

Chapter 4

Section 4.02

Ministry of Community Safety and Correctional Services

Centre of Forensic Sciences

Follow-up on VFM Section 3.02, *2007 Annual Report*

Background

The Centre of Forensic Sciences (Centre) provides independent forensic-science laboratory services to law-enforcement officers and other justice-sector clients. Police investigators and Crown prosecutors rely on forensic science to identify or eliminate suspects and to provide evidence that can withstand scrutiny in court. Delays or errors in forensic analyses can prolong police investigations, increase their costs, and affect public safety by allowing criminals to remain free to reoffend.

During the 2008/09 fiscal year, the Centre received more than 11,600 requests (10,400 in 2006/07) from its justice-sector clients for scientific analyses of evidence. These requests resulted in the issuing of almost 15,100 analytical reports (12,700 in 2006/07). The types of services (with approximate percentage of staff working in each area in parenthesis) were as follows:

- biology (32%);
- toxicology (20%);
- chemistry (14%);
- firearms and toolmarks (8%);
- documents and photoanalysis (4%); and
- electronics (3%).

The Centre's head office and central laboratory are located in Toronto, and a northern regional

laboratory is located in Sault Ste. Marie. During the 2008/09 fiscal year, the Centre had operating expenses of approximately \$26.4 million (\$25.5 million in 2006/07).

In our *2007 Annual Report*, we concluded that the Centre had established reasonable processes for ensuring the quality of its services, and noted that it was pursuing international accreditation in this regard for 2008, which it has since received. As well, its clients were generally satisfied with the calibre of its work. While the timeliness of its services was an issue in the past, over the last several years it had improved in this area—its DNA analysis in particular—despite an increase of more than 70% in the demand for forensic services.

However, improvements in systems and procedures were required for the Centre's turnaround times to be comparable to those of leading international forensic laboratories. Some of our more significant observations were as follows:

- We compared the Centre to two global leading forensic-science laboratories—one in the United Kingdom and the other in Sweden—and found that the two completed their case reports in about half the Centre's average turnaround time of 64 days.
- The Centre used only one turnaround-time target to monitor the performance of its different investigative sections. However, since

the kinds of cases each section works on are completely different, each different section should have its own turnaround-time target.

- Having standards and case-completion benchmarks by section would facilitate managerial oversight and identification of bottlenecks requiring corrective action. The Centre's 90-day target for completing 80% of its cases was much longer than targets set by forensic-science laboratories in other jurisdictions, which often set targets of 30 days or less.
- The Centre had established no documented systems or procedures for monitoring the number of urgent cases processed by each section or their turnaround times.
- The Centre's information systems did not help management determine why certain case reports had been delayed.

We made a number of recommendations for improvements, and received commitments from the Centre that it would take action to address our concerns.

Status of Recommendations

The Centre has made a substantial effort to update its systems and procedures to address our recommendations and increase its efficiency. Of particular note is the Centre's participation in a multi-jurisdictional performance-benchmark project. However, it has so far been unable to improve overall turnaround times, given the increased demand for its services, and its available resources. The status of action taken on each of the recommendations is described in the following sections.

MONITORING REPORT TURNAROUND TIMES

Recommendation 1

In order to ensure that it better meets the needs of its clients for investigating and prosecuting crime, the

Centre of Forensic Sciences should conduct a review of its practices and resources on an area-by-area basis, with a focus on achieving improvements in its turnaround times for completing case analyses, especially for the more urgent cases.

Status

The Centre informed us that it had completed an area-by-area review of its practices and resources in May 2008, with the objective of improving turnaround times. It identified ways it could be more efficient through enhancing processes and eliminating bottlenecks. These changes were either implemented or were under consideration for future implementation.

We were advised that turnaround-time improvements had been achieved in the biology, chemistry, and firearms investigative sections. In the areas where turnaround times had not improved, such as toxicology, initiatives were underway that were expected to improve things over time. In addition, the Centre improved its central receiving area's procedures and this section subsequently saw an increase in its efficiency.

However, the Centre was not able to improve its overall turnaround times, which have increased marginally. The Centre noted, and as Figure 1 shows, since our audit of two years ago, the Centre has had to deal with an almost 11% increase in the cases it receives. During this period, it received an operating budget increase of 3.5%, yet increased its output of completed reports by about 19%.

Figure 1: Centre of Forensic Sciences Workload and Turnaround Times, 2006/07–2008/09

Source of data: Centre of Forensic Sciences

Fiscal Year	Cases Received	Completed Reports	Avg. # of Days to Issue Reports	% of Reports Completed within 90 Days
2006/07	10,454	12,693	64	79
2007/08	11,393	14,016	67	73
2008/09	11,573	15,146	66	79
Change (%)	11	19	3	–

SETTING TARGETS FOR REPORT TURNAROUND TIMES

Recommendation 2

To ensure that the Centre of Forensic Sciences' target turnaround times for completing case analyses are meeting the needs of its clients and the administration of justice, the Centre should establish processes, involving its clients, to:

- set turnaround-time targets for the various types of investigative services it provides, and segregate these between urgent and non-urgent cases;
- assess actual performance against targets; and
- compare its turnaround times and methods of achieving them with those of other jurisdictions.

Status

The Centre informed us that it had conducted target surveys on turnaround times in June 2008 and held focus groups from June to August of the same year with special investigation units, police, and the Crown to assess client needs for timely delivery of analytical reports for both non-urgent (routine) and urgent cases. As a result, the Centre decided to bring its method for setting turnaround-time targets more into line with the methods used in other jurisdictions, so that it would better meet its client needs.

New turnaround-time targets for both routine and urgent requests were put into place as of January 2009. For a routine case, the turnaround time target became 30, 60, or 90 days, depending on the seriousness of the offence, the complexity of the analysis, and the capacity within a section. For urgent cases, the Centre began to directly consult its client to determine the turnaround time needed according to the circumstances and the criteria established by the Centre, which has resulted in "client-driven" turnaround-time targets being set for each case.

The Centre has also been preparing quarterly reports for each investigative section on the performance achieved against the targets set for both routine and urgent cases.

TRACKING CASES BY PRIORITY

Recommendation 3

The Centre of Forensic Sciences should ensure that its information systems capture information on urgent cases that allows the monitoring and assessment of:

- each investigative section's success in responding to urgent cases;
- the impact of urgent cases on each investigative section's workload; and
- the turnaround times achieved.

Status

The Centre informed us that it had modified its information system in November 2008 so that it would be able to capture and track performance on urgent cases. The system can now record the turnaround time committed to the client and the actual completion date, and can capture the reasons for urgency.

The impact of urgent cases on each section workload is to be assessed annually as part of the Centre's operational and performance-planning activities.

As previously noted, among the Centre's quarterly reports are those that assess performance for urgent cases against the turnaround times to which the Centre committed.

The Centre told us that the data it had collected in the first five months since modifying its information system indicated that 89% of all urgent cases had been completed by the due date and within an average turnaround time of 10 days.

MONITORING CAUSES OF DELAYS

Recommendation 4

To ensure that the causes of delays in processing cases are monitored and assessed so that any systemic issues can be addressed, the Centre of Forensic Sciences should:

- ensure that its information systems record the reasons for any significant delays in each case it investigates;

- *set standards for the processes used by each investigative section and monitor variances between expected and actual times;*
- *conduct regular evaluations where delays in completing cases appear high to identify the reasons and determine what steps can be taken to mitigate the likelihood of the same delays arising in the future.*

Status

The Centre informed us that it had modified its information systems in November 2008 to allow section managers to monitor any delays in completing cases and record the reasons for delays.

The system provides reports to managers on those cases that are approaching their targeted turnaround times. Managers have been reviewing these reports and, when necessary, expediting the cases to prevent delays.

The Centre informed us that it had started requiring managers to input an explanation into the information system for any cases that exceed their targeted turnaround time by 50% or more. The categories used to describe reasons for delay include equipment problems, staffing issues or absences, quality incidents, competing workloads, administrative bottlenecks, subcontractor issues, supply chain problems, insufficient case information, inability to contact client, and delays in other sections. Analysis of the data collected since November 2008 has shown the most common cause for delay was competing workloads due to large volumes of work within a section.

The Centre informed us that it needed to continue collecting data for at least a year to properly identify trends in delays. It expected that managers would use this information for their next annual operational and performance-planning activities to identify what caused delays and the necessary corrective action.

MEASURING PERFORMANCE

Recommendation 5

In order to better monitor and report on its financial and operational performance, the Centre of Forensic Sciences should:

- *establish measures to monitor the cost effectiveness of its operations;*
- *benchmark its performance against that of other forensic laboratories;*
- *investigate whether its quarterly reports on average turnaround times are reaching those clients who would best benefit from them and consider distributing these reports directly to them.*

Status

The Centre informed us that it had conducted a cost-measuring and comparison exercise using 2007/08 data in February 2009. It has been measuring cost-effectiveness by calculating each report's average cost, using staffing and other costs in each section along with a prorated portion of all other support costs. This measurement is to continue each year as part of the Centre's annual operational and performance-planning activities. Measures for additional activities are to be created by the end of 2009/10, after the required changes have been made to the Centre's information systems.

The Centre also made changes to bring its activities more into line with those of other jurisdictions. It started classifying its cases using industry-standard crime-report violation codes and has been using internationally recognized definitions to record specific examination activities for each case.

The Centre informed us that, since 2007, it has been participating in an ongoing multi-jurisdictional benchmarking project. The project is led by West Virginia University, sponsored by the U.S. National Institute of Justice, and 14 forensic labs from across North America are participants, including the RCMP. Assessment strategies are to be developed by the end of 2009, once enough data for comparison and benchmarking have been collected from various jurisdictions.

According to the Centre, the benchmarking exercise is aimed at defining and standardizing performance measures that can be used to compare performance across jurisdictions and assess resource allocation, efficiencies, and value for services. Some of the key reporting measures to be benchmarked for comparison across jurisdictions are:

- breadth of analysis, such as the average number of tests conducted per case;
- accuracy and quality control, such as the average number of tests per item within a case;
- efficiency and productivity, such as the average number of items per full-time equivalent staff;
- market conditions, such as the average salary;
- labour productivity, such as the average number of tests per full-time equivalent staff;
- economy of operation, such as the average cost per case; and
- other measures, such as backlog of cases older than 30 days.

The Centre informed us that it has continued its practice of providing information sheets to its clients upon receipt of each case. The client information sheets include information on targeted and actual turnaround times, which are updated on a quarterly basis, and are intended to give the Centre's clients a reasonable expectation of when they will receive the results for their cases.

As part of its annual client satisfaction survey, to be conducted in 2009, the Centre plans to include a question seeking clients' feedback on the usefulness of the performance reports, such as client information sheets on turnaround-time statistics, that they received.