
Chapter 2: Management of Nova Scotia's Hospital System Capacity



Why we did this audit:

- Department of Health and Wellness spends around \$4 billion of Nova Scotia's total \$10 billion annual budget
- Infrastructure challenges in Nova Scotia hospitals have existed for many years
- Movement of patients in and through hospitals impacts health care costs
- Nova Scotians expect quality health care

Overall conclusions:

- The Department and the Health Authority must deliver health care more efficiently and effectively to Nova Scotians
- Health care staff often have to work around infrastructure challenges to meet patient needs

What we found in our audit:

- Historical ways of providing health care to Nova Scotians are not sustainable; changes are required.
- The health system needs to focus on providing the right care, in the right place, at the right time, to those in need.
- Type and location of health services for Nova Scotians should be determined and communicated to citizens.
- Some new programs are successful in finding new ways to care for Nova Scotians.
- Nova Scotia Health Authority has 41 hospitals, some within 30 minutes of each other; efficiency of care needs to be assessed.
- At least \$85 million is needed just to meet urgent infrastructure needs.
- Some hospitals in need of major repairs are located close to other hospitals.
- A solution to the urgent challenges with the VG site must be found soon.
- Hospital patients may experience delays moving from the emergency department to an inpatient hospital bed or at the time of discharge from hospital.



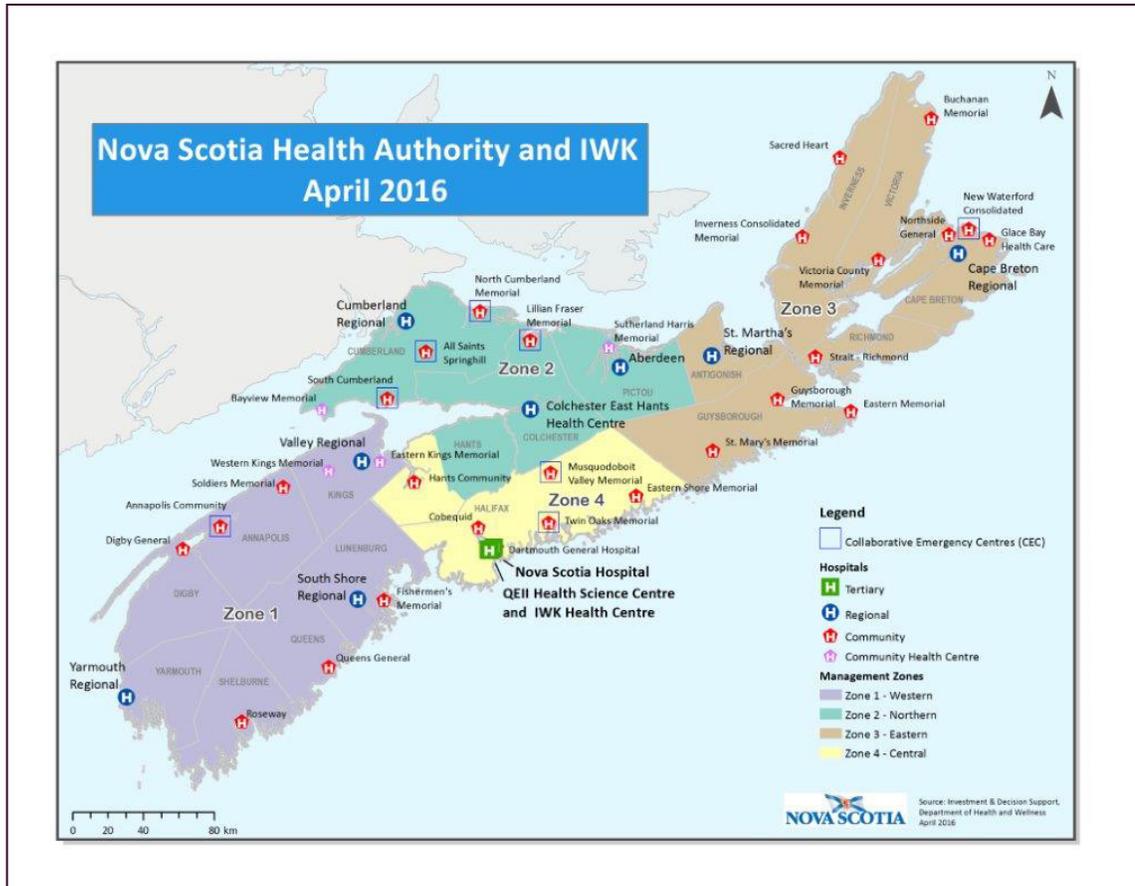
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* *Both Health and Wellness and the Health Authority agreed to implement all recommendations.*

2 Management of Nova Scotia's Hospital System Capacity

Background

- 2.1 The Department of Health and Wellness provides leadership, strategic direction, and sets standards for the health system, as well as funding the delivery of health services.
- 2.2 The Nova Scotia Health Authority was established on April 1, 2015 through a merger of the previous nine district health authorities. The new Health Authority is responsible for governing, managing, and providing health services, as well as engaging citizens in the health care system.
- 2.3 There are four management zones in the province, each with local leadership teams reporting to Health Authority executive management. Each zone includes a number of community health boards responsible for communicating with the local community to help deal with local concerns.
- 2.4 The Nova Scotia Health Authority is responsible for 41 hospitals and health care centres, serving Nova Scotia's population of approximately 921,000 people. The map on the following page shows the location of hospitals and Health Authority management zones. There are:
 - nine regional hospitals;
 - QEII Health Sciences Centre – provides specialized services for Atlantic Canada; and
 - 31 other facilities, including collaborative emergency centres.
- 2.5 The IWK Health Centre is a separate entity which does not fall under the Nova Scotia Health Authority.



2.6 The Department's 2015-16 budget was \$4 billion; \$1.5 billion (38%) relates to funding the Nova Scotia Health Authority. In 2014-15, Health and Wellness' budget was \$4 billion; \$1.5 billion (38%) was for funding the nine district health authorities.

Audit Objectives and Scope

2.7 In spring 2016, we completed a performance audit at the Department of Health and Wellness and the Nova Scotia Health Authority. The IWK Health Centre was not included in our audit. The purpose of the audit was to determine if the Department and the Health Authority have adequate processes to ensure the Province's hospital system capacity is managed in a manner that promotes efficiency and effectiveness. We conducted the audit in accordance with sections 18 and 21 of the Auditor General Act and auditing standards of the Chartered Professional Accountants of Canada.

2.8 The objectives of the audit were to assess whether processes at the Department of Health and Wellness and the Nova Scotia Health Authority were adequate to:



- oversee the location, usage and operations of emergency departments across the province;
 - manage and regularly review the location, usage, and operation of emergency departments across the province; and
 - manage patient flow and reduce wait times and/or the number of beds required across the system.
- 2.9 Certain audit criteria were adapted from Accreditation Canada's *Standards for Public Health Services* (Qmentum Program 2010). Additional criteria were developed specifically for this engagement by our Office. The criteria were discussed with, and accepted as appropriate by, senior management at Health and Wellness and the Health Authority.
- 2.10 Our audit approach consisted of visiting 19 hospitals throughout the four management zones. We selected the QEII, each of the nine regional hospitals, and one community hospital supporting each regional hospital. We received a tour of each facility and spoke with personnel about the infrastructure. These personnel were often responsible for infrastructure in additional facilities in the area, so we also obtained information on those other facilities. We conducted interviews regarding movement of patients through the hospital, including detailed discussions on emergency departments. We also conducted interviews with senior management and supporting staff at both the Department and the Health Authority. We examined supporting documentation and data as applicable. Our audit period covered April 1, 2013 to September 30, 2015. We examined documentation outside of that period as necessary.
- 2.11 We visited the following 19 hospitals.

Central Management Zone	Eastern Management Zone
Dartmouth General	Cape Breton Regional
Musquodoboit Valley Memorial	New Waterford Consolidated
QEII Health Sciences Centre	St. Martha's Regional
	St. Mary's Memorial

Northern Management Zone	Western Management Zone
Aberdeen Regional	Fishermen's Memorial
Colchester East Hants Health Centre	Roseway
Cumberland Regional Health Care Centre	Soldiers' Memorial
Lillian Fraser Memorial	South Shore Regional
South Cumberland Community Care Centre	Valley Regional
Sutherland Harris Memorial	Yarmouth Regional



Significant Audit Observations

Hospital System Sustainability

Conclusions and summary of observations

The historical approach to health care delivery, with a heavy focus on hospital-based care is not sustainable given the Province's fiscal situation. Costs and demand for services continue to increase. Some changes have already occurred, including the use of collaborative emergency centres and programs such as Home First, but more work is required to create a system that can continue to provide health care to Nova Scotians into the future. As changes take place, full and clear engagement and communication will be necessary to help ensure all stakeholders understand what is happening and why it is necessary.

► **Change is required in delivery of health services; historical approaches are not sustainable**

- 2.12 *Change is needed* – Our audit found change is needed and identified examples in which previous changes have led to successes. A new approach, with less emphasis on hospitals and more focus on providing the right type of care in the right location, is required.
- 2.13 Nova Scotians want timely access to the health services they require. The Department, along with the Health Authority, are responsible for defining what services can be expected, in which locations, and how quickly people can expect to receive them.
- 2.14 Health services planning is something that has been started a number of times in the past 20 years. It is important that health system leadership ensure planning is completed in a timely manner and results in new approaches and specific outcomes to help guide the system in a new and sustainable direction.
- 2.15 *Clear and timely communication* – It is important the Department and the Health Authority ensure complete and clear communication occurs as stakeholders, including the public, need to understand how and why changes will be implemented, what services will be available, and the timeframes within which they can expect to receive those services. A willingness to implement and accept change in health care, by both health care providers and the public, will allow challenges within the health system to be better addressed now and into the future.
- 2.16 Much of health care delivery in Nova Scotia has traditionally been provided through treatment and care in hospitals. The Province's hospital infrastructure – buildings, equipment, and parking lots – is aging, and



funding is not sufficient for repair and replacement needs. Those working in health care may do so in a difficult environment, which may create challenges to providing high quality patient care.

- 2.17 Some services are still provided in hospitals when they could be provided in other settings, such as outpatient clinics. Many patients face difficulty or delay in receiving the care they require. Others spend extended time in hospital beds when more appropriate care may be better provided elsewhere, often at a lower cost. Together, these issues indicate the current approach is no longer good enough and a new approach is needed.

► **New methods of service delivery are having success in caring for patients**

- 2.18 *Collaborative emergency centres* – Changes are already occurring and collaborative emergency centres are an example. These centres provide a model of care that incorporates access to emergency care and primary care in the same setting. The Department of Health and Wellness hired a consultant to review this model. The resulting report found the new model has been successful in rural communities, providing more predictable access to services, while reducing unexpected emergency department closures. This is consistent with what hospital staff and management told us during our audit.
- 2.19 Predictable access to care is significant to patients, particularly in communities where it may be difficult to recruit doctors and other health care providers. Low numbers of doctors can lead to emergency department closures. In areas where the collaborative emergency centre model has been implemented, the frequency of unexpected closures has been reduced, meaning residents have more predictable access to emergency health care.
- 2.20 This model has also provided better access to primary care as the doctor and other health care providers function as a primary health care team. This is important as multiple facilities we visited indicated recruitment and scheduling is an ongoing challenge. Traditional primary care with all residents having a family doctor may not be feasible moving forward and alternatives such as collaborative centres will become more necessary.
- 2.21 *Home First program* – Patients remaining in hospital once they are medically ready to be discharged can be a significant issue for appropriate patient movement in a hospital. This can happen if there is a lack of necessary home supports in the community. The Home First program considers many ways to get patients home, with appropriate supports, rather than remaining in hospital or being admitted to a long term care facility.
- 2.22 While this program has been implemented province-wide, we noted particular success in this area at Colchester East Hants Health Centre. Management



provided reports showing the percentage of long term care referrals coming from hospitals is going down, meaning more people are able to stay in their homes until they require long term care. While we did not audit these reports, the trend shows that Colchester East Hants Health Centre's efforts have had a positive result.

Colchester East Hants Health Centre – Long Term Care Referrals			
Placement From	2015-16	2014-15	2013-14
Community	103 (84%)	111 (75%)	100 (72%)
Hospital	19 (16%)	37 (25%)	38 (28%)
Total	122	148	138

2.23 Colchester staff told us the success can be linked to shifting the culture of health care professionals, along with patients and their families, allowing them to recognize and accept all possible home care options, rather than staying in the hospital. They indicated the following helped lead to the improvement:

- management support;
- different groups working together within the facility;
- involving doctors;
- discussing barriers to discharging patients back home during rounds;
- a mobility enhancement program; and
- establishing a team to help patients transition from hospital to home.

2.24 *Care by Design* – Emergency department personnel told us nursing home patients in need of medical care are often transferred via ambulance, regardless of whether the situation is an emergency or not. This is not an effective use of resources.

2.25 The central zone has implemented a program called Care by Design. It regularly schedules health care team visits to nursing homes. The team includes physicians, nurses, and paramedics to provide coordinated care. Central zone hospital staff told us that, in some instances, the program allowed for a 30 to 40 percent reduction in patient transfers from nursing homes to emergency departments. This is a good example of making changes that result in a more effective use of health services.

**Recommendation 2.1**

The Department of Health and Wellness and the Nova Scotia Health Authority should tell Nova Scotians what they should expect from their health care system. This includes determining and communicating which services will be delivered in hospital and in other locations, and what level of service to expect in communities across the province.

***Department of Health and Wellness Response:** DHW agrees with this recommendation and intends to implement. This process will include engaging communities and a variety of stakeholders to get input into their health needs to better develop systems and services of quality, sustainable, patient-centered care to best meet the needs of our citizens and communities. This engagement will take a variety of forms (including public consultations, retrieving information through electronic means, posting updates on websites) to better inform planning for health services. NSHA and the IWK will lead the engagement work supported by the DHW.*

***Nova Scotia Health Authority Response:** Nova Scotia Health Authority agrees with this recommendation and intends to implement. The amalgamation of nine former district health authorities has created the foundation on which to plan provincially based on population needs while taking into consideration best practices, standards of service delivery and the context of local communities. Engagement of Nova Scotians is a key priority in this work.*

Infrastructure**Conclusions and summary of observations**

Annual capital funding through the Department of Health and Wellness and the Nova Scotia Health Authority is not enough to complete urgent repairs on hospitals throughout the province. Staff indicated some hospitals are generally in good shape, although more attention to maintenance is required. Other hospitals need significant repair or replacement; in some situations, there are other hospitals which are below capacity close to these facilities. The Health Authority needs to create a plan that addresses location, usage, and operation of emergency departments, hospitals, and other health services to ensure efficient use of limited resources.

► Funding has not met the infrastructure needs of all hospitals in the province

2.26 The examples in this section are based on what management told us during our visits to hospitals. It is not meant to be a complete list of issues in the facilities we visited; there may also be other significant issues in the hospitals we did not visit. It is also important to note that while management acknowledges these deficiencies exist, we are not commenting on whether they must be corrected immediately or whether they are the highest priority



items. Instead, as noted in the recommendations in this chapter, the system should be reviewed and decisions made on infrastructure needs and overall service delivery models considering the best interests of the entire province.

2.27 *Condition of facilities* – The Nova Scotia Health Authority has 41 hospitals and health care centres, some of which consist of multiple buildings, including many older buildings. Staff at six facilities had specific concerns about some of their buildings. Management at 13 facilities told us the buildings were generally in good shape, but preventative maintenance is needed as infrastructure continues to age. Building and maintenance staff are working with the resources available to retrofit older systems and patch problems as needed. However, if preventative projects are not adequately funded, the cost of needed maintenance may continue to grow and there could be more significant issues in the future. Examples of the more significant concerns noted around preventative maintenance include the following.

- Elevators at the South Shore Regional Hospital need work which has not been completed because elevators are required on a daily basis and there are not enough backups.
- South Shore Regional and Dartmouth General hospitals have electrical systems which cannot be serviced without shutting off electricity to the hospital.
- Dartmouth General had a leaky roof which caused damage to a newly-renovated space on the floor below. Additional work is still needed to prevent further leaks.

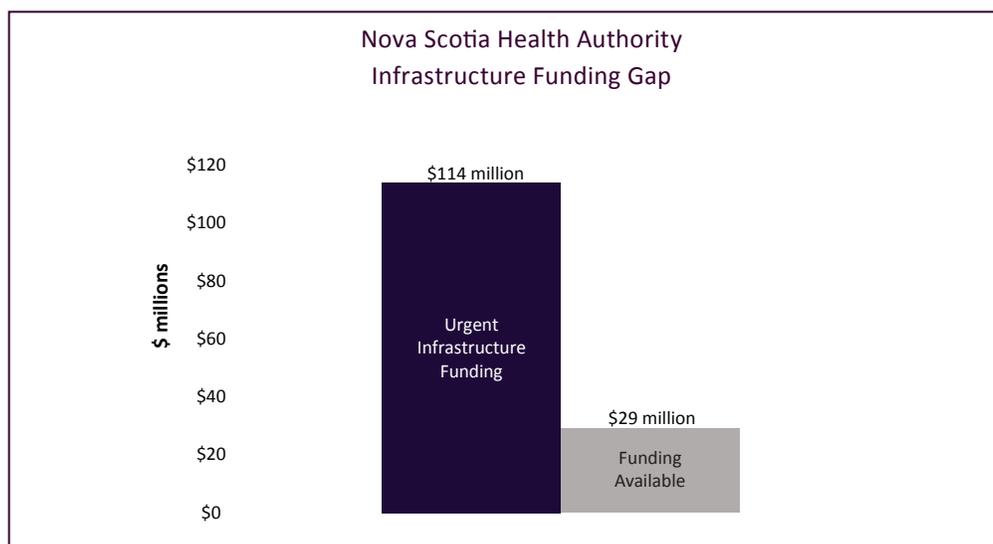
2.28 Completing maintenance and upgrades on hospital buildings poses unique challenges as facilities operate 24/7. Facilities management staff also noted the need to consider infection prevention and control, and patient safety matters, as well as negative impact on patient access which can result from temporarily closing a unit or service in a facility that is operating at capacity. Management told us these issues represent 20 to 30 percent of project costs. This is an example of how offering services in a hospital setting can be more costly than doing so elsewhere in the community.

2.29 Some of the more concerning issues facilities management identified were as follows.

- Brick work on Cape Breton Regional is coming loose due to mortar deterioration requiring steel beams be added to hold the bricks in place.
- New Waterford Consolidated and North Cumberland Memorial do not have sprinkler systems.
- A new automated lab installed at the VG site of the QEII is in a building with a risk of leaks from old pipes.



2.30 *Infrastructure funding* – Building and equipment projects are cost shared between the Department and the Health Authority; funding is allocated on a risk basis. Available funding is nowhere near enough to complete needed infrastructure repairs and maintenance. The following graph illustrates how large this gap is.



Source: Nova Scotia Health Authority (unaudited)

2.31 Health Authority management told us that 2015-16 urgent infrastructure requirements are approximately \$114 million, excluding day-to-day building maintenance and management needs. Available funding is roughly \$29 million for all infrastructure needs. The shortfall in funding for urgent infrastructure needs alone, without considering day-to-day needs, is \$85 million. When urgent infrastructure maintenance cannot be completed, infrastructure will continue to deteriorate.

► **Some hospitals needing major repairs are located very close to other hospitals**

2.32 *Proximity of facilities* – Through our discussions with hospital staff, a number of facilities were identified which are less than a 30-minute drive apart. In some instances, at least one of those facilities is in need of significant work – either replacement or major renovation. The large funding gap discussed above makes it clear that Nova Scotia's health system cannot reasonably sustain all of its current facilities. Those which are close together should be reviewed to determine the most efficient use of limited resources. The Department of Health and Wellness and the Health Authority need to work together with hospital management to determine whether certain services could be provided through alternative means, either in the community or at nearby hospitals.

2.33 The following are a few examples we were made aware of during our audit. We did not visit all facilities in the province, and there may be similar



situations that the Department and the Health Authority should address as well.

- 2.34 Staff told us that North Cumberland Memorial Hospital, constructed in the 1960s, has been identified as needing major infrastructure investment for almost a decade. Very few maintenance projects were approved for this facility during that time. The existing building is in very poor condition.
- 2.35 North Cumberland Memorial Hospital has four beds and, based on reports provided to our Office, it is operating with an average of two patients. This facility is located about 40 minutes from Cumberland Regional Health Care Centre and 30 minutes from Lillian Fraser Memorial Hospital, a 10-bed community hospital. According to Health Authority reports, both of these facilities have had occupancy rates at or below 80 percent for most of the last four years. It appears patients from North Cumberland Memorial could be admitted to either of the two nearby facilities if required.
- 2.36 There are three community hospitals – Northside General, New Waterford Consolidated, and Glace Bay – within 30 minutes of the Cape Breton Regional Hospital in Sydney. The data provided to us by hospital management indicates these four facilities experience occupancy rates ranging from 81 to 106 percent. Significant repairs are needed to three of the four facilities.
- 2.37 Staff noted that Northside General Hospital, the oldest of these three community facilities, does not have adequate heating and ventilation systems, and many other significant repairs are required. We were also told that New Waterford Consolidated, the second-oldest facility, requires electrical upgrades, a sprinkler system, and conversion of the 40-year-old boiler plant. A master renovation plan was completed for New Waterford Consolidated Hospital in 2013, with estimates ranging from \$9.5 to \$13 million. Staff also told us there are significant issues with the exterior brick work and heating system at the Cape Breton Regional Hospital.
- 2.38 Fishermen's Memorial Hospital is located 20 minutes from South Shore Regional Hospital. These two facilities work in partnership to provide different services to fit the needs of the community. Fishermen's Memorial Hospital is a community hospital that provides palliative care, addiction services, restorative care, a veterans unit, and care for patients waiting for long term care beds. South Shore Regional Hospital staff indicated there are issues with the size of their emergency department and they experience a high number of patients waiting for long term care. Management at both sites told us that the services offered at the community hospital take pressure off of the regional site.
- 2.39 While this appears to be a good example of finding different ways to use facilities that exist in close proximity to each other, many of the services



offered at Fishermen's Memorial could be offered appropriately, and more cost effectively, outside of a hospital facility. The costs of operating a hospital are greater than offering similar services elsewhere in the community. If the costs of maintaining Fishermen's Memorial increase, the Health Authority may face additional financial pressure and may require a new approach.

- 2.40 Given the maintenance needs, poor condition of certain facilities, varying occupancy rates, and proximity to other facilities, the Health Authority needs to assess the needs of all communities and the province as a whole, before it commits to replacing or significantly repairing any facility.

Recommendation 2.2

The Department of Health and Wellness and the Nova Scotia Health Authority should review hospitals located close to each other to assess whether this is the most efficient and effective approach to providing health care for Nova Scotians.

***Department of Health and Wellness Response:** DHW agrees with this recommendation and intends to implement. As part of planning for health services, this review will include looking at the types of services in different facilities and looking at the needs of our population. The Department's role in this work will be in line with our legislated mandate for setting strategic direction, policy and standards, and ensuring accountability for funding through measuring and monitoring system performance. Assessment of proposals for significant infrastructure funding will include reviewing issues of access, patient safety and quality, and cost effectiveness.*

***Nova Scotia Health Authority Response:** Nova Scotia Health Authority agrees with this recommendation and intends to implement. As we focus on the needs of the population, our work with communities will include how to ensure access to the range of services that help Nova Scotians be healthy and stay healthy and how we make best use of all our resources.*

► **There are significant issues with the Victoria General site that need to be addressed**

- 2.41 *Victoria General site* –The QEII is made up of 10 buildings located on two sites in Halifax. The age and condition of the buildings vary, with some having serious issues. Facility staff told us that a 2008 facility condition report recommended four buildings be replaced. Direct patient care is provided in two of these buildings – the Victoria building (built in 1948) and the Centennial building (built in 1967). Facility staff told us there are concerns with exterior cladding, heating and ventilation, plumbing, and electrical in both buildings. Serious issues with the Victoria and Centennial buildings, such as floods, legionella bacteria, and heating concerns, are well known in Nova Scotia.



- 2.42 The QEII is a tertiary care facility serving patients from across Atlantic Canada. In this role, the QEII treats some of the most vulnerable and sickest patients in the Atlantic region. Cancer care and organ transplant patients are treated in the Victoria building. Housing these patients in buildings with severe maintenance issues may cause challenges in providing health care.
- 2.43 Department management told us that planning for the VG project is well underway and they have started assessing which services could be offered in different settings; for example, having outpatient clinics outside of a hospital setting. Construction work has already begun at the Dartmouth General Hospital, with part of this work ultimately intended to allow the Health Authority to increase the number of beds and operating rooms in that facility so that more patients can be seen there in the future. Department management told us that the intent is to have services in appropriate locations and build a smaller, new facility. This project needs to be completed in a timely manner to ensure patients are receiving an appropriate standard of care.
- 2.44 While we acknowledge planning is underway, it is critical for the health of Nova Scotians that the Department and the Health Authority find a way to move this project forward quickly. Each subsequent flood or other infrastructure failure further erodes public confidence in the Province's health system and adds additional stress for staff and patients. If too much time goes by before a plan is completed and implemented, these facilities may not be fit for use before the services there are available elsewhere, either in existing facilities or in a new facility.

Recommendation 2.3

The Department of Health and Wellness and the Nova Scotia Health Authority should quickly determine how services at the VG site can be effectively provided through new or existing sites by preparing a detailed plan for how and where services will be offered and communicating this to Nova Scotians.

***Department of Health and Wellness Response:** DHW agrees with this recommendation and intends to implement. A plan with details and timelines was shared with Nova Scotians on April 21st. Planning will continue to be shared, as details are developed, through a variety of mechanisms including: <http://qe2redevelopment.ca/> ; a Facebook site, as well as stakeholder and public engagements over the next few years.*

***Nova Scotia Health Authority Response:** Nova Scotia Health Authority agrees with this recommendation and is in the process of implementing. Since the time of the audit, NSHA and government have released a multi-faceted and phased strategy to move services out of the VG site into new or existing sites. This initiative will see services relocated to the most clinically-appropriate locations while fully leveraging the existing infrastructure Nova Scotians have already invested in.*



The strategy includes the co-location of the most complex and specialized services at the Halifax Infirmary site of the QEII Health Sciences Centre. Operating room capacity will be moved from the VG site to the Halifax Infirmary, Dartmouth General and Hants County hospitals. Outpatient services will be moved to the Halifax Infirmary site and to the community as appropriate, while most outpatient cancer services will be consolidated at the Dickson building site. Some of this work is already underway.

► **Many emergency departments have few patients during overnight hours**

2.45 There are 37 emergency departments and collaborative emergency centres in Nova Scotia (excluding the IWK Health Centre). Tertiary and regional facility emergency departments are always open; community hospital emergency departments may experience closures.

2.46 *Lack of collaborative emergency centre usage at night* – It is important facilities are only operating when necessary to ensure effective use of resources. Health Authority management told us one of the requirements for establishing a collaborative emergency centre was that some level of service be made available 24/7. The following chart reports information from an external provincial review conducted in 2014 which determined many collaborative emergency centres were not experiencing significant numbers of patients at night.

Site	Average Number of Patients/Night per Quarter
Annapolis	Less than 1 patient per night
Musquodoboit Harbour	One patient per night
North Cumberland	Less than 1 patient per night
Parrsboro	Less than 1 patient per night
Springhill	Less than two patients per night
Tatamagouche	One patient per night

Source – Care Right Now Evaluating the CEC experience in Nova Scotia – Report prepared by Stylus Consulting for the Department of Health and Wellness

2.47 The 2014 review also found that up to 44% of the time, there were no patients using the collaborative emergency centre services at night. While some of these facilities are not close enough to any others to meet the provincial standard requiring 95 percent of the population be within one hour of an emergency department, some are near other facilities and the provision of overnight service may not be required to meet the provincial standard.

2.48 New Waterford was not included in the provincial review because it had been operating for less than a year. However, facility management told us that despite averaging less than one patient per night, they are required to offer night time service. Management told us the resources used for this could



be more effectively utilized across the entire Sydney area. This continued underutilization reduces the opportunity for personnel to practice their skills, and results in money spent to offer a service that is not in demand. This is a poor use of resources.

- 2.49 With high infrastructure costs, and limited resources in the province, it is important the Health Authority consider the location, usage, and operation of emergency departments, collaborative emergency centres, and hospitals, to utilize its resources in a manner that adds the highest value. This should be addressed through health services planning.

How Patients Move through a Hospital

Conclusions and summary of observations

The Nova Scotia Health Authority is not adequately addressing issues that slow patient movement within hospitals and cause emergency department crowding along with longer emergency department waits for many patients. Admitted patients often remain in the emergency department because beds on hospital units are occupied. These patients may no longer require hospital care, but remain in hospital due to limited resources in the community. We also found the inability to access appropriate mental health services has a significant impact on patient movement through emergency departments and hospitals. Limited access to appropriate primary care can be an issue that also contributes to nonemergent patients seeking care at the emergency department, contributing to crowding. We recommended Health and Wellness and Nova Scotia Health Authority implement a system-wide plan to define the level of health services that will be available to Nova Scotians.

- 2.50 *The right care, in the right place, at the right time* – In speaking with health care professionals throughout the province, they often noted how important it is for patients to receive the right care, at the right place, and at the right time. This allows for the most efficient and effective use of resources, should reduce wait times, and provides a better experience for both the patient and the health care provider. When this does not happen, it can result in significant issues throughout the system, some of which are visible in crowded emergency departments. Medical personnel emphasized to us that bigger hospitals with more beds are not the solution. Timely access to treatment and expertise are the most important factor for patients.
- 2.51 The emergency department is meant to quickly assess and manage patients with unknown problems, patients with a pre-existing illness that is getting worse, or patients with an injury requiring emergency care. The most appropriate type of patient for the emergency department is one who is very



ill and requires treatment for a short period. This may require admitting to a hospital bed, although the intent should be to discharge patients as soon as they are medically ready.

► **Overcrowding in the emergency department often results from issues elsewhere**

- 2.52 *Emergency department crowding* – Crowding is an indicator of larger issues which occur outside of the emergency department, and sometimes outside of the hospital altogether. Many medical professionals we spoke to commented that issues such as lack of access to family doctors and an inability to move patients quickly from the emergency room to inpatient beds needs to be addressed on a system-wide basis. This is important to understand when considering patient movement and emergency department crowding.
- 2.53 Hospital management identified three key causes that result in emergency department crowding.
- Admitted patients remaining in the emergency department due to patients occupying hospital beds who no longer need hospital care.
 - Patients seeking medical care at the emergency department who do not have a medical emergency.
 - Patients waiting in the emergency department for further diagnostic services such as lab or other tests.
- 2.54 When someone visits the emergency department and the attending physician decides that person needs to be admitted to hospital, there may not be an inpatient bed available. In many hospitals, the patient remains in the emergency department until a bed is available on a unit. Spending longer periods in the emergency department is not ideal for the patient.
- 2.55 *Alternate level of care patients* – Hospital staff told us the lack of available beds is often related to patients requiring alternate levels of care. These patients typically remain in a hospital bed due to a lack of supports in the community, or at home, or because they are waiting for a bed to become available in a long term care facility. A hospital is not the most appropriate place for these patients to receive care, nor is this the most efficient use of resources for the health system. Hospital beds are meant for patients who require care for a short period, until they are healthy, stable, and able to be discharged. When patients requiring other levels of care occupy hospital beds, they do not receive the right care, in the right place, at the right time, nor do the patients remaining in the emergency department while they wait for a hospital bed.
- 2.56 Additionally, the cost of health care provided in a hospital is much higher than in a long term care facility. Figures obtained from the Canadian



Institute of Health Information's website show an average cost of just over \$1,300 per day for a hospital stay in Nova Scotia, while Health and Wellness figures show the average cost per day of a long term care facility is around \$250. This does not consider the potential lower costs for patients who could receive home care rather than being admitted to a hospital or long term care facility.

- 2.57 Staff at many facilities expressed concern about the number of alternate level of care patients occupying hospital beds, potentially resulting in admitted patients remaining in the emergency department. These patients were receiving care in a hospital when the care they required might have been better provided at home or in a long term care facility. This may reduce access to hospital beds for those patients who do require a hospital stay. This issue should be addressed by the Health Authority through health services planning.
- 2.58 *Nonemergent patients at the emergency department* – There are many instances when patients seek medical attention at the emergency department for care that could be provided in a primary care setting, such as by a family doctor. Frequent examples of why individuals arrive at the emergency department seeking nonemergent care are:
- patients not having a primary care physician or not being able to get an appointment with their doctor for the same or next day; or
 - patients viewing the emergency department as an outpatient department which they can use to replace seeing a family doctor for more routine concerns.
- 2.59 *Primary care access* – Management in many facilities we visited told us non-emergent patients are seeking care in the emergency department due to limited access to a primary care physician. This was more of an issue for hospitals outside of city centres, where personnel noted there can be fewer general practitioners. These patients are not a primary contributor to backlog in the emergency department, although they do result in crowding throughout the waiting and treatment areas, and highlight a possible resource gap within the health care system. The establishment of collaborative emergency centres is helping to address this, but primary care access remains an issue in areas of the province.
- 2.60 *The public's perception* – Many hospital personnel told us that some members of the general public view the emergency department as an outpatient clinic. They told us this has resulted in patients seeking care without attempting to see their family physician first, or without considering the seriousness of their medical issue. Some patients expect to see a physician quickly, even if their issue is not urgent. This is not practical in many situations, as the



emergency department prioritizes patients based on urgency. When possible, it is ideal for non-urgent patients to see their family doctor first, assuming they have one. This will assist medical professionals in providing patients with the right care, in the right place, at the right time.

2.61 *Access to services in hospital* – When patients are seen by a physician in the emergency department, further assessments may be required prior to leaving the hospital. This may consist of lab or other diagnostic tests, or seeing a specialist for a second opinion. The availability of equipment or personnel can have a significant impact on a patient's length of stay. This is true for inpatients as well, as they may require additional testing or therapy before they are discharged. Diagnostic imaging, laboratory, occupational and physical therapy were all noted as services that can slow patient movement, as well as increase length of stay. We recognize that offering all services in all locations is not feasible and may not be appropriate, so this issue will continue to have an impact. The expectations for these services should be clearly defined so Nova Scotians understand what can be expected. Recommendation 2.1 (noted earlier in the report) addresses this issue.

2.62 *Other matters* – Management and staff at many of the hospitals we visited expressed concerns regarding patients in need of mental health services and adult protection clients (may be clients of Health and Wellness or Community Services) who come to emergency departments. In some situations, these patients and clients may need medical assessment in emergency but, ultimately, care may be better offered outside of a hospital. Unfortunately, we were told some of these patients may experience extended stays in the emergency department while waiting for more appropriate care options to be found. This exposes the patient to an environment in which the lights are always on, while machines, equipment, and people create a lot of noise. This can be an unsettling environment for the patient and add to the existing trauma. Since these individuals may receive services from other entities, such as Community Services, it is important that Health and Wellness and the Health Authority engage those partners in determining the most appropriate care options.

Recommendation 2.4

The Department of Health and Wellness and the Nova Scotia Health Authority should work with their partner agencies or departments to determine the most effective and efficient means to provide care to mental health patients and adult protection clients.

Department of Health and Wellness Response: *DHW agrees with, and intends to implement, the recommendation that NSHA and DHW should work with partners such as the Department of Community Services regarding adult protection (AP) clients' and mental health patients' access to appropriate care. DHW supports all*



of these clients/patients accessing timely, appropriate placement which supports their needs in an appropriate setting. DHW, IWK, NSHA and DCS have been in collaboration as part of the Health System Alignment Advisory Group tasked to make recommendations to the Deputy Minister of Health and Wellness and the Deputy Minister of Community Services regarding a Collaborative Complex Needs Case Management Protocol.

Nova Scotia Health Authority Response: *Nova Scotia Health Authority agrees with this recommendation and has a number of initiatives underway to improve our ability to deliver the appropriate care at the appropriate time by the appropriate care provider. We intend to continue to build on these efforts. This includes working with partner agencies to increase availability of community-based supports and improving access to family physicians and other primary care providers. Another example is our efforts to work with the Department of Community Services to improve access to safe, affordable, supported housing in the community for mental health clients.*



Department of Health and Wellness: Additional Comments

The health system in Nova Scotia has been undergoing significant change over the past two years. Beginning with the consolidation of nine health authorities into the Nova Scotia Health Authority (NSHA) in 2015-16 and continuing with the redesign of the Department of Health and Wellness in 2016-17. These changes position the Department and the health authorities (NSHA and IWK) to improve the health outcomes of Nova Scotians, improve patient care and reduce system costs. As this audit demonstrates, one of the ways to make these needed changes in our system is for the Department to support the health authorities to plan services provincially.

The audit notes a number of concerning infrastructure issues in our system. It is important that Nova Scotians know the health and safety of our patients, healthcare providers and the public is a priority for the Department and the health authorities. Where issues are known, the health authorities have mechanisms in place to ensure patients and providers are not at risk. While we plan for the future, the Department, the NSHA and the IWK will ensure that safety remains a priority.

Nova Scotia Health Authority: Additional Comments

Nova Scotia has some of the poorest health outcomes in the country, despite spending more and more on health care over many years. As a population, we aren't getting healthier. Growing demands related to the needs of our population, inflationary costs and aging buildings and equipment continue to drive up costs. We know that continuing to invest more in the same way is not the answer and that change is needed. As the single largest publicly-funded organization in the province, Nova Scotia Health Authority is committed to making the health system as effective and efficient as possible to deliver quality and safety care and service. This means rethinking how we organize and deliver health services across the province to make the best use of our financial, people and infrastructure resources to get better results.

Nova Scotia Health Authority welcomes the findings contained in the Auditor General's report. The recommendations validate the work we've been doing to plan, co-ordinate and organize our programs, services and resources as a provincial organization. In just over twelve months, we have made significant progress in putting the people, processes and structures in place to bring nine organizations together as one and are on the path to a more integrated, collaborative, efficient and effective