

Chapter 28

Saskatchewan Health Authority (Kelsey Trail) – Maintaining Medical Equipment

1.0 MAIN POINTS

By December 2017, the former Kelsey Trail Regional Health Authority improved some of its processes to maintain medical equipment but more improvements are needed. It implemented two of three recommendations first made in our 2010 medical equipment maintenance audit. It properly updated its medical equipment listing, and regularly gave senior management sufficient information to facilitate meaningful discussions about the equipment.

Further work remains to make sure all medical equipment is maintained consistent with policy and required manufacturers' standards. Properly functioning medical equipment supports the health system in providing safer, patient-centred care.

2.0 INTRODUCTION

To provide patient care, Kelsey Trail relies on medical equipment to help diagnose and treat patients. From April 1, 2017 to December 31, 2017, Kelsey Trail bought \$0.72 million in new medical equipment (2016-17: \$2.21 million) and spent \$0.16 million (2016-17: \$0.23 million) on medical equipment maintenance.¹

In our *2010 Report – Volume 2*, Chapter 11C, we concluded that Kelsey Trail Regional Health Authority did not have adequate processes to maintain its medical equipment. We made seven recommendations. At July 31, 2015, the time of our last follow-up, Kelsey Trail had implemented four recommendations; three recommendations remained outstanding.² Kelsey Trail had not yet created a current and complete list of all medical equipment, maintained all equipment in accordance with the required standards, or reported to management and the Board about the state of the medical equipment.

On December 4, 2017, the Government of Saskatchewan consolidated all 12 regional health authorities, including Kelsey Trail, into one Saskatchewan Health Authority. The Authority became responsible for patient care previously administered by Kelsey Trail.

To conduct this follow-up audit, we followed the standards for assurance engagements published in the *CPA Canada Handbook – Assurance* (including CSAE 3001). To evaluate Kelsey Trail's progress towards meeting our recommendations, we used the relevant criteria from the original audit. Kelsey Trail's management agreed with the criteria in the original audit. We interviewed staff responsible for monitoring medical equipment maintenance, and assessed the IT maintenance management system and medical equipment maintenance reports.

¹ Information provided by management.

² *2015 Report – Volume 2* (Chapter 51, pp. 343-345).



3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at December 31, 2017, and actions up to that date. At December 31, 2017, the Saskatchewan Health Authority (through the former Kelsey Trail) implemented two recommendations and made progress in implementing the other one.

3.1 Medical Equipment Listing Up-to-Date

We recommended that Kelsey Trail Regional Health Authority maintain a complete and current list of all medical equipment, its location, and its maintenance record. (2010 Report – Volume 2; Public Accounts Committee agreement January 19, 2011)

Status – Implemented

In January 2017, the former Kelsey Trail Regional Health Authority implemented a new policy to guide staff on what to do when it buys new medical equipment. The policy outlines the procedures to maintain a complete and current list of all medical equipment purchased.

We found that Kelsey Trail's IT maintenance system contained a complete and current list of medical equipment. The IT system also documented the equipment's location.

3.2 Maintaining All Medical Equipment According to Standards Needed

We recommended that Kelsey Trail Regional Health Authority maintain all equipment in accordance with the required standards. (2010 Report – Volume 2; Public Accounts Committee agreement January 19, 2011)

Status – Partially Implemented

Staff responsible for medical equipment located within the former Kelsey Trail Regional Health Authority did not maintain all equipment in accordance with required standards. They also did not set correct maintenance schedules in the IT maintenance system.

Kelsey Trail's Preventative Maintenance Plan Policy 7-100 requires maintenance to occur according to manufacturer's requirements. Items requiring maintenance must have documentation setting out the frequency, parts required, and tasks to complete. Kelsey Trail is to use its maintenance IT system to document this information.

Staff were not consistently following this Policy, or carrying out maintenance as expected. We found:

- Of all the medical equipment listed in the IT system, for 12 devices, staff failed to set a maintenance schedule as required by its maintenance policies.

- For 12% of the 33 items tested, the frequency of maintenance set up in the IT system was less than the manufacturers' requirements; manufacturers required semi-annual maintenance, and only annual maintenance was scheduled.
- For 33% of the 33 items tested, each was not maintained within expected frequency even though staff set up the correct frequency in the IT system. We found some of these items received maintenance six months after their scheduled date; one item, as of December 2017, was nine months past its annual scheduled maintenance date.

Also, staff did not always promptly enter completed maintenance into the IT system. For example, when staff used bulk work orders to schedule maintenance, order closure occurred only when all medical equipment on the order had received maintenance.³ We found that staff did not close some orders until several months after the first medical equipment device listed on the order received maintenance. Because the IT system uses the work order closing date to schedule the next maintenance date, not entering maintenance when completed results in some medical equipment not having their next maintenance scheduled in accordance with manufacturers' requirements.

Not maintaining equipment in accordance with manufacturers' requirements increases the risk that equipment will not work properly or safely when needed. This can have a serious impact on a patient's treatment.

3.3 Effective Reporting to Senior Management

We recommended that Kelsey Trail Regional Health Authority provide reports to the Board of Directors and senior management on the state of medical equipment at all of its healthcare facilities. (2010 Report — Volume 2; Public Accounts Committee agreement January 19, 2011)

Status – Implemented

Since January 2017, the Board and senior management of the former Kelsey Trail Regional Health Authority received monthly reports on the state of medical equipment at all of the healthcare facilities within the former Kelsey Trail region. The reports provided sufficient information to facilitate meaningful discussions about the state of the equipment. These reports included:

- The amount of medical equipment that received maintenance in accordance with manufacturer requirements
- The amount of medical equipment with overdue maintenance (i.e., beyond manufacturer's requirements), as well as the reasons for them being overdue

³ Bulk work orders for maintenance work are where orders for maintenance of more than one piece of equipment is placed on the same order.

