership work focuses on improving relationships for the sake of improved performance. Novel development work was recently presented at the Canadian Association for Health Services and Policy Research Annual Conference. The Fully at the Table program is still offered and is the focus of a national research investigation exploring ways to advance leadership for the sake of improving health care.

Selected Results from the 2011 Central Zone Physician Survey



Frequency Tracked: Every two years

Last Updated: June 2011

Next Update Expected: 2014



3.6 Strengthen Accountability of Employees and Physicians.

Strategy: Transformational Leadership

Goal: Staff, management and physicians at all levels report being held accountable for their performance.

Measure: 20 point increase in the percentage of staff, management and physicians responding most positively on survey items measuring self reported accountability.

What is being measured?

As with the leadership measure, we recently conducted a survey of employees and physicians on accountability. The survey included a cluster of items that correlate to form a scale. We asked respondents if they were clear on what is expected of them in their role, if they had received feedback on their work in the past 12 months, and if they feel they are held accountable in their work.

Our baseline reflects the top of the range – percentages of responses at 4.5 or higher out of 5.0 on average for the scale. Again, we are looking to shift the whole curve up – our indicator is at the top end, but we are looking to address this issue across the board.

Why is it important?

Transformation requires leadership, and accountability is a big part of that. What we heard loud and clear through our strategic engagement process was a call, from staff and the public, for more accountability for action.

At Central Zone, we are building a culture of accountability. Over the past three years we have sown the seeds of leadership through the My Leadership program and Fully at the Table. The next three years will be about nurturing those seeds for real growth.

How are we doing?

In the 2012/13 employee and physician survey, 35% of respondents indicated a response of 4.5 or higher out of 5.0 with regard to accountability. In 2013/14, this percentage dropped to 29%. Details can be seen in the graph below. As a subgroup, physicians were at 31% for both 2012/13 and 2013/14.

The following trends were noted:

- A sharp increase in the accountability factors for directors
- Some positive change for supervisor and clerical employees

- No appreciable change for Health Services Managers
- Some decline for Confidential Excluded employees and Other Managers
- A marked decline for other clinical staff (nursing and allied health professionals) and support staff.

There is some sense that the decline for a number of these employees was connected to the high profile labour issues and subsequent work stoppages, which occurred around the time the survey was conducted.

What are we doing about this?

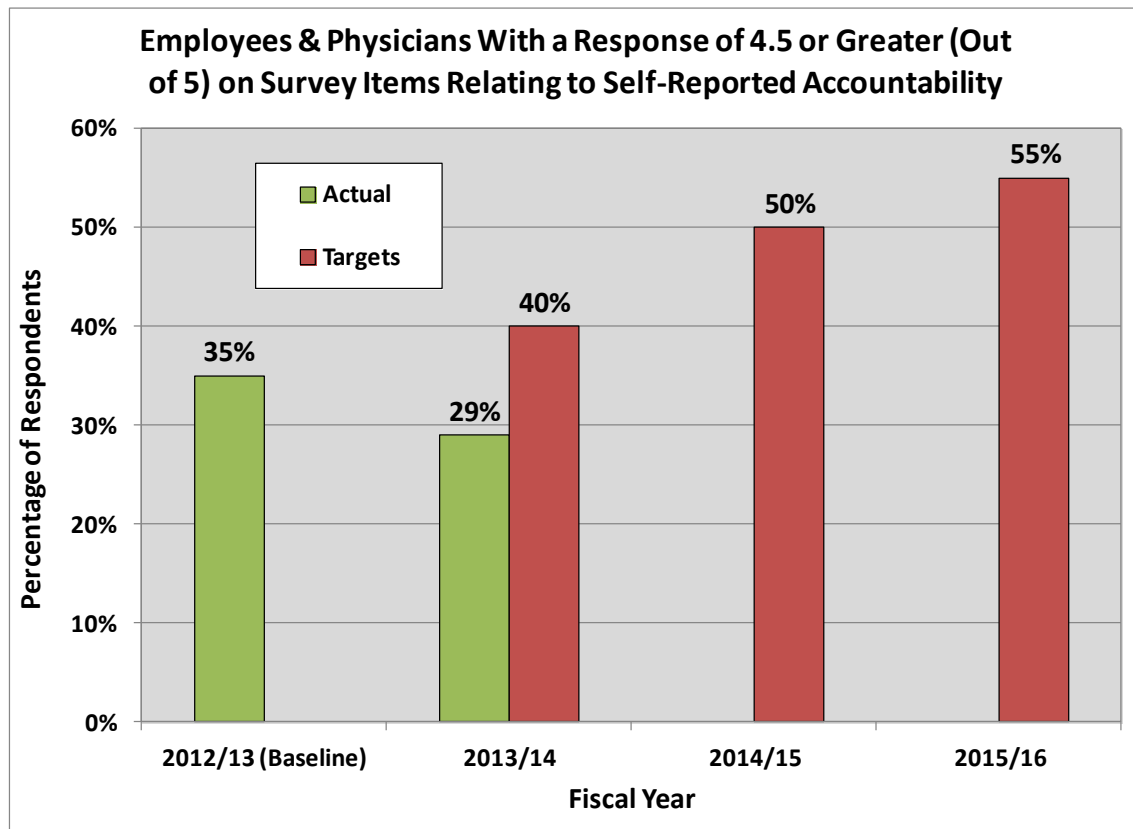
The anticipated first year increase was expected to occur and coincide with the development of AFP Deliverables work (accountability) however the original timelines were detailed. A big swing in the numbers for 2014-15 is anticipated which should have this back on track as the deliverable will be finalized by September 1, 2014. At the same time, specific work focusing on resident accountability will be launching which will mean all facets of the action plan will be in motion.

Work is being done on developing and rolling out accountability measures for management and in turn this should increase the accountability factors for other staff. The work on job profiles, competencies and skills for health services managers has been completed and that work is being used to influence the development of accountability frameworks, and training for this group. There is also work being done to introduce an accountability framework for new hires.

With the impending provincial consolidation, the initial scope of the work on Accountability has been scaled back due to resource constraints but the Project Plan has been revised to take that into account.

With the aforementioned efforts in progress, it is expected the three-year target for this work will be met.

[last updated June 2014]



Graph Update Frequency: Yearly

Graph Last Updated: Jan. 2015

Next Update Expected: Summer 2015

4 Innovating Health and Learning

4.1 Research Funds from Grants & Contracts

What is being measured?

This indicator is the total new dollars in grant and contract research funds received during the fiscal year.

Why is it important?

Central Zone Research Services manages more than 1,200 research accounts (funded projects) supporting 1487 active research projects (funded and unfunded), and is responsible to ensure that all legal, financial and ethical requirements and approvals for research in the Central Zone are fulfilled. There are 280 research employees who are integral members of the interdisciplinary healthcare teams providing quality patient-centered care in the Central Zone.

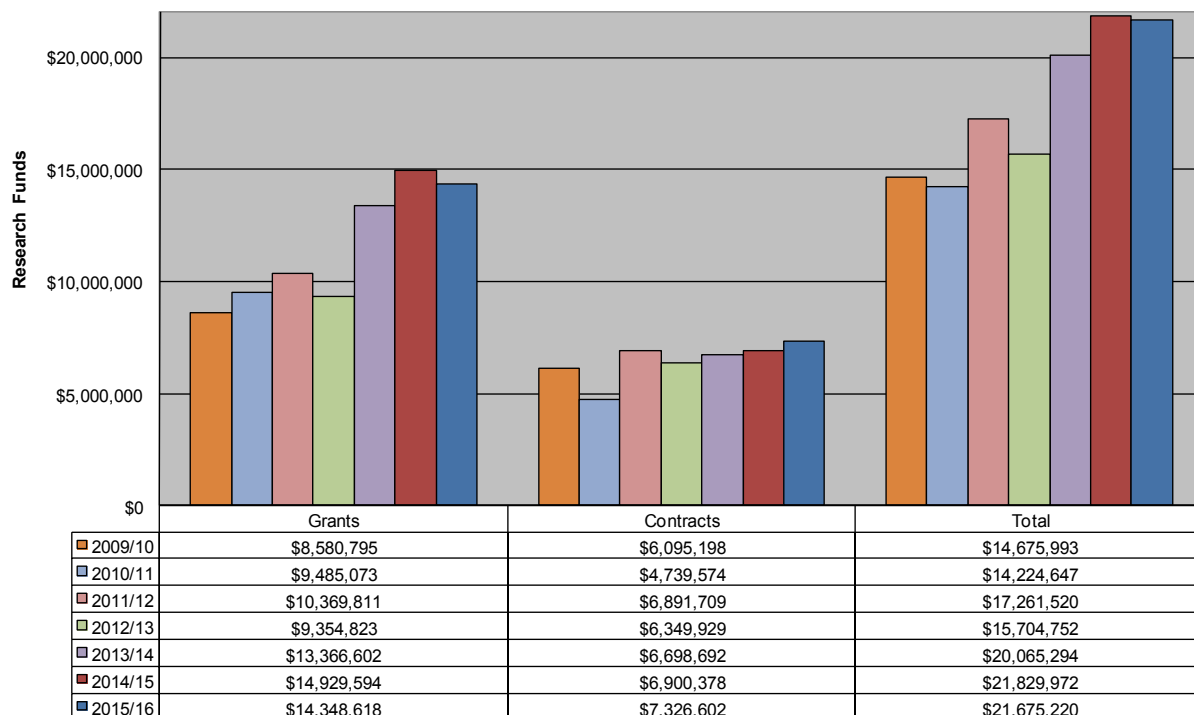
How are we doing?

Total research funds broken down into grants and contracts are shown in the graph below. In 2015/16, funds from contracts were up from the previous year while funds from grants were down. Funds from grants, however, remain higher than that seen in 2014/15 or earlier.

What are we doing about this?

Central Zone researchers have been the recipients of several large awards. These awards tend to be multidisciplinary in nature and involve a variety of researchers with diverse knowledge and expertise. Additional project management resources have been provided to ensure these projects are successful at every level.

**Total Research Funds from Grants and Contracts
Central Zone**



Frequency Tracked: Annually

Last Updated: Sep. 2016

Next Update Expected: Summer 2017



4.2 Focus on Innovation that has Benefits for Patients & Aligns with Our Mission.

Strategy: Innovating Health and Learning

Goal: New innovations are demonstrably aligned with organizational goals, have clear benefits for patients, and contribute to sustainability.

Measure: Implementation of a health technology assessment process for all new major capital equipment expenditures over \$500,000, and all new externally provided diagnostic testing which costs more than \$10,000 annually per type of test.

What is being measured?

To fulfill this goal, we need to implement a new health technology assessment process. Currently, we don't have such a process in place – in a sense, that's our baseline.

This process will cover all major capital equipment expenditures over \$500,000 and all new types of diagnostic testing provided by an external supplier and projected to cost over \$10,000 annually. Of course, this is still in the early stages and there is a lot more engagement and input to come from clinical groups on what this process will cover.

Why is it important?

A Health Technology Assessment is a best practice, evidence-based approach to ensure expenditures are aligned with our strategies, benefit our patients, and realize cost efficiencies. It is a methodological approach to making decisions.

There are two elements to this: first, rigorous evaluation and prioritization to ensure innovations align with our priorities in the Central Zone; second, translating innovations into improvements in care and services.

How are we doing?

There was no interim target for this goal.

What are we doing about this?

Catherine Gaulton, Vice-President, Performance Excellence & General Counsel, and Pat McGrath, Integrated Vice-President, Research and Innovation, have convened an action team to develop an action plan. Two major actions for achievement of this 2016 goal are:

1. Implementation of health technology assessment to new capital equipment purchases over \$500,000 and other capital processes as recommended by Capital Funding Committee and approved by LET
2. Implementation of NS-based health technology assessment process to all qualifying diagnostic processes and to other diagnostic processes as recommended by Lab Utilization Committee and approved by LET

The attainment of this year's goal is directly related to having a Health Technology assessment capability the Central Zone and that is in turn directly related to conversations provincially on health technology assessment. This continues to be pursued provincially and with health transition leadership.

[Last updated: August 2014]



4.3 Strengthen Partnerships with Learning Institutions

Strategy: Innovating Health and Learning

Goal: Partners in the academic health learning network report a high degree of quality in their relationship.

Measure: 85% positive response by academic partners on survey items related to the quality of the partnership.

What is being measured?

We sent an online survey to 11 senior leaders at our key partnering academic institutions, asking them about the quality of our partnership with respect to both research and education.

We only received three responses, so the baseline is not concrete. We will look to increase both the response rate and the rate of positive results. Our target is to have 85% positive responses from our partners.

Why is it important?

Simply, if we are not performing at the highest possible level with regard to education, research and innovation, we won't be improving care in the Central Zone.

We are committed to strengthening our ties to learning institutions across the Maritimes – connecting directly to our academic mandate. As an academic health science network, we have a unique role to play in fostering relationships among learning organizations.

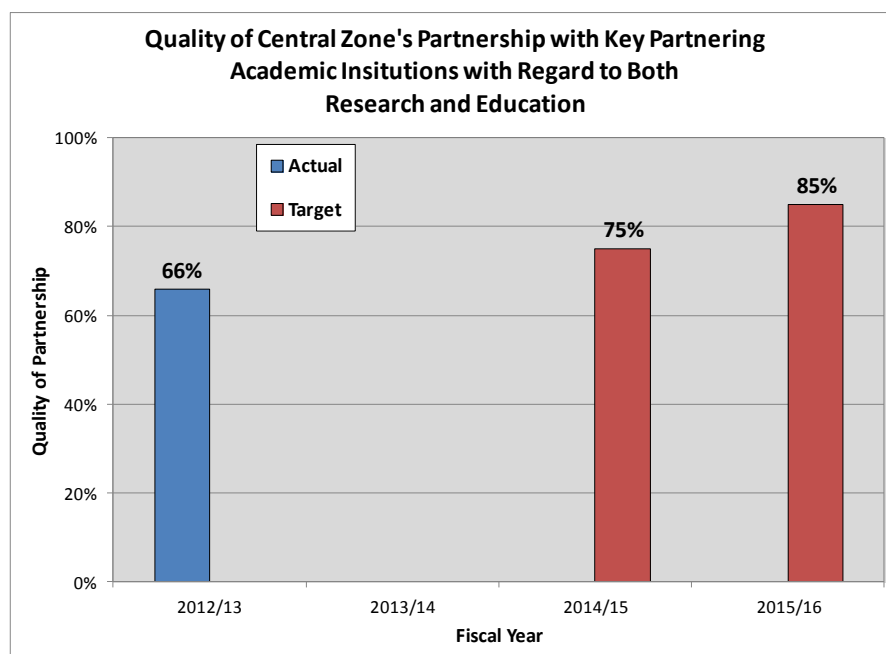
How are we doing?

Baseline results: In the partner survey, respondents rated the quality of our partnership with regard to both research and education at 66%. Results from a follow-up survey are not available.

What are we doing about this?

Pat McGrath, Integrated Vice-President, Research and Innovation, have convened an action team to develop an action plan. A major action for achievement of this 2016 goal is to further discussions with key researchers at the key educational institutions to gather information and identify barriers to enhance research relationships, ease research approval and facilitate innovation within universities and the Central Zone.

[Last updated August 2013. An update for 2013/14 was not provided]



Graph Update Frequency: Yearly

Graph Last Updated: 2013

Next Update Expected: 2015



4.4 Build our Capacity for Interprofessional Research and Interprofessional Education

Strategy: Innovating Health and Learning

Goal: Increase opportunities for interprofessional research and interprofessional education

Measure: 50% increase in the percentage of new, Research Ethics Board approved research initiatives that are interprofessional, and in the number of hours of interprofessional education offered annually

What is being measured?

Although increased interprofessional capacity for both research and education are both being measured in this goal, they are actually quite different areas. It will require two baselines and measures. We feel we can address both initiatives with a common target of a 50% increase in results.

The number of hours has been chosen as the measure for interprofessional education, and the percentage of new, Research Ethics Board-approved interprofessional initiatives as the measure for research.

Why is it important?

The Canadian Institute of Health Research and other research funding bodies are moving to make it a requirement that research initiatives be interprofessional—we are falling in line with a national trend.

This goal relates to our efforts to strengthen collaboration—around chronic disease management, for example. It also connects directly to our focus on improving the quality of care in transitions.

Professions tend to focus on what makes them distinct – we need to work hard to focus on what we hold in common, and by doing that we can transform care.

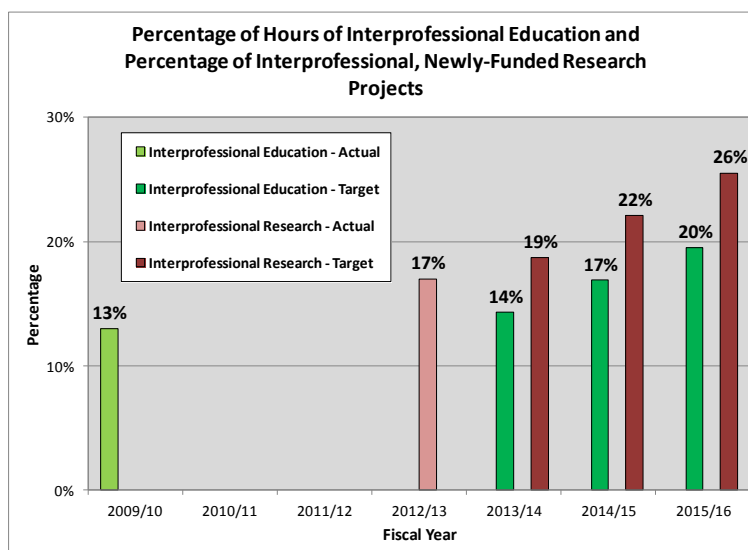
How are we doing?

The 2013/14 target was met for interprofessional education. Results for interprofessional research were not provided.

What are we doing about this?

We intend to sustain the levels of IP education through focusing on skills-building sessions on IP Facilitation. This year we have targeted clinical and corporate employees who regularly deliver education. We hope to extend this skills building to less developed areas in the future, i.e., Medical Education. Work is being conducted on targeting clinical teams to work with to advance interprofessional collaboration. We intend to sustain current levels and expand IPE student placements by the continued engagement of staff and physicians in new clinical areas. We have recruited Stephen Phillips to co-lead the student IPE placement stream so to better model interprofessional practice but also to enhance engagement of physicians and their students both in the Central Zone and at Dalhousie School of Medicine. In addition, we are creating a resource hub for knowledge transfer and hosting an annual interprofessional day targeted at front-line staff. These have been areas of focus and we believe they support sustaining the amount of interprofessional education. We are waiting to partner with colleagues provincially on interprofessional simulation opportunities. We are hopeful this work will proceed in the coming year.

[Last updated July 2014. An update was not provided for the research portion of the goal]



Graph Update Frequency: Yearly

Graph Last Updated: 2013

Next Update Expected: 2015

5 Sustainability

5.1 Innovate Systems and Processes for Greater Efficiency

Strategy: Sustainability

Goal: Optimize resources to improve organizational (system) performance, quality and efficiency.

Measure: 60% of typical cases for identified Case Mix Groups have an ALOS equal to or less than the ELOS



What is being measured?

The measure is the percentage of typical cases for which the average length of stay (ALOS) is less than the expected length of stay (ELOS). ALOS is the average length of stay for patients in a particular case mix group (CMG). ELOS is how long patients in that CMG would be expected to stay in hospital. The ELOS is derived from national data.

The main focus will be on three CMGs: heart failure without coronary angiogram, chronic obstructive pulmonary disease (COPD), and ischemic event of the central nervous system (CNS) (but not to the exclusion of other CMGs).

Why is it important?

These 3 CMGs are in the top 10 CMGs by volume. If these three CMGs are addressed, there will be improvement in the overall results and results in these areas influence other key indicators being tracked. Delays in discharging patients in these CMGs affect the whole system—right back ED patients waiting for a bed.

How are we doing?

For 2014/15, for the three CMGs combined, the proportion of typical cases with an ALOS equal to or less than the ELOS was 53.2%. See the graph below. This is an increase from the 2012/13 baseline and the previous year, but falls short of the 2014/15 target of 55%. Individual CMG percentages were:

- Heart failure without coronary angiogram: 52% (surpassed target of 49%)
- COPD: 57.1% (did not meet target of 58%)

- Ischemic event of the CNS: 44% (did not meet target of 51%)

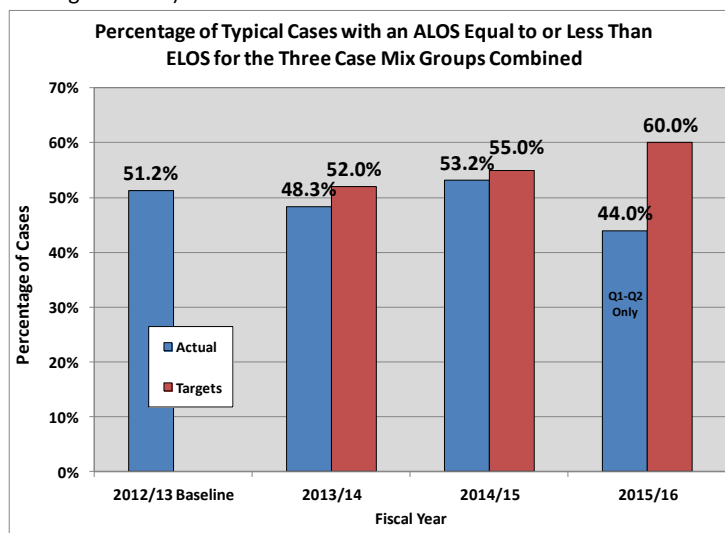
For Q1–Q2 of 2015/16, the rate for all three CMGs combined was 44%—short of the target of 60%.

What are we doing about this?

Continued work related to integrating robust utilization management activities and practices at the unit level will assist to move this priority area towards identified targets. Work is ongoing at the unit level related to BUMP, patient room white boards, and standardized discharge planning processes. It is important to note that for two of the indicators, over the course of the last 12 months, there has been an increase in cases translating to an increase in service volume which may have contributed to not reaching the goals. For “ischemic event of the CNS”, there was an increase in 50 cases from 2012/13 to 2013/14. For “COPD”, there was an increase of 11 cases and for “heart failure without coronary angiogram”, the volumes remained stable at 307 cases. The volume and complexity of these patients is a variable in a team’s ability to achieve targets related to expedient discharge.

The activity areas identified to support the achievement of targets remain valid and will be pursued at the unit and system level: the utilization management practices, design, development, and implementation of a district clinical service plan and master facilities plan.

[Last updated: June 2014]



Graph Update Frequency: Quarterly

Graph Last Updated: Dec. 2015

Next Graph Update Expected: Mar. 2016



5.2 Develop Funding Models Based on our Priorities

Strategy: Sustainability

Goal: All 14 areas of focus are transitioned to funding models based on leading practices.

Measure: 100% implementation of funding formulas based on our priorities, using leading practice where available.

What is being measured?

This goal and its measure are important indicators in their own right, ensuring we are making progress on our strategic plan. They will enable our success with regard to the other 13 goals.

This work is fairly straightforward. We just need to get on with the work and put the models and formulas in place. It will take time, of course, and we don't expect we will find many leading practices to adopt - we'll actually be breaking new ground.

Why is it important?

Unfortunately, we know that in health care, sometimes we embark on initiatives without giving them the necessary resources. This goal is about changing that.

The most significant impact of this goal, and its measure, is that we will have a process in place to help us be intentional about the trade-offs we need to make with our resources.

We cannot do everything, and we need to ensure that our strategic priorities are funded while advancing other key indicators. There are challenging times ahead, and the process we put in place will help us move through them.

How are we doing?

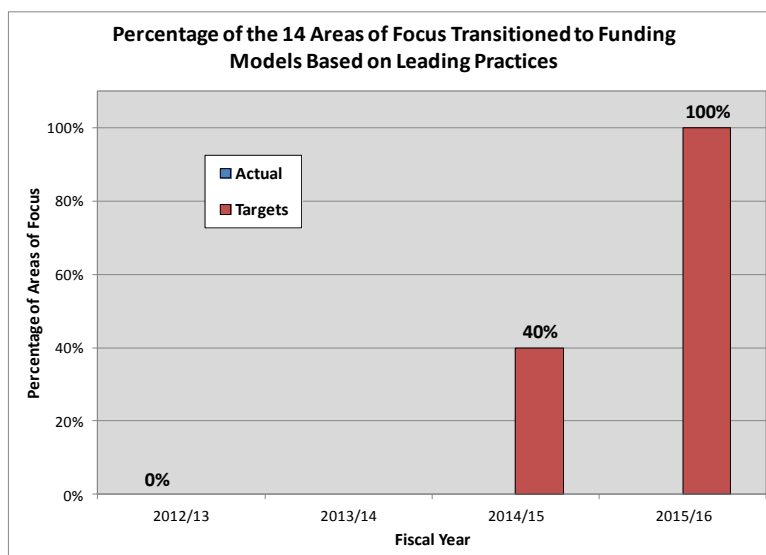
In the baseline year of 2012/13, none of the Areas of Focus had funding models based on leading practices. There was no target for 2013/14.

What are we doing about this?

LET provided the mandate for the work on case costing activity to continue, as such great progress is being made on the case-costing front. As follow-up to the fourth quarter OPIA status report, two case-costing pilot groups have been selected—one from surgery and one from medicine. The pilot groups continue to meet with physicians/clinical leaders, leveraging the case costing data to understand opportunities for planning and service delivery. Much of the pilot work is focus on understanding the costing data and reporting.

With respect to the 14 Our Promise in Action (OPIA) areas of focus and action plans, the \$700,000 of OPIA funding allocated in the fourth quarter of fiscal 2013/2014 has been approved and annualized in the fiscal 2014/2015 business plan and budget. As a result, approximately \$1.5M–\$2M has been allocated towards OPIA action plans in the 2014/15 fiscal year's budget.

[Last updated August 2014]



Graph Update Frequency: Yearly

Graph Last Updated: Aug. 2014

Next Update Expected: Summer 2015



5.3 Be Better Environmental Stewards

Strategy: Sustainability

Goal: The Central Zone is independently recognized as a leader in adopting practices and processes that minimize the impact on the environment.

Measure: 15% reduction in total annual electrical power consumption.

What is being measured?

Originally, we saw the work of developing our measure as finding an independent body to review our practices and processes, and target an improvement in their assessment of our progress.

What we quickly realized in our discussions is that the actual result is what is key. So we have chosen a significant environmental indicator—power usage (in kWh)—and established a challenging target.

Over the past two years our power use has been trending upwards. We want to stop that climb, and begin to reverse it, by achieving a 15% real reduction in power consumption in three years.

Why is it important?

As a major organization in this region, we are accountable to our larger community, and can play an important role in reducing our environmental impact.

We are working closely with Efficiency Nova Scotia, a recognized independent body, to achieve this important goal.

How are we doing?

From July 2012 to March 31, 2014, we have achieved a measured savings of 4,870,992 kWh/year (a 5.8% decrease), which exceeds

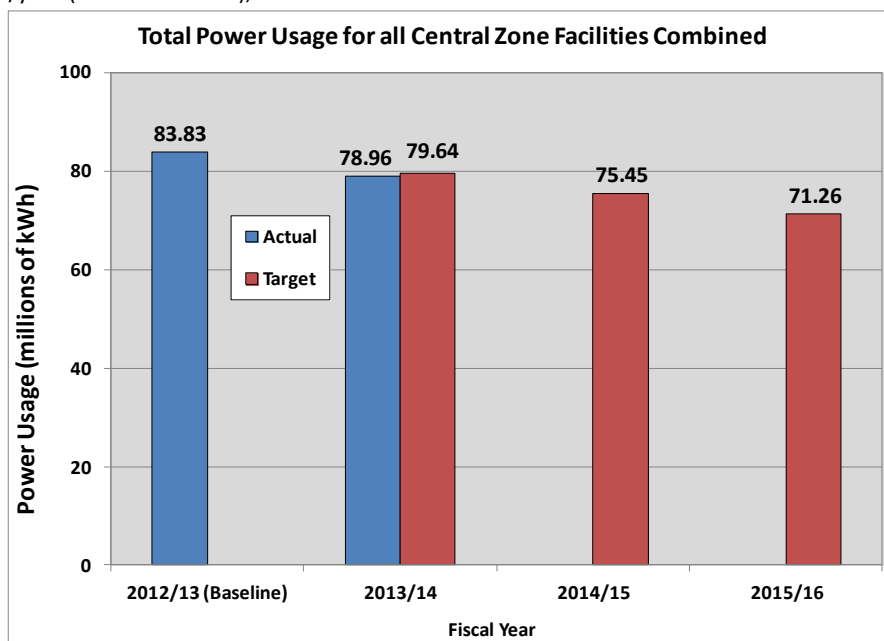
the 5% decrease goal of 4,191,550 kWh/year. See the graph below for baseline, actual and target measures.

What are we doing about this?

The projects that contributed to this reduction included recommissioning of the Rehab building steam plant boiler control, and various lighting retrofits across the district. It is important to state that this reduction is actually a cost avoidance. As the organization changes and new equipment gets added and/or processes are changed, the district's actual usage of electricity increases. This work to reduce usage helps us offset some of that increase.

As of July 2, 2014, the partnership with Efficiency Nova Scotia (ENS) has been renewed and David Bligh has been the onsite energy manager since January 1, 2014. Central Zone pays 50% of David's salary and ENS recovers their 50% share from rebates Central Zone earns from projects. Unfortunately, there is not a confirmed funding source for the 2014/15 fiscal year. Without this, the 2014/15 further 5% reduction goal will not be achieved and the partnership with ENS will end for the onsite energy manager as there will not be any projects for him to lead.

[Last updated July 2014]



Graph Update Frequency: Yearly

Graph Last Updated: July 2014

Next Update Expected: 2015



5.4 Implementation of the Electronic Health Record

Strategy: Sustainability

Goal: An electronic health record.

Measure: Percentage of the implementation of the Electronic Health Record.

What is being measured?

A fully integrated electronic health record (EHR) is a real-time, patient-centered record that makes information available instantly and securely to authorized users. EHRs are designed to contain and share information from all providers involved in a patient's care journey. Key EHR components include: electronic clinical documentation; Positive Patient Identification; Computerized Physician Order Entry.

Why is it important?

Connecting people and their health information electronically is essential to provide real time access to health information. We have heard from patients, and staff, how essential this is to transforming health and health care. Integrated patient information management solutions such as the EHR are critical to supporting a systemic shift in health care, from that of the organizational view of patient health to patient ownership of his/her own health. Implementation of the EHR has been identified as a priority in Central Zone's Business Plans and Strategic Plan, and aligns with the long term goals for provincial clinical services of the Department of Health & Wellness.

How are we doing?

Central Zone's efforts to implement an EHR have stalled due to the province's desire to have a single

health information solution. The province is commencing with the development of a business case for treasury board to move all clinical system applications to a single solution, from today's three information technology platforms (Central Zone – Best of Breed, IWK – Meditech Magic, All Other Districts – Meditech). Central Zone's E.H.R. initiative (RFP for technology) has been put on hold as a result of this provincial initiative. However, the province has approved Central Zone to launch preparatory work (change management, form consolidation, electronic form development, business process, etc.). We are recruiting a team of new resources to lead this work.

What are we doing about this?

We realize that implementing a fully electronic health record involves much more than just installing a software system. We are currently undertaking activities that will support the introduction of an electronic records system once it is chosen. Infrastructure such as computer terminals and wireless connects must be in place. Process redesign and change management needs for the front lines and support areas must be explored to ensure we make the most of any system.

[Last updated: July 2014]



5.5 Focus on Sustainability

Strategy: Sustainability

Goal: Appropriate level of funding requests for capital equipment

Measure: Percentage of funded requests for capital purchases in relation to identified required funding

What is being measured?

The measure for this goal is the percentage of funded requests for capital purchases in relation to identified required funding.

Why is it important?

To fulfill this goal, we need to ensure we prioritize our requests for capital funding and provide clear, compelling business cases to ensure funders are aware of the need, risks and impacts for each request.

A new process was introduced to evaluate and prioritize all requests for capital equipment.

We are pursuing a best practice, evidence-based approach to ensure expenditures are aligned with our strategies, benefit our patients, and realize cost efficiencies. It is a methodological approach to making decisions.

How are we doing?

The graphs below show the progress toward this goal. The first graph shows progress toward obtaining capital funding for identified priority purchases and infrastructure improvements. The second graph shows the percentage of actual funding approval compared to the target.

What are we doing about this?

Infrastructure. Requests are submitted to DHW in categories: funding for design work; repair and renewals(R&R) over \$90,000 and R&R under \$90,000. There is a separate submission for capital projects over \$1Million; clinical capital projects would fall in this as well. In 13/14 we had approved funding from internal and external sources of \$10,355,029 for 4 projects. We currently have business cases submitted for projects for fiscal 14/15; 15/16 e.g.

next phase of the Innovative Care Flexible Facilities Renewal; Purdy Exit.

We have allocated funds for our on-site energy advisor and projects. This is to help us reach our business plan target of reduction in electrical consumption by 15% over 3 years.

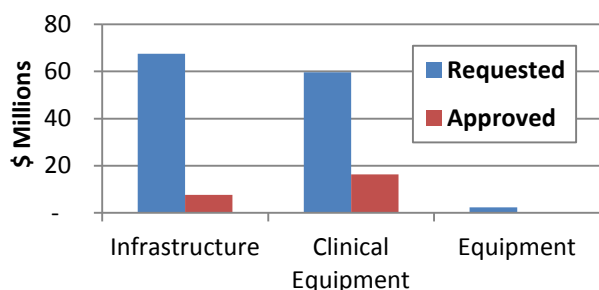
Clinical Equipment. Ways to improve our capital funding are continuously being sought. Central Zone participated in a DHW consulting project and our primary recommendation was that the funding model for equipment should span more than one year to enable us to access items in a more stable manner and complete projects. Clinical Engineering continues to maximize the usable lifespan of the equipment. In February 2014, DHW requested a business case for the three Linear Accelerators (\$12M) on our list. It was submitted by Central Zone in April. This was outside the normal process due to the high cost of items. There is continuous work with Directors and Managers to find any available sources to cover urgent needs. Due to financial constraints, a proactive multi-year asset management plan for equipment replacement is not feasible at this time. With limited funds we rank the urgent needs and purchase what we can within funding sources.

Equipment (not direct patient care). A need has been noted in our next Capital Budget (FY14/15) to try to allocate funds for this category and rank them separately. These types of requests previously were ranked with the clinical equipment and would never rank high enough to receive funding. If the equipment is substantial, we can also submit it to DHW, although it is difficult to obtain funding through that process.

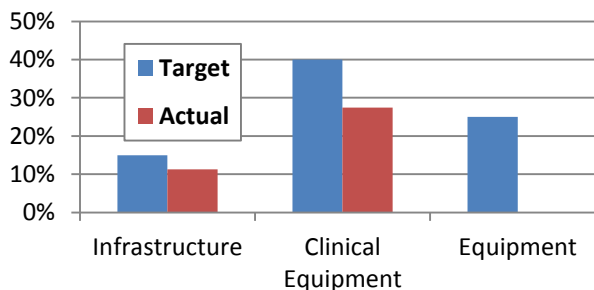
In summary, while we all work to secure capital funding, as a system it is an on-going challenge.

[Last updated June 2014]

**Capital Requests and Approvals
FY 2013/14**



**Target vs. Actual Approval
Percentage - FY 2013/14**





5.6 Improve Population Health

Strategy: Sustainability

Goal: Influence change in six major public policies that affect population health

Measure: Active participation in and contribution to development of primarily *non-health sectors*

What is being measured?

Central Zone's active participation in and contribution to development of healthy public policy by primarily non-health sectors (municipality, school board, finance sector, community services sector, etc). The Our Promise in Action 2013 – 2016 goal is to influence two major policies per year in each of 2013/14, 2014/15, and 2015/16. At least one policy should be at the municipal government level. A **major** policy is one that actively engages the **senior leadership** of the target sector and that could lead to significant public dialogue. Policies need not be new if Central Zone's active involvement continues from one year to the next, as policies sometimes take years to develop.

Why is it important?

The Pepin and Keon¹ report on Population Health (Senate Sub Committee report on Population Health, 2009) describes that much of what influences health exists in policies and arenas well outside of health care (1). While most authorities agree that a maximum of 25% of health is achieved through health service delivery and related policies, the Pepin/Keon report points out that 10% of health is achieved through creation of policies promoting

healthy built environments, with another 50% being contributed to by social and economic policies. Advocating for and contributing to non-health sector led healthy public policies is therefore the most important strategy we can use to act on the determinants of health and reduce health disparities.

How are we doing?

In 2013-14, Central Zone actively contributed to the policies noted in the table below. Anticipated policy directions for 2014/15 and 2015/16 are also noted.

What are we doing about this?

Gaynor Watson-Creed, Medical Officer of Health, and senior leadership, are overseeing activities to achieve the 2016 goal.

[last updated July 2014]

¹ Pepin, L, and Keon, W. 2009 A healthy productive Canada: a determinant of health approach. Final Report of Senate Subcommittee on Population Health

Focus of Policy Direction	Year		
	2013/14	2014/15 (anticipated)	2015/16 (anticipated)
Non-Municipal Government Local, i.e., school board, Health Zone, CHB	Central Zone Breast Feeding Policy (complete)		
Municipal Government	- Municipal Alcohol Strategy, HRM (first draft complete) - HRM Regional Municipal Planning Strategy (complete) - Mayor's Round Table on Health (HRM) (initiated) - Mayor's Round Table on Housing (HRM) (initiated)	- Guidelines for the development of prostitution business districts (HRM) - Healthy Eating in Recreation Centres (HRM) - Finalization of Complete Streets Policy (HRM) - Contribution to Municipal Food Strategy (HRM) - Contribution to HRM Centre Plan (HRM)	
Provincial or Federal		- Guidelines for the development of prostitution business districts (Provincial, led by Dept Community Services and DHW) - Healthy Eating in Recreation Centres (HRM) (Provincial, led by DHW)	

Appendix A: Patient Safety Scorecards

LEGEND	Not meeting target	Almost meeting target	Meeting target	No established target or data not available
--------	--------------------	-----------------------	----------------	---

Table A1: Scorecard for Quarterly-Trending Indicators

Area	Indicator	Target	Q2 13/14	Q3 13/14	Q4 13/14	Q1 14/15	Q2 14/15	Q3 14/15	Q4 14/15	Q1 15/16	Q2 15/16	Q3 15/16	Q4 15/16	Q1 16/17
Hospital Acquired Infections	MRSA Incidence (per 10,000 patient days)	< 11	7.1	5.7	4.5	4.9	6.3	6.1	4.7	6.3	4.3	4.5	6.0	5.6
	C. difficile Incidence (per 10,000 patient days)	< 6.0	3.4	2.9	3.9	2.9	2.7	3.7	2.7	3.6	4.4	3.4	3.6	4.9
	VRE Incidence (per 10,000 patient days)	< 8.6	1.4	1.5	0.9	0.0	0.3	0.1	0.3	0.0	0.0	0.0	0.0	0.0

Table A2: Scorecard for Calendar Year Annually-Trending Indicators

Area	Indicator	Target	2011	2012	2013	2014	2015	1 st half 2016
Hand Hygiene Compliance	Before Patient Contact	80%	54%	46%	60%	65%	65%	64%
	After Patient Contact	80%	75%	74%	81%	84%	86%	83%
	Overall	80%	66%	61%	72%	76%	78%	75%

Table A3: Scorecard for Fiscal Year Annually-Trending Indicators

Area	Indicator	Target	2011/12	2012/13	2013/14	2014/15	2015/16
Mortality	Hospital Standardized Mortality Ratio (HSMR)	Below National Average	111 (National Avg:103)	120 (National Avg:100)	110 (National Avg:96)	109 (National Avg: 96)	
Patient Safety Culture Survey	"Excellent" & "Very Good" Responses			51%			
	"Acceptable" Responses			41%			
	"Poor" and "Failing" Responses			9%			
	Total of "Excellent", "Very Good", and "Acceptable" Responses Combined	90%		92%			
Annual Patient Safety Training	Percentage Who Completed at Least One Patient Safety Course	100%	51%	63%	75%	70%	63%
Patient Experience Survey – Concern for Safety: Inpatient & Organizational Results	Percentage of "Agree" responses to: Staff consistently washed hands before providing care	90%	90%	89%	89%		
	Percentage of "Agree" responses to: Before giving medications, did staff tell you what the medicine was for?	90%	87%	86%	86%		
	Percentage of "Agree" responses to: Hospital staff described possible side effects in a way that was understandable	90%	69%	69%	67%		
	Percentage of "Yes" responses to: Told what you could do to make sure you were safe in hospital	90%	69%	68%	69%		

Appendix B: Access Score Card (Wait Times)

Performance LEGEND	Not meeting target	Almost meeting target	Meeting target
-----------------------	--------------------	-----------------------	----------------

Table B1: Target and Actual Wait Times for Key Treatments/Procedures in the Central Zone

Treatment / Procedure	Target Wait Time	Average Wait Times for August 2016 (except where otherwise noted)	
		Location	Performance
Elective Computed Tomography (CT)	28 days	Central Zone	39 days
Magnetic Resonance Imaging (MRI)	28 days	QEII	211 days
Radiotherapy – Intermediate Cases	14 days	QEII	14 days
Radiotherapy – Urgent Cases	7 days	QEII	6 days
Hip Fracture Repair	100% of cases completed within 48 hours	Central Zone	85% of cases completed within target (Q1 2016/17)
Hip Replacement	100% of cases completed within 26 weeks	Central Zone	52% of cases completed within target (Q1 2016/17)
Knee Replacement	100% of cases completed within 26 weeks	Central Zone	27% of cases completed within target (Q1 2016/17)
Cataract Surgery	100% of cases completed within 16 weeks	Central Zone	67% of cases completed within target (Q1 2016/17)
CABG – Urgent Cases	7 days	QEII	40 days (median wait time)
CABG – Semi-Urgent Cases	21 days	QEII	43 days (median wait time)
CABG – Scheduled Cases	42 days	QEII	43 days (median wait time)
ED – 90 th Percentile Wait Time from Triage to Admission	8 hours	QEII	26 hours (90 th percentile)
		DGH	54 hours (90 th percentile)
ED – Average Wait Time from Triage to Physician: CTAS Level 3 (Urgent)	30 minutes	QEII	147 minutes
		DGH	180 minutes
		CCHC	115 minutes
		HCH	75 minutes

Appendix C: Strategic Streams

This report has been organized around Central Zone's Five Strategic Streams:

Person-Centered Health Care – Person-centered health welcomes the patient as a full-fledged member of the health care team, respects their ownership and rights to their own health, and recognizes that a healthy person needs a healthy community. Capital health will care for the whole person before us with our hearts, as well as our hands and minds.

Sustainability - Capital Heath is transforming health care today because we want to be here for the people of our communities for a very long time. We are working to ensure our workforce will be sufficient to care for those we serve; buildings will be designed with the needs of patients citizens and the environment in mind; and all of this will happen on a budget that will not break the bank.

Transformational Leadership - Capital Heath invites every person to share their talents, act with passion and purpose, listen deeply, grow relationships, take risks and embrace tension to co-create a world-leading haven for people-centered health, healing and learning. We will focus on matching peoples' passion, talents and sense of purpose to the work rather than just focusing on the technical aspects of the job. We will create a culture and environment that fosters joy, pride, trust, and respect.

Citizen Engagement & Accountability - Central Zone is opening our doors, our minds, and our ears to connect with what communities really need. We are committed to a health system where each of us shares in the accountability for our individual health, the health of our health system and that of our community.

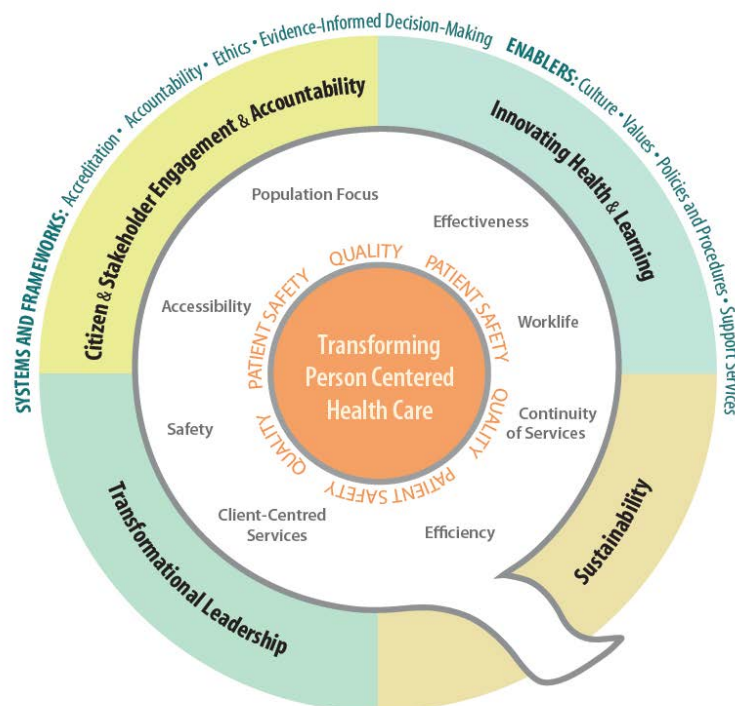
Innovation & Learning - Central Zone will contribute to a better tomorrow as lifelong learners, educators of the next generation, and researchers of new frontiers in health and healing. We will keep the spark of curiosity alive, and encourage it in everyone—whether they're at the bedside, in the boardroom, or in the lab. Constantly asking why will help us find a better way.

Appendix D: Quality and Patient Safety Framework

The Integrated Quality and Patient Safety Framework shown below outlines the quality and patient safety structure, functions, responsibilities and accountabilities in the Central Zone. The framework is not a stand alone document – it is supported by Our Promise, Our Declaration of Health, the Patient Safety Plan, our Strategic Indicators Reporting Framework, Central Zone Ethics Framework, Research Ethics Framework, and our foundation as an academic health sciences network. It provides information and guidance to the organization for selection and measurement of our achievements in service quality, care outcomes, and risk mitigation. It is not intended to be a detailed procedure for designing or implementing quality and patient safety initiatives. The framework is reviewed on a regular basis to ensure continued alignment with the vision mission and strategic direction of the Central Zone.

This framework was developed in 2010 and first appeared in the October 2010 version of this report— replacing the Framework for Developing and Reporting of Operational Measures.

Integrated Quality and Patient Safety Framework



OUR FOUNDATION: Capital Health is an academic health sciences network providing timely access to advanced patient care, leading edge research and training for the current and the next generation of health care professionals.



In addition, each indicator found within the Central Zone's Strategic Indicators Report falls into one of the eight Qmentum quality dimensions outlined by Accreditation Canada (<http://www.accreditation.ca/en/default.aspx>). The quality dimensions are listed below.

Qmentum Quality Dimensions:

Population Focus - working with communities to anticipate and meet needs

Accessibility - providing timely and equitable services

Safety - keeping people safe

Worklife - supporting wellness in the work environment

Client-centred services – putting clients and families first

Continuity of Services – experiencing coordinated and seamless services

Effectiveness - doing the right thing to achieve the best possible results

Efficiency - making the best use of resources

Appendix E: Our Promise in Action Poster



Our Mission is to be a world-leading haven for people-centred health, healing and learning.

Our Vision is for a future with healthy people and healthy communities.

Our Values are who we are and how we act. We're grounded in integrity, and courageous, caring, accountable and inquisitive.



Transforming Person-Centred Health Care Experience

Putting those we serve – patients, families, communities – at the centre of our work. Relentless pursuit of excellence in care and service.

AREA of FOCUS: Strengthen community-based care for chronic disease.

GOAL: Significant increase over baseline of chronic disease management occurring in the community where appropriate.

MEASURE: 5% reduction in the number of return outpatient visits annually at selected clinics in relation to hypertension, heart disease, COPD, and diabetes.

AREA of FOCUS: Improve quality of care in transitions.

GOAL: Care teams will improve achievement in meeting established standards in the quality of care at key transition points substantially over 2012 baseline levels.

MEASURE: 50% overall compliance in documenting patient instructions on the discharge summary.

AREA of FOCUS: Build a culture of customer service.

GOAL: Patients, families and communities report customer service interactions with Capital Health employees and physicians meet or exceed their expectations.

MEASURE: 20 point increase in the percentage of patients responding most favourably on customer service related survey questions.



Citizen and Stakeholder Engagement and Accountability

With patients, partners and the public, we exchange information, make decisions, act together and share responsibility to improve health and well-being.

AREA of FOCUS: Partner with the public so individuals and communities can play a key role in managing their own health.

GOAL: Significant increase in number of individuals reporting that Capital Health has supported them in playing a key role in managing their own health.

MEASURE: 10 point increase in percentage of residents who say they have received support in managing their own health.

AREA of FOCUS: Involve patients directly in their care.

GOAL: Patients or their surrogates report that their involvement in decision-making related to their care met or exceeded their expectations.

MEASURE: 10 point increase in the percentage of patients responding positively to a survey question about being consulted in decision-making about their care.

AREA of FOCUS: Lead dialogue with the public addressing appropriateness of care.

GOAL: Improve public awareness of quality of life issues related to appropriateness of care.

MEASURE: 20 point increase in the percentage of Capital District residents surveyed who report a high degree of familiarity with the concept of appropriateness of care.



Transformational Leadership

Everyone is expected to be a leader in their work. Together we are accountable to make things better.

AREA of FOCUS: Improve leadership capacity at all levels.

GOAL: Employees and physicians working at Capital Health will meet or exceed expectations of leadership in their work as defined by the Capital Health leadership capabilities.

MEASURE: 20 point increase in the percentage of employees and physicians responding most positively on survey scales related to leadership.

AREA of FOCUS: Strengthen accountability of employees and physicians.

GOAL: Staff, management and physicians at all levels report being held accountable for their performance.

MEASURE: 20 point increase in the percentage of staff, management and physicians responding most positively on survey items measuring self-reported accountability.



Innovating Health and Learning

Excellence in education and research. Learning all the time, in everything we do. Embracing new ideas and having the courage to do things differently.

AREA of FOCUS: Focus on innovation that has benefits for patients and aligns with our mission.

GOAL: New innovations are demonstrably aligned with organizational goals, have clear benefits for patients, and contribute to sustainability.

MEASURE: Implementation of a health technology assessment process for all new major capital equipment expenditures over \$500,000, and all new externally provided diagnostic testing which costs more than \$10,000 annually per type of test.

AREA of FOCUS: Strengthen partnerships with learning institutions.

GOAL: Partners in the academic health learning network report a high degree of quality in their relationship.

MEASURE: 85% positive response by academic partners on survey items related to the quality of the partnership.

AREA of FOCUS: Build our capacity for interprofessional research and interprofessional education.

GOAL: Increase opportunities for interprofessional research and interprofessional education.

MEASURE: 50% increase in the percentage of new, Research Ethics Board-approved research initiatives that are interprofessional, and in the number of hours of interprofessional education offered annually.



Sustainability

Making responsible and wise decisions about our resources now while investing in the future. Transforming the system to ensure it is there when and where needed.

AREA of FOCUS: Innovate systems and processes for greater efficiency and quality.

GOAL: Optimize resources to improve organizational (system) performance, quality and efficiency.

MEASURE: 60% of typical cases for identified Case Mix Groups have an Average Length of Stay (ALOS) equal to or less than the Expected Length of Stay (ELOS).

AREA of FOCUS: Develop funding models based on our priorities.

GOAL: All 14 areas of focus are transitioned to funding models based on leading practices.

MEASURE: 100% implementation of funding formulas based on our priorities, using leading practice where available.

Appendix F: Contributors

Many people contributed to the preparation of this report. In particular:

- Gail Blackmore, Senior Director, Quality Improvement, Safety, and Patient Relations
- Mary Bourque, Employee Health
- Sara Brown, People Services
- Lisa Dillman, Decision Support
- Joanne Dunnington, Perioperative Services, Pain Services, Regional Tissue Bank
- Denise Hatchette, Finance
- Ann Meisner, Heart Health & Critical Health
- Nancy MacDonald, Decision Support
- Tanya MacNeil, Infection Control
- Brian Martell, Diagnostic Imaging
- Lynn Molloy, Department of Surgery
- Nicole Munroe, People Services
- Kim Ryan, Performance Excellence Program
- Stacey Squires, Perioperative Nursing
- Jodie Trembley, Cancer Care Program

Their contributions of data, background information, and insights enrich this report and are gratefully acknowledged.

QEII	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
Monthly volume (registrations)	6274	5690	6157	5966	6198	6015	6365	6496	6294	6516	5902	6223	6491
Lengths of Stay admitted patients (90 th percentile) - hours	20.8	23.9	24	22.6	27.6	23	23.5	24.3	21.3	26	22.1	21.8	22.9
Length of stay medicine (90 th percentile)- hours	33.2	36.2	46.5	53.6	38.1	45.3	34.2	48.3	48.7	43.1	39.7	41.2	40.9
Boarded hours (Bed hours that exceed 8 hours) - hours	4762	4064	5454	6932	5584	6376	3651	6407	6038	6369	4677	5270	6838
Code census calls	9	6	14	20	14	16	5	11	14	20	6	11	
Off load times													
90 th percentile - minutes	139	113	150	173.2	125.0	148.4	77.8	146	162	182.3	131.2	162	?
average - minutes	51.3	42.9	52.1	63.5	47.0	53.1	32.9	53.7	55.8	65.6	46.8	58.6	74.1
DGH	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
Monthly volume (registrations)	3363	3234	3617	3324	3602	3359	3432	3672	3465	3552	3280	3361	3569
Lengths of Stay admitted patients (90 th percentile) - hours	41.2	35	39	40.6	30	46.4	36.9	38	34.5	36	39	38.6	38.9
Length of stay medicine (90 th percentile)- hours	63.8	46.9	51	51.7	47.9	65	45.8	67.2	69	45.1	64.4	68.3	77.3
Boarded hours (Bed hours that exceed 8 hours) - hours	6168	3865	5058	6094	4250	6264	4774	6000	6276	5098	6279	4755	6978
Code census calls	23	16	18	23	20	20	13	20	15	17	20	19	?
Off load times													
90 th percentile - minutes	201.1	173	220	204	209.4	220	195.8	220.6	200	208.6	185	148.6	208.2
average - minutes	76.8	66.7	85.93	84.3	80.7	87.2	75.5	88.7	80.2	81.9	68.5	55.5	72.2

Norwegian war hero to get care at Halifax veterans' hospital after months of struggle

Veterans Affairs Canada also to review long-term care needs for veterans

By Michael Gorman, Carly Stagg, CBC News Posted: Jun 24, 2016 11:09 AM AT Last Updated: Jun 24, 2016 10:38 PM AT

The family of a decorated Norwegian-Canadian war hero says that after months of struggle, Petter Blindheim, 94, will finally be admitted to a Halifax veterans' hospital for long-term care.

Peter Blindheim, Blindheim's son, says he met with Halifax MP Andy Fillmore on Friday, who gave him the news in person.

"It's a shocker, it's a big change from what we were told yesterday," Blindheim told CBC News Friday.

- Veterans Affairs rejects 94-year-old war hero's request for care
- Premier says 'bureaucratic BS' from federal Libs keeping vet out of Camp Hill

His son called the decision to finally open a spot for his father at Camp Hill Veterans Memorial Hospital not only "a positive outcome for us, it is going to have a positive outcome for Canada."

Veterans Affairs launches review

The federal government's decision is part of a new agreement between the Nova Scotia Health Authority and Veterans Affairs Canada to provide broader access for veterans to 15 beds at the hospital.

Libby Douglas, the director general of service delivery and program management for Veterans Affairs Canada, said all veterans interested in moving into Camp Hill would still have to be evaluated on a case-by-case basis.

But in general terms, she said any veteran who is eligible for care at a community facility in the province would now be considered for one of the 15 beds.

That means there would also potentially be opportunities for newer veterans to access Camp Hill.

The department also announced on Friday it would conduct a review of long-term care needs for veterans. Douglas said it was too soon to provide details on the substance of the review or a timeline.

Protests and 'bureaucratic BS'

Blindheim is now in the process of being admitted to Camp Hill, according to his son. Marilyn Blindheim said she'll be in to visit her husband every day.

"Camp Hill's the place for him because he's a Second World War veteran, he's a hero," she said. "I know in my heart I just can't take care of him anymore, I'd love to but it's just too much on me."

Up until now, Veterans Affairs has refused Blindheim a bed at the facility. His treatment by the department led to a protest last week and even prompted Nova Scotia Premier Stephen McNeil to call on the federal Liberals to stop the "bureaucratic BS."

'Feel the heat, you see the light'

Veterans Affairs initially told the family Blindheim was not eligible for Camp Hill because he enlisted during the German occupation of Norway in the Second World War and fought as part of the resistance, rather than an Allied country.

The department later said Blindheim wouldn't be allowed at Camp Hill because there was adequate care at existing provincial facilities.

"Once you feel the heat, you see the light, as they say," said former NDP MP Peter Stoffer, who's been vocal through Blindheim's case.

"Hopefully the bureaucrats will learn from this that stuff of this nature should be very straightforward in the future. These men and women are asking for just a little bit of respect and dignity and care at the remaining ends of their lives."

Lots of behind the scenes work

In an interview, Fillmore said it was obvious right away that Blindheim needed a bed and people at all levels of government worked together as quickly as possible to make the change announced Friday.

"When you try to shift direction on the ship of state and that command goes down to the engine room, it takes a little time to turn that big ship," he said.

While the initial reaction in a disputed case such as this is to consult the rule book, Fillmore said it was clear that wasn't going to cut it.

"What we've learned through this is that those rules simply weren't good enough," he said. "They weren't meeting the need."

Fillmore praised Blindheim and his family for their advocacy work and the change they've helped bring about for other veterans. The changes happening in Nova Scotia will eventually be rolled out across the country, he said.

"The first thing that my dad said when I sat down and told him was, 'Well what about the other veterans? It won't look good if I just go there,'" said Peter Blindheim.

Regulations 'not currently compassionate'

In a statement, Veterans Affairs Minister Kent Hehr did not mention Blindheim's case. However, he said the federal government has been working closely with Nova Scotia MPs and the provincial health authority to overcome "challenges faced by veterans in accessing long-term care in Nova Scotia."

"The Veterans Health Care Regulations are not currently compassionate or flexible enough to address the urgent needs of our veterans," said Hehr in a statement.

With files from David Irish

Explore CBC

CBC Home	Music	Documentaries	Digital Archives
TV	Life	Comedy	Games
Radio	Arts	Books	Contests
News	Kids	Parents	Site Map
Sports	Local	Indigenous	

Stay Connected

Apps	RSS	Podcasts	Newsletters & Alerts
----------------------	---------------------	--------------------------	--

Services and Information

Corporate Info	Reuse & Permission	CBC Shop	Jobs
Public Appearances	Terms of Use	Help	Doing Business with Us
Commercial Services	Privacy Policy	Contact Us	Renting Facilities



©2017 CBC/Radio-Canada. All rights reserved

[Visitez Radio-Canada.ca](#)

Featured



News and weather update: Wednesday Mar 8, 2017



Crown to appeal cabbie's sexual assault acquittal



Protesters call for Judge to be removed



Newly discovered document answers Africville Church mystery



N.S justice department announce new sexual assault services



Halifax council discussing taxi license appeals

Future uncertain for Halifax's Camp Hill Veterans hospital

CTV Atlantic
Published Friday, March 13, 2015 10:07AM ADT

Questions are being raised about the future of the Camp Hill Veterans Memorial hospital in Halifax.

A notice has been sent to volunteers, saying there are so many empty beds on the sixth floor that admissions to the area will stop, and other units will also close as more rooms in the hospital become unoccupied.

Only Second World War and Korean War veterans are currently eligible for admission to Camp Hill.

According to the letter, 17 rooms were unoccupied at the end of February and a transition plan for the hospital has been activated.

Veterans Affairs issued a statement Thursday evening, saying that while Camp Hill will no longer be admitting veterans to the sixth floor, there are vacancies on other floors so new admissions can be accommodated.

"At this point there are no vets actively waiting for placement," said the department in its statement.

"Fifteen vets at Camp Hill passed away in January and 13 deaths in February. As such, Camp Hill is experiencing lower occupancy and the decision to stop admitting to the sixth floor is part of the transition plan."

CTV News has also learned that the hospital has been used to alleviate overcrowding in the emergency room at the Halifax Infirmary. A spokesperson for Capital Health said five people were moved from the ER to Camp Hill last week.

The letter states that when construction begins to expand Dartmouth General, some patients will be moved to Camp Hill.

Former Nova Scotia health minister Maureen MacDonald said Ottawa has made it clear that changes are coming to hospital care for veterans.

"The federal government made it clear sometime in 2012 that they were going to get out of the business of long-term care to veterans right across the province," said MacDonald.

"This tells me that the federal government are changing and withdrawing services for long-term care, just like they closed veterans offices around the province."

Veterans Affairs said any veteran who needs long-term care because of a service-related condition will still have access to a bed. It also said veterans who reside at Camp Hill will continue to receive the care and support they have grown accustomed to.

With files from CTV Atlantic's Rick Grant

PHOTOS



MOST WATCHED



CTV News at Six Atlantic for Tuesday, March 7, 2017



Cape Breton Speedskater makes history



CTV Atlantic: Diner says misunderstanding behind incident

MORE STORIES FROM ATLANTIC

Hundreds protest sexual assault court decision in Halifax

Chart 1: Destination hospitals for Cobequid patient transfers at Close including IWK – Bar

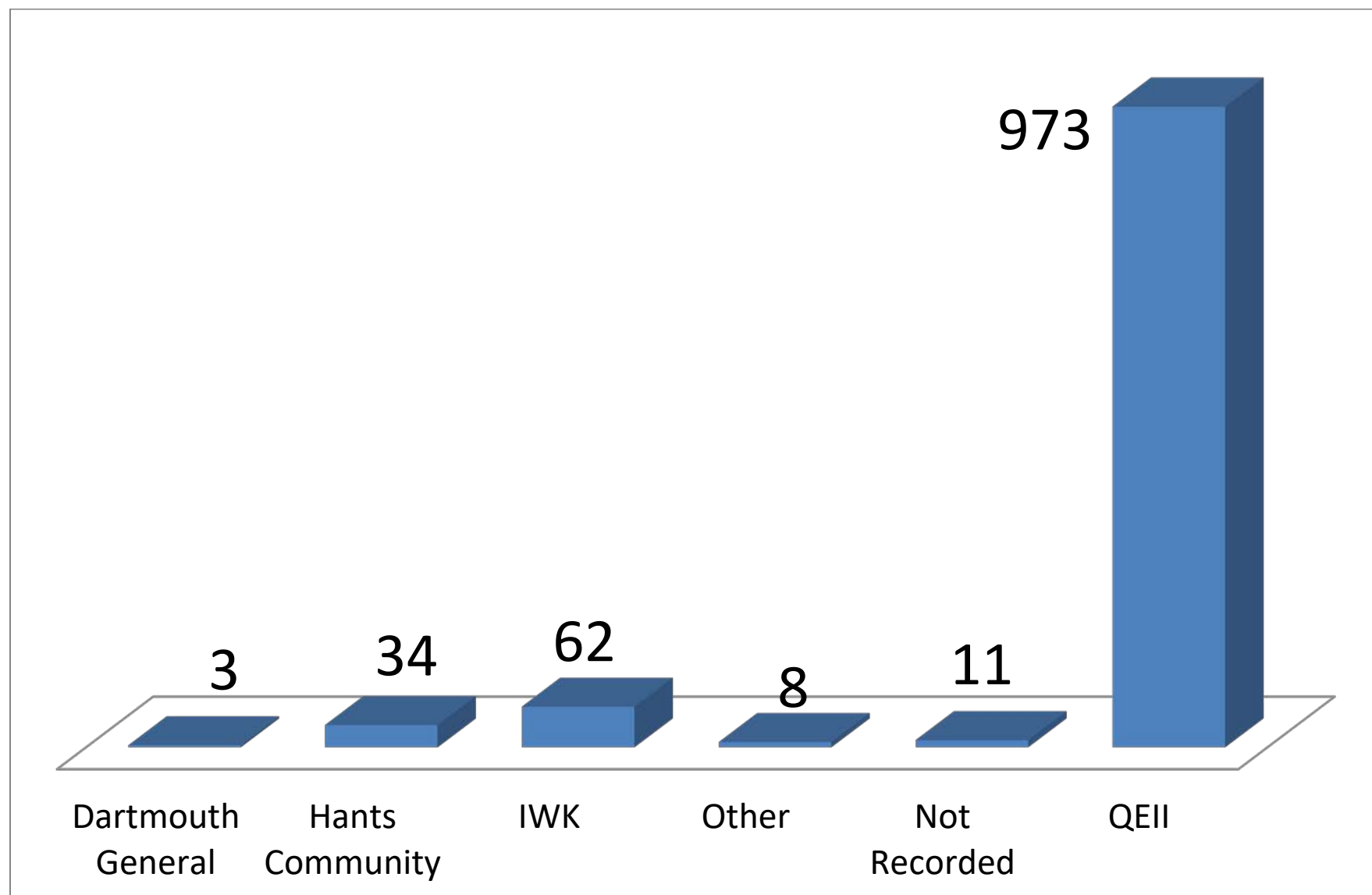


Chart 2: Destination hospitals for Cobequid patient transfers at Close **including** IWK - Pie

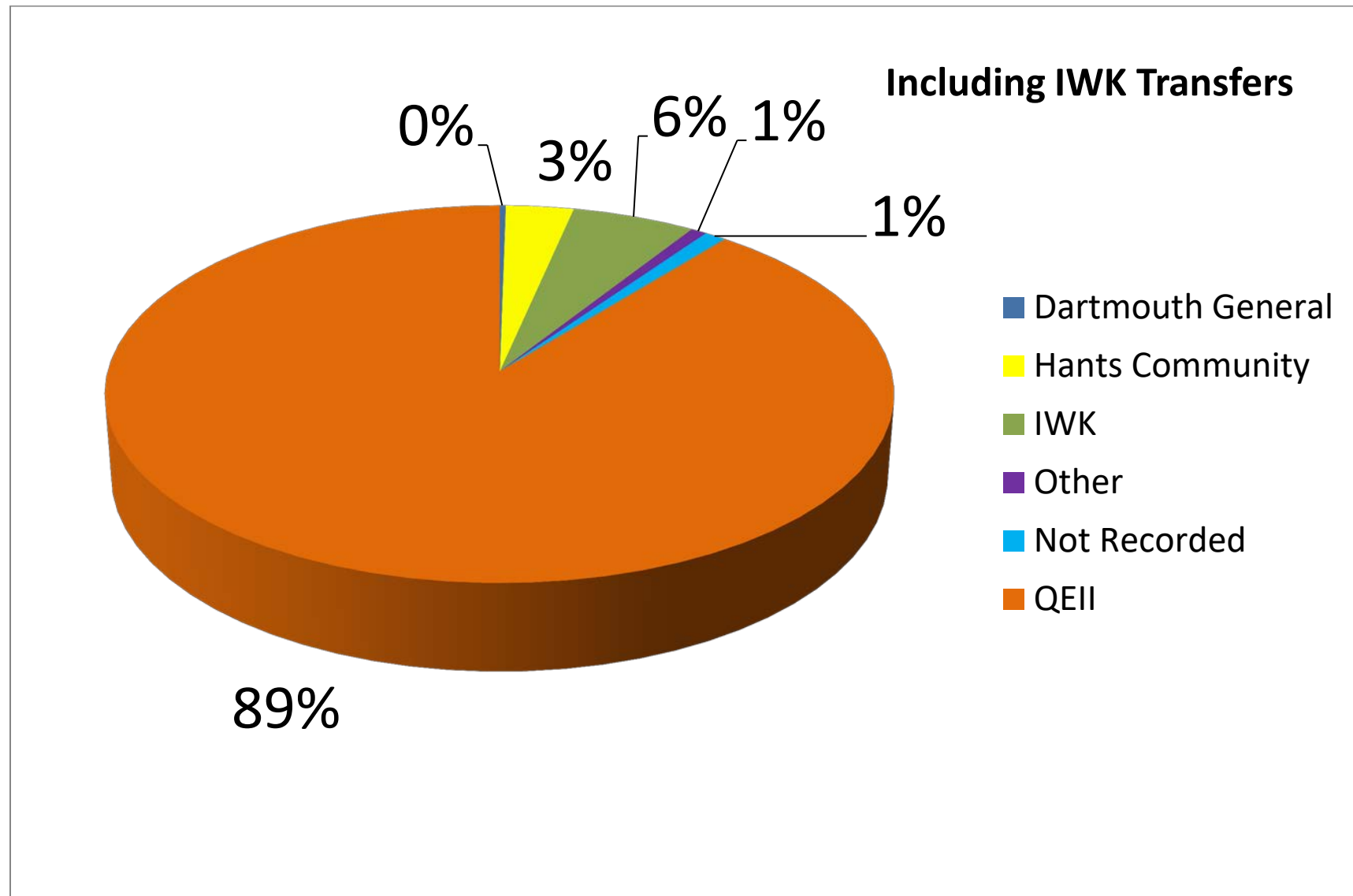
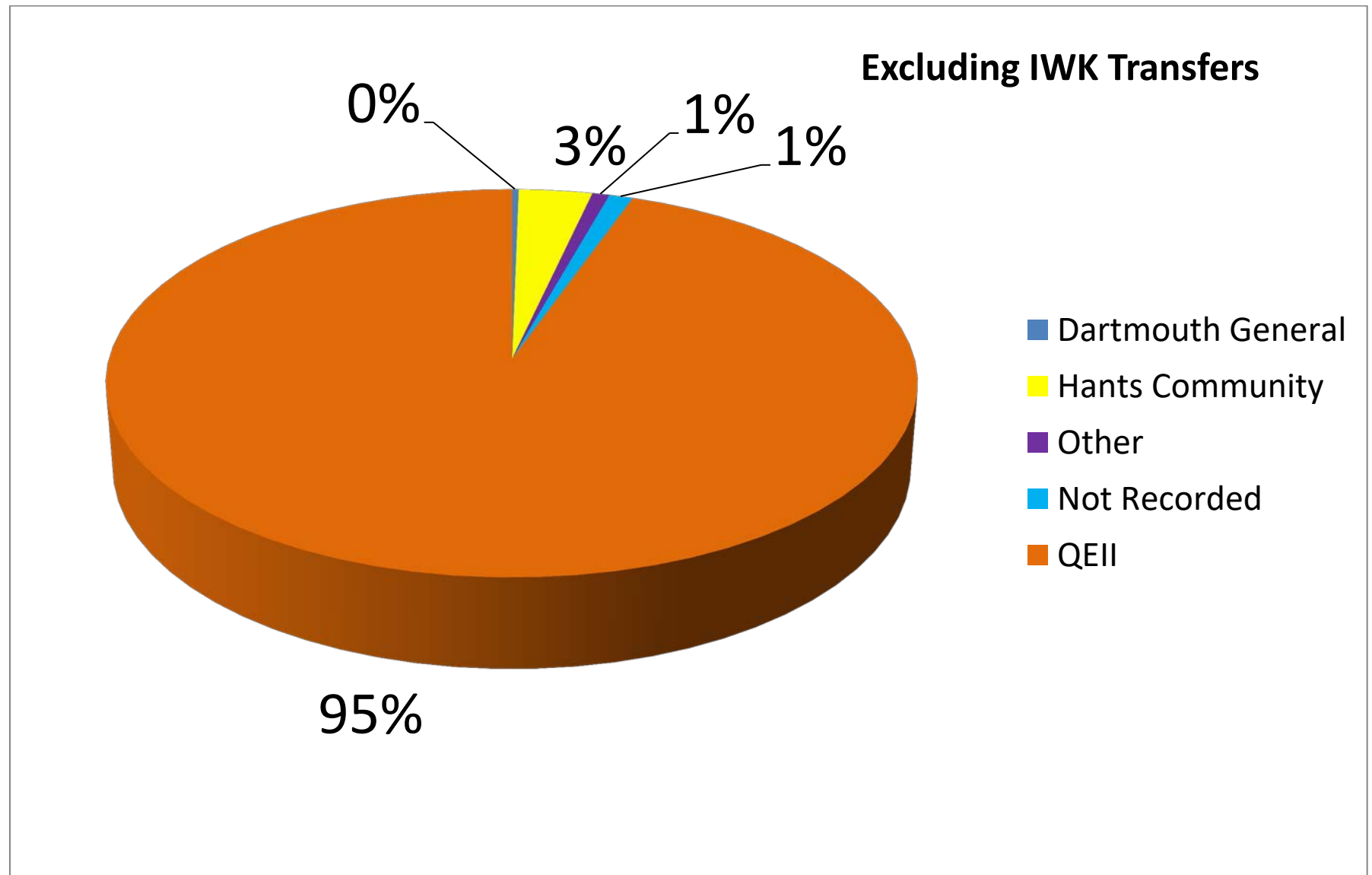


Chart 3: Destination hospitals for Cobequid patient transfers at Close **excluding** IWK - Pie



CCHC EDIS System

Transfers at Close Summary

Reporting Jan 1 2016-Feb 28 2017

Receiving Hospital	Hour	Transfers
DGH	23	3
HCH	23	8
	22	10
	2	3
	1	2
	0	11
HCH Total		37
IWK	22	25
	23	17
	0	14
	1	5
	2	1
IWK Total		62
OTHER	22	3
	23	1
	0	3
	1	1
Other Total		8
QEII	22	273
	23	286
	0	242
	1	128
	2	36
	3	6
	4	2
Other Total		973
Not Recorded	22	3
	23	4
	0	1
	1	3
Not Recorded Total		11
Overall Total		1091