

## Chapter 26

# Saskatchewan Health Authority—Analyzing Surgical Biopsies in Regina and Saskatoon Labs

### 1.0 MAIN POINTS

The Saskatchewan Health Authority is responsible for providing lab services that include analyzing surgical biopsies at its Regina and Saskatoon labs. In 2023, those labs analyzed over 417,000 tissue samples or about 100,000 cases.

By May 2024, the Authority implemented one of the three remaining audit recommendations we first made in 2018 related to analyzing surgical biopsies.

The Authority began consistently monitoring the completion of preventive maintenance on lab equipment in Saskatoon used to support analysis of surgical biopsies. In April 2024, the Authority updated its maintenance log policy in Saskatoon, including requiring staff to explain maintenance delays. Our testing of maintenance logs found lab staff completed maintenance as required and reviewed maintenance logs in accordance with policy (within five business days of submission at the beginning of each month).

The Authority approved a new surgical biopsy requisition form and guidance for healthcare providers (e.g., family physicians) in September 2022 but had yet to implement it by May 2024. We found the Authority approved additional revisions to the requisition form in June 2024 and was developing a plan to start training healthcare providers on using the new requisition form. In 2023, Regina labs received incomplete requisitions 23% of the time, supporting the need for training.

Also, the Authority had yet to fully implement a consistent approach for prioritizing and issuing timely diagnosis reports for surgical biopsies. In March 2024, the average turnaround time for diagnosis reports was over 11 days at the Saskatoon labs, and over 28 days at the Regina labs. Further, the surgical biopsy backlog in Regina was 5,600 cases at March 2024. We found the Authority drafted priority targets and expected turnaround times for diagnosis reports (e.g., 24–72 hours for urgent cases), but had not approved these targets by May 2024.

Having effective processes for performing analysis of surgical biopsies helps the Authority to provide timely results to healthcare providers so they can provide timely treatment options to patients.

### 2.0 INTRODUCTION

#### 2.1 Background

*The Provincial Health Authority Act* makes the Saskatchewan Health Authority responsible for planning, organizing, delivering, and evaluating provincial health services. As part of this mandate, the Authority is responsible for providing lab services, including surgical



biopsies. A surgical biopsy is a procedure involving the surgical removal of tissue for laboratory analysis by pathologists to identify the existence of disease.

The Authority has eight labs that analyze surgical biopsies for diagnostic purposes (e.g., potential cause of a disease)—three labs in Saskatoon; two labs in Regina; and one lab each in Prince Albert, North Battleford, and Moose Jaw. The Authority’s labs in Regina and Saskatoon employ about 101 full-time equivalent staff.

In 2023, Regina and Saskatoon labs analyzed over 417,000 tissue samples or about 100,000 cases. In March 2024, the surgical biopsy backlog in Regina was 5,600 cases and 1,694 cases in Saskatoon.<sup>1</sup>

The labs in Saskatoon and Regina are also referral centres for surgical biopsies; in that, they receive biopsies collected from other lab locations (e.g., other labs in and outside the province) for analysis. As a result, the Saskatoon and Regina labs analyze the majority of surgical biopsies done in Saskatchewan. Our original audit in 2018 focused on the Saskatoon and Regina labs.

## 2.2 Focus of Follow-Up Audit

This chapter describes our second follow-up audit of the Saskatchewan Health Authority’s actions on the recommendations we made in 2018.

We concluded for the 12-month period ended July 15, 2018, the Authority had, other than the areas identified in our seven recommendations, effective processes to analyze surgical biopsies efficiently in laboratories located in Regina and Saskatoon.<sup>2</sup> By 2022, the Authority implemented four recommendations.<sup>3</sup>

To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Authority’s progress toward meeting our recommendations, we used the relevant criteria from the original audit. Authority management agreed with the criteria in the original audit.

To complete this follow-up audit, we interviewed key Authority staff responsible for lab services. We also assessed relevant documentation such as lab equipment maintenance logs, forms, guidance, and biopsy turnaround times.

## 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 May 31, 2024, and the Saskatchewan Health Authority’s actions up to that date.

<sup>1</sup> In 2023, patients waited up to 33 days for surgical biopsy diagnosis in Regina and 12 days in Saskatoon, largely due to the back log.

<sup>2</sup> *2018 Report – Volume 2, Chapter 23*, pp. 135–149.

<sup>3</sup> *2022 Report – Volume 2, Chapter 19*, pp. 207–214.

### 3.1 Consistent Turnaround Targets for Diagnosis Reports Not Yet in Place

***We recommended the Saskatchewan Health Authority implement a consistent approach for prioritizing and issuing timely diagnosis reports for surgical biopsies.*** (2018 Report – Volume 2, p. 144, Recommendation 3; Public Accounts Committee agreement March 1, 2022)

**Status**—Partially Implemented

The Saskatchewan Health Authority is working on implementing a consistent approach for prioritizing and issuing timely diagnosis reports for surgical biopsies.

The Authority continues to have varying turnaround times for processing requests to analyze surgical biopsies as well as to issue diagnosis reports at its Regina and Saskatoon labs. The Authority uses targeted turnaround times between 2–14 days for various priority levels in Saskatoon, and a target of 5 days in Regina. Regina does not have documented priority levels.

The Authority has set an internal quality target striving to complete 80% of diagnosis reports in eight days—Regina and Saskatoon labs are not meeting this target.<sup>4</sup> For instance, in March 2024, the average completion time for diagnosis reports was over 11 days in Saskatoon, and over 28 days in Regina. The Authority decided to strive for 80% in eight days to get the provincial turnaround times to a more reasonable level.

Good practice indicates target turnaround times for issuing diagnosis reports should be between 24 hours to 5 business days based on urgency. The Authority's draft priority targets and expected turnaround times for diagnosis reports are set out in **Figure 1**. These turnaround times were not approved at May 2024.

**Figure 1—Draft Surgical Biopsy Turnaround Time Expectations**

Priority Type	Turnaround Time <sup>4</sup>
Priority 1: Urgent	24–72 hours
Priority 2: Small	3–6 days
Priority 3: Routine	8 days
Priority 4: All others	8 days

Source: Information provided by Saskatchewan Health Authority.

The Authority expects to approve the priority turnaround times in June 2024.

Having inconsistent prioritization guidelines in Regina and Saskatoon for analyzing specimens may result in some patients and healthcare providers waiting longer than others for diagnosis results, which may delay needed medical treatment. Consistently assessing the issuance of diagnosis reports against standard provincial targets will also allow the Authority to take appropriate actions where it is not meeting targets (e.g., Regina average turnaround time).

<sup>4</sup> Lab management calculates turnaround time as the time between the entry of a requisition into the lab information system and completion of a pathologist's diagnosis report (it does not include weekends and statutory holidays).



### 3.2 Roll Out and Training Needed on Surgical Biopsy Requisition Forms for Healthcare Providers

---

***We recommended the Saskatchewan Health Authority educate healthcare providers on properly completing surgical biopsy requisitions for Regina and Saskatoon labs.*** (2018 Report – Volume 2, p. 147, Recommendation 6; Public Accounts Committee agreement March 1, 2022)

**Status**—Partially Implemented

While the Saskatchewan Health Authority approved a new surgical biopsy requisition form, it has yet to roll out the form or educate healthcare providers on how to properly complete it.

As indicated in our 2022 audit, the Authority approved a new surgical biopsy requisition form and guidance for healthcare providers in September 2022. Though, we found it had yet to implement the form and approved additional revisions to the form in June 2024. This form sets out key sections that healthcare providers must complete such as patient clinical history, list of all samples and tissues, sample removal time; guidance explains how to complete the requisition properly. At May 2024, Authority management indicated it was developing a plan to start training on the new form.

Incomplete requisitions can result in diagnosis delays. In 2023, the Regina labs received 242 incomplete requisition forms from healthcare providers or an average of 23% (Saskatoon labs did not track or report on incomplete requisitions).<sup>5</sup>

Having one provincial requisition form, along with guidance and training, will help healthcare providers include consistent information to assist in prioritizing surgical biopsies. This may help reduce the risk of incomplete requisitions and possible delays in diagnosing patients' biopsies.

### 3.3 Required Preventative Maintenance Consistently Documented

---

***We recommended the Saskatchewan Health Authority require its labs to keep records of preventative maintenance completed by technical staff on its surgical biopsy equipment.*** (2018 Report – Volume 2, p. 149, Recommendation 7; Public Accounts Committee agreement March 1, 2022)

**Status**—Implemented

The Saskatchewan Health Authority implemented a process to consistently track and monitor the completion of preventive maintenance on surgical biopsy equipment (e.g., microtomes [tissue slicers], water baths, eye wash stations) in Saskatoon.

In April 2024, the Authority updated its policy and process for reviewing equipment maintenance logs in Saskatoon.<sup>6</sup> This policy establishes responsibility for laboratory staff to regularly conduct and record maintenance activities in a log (e.g., daily or weekly). It also

---

<sup>5</sup> These incomplete requisitions were submitted using the previous version of the form.

<sup>6</sup> During our 2018 audit, we found the Regina labs kept adequate equipment maintenance records.

sets out timing for monthly review and sign off of the maintenance logs by the medical laboratory technologist. When staff do not complete equipment maintenance timely, the Authority requires them to complete a deviation form explaining the reasons for the delay, contributing factors, and actual or potential impacts on patients' diagnosis reports.

We tested 20 maintenance logs from April and May 2024 and did not find significant issues with lab staff completing the equipment maintenance as required. Additionally, we found a medical laboratory technician reviewed and signed off on the logs monthly in accordance with policy.

Timely maintenance of laboratory equipment is essential to prevent disruptions that could impact turnaround times or produce inaccurate analysis/diagnosis of biopsies.

