



Code Crisis

An interim follow up report to

Code Census

March 2018

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BACKGROUND

In February 2017, NSGEU members working at the HI (HI) raised concerns about overcrowding and long waits for patients.

In March of 2017, NSGEU President Jason MacLean responded by releasing a report called *Code Critical*. (Appendix A)

Code Critical had 15 recommendations for improvements which were suggested by front-line staff in the Emergency Department (ED) and on inpatient floors.

The NSHA, meanwhile, had prepared its own internal study of the issue in February of 2017. That study, entitled *Right Care, Right Place*, also made a series of important recommendations. (Appendix B)

THE WORKING COMMITTEE

Following the release of *Code Critical*, the NSHA invited NSGEU staff and health care members to participate in a working committee to study and report on the recommendations in *Right Care, Right Place* and *Code Critical* and make any further recommendations they thought were appropriate.

That Committee met first on May 23. It was made up of the following people:

Working Committee Co-Sponsors

Jason MacLean, President, NSGEU

Vicki Sullivan, Operations Executive Director, Central Zone, NSHA

Working Group Committee Co-Leads

Peter MacDougall, Health Services Director, Central Zone, NSHA

Shawn Fuller, Director of Servicing and Negotiations, NSGEU

Working Group Members

Breanne Gillis, Charge Nurse, HI ED

Allan Lapierre, Paramedic HI ED

Denise Meade Jones, Charge Nurse HI 4.1

Brandon Rose, Information Analyst, NSGEU

Brian Butt, Health Services Director, Central Zone, NSHA

Bruce English, Director of People Services, Central Zone, NSHA

Wendy McVeigh, Director, Continuing Care, Central Zone

The committee met six times. It reviewed data (Appendix E) and explored issues related to overcrowding.

TERMS OF REFERENCE

The Working Committee's terms of reference stated that it should work collectively to review issues and recommendations from *Code Critical* and identify actions for implementation to address wait times, overcrowding, inpatient flow, and enhance timely access to appropriate and safe care across the system. The Committee focused its attention on the HI (HI) and the HI Emergency Department (HI ED).

The terms of reference also mandated the Committee to review *Right Care, Right Place* and identify other actions that may be helpful.

The Committee was tasked with preparing a report to be submitted to the co-sponsors, Jason MacLean and Vickie Sullivan.

NSGEU, working with NSHA, has completed a draft of the report. The NSHA has not yet provided its final edits to this document nor have the NSHA members of the committee given final agreement to the contents. However, delays in finalizing the report have prompted the NSGEU to submit this document to Ms. Sullivan and Mr. MacLean as an interim report.

This document explores the problem from several angles. In each section we outline the Committee's discussions, we highlight actions taken or under consideration by NSHA and we report on recommendations the Committee believes would be helpful to further address the problems.

It is important to note that the recommendations and comments in this report do not necessarily reflect the views or opinions of either the NSHA or the NSGEU. Rather they are developed by staff and members for consideration by each organization.

THE PROBLEM

The problem is simple, but the solutions are complex. People are waiting far too long at the HI ED for admission to hospital. People are waiting too long for consultations in the emergency department and they are waiting too long for decisions on care.

The committee agreed that wait times and overcrowding at the HI ED are a growing concern. A key cause of that problem is that the more and more people are registering for care at the HI ED. At the same time, inpatient floors are not able to discharge patients fast enough to admit ED patients in a timely fashion.

It is clear the HI has a serious capacity problem and must consider adding beds or re-aligning beds in order to keep pace with increasing demands.

The *Code Critical* report made all this clear. And it is something the NSHA well understood when it prepared its *Right Care, Right Place* plan.

Pick almost any measure, use almost any time-frame, and you see more people showing up at the ED and waiting longer to be seen.

Numbers provided to the Committee by NSHA show that HI ED registrations for fiscal 2016-2017 set a new record high with 74,676 people arriving at the doors.

This was the eighth consecutive year the number reached a record high.

When viewed over time, the growth is startling. The number of people visiting the HI ED has increased by nearly 30 percent since 2008-09. That was the year things were so bad that Dr. John Ross called a code orange in order to bring the problem into public prominence.

Here's another illustration of the problem; from September 1, 2016, to August 31, 2017, the HI ED average daily registrations grew from 200 to 206. That number was up from an average of 191 daily registrations in the year between September 1, 2012 to August 31, 2013. It was common in 2017 for 250 patients to show up at the HI ED for care in a single day.

Administration and front-line staff at the NSHA and CDHA before it, deserve credit for managing the problem over the last eight years. Some of the measures taken at the HI ED have been emulated in emergency departments across the country.

In fact, changes made by NSHA as a result of its *Right Care, Right Place* plan, such as the introduction of afternoon bed rounds, have led to some improved conditions in just the last eight months.

NSHA reported to the committee on other recent changes or proposed changes at the HI ED include the following:

- NSHA developed and implemented policies/processes around “direct admits” to inpatient units so they could more easily bypass emergency departments. For example, working with teams to implement Goals of Care frailty platform, beginning with Medicine, where training and education is complete.
- NSHA made a proposal to government to expand early mobilization initiatives in emergency department and inpatient units at HI and DGH. SBAR (Situation, Background, Assessment, Recommendation) submitted with 2017-18 Business Plan for DGH to look at a mobilization philosophy/plan. NSHA is awaiting approval.
- NSHA is implementing a frailty strategy, focused in Goals of Care, in Medicine Units within Central Zone. It expects this strategy to improve flow between ED and inpatient units.
- Central Zone continues to operationalize two beds in the Rapid Assessment Unit (RAU) to help with consult and admission process as required. These beds, however, are not dedicated for RAU use. The area is normally used by research nurses as an office and can only be accessed in urgent situations. The research nurses are asked to work from home when the beds are needed.

But all the improvements and innovations inevitably get swallowed up by the relentless and steady increase in patient registrations.

Without a change in capacity and staffing, the NSHA, will need continued innovations just to maintain HI ED wait times at current levels, which we all recognize are not acceptable.

Put another way, the NSHA needs to be constantly innovative and relentlessly adaptable just to tread water.

The following data helps highlight that point:

In its Strategic Indicators report from October 2016, NSHA concluded that wait times between when an emergency department patient was triaged and the time that patient was admitted to an in-patient bed was an important strategic indicator for quality in the ED.

The NSHA's objective was to have 90 percent of patients admitted to an in-patient bed within eight hours. In September of 2014 that wait was about 26 hours. It was 23 hours in September of 2015 and it was 21 hours in September of 2016.

Data provided to the committee by NSHA shows that this past September that wait time had increased again to 24.8 hours.

Most HI Ed patients who are admitted are admitted to Medicine inpatient beds. In September, 2017, the 90th percentile wait time from triage to admission was 45.4 hours. The average wait time was 23.5 hours. More than 100 of these patients waited more than 24 hours for admission to Medicine inpatient beds.

There have been improvements from month to month. But the data show wait times are consistently about three times longer than the objective of eight hours identified by the NSHA despite a new round of innovative changes at the HI.

Recommendation: the Working Committee urges the NSHA to adopt recommendation #4 in the Code Critical report. That recommendation would allow NSHA to track the key measure of 90th percentile wait from triage to admission and to outline continued strategies to address the problem.

Recommendation #4 states:

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.

The Committee discussed other internal operations of the HI ED including how long it takes physicians to conduct consults. It was reported to the Committee that the NSHA target for a consult time was two hours.

ED staff suggested it often takes much longer and delays in consults are leading to delays in admissions and discharges. NSGEU requested data showing the length of time between when consults are requested and time to disposition. NSHA does not currently capture this data.

Recommendation: the NSHA gather and review accurate consult times to ensure physicians are achieving the most efficient admission and discharge times possible.

PATIENT FLOW, DIVERSION AND DISCHARGE PLANNING

The growing number of ED patients is a key part of the problem. But contributing factors include inefficiencies in the care processes within departments. These inefficiencies are caused by internal challenges around patient flow, community discharge planning and capacity in the ED and on inpatient floors.

Patient flow is complex and is affected by the prevailing cultures of thought and perceptions within the medical community, patients, and the public. It is made more difficult still by the social determinants of health present in Nova Scotia and the fact that Nova Scotia is one of the oldest and least healthy provinces in Canada.

NSHA reported to the committee that it has made strides in these areas. According to the NSHA, the Central Region implemented a number of measures aimed at improving how patients move through the acute care system and it is working on other possible improvements. For example:

- All Medical/Surgical units at both the HI and VG developed unit-based action plans. These plans include implementation of white boards and expected discharges of all services. Unit-based plans are posted to a share point site that can be accessed by all managers. Afternoon rounds have been incorporated to plan for end of day and following day with Flow Co-ordinator.
- The NSHA is planning an early supported discharge (ESD) for people who experience mild to moderate strokes, addressing both acute and rehab needs. The ESD model provides rehabilitation therapy in community settings, accelerating the transition from hospital to home. Progress to date:
 - 2016 Plan developed by Central Zone Stroke Advisory Team shared with Continuing Care and Primary Health Care for feedback and potential for implementation.
 - Central Zone Stroke Advisory Team working on a more enhanced program proposal with implementation details.
 - Situation/Background/Assessment/Recommendations (SBAR) document submitted with 2017-18 Business Plan for QEII (awaiting outcome).
- The NSHA reported to the committee that it conducted a focused review of use of Hospitalist Medical Unit including reviewing barriers to discharge, discharge planning, role of the charge nurse. Here's the progress to date from that initiative:
 - Project team has been implemented.
 - Strategies include: re-implementation of white boards, implementation of Estimated Date of Discharge (EDD) on all patients, and implementation of afternoon care planning rounds.
 - Mobilization strategy developed.
 - Charge nurse role devoted solely to discharge planning.
 - Developed education booklet for patients and families – what they need to do to prepare for discharge.

The actions above will be applied to other services in the future.

- The NSHA also reported that it is working with community partners to explore options for patients discharged from the QEII and DGH to wait for long-term care in alternative care settings, both inside and outside of NSHA.
- The NSHA has identified non-traditional spaces for surge capacity and discharge holding.
 - Units have identified non-traditional spaces and are prepared to provide care in these spaces as needed.
 - DGH has created an admission lounge to accommodate admitted patients until beds become available.
- The NSHA said it is reviewing home care and long-term care policies and procedures, including response times, eligibility and priority criteria. Progress to date:
 - Continuing Care is engaged in Alternative Living Care (ALC) Utilization Management Form pilot project. This pilot will provide data to identify areas to focus.
 - Continuing Care is also engaged patient flow project, led by Brian Butt.
- The NSHA said it is reviewing Diagnostic Imaging (DI), Lab & Cardiac diagnostics prioritization policies to identify solutions that support inpatient flow and access/flow from DGH. Progress to date:
 - Utilization Management System data reviewed with Lab and DI.
 - DI - process plan through Bed Management to identify day-of-discharge issues. Addressed daily in bed rounds.
 - The NSHA reported that lab issues were insignificant. Front-line staff reported, however, that long waits of up to three hours for lab work is not uncommon.
- The NSHA is reviewing ALC-related and Department of Community Services (DCS) policies (including definitions, eligibility, per diem charges, collections, patient/family refusal options). Progress to date:
 - DCS led an initial meeting in August 2017 with plans for a follow-up meeting this fall. This forum will serve as a venue to explore discharge delays related to clients requiring DCS programs and services.

ALC Beds

Despite the good work, serious problems remain. For example, ALC patients awaiting discharge remain a serious challenge.

Data presented to the Working Committee in May, 2017, showed that 27 percent of the beds on 8.4 were occupied by ALC patients in the third quarter of 2016.

NSHA has not yet been able produced data to demonstrate the extent of the problem on other floors with ALC beds.

The Committee learned that one problem rests with patient and family expectations. Often families are told early in the hospitalization of an ALC patient that the patient will require a long term care (LTC) placement.

The Committee was told that once a doctor says a patient must go to a LTC placement, it can be impossible to change the patient's mindset. This can complicate efforts by continuing care staff to return the patient to their home when that is appropriate, leading to delays in discharge.

Recommendation: front-line staff, including physicians, should be educated about the effect of establishing family expectations for future care for ALC patients and should try to avoid doing this.

The *Code Critical* report highlighted that it is not uncommon for some ALC patients to remain in hospital for a six months, a year or more while awaiting placement.

Recommendation: the Committee urges the NSHA to consider recommendation #5 from the *Code Critical* report. The Committee did question whether a four-month stay for an ALC patient was too long before it triggered an automatic review.

Code Critical recommendation #5 reads;

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

Camp Hill Veterans Memorial Building (VMB) is being used to accommodate patients from the QEII and DGH, where space allows. Priority access to VMB is for contract-eligible veterans.

Since June 2016, Veterans Affairs Canada (VAC) has opened access to these beds to a new cohort of Veterans (veterans eligible for care in a community facility other than contract beds). Initially there were 15 beds for this purpose and it has expanded to 25. VAC determines eligibility.

For the past two-and-a-half years while DGH has undergone renovations to the third and fourth floors, priority access to these beds has been given to appropriate DGH patients. Beds have also been used as surge capacity for the HI site of the QEII. If the health authority uses a Veterans bed, we pay VAC the per diem rate as these beds are funded federally through VAC.

As DGH opens more beds, they will no longer transfer patients to Camp Hill. Patients from DGH who are staying at Camp Hill will be transferred to long-term care as they are discharged.

There are staffing costs and costs related to leasing space from Veterans Affairs. These costs are not an insignificant burden for the NSHA. The NSGEU was informed by hospital administration that floors who send ALC patients to the VMB must pay in the range of \$400 a day from the budget of the floor. In the third week of January, there were eight ALC patients at the VMB who had been transferred from in-patient floors at the HI. In one week, eight patients would cost HI inpatient floors more than \$22,000 out of their patient budgets. Some of that money may be recouped through fees to the patients.

Recommendation: The Committee supports recommendations #6 and #7 in the *Code Critical* report. Those recommendations are:

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

Code Critical Recommendation #7; The NSHA should come to agreement with Veterans Affairs to place appropriate LTC patients from the HI at the VMB after the DGH 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.

New Recommendation: the Province of Nova Scotia should assist in creating HI ED capacity by providing additional funding to the NSHA to offset the costs for floors who must transfer patients to the VMB to create space.

During a recent tour of the Nova Scotia Hospital (NSH) site at the NSHA, the NSGEU learned there were 20 vacant rooms at the Simpson Landing Community Living site. These private rooms are only a few years old and could be suitable for some ALC patients awaiting placement. The rooms have been vacant for some time.

New Recommendation: The NSHA should review whether to place appropriate ALC patients at the Simpson Landing Community Living site. Such placements could be used to relieve pressure on in-patient floors during high volume months at the HI ED, including during flu season.

PEI Patients

The *Code Critical* report identified a problem staff had in repatriating PEI patients to their home hospitals. NSHA has taken some action to address this issue.

Following the release of *Code Critical* report, the Health Services Manager on 4.1 held discussions with PEI Health officials. Staff report improvement and greater accountability when returning PEI patients to their home province.

But staff also believe more could be done. Staff report that during the week of October 16 there were between six and eight patients from PEI on 4.1, a 31-bed unit. Some had been there between two and three weeks.

The Working Committee discussed the progress made to date on this problem and the challenges that remain.

Recommendation: the Working Committee endorses recommendations #8 and #9 in the Code Critical report and urges the NSHA to continue to examine ways to improve the repatriation of PEI patients.

Code Critical recommendations #8 and #9 read as follows:

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.

Meanwhile, patients from around Nova Scotia and Atlantic Canada may wait days or longer for a surgery at the HI. Some of those patients could receive the same pre-surgery treatment at their home hospitals that they receive at the HI.

PEI patients are a good example. As mentioned above some patients from PEI have stays that extend as long as three weeks. During part of that time, the patients might have received pre-surgery care that could have been provided at their home hospital.

New Recommendation: NSHA should review the extent to which pre-surgery admissions from home hospitals to the HI take place before they are necessary.

The Admission Process

The Committee had much discussion about the NSHA's efforts to improve the transfer of patients from the ED to inpatient floors. The data above demonstrate that wait times for all services continue to exceed NSHA targets. NSHA said it is focused on improving those waits.

The Committee heard from Ms. Sullivan that; "(We) have to set expectations on the floors that they have got to move patients quickly."

NSHA has approved a provincial Overcapacity Policy. NSHA reported that it was revising the Central Zone overcapacity policy and was expecting to have a new policy in the fall. Central Zone has formed a committee, including managers and Professional Practice team members, working with staff from the emergency department and inpatient units to complete that work.

That review is consistent with recommendations in both the *Code Critical* and *Right Care, Right Place* reports. However, the new policy was not presented to the committee and is still not available for staff to review and rely upon.

The Committee discussed at length staff's contention that they are no longer allowed to make Code Census calls.

In 2016, there were 146 Code Census calls. In January 2017, there were 23 Code Census calls and 30 in total between February and March. But there have only been two Code Census calls since June of 2017. The NSGEU worried this could be viewed as an attempt to disguise the growing problem at

the HI ED by hiding a key measure thus avoiding public accountability. Indeed, when NSGEU requested data on how often the HI ED reached the criteria that would previously have prompted a Code Census call, the NSHA did not respond.

The fact staff can no longer call Code Census appears to result from the changes to the HI overcapacity policy. One NSHA representative on the committee said an objective of the revised policy would be to have patients “pulled out of emergency (to inpatient floors) versus having patients pushed out of emergency.”

These comments suggest there needs to be a change in the culture of thought among staff on inpatient floors and at the ED. Rather than reacting to Code Census calls that require inpatient floors to take ED admissions, NSHA staff want inpatient floors to react to all requests as quickly as possible in line with the conditions on the floor.

Recommendation: NSHA must work with staff to ensure they understand the importance of responding as quickly as possible to every admission request from the ED.

Recommendation: NSHA provide the Working Committee draft changes to its overcapacity policy before they are final so that the Committee may review the changes and provide feedback.

Recommendation: The Working Committee endorse recommendation #2 on accountability in the *Code Critical* report by publishing data related to the HI ED overcrowding. That recommendation, which was revised slightly to address current practices at NSHA, reads:

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 including:

- How many times the criteria for Code Census are met on a daily and monthly basis (> 8 admitted patients & >148 NEDOCS score).
- How many patients were placed above census on in-patient floors and where those patients were kept (i.e., in hallways, family waiting rooms or overcapacity in private and semi-private rooms).
- How many ALC and LTC patients are in QEII beds awaiting placement.
- How many people show up for treatment at the HI ED.
- How often and for how long ambulances wait at the ED to offload patients because of overcrowding in the ED.
- Data associated with Recommendation #4 (updated triage-to-admission wait time data published on its website and reports each month on steps it [NSHA] is taking to reduce those times in order to meet its stated goal of eight-hours).

DEMOGRAPHICS AND CAPACITY

Nova Scotia has the oldest population in Canada and it continues to get older. Statistics provided by the NSHA show that while there was a 5 percent increase in non-seniors presenting at the DGH and HI ED between 2013 to 2016, the number of seniors presenting increased by 12 percent in the same time period.

Not only are there more seniors showing up at the ED, but they are sicker. NSHA reports the number of seniors arriving at the two EDs who require urgent care has risen by almost 10 percent.

The Committee discussed the possibility of NSHA modifying some of its ED services to adapt to the increase in the number of seniors.

NSHA has an innovative service called the Quick Response Program (QRP). The QRP operates at DGH and the HI, QEII. The program presently serves clients living in Halifax and Dartmouth with up to 24 hours of CCA care for a five-day period to provide clients, their families and continuing care time to explore longer term sustainable care options.

This program is used to divert individuals from presenting to the ED as well as transitioning individuals from the ED to home. We are currently using this program to its full capacity. The NSHA continuing care program has no authority to expand the QRP at this time as this is directly funded by the Department of Health and Wellness.

The program is fully utilized every day, according to NSHA administrators. But because of the limited funding and resources it is only able to help divert 3-4 seniors each day. ED staff including physicians and management want it expanded to meet the full demand, but the province has not yet responded.

Recommendation: NSHA and NSGEU lobby the province for an expansion of the QRP so that it meets the current demand. This will shorten waits for seniors and create capacity in both the ED and in-patient floors.

Capacity

The Committee believes the NSHA should have as complete an understanding as possible of what it faces in the future. A detailed predictive study of demographic developments and the resulting future demands on health services in the Halifax Regional Municipality would be a very useful planning tool. Such a study would help identify the most effective ED for the future and give important information to guide any future bed capacity planning.

Recommendation: The Working Committee endorses recommendation #3 in *Code Critical* and it asks Ms. Sullivan and Mr. MacLean to write to the Minister of Health and Wellness urging his department to take immediate action to undertake a comprehensive predictive study on the ability and capacity of the HI and HI ED to manage Nova Scotia's aging population and health determinants into the future.

Code Critical recommendation #3 reads:

The Department of Health and Wellness should immediately conduct a study to determine the reasons why there has been such a 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 the number decline or if it will increase. This information is critical if the NSHA is to plan for future demands on the system.

Recommendation: NSHA should consider other possible changes to the ED operations to increase capacity including implementing recommendations #13, #14 and #15 in the *Code Critical* report.

Code Critical recommendations #13, #14 and #15 read as follows:

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.

Recommendation: NSHA should explore continued expansion of the scope of practice of health professionals including allowing paramedics to order X-rays in appropriate situations.

It is clear that an effective, long-term solution aimed at reducing wait times to acceptable standards requires that the Province recognize the true crisis facing health care – a need for more capacity – and to make this crisis a priority.

Specifically, that means the provincial government must consider expanding the capacity of the HI. The demolition of the Victoria General buildings and the associated rebuilds offer the NSHA and the Province a unique opportunity to ensure appropriate future capacity at the HI that is able to meet upcoming demands.

Already this January, patients at the HI have once again begun to appear in family waiting rooms and in hallways. Patients being placed outside in-patient rooms are being given nurse cell phone numbers and are being told to call in the event they have a problem.

The Committee recommends the NSHA and the NSGEU advocate for the province to make greater acute care capacity a priority within the Central Zone of the NSHA.

NSHA front-line staff continue to insist that the Cobequid ED offers unutilized emergency department capacity less than 20 kilometers from the HI ED. The Cobequid is open from 7am to midnight every day. When the Cobequid closes almost 90 percent of its patients are transferred to the HI ED, creating an influx of new patients that need to be managed.

In the meantime, the Cobequid ED registrations are also continuing to grow at a rapid rate raising the question whether the Cobequid should remain open 24 hours a day.

Recommendation: NSHA review and consider recommendations #11 and #12 in the Code Critical report.

Those recommendations read:

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 ED is most able to deal with Cobequid patients rather than simply sending nearly all patients to the HI.

NSHA, meantime, continues to work within its existing limitations to find innovative ways to address capacity challenges.

In winter 2017, eight acute care beds were opened at the HI to accommodate an over-capacity situation in surgery. When the surgical overcapacity situation was resolved, these beds were closed. Two rehab beds were opened at the Nova Scotia Rehabilitation Centre to address an increase in the number of patients requiring rehab. These beds remain open.

In the fall of 2016, Medicine services were realigned and an additional eight medicine beds were made available.

But these changes remain stopgap measures. Without provincial government recognition that there is a crisis, the problems cannot be properly addressed.

SHORTAGES OF DOCTORS, NURSES, AND HEALTH CARE WORKERS

This report has already identified the steadily growing number of ED registrations. During peak periods in the summer and during flu season, it is common for 250 patients to register at the ED each day. In 2008-09, the HI ED averaged 161 patient registrations a day.

The Working Committee has concluded this problem is closely linked to the shortage of family doctors.

In addition, the doctor shortage has a negative cumulative affect on the health of those without a family doctor. Minor ailments, if not treated immediately, can grow into more serious health problems which place a greater burden on the health system. There are reports of four family doctors who are about to leave or retire in the Dartmouth area.

Nova Scotia's serious family doctor shortage also delays patient discharges. Staff are not always able to arrange appropriate follow-up care for patients who don't have family doctors, which leads to longer hospital stays.

NSHA is working with the provincial government to establish collaborative practice clinics in the Halifax Regional Municipality beginning with a clinic in Dartmouth.

Nova Scotia's Auditor General reviewed the doctor shortage problem and made recommendations in his November 2017 report. They included the recommendation that the Department of Health and Wellness and NSHA "develop a process to identify and assist Nova Scotians with serious health conditions who do not have a family doctor."

Fulfilling this recommendation would certainly assist the HI ED which is currently one of the few remaining care options for residents without a family doctor.

In the meantime, NSGEU Committee members report that the HI ED is currently facing staff shortages that have led to recent and ongoing bed closures including the closure of complete PODS. NSGEU recently filed freedom of information requests that showed the HI ED closed 67 beds in the months of October and November 2017 alone. Every single closure was the result of staff shortages.

Source: NSHA

Date	Location	# of Beds Closed	Reason
10/4/2017	Emerg - HI	4	Related to Staffing (4 hrs TD + TN)
10/5/2017	Emerg - HI	8	Related to Staffing (4 hrs 0300-0700)
10/6/2017	Emerg - HI	8	Related to Staffing (TN)
10/14/2017	Emerg - HI	4	Related to Staffing (reopened 2 beds at 1900)
10/20/2017	Emerg - HI	8	Related to Staffing (4 hrs 0300-0700)
10/21/2017	Emerg - HI	2	Related to Staffing (7 hrs 2400-0300)
10/21/2017	Emerg - HI	4	Related to Staffing (4 hrs 0300-0700)
10/28/2017	Emerg - HI	4	Related to Staffing (4 hrs 0300-0700)
10/29/2017	Emerg - HI	4	Related to Staffing (4 hrs 0700-1100)
11/4/2017	Emerg - HI	4	Related to Staffing (TN 1900-0700)
11/5/2017	Emerg - HI	3	Related to Staffing (4 hrs 0300-0700)
11/14/2017	Emerg - HI	4	Related to Staffing (1 hour later reopened)
11/23/2017	Emerg - HI	10	Related to Staffing (4 hrs 0300-0700)

The NSHA reported that the HI ED recently lost seven registered nurses. It has recruited some replacements. NSHA, however, also informed the Committee of significant challenges related to recruitment of registered nurses.

Some of these challenges are related to delays in getting the College of Registered Nurses to license nurses from out of province who want to work in Nova Scotia. It can take the College six weeks to approve a license transfer.

The College also prorates licensing fees for newly recruited, out-of-province nurses in a way that can sometimes cause a nurse to delay his or her start time. A nurse who starts a position prior to July 1 is charged the full annual licensing fee. A nurse starting after July 1 will have the cost prorated.

The Province regulates the College through legislation. The Committee was told the Province and the NSHA plan to meet with the College to discuss the effect of these practices.

The Committee urges the NSHA and the Province to clear any unnecessary hurdles that stand in the way of licencing out-of-province nurses in order that recruitment can occur in as timely a fashion as possible.

In the meantime, front-line staff at the HI ED are beginning to raise a number of serious concerns about their safety. Staff have been confronted with dangerous patients and do not believe the NSHA is doing enough to ensure their safety. In just one example, in late January 2018, a doctor had to enter the triage area with a hockey stick to deal with a patient carrying a knife. Among staff concerns is that they cannot directly dial 911 when confronted with a safety emergency. They must call 3333 and have the details of the situation relayed to 911 by another person. Staff in triage do not even have a panic button to alert others.

The NSGEU is working with staff now on these issues. The Union met with NSHA administrators in January and raised numerous safety concerns. The Union has advised staff to take the safety issues to the NSHA's Joint Occupational Health and Safety Committee and to make a complaint to the Department of Labour if matters are not addressed.

CONCLUSION

There are too many people showing up at the HI ED for the NSHA to maintain wait times that reach the organization's own identified standards.

All of these recommendations are intended to help NSHA to identify innovations that will allow it to keep pace with ever-increasing and more complex patient demands.

It must be re-stated that an effective long-term solution aimed at reducing wait times to acceptable NSHA standards requires the province to recognize the true crisis facing health care and to make this crisis a priority. Without provincial government leadership a bad problem will continue to get much worse almost every day.

Until the serious capacity issues are addressed, the NSHA must continue to run as fast as it can just to maintain wait times at unacceptable levels.

The NSHA deserves credit for the innovations already advanced and detailed in this report. The front-line staff greatly appreciated the opportunity to have their voices heard in the Working Committee and conveyed in this report.

The Committee focused its efforts on the HI ED. It must be said that the problems at the HI ED are mirrored at the DGH ED.

We remain prepared to answer any questions or explore any further issues that the sponsors believe would be helpful.



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

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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.

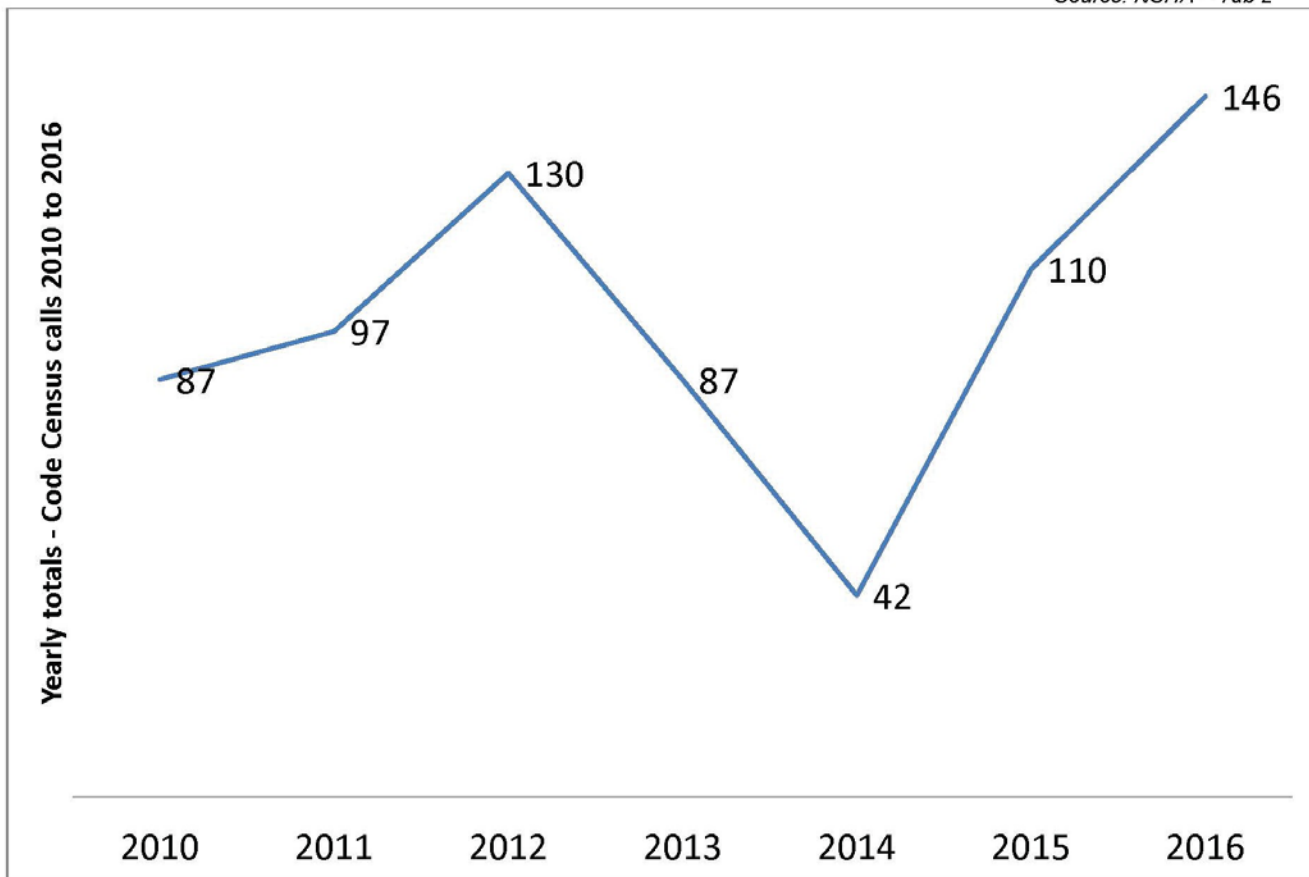
Hospital administrators and staff report that it is sometimes called twice a day. And that is despite the fact that Code Census cannot be called between the hours of 7pm and 7am according to the policy.

“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 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.

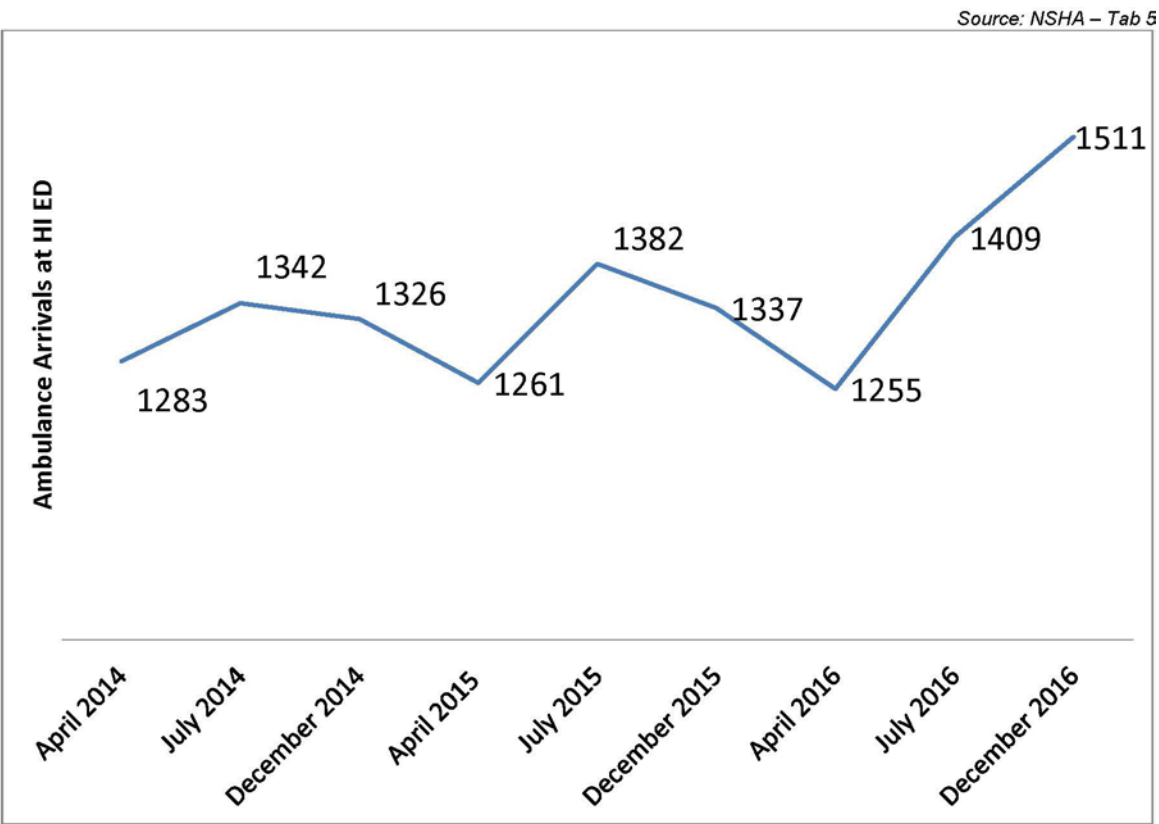
So how is the Halifax Infirmary doing? It is failing.

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.

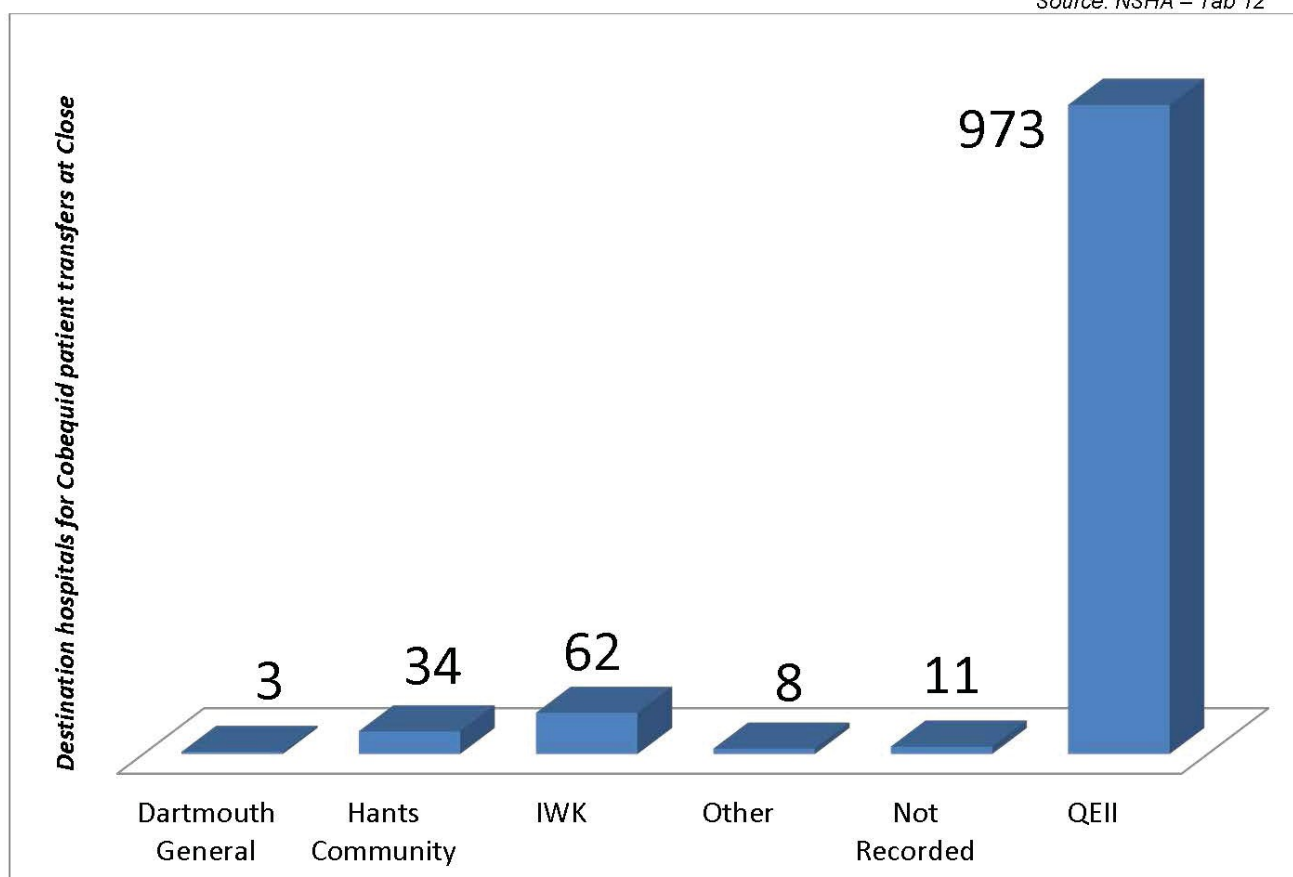
In 2009, the Department of Health considered keeping the Cobequid ED open 24-hours a day. In 2011, the Department decided not to. Staffing issues, costs and usage all factored into that decision.

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.



Background

***Right Care, Right Place* Action Plan**

May 31, 2017

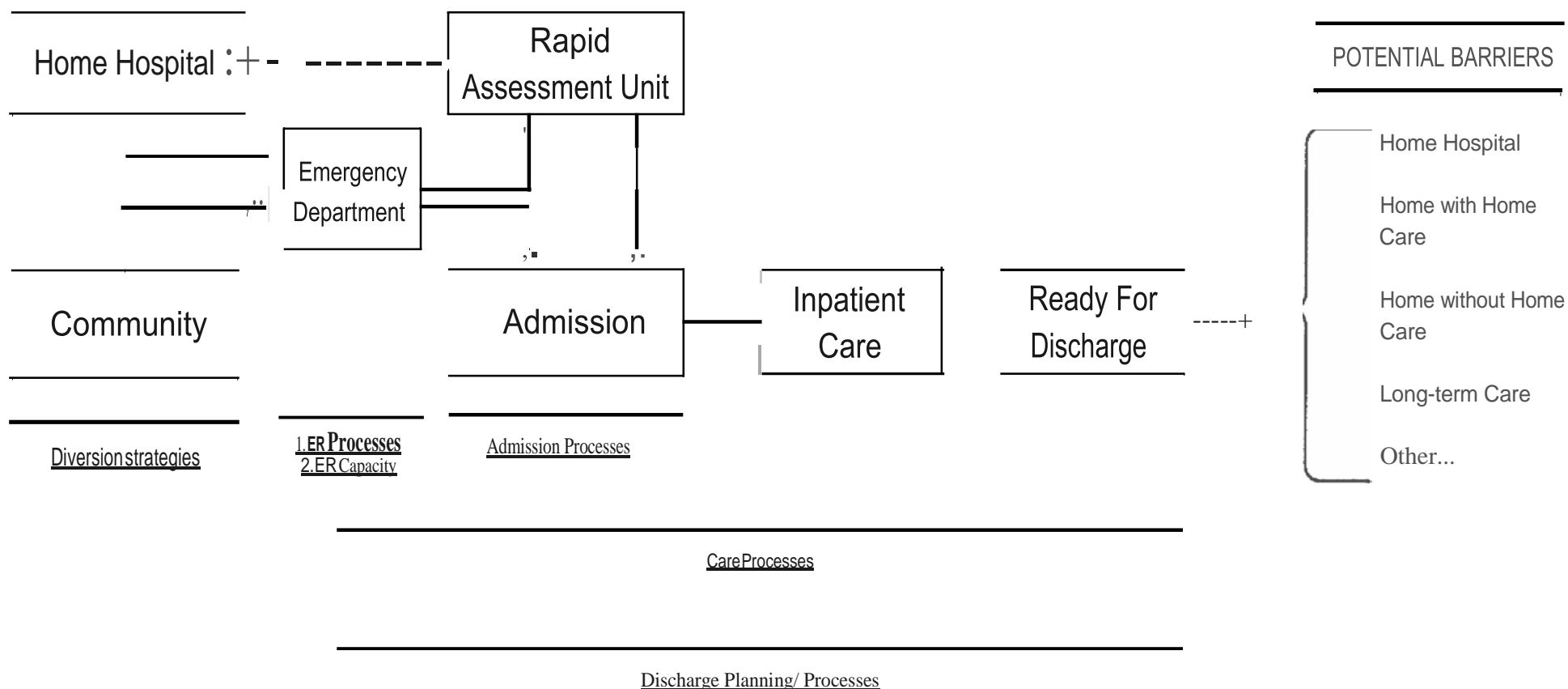
Overview

Call to Action

- QEII ED, Medicine (HMU/MTU) & Admin reps met late January to review continuing overcapacity and flow issues
- *"Right Care, Right Place"* team formed
- Patient Flow mapped across the continuum
- System lens applied
- Action Plan developed
- Action Plan enhanced to include DGH



Right Care, Right Place- Emergency Department/Inpatient Flow Review





Immediate Action

1. . Opened surge capacity on inpatient areas at QEII & DGH to respond to demand
- 2 Met with ED physicians to identify options to better utilize Pods 1 & 5 and to review role of Triage physician
3. Expanded Rapid Assessment Unit by 2 beds (from 8-10); reviewed admission and care processes
4. Developed options for increasing capacity
5. Met with Directors/Managers to review Action Plan and accountabilities

what options?
has it happened?

Action

1. Review of Overcapacity Policy

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2. Daily calls with Director ED & Director

Patient Flow post Bed Rounds, with focus on
plan for admitted patients

3. Afternoon Bed Rounds

4. Maximize use of VMB

Central Zone Emergency Departments - EDIS Patient Flow

< Back

Last Updated: 11:19

Patient Flows	QELI [RED]	DGH [RED]	CCHC [GREEN]	HCH
Total Patients in ED:	57	49	26	7
Waiting Areas:	5	5	7	0
Ambulance Holding:	7	2	0	0
Total Patients Waiting:	21	12	7	0
Consults Awaiting Disposition:	8	5	0	0
Patient Expects:	6	4	2	0
Prioritized waiting for EP:	0	14	3	0
Max LOS patients waiting for EP:	1:29	5:13	1:39	0:41
Unoccupied ED Beds:	2	3	3	4
Occupied Overcapacity / Hall Stretchers:	0	8	7	0
Admitted waiting for Bed:	8	14	0	0
Max LOS Admitted:	44:05	75:54	0:00	0:00

• CCUC represents transfers awaiting delivery

** CCHC maximum LOS waiting for transfer

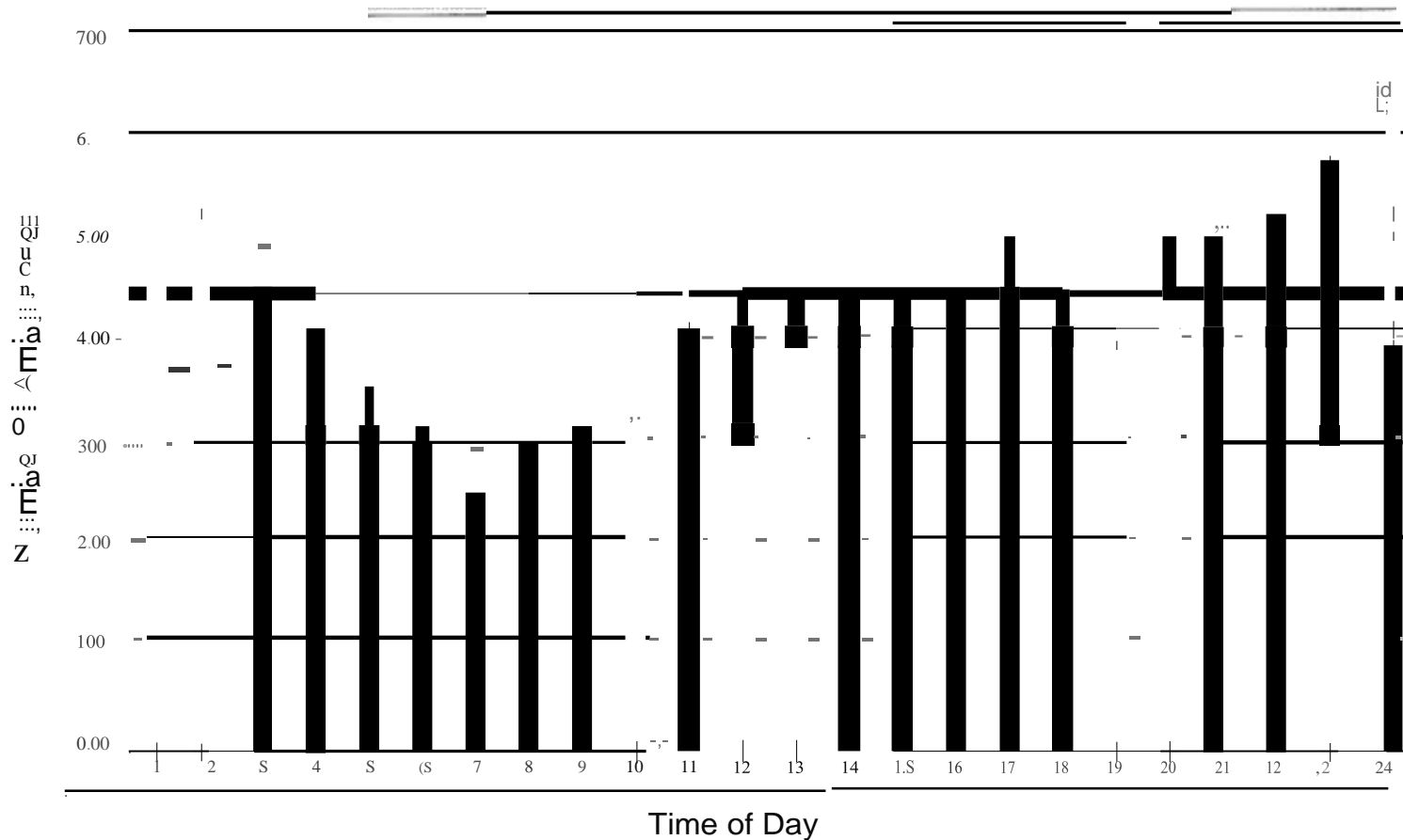
Figure 1 is a line graph showing the dependence of the dimensionless parameter $Q_{\frac{1}{2}}^{\frac{1}{2}}$ on the dimensionless parameter $\omega \approx V_0 \cdot \pi \cdot A$. The y-axis represents $Q_{\frac{1}{2}}^{\frac{1}{2}}$ and ranges from 0 to 70. The x-axis represents ω and ranges from 0 to 10. Four data series are plotted: squares (■), diamonds (◆), triangles (▲), and circles (●). The squares series is the highest, followed by diamonds, triangles, and circles. All series show a general downward trend as ω increases, with some fluctuations.

	20fJ 04/29	2017/ 04/	20fl D5J01	20fl 05/02	2017/ 05/03	2011/ 05/04	2011/ 05/05	20f// D5J06	'20fl/ 05/07	2011/ 08/08	2011/ 0	20fl 05/1)	20fl 05/11	20fl 0)	20fl 0.113	20V// 05/4/	2011/ 06/5/	2017/ 06/5/	2017/ 06/16	2011/ D5J8	2017/ 05/1	20f// 05ra	20f// 082	2017/ 05/22	'mfl/ 05/23	2011/ 05/24	2017/ 1m/	2017/ 01/26	2011/ Dfnj	20f// 01/28	2017/ 0fa9
-t-CCHC	8	6	M	12	11	6	12	7	6	9	fl	8	5	8	8	3	8	12	12	0	n	5	12	9	9	7	11	12	3	n	9
-+-DGH	27	22	11	24	11	28	11	12	21	ti	21	ti	28	23	11	22	26	27	12	11	21	11	11	24	1i	21	11	28	23	22	11
HCH	6	2	5	2		2	8	2	3	2	5	4	3	2	3	2	1	5	1	8	2	5	5	4	4	6	6	2	2	7	6
- QE H	47	33	43	44	66	24	37	39	44	39	56	48	52	48	47	41	42	53	45	40	49	42	46	43	46	55	51	49	44	33	48



Key Initiatives from Action Plan

EHS Offload Numbers



Key Initiatives from Action Plan

EHS Offload Times

QEII-DGH Ambulance Offload Summary

Reporting Jul 1, 2016 to Dec 31, 2016

	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dttc-16	Summary
90%ile Time to First Bed / WR (min)	77.8	146	162	182.3	131.2	162	149
Avg Time to First Bed /WR (min)	32.9	53.7	55.8	65.6	46.8	58.6	52.3
Ambulance Volume	1409	1417	1336	1437	1335	1511	8445
Daily Avg	44.0	43.2	41.3	43.2	42.7	45.5	45.9

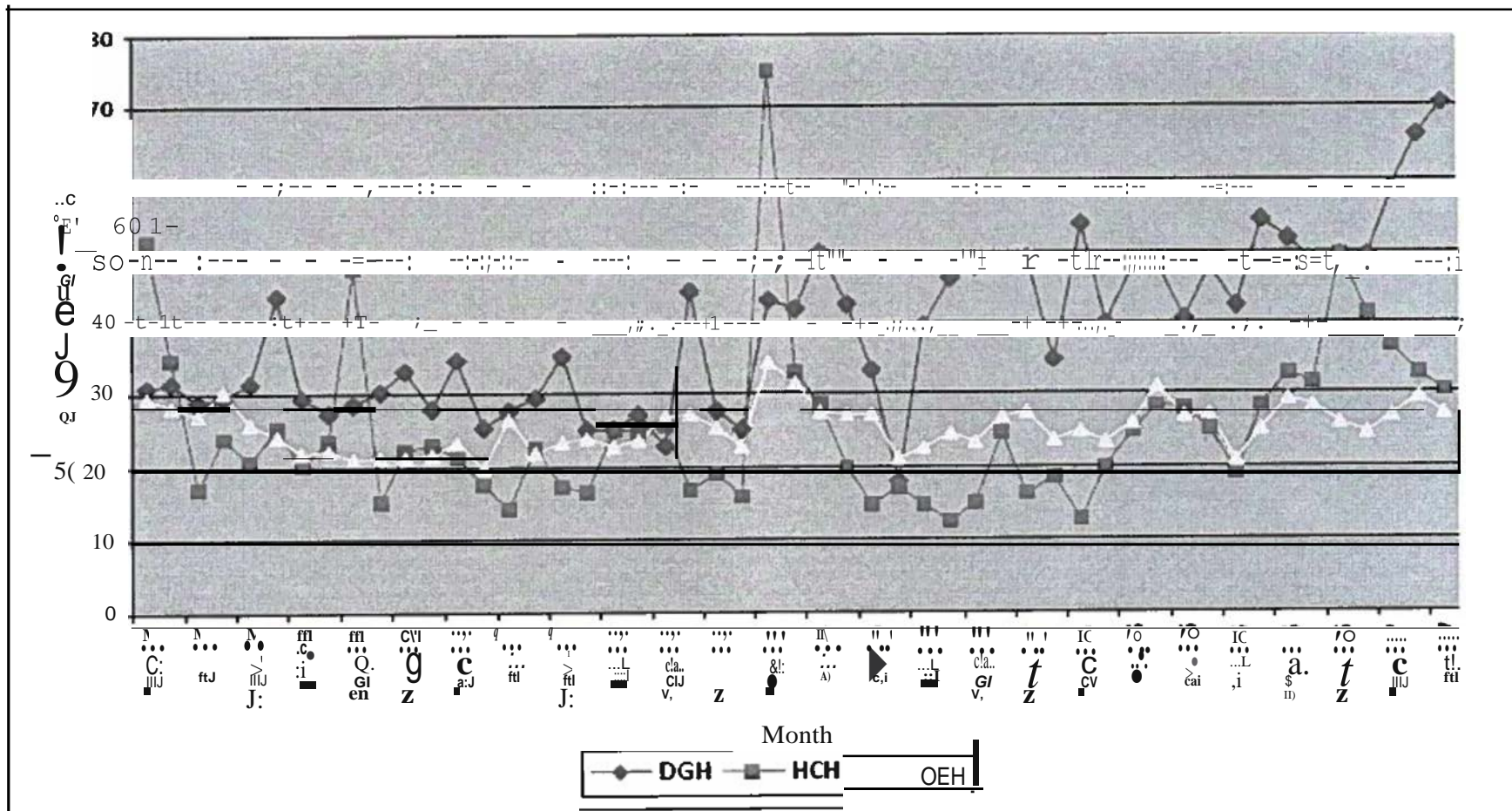
	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Summary
DGH 90%ile Time to First Bed/ WR (min)	195.8	220.6	200	208.6	185	148.6	194
Avg Time to First Bed /WR (min)	75.5	88.7	80.2	81.9	68.5	55.5	74.8
Ambulance Volume	627	680	580	649	555	698	3789
Daily Avg	19.5	20.7	18.4	20.3	18.2	22.1	20.6

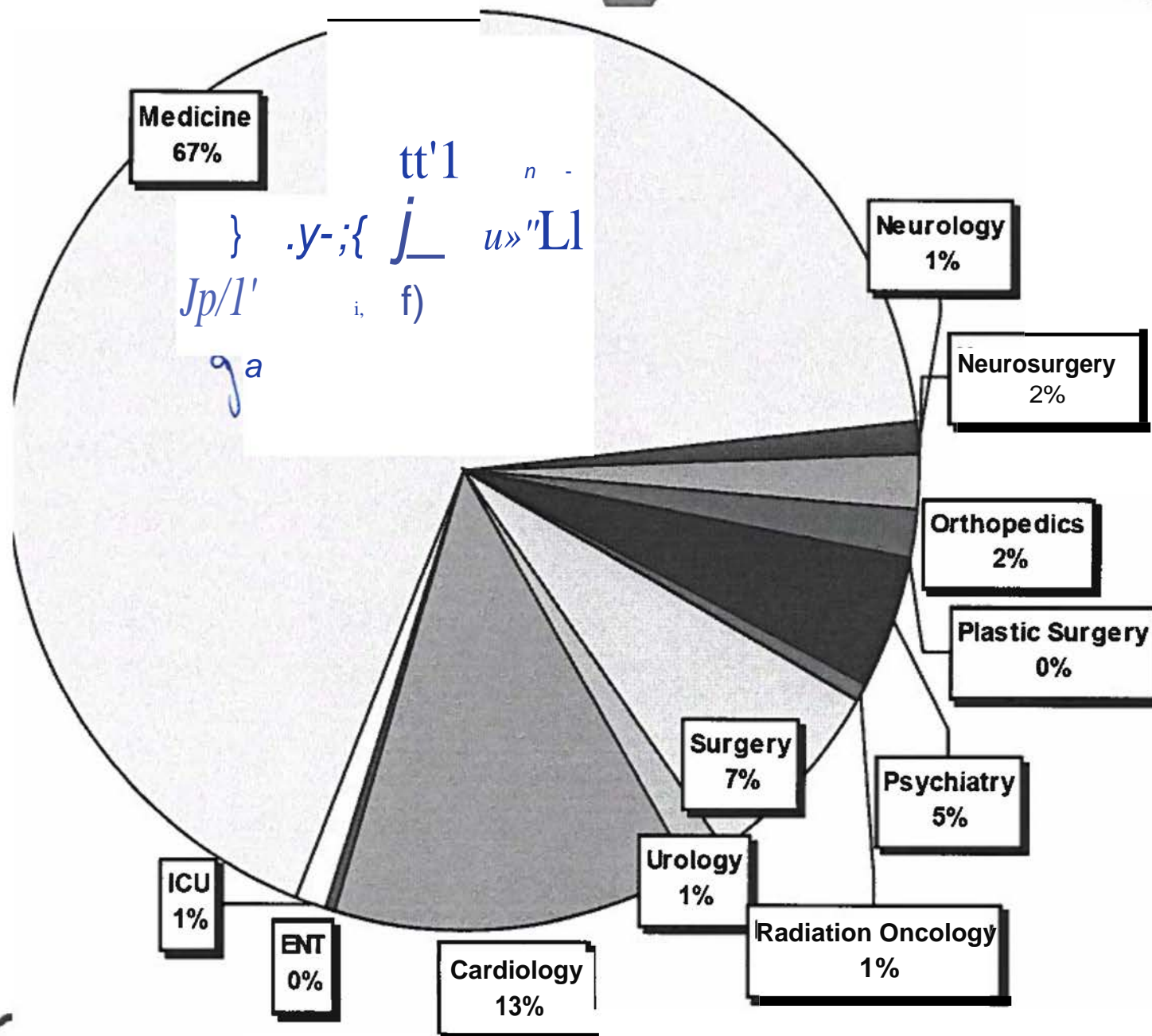
Key Initiative from Action Plan

Central Zone EDI

90th % ED LO or Admitted Patients

Reporting Jan 1 2013 to Mar 31 2017







Key Initiative from Action Plan to Address ED Process Flow

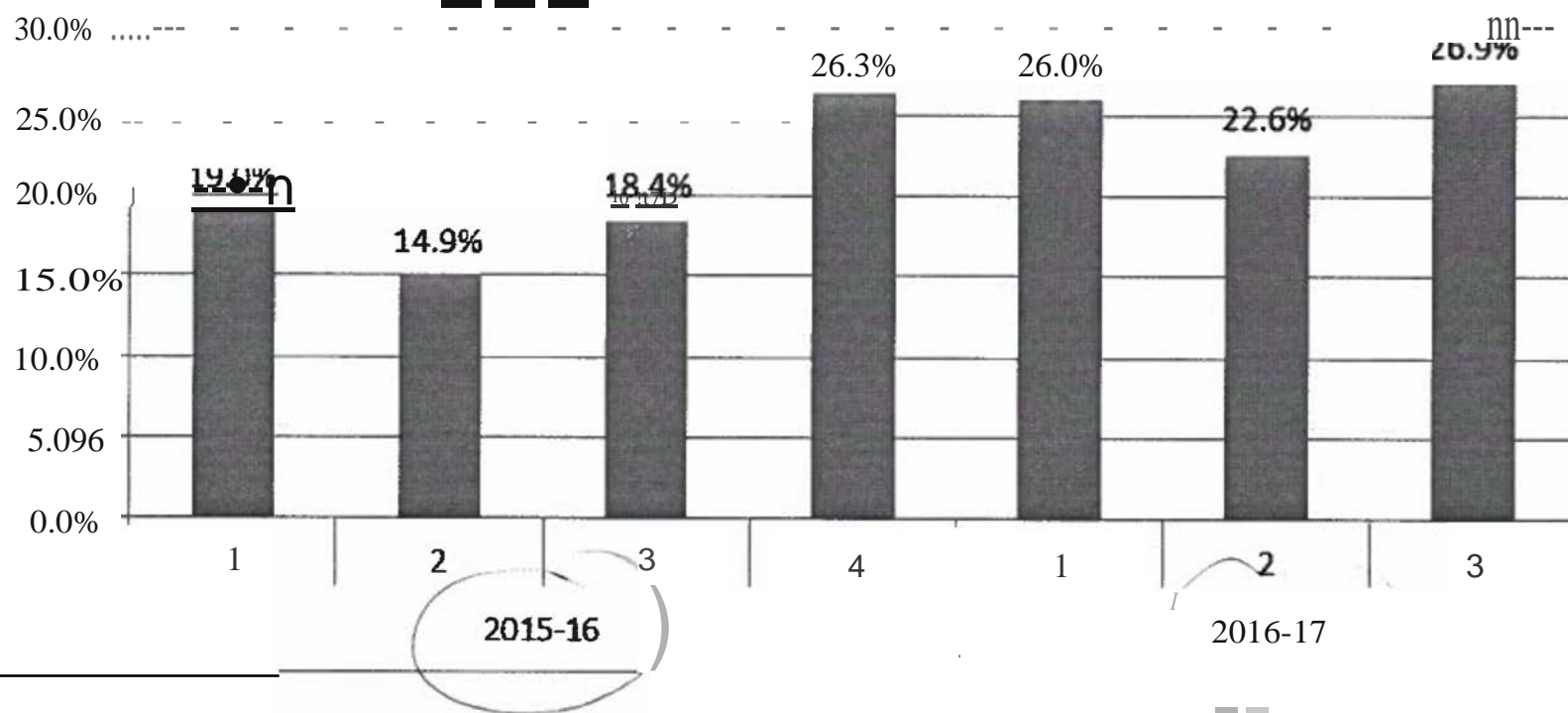
- Reviewing EHS offload procedures and staffing model
- Reviewing intent, utilization and capacity of Rapid Assessment Unit
- Reviewing processes of care/use of ED examination rooms
- Expanding use of standard order sets and triage-driven protocols

Key Inpatient Initiatives

% ALC Days of Total Status Days by Fiscal Quarter

April 2015 to December 2016

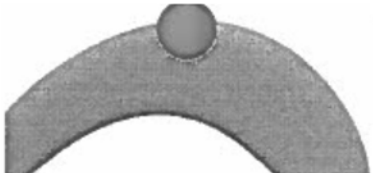
Unit 8.4 - Hospitalist Medicine Unit





Key Initiatives to Reduce Inpatient Length of Stay

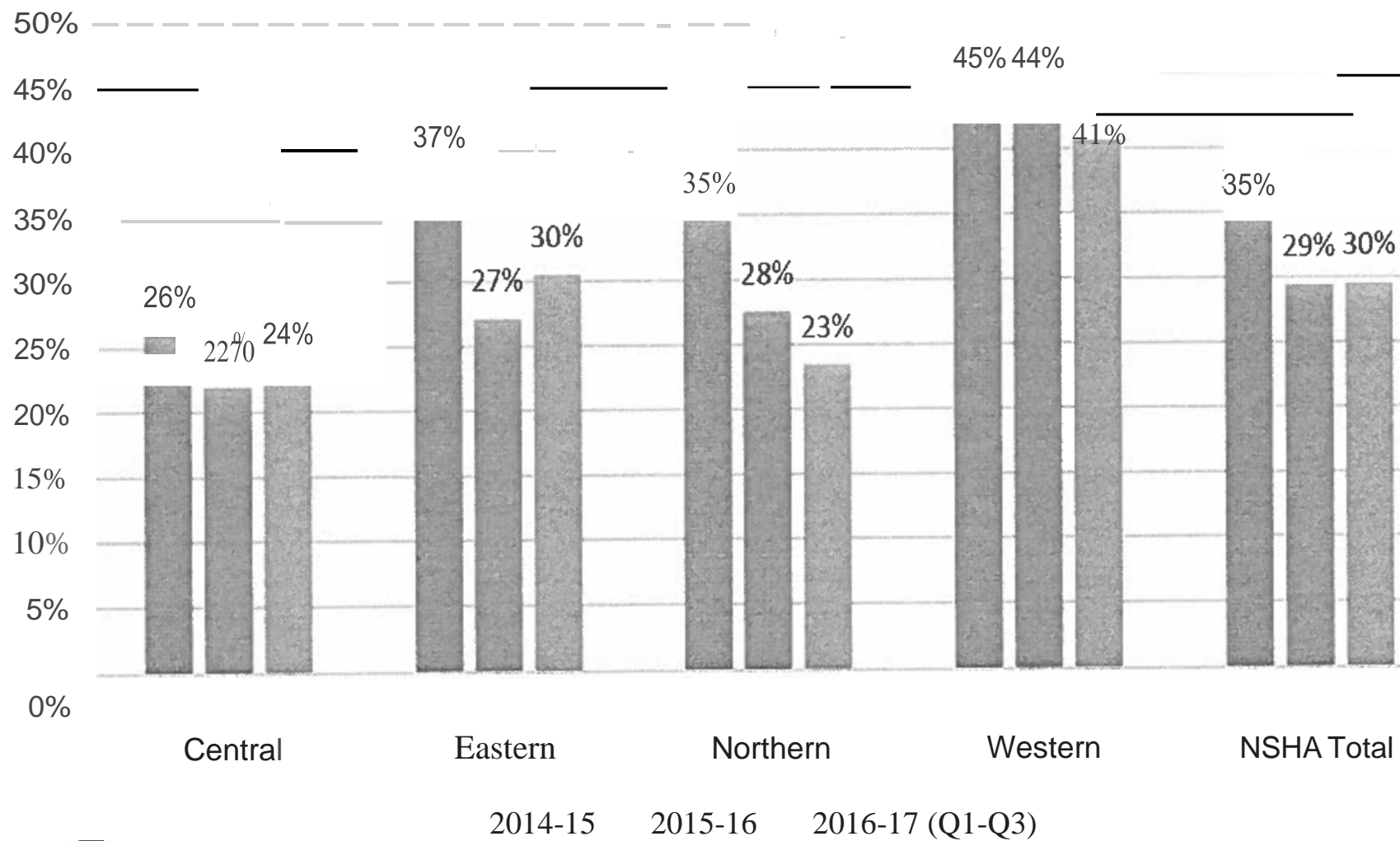
- Conducting a focused redesign of patient flow processes on the Hospitalist Medical Unit (**HMU - 8.4**) ;t
- Reviewing DI and Lab patient prioritization algorithms
- Exploring opportunities to integrate frailty strategy t;{C+-,n.-; Li t\$.
- Redesigning orthopedic units to improve flow and care



Key Initiatives to Reduce Inpatient Length of Stay

- Integrating spinal care on one unit to maximize care paths and resources
- Implementing afternoon Bed Rounds, with focus on discharges
- Reviewing options to wait LTC in alternate care settings

% of RFD (Ready for Discharge) days related to Continuing Care





Key Physician Initiatives

- Improve Consultant response times*
- Expand direct admits to inpatient units
- Identify estimated date of discharge
- Improve timeliness of Physician rounding

* *Will be included in proposed CZ-ZMAC Departmental Scorecard*



Continuing Care Initiatives

Since 2015, we have seen...

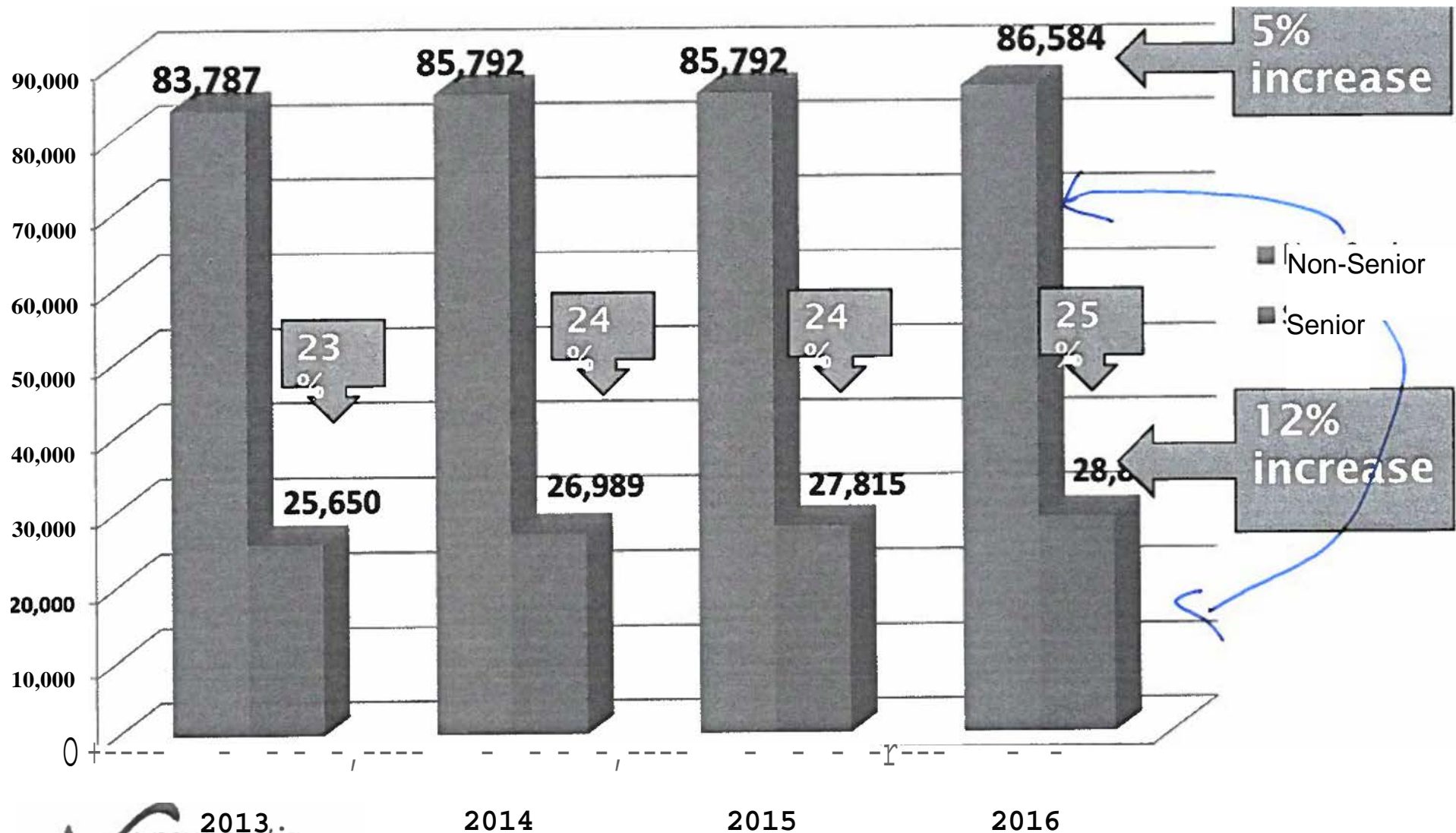
- 9% increase in LTC placements
- 56% reduction in the number of people waiting for LTC (initial placement)
- 25% reduction in wait times for people in community
- 58% of placements are from community
- 95% reduction in people waiting for home support
- 97% reduction in home support hours on the waitlist



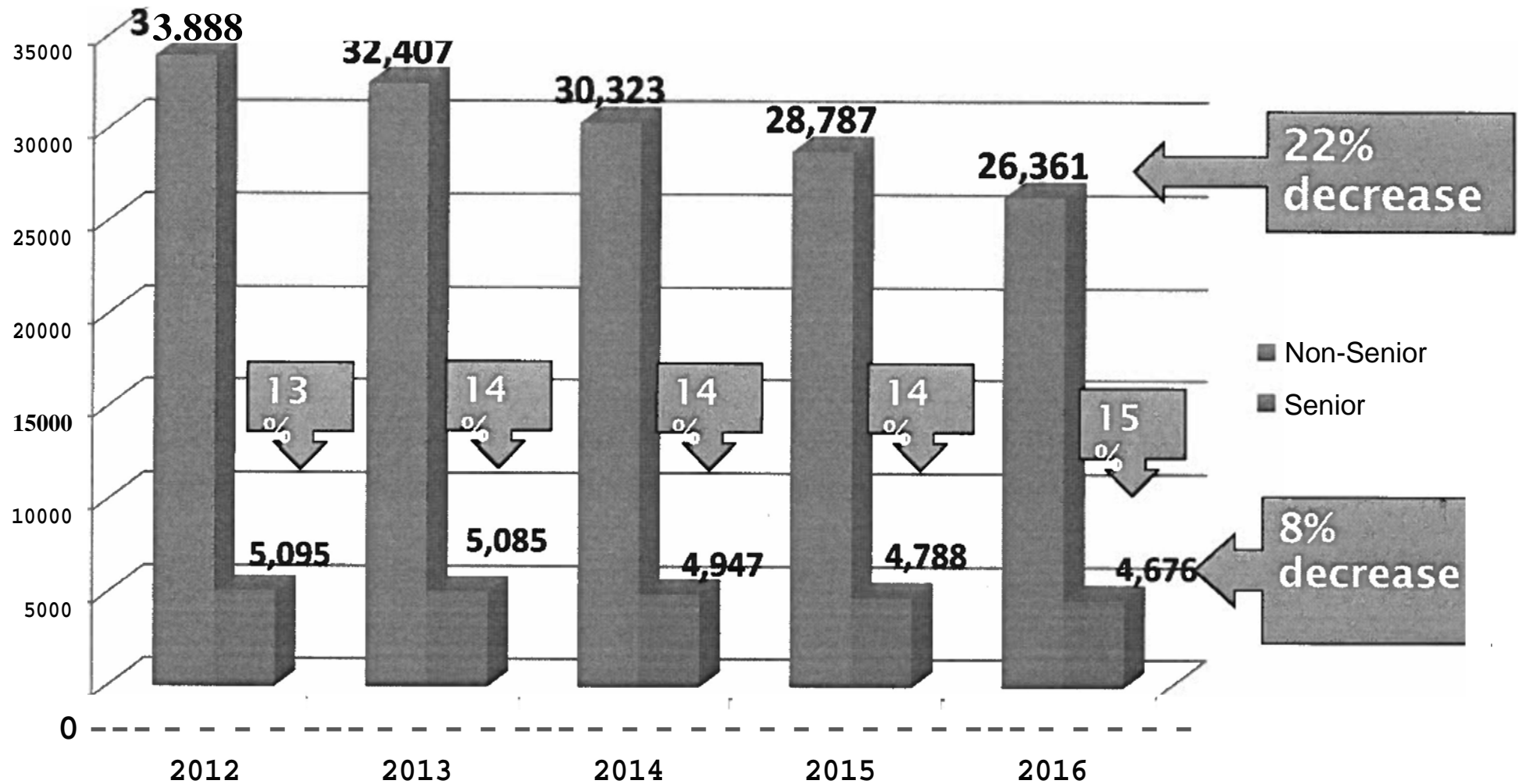
seniors and Hospitals

- **Since 2013/14**
 - Nursing Home wait times for people in hospital have been reduced by 37%
- **Central Zone - DGH & HI ERs**
 - More seniors are presenting at ERs *» s.p. 100 %' (air Vf)*
 - % of seniors presenting with non-urgent issues is lower than non-seniors
 - % of seniors presenting with non-urgent issues is decreasing

People presenting at D H & Q II EDs



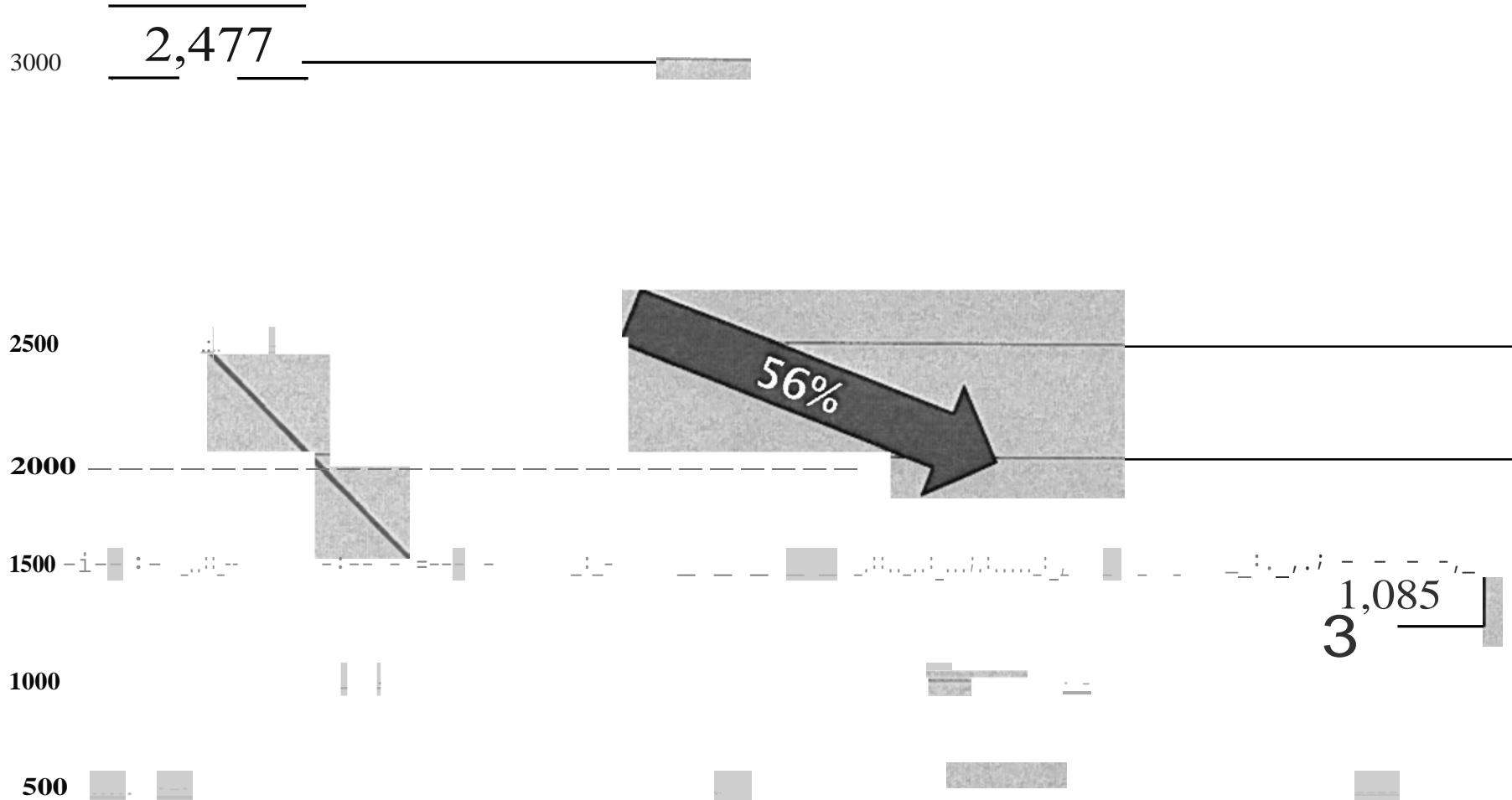
Number of Non-Senior and Senior Non-urgent patients at QEII & DGH ED



Ce tral Zone

Number of LTC Beds	#RCF Beds	%	#NH Beds	%	Total Beds	%
Western	236	26%	1,762	26%	1,998	26%
Northern	308	33%	1,239	17%	1,547	19%
Eastern	161	17%	1,600	23%	1,761	23%
Central	222	24%	2,322	34%	2,544	32%
Total	927	100%	6,923	100%	7,850	100%

Number of People Waiting for Initial LTC Placement



0

1

March 6/15

April 6/16

July 6/16

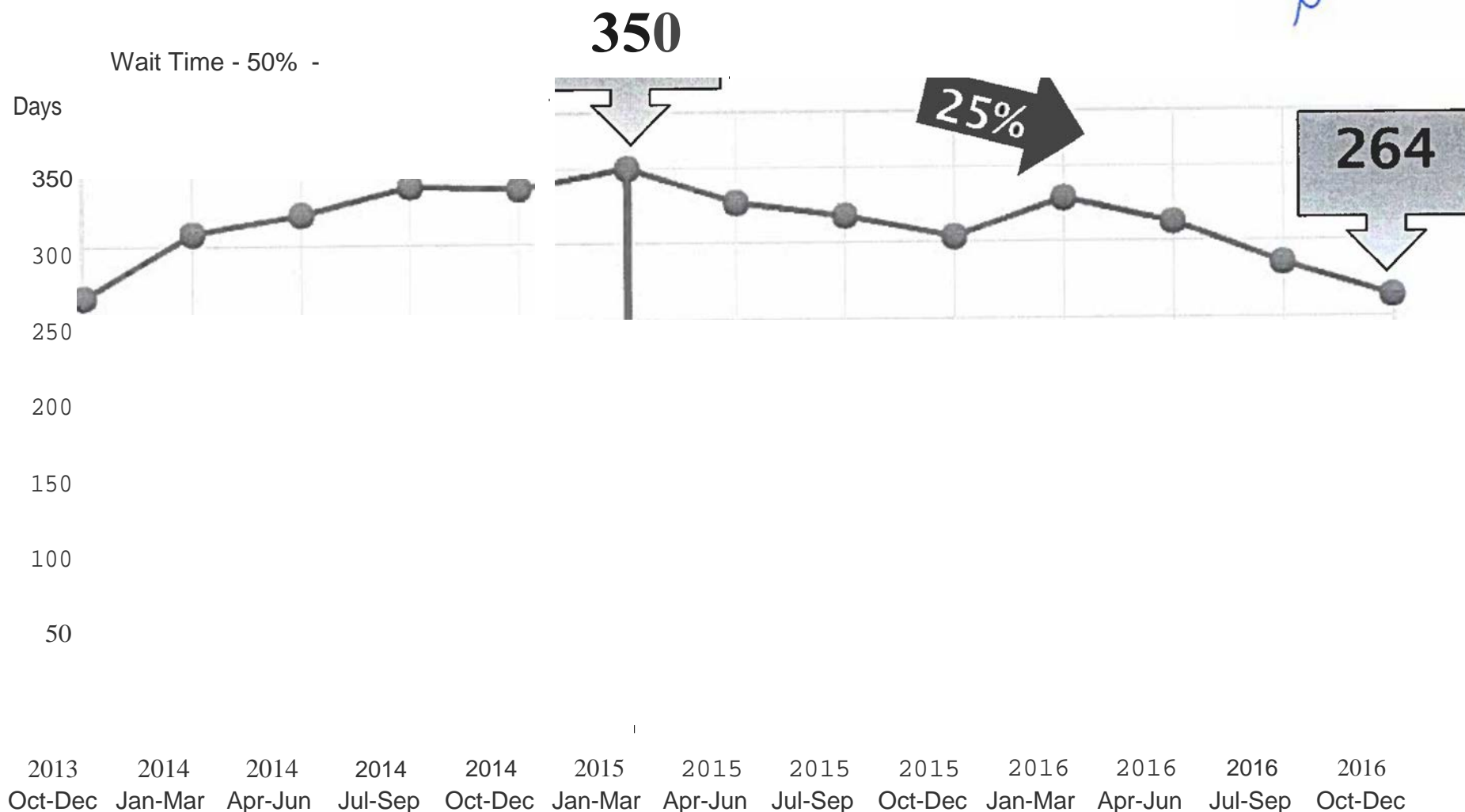
Oct **5/16**

Jan 4/17

April 19/17

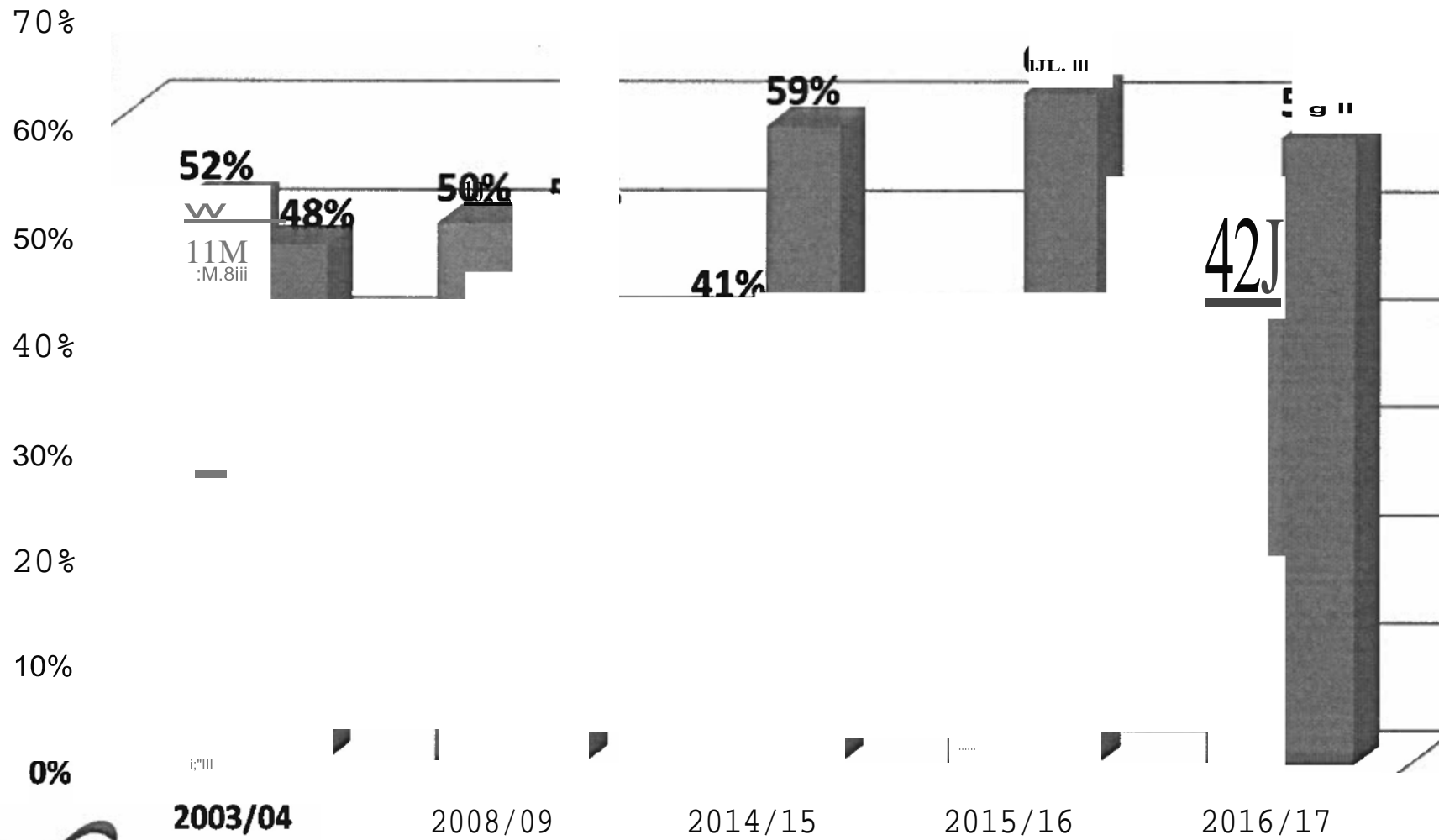
Nursing Home Median Wait Times

People waiting less time.

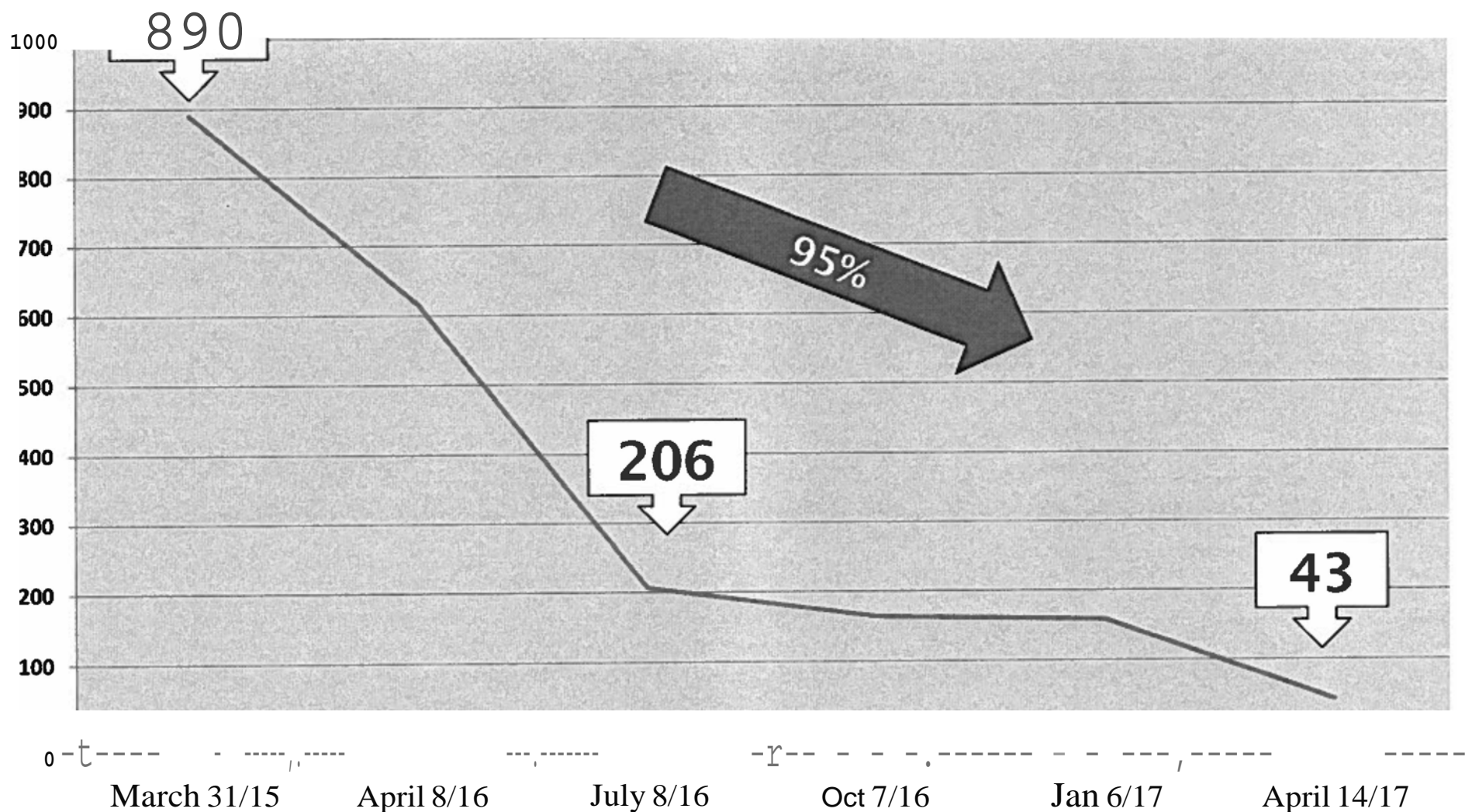




Location At Time of Nursing Home Placement



Number of People Waiting for Home Support



Home Care

	Home Support	Home Nursing	Home HS Waiting	Home HS Waiting	Home care	Home clients
Hours	visits	# of clients	# of hours	clientsA*	programB	
(April - Sept)	(April - Sept)A	(Feb 19, 2016)	(Feb 19, 2016)	(April - Sept)	*+ (Dec 2015)	

Western	339,328	82,000	314	1,552	6,735	917
Northern	294,839	127,235	64	1,055	6,103	393
Eastern	338,097	126,585	87	266	5,036	580

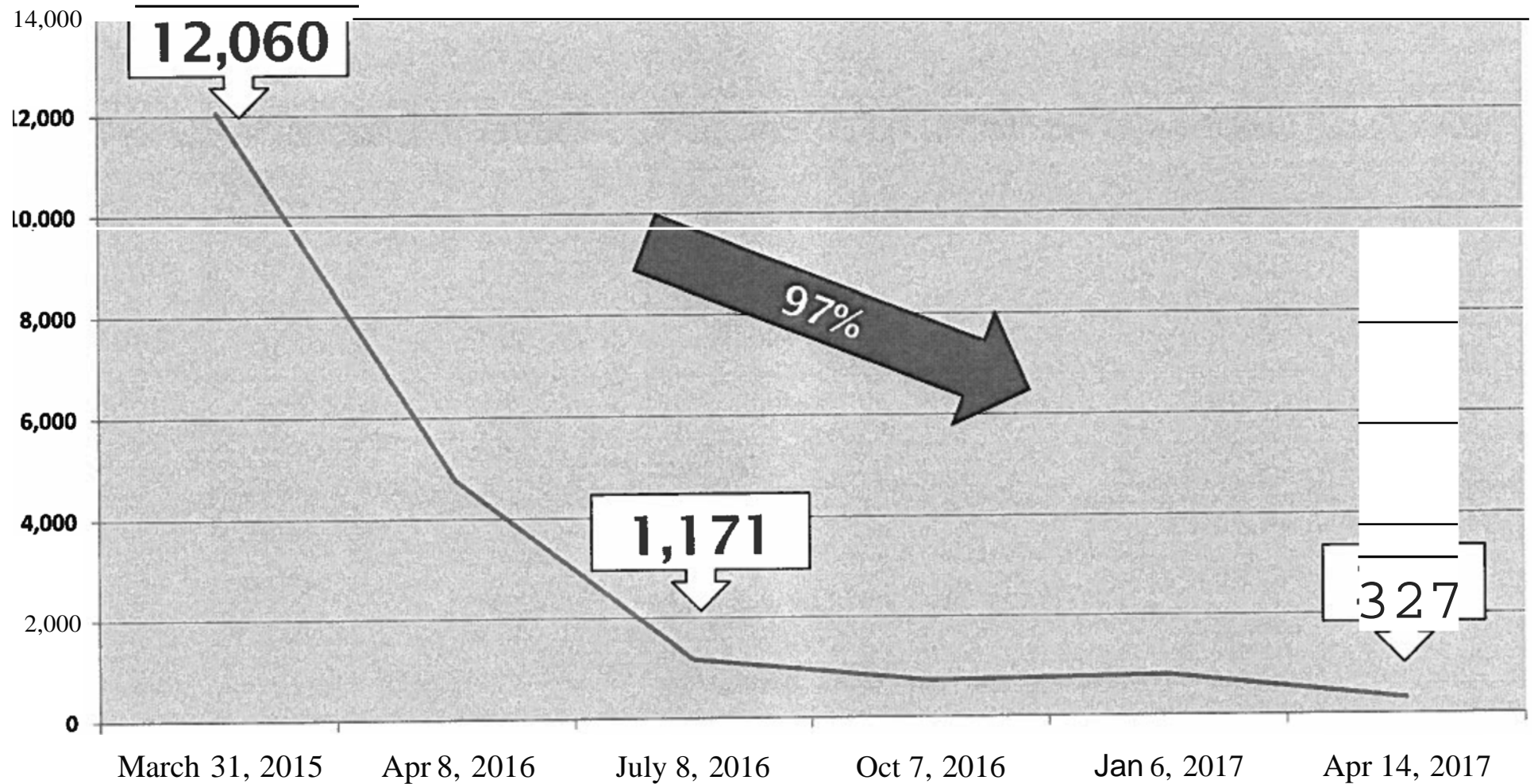
		161,203	163	1,13	\$9	1,146
Total	1,550,276	497,027	628	4,003	26,470	3036

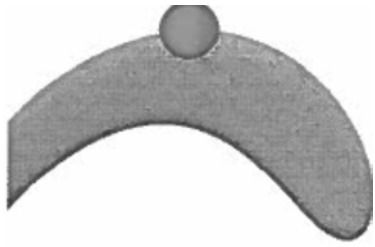
" doesn't include NSHA nursing visits

*over estimation as some clients would be receiving both or multiple other programs

+ other programs include SMC, Supportive, CGB, PAAP

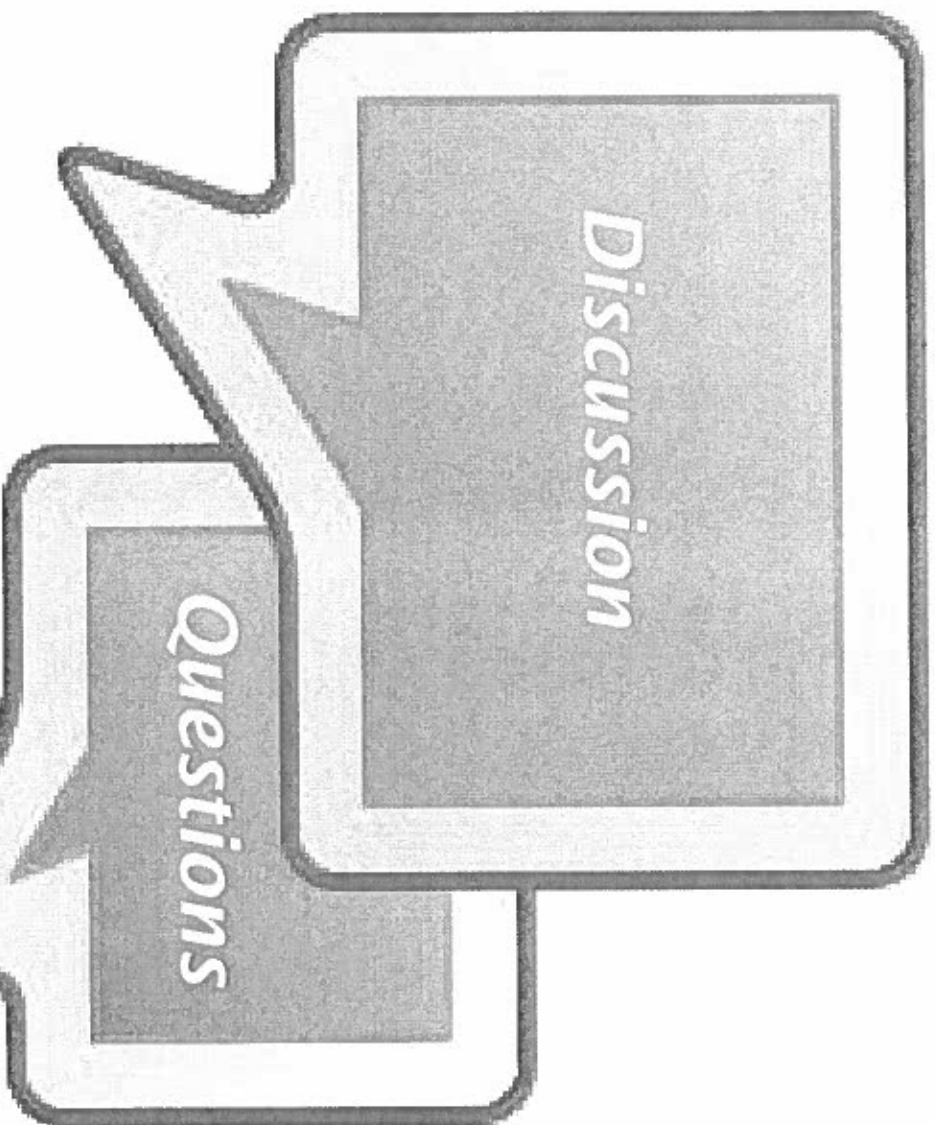
Home Support Waits Reduced Hours





Strategic Directions

- 1. Continuing Care Strategy (Lead DHW)**
- 2. Home First & New Case Management Model**
 - ▶ **CPSI & CHCA Safety Initiative**
 - ▶ **CFHI EXTRA Fellowship**
- 3. New Long Term Care Placement Policy (Phase 2)**
- 4. Contract Management**
- 5. Integration across health system**
 - ▶ **Primary Health Care**
 - ▶ **Mental Health**
 - ▶ **Acute Care**
 - ▶ **Rehabilitation**



CODE CRITICAL – STATUS OF RECOMMENDATIONS

The Working Committee's terms of reference required that it conduct a review of the status of the recommendations made under Code Critical. That review is contained in this appendix. It should be noted that many of these recommendations are repeated in the Working Committee's report for consideration.

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.

Status: **Underway**

Comments and Recommended Action

- NSHA is nearing completion of the review. Brian Butt will bring a draft of that review to the working group for consideration.

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.

Status: **Underway**

Comments and Recommended Action

- In the post-amalgamation health care system, NSHA acknowledges a successor to the Strategic Indicators Report (SIR) needs to be published in a public forum.
- The working group encourages authors of the successor to the SIR to include, but not be limited to, the following information in any future report:
 - How many times ~~Code Census is called~~ **the criteria for Code Census is met on a daily and monthly basis (> 8 admitted patients & >148 NEDOCs score).**
 - How many patients were placed above census on in-patient floors and where those patients were kept (ie, in hallways, family waiting rooms or overcapacity in private and semi-private rooms).
 - How many ALC and LTC patients are in ~~Halifax Infirmary~~ **QEII** 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 ambulances wait at the Emergency Department to offload patients because of overcrowding in the ED.
 - ~~How many surgeries are cancelled monthly.~~
 - Data associated with Recommendation #4 (updated triage-to-admission wait time data published on its website and reports each month on steps it [NSHA] is taking to reduce those times in order to meet its stated goal of eight-hours).

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.

Status: **Unaddressed**

Comments and Recommended Action

- The Department of Health and Wellness has not performed or committed to perform a review of this nature.
- Data captured for the working group show patient-per-day levels continuing to grow.
- NSGEU maintains their assertion a review of this nature is necessary for future planning.

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.

Status: **Underway**

Comments and Recommended Action

- See comments under Recommendation #2

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.

Status: **Unaddressed**

Comments and Recommended Action

- The NSHA has not committed to perform an automatic review of this nature.
- (For discussion) The Working Committee recommends the NSHA adopt this recommendation in an effort to alleviate pressure on the ED and inpatient LOS times. The Working Committee discussed, without conclusion, whether four months was too long to wait before conducting an automatic review.

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

Status: **Unaddressed**

Comments and Recommended Action

- Data captured for the working group indicates there are consistently “Available Rooms” ready to receive 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.

Status: **Unaddressed**

Comments and Recommended Action

- The NSHA has not indicated they have reached or attempted to reach a new agreement with Veterans Affairs as outlined above.

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.

Status: **Some action taken, further discussion required**

Comments and Recommended Action

- Manager on 4.1 held discussions with PEI Health officials following the release of Code Critical report. Staff report improvement and greater accountability when returning PEI patients to their home province.
- Staff report that on the week of October 16 there were between six and eight patients from PEI on 4.1. And PEI patients can have stays that extend from 2-3 weeks.

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.

Status: **Some Action, Further Discussion required**

- See comments under Recommendation #8

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.

Status: **Unaddressed**

Comments and Recommended Action

- See comments under Recommendation #8

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.

Status: **Unaddressed**

Comments and Recommended Action

- Neither the NSHA or DHW have indicated they are willing to explore or reconsider the role of the

Cobequid ED in an aim to help alleviate pressure in the HI ED and in-patient floors.

- Data captured for the working group indicates Cobequid patients are often discharged and/or transferred after midnight.
- Cobequid ED registrations continue to climb.

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.

Status: **Unaddressed**

Comments and Recommended Action

- Since NSGEU released Code Critical, the NSHA has not indicated assessments are now being done each evening to determine which nearby Emergency Department is best able to deal with Cobequid patients at close.

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.

Status: **Some Action Taken**

- NSHA has reviewed EHS offload procedures
- NSHA is reviewing the processes of care and use of ED examination rooms
- NSHA is expanding the use of standard order sets and triage-driven protocols, although this is currently on-hold awaiting provincial government approval (FACT CHECK)
- NSHA met with ED physicians to identify options to better utilize PODS one and five.

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.

Status: **Some Action Taken**

Comments and Recommended Action

- NSHA conducted a review and determined there was no additional capacity for expansion of RAU space but it did add two beds in the RAU to assist with consult and admissions
- NSHA has not expanded the RAU hours
- (For discussion) NSGEU urges the Working Committee to adopt the recommendation so that consideration may be given to expanding the hours of operation for the RAU

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.

Status: **Unaddressed**

- (For discussion) The NSHA has not indicated they are willing to increase the discharge planning capacity at the HI ED by increasing the number of discharge planning staff and expanding their hours.

Recommendation; the Working Committee urges the NSHA to adopt recommendation #4 in the Code Critical report. That recommendation would allow NSHA to track the key measure of 90th percentile wait from triage to admission and to outline continued strategies to address the problem.

Recommendation: the NSHA gather and review accurate consult times to ensure physicians are achieving the most efficient admission and discharge times possible.

Recommendation: front-line staff, including physicians, should be educated about the effect of establishing family expectations for future care for ALC patients and should try to avoid doing this.

Recommendation: the Committee urges the NSHA to consider recommendation #5 from the Code Critical report. The Committee did question whether a four-month stay for an ALC patient was too long before it triggered an automatic review.

Recommendation: The Committee supports recommendations #6 and #7 in the Code Critical report. Those recommendations are:

New Recommendation: the Province of Nova Scotia should assist in creating HI ED capacity by providing additional funding to the NSHA to offset the costs for floors who must transfer patients to the VMB to create space.

New Recommendation: The NSHA should review whether to place appropriate ALC patients at the Simpson Landing Community Living site. Such placements could be used to relieve pressure on in-patient floors during high volume months at the HI ED, including during flu season.

Recommendation: the Working Committee endorses recommendations #8 and #9 in the Code Critical report and urges the NSHA to continue to examine ways to improve the repatriation of PEI patients.

New Recommendation: NSHA should review the extent to which pre-surgery admissions from home hospitals to the HI take place before they are necessary.

Recommendation: NSHA must work with staff to ensure they understand the importance of responding as quickly as possible to every admission request from the ED.

Recommendation: NSHA provide the Working Committee draft changes to its overcapacity policy before they are final so that the Committee may review the changes and provide feedback.

Recommendation: The Working Committee endorse recommendation #2 on accountability in the Code Critical report by publishing data related to the HI ED overcrowding. That recommendation, which was revised slightly to address current practices at NSH, reads:

Recommendation: NSHA and NSGEU lobby the province for an expansion of the (Name) program so that it meets the current demand. This will shorten waits for seniors and create capacity in both the ED and in-patient floors.

Recommendation: The Working Committee endorses recommendation # 3 in Code Critical and it asks Ms. Sullivan and Mr. MacLean to write to the Minister of Health and Wellness urging his department to take immediate action to undertake a comprehensive predictive study on the ability and capacity of the HI and HI ED to manage Nova Scotia's aging population and health determinants into the future.

Recommendation: NSHA should consider other possible changes to the ED operations to increase capacity including implementing recommendations #s 13, 14 and 15 in the Code Critical report.

Recommendation: NSHA should explore continued expansion of the scope of practice of health professionals including allowing paramedics to order X-rays in appropriate situations.

The Committee recommends the NSHA and the NSGEU advocate for the province to make greater acute care capacity a priority within the Central Zone of the NSHA.

Recommendation: NSHA review and consider recommendations #11 and #12 in the Code Critical report. The Committee urges the NSHA and the Province to clear any unnecessary hurdles that stand in the way of licencing out-of-province nurses in order that recruitment can occur in as timely a fashion as possible.

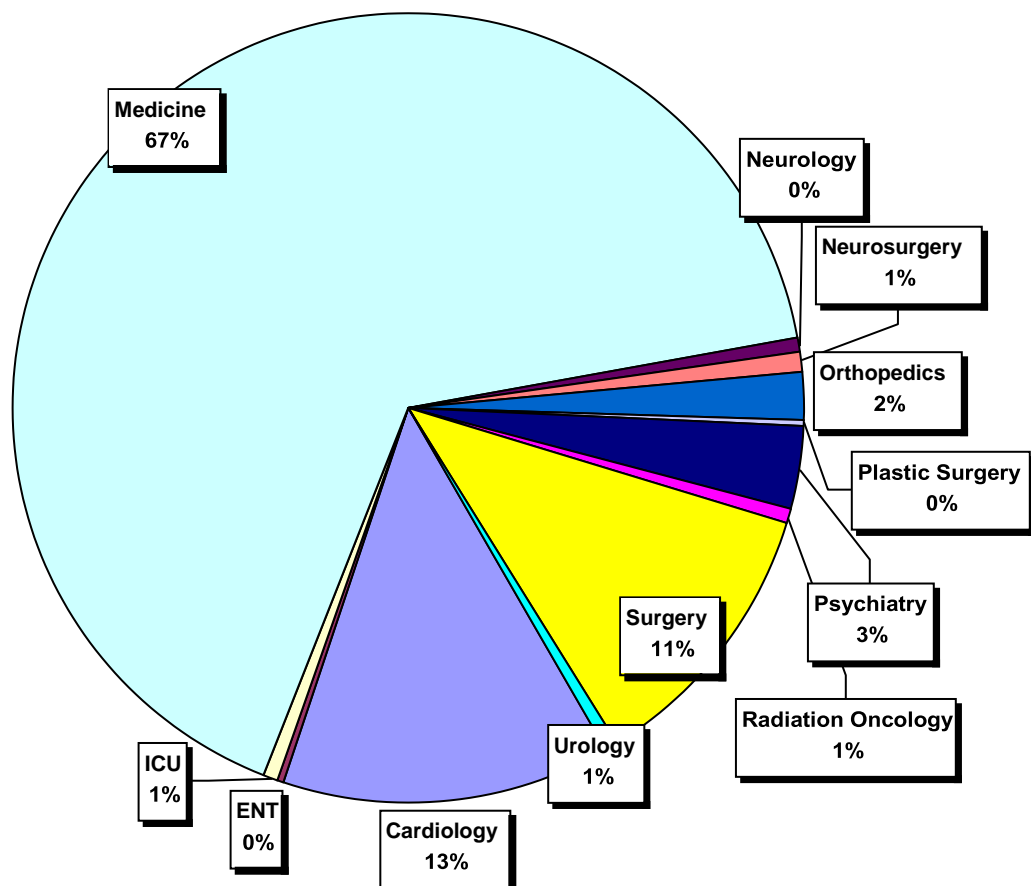
QEI Emergency Department Information System (EDIS)

Admitted Patient Total Stay in ED Summary (Time Triage to Time Depart ED for Inpatient Bed)

Reporting Period from: Sep 01, 2017 to: Sep 30, 2017

Service	Service Admits (% Total Admits)	Total ED Stay > 8 hr (% > 8 hr)	Total ED Stay > 24 hr (% > 24 hr)	Avg Total ED Stay (hr)	90%ile Total ED Stay (hr)
Cardiology	99 (11.9%)	67 (67.7%)	22 (22.2%)	14.8	31.6
ENT	10 (1.2%)	2 (20.0%)	0 (0.0%)	7.7	21.2
ICU	20 (2.4%)	3 (15.0%)	1 (5.0%)	6.2	26.2
Medicine	252 (30.3%)	229 (90.9%)	103 (40.9%)	23.5	45.4
Neurology	20 (2.4%)	9 (45.0%)	0 (0.0%)	7.7	13.4
Neurosurgery	47 (5.6%)	13 (27.7%)	0 (0.0%)	6.3	15.3
Orthopedics	103 (12.4%)	27 (26.2%)	2 (1.9%)	7.0	17.1
Plastic Surgery	6 (0.7%)	3 (50.0%)	0 (0.0%)	9.2	19.9
Psychiatry	54 (6.5%)	16 (29.6%)	4 (7.4%)	9.2	39.6
Radiation Oncology	5 (0.6%)	4 (80.0%)	1 (20.0%)	14.0	26.1
Surgery	197 (23.6%)	107 (54.3%)	6 (3.0%)	9.9	21.2
Urology	20 (2.4%)	6 (30.0%)	0 (0.0%)	7.9	21.1
Summary	833	486 (58.3%)	139 (16.7%)	10.3	24.8

ED Boarding = 5961 bed hrs/month (Beyond 8 Hours)



Boarding: Total Stay in ED Beyond 8 hours

All Patients Consulted (including multiple consults and CDU Patients)

QEII EDIS System

Reporting Jan 1, 2013 to Sep 30, 2017

CTAS	Age Group	LOS (hrs)	Pts
1	16-25	0-10	588
1	16-25	10-24	64
1	16-25	24-48	5
1	16-25	48-72	1
1	26-50	0-10	962
1	26-50	10-24	158
1	26-50	24-48	35
1	26-50	48-72	4
1	51-65	0-10	1004
1	51-65	10-24	198
1	51-65	24-48	61
1	51-65	48-72	10
1	51-65	72-96	1
1	65+	0-10	1339
1	65+	10-24	315
1	65+	24-48	93
1	65+	48-72	12
1	65+	72-96	2
2	16-25	0-10	8062
2	16-25	10-24	1077
2	16-25	24-48	217
2	16-25	48-72	26
2	16-25	72-96	1
2	16-25	96+	2
2	26-50	0-10	18110
2	26-50	10-24	3209
2	26-50	24-48	634
2	26-50	48-72	73
2	26-50	72-96	16
2	26-50	96+	4
2	51-65	0-10	14795
2	51-65	10-24	3664
2	51-65	24-48	909
2	51-65	48-72	127
2	51-65	72-96	13
2	51-65	96+	5
2	65+	0-10	15672
2	65+	10-24	6019
2	65+	24-48	1901
2	65+	48-72	216
2	65+	72-96	28
2	65+	96+	24
3	16-25	0-10	25624
3	16-25	10-24	1534

3	16-25	24-48	137
3	16-25	48-72	12
3	16-25	72-96	1
3	26-50	0-10	48356
3	26-50	10-24	4350
3	26-50	24-48	467
3	26-50	48-72	52
3	26-50	72-96	7
3	26-50	96+	4
3	51-65	0-10	27928
3	51-65	10-24	4105
3	51-65	24-48	728
3	51-65	48-72	87
3	51-65	72-96	11
3	51-65	96+	3
3	65+	0-10	31174
3	65+	10-24	7769
3	65+	24-48	2186
3	65+	48-72	251
3	65+	72-96	60
3	65+	96+	57
4	16-25	0-10	21232
4	16-25	10-24	186
4	16-25	24-48	12
4	16-25	72-96	1
4	16-25	96+	1
4	26-50	0-10	31465
4	26-50	10-24	384
4	26-50	24-48	34
4	26-50	48-72	5
4	26-50	96+	2
4	51-65	0-10	16007
4	51-65	10-24	263
4	51-65	24-48	28
4	51-65	48-72	5
4	51-65	72-96	3
4	51-65	96+	4
4	65+	0-10	9761
4	65+	10-24	326
4	65+	24-48	90
4	65+	48-72	18
4	65+	72-96	3
4	65+	96+	8
5	16-25	0-10	2989
5	16-25	10-24	19
5	16-25	24-48	1
5	26-50	0-10	4492

5	26-50	10-24	40
5	26-50	24-48	5
5	26-50	48-72	1
5	51-65	0-10	1982
5	51-65	10-24	23
5	51-65	24-48	2
5	65+	0-10	1011
5	65+	10-24	16
5	65+	24-48	3
5	65+	48-72	2
5	65+	72-96	1

QEI	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	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
Monthly volume (registrations)	6274	5690	6157	5966	6198	6015	6365	6496	6294	6516	5902	6223	6491	5784	6428	6132	6348	6103	6743	6576	6505
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	24.9	25.1	20.6	26.9	21.8	22.9	20.5	24.8
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	46.4	44.1	36	45.7	36.7	36.8	47	45.4
Boarded hours (Bed hours that exceed 8 hours) - hours	4762	4064	5454	6932	5584	6376	3651	6407	6038	6369	4677	5270	6838	6581	6199	4891	6760	5796	5103	5354	5961
Code census calls	9	6	14	20	14	16	5	11	14	20	6	11	23	16	14	7	5	0	0	2	0
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	208.2	192.3	200	144.6	128.4	141.5	133	174	203
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	69.3	70.7	51.9	47.6	50.5	49.5	56.2	74.20