Report of the Auditor General to the Nova Scotia House of Assembly

December 2014

Independence • Integrity • Impact

November 19, 2014

Honourable Kevin Murphy
Speaker
House of Assembly
Province of Nova Scotia

Dear Sir:

I have the honour to submit herewith my Report to the House of Assembly under Section 18(2) of the Auditor General Act, to be laid before the House in accordance with Section 18(4) of the Auditor General Act.

Respectfully submitted

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Auditor General of Nova Scotia

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NOVA SCOTIA

Office of the Auditor General

Our Vision

A relevant, valued and independent audit office serving the public interest as the House of Assembly's primary source of assurance on government performance.

Our Mission

To make a significant contribution to enhanced accountability and performance in the provincial public sector.

Our Priorities

Conduct and report audits that provide information to the House of Assembly to assist it in holding government accountable.

Focus our audit efforts on areas of higher risk that impact on the lives of Nova Scotians.

Contribute to a better performing public service with practical recommendations for significant improvements.

Encourage continual improvement in financial reporting by government.

Promote excellence and a professional and supportive workplace at the Office of the Auditor General.

NOVA SCOTIA

Who We Are and What We Do

The Auditor General is an independent nonpartisan officer of the Legislature, appointed by the House of Assembly for a ten-year term. He or she is responsible to the House for providing independent and objective assessments of the operations of government, the use of public funds, and the integrity of financial reports. The Auditor General helps the House to hold the government to account for its use and stewardship of public funds.

The Auditor General Act establishes the Auditor General's mandate, responsibilities and powers. The Act provides his or her Office with a modern performance audit mandate to examine entities, processes and programs for economy, efficiency and effectiveness and for appropriate use of public funds. It also clarifies which entities are subject to audit by the Office.

The Act stipulates that the Auditor General shall provide an opinion on government's annual consolidated financial statements; provide an opinion on the revenue estimates in the government's annual budget address; and report to the House at least annually on the results of the Office's work under the Act.

The Act provides the Office a mandate to audit all parts of the provincial public sector, including government departments and all agencies, boards, commissions or other bodies responsible to the crown, such as regional school boards and district health authorities, as well as funding recipients external to the provincial public sector. It provides the Auditor General with the authority to require the provision of any documents needed in the performance of his or her duties.

In its work, the Office of the Auditor General is guided by, and complies with, the professional standards established by the Canadian Institute of Chartered Accountants, otherwise known as generally accepted auditing standards. We also seek guidance from other professional bodies and audit-related best practices in other jurisdictions.

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Introduction

1 Message from the Auditor General

Appointment as Auditor General

1.1 On April 29, 2014, I was appointed as Auditor General of Nova Scotia for a term of 10 years beginning July 2, 2014. The goal of my office is to provide independent and objective assurance concerning the operations of the Government, the use of public funds, and the integrity of financial and performance reports. To do this we issue independent opinions on Government financial reports and conduct performance audits on public sector operations to assess whether:

- governance frameworks provide appropriate direction, control and accountability;
- value for money is achieved;
- public funds and property are properly managed; and
- legislation and government policies are complied with.

1.2 Our audits not only seek to identify significant issues, but also provide recommendations to improve the management of the public sector. We work closely with the Public Accounts Committee and senior Government officials as they strive to deliver services to Nova Scotians in the most efficient and economical manner possible.

1.3 I would like to thank my executive team and all staff within the Office for a smooth transition and working with me as we fulfill our mandate and strive to continue to do better into the future.

My Office

1.4 The work of my Office is led by an executive team.

- Alan Horgan, CA – Deputy Auditor General
- Ann McDonald, CA – Assistant Auditor General
- Evangeline Colman-Sadd, CA – Assistant Auditor General
- Terry Spicer, CMA – Assistant Auditor General
- Darleen Langille – Assistant to the Executive Leadership Team

1.5 Reporting to the executive are approximately 28 audit and administrative professionals who have varied academic backgrounds and professional designations. Our reports are available on our website at www.oag-ns.ca. You can also follow the Auditor General on Twitter – @OAG_NS.

1.6 Since taking Office on July 2, 2014 I have:

- issued a clean audit opinion on the Public Accounts of Nova Scotia; and
- tabled this first performance audit report.

This Performance Audit Report

1.7 This report has three performance audit chapters.

- Community Services: Integrated Case Management System
- Education and Early Childhood Development: Tri-County Regional School Board
- Health and Wellness: Surgical Waitlist and Operating Room Utilization

1.8 The following paragraphs provide a brief overview of the highlights of these chapters.

1.9 *Community Services: Integrated Case Management System* – We found that the Department of Community Services does not have all the necessary controls in place to protect the privacy, integrity and availability of data in the Integrated Case Management system. Specifically, servers were not fully secured against unauthorized access from within Government. The audit also identified weaknesses that could impact the completeness, accuracy and timely access of the information used in delivering services to Nova Scotians.

1.10 *Education and Early Childhood Development: Tri-County Regional School Board* – Our audit concluded that the Tri-County Regional School Board and management are not providing adequate oversight and monitoring of the educational services delivered within their schools. The governing Board does not receive or request information to monitor the progress of students nor has it determined the reasons for poor student performance in numeracy and literacy.

1.11 *Health and Wellness: Surgical Waitlist and Operating Room Utilization* – Our work determined that the Province does not have adequate processes

to manage waitlists for surgery and the allocation of operating room time does not always consider patient priority and waitlists. Nova Scotia lags far behind national benchmarks in key areas. For example, in 2013, only 43 percent of knee replacements met the six-month benchmark. While there have been efforts within district health authorities and the IWK Health Centre to manage wait times, a systematic and common Provincial approach is still in the planning stages.

1.12 Overall, the common theme from these three audits is the need for effective leadership to ensure those responsible for education, healthcare and the delivery of services are achieving the desired results.

Going Forward

Implementing actions to address weaknesses from prior audit reports

1.13 Over the past number of years, my Office has reported on the low level of success by Government officials in implementing their promised action on the problems facing Government on a timely basis. We understand that governments face many challenges, changing priorities and fiscal constraints. However, failing to implement the promised action increases the risk that services are not effectively delivered in the most efficient and economical manner possible. Departments need to do a better job of implementing our recommendations and elected officials, such as the Public Accounts Committee, need to continue to hold departments accountable for results.

My expectations

1.14 Our audits are well thought out and involve the auditee from the planning to reporting phases. We will continue to work to ensure our recommendations are focused, reasonable, and have a commitment from auditees to address the issues in a timely manner. Therefore, I would like to see more timely implementation of promised change so that all Nova Scotians get the services they need. If promised change does not happen, the Nova Scotia Legislature and citizens need to know who did not deliver, why and what the consequences are. This is accountability at its core, which is fundamental to a public sector facing fiscal and other constraints.

Our work forward

1.15 Our planned audit reports are now outlined on our website up until June 2015 and include the following.

January 2015 Special Report

- Bluenose II Restoration Project

February 2015

- Results of Financial Audits and Reviews
- Crown Corporation Accountability
- Indicators of Financial Condition
- Review of Audit Opinions and Management Letters
- Follow-up of 2012 Financial Recommendations

April 2015

- Report on Review of Government Financial Statement Revenue Estimates for the Fiscal Year Ended March 31, 2016

June 2015

- Forest Management and Protection
- Aquaculture Monitoring
- Follow-up of 2011 and 2012 Performance Audit Recommendations
- Responsible Gambling and the Prevention and Treatment of Problem Gambling
- Procurement and Management of Professional Services

Performance Audits

At a Glance

2 Community Services: Integrated Case Management System

Summary

The Department of Community Services and the Department of Internal Services do not have all the necessary controls in place to protect the privacy, integrity and availability of the data in the Integrated Case Management (ICM) system. Given that the system was implemented in 2007, we assessed the system against the processes and controls that would be expected around a mature IT environment. The following table shows the results of our assessment of the ICM system's controls.

Sections	Confidentiality	Integrity	Availability
Information Technology Security	●	○	○
IT Service Operations	○	○	●
Data Integrity	--	○	--
IT Governance	○	○	○

○ Improvements are required.
● Significant improvements are required.
-- Controls assessed in this section are not meant to address confidentiality or availability.

We noted that Community Services has made positive steps through initiatives in the areas of training, IT control assessments, IT technical forums and project management. However, we identified significant weaknesses in the IT security of systems. We also identified processes that need to be redesigned or enhanced, including those of IT risk management. These deficiencies put the confidentiality, integrity and availability of information within the ICM system at risk.

Confidentiality: Security weaknesses in the configuration of the system allowed us to gain unauthorized access to sensitive personal information maintained in ICM, including detailed case notes, names of children taken into care, and financial information. Access to this personal information is limited to users within the government network. Some of these weaknesses were subsequently addressed by Community Services after we communicated them.

Integrity: There are weaknesses in how ICM accepts and stores data, as well as in the processes around managing changes, user access and incidents. Incomplete and inaccurate information can negatively impact the decisions of those providing services.

Availability: There are deficiencies in monitoring system resources and availability; planning to restore ICM in the event of an outage; and central oversight of business continuity plans. The risk associated with these deficiencies is high because of the intermittent system outages ICM has been experiencing. Timely access to the client and case information within ICM is required for employees providing services to Nova Scotians.

2 Community Services: Integrated Case Management System

Background

2.1 The Department of Community Services (the Department) contributes to the health and well-being of Nova Scotians through the delivery of social programs. According to the Department's 2014 public statement of mandate, it provides services to approximately 200,000 Nova Scotians each year. This represents 1 in 5 Nova Scotians.

2.2 The cost to provide these services according to the Department's 2014-15 budgeted expenditures is approximately $904 million, with the majority of funding across four key divisions.

Divisions	Expenditure
Employment support and income assistance	$383 million
Family and children's services	$143 million
Services for persons with disabilities	$299 million
Housing services	$36 million
Other division expenditures	$43 million
Total	$904 million

2.3 The Integrated Case Management (ICM) system was developed and implemented in 2007 and is therefore expected to be a mature system. It is intended to help support the integral social service programs administered by the key divisions in the Department. ICM is a web-based application, only accessible by employees on the government network.

2.4 The application stores information that helps employees to track, manage and make decisions on the services they provide to their clients. These decisions include the following.

- Are the basic needs of the client being met?
- What assistance is the client eligible for?
- What assistance has the client received in the past?
- Is intervention and protection needed?

2.5 Given the nature of the services being provided, the information that is collected and stored in ICM can be highly sensitive and linked to specific individuals. This includes financial records, contact information, and records of services obtained from the Department. While the Department owns the

ICM application and is responsible for the data stored in it, the infrastructure that supports the application is managed by Information, Communication and Technology Services (ICTS), a branch of the Department of Internal Services. This branch was previously known as the Chief Information Office. That Office was created in April 2009.

2.6 The Information, Communication and Technology Services branch's mandate is to plan, organize and direct the efficient and effective use of information technology (IT) across government. It is responsible for the Provincial Government's IT infrastructure. This includes the government network, telecommunications and the Provincial data centre. ICTS provides and manages the servers and databases which support and run the Department of Community Services' Integrated Case Management system.

Audit Objectives and Scope

2.7 In summer 2014, we completed an audit of the Department of Community Service's Integrated Case Management system. The overall goal of the audit was to assess whether the Department has necessary controls to protect the confidentiality and integrity of the data in ICM, and to ensure its availability when providing services to clients.

2.8 Audit criteria for this engagement were based on the IT Governance Institute's Control Objectives for Information and Related Technology (COBIT 4.1). COBIT is a widely-accepted, international source of best practices for the governance, control, management and audit of IT operations. The audit objectives and criteria were discussed with, and accepted as appropriate by, Department of Community Services' senior management.

2.9 Audit fieldwork was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards of CPA Canada. It was performed during the period from March to July 2014. Technical aspects of systems were assessed at various points in time from April to July of 2014 and system transactions were analyzed for the period of April 1, 2012 to February 28, 2014.

Significant Audit Observations

IT Security

Conclusions and summary of observations

We identified significant weaknesses in IT security. We were able to gain unauthorized access to confidential information contained in ICM. Information accessed included personal information such as detailed client case notes, details of client visits and financial information. We were also able to gain unauthorized access to information on four servers which we used to gain full control over two of those servers, and access to a database. Some of these weaknesses were subsequently addressed by the Department after we communicated them.

Servers are not fully secured against unauthorized access from within Government

2.10 *Background* – Information technology such as applications, databases and operating systems have settings (e.g., password length, logging of key system events, account lockout limits) that can be configured to dictate how users interact with them. Improper application of these settings can create security weaknesses, giving individuals the opportunity to gain unauthorized access to view, modify or delete information.

2.11 *Unauthorized access to reports* – ICM has reporting capabilities that are used to generate reports for staff and management to use in support of their job responsibilities. These reports may include information such as detailed history of case notes for a particular client, children taken into care, client contact information, client financial details, and a list of all ICM users and permissions.

2.12 We found significant security weaknesses that allowed us to view ICM reports and see sensitive information. Anyone within the government network could potentially view this information. When we informed Department management, they partially addressed the weaknesses to prevent anyone outside Community Services from accessing the sensitive information. Department management told us that they were not aware of any security breaches.

Operating system and database controls are not sufficient

2.13 *Operating system controls* – We assessed the security of the operating systems for the eight servers that support ICM. It is necessary to provide system administrators with accounts that allow them to manage and maintain the operating systems of the ICM servers (server accounts). These accounts are

different from those used by Community Services staff to access ICM when providing services to clients. Specific roles assigned to the server accounts include:

- running the ICM application and its database;
- running tools to store and manage programming code for ICM;
- generating reports for ICM users; and
- executing scheduled programs to send and receive data.

2.14 We found deficiencies related to the server accounts which are detailed below.

2.15 *Unauthorized access to files* – We were able to gain unauthorized, read-only access to files and folders on four of the eight servers reviewed. Information viewed in some of these files contained user names and passwords which gave us the ability to have full control over two servers. Full control over these servers would allow a user to give access to other users, run programs, modify data, or shut down the system entirely. The user names and passwords we found also allowed us to gain access to a test database for ICM, which was populated with real client data as recent as 2012. ICM data can include case notes made by case workers, financial information and contact information of clients.

2.16 Prior to our audit, users connected to the government network (e.g. in all government departments) would have been able to access these confidential files. When we notified the Department, management addressed the weaknesses that were putting the security of the system at risk.

2.17 *Operating system versions* – Three of the eight servers used to support the ICM system are using versions which will no longer be supported by the vendor, and will no longer receive security and other updates, as of 2015. Without these updates, the servers could have weaknesses that would allow unauthorized individuals to gain access to the server or cause system outages.

2.18 *Passwords* – As noted above, server accounts are used for administration purposes or to assist in running ICM programs. The accounts are installed by the vendor of the operating system or created by the Province. To manage these accounts, each server has unique settings (e.g. passwords, account lockouts, and auditing) to prevent and detect unauthorized access to the server through these accounts.

2.19 We found the settings for account passwords were not consistently applied across all eight servers. Two of those servers' settings did not provide

adequate security and did not match the password standards required by the Information, Communication and Technology Services branch. None of the eight servers have enabled account lockout functionality to restrict the number of unsuccessful logins a local user can have; therefore, attempts to log in can continue until unauthorized access is gained.

2.20 *User accounts* – We found unnecessary accounts on four of the eight servers we reviewed. This creates avoidable exposure to unauthorized system access.

2.21 *Database controls* – The detailed information about ICM clients is stored in its databases. The databases need to be protected to prevent someone from bypassing the ICM application controls in place and gaining direct access to data files. We noted weaknesses relating to the security of the databases. This includes lack of logging for key system events, such as unsuccessful login attempts, and weak database account and password settings.

Information transferred internally is not encrypted

2.22 *Electronic data transfers* – We assessed the security of data transferred between ICM and other servers, databases and external entities. We noted information transmitted outside of the Province's network is encrypted. However, data transferred between databases or to users within the network is not always encrypted, thus increasing the risk of unauthorized capture and viewing of confidential data.

Recommendation 2.1
The Department of Community Services and the Department of Internal Services should address security weaknesses identified in ICM databases and servers.

Department of Community Services Response: The Department agrees with this recommendation. The Department, upon being informed of the identified weaknesses, immediately addressed significant findings. The Department will develop a work plan in collaboration with Information, Communications, and Technology Services (ICTS) to review existing technical settings and make appropriate changes.

Department of Internal Services Response: Information, Communication and Technology Services Branch, agrees with this recommendation. An implementation plan and timeline has been developed to address this recommendation.

IT Service Operations

Conclusions and summary of observations

There are weaknesses in the operational processes which manage ICM that put the confidentiality, integrity and availability of information at risk. During our testing, we noted that the processes to manage changes to programming code are ineffective. We also observed that the process to manage user access requires improvement in order to ensure all users have appropriate access to ICM. Further, additional oversight is required to manage incidents. We noted processes for identification and remediation of problems are informal. Also, there are deficiencies in monitoring system availability and more oversight is needed to ensure the Department's business continuity plans are documented, updated and tested. The Department's processes to manage projects related to ICM are good.

Additional access management controls are required

2.23 *Background* – User access to information systems needs to be carefully managed to ensure that information is only available to those who need to see it. When a user's responsibilities change, their access should change accordingly. Without strong controls over granting, modifying and removal of access to the ICM application, there is a risk that users could have access to information that is not required as part of their job responsibilities. This increases the risk of unauthorized disclosure, modification or deletion of data.

2.24 *User account management* – An employee requires both a government network account and an ICM account before being able to access the ICM application. ICTS is responsible for managing network accounts for all of government while the Department manages ICM accounts and grants permissions.

2.25 We tested various components of access management for ICM and found the following deficiencies.

- Access Management – There are processes in place to manage employee access to ICM. However, of a sample of 50 access requests for new users, we found one was granted a higher level of access than what was required for their job duties, and three did not have evidence of appropriate approvals for the access they received.
- Review of Existing Accounts – There is no formal process to review current users' level of access to information. We noted that three of 40 accounts tested had inappropriate access for their current job roles and responsibilities, therefore providing them with access to confidential information not required for their job.

- Dormant Accounts – We identified 59 accounts that were no longer required. Management subsequently disabled these accounts upon our notification.

Recommendation 2.2
The Department of Community Services should ensure only authorized users have access to only the information necessary to fulfill their job requirements and only for the period of time required.

Department of Community Services Response: The Department agrees with this recommendation. Periodic reviews of ICM security to ensure staff continues to have appropriate security levels are currently conducted. The current procedures will be reviewed and enhanced monitoring implemented.

Processes do not ensure timely problem resolution

2.26 *Background* – IT-related incidents are disruptions to users' ability to productively use information technology. Incidents need to be identified, documented and addressed to ensure staff can continue to perform their work and information remains secure. Recurring IT incidents can also add more strain on IT resources and require an effective problem management process to identify and address the root causes of those incidents.

2.27 *Incident management* – Incidents applicable to ICM that are identified by staff are communicated to the Department's IT Services group. IT Services utilizes a web application to record incident tickets, track, and monitor the resolution of those incidents. We noted that the Department does not review the status of the tickets that are on hold or in process to determine if they still need to be addressed or can be closed. Our review of ICM tickets identified several instances of open and pending tickets that were created in 2010, 2011 and 2012 which increases the risk of persistent issues within ICM.

2.28 *Problem management* – Management relies on staff awareness of recurring incidents to indicate there may be a larger problem. While the production support team holds bi-weekly meetings to discuss any recurring issues staff are aware of, they do not retain meeting notes. In addition, the software utilized to record and manage incidents is not used to analyze tickets to look for recurring issues or trends that may indicate a larger problem. Performing a proactive review of incident tickets could assist the Department in identifying recurring problems sooner and improving the overall quality and availability of the system.

Recommendation 2.3
The Department of Community Services should regularly analyze results of its reported incidents and take action to address weaknesses on a timely basis.

Department of Community Services Response: The Department agrees with the recommendation. A new Incident Management process is being developed and adopted which will ensure tickets are appropriately addressed and closed.

2.29 *Background* – Changes to information technology can result in the introduction of security vulnerabilities and programming errors if they are poorly managed. Therefore, changes should be approved, documented, tested, and approved prior to implementation. Larger changes require proper project management practices. Weaknesses in the processes to manage projects and ongoing changes to a system can result in weaknesses in the system such as programming bugs or security holes.

Project management practices are strong

2.30 *Project management* – Large changes undertaken by the Department are documented and managed through the use of strong project management practices which help to protect the confidentiality, integrity and availability of ICM. Such changes are major business improvement initiatives and include implementing ICM in other Departmental program areas. We reviewed the Department's documentation and process followed for one of four significant projects listed in the draft IT strategic plan and noted:

- a strong governance structure;
- an effective approach for the size and scope of the project;
- evidence of stakeholder commitment;
- maintenance of a detailed project plan throughout,
- identification and management of project risks;
- management of resources; and
- measurement of the performance of the project.

Change management practices have weaknesses

2.31 *Change management* – Changes to ICM can be minor, for example, new reports or adding options to dropdown menus. Changes can also be made to programming code. The Department has a process to make changes to ICM which includes using software to manage ICM programming code, track changes, and restrict who can make those changes. However, the process and associated approvals relating to these programming changes are not documented in a consistent manner and, in some cases, not documented at all. A lack of documented approvals and testing was found in five recent changes that we examined, indicating that changes may have been made without going through the proper approval and testing processes. Changes that are

not controlled can increase risks to the system, such as system failures or lost client data.

Recommendation 2.4
The Department of Community Services should ensure documentation to support the management of changes to ICM is maintained, including its purpose, testing results and applicable approvals.

Department of Community Services Response: The Department agrees with this recommendation. The current Change Management process is being revised and will be adopted to ensure consistency and supporting documentation is maintained.

Continued availability of ICM is at risk

2.32 *Background* – Employees should be able to access ICM in support of their job responsibilities at all times. Ensuring systems are available requires monitoring the hardware resources of servers, including how much memory and processing power is being utilized. In the event users experience an ICM system outage, management should have a plan to restore ICM and maintain the Department's services.

2.33 *Resource performance management* – Users have been experiencing ICM system outages. Community Services has hired consultants to assess the application, database and web server, however, the source of the issue has not been identified. The Department is still working on fixing the issue.

2.34 *Continuous monitoring* – The Department of Internal Services' Information, Communication and Technology Services branch (ICTS) uses a program to monitor the status of servers. Should a server fail or go offline, an alert can be sent to ICTS staff so the problem can be fixed. However, three of the eight ICM servers we reviewed did not have the program installed; therefore, ICTS staff would not be notified in a timely manner if those servers went down. Instead, the users would be the first to become aware of server issues through a system outage. On the five servers with the monitoring program installed, only the basic features have been enabled. Additional preventative settings could be enabled to send out alerts and warning prior to a server going down. However, Department management was unaware of further monitoring capabilities and the need to specifically request these services from ICTS.

Recommendation 2.5
The Department of Community Services and the Department of Internal Services should monitor the performance and capacity of the ICM systems on an ongoing basis and address any issues.

Department of Community Services Response: The Department agrees with this recommendation. The Department has already made several changes to improve the performance of ICM and will continue to improve system performance and work with Information, Communications, and Technology Services (ICTS) to put adequate monitoring tools in place.

Department of Internal Services Response: Information, Communication and Technology Services Branch, agrees with this recommendation and will work with the Department of Community Services to develop and implement a process to monitor the performance and capacity of the ICM systems on an ongoing basis and address any issues. An implementation plan will be developed with the Department of Community Services.

2.35 *Continuity planning* – Employees in each of the Department's four regions are assigned responsibility for business continuity planning to ensure that critical services provided by the Department can be maintained or resumed quickly in the event of an interruption. This would include natural disasters or a mass illness that reduce staffing levels. Without proper continuity planning, essential services to Nova Scotians could be disrupted in the event government offices or ICM are unavailable.

2.36 The Department of Community Services, in an oversight capacity, has not ensured that all locations have appropriate and current plans. The Department is working with ICTS to test a new, government-wide business continuity plan initiative that will assess requirements and develop standards to ensure all departments have effective plans. This includes prioritization and timelines for the restoration of key department-specific computer programs. Training is expected to be provided to government business continuity plan coordinators, culminating in a government-wide testing exercise in December 2014.

Recommendation 2.6
The Department of Community Services should ensure that business continuity plans are in place and contain information such as prioritization and timelines for restoration of key Department computer programs.

Department of Community Services Response: The Department agrees with this recommendation. The Department will complete its work with Information, Communications, and Technology Services (ICTS) on the business continuity plan initiative and will work to ensure all regional locations have current and appropriate business continuity plans that include information pertaining to the restoration of key computer programs.

2.37 *Disaster recovery* – As part of an audit reported in November 2011, our Office made a recommendation to ICTS to develop a disaster recovery plan for the

Provincial data centre. While a plan has been developed, it does not list the key departmental computer programs that need to be restored, or the priority and timeframes in which they should be restored. This information will be available from the business continuity plans prepared by the departments and should be incorporated into the Provincial disaster recovery plan.

Recommendation 2.7
The Department of Internal Services and the Department of Community Services should work together to incorporate the Department of Community Services' business continuity plan into the Province's disaster recovery plan.

Department of Community Services Response: The Department agrees with this recommendation. The Department will work with the Department of Internal Services to incorporate the Department's business continuity plan into the province's disaster recovery plan.

Department of Internal Services Response: Information, Communication and Technology Services Branch agrees with this recommendation and will work with the Department of Community Services to incorporate Department of Community Services' business continuity plan into the province's disaster recovery plan. An implementation plan and timeline is in place; significant progress has been made in identifying critical business functions and analysis of ICT requirements at the Department of Community Services.

Data Integrity

Conclusions and summary of observations

Weaknesses exist which pose a risk to the integrity of ICM information. We performed an analysis of the data stored in ICM and found potential areas of concern. We identified trends in data that showed payments without case numbers, duplicate clients and duplicate trustees in the system, and bank accounts which receive funds for multiple clients. These weaknesses create the potential for overpayments, payments to the wrong individuals, and decisions based on incomplete information.

2.38 *Background* – Data integrity is a term that encompasses essential characteristics that need to be in place in order for a system to adequately support operations. Those characteristics include data completeness, consistency, timeliness, and validity. Data integrity enables system users to make decisions based on reliable information and to appropriately identify and monitor operations.

Additional monitoring controls are required around ICM data

2.39 *Payments to clients* – We analyzed payments made between April 1, 2012 to February 28, 2014. In order for the Department to adequately monitor total payments made to, or on behalf of its clients, a case identification number should be assigned to all payments. We identified 0.04% , or 1,250, of approximately 3.1 million transactions that were not associated with case identification numbers and therefore could not be traced back to clients. We understand that the ability to enter payments without a case identification number is a necessity to provide immediate services to some clients but the lack of association with a case increases the risk for fraud and error.

Recommendation 2.8
The Department of Community Services should closely control and monitor the risks related to payments made without a case identification number.

Department of Community Services Response: The Department agrees with this recommendation. The ability to make low dollar value payments without a case identification number is necessary to provide immediate services to some clients, particularly Child Welfare cases. Payments without a case identification number accounted for 0.04% of payments made through ICM during the audit period. The Department will investigate the feasibility of using SAP, rather than ICM, for these types of payments to increase control.

2.40 *Bank account activity* – We performed an analysis to identify trends and anomalies related to client bank accounts to which payments are made. Although situations in which the same account is used for multiple individuals within the same family are expected, we found instances of the same bank account used for multiple individuals who were not family. For example, individual bank accounts were associated with as high as 205 and 435 different clients.

2.41 After researching the accounts noted above, it was found that the accounts were related to organizations providing services on behalf of clients (trustees). However, ICM does not have controls in place to monitor or verify that bank accounts are assigned to the appropriate individuals. If bank account assignments are not monitored, there is a risk that funds are deposited in accounts that do not belong to the client.

Recommendation 2.9
The Department of Community Services should enhance controls over bank account assignments to clients.

Department of Community Services Response: The Department agrees with this recommendation. The Department has established an internal working group

to create an action plan to address this recommendation and other internal control improvements. Existing controls over bank accounts include the use of a direct deposit form, signed by the client, and supported by a voided cheque or bank stamp. The form has recently been reviewed and improvements have been made. Existing policies also require strict segregation of duties among Department staff when bank accounts are entered into ICM. These controls will be reinforced with Department staff.

Reliability of data is at risk due to weaknesses

2.42 *Duplicate client records* – We conducted an analysis to identify multiple occurrences of the same first name, last name, gender and birthdate within ICM. We found instances in which the same client had been entered four or more times. This limits the system's ability to identify all cases linked to a given client. One case number may not provide the whole picture of a client's interactions with the Department and decisions may be made using inaccurate or incomplete information.

2.43 The issue of duplicate client records was a known issue that the Department was in the process of correcting. The Department had corrected approximately 5,000 records already flagged as duplicates. However, even after the duplicate records are corrected, the potential for creating new duplicate records will still exist as the system does not prevent such situations. Management indicated that users need the flexibility to enter clients with limited amounts of information in order to provide essential services on a timely basis. Therefore, duplicate clients will continue to exist in ICM. Duplicate records make it difficult to obtain the entire case history for a given client and this increases the opportunity for fraud and error.

2.44 *Duplicate trustee records* – Some of the Department's clients require assistance to handle their payments. In these situations, specific individuals and organizations are designated as trustees and receive funds on behalf of the client. Trustees can assist multiple clients at the same time, but we found the Department re-enters trustee information for each client. We analyzed Department data and found that, in some instances, the same trustee was created more than 100 times. This results in an integrity issue because a client is associated with a trustee, but ICM does not link a given trustee to all the clients they represent. This raises concern about the ability to monitor the total activity of trustees and other organizations acting on behalf of various clients, and increases the opportunity for fraud and error.

Recommendation 2.10
The Department of Community Services should reduce duplicate clients and trustees within ICM.

Department of Community Services Response: The Department agrees with this recommendation. The Department will continue its ongoing efforts to reduce duplicate client records through staff training and monitoring. The use of a single bank account by multiple clients has increased in recent years due to use of large trustees such as shelters. The Department plans to prepare monthly reports showing all bank accounts assigned to more than one client, and to assign specific responsibility for monitoring these reports. In addition, the Department will examine the issue of how to specifically identify trustees and related clients in ICM.

IT Governance

Conclusions and summary of observations

Governance and oversight of information technology controls and processes are weak in some areas of the Department of Community Services. The Department has not implemented an IT risk management framework to assess, and potentially reduce, the impact of IT risks on the organization. Also, IT application controls have not been tested to ensure they are working as designed; and therefore, confidentiality, integrity and availability of data is at risk. We noted that while the Department aligns itself with the goals, policies and standards of the Provincial government and the Information, Communication and Technology Services branch, the Department's IT strategic plan is draft with outstanding sections to be completed. In addition, as noted throughout this chapter, there are many weaknesses which need oversight to address.

There is no IT risk management framework in place

2.45 *Background* – An IT risk management framework with continuous monitoring of controls and processes is required to protect the confidentiality, integrity and availability of information. Without identifying and assessing IT risks, the organization cannot be sure that it has the required safeguards in place to protect its assets. Without proper monitoring of these safeguards or controls, the organization cannot ensure existing safeguards are working effectively. These processes would oversee all IT controls and would assist in reducing the deficiencies identified in this chapter.

2.46 *IT risk management framework* – The Department does not have a complete IT risk management framework to identify, document and manage IT risks, including security threats and system outages. The Department relied on ICTS for risk management, but ICTS is still developing its IT risk management services and does not yet have the tools and policies needed for government-wide implementation. Risks which have not yet been identified, analyzed, and mitigated can result in vulnerabilities which could impact the confidentiality, integrity and availability of information.

2.47 The Department completed a self-assessment of its IT controls protecting the ICM application, using a comprehensive assessment template provided by ICTS. The assessment is a positive first step in identifying the existence of IT controls and any gaps in the controls. However, the Department did not test existing IT controls to assess if they were working as intended. Without assurance that controls are working as planned, there could be vulnerabilities which negatively impact the confidentiality, integrity and availability of information.

Recommendation 2.11
The Department of Community Services should ensure it has a control framework for IT which includes risk management and a plan to assess the ongoing effectiveness of controls.

Department of Community Services Response: The Department agrees with this recommendation. The Department will complete its IT risk management framework and will perform testing of existing IT controls to ensure their effectiveness.

The IT strategic plan has not been finalized

2.48 *IT governance* – As outlined in Community Services' draft IT strategic plan, the Information and Technology Services group supports the Department's technology needs and aligns itself with the goals, policies and standards of the provincial government and ICTS. However, the current plan is still draft, with outstanding sections to be completed. Without a finalized strategic plan, there is a risk that the direction and prioritization of IT initiatives may not fully address the needs of the business. The Department's draft IT strategic plan identified the need for a decision-making group to determine the prioritization of initiatives outlined in the plan.

2.49 *Service-level agreements* – Daily support of the ICM system is a shared responsibility between ICTS and Community Services. ICTS hosts and monitors the ICM servers, while the Department is responsible for approving system access, and determining application and system monitoring requirements. The Department and ICTS do not have an operating agreement to outline the types of services provided and associated service-level expectations. Areas which should be covered in this agreement include:

- service desk responsibilities;
- ICM hosting requirements and performance targets;
- backup and recovery; and
- disaster recovery procedures and prioritization.

2.50 Without a service-level agreement, Community Services cannot ensure that ICTS has agreed to the requested services (e.g. application hosting, system monitoring, and disaster preparedness) to be performed to ensure the security of ICM and to prevent system outages.

Recommendation 2.12
The Department of Community Services should finalize an approved IT strategic plan that includes the role and responsibilities of the Information, Communication and Technology Services branch and the Department.

Department of Community Services Response: The Department agrees with this recommendation. The Department will finalize the IT strategic plan and will include roles and responsibilities of Information, Communciations, and Technology Services (ICTS) and the Department.

IT training and IT security awareness training are being developed

2.51 *IT service training* – The Department has moved forward on initiatives to improve the services and processes of its IT Services group. This includes training and certifying staff on the Information Technology Infrastructure Library (ITIL) – a set of widely-used practices for IT service management that focuses on aligning IT services with the needs of business. In addition, the Department has implemented an IT technical forum to provide a venue for staff to discuss various IT issues, and identify and investigate problems or service enhancements.

2.52 *IT security awareness* – The Department has not provided security awareness training to its staff since 2011 and training is not routinely provided to new staff. Department management told us that they are creating a new training plan for information security awareness and is revamping its new staff orientation program. Employees can be targeted by malicious individuals in an attempt to get them to unknowingly disclose information or open vulnerabilities in computer systems that could be exploited. Employees need to be trained and made aware of the signs they are being targeted and how to respond appropriately. The Department is aware of the lack of IT security awareness training and told us it will be provided.

At a Glance

3 Education and Early Childhood Development: Tri-County Regional School Board

Summary

Neither the governing Board nor management at the Tri-County Regional School Board is fully meeting their respective responsibilities in the oversight and monitoring of the delivery of educational services in their schools. While governing Board members and management have numerous and varied roles and responsibilities, their fundamental responsibility is to ensure the educational progress of their students is meeting expectations.

Although the governing Board meets on a regular basis they do not receive sufficient information or spend appropriate effort on the fundamental role of educating students. The Board does not request or receive important information to know whether schools are planning and making sufficient progress towards achieving business plan goals, the academic performance of students is meeting expectations, and the development needs of teachers and principals are met. Roles and responsibilities need to be clearly defined so that they are understood by both the governing Board and management.

The Board has identified improving student achievement in numeracy and literacy as priorities, but has not undertaken an in-depth analysis to determine the root causes in its schools which are contributing to the underachievement of students in these two areas. We recommended the Board undertake such an analysis in order to identify and develop specific strategies to target key reasons their students are underperforming.

Although management directed schools to create annual school improvement plans, the goals outlined in the plans did not always align with the Board's priorities. Reporting by schools on progress towards their goals was limited. Management needs to ensure school improvement plans address Board and school priorities and reports on progress are timely.

Management monitors student progress in literacy through Provincial assessments and school-based testing, and has implemented an early literacy program. However, management does not fully monitor, or take action, on student progress in its other priority area of numeracy. Management also does not regularly monitor progress in other subject areas, including progress of students with individualized program plans. We recommended management regularly examine student progress in all subject areas, including students with individualized program plans, and take action to ensure students are progressing appropriately.

3 Education and Early Childhood Development: Tri-County Regional School Board

Background

3.1 The Tri-County Regional School Board is one of eight school boards in the Province. It was officially formed in August of 2004. It serves approximately 6,100 students over 7,000 square kilometers, covering the counties of Digby, Yarmouth and Shelburne. The Tri-County region is a bilingual area with French Immersion and French Second Language programs provided. Eleven members sit on the governing board. Each member also sits on the Education Committee, a standing committee of the governing board.

3.2 The Board is responsible for 28 schools.

- 17 elementary schools
- 6 high schools
- 1 middle school
- 2 elementary/high schools
- 2 adult high schools

3.3 The Superintendent is responsible for the overall operation of the Board's head office and schools, and the supervision of the Board's employees. In addition to the head office, operations are divided among four departments, overseen by three directors and one coordinator, who report to the Superintendent. The four departments are:

- Programs and Student Services
- Operational Services
- Human Resources
- Financial Services

3.4 The head office consists of 47 support staff including 11 staff, such as coordinators and curriculum consultants, to monitor and provide professional support to the educational programs. The Board employs 466 teachers and principals across its schools and 351 non-teaching staff. Operational and management decisions at the school level are the responsibility of the principals and vice-principals. The Board's operating budget for 2013-14 was approximately $69 million.

3.5 The Board states its mission as the following: *"We will ensure quality education for all our students enabling them to reach their full potential."* The Board notes its motto is to put students first.

3.6 The Board outlined three specific goals for the 2013-14 year:

- improve student learning and achievement in literacy and numeracy;
- promote a safe, supportive, socially just and healthy learning environment for students and staff of the Tri-County Regional School Board; and
- increase operational efficiency and effectiveness in facility management, school utilization, student transportation, technology infrastructure, board finances, human resources, board governance, and programs and student services delivery.

3.7 In addition to specific goals in the business plan, the Board is responsible to fulfill its duties as outlined in the Education Act and Regulations. This includes focusing on the achievement of all students enrolled in the Board's schools and programs.

Audit Objectives and Scope

3.8 In summer 2014, we completed a performance audit at the Tri-County Regional School Board. We examined activities relating to certain responsibilities of the elected Board members and the management team. The audit was conducted in accordance with Sections 18 and 21 of the Auditor General Act and auditing standards adopted by the Chartered Professional Accountants of Canada.

3.9 The objectives of the audit were to determine if the Tri-County Regional School Board's:

- governing members are providing adequate oversight related to the delivery of educational services within the Board's schools: and
- management team provides adequate planning and monitoring of educational services delivered at the school level.

3.10 Audit criteria were developed specifically for this engagement and were discussed with, and accepted as appropriate by, governance and management representatives of the Tri-County Regional School Board.

3.11 Our audit approach included interviews with governing Board members, the management team and school staff; documentation of processes; examination of legislation, policies and other documentation; and testing compliance with legislation, policy and other applicable processes. Our main audit period included activities conducted from April 1, 2012 to March 31, 2014, focusing on primary to grade six. However, we examined activities and documentation outside of this period as necessary.

Significant Audit Observations

Board Oversight

Conclusions and summary of observations

The governing Board is not fulfilling its oversight role in the delivery of educational services in the schools. Although it meets on a regular basis, Board members do not receive the needed information and do not appropriately focus on students' educational performance. The governing Board does not have the necessary information to know whether:

- schools are planning and making adequate progress toward business plan goals;
- student performance, including students with individualized program plans, is meeting Board expectations; and
- teachers' and principals' development needs are being met.

The governing Board does not understand the full nature and requirements of its responsibilities and has not told management the information it needs to carry out its responsibilities. In addition, the governing Board does not have a process to assess its own performance and does not appropriately evaluate the Superintendent's performance.

Roles and responsibilities are not clearly defined and information needs are not communicated

3.12 *Governing Board's roles and responsibilities* – Governing Board members have oversight roles and responsibilities to fulfill. These are described in general in the Education Act and internal policies and by-laws developed by the Board. When Board members are elected, orientation presentations and seminars are provided. The Department of Education and Early Childhood Development, and the Nova Scotia School Board Association, facilitate these sessions. The governing Board has not clearly defined its role and responsibilities in comparison to those of management. As well, the

governing Board has not defined and communicated its information needs in order to effectively carry out its responsibilities.

3.13 *Governing Board performance and self-assessment* – Members have varying views on how well the governing Board is performing and its governance practices. As part of its spring 2014 training session, Board members completed an anonymous survey. Our interviews, as well as responses from the survey, indicate most members have the following perceptions.

- Members are not in agreement about how to perform their governance role.
- Members do not understand the difference between Board decisions and those delegated to the Superintendent.
- Members do not consider all aspects of an issue.
- Members are not open to others' thoughts and opinions.
- Members cannot be honest with each other and do not leave meetings with mutual respect.

3.14 The governing Board cannot be effective without an appropriate understanding of its role and responsibilities and the information it needs to fulfill those responsibilities.

3.15 The governing Board does not have a process to assess its own performance and modify, as necessary, how it operates. An effective self-assessment process could allow the governing Board to evaluate how well it is performing and identify where improvements are needed. Such an assessment could assist the governing Board in being effective in its oversight role to ensure the educational needs of students are met.

Recommendation 3.1
The governing Board of the Tri-County Regional School Board should define its role and responsibilities and the information required from management in order to fully carry out its duties in educating students. Board members should also complete an annual self-assessment of their performance and address any identified weaknesses in a timely manner.

Tri-County Regional School Board Response: The Tri-County Regional School Board agrees with this recommendation.

- As part of our ongoing work on governance, we will undertake a detailed examination of our role and responsibilities under Section 63A and 64 of the Education Act and determine the information required from management in order to fully carry out our duties toward educating students.

- We will continue our work on developing an appropriate self-evaluation process and instrument(s).
- General time-line – 2014/2015 school year; ongoing.

3.16 *Board and Education Committee meetings* – At the Tri-County Regional School Board, all governing Board members sit on the Education Committee. Education Committee meetings occur once a month from September to June. Regular Board meetings occur at the same frequency, with special meetings scheduled as necessary. This provides for 10 Education Committee meetings and 10 regular Board meetings per academic year. These meetings are important as they are intended to provide Board members the opportunity to focus on student performance and delivery of educational services in schools.

The Board is not effectively overseeing educational results

3.17 *Literacy and numeracy goals and targets* – Each year, the Board develops an annual business plan with goals and targets for the academic year. The 2013-14 Board plan included a goal to improve student learning and achievement in the areas of literacy and numeracy. This goal recognized that student performance in these two areas needs improvement. Although literacy and numeracy are a priority area, the governing Board has not directed management to undertake a comprehensive analysis to determine the root causes of the poor student performance. The potential impact of Board initiatives targeting literacy and numeracy is unclear and the initiatives may not be targeted in the right areas or delivered in the right way.

3.18 *Discussion and reporting on student performance* – Given the importance of student academic performance, we expected this would be a frequent topic at governing Board meetings. However, we found this topic was rarely discussed at either Board or Education Committee meetings. This is despite below-average student achievement results on provincial assessments in the last two academic years, as outlined in the following chart.

Provincial Assessment Results	2012–13			2013–14		
	TCRSB	Province	Rank	TCRSB	Province	Rank
Grade 3 Reading	70%	76%	7 (1)	60%	70%	7 (1)
Grade 3 Writing – Ideas	84%	88%	7 (1)	80%	88%	7 (1)
Grade 3 Writing – Organization	71%	80%	7 (1)	67%	76%	7 (1)
Grade 3 Writing – Language Use	74%	83%	7 (1)	70%	79%	7 (1)
Grade 3 Writing – Conventions	64%	71%	7 (1)	61%	66%	6 (1)
Grade 4 Math	Not offered	Not offered	N/A	69%	74%	6/7(1)*

Provincial Assessment Results	2012–13			2013–14		
	TCRSB	Province	Rank	TCRSB	Province	Rank
Grade 6 Reading	65%	76%	8 (2)	70%	75%	6/7 (2)*
Grade 6 Writing – Ideas	85%	89%	7/8 (2)*	88%	88%	4/5/6 (2)*
Grade 6 Writing – Organization	74%	81%	7/8 (2)*	77%	79%	5/6 (2)*
Grade 6 Writing – Language Use	75%	82%	8 (2)	77%	79%	5/6 (2)*
Grade 6 Writing – Conventions	64%	73%	8 (2)	61%	65%	6/7 (2)*
Grade 6 Math	64%	73%	7 (1)	65%	73%	7 (1)

(1) Ranking out of seven school boards (CSAP did not participate) – one is highest, seven is lowest
(2) Ranking out of eight school boards – one is highest, eight is lowest
* tied with another school board
Results are percentage of students who met or exceeded the assessment expectation

Source: Department of Education and Early Childhood Development

3.19 The Department of Education and Early Childhood Development released eight different provincial assessment results for the 2012-13 academic year. The Education Committee received a presentation on two of these results. Without reporting to the governing Board on overall student performance using information such as provincial assessments, Board members are likely unaware of whether students are meeting expectations and adequate progress is being made. It is the duty of Board members to focus on areas of concern and hold management accountable for addressing school-based factors impeding student educational achievement.

3.20 Within the student population there are approximately 590 students with individualized program plans. These students have individual plans developed specific to their needs; these needs may be academic or more general life skills. Significant Board resources, such as teacher assistants, are used to support these students. Each school monitors its students with individualized plans throughout the school year and teachers document student progress. Provincial assessments do not include student progress toward individualized plan outcomes.

3.21 The governing Board has not requested, nor has it received, any information regarding students with individualized plans. Board members may not be aware of how many students are on these plans, progress toward their goals or other relevant information to understand how these students are performing. Therefore, the governing Board is not fulfilling its oversight role related to the results of students with individualized program plans.

Recommendation 3.2
The governing Board of the Tri-County Regional School Board should request that management determine and address the reasons for the unsatisfactory performance of its students in literacy and numeracy. In addition, the Board should regularly review reports on student performance, including students with individualized programs, to hold management accountable for the delivery of educational services to its students.

Tri-County Regional School Board Response: The Tri-County Regional School Board agrees with this recommendation.

- We will ask management to identify the areas of unsatisfactory performance of students in literacy and numeracy, and to identify the strategies for the satisfactory performance in those classrooms/schools where this is the case.
- We will ask management to develop a plan to address literacy/numeracy issues as identified, including best practices in our own and other classrooms.
- We will include student performance summary reports, including ALL students, as a standing agenda item for Education Committee.
- General time-line – 2014/2015 school year; ongoing

The Board does not ensure school-based plans address priorities

3.22 *School improvement plans and annual reports* – Schools are required to develop goals and strategies for improvements and document those in an annual plan. School improvement goals are to be specific to each school and are intended to contribute to achieving the goals and priorities outlined in the Board's business plan. Schools are to report annually on their progress in achieving their improvement goals.

3.23 The governing Board does not receive information on whether school improvement plans and annual reports are completed and whether school goals appropriately align with the Board's goals. It is important the governing Board is aware of the status of these documents, and whether schools are making progress towards their goals, in order to hold management accountable for whether actions at the schools are addressing student educational needs.

Recommendation 3.3
The governing Board of the Tri-County Regional School Board should ensure that appropriate school improvement plans align with Board goals and oversee whether expected results are being achieved.

Tri-County Regional School Board Response: The Tri-County Regional School Board agrees with this recommendation.

- We will establish a mechanism to check school improvement plans against Board goals.

- We will establish a mechanism to measure school results against improvement plans.
- We will include school improvement plans as a standing item on the SAC portion of the Education Committee agenda, and establish a reporting schedule.

The Board does not oversee teacher and principal evaluations

3.24 *Teacher and principal evaluations* – Board policy requires teachers and principals be evaluated periodically. This process is important in determining whether performance expectations are met in the delivery of educational services at the school level. The governing Board does not regularly receive summary information on teacher and principal evaluations. As a result, the governing Board is not fully aware of staff development needs, whether evaluations are completed according to policy, and whether schools are adhering to the public school program as required by the Education Act.

Recommendation 3.4
The governing Board of the Tri-County Regional School Board should ensure that teacher and principal evaluations are completed according to Board policy, that teachers are adhering to the provincial program of studies, and that staff development needs are being met.

Tri-County Regional School Board Response: The Tri-County Regional School Board agrees with this recommendation.

- We will establish a schedule for regular summary information on teacher and principal evaluations to be brought to the Board.
- We will monitor these reports to ensure that staff development needs are being met, within financial constraints, and that teachers are adhering to the provincial program of studies.
- General time-line – 2014/2015 school year; ongoing.

The Board does not appropriately evaluate the Superintendent's performance

3.25 *Assessment of Superintendent performance* – The Superintendent, like the governing Board, has specific responsibilities under the Education Act. In addition, the goals and priorities in the Board's business plan provide overall direction for the Superintendent. In examining the 2012 and 2013 Superintendent performance appraisal process, we found the process did not link the Superintendent's performance to the responsibilities of the position under the Education Act or the Board business plan. This limits the quality of the evaluation and the usefulness of the process as an accountability tool.

Recommendation 3.5
The governing Board of the Tri-County Regional School Board should evaluate the Superintendent's performance against the responsibilities of the position and take any necessary action.

Tri-County Regional School Board Response: The Tri-County Regional School Board agrees with this recommendation.

- We will continue to review the process for the assessment of the Superintendent's performance on an annual basis.

Management's Planning and Monitoring

Conclusions and summary of observations

Management does not ensure that schools have goals and strategies that are linked to Board goals and does not ensure schools appropriately report on their progress in achieving those goals. While management monitors student performance in literacy in several ways, it does not fully monitor student performance in numeracy. In addition, management is not regularly monitoring student performance in other subject areas or students with individualized program plans to ensure they are performing as expected. Management has implemented a process to evaluate teachers and principals. However, this process does not ensure personal growth plans are linked to Board and school goals, such as improving student performance in numeracy and literacy. In addition, recommendations for teachers' and principals' overall improvements are not always clear, actionable and specific for follow-up.

Management does not effectively monitor the school improvement process

3.26 *School improvement plans* – In delivering the Provincial curriculum within its schools, the Board specifically identified improving literacy in its 2012-13 business plan and improving in numeracy and literacy in its 2013-14 plan. To carry out the Board's plan, it is management's responsibility to direct and assist schools to develop goals and action plans that align with the Board's goals and report periodically on progress in meeting those goals. We found management directed schools to create annual school improvement plans, outlining their goals for improvement. However, management did not clearly direct schools to ensure their goals align with Board goals to improve student performance in numeracy and literacy.

3.27 We selected six elementary schools to determine if annual school improvement plans were developed. Three schools did not develop a school improvement plan for at least one of the years covered during our audit period even though provincial assessment results showed student performance needed improvement at those schools. Management indicated changes in

administration at the schools as the primary reason improvement plans were not in place.

3.28 We examined the goals established by the four selected schools with 2013-14 plans to determine if they aligned with the Board's plan. Since some school plans did not clearly identify the data used to support the goals selected, we analyzed the 2012-13 provincial assessment data to determine whether student performance in numeracy and literacy at the schools warranted improvement goals in those areas. We noted the following results.

- Two schools had improvement goals that were focused on the areas in which student achievement was below expectations, as supported by the provincial assessment data.
- One school had a numeracy goal, while the provincial assessment results indicated a focus on both numeracy and literacy was needed.
- Provincial assessment results for one school indicated a literacy goal was needed more than the numeracy goal established by the school.

3.29 We examined the school plans to determine whether they included specific actions to address the goals established. Two schools had outlined specific action plans or strategies, and teachers were aware of and using the plans and strategies. The other two schools did not have specific strategies outlined in their plans. Teachers were to develop classroom strategies on their own initiative. This is not an effective way to implement improvement goals throughout the school.

3.30 Management requires each school to submit an annual report to indicate school progress against the improvement plan goals and outline the improvement goals for the upcoming school year. The deadline for submitting annual reports is September 30th of the upcoming school year. We could not determine whether the 2012-13 annual reports were submitted on time for the six schools we selected as management could not provide evidence of when they received the reports. These reports are a key tool for management to determine whether schools are making reasonable progress and are beginning a new school year with appropriate goals and action plans to address student performance. Reporting by schools on progress toward their goals was limited in the annual reports we examined.

Recommendation 3.6

Tri-County Regional School Board management should ensure that school improvement plans and annual reports are completed on a timely basis, include specific goals and strategies to address Board and school priorities, and report progress on achieving goals.

Tri-County Regional School Board Response: Tri-County Regional School Board Senior Management Team agrees with the recommendation. An enhanced follow-up process will be established and implemented within the current school year and adjustments made to ensure more effective monitoring and reporting occurs on an ongoing basis.

Management does not monitor student performance in many subject areas

3.31 *Monitoring progress of students* – Teachers and principals are the frontline for the delivery of educational services through direct involvement with and monitoring of students in schools. Board management is responsible for monitoring student performance across all its schools and ensuring student educational needs are met. Our audit focused on management's role in monitoring the progress of students, particularly in the elementary grades.

3.32 *Provincial assessments* – Numeracy and literacy are recognized as two fundamental areas of learning that students need to master during the early grades to be successful in their later schooling. The Board identified these two areas as priorities in its business plan. The Department of Education and Early Childhood Development carries out provincial assessments in numeracy and literacy at various elementary grades. These assessments are one of the primary ways that management monitors student performance. Management analyzes the provincial assessment data to identify schools whose students are not performing to expectations. Management forwards the results and provides support to the school principals to take appropriate action to improve performance.

3.33 *Monitoring numeracy* – In 2011-12, the Board developed and implemented an assessment program called Targeting Twos. The program is designed to identify strengths and weaknesses of grade two students in numeracy before they write the first provincial numeracy assessment in grade four. Teachers provide extra assistance to students as needed and forward results to teachers in the next grade to continue student monitoring. Schools also submit the assessment results to management.

3.34 In 2014-15, management plans to perform comparisons between schools to determine, for example, if board-wide professional development is needed in a particular area of numeracy. Management also plans to identify the five schools with the greatest need in grade four numeracy, based on provincial assessments. Students in the identified schools who do not meet expectations will receive individual assistance from a numeracy intervention teacher. Implementation in all schools will depend on the success of the program in the initial five schools and the availability of funding. Management plans to review and analyze the progress of the students receiving support at the end of the first year of the program.

3.35 Although this planned program will likely be a positive step, a weakness remains as management is not regularly monitoring student performance in numeracy other than in grade two and in those grades that write Provincial assessments. As well, management does not regularly monitor and review school-based student assessments in other subject areas. Rather, management reviews results and responds in specific instances when a principal raises concerns or requests assistance. Management is not proactively monitoring student results at all grade levels and subject areas and ensuring performance weaknesses are addressed in an appropriate and timely manner. Therefore student performance in numeracy may decline and not receive attention by management until over a year later when provincial assessment results are received.

Recommendation 3.7
Tri-County Regional School Board management should regularly monitor the performance of students in all subject areas and take the required action to ensure student achievement meets expectations.

Tri-County Regional School Board Response: Tri-County Regional School Board Senior Management Team agrees with the recommendation. We will implement additional strategies, commencing this school year, to monitor student performance. Completely implementing this recommendation will be challenged by limited resources, among them being human resources.

3.36 *Monitoring literacy* – Management initiated a reading assessment process to track the reading progress of students in grades one, two and three. Management analyzes the school assessment results to identify gaps between school and Provincial literacy assessment results, and to identify any common areas of weakness among students. Management provides this information to the principals for comparison purposes and for input into their school improvement planning process. Teachers also use the assessments as a tool to determine which students should take part in an intervention program, discussed below. Management plans to implement these reading assessments in grade four in 2014-15.

3.37 *Early literacy program* – The Early Literacy Program, an initiative from the Department of Education and Early Childhood Development, provides students underperforming in literacy in grades one to three with individual, or small group, reading assistance. Classroom teachers, in consultation with the early literacy teacher, determine which students are selected for this intervention. Each elementary school has at least one early literacy teacher as part of the program. The early literacy teacher assesses students at the beginning and end of each school cycle to determine their progress.

Students with individualized plans are not appropriately monitored by management

3.38 *Individualized program plans* – Management does not have an appropriate process for monitoring the performance of its approximately 590 students with individualized program plans. These students have individualized plans developed specific to their academic or other needs. School-based program planning teams monitor each plan individually. When available, Board management attends school program planning meetings and is more involved when students need a more complex individualized plan. However, management does not regularly monitor to determine if students with individualized plans are generally progressing appropriately. For example, management does not periodically review the progress of students on a sample basis, or investigate further if potential problems are identified.

Recommendation 3.8
Tri-County Regional School Board management should appropriately monitor the performance of students with individualized program plans and take needed action to ensure those students progress as expected.

Tri-County Regional School Board Response: Tri-County Regional School Board Senior Management Team agrees with the recommendation. Management will establish effective processes to ensure students with individual program plans progress as expected. This recommendation will be implemented in the current school year to ensure effective monitoring and reporting on an ongoing basis. This will supplement the monitoring that currently takes place through the program planning process.

Teacher and principal evaluations are completed although improvements are needed

3.39 *Teacher and principal evaluations* – Management has an evaluation process for teachers and principals outlined in the Board's policy manual. Permanent teaching staff and principals receive an in-depth evaluation every four years and a yearly performance summary between evaluations. In-depth evaluations for principals include assessments related to school improvement plans and implementation strategies. Term teachers receive a similar evaluation one or more times per year, depending on the length of their term. The yearly performance summary is a brief document which summarizes permanent teachers' and principals' accomplishments and involvement in the school during the year. Principals or vice-principals complete teacher evaluations at their schools and submit them to management. Board management is responsible to complete principal evaluations.

3.40 We examined a sample of teacher and principal evaluations at our six selected schools for compliance with Board policy.

- 19 of 22 teachers we selected had the required evaluations completed during 2011-12 to 2013-14.
- All six principals we selected had an evaluation for 2012-13, the first year in which principal evaluations were required. Evaluations for 2013-14 were not yet due at the time of our audit.
- The three in-depth principal evaluations we examined included assessments related to the school improvement plan and strategies.

3.41 Part of the evaluation process is to identify any areas for improvement and provide recommendations. We found many of the recommendations to teachers were made to address situations observed during a specific classroom visitation. Other recommendations were more general and not always specific for follow-up, such as continue to seek guidance when needed. In four cases, it was not clear in the subsequent evaluations whether recommendations from a previous evaluation had been implemented or performance improved. We found one instance in which a specific recommendation in the 2012-13 evaluation was not implemented by the principal in the following year.

3.42 If recommendations to teachers or principals on areas for improvement are not specific, they do not provide sufficient guidance on actions needed and are difficult to follow up. Appropriate follow up on specific recommendations supports accountability of those being evaluated.

Recommendation 3.9
Tri-County Regional School Board management should ensure the evaluation process includes recommendations for improvement that are specific and that timely follow-up is completed to determine if appropriate progress has been made.

Tri-County Regional School Board Response: Tri-County Regional School Board Senior Management Team agrees with the recommendation. This recommendation will be implemented in the current school year to ensure more effective monitoring and reporting on the evaluation process for teachers and Principals. While an evaluation process is in place, this addition will further strengthen overall teacher and Principal evaluation.

Professional growth plans are completed although not always linked to Board goals

3.43 *Professional growth plans* – Although not a formal Board policy, management has directed permanent teachers and principals to complete an annual professional growth plan to identify personal improvement goals they want to achieve. At least one of the areas for growth should reflect the school improvement plan. Plans are to be reviewed initially and at the end of the year by staff and their supervisors.

3.44 We examined a sample of teacher and principal professional growth plans at the six selected schools for compliance with management's direction.

- All teachers and principals we selected had professional growth plans for 2013-14, as required by policy.
- In 2012-13, four teachers and one principal did not have professional growth plans.
- We found limited evidence of review of teachers' plans by principals.
- Two teachers did not have a specific numeracy or literacy goal in 2013-14.
- We found evidence of review of principals' plans by management.
- Three principals did not have a numeracy or literacy goal in their 2013-14 plans.

3.45 Management indicated that they are making improvements to the professional growth plan process in 2014-15 to ensure teachers complete and submit plans to the principals and principals to management and that plans are reviewed as required at designated times.

Recommendation 3.10
Tri-County Regional School Board management should ensure that professional growth plans are completed and that plans link to Board and school improvement goals.

Tri-County Regional School Board Response: Tri-County Regional School Board Senior Management Team agrees with the recommendation. The professional growth plan is currently in place and will be adjusted to better reflect the Board Business Plan and school improvement plan. This will be implemented for the 2015-2016 school year.

Tri-County Regional School Board Additional Comments

Board Summary:
In summary, the Tri-County Regional School Board will make every effort to implement the recommendations, subject only to possible financial restraints.

Management Summary:
In summary, the Tri-County Regional School Board Senior Management Team commits to working towards implementing these recommendations. However, the underlying challenge in the implementation continues to be limited resources, staffing levels being paramount, due to financial restraints.

At a Glance

4 Health and Wellness: Surgical Waitlist and Operating Room Utilization

Summary

Data in the Province's surgery wait time registry – PAR-NS – is reasonably accurate and there have been efforts to improve elective surgery wait times in recent years. However, Nova Scotia does not have adequate processes to manage waitlists for surgery or to optimize operating room use focused on surgical priorities. Nova Scotia still lags far behind national benchmarks in key areas; in 2013, only 43% of knee replacements met the six-month benchmark. There is no overall action plan to deal with this.

Health and Wellness has not set performance targets for elective surgery wait times. Annual demand has routinely outpaced completed surgeries. Without targets, it is difficult to evaluate entity and system performance.

The Province has a central system for elective surgery wait time information called PAR-NS. Wait time information is available publicly on the Department of Health and Wellness website. We found this website user-friendly and noted the type and nature of available information compared favourably with other jurisdictions in Canada.

We found the registry's data was reasonably accurate for reporting wait times; however surgeons do not consistently use the system's surgery priority system. This means the resulting waitlist is not correctly prioritized. Some surgeons' offices do not submit patient booking information in a timely manner which delays patient placement on the waitlist. Nearly 25% of submissions are at least one week late.

Further, we found the allocation of operating room time does not always consider patient priority and waitlists. It tends to reflect the historical assignment of time to a surgical service or individual surgeon. Active oversight of operating rooms at the district health authorities and IWK Health Centre has focused on managing day-to-day operations. We found that available operating room time was not optimally used, which means lost opportunities to do more surgery.

We found there have been efforts to manage wait times in the districts and at the IWK Health Centre, often with support of the Province, but a systematic and common provincial approach is still in the planning stages. The Department needs to oversee these processes and increase the pace of change.

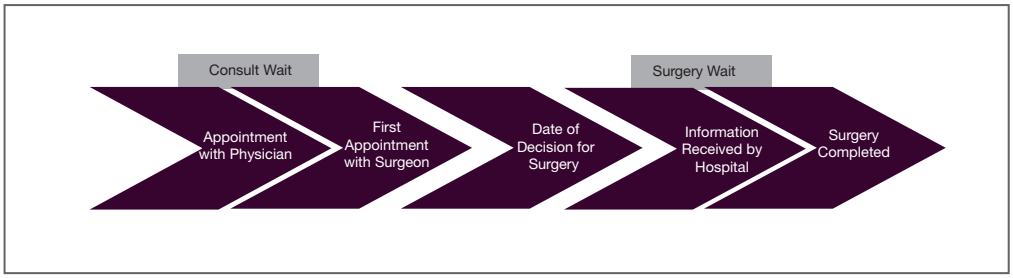
We expect that following amalgamation, our recommendations specific to district health authorities will be applicable to the newly formed district health authority and the IWK Health Centre.

4 Health and Wellness: Surgical Waitlist and Operating Room Utilization

Background

4.1 Under the Health Authorities Act, the Department of Health and Wellness is responsible for the strategic direction of health care, policy, and standards for delivery of services. It is also responsible for the allocation of financial resources to the district health authorities and IWK Health Centre. District health authority and IWK management are responsible to determine their priorities in the provision of health services and recommend their plans to the Department.

4.2 Elective surgery wait time has two elements: consult wait time and surgery wait time. Consult wait time is the period between the date when the surgeon receives a patient referral and the date the patient is first seen by the surgeon. Surgery wait time is the period between the date the surgery booking information was received by the hospital and the date the surgery was completed. Currently, the date of decision for surgery is not used in the calculation of wait time in Nova Scotia, or in most other Canadian jurisdictions.



4.3 In 2004, federal and provincial representatives met to discuss the future of health care and a 10-year plan to strengthen health care was developed. This plan established strategic investments in five initial priority clinical areas: cancer, heart, diagnostic imaging, joint replacement and sight restoration. As part of this plan, the wait times reduction fund was established to assist provinces and territories with their wait time reduction initiatives.

4.4 In 2010, the Patient Access Registry system (PAR-NS) was implemented in Nova Scotia, with support from the federal government. At a cost of approximately $12 million, this system enabled a prioritized, Province-wide elective surgery waitlist. The system draws data from all operating room systems used in the Province on a real (or near real) time basis. Surgeon offices may also have their own systems to record patient information outside PAR-NS.

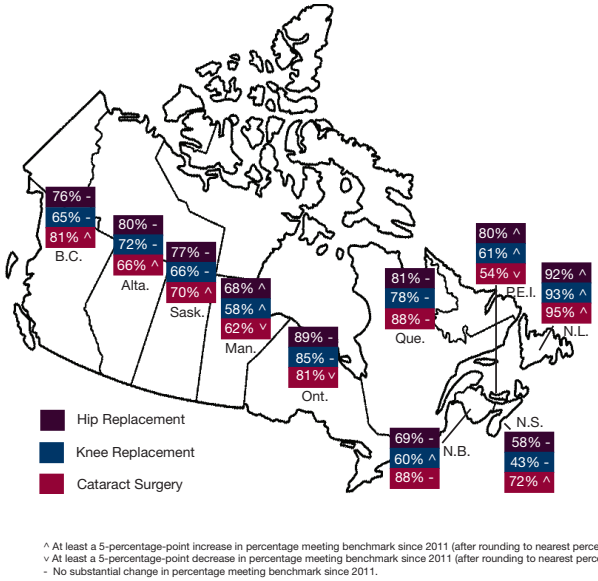
4.5 Surgical wait time information from PAR-NS is available publicly through the Department's website. This includes consult and surgery wait information for completed elective surgeries.

4.6 As a result of the national wait time strategy, elective surgery wait time benchmark timeframes were established for some initial priority wait areas, including the following.

- Knee replacement
- Hip replacement
- Cataracts

4.7 The Canadian Institute for Health Information reports results for most provinces. The chart below shows that Nova Scotia lags behind most other provinces compared to these benchmarks. For example, only 58% of hip replacements and 43% of knee replacements met the benchmark between April and September 2013.

Percentage Meeting Benchmark, April to September 2013, by Province



^ At least a 5-percentage-point increase in percentage meeting benchmark since 2011 (after rounding to nearest percent).
v At least a 5-percentage-point decrease in percentage meeting benchmark since 2011 (after rounding to nearest percent).
- No substantial change in percentage meeting benchmark since 2011.

Source: Canadian Institute for Health Information

4.8 Operating room resources are managed at Capital Health, Annapolis Valley Health, and the IWK Health Centre (the entities we visited for detailed audit work) with an OR committee to provide oversight. The Department of Health and Wellness has limited involvement in operating room utilization. From 2008 until 2010, the Department of Health engaged a consultant to perform benchmarking for operating room costs and utilization at each of the Province's district health authorities and the IWK. These reports suggested areas for improvement and performance measures.

4.9 It is important to note that elective surgeries are not generally optional as the name suggests. Elective surgery simply means nonemergency. We also acknowledge that wait time is an important patient-centred consideration, but not the sole factor with respect to surgical care. Other factors include hospital teaching mandates, minimum surgeries, skill maintenance and practice viability.

Audit Objectives and Scope

4.10 In summer 2014, we completed a performance audit of elective surgery wait times and operating room use at the Department of Health and Wellness, Annapolis Valley Health, Capital Health, and the IWK Health Centre.

4.11 The purpose of this audit was to determine whether:

- the Province has adequate systems and processes for managing patient waitlists for surgical procedures so that wait time and clinical patient need is appropriately considered; and
- operating rooms are managed to optimize usage and focus on surgical priorities.

4.12 The audit was conducted in accordance with sections 18 and 21 of the Auditor General Act and standards adopted by the Chartered Professional Accountants of Canada.

4.13 The objectives of the audit were to assess whether:

- surgery wait times data in PAR-NS is reasonably accurate and fairly presented in public reporting;
- surgery wait times are calculated appropriately and consistently across the Province;
- wait times data is analyzed to manage surgery waitlists;
- wait times are sufficiently communicated to stakeholders (surgeons, hospital and district management, patients, general public);
- the processes for establishing wait time targets and monitoring performance are adequate; and
- operating rooms are managed to optimize usage.

4.14 Certain audit criteria for this engagement were adapted from Accreditation Canada's Qmentum Program. Other criteria were developed by our Office. The audit criteria were accepted as appropriate by senior management in all

the entities we audited. We conducted our audit in 2014, using data from April 1, 2011 to September 30, 2013.

4.15 Our audit approach included examination of relevant policies, procedures, reports and other documentation, and interviewing Department, district and IWK staff and surgeons. We also tested surgery booking information and analyzed wait time and operating room utilization data, information and reporting.

4.16 We expect that following amalgamation, district-specific recommendations will be applicable to the newly formed district health authority and the IWK Health Centre.

Significant Audit Observations

Surgery Wait Time and PAR-NS

Conclusions and summary of observations

The Department's public wait time website is easy to use and reports information which is relevant for patients waiting for surgery. We found PAR-NS data is reasonably accurate to report patient wait times for surgery consistently across the Province. Wait time is calculated from when the booking is received by the hospital. This does not capture the time between the surgeon's decision to operate and receipt of booking information at the hospital. We recommended that Nova Scotia move to a more patient-centred approach by calculating wait times from the date of decision to operate. We also found that surgeons' offices are often late in submitting booking information to hospitals. This delays patient entry to the waitlist.

4.17 *Background* – The Patient Access Registry system (PAR-NS) is a central wait time reporting application, run by the Department of Health and Wellness. A comprehensive policy outlines the data to be entered by the district health authorities. It also assigns responsibility for data quality to a manager at the Department of Health and Wellness and one in each district health authority.

Wait time reporting is reasonably accurate

4.18 *Data quality and reporting* – We tested PAR-NS data to determine whether it was reasonably accurate for wait time reporting. We examined support for the information recorded in PAR-NS for 135 patients and did not find significant errors or issues. The testing was based on data as reported to PAR-NS; we did not audit the completeness of the waitlist. Additionally, our testing did not assess clinical decisions made by surgeons to place a patient

on the waitlist. Rather, we assessed the accuracy of information based on submissions from surgeons' offices.

4.19 We also analyzed all waitlist data from April 1, 2011 to September 30, 2013 to check for duplicate patient records and other data quality weaknesses. We did not find significant data quality issues.

4.20 The Department of Health and Wellness, each district health authority, and the IWK have a manager responsible for data quality. Access managers are integral to managing PAR-NS and ensuring data is accurate.

Wait time information reporting compares favourably with other jurisdictions

4.21 *Public wait time reporting* – PAR-NS data is used to provide quarterly, public wait time information on the Health and Wellness website. The website shows how long people who had surgery completed during the most recent quarter waited.

4.22 We found the website compares favourably with those in other provincial jurisdictions, in both ease of use and also, what is reported (see chart below). It shows trends by surgical procedure and facility. Starting with the March 31, 2014 reporting period, the website now includes surgeon-level wait time information. Surgeon-level wait time can be key information for patients in deciding where they may seek to receive care. We noted certain provincial jurisdictions report additional information, such as the number of patients still waiting for a procedure and performance targets.

Canadian Jurisdictional Comparison of Wait Time Websites

Province	Average Length of Time Waited	50th Percentile Waited	90th Percentile Waited	Cases Waiting	Facility -Level Wait Time	Surgeon -Level Wait Time	Benchmarks	Targets (other than full benchmarks	Trending
Newfoundland and Labrador		✓	✓				✓		
Nova Scotia	✓	✓	✓		✓	✓	✓		✓
Prince Edward Island	✓	✓	✓				✓		✓
New Brunswick		✓	✓		✓		✓	✓	✓
Quebec	✓			✓	✓		✓	✓	
Ontario			✓		✓		✓		
Manitoba		✓			✓				
Saskatchewan		✓	✓	✓		✓	✓	✓	✓
Alberta	✓	✓	✓		✓	✓			✓
British Columbia		✓	✓	✓	✓	✓	✓	✓	✓

Source: Wait time website for each jurisdiction.

Surgeons not submitting booking requests in a timely manner

4.23 *Late submissions from surgeons' offices* – We found many surgeons' offices throughout the Province do not submit surgery booking information in a timely manner. The PAR-NS policy allows seven days for surgeons to submit booking information to the waitlist, and an additional five days for that information to be entered into PAR-NS by hospital staff. However, surgeons' offices often miss their deadline, with nearly 40% of all submissions exceeding the seven-day timeframe. There has been no improvement in the timeliness of submissions between 2011 and 2014.

Surgeon Booking Information Submission Timeliness (Percent within timeframes)			
Year	**0 – 7 days %**	**8 – 14 days %**	**15 + days %**
2011	60%	14%	26%
2012	58%	13%	29%
2013	62%	12%	26%
2014	62%	12%	26%
Source: PAR-NS			

4.24 Late submission of patient surgery bookings means the waitlist is not up-to-date. However, because the wait for surgery is calculated using the date the booking was received by the hospital, late submissions do not impact the wait time calculation. Although other jurisdictions also calculate wait times in this manner, from a patient's perspective, the actual wait begins when the decision is made to operate and the patient is medically ready.

4.25 Health and Wellness management told us they are considering changing the surgery wait calculation to start when the decision to operate is made and the patient is ready. This would more appropriately reflect patient experience. Regardless of how the wait time is calculated, it is important that surgeons' offices submit booking information in a timely manner. The Department of Health and Wellness should take leadership and emphasize that timeliness of submissions is important to ensure wait time data is as complete as possible. We understand the Department may continue to be required to calculate surgery wait times for the Canadian Institute for Health Information which uses the date a booking was received in its reporting.

Recommendation 4.1
The Department of Health and Wellness should report surgery wait times from the date of decision to operate to the date of surgery. Also, the Department should ensure booking information is submitted within the PAR-NS policy timeframes.

Department of Health and Wellness Response: The Department of Health and Wellness accepts the recommendation to begin reporting surgery wait times from the date of decision and will begin working to enact this change as soon as technically possible.

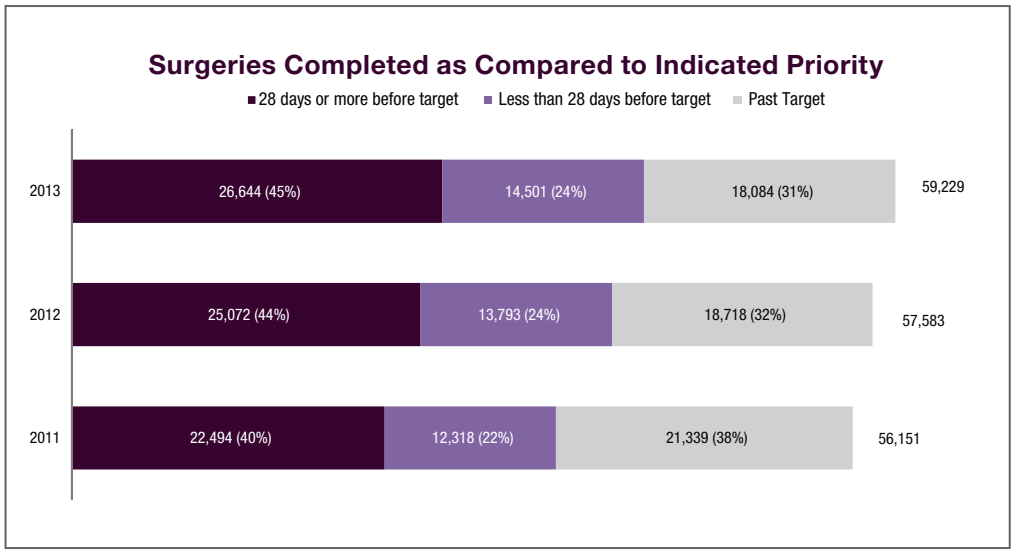
The Department of Health and Wellness will work with the District Health Authorities and other stakeholders as appropriate to ensure booking information is submitted within PAR-NS policy timeframes.

Waitlist priority ranking process not consistently used

4.26 *Waitlist priority ranking* –PAR-NS ranks patients based on clinical priority for surgery. Surgeons are supposed to assign one of six clinical priorities which indicate how quickly the patient should have surgery. These range from within one week to one year.

4.27 The prioritization system is not consistently used when scheduling surgeries. We noted that some surgeons use the same priority for most of their patients. While we found wait time data is reasonably accurate, we did not assess the correctness of clinical priority.

4.28 The chart below provides a three-year summary of when surgeries were completed compared to priority. For example, in 2013, based on the assigned surgery priority, 45% of surgeries were done well before they needed to be and 31% were done late. This means broad use of hospital-based or other central scheduling could not be done reliably using the current PAR-NS data because the priority of each patient is uncertain.



Source: PAR-NS

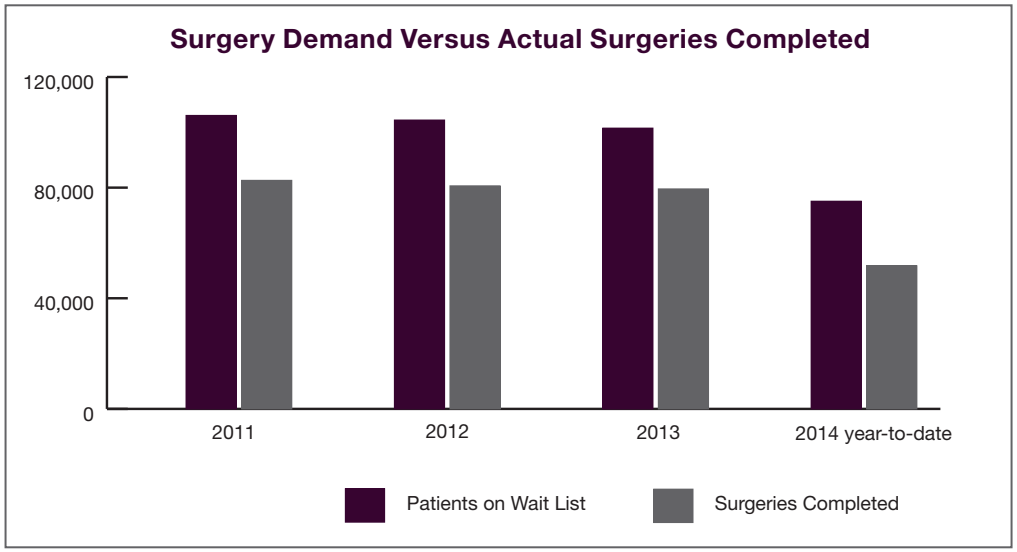
Includes elective surgeries with established priority

Surgery Wait Time Management

Conclusions and summary of observations

The Department of Health and Wellness, Annapolis Valley Health, Capital Health, and the IWK Health Centre do not set realistic organizational performance targets for elective surgery wait times. In addition, the Department has not established expectations for elective surgery volumes or wait time performance. There have been efforts to manage wait times in the districts, often with support of the Department, but there is no overall Provincial approach. Orthopaedic surgery has begun work on a Provincial approach, but there is no action plan to put this into practice. While we found no significant issues of accuracy in our testing of waitlist data, we noted the Department had concerns with the elective surgery waitlist in relation to when patients are added to the list. We recommended the Department develop a practice to ensure patients are only added to the waitlist when appropriate according to Department policy.

4.29 *Background* – The following chart shows that the trend for surgery in Nova Scotia indicates annual demand regularly exceeds the number of surgeries completed. For example, in 2013, only 78% of those on the waitlist had surgery. Nova Scotia is far behind national wait time targets for areas such as hip and knee replacements. Setting targets, monitoring performance against those targets, and developing plans to make improvements over time, is an important aspect of managing surgical wait times across the Province. We assessed the process to establish wait time targets and monitor performance at Annapolis Valley Health, Capital Health, the IWK Health Centre, and the Department of Health and Wellness. We also considered how this information is used in managing surgical wait times.



Source: PAR-NS

Efforts made to manage wait times Provincially but more progress needed

4.30 *Provincial wait time improvement efforts* – There is a Provincial committee to deal with matters relating to elective surgery wait time called the Provincial Perioperative Advisory Committee. Members include staff from Health and Wellness and district health authorities. We noted active efforts by the committee to identify issues and make recommendations to Health and Wellness regarding possible ways to manage surgical wait time issues Provincially.

4.31 For example, in September 2012, the Provincial Perioperative Advisory Committee recommended all operating room procedures be managed through district surgical offices rather than surgeon offices. In April 2013, the Committee recommended a twelve-month maximum target for all elective surgeries by April 2015, with a future target to be set for six months. However, when we completed our work, these recommendations had not been implemented.

4.32 The Provincial Perioperative Advisory Committee's approach is to address wait time issues by surgical specialty, beginning with orthopaedics because it has the longest wait times. As illustrated by the chart below, wait times to complete hip and knee replacement surgery have greatly exceeded national benchmarks. For example in 2013, the wait for knee replacement surgery was 615 days. The benchmark for the procedure is 180 days.

National Benchmark Surgeries – Nova Scotia Trends

Type of Surgery	Days Waited for Surgery			
	Actual – Nova Scotia (PAR-NS data)			National Benchmark
	2011	2012	2013	All Years
Hip Replacement	490	497	521	180
Knee Replacement	637	560	615	180

4.33 The Orthopaedic Working Group was formed in 2012 to develop Provincial processes to improve the quality of services. The group includes Health and Wellness staff, and clinical and administrative leads from the district health authorities offering orthopaedic surgery.

4.34 Health and Wellness management told us that a January 2014 report by this working group resulted in an additional $4.2 million for orthopaedics in 2014-15. The working group has been tasked with developing a five-year plan for orthopaedics in the Province. In summer 2014, efforts to recruit a program manager to oversee the development of a five-year plan were unsuccessful and the Department must now decide how to proceed.

4.35 Once complete, it is expected the Orthopaedic Working Group's approach will be used as a template for other surgical areas Provincially. While it is in

the early phases, it is hoped this will lead to timely improvements. However, we have concerns regarding the results of efforts to date. The Orthopaedic Working Group has been meeting for nearly two years and a plan is not in place. The Department needs to exercise leadership to ensure the five-year plan is developed and executed so results can be achieved. Efforts are also needed to operationalize improvements to other surgical areas.

4.36 As demonstrated by the chart below, results for national benchmark surgeries vary significantly by district. This also supports the need for a Provincial approach to wait time management. For example, at Annapolis Valley Health the wait for cataract surgery was approximately nine months. If you were a patient in the Cape Breton District Health Authority, you waited one month. The national target for completion of cataract surgery for high risk patients is four months.

National Benchmark Surgeries by District Health Authority – 2013

	Days Waited for Surgery		
	Hip Replacement (Target 180 days)	Knee Replacement (Target 180 days)	Cataracts (Target 120 days) Note 2
All District Health Authorities	521	615	229
DHA 1 – South Shore Health	Note 1	Note 1	142
DHA 2 – South West Health	Note 1	Note 1	81
DHA 3 – Annapolis Valley Health	592	600	279
DHA 4 – Colchester East Hants Health Authority	Note 1	Note 1	128
DHA 5 – Cumberland Health Authority	Note 1	Note 1	96
DHA 6 – Pictou County Health Authority	474	602	70
DHA 7 – Guysborough Antigonish Strait Health Authority	Note 1	Note 1	154
DHA 8 – Cape Breton Health Authority	382	415	30
DHA 9 – Capital Health	540	719	267

Note 1 – Joint replacements not completed in these districts
Note 2 – Target refers to high risk patients; Nova Scotia does not stratify cataract patients.

Source: PAR-NS

4.37 The Department's recent estimates note approximately $35 million is needed to start completing 90% of hip and knee replacements within the six-month benchmark reported by the Canadian Institute for Health Information. Once this benchmark is achieved, an estimated $7.7 million is needed annually to maintain a six-month wait moving forward. These estimates are based on

current processes. Process improvement may mean less funding is required. We have not audited whether these estimates are reasonable.

Waitlist may contain patients not medically ready for surgery

4.38 In September 2013, the Department presented a proposal to the Orthopaedic Working Group to optimize existing orthopaedic surgical resources. Possible approaches included:

- validating surgery waitlists;
- requiring districts to implement central intake models;
- publishing surgeon wait times for hip and knee; and
- promoting next available surgeon in the referral.

4.39 Department policy defines when patients are to be placed and remain on the waitlist. However, Health and Wellness management believe surgery waitlists should be validated through clinical assessment of patients waiting more than a year. Our testing of waitlist data looked at data accuracy, but did not address clinical matters. When we completed fieldwork in August 2014, the working group had not dealt with scheduling practices or ensuring only patients that should be on the waitlist are. For example, a patient may be receiving medical treatment and it is uncertain if surgery will be required.

4.40 We noted that many recommended actions of the past two years have taken place: funding of pre-habilitation clinics; public reporting of surgeon wait time; promotion of next available surgeon in consult referrals; actions to address foot and ankle waits; and additional resources for knee and hip replacement surgeries. However, Health and Wellness must address its concerns regarding the validity of the orthopaedic waitlists and surgeon scheduling practices.

4.41 Regardless of the scheduling practice used (i.e., hospital versus surgeon), an accurate waitlist which only includes those ready for surgery is required to decide where attention is needed.

Recommendation 4.2
The Department of Health and Wellness should ensure the surgery waitlist complies with its policy, including ensuring the existing waitlist consists of only patients ready for surgery.

Department of Health and Wellness Response: The Department of Health and Wellness accepts this recommendation.

The Department will work with the District Health Authorities and the Access Managers to ensure all PAR-NS policies are adhered to, including ensuring the existing waitlist consists only of patients eligible for surgery.

Realistic wait time performance expectations not established

4.42 *Wait time targets and public performance reporting* – The Department of Health and Wellness has not established targets for elective surgery wait time performance. The Department's 2012-13 Accountability Report includes the number of patients waiting over a year for elective surgery and indicates the Department wants the elective waitlist to decline in the future. The 2013-14 report did not include patients waiting more than a year. We noted that there was a 14% reduction in patients waiting longer than one year during that period.

4.43 As noted, Nova Scotia is still far behind in many areas when compared to national benchmarks. The Department's 2014-15 Statement of Mandate notes the Department will *"explore ways to achieve a target of one year maximum wait time for elective surgery in Nova Scotia."* This is not a concrete, short-term target, but the suggestion of a goal for the future. Health and Wellness has no interim targets, no plans, and no defined timeframe by which they plan to reach a one-year maximum wait. There are also no overall Provincial expectations for the district health authorities with regards to elective surgery performance.

4.44 At Annapolis Valley Health, Capital Health and at the IWK Health Centre, we found varying practices in setting organizational performance targets for surgery wait times and performance reporting. In all cases, persistent weak surgery wait time performance indicates the need for interim performance targets.

4.45 Annapolis Valley Health reported results against surgery priority targets internally, but did not have realistic organizational surgery wait performance targets.

4.46 Capital Health established organizational targets for knee, hip and cataract surgery, and reported against those publicly. Performance has not been close to the target of 100% meeting the benchmarks. For example, at June 30, 2014, only 37% of knee replacements met the benchmark.

4.47 The IWK Health Centre reported overall surgery wait time results against surgery priority targets, but did not set realistic organizational performance targets. Realistic targets serve to help define performance expectations and accountability for making real improvements in surgical wait times.

Recommendation 4.3
The Department of Health and Wellness, Annapolis Valley Health, Capital Health, and the IWK Health Centre should set specific, short-term surgery wait time performance targets and regularly report against those targets publicly.

Department of Health and Wellness Response: The Department of Health and Wellness accepts this recommendation.

The Department will work with and support the District Health Authorities to establish broad provincial wait time targets, and timelines for achievement, as well as district specific wait time targets, and timelines for achievement, based on local considerations and capacity.

Annapolis Valley Health Response: Annapolis Valley Health agrees with setting realistic interim surgery wait-time performance targets. Annapolis Valley Health's implementation of interim performance targets will demonstrate improvement in surgical waits and allow us to reach national benchmarks over time.

Capital Health Response: Agree and intend to implement with a timeline of January to March 2015.

IWK Health Centre Response: The IWK Health Centre agrees with this recommendation and will implement. The IWK has initiated this work and expects to be fully compliant with the recommendation by June 30, 2015.

4.48 *Internal reporting* – At Health and Wellness, we determined internal reporting of surgery wait time is prepared and communicated to Department senior management regularly. The reporting provides a comprehensive Provincial snap shot of wait time with analysis. This information was considered by the Perioperative Advisory Committee in the conduct of its oversight work.

Processes for wait time reporting at the districts and IWK are lacking

4.49 At Capital Health, there is regular elective surgery wait time reporting at some levels in the District. Information is reported to the Capital Health Board monthly. Certain surgical services received reporting, but on an ad hoc basis. We were provided numerous examples of ad hoc reporting in the District which shows that wait time information can be readily provided if requested. However, the lack of routine reporting of wait times means management does not regularly review the information to identify and analyze wait time issues and trends at the District and within services.

4.50 Wait time reporting was not a regular agenda item for the Capital Health's OR Executive Committee. Part of that committee's mandate is to allocate

operating room time to meet service standards. While wait times were occasionally discussed, it was not given the committee's oversight attention to the extent needed to manage the waitlist.

4.51 At Annapolis Valley Health, monthly, quarterly, and annual elective surgery wait times based on PAR-NS data were reported to some of the management team. However, some managers access such reports through an intranet site and we found the site was not up-to-date for all monthly reports.

4.52 We found IWK pediatrics management receives comprehensive wait time statistics, which are regularly reviewed at the Children's OR Committee. In addition, IWK adult surgical management recently began to receive wait time reports, which are reviewed by the Adult Surgical OR Committee. In both cases, the information is generated largely from an internal IWK system which predates PAR-NS. Management expressed concern about the continued use of the internal system since PAR-NS is now the source system for wait times. They indicated they will look to identify PAR-NS reporting options. We also observed that regular wait time reporting occurs at the executive and board level.

4.53 We found that wait time reporting processes were not documented at any of the three health entities we audited. Regular surgical wait time reporting processes need to be documented to provide continuity if personnel change positions or leave the organization. This includes detailing information requirements and related analysis, as well as who should receive reports and at what frequency. The process should also contain direction to survey users periodically to ensure reporting continues to meet needs.

Recommendation 4.4

Annapolis Valley Health, Capital Health and the IWK Health Centre should develop and document regular, internal elective surgery wait time reporting processes. These processes should be updated periodically based on a review of user information needs. Management should use this reporting to determine what action is needed to help address wait time issues.

Annapolis Valley Health Response: Annapolis Valley Health accepts this recommendation and is developing documentation that outlines internal elective surgery wait time reporting processes.

Capital Health Response: Agree and intend to implement by December 31, 2015. Management and physicians will be accountable under our co-leadership model.

IWK Health Centre Response: The IWK Health Centre agrees with this recommendation and will implement. Expected timeline for completion is June 30, 2015.

Districts and IWK demonstrated efforts to improve wait times

4.54 *District management of wait time issues* – We found Capital Health management demonstrated efforts in addressing elective surgery wait issues. The areas of greatest wait in the District (and the Province) are orthopaedics and ophthalmology. Examples of efforts identified included:

- reallocation of operating room resources;
- monitoring long-waiting patients (to ensure patients wish to remain on the list);
- use of a blitz strategy for certain long-waiting orthopaedic surgery patients in 2013;
- using Scotia Surgery for certain surgeries; and
- process changes in ophthalmology to increase the number of cataract surgeries performed with existing operating room capacity.

4.55 Capital Health also submitted proposals to Health and Wellness to increase ophthalmology capacity and add another surgeon. However, we found the proposal to increase capacity did not explain how increased surgery volumes could be achieved without a change in funding. Indirect costs were also not included in the comparisons of alternatives. Health and Wellness had similar concerns and this proposal did not move forward.

4.56 Annapolis Valley Health management has processes to identify elective surgery wait time issues and have demonstrated initiative in addressing these issues. The areas of greatest waits in the District were orthopaedics and ophthalmology. We identified examples of active efforts to manage surgical wait times, including:

- monitoring long waiters to help ensure a valid wait population;
- requests for additional resources from Health and Wellness to apply against key wait areas;
- establishing an orthopaedic pre-assessment clinic;
- pilot project for central surgery booking; and
- cooperation with other districts to obtain additional resources.

4.57 The IWK has two surgical services operating programs – the Children's program, and Women and Newborn Health program. We found the IWK Children's program management have processes to identify and consider elective surgery wait time issues; management has demonstrated some effort in addressing issues. The areas of greatest wait concern are dental,

gastrointestinal, ophthalmology, and orthopaedics. Efforts identified included:

- cooperation with South Shore Health to perform certain procedures there;
- reallocation of operating time;
- monitoring long-waiters; and
- developing a proposal to address children's dental surgery volumes.

4.58 Across the Province, efforts to address local wait issues, particularly in relation to orthopaedic surgery, have meant keeping up with incremental demand, without addressing wait time improvement. In the case of ophthalmology, efforts have resulted in reduced waitlists. Managing operating room use is central to district efforts to manage waitlists within existing resources. This is dealt with in the following section.

Operating Room Use

Conclusions and summary of observations

Annapolis Valley Health, Capital Health and the IWK Health Centre did not have effective processes to support the efficient use of operating room resources. We found policies are either outdated or in draft form at both Annapolis and Capital. Key performance indicators to manage and assess the efficiency of operating room use are not consistently measured in either of the three entities we audited. We also found that information about efficient use of operating rooms is not collected; reporting is not established; and regular monitoring is not always carried out. Management at Annapolis Valley Health and the IWK Health Centre indicated there is an assumption that OR resources are already used efficiently. However, we found that utilization of operating rooms is not adequately monitored. Time is often allocated on the basis of historical precedent, without consideration of waitlist priorities. While there is active oversight of operating rooms at the district health authorities, it is largely focused on managing daily operations. In addition, clinical services planning for the coordination of Provincial operating room resources is in very early stages.

4.59 *Background* – We examined operating room use practices at Annapolis Valley Health, Capital Health and the IWK Health Centre. We also assessed Department of Health and Wellness activities in this area. Effective processes to support the efficient use of operating rooms and managing surgical priorities are necessary to alleviate waitlist demands and provide timely access to surgical services.

Processes to support efficient operating room use are deficient

4.60 *Policies and processes* – Each district we visited and the IWK had its own processes to support operating room use. The processes should address matters such as physician and anesthetist absences, cancellations, and allocation of operating room time. At the IWK Health Centre, the Women's and Newborn Health Program and the Children's Program have processes specific to each program. At Capital Health, there was also variation between the Dartmouth General Hospital and the District's other facilities.

4.61 At Annapolis, Capital and the IWK, we found processes were ineffective to support efficiency of operating room use. For example, processes lacked guidance around planning for unused OR time and considering wait times when re-allocating unused OR time.

4.62 *Annapolis Valley Health* – The District's Operating Room Policy has been draft since 2010 but management told us it is the current practice. Provisions for allocating operating room time, scheduling, surgery cancellations, and planned surgeon absences were included in the policy.

4.63 Although the policy states that the OR committee assigns operating room time with consideration of demand, wait times, and other matters, we found only one instance in which time was moved to another service for the long term, despite significant wait times that demonstrate the need to do so. Management indicated that allocation of operating room time is largely based on historical precedent and it has been challenging to implement change due to individual physician preferences.

4.64 Additionally, optimal use expectations are not established for the operating rooms. Annapolis management told us they believe operating room use is already optimized. However, when we requested an overall utilization statistic (time used versus time available), we were told that this information is no longer available since an upgrade to the surgical information system.

4.65 Without clear expectations or measures for operating room utilization, District management cannot plan and objectively compare performance to determine if resources are optimized and allocated to services with the most critical needs. This impacts wait times and the ability to provide timely service to patients.

Recommendation 4.5

Annapolis Valley Health should update and approve its operating room scheduling policy. The policy should address optimal usage expectations, and formal standards to allocate operating room time and include guidance for revisiting operating room allocation on a regular basis with consideration of wait time.

Annapolis Valley Health Response: Annapolis Valley Health is in agreement with this recommendation. The current operating room scheduling policy will be revised to ensure allocation of operating time is based on patient need, resources, community, utilization, and provincial priorities. Implementation success requires collaboration with Department of Health and Wellness and physicians. Resource allocations may impact the District's ability to achieve targeted results.

4.66 *Capital Health* – Operating room policies and guidelines that support operating room utilization at Capital Health have not been updated since 2005. The policies lack guidance on key elements necessary to support efficient operating room use. There is no formal process to plan for surgeon and anesthetist absences and the policy does not require consideration of wait times when allocating resources. We found that OR committees provided guidance for some areas. For example, the OR Executive Committee mandated that a service with the longest waitlist be given priority for operating room time which other services could not use due to scheduling issues. The OR Executive Committee and the Dartmouth General OR Committee also established a two-week notice deadline for surgeons to submit surgical bookings.

4.67 We noted issues at the Dartmouth General Hospital with respect to patient wait and operating room use. Courtesy physicians are not assigned regular operating room time, but a surgeon with courtesy privileges had the largest waitlist for a particular service. No steps have been taken to reassign patients within the service. In another surgical service, 50% of one surgeon's patients waited close to a year for surgery while a colleague's patients waited approximately two months. The chart below provides further information on this situation. While we acknowledge the physicians have a different mix of patient types, this is an example of historical allocation of operating room time and issues which can arise. A more patient-centred process would involve consideration of wait times.

Elective Surgery Cases Waiting – Dartmouth General Hospital Example
(as at June 30, 2014)

	Total Cases	50th Percentile Days Wait	90th Percentile Days Wait	Long-waiters *	% waiting over a year
Surgeon A	132	60	270	8	6%
Surgeon B	544	293	626	230	42%

* Waiting longer than one year

Source: PAR-NS

4.68 A 2010 consultant report for Capital Health noted a utilization benchmark of 90% would be appropriate. Capital Health performance indicators to measure operating room use suggest that operating rooms are not optimized. The year-to-date utilization rate reported June 2014 ranged from 71% to 84% at the Victoria General and Halifax Infirmary sites. The Dartmouth General

Hospital's utilization rate for the month of June 2014 was 80%. District management told us that they are not fully confident in the data that makes up these figures for the Halifax sites because the information is being pulled from a number of systems and the output has not been fully validated. This issue has been ongoing since 2012. Capital Health management need to take steps to ensure the reported operating room utilization rates are correct.

Recommendation 4.6

Capital Health should update its operating room policies over utilization to better support efficient operating room use. The policies should address revisiting operating room time allocation with more consideration of wait times. Reporting of utilization information should be validated to ensure the output is accurate.

Capital Health Response: Agree and intend to implement with a timeline of January to March 2015. Approach is to include hiring/realigning resources to support deep analysis of current operating room information systems to determine capacity to provide utilization reports and information to inform decision making. If this is not adequate other options will be explored. The new approach will be multilevel – surgeon, surgical service and system. The existing policies will be revised, and an accountability process to support the new policies will be in place. Work is currently already in progress regarding the realignment of ENT and orthopaedic operating room time at Dartmouth General Hospital.

4.69 *IWK Health Centre* – The IWK Children's program operating room policy is adequate. It includes procedures to deal with absences, cancellations, and consideration of waitlists for allocation of operating rooms. Operating room time has been reallocated based on the policy. The IWK Women's and Newborn Health program developed a policy to use a committee to schedule surgeries based on waitlist data. Management told us the policy is followed, but since the committee does not keep minutes, we could not confirm this. The policy does not include guidance on planned surgeon and anesthetist absences or cancellations.

4.70 Usage expectations are not established for operating rooms. IWK management indicated that operating rooms are already optimized. However, when we requested an overall utilization statistic (time used versus time available), we were told that this information is not reported regularly. Due to the lack of recent data, it cannot be determined if operating room resources are optimized. However, results from ad hoc reports we examined indicate that efficiencies can be gained in certain areas, such as surgery on-time starts and turnover time between surgeries. For example, 76% of first surgeries of the day started late in the IWK Children's program for the period April to June 2013.

4.71 Sufficient information is necessary to identify inefficiencies in operating room utilization and take steps to improve performance. Without clear

expectations or measures for operating room utilization, management at the IWK cannot plan and objectively compare performance to determine if resources are optimized and allocated to services with the most critical needs.

Recommendation 4.7
The IWK Health Centre should update its operating room policies, including having clear guidance on planned physician absences, surgery cancellations, and optimal usage expectations. The Health Centre should measure and monitor its operating room usage regularly.

IWK Health Centre Response: The IWK Health Centre agrees with this recommendation and will implement. There are OR policies currently in place that will be revised to ensure the required processes are defined, documented, and enforced. Expected timeline for completion is June 30, 2015.

Operating room use lacks regular and reliable utilization monitoring and reporting

4.72 *Reporting* – Operating room use lacks regular and reliable utilization monitoring and reporting. While PAR-NS has some OR utilization reporting, it is still under development. The information available to each district health authority outside PAR-NS to collect and report certain operating room use statistics is not consistent. Although information varies, management at Annapolis, Capital and the IWK expressed concerns about the quality and accessibility of information. Certain systems require manual data entry and are therefore labour intensive. Nursing and clinical staff are sometimes required to perform these tasks, which may not be the best use of those staff member's time.

4.73 In 2012, Capital Health developed a reporting tool which includes a number of key operating room performance indicators. Reports are compiled from various systems and distributed and discussed on a bi-weekly basis. However, Capital Health management have told us that they are not fully confident in the quality of the information in these reports and have been working on validating the data. The Dartmouth General Hospital does not have access to this reporting tool and reports more basic information, such as cancellations and the number of surgical cases and hours, to key personnel on a regular basis.

4.74 Annapolis Valley Health reports a number of operating room use statistics that are results-based. Overall, there are no operating room key performance indicators established to manage results. We found that some reports provide comparative figures showing time used, but these are not compared to available time. Basic information about overall utilization was not available

from the system and we noted that other reports were manually prepared by staff.

4.75 IWK Health Centre reports operating room utilization statistics on an ad hoc basis. We found evidence that some ad hoc reporting was completed during the audit period.

4.76 Reporting meaningful information would be helpful to management in all districts when making decisions about allocating operating room resources to meet surgical priorities.

4.77 *Monitoring and oversight* – Annapolis Valley Health, Capital Health, and the IWK Health Centre have some structures to monitor operating room utilization. However, as noted previously, they do not have sufficient information and supporting processes required to make informed decisions.

4.78 We found that committees are identifying opportunities to improve utilization. Examples include: modifying current processes, sharing resources with other districts and external sources, and submitting proposals to the Department of Health and Wellness. For example, Capital Health has partnered with Scotia Surgery to complete certain surgeries. Capital also uses surgical facilities at Hants Community Hospital to conduct orthopaedic surgeries. IWK Children's programs use Bridgewater surgical facilities to perform certain types of surgical procedures. Annapolis Valley Health conducts some procedures at South Shore District Health Authority. This indicates that the opportunity exists for provincial coordination of operating room resources.

Recommendation 4.8

Annapolis Valley Health, Capital Health and the IWK Health Centre should establish standard management reporting that includes meaningful operating room utilization measures.

Annapolis Valley Health Response: Annapolis Valley Health is in agreement with this recommendation. Operating room utilization key performance indicators have been identified. They will be monitored on a quarterly basis to ensure optimal operating room utilization.

Capital Health Response: Agree and intend to implement with a timeline of April to June 2015. The timeline for implementation will support collaboration for the development of standardization across management zones.

IWK Health Centre Response: The IWK Health Centre agrees with this recommendation and will implement. The IWK currently reports utilization measures on an ad hoc basis and will establish regular reporting processes and definitions. Expected timeline for completion is June 30, 2015.

No overall plan for efficiently managing operating rooms Provincially

4.79 *Operating room coordination: Health and Wellness* – Historically, operating room utilization was considered the responsibility of the district health authorities. In 2012, the Department recognized it has a Provincial role in trying to coordinate clinical services planning (including surgery) and the Provincial Clinical Services Planning Steering Committee was formed. Clinical services planning involves designing a Provincial approach to care including where people can access services, such as surgical procedures. Management decided to focus on orthopaedic surgeries initially since the Orthopaedic Working Group had been formed and was developing a five-year plan. However, there is still no overall framework for surgical clinical services planning. Clinical services planning will be fundamental for ensuring operating room resources are optimized with a focus on surgical priorities Province-wide.

Recommendation 4.9
The Department of Health and Wellness should develop a clinical services planning framework for surgery that determines which services will be offered in each location.

Department of Health and Wellness Response: The Department of Health and Wellness agrees with this recommendation. The Perioperative Advisory Committee will assist in providing leadership and will work with the new provincial health authority structure to determine a clinical plan for surgical services.