# Chapter 1 Section **1.12**

# **1.12** SAMS—Social Assistance Management System

Follow-Up on VFM Section 3.12, 2015 Annual Report

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	3	3			
Recommendation 2	4	2	2		
Recommendation 3	2		2		
Recommendation 4	1	1			
Recommendation 5	2	2			
Total	12	8	4	0	0
%	100	67	33	0	0

## **Overall Conclusion**

At the time of our follow-up, the Ministry of Community and Social Services (Ministry) informed us that, as of May 30, 2017, it had spent about \$294 million on the Social Assistance Management System (SAMS) and installed three major upgrades to make the system more stable. The Ministry told us that, since 2016 and going forward, it expects to spend about \$50 million per year to maintain SAMS. As of July 4, 2017, the Ministry has taken the necessary steps to implement 67% of actions we recommended in our *2015 Annual Report*. For example, since our last audit, the Ministry reviewed the backlog of help desk calls about potential new defects and reallocated its resources to prioritize fixing these defects. The Ministry also hired qualified staff to directly oversee consultants to ensure that they no longer report directly to other consultants.

The Ministry has made progress in implementing the remaining 33% of our recommended actions. For instance, the Ministry has developed a process to reconcile all benefit payment calculation errors generated by SAMS' defects so far. Going forward, the Ministry will use this process to reconcile new calculation errors caused by existing SAMS' defects. The Ministry also made progress in ensuring that consultants' work is assessed for efficiency and effectiveness by making some improvements to the way it monitors and tracks their performance. The Ministry is in the process of reviewing and updating the consultants' service performance to make further improvements in this area.

The status of actions taken on each of our recommendations is described in this report.

## Background

Approximately 940,000 (900,000 in 2015) Ontarians in need receive social assistance because they are unemployed and/or have disabilities. Social assistance provides financial aid, health benefits, access to basic education, and job counselling and training to some people, with an objective of helping them become as self-sufficient as possible.

To help improve and modernize the administration and delivery of social assistance, the Ministry of Community and Social Services (Ministry) decided to replace its old information technology system with a new system known as the Social Assistance Management System (SAMS). In 2009, Curam Case Management System (now IBM) won the competition to supply the system. The government approved a project budget of \$202.3 million and an initial deadline of November 2013 for the launch of SAMS. The launch date was changed several times because of delays and issues that arose, and SAMS was finally launched in November 2014, a year later than planned and about \$40 million over budget.

About 11,000 Ministry and municipal personnel rely on SAMS to help them determine an applicant's eligibility for social assistance; calculate and distribute about \$7.1 billion (\$6.6 billion in 2015) in annual benefit payments; generate letters to inform people about their eligibility or changes to their benefits; and generate reports with information that the Ministry and municipalities need to manage social assistance programs.

At its launch, SAMS had a number of serious defects that caused numerous errors. For example, the system generated about \$140 million in benefit calculation errors—\$89 million in potential overpayments and \$51 million in potential underpayments. As well, SAMS generated many letters and tax slips containing incorrect information. Some of these errors may never be resolved. At the completion of our 2015 audit, SAMS was still not functioning properly, requiring caseworkers to use time-consuming workarounds to deal with problems.

In March 2015, at an additional expense, the Ministry hired consultants to conduct a review of SAMS and put in place an integrated transition and business recovery plan. The Ministry also committed to working with municipal delivery partners on the ongoing improvement of SAMS. At the time of our audit, the Ministry did not anticipate SAMS would become fully stable until spring 2016 and, at the completion of our audit, it did not know what the final cost of SAMS would be.

Other significant findings from our audit included the following:

- Prior to launch, SAMS was not fully tested and the system performed poorly on the tests that were done. SAMS was also not piloted with data converted from the previous system because of delays. At launch, there were about 114,000 errors in client data that caused SAMS to generate incorrect results for client eligibility and benefit payments.
- Only some of the government-mandated payment testing was conducted and many serious payment-related defects were found after launch. According to the Office of the Provincial Controller, SAMS was the only computer system ever connected to the government's accounting system without passing government-mandated payment testing.
- The Executive Committee overseeing the development of SAMS assumed significant risk when it decided to launch the system, because it knew that SAMS did not meet the launch criteria developed by the Ministry. The Ministry launched SAMS anyway because it considered the risks of delaying to be greater than the risks of launching a system that was not fully ready.
- While the Executive Committee knowingly assumed some risks by launching SAMS, it was not made aware of key information, including that there were more serious defects

than reported, and that some crucial tests had produced worse results than reported.

- In the six months before launch, the testing team began reporting to the business project director instead of the technical project director. However, the business project director did not have an IT background or the required technical expertise.
- Ontario's Internal Audit Division proposed an audit of SAMS' readiness four months before launch. However, Internal Audit and SAMS' project leads could not agree on the scope of the audit and it was not performed.
- The Ministry did not properly oversee the external consultants; instead, consultants oversaw other consultants through most of SAMS' development. The vagueness in consultants' time reporting, and the lack of independent oversight during much of the project, made it difficult to assess how efficiently consultants were working.
- Training provided by the Ministry to caseworkers on how to use SAMS, prior to launch, was inadequate.
- As of July 31, 2015, there were still 771 serious defects identified in SAMS that had not been fixed. Our audit found that Ministry resources were not sufficiently dedicated to fixing defects. Also, there were likely additional defects that had not been identified because the Ministry had a backlog of complaints and problems that caseworkers had reported.
- Problems would persist in SAMS until defects are dealt with. It would remain difficult to use, continue to generate incorrect eligibility determinations and benefit payments, and continue to generate inaccurate reports that the Ministry and municipalities need to properly manage Ontario Works and the Ontario Disability Support Program. In addition, caseworkers would continue to have to use time-consuming "workarounds" to deal with these problems, taking away time from

providing the full range of case-management services to clients.

In our 2015 report, we recommended that the Ministry review the backlog of information related to potential defects so that they could be prioritized for fixing; reconcile all benefit payment errors generated by SAMS to the eligible amounts clients should have received; ensure that consultants' work is assessed for efficiency and effectiveness; establish a knowledge transfer strategy for Ministry staff; and ensure that SAMS undergoes and passes all government-mandated payment testing.

The report contained five recommendations, consisting of 12 actions, to address our audit findings.

## Status of Actions Taken on Recommendations

We conducted assurance follow-up work between April 1, 2017, and July 4, 2017, and obtained written representation from the Ministry of Community and Social Services (Ministry) on September 1, 2017, that it has provided us with a complete update of the status of the recommendations we made in the original audit two years ago.

### Ministry Response to SAMS Problems Inadequate

#### **Recommendation 1**

In order to ensure that eligible individuals receive the level of social assistance and support to which they are entitled, and to eliminate, as best as possible, eligibility and benefit payment errors made by the Social Assistance Management System (SAMS), the Ministry of Community and Social Services should:

 assign adequate resources to review the backlog of information related to potential defects so that defects can be prioritized for fixing;
Status: Fully implemented.

#### Details

During our 2015 audit, we found that the Ministry had a backlog of about 11,500 calls from the help desk which it had not reviewed. After SAMS launched, the Ministry provided other helplines for specific errors, but these also had a backlog of a few hundred unanswered calls when we finished our audit. Until these calls were reviewed, potential new SAMS' defects would remain unknown.

Since our audit, in October 2015, the Ministry hired an outside consulting firm to review the backlog of calls containing information about potential defects and prioritize the newly-identified defects for fixing. The consulting firm was also asked to provide recommendations on how the Ministry could streamline its process of reviewing help desk calls. By May 2016, the consulting firm finished its review and potential defects were prioritized for further investigation and fixing.

Based on the consultant's recommendations, the Ministry also streamlined its call review process. By February 2017, all information about potential and existing SAMS' defects was merged into a single database. Since then, information about potential new defects provided by callers is being logged into the database. This allows the Ministry to review and prioritize calls faster, as it can more easily reconcile information provided by callers about potential new defects with defects that it is already in the process of investigating or fixing. At the time of our follow-up, there was no backlog of calls to the help desk.

 allocate its resources so that fixing of defects takes priority;
Status: Fully implemented.

#### Details

During our 2015 audit, we found that only external consultants (rather than Ministry staff) had the skills to fix serious defects, but they were spending less than half of their time (44%) doing so. The remaining 56% of their time was spent developing new enhancements to SAMS' functions, resolving ad hoc requests and transferring knowledge to Ministry staff.

Since our audit, the Ministry told us that it has allocated more resources to fixing defects and has installed three major SAMS' upgrades that fixed old defects. Based on time-tracking reports that we reviewed, by November 2016, Ministry staff and external consultants' time spent fixing serious defects increased by about 10%. In the database where the Ministry tracks the progress of defect fixing, we found that all of the old 771 serious defects were fixed by December 2016.

At the time of our follow-up, the Ministry was working on fixing 196 newly-identified serious defects. The Ministry told us that, going forward, fixing defects will remain a priority and that its staff and consultants will continue to spend about 50% to 65% of their time on it.

develop a process to reconcile all benefit payment errors generated by SAMS to the eligible amounts that clients should have received and ensure that they are corrected.
Status: Fully implemented.

#### **Details**

In our 2015 audit, we noted that serious defects in SAMS caused benefit payment calculation errors amounting to \$140 million (\$89 million in potential overpayments and \$51 million in potential underpayments) but this only included defects that were fixed. The Ministry could only quantify the dollarimpact error of a defect once it was fixed because that is when SAMS automatically recalculated past incorrect benefits. For example, if SAMS incorrectly calculated the monthly benefit for a client as \$570 when it should be \$600, only when the defect is fixed would SAMS recalculate the amount and report that the client got \$30 a month less than he or she should have.

The Ministry designed and implemented manual workarounds for this problem, so a caseworker may have already identified the error and circumvented the normal SAMS process to issue the correct payment well before the Ministry fixed the defect. However, the Ministry could not confirm if workarounds were always applied by caseworkers; as a result, the Ministry did not know what portion of the approximately \$140 million had already been corrected by caseworkers. Thus, allowing SAMS to adjust the \$140 million of past incorrect benefits could reverse corrections made previously by caseworkers. In response to this, the Ministry suspended the adjustment of all benefit corrections calculated by SAMS, and told us it was planning to have caseworkers manually review such corrections—starting at an unspecified time in the future.

Since our audit, between November 24 and December 18, 2015, an external consulting firm hired by the Ministry reviewed the \$140 million in benefit calculation errors and identified that there was a possibility that—for about \$59 million of the errors-caseworkers might not have applied workarounds and clients could have ended up receiving incorrect benefit payments. The consulting firm recommended a process to investigate and fix these calculation errors. As part of this process, in March 2016, the Ministry communicated to all caseworkers a list of recommended actions to investigate and fix the calculation errors for which workarounds might not have been applied. Between June and December 2016, based on a recommendation from the consulting firm, the Ministry sampled 61% of the \$59 million calculation errors to check if they were correctly handled. At the time of our followup, the Ministry told us that all of the calculation errors in its sample were fixed and that clients ended up receiving correct benefit amounts. As part of our follow-up, we reviewed the process used by the Ministry to investigate and fix the benefit calculation errors and conducted our own sample of calculation errors from the \$59 million. In all of our samples, we found that the errors were fixed and clients were paid correctly.

Going forward, the Ministry will continue to use its current process for investigating and fixing defects to ensure clients are paid the right benefit amounts.

## **Consultant Work Inadequate, Not Properly Overseen by Ministry**

#### **Recommendation 2**

To prevent unnecessary delays in bringing the Social Assistance Management System (SAMS) to full and effective functionality, and to ensure that the consultants still working on SAMS are held accountable for delivering quality results, the Ministry of Community and Social Services should:

 assign its own properly qualified staff to directly oversee consultants;
Status: Fully implemented.

#### **Details**

Our 2015 audit found that the Ministry did not properly oversee Curam and IBM consultants. It relied on the consultants not only to design and develop most of SAMS, but to also oversee their own work. Consultants billed an average hourly rate of \$190 and were overseen by other consultants who were paid daily rates as high as \$2,000. Many consultants took much longer than anticipated to complete their work, and, in some instances, billed for time spent on fixing errors in their own work.

Since our audit, between December 2015 and April 2016, the Ministry has hired nine full-time qualified staff to replace consultants in lead positions who oversaw the work of other consultants. Information provided to us by the Ministry showed that all major areas of SAMS, including software development, system upgrades installation and testing, are now led and overseen by full-time Ministry staff.

In January 2016, the Ministry also improved its oversight of consultants by requiring them to submit their timesheets on a weekly basis instead of monthly. On their timesheets, consultants must now provide more details about the work that they performed and full-time Ministry staff are responsible for reviewing and signing off on all submitted timesheets before consultants are paid. At the time of our follow-up, the Ministry also confirmed that none of the Curam and IBM consultants currently involved in lead roles on SAMS oversee the work of other consultants and that all consultants are directly supervised by full-time Ministry staff.

 ensure that consultants' work is assessed for efficiency and effectiveness;
Status: In the process of being implemented by fall 2017.

#### **Details**

During our 2015 audit, we found that, between November 2013 and March 2014, Curam billed the Ministry 11,500 hours, at an average rate of \$190 per hour, for work that was estimated to take about 10,300 hours, indicating that they were working inefficiently. While the Ministry received timesheets from Curam and IBM, it was not assessing if consultants worked efficiently or effectively.

Since our audit, the Ministry has made some progress toward assessing consultants' work. In fall 2016, the Ministry developed better system testing reports and, together with the new merged defects database implemented in February 2017, was able to track more detailed information about potential and existing SAMS defects. This information allows the Ministry to investigate if a defect was caused by consultants' poor workmanship. The Ministry has also begun to set targets for the number of defects consultants should be able to fix within a specified time and told us that it monitors consultants' progress against those targets on a weekly basis. The warranty period for consultants' work has also been extended from 150 to 180 days and a new contract clause has been added that requires consultants to fix defects or other SAMS problems that were caused by their poor workmanship at their own cost.

At the time of our follow-up, the Ministry told us that it is in the process of reviewing its contract with consultants. As part of the review, the Ministry wants to include in the contract a more defined description of service performance levels and a requirement that consultants report on meeting these performance levels. The Ministry also wants to introduce additional financial consequences to consultants if they fail to meet their contractual performance levels. This review is expected to conclude in fall 2017, at which time the Ministry will determine what changes are necessary.

 on future projects, work towards reducing its dependence on consultants, and ensure consultants' knowledge is transferred to ministry staff.
Status: First part of recommendation is fully implemented; second part of recommendation is in the process of being implemented by March 31, 2018.

#### **Details**

At the time of our 2015 audit, we found that the Ministry still relied heavily on Curam consultants to fix serious defects and that it did not ensure that Curam consultants transferred their knowledge to Ministry staff.

Since our audit, the Ministry has hired new staff and transferred staff from other departments to fill about 30 new full-time positions to perform work on SAMS that was previously done by consultants. The Ministry is also spending less on consultants, from about \$20 million in 2015/16 to \$12.5 million in 2016/17. At the time of our follow-up, the Ministry told us that it was on track to reduce its spending on consultants by another \$1.5 million to about \$11 million in 2017/18.

In May 2017, the Ministry made a submission to Treasury Board Secretariat to convert more consultant positions into Ministry positions (including 12 full-time positions) working on SAMS. The Government has approved the Ministry's submission. The Ministry also told us that it is in the process of developing a new strategy to manage its resources, which includes knowledge transfer on SAMS. The strategy is being developed specifically for SAMS in response to **Recommendation 3** in our 2015 audit. Although, at the time of our follow-up, the Ministry had no imminent plans to launch a new major information system or to replace SAMS, it told us that the strategy will provide a blueprint for knowledge transfer on future IT projects. Completion of the strategy is expected in March 2018.

#### **Recommendation 3**

In order to ensure that ministry staff can help fix all defects in the Social Assistance Management System (SAMS) in the short term, and maintain SAMS in the long term after consultants have left, the Ministry of Community and Social Services should:

 establish a knowledge transfer strategy for ministry staff which includes outcome targets based on achieving learning objectives;
Status: In the process of being implemented by March 2018.

#### **Details**

Our 2015 audit found that the Ministry did not ensure that Curam consultants transferred their knowledge to its own staff before launch and the Ministry relied heavily on Curam consultants to fix serious defects as only they, not the Ministry, had the skills to do so.

Since our audit, in spring 2016, the Ministry implemented a formal mentorship program where Ministry staff are paired with consultants and a formal knowledge transfer agreement is developed. We reviewed some of the agreements and found that they included a detailed knowledge transfer plan, which listed outcome targets and timelines for achieving specific learning outcomes.

As previously discussed, the strategy the Ministry is developing to manage its resources also includes knowledge transfer on SAMS. The knowledge transfer strategy covers specific areas, such as knowledge transfer tools, and sets specific levels for staff learning and development. The Ministry expects to complete its strategy in March 2018.

• assess and document the progress in achieving these targets.

Status: In the process of being implemented by March 2018.

#### **Details**

During our 2015 audit, we noted that, although the Ministry's staff of 11 developers were becoming more knowledgeable, they were only slowly learning to fix even minor problems. The Ministry still relied heavily on Curam consultants to both develop and fix serious defects in SAMS.

Since our audit, in September 2016, the Ontario Internal Audit Division stated in its report on SAMS that the Ministry's assessment and documentation of knowledge transfer was incomplete. At the time of our follow-up, the Ministry told us that it developed a knowledge transfer plan in 2016 to assess and document (on an aggregate basis) its progress in achieving knowledge transfer targets. However, the documentation of knowledge transfer activities outlined in the plan has not been completed. The Ministry told us that the main reason for that is the fact that it was focused on fixing SAMS' serious defects as soon as possible; however, now that the system has become more stable, the Ministry will begin to educate its staff on the importance of properly completing knowledge transfer documentation. This education will be conducted as part of the mentorship program beginning in fall 2017, and the Ministry plans to make it part of its knowledge transfer strategy. The Ministry told us that it expects that knowledge transfer documentation will improve by March 2018.

## Ministry Overly Optimistic about SAMS' Readiness for Launch

#### **Recommendation 4**

To ensure that the Social Assistance Management System (SAMS) reaches the high level of performance intended and that it functions in compliance with government requirements, the Ministry of Community and Social Services should ensure that SAMS undergoes and passes all government-mandated payment testing.

Status: Fully implemented.

#### **Details**

Since 2005, the government has mandated that the computer system for any program that provides payments must pass certain tests to ensure that payments and cheque stubs are accurate. In our 2015 audit, we found that SAMS interfaces with the government's accounting system to make benefit payments, so it should have undergone the mandatory testing. However, when SAMS was launched, it was not in stable enough condition for the government's Enterprise Financial Services and Systems Division (EFSS) to perform all of the required tests. We also found that SAMS was required to undergo the same government-mandated payment testing whenever major software upgrades were installed. Although SAMS had been upgraded several times, we found in 2015 that these tests were not performed.

At time of our follow-up, the Ministry informed us that, in July 2016, it formalized a process for ensuring SAMS undergoes government-mandated payment testing when major software upgrades are installed. Since that time, the Ministry has installed four major upgrades, and provided us with documentation signed off by EFSS that all required testing was conducted.

#### **Recommendation 5**

In order to improve the decision-making process used to launch a major information system, the Ministry of Community and Social Services should:

 ensure that the decision to launch an information technology system is based on relevant criteria and information that provides decisionmakers a complete and accurate status of system readiness;

#### Status: Fully implemented.

#### **Details**

During our 2015 audit, we found that SAMS had 737 serious defects, but that project staff told the Executive Committee that SAMS had 418 serious defects. Ministry staff explained to us that the remaining 319 serious defects were not shared with the Executive Committee because they had started developing solutions or fixes for them. Of the 418 defects reported to the Executive Committee, project staff advised that 217 of them could be handled by just 27 workarounds. No workarounds had been devised for the other 201 serious defects. We also found that the Executive Committee did not know:

- that project staff did not test 11 of 85 interfaces;
- that not all required payment tests were conducted or conducted testing was incomplete;
- the number of actual case discrepancies due to defects; and
- that converted data was not fully tested.

In May 2015, the Ministry updated its policies on what information should be shared with the decision-makers and told us that it has been providing them with a complete and accurate status of SAMS each time it installs new major system upgrades.

At the time of our follow-up, the Ministry told us that it had no imminent plans to launch a new major information system or to replace SAMS but that, in the future, it will review and update its current policies to ensure that the decision to launch a new system is based on relevant criteria and that decision-makers are provided with complete and accurate information about the status of system readiness. The Ministry said that these changes will be made during the initiation of the next major information system launch to ensure that the recommendations are followed throughout the project lifecycle.

 have Internal Audit independently review key information used in assessing the system's state of readiness while making the decision to launch.
Status: Fully implemented.

#### Details

Our 2015 audit found that, while Internal Audit did conduct audit work on the SAMS project, the last report it issued was in November 2013, a full year before SAMS was launched. Four months prior to the launch, Internal Audit met with SAMS' project leads to propose an audit of SAMS' readiness for launch, but they could not agree on the scope of the audit. Internal Audit told us that the Ministry believed the IBM consultants on the project team had the necessary expertise to assess SAMS' readiness. The Ministry therefore suggested that Internal Audit's scope of work should focus on SAMS after launch.

At the time of our follow-up, the Ministry provided us with documents showing that, on July 12, 2017, it made a mandatory policy to request that Internal Audit independently review key information used in assessing a major system's state of readiness for launch. The Ministry also told us that, in September 2016, Internal Audit assessed the progress of the Ministry's efforts in also responding to recommendations and advice provided by an external consultant in addressing SAMS' postimplementation issues.