Chapter 47 Social Services—Protecting Children-in-Care Information in the Linkin System

1.0 MAIN POINTS

The Ministry uses an electronic case management system, Linkin, to support the delivery of its programs and services for children in care. Linkin contains confidential information about children in care (and their families). Accurate and secure information in Linkin helps ensure children who are in the care of the Minister are properly protected and cared for.

As of August 2018, while the Ministry of Social Services made progress in better protecting information in its Linkin system about children in care, it has further work to do to protect information in Linkin from known security vulnerabilities.

Since 2016, the Ministry implemented three of the four recommendations made in our 2016 audit regarding protecting information about children in care. The Ministry established a checklist and timeframes for removing user access to Linkin. It followed its processes for verifying the completeness of childcare provider information in Linkin. Also, the Ministry consistently documented its review and approval of Linkin payment reports used to identify unusual payments.

However, it needs to upgrade the Linkin system, and develop a long-term plan for keeping Linkin up-to-date. Not updating systems in a timely manner makes them susceptible to compromise and failure.

2.0 Introduction

This chapter describes our first follow-up of management's actions on the recommendations we made in 2016.

In our 2016 Report – Volume 1, Chapter 17, we concluded that for the 12-month period ended December 31, 2015, the Ministry of Social Services had, other than the areas identified in our four recommendations, effective processes to protect information about children in care in the Linkin system.

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

For the follow-up audit, we focused our audit effort on testing a sample of terminated and transferred Linkin users, interviewing key Ministry staff, assessing a sample of caregivers' information in Linkin, and reviewing Linkin reports.

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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 August 31, 2018, and the Ministry of Social Services actions up to that date. We found that the Ministry of Social Services had implemented three of the recommendations, and partially implemented one.

3.1 Implementation of Updates to Linkin Needed

We recommended that the Ministry of Social Services establish a written plan for updating its Linkin system to protect it from known security vulnerabilities. (2016 Report – Volume 1; Public Accounts Committee agreement March 14, 2017)

Status - Partially Implemented

The Ministry's Linkin system is not up-to-date. The Ministry does not have a long-term plan for keeping the Linkin system up-to-date to protect it from known security vulnerabilities.

The Linkin application has not received a security patch or update since 2015. The vendor began phasing out regular support for the Linkin application in 2016, and has offered extended support since then (e.g., help desk support). For 2017-18 the Ministry signed an extended support agreement, at a cost of \$250,000. The Ministry advised us that delays in system upgrades have resulted in numerous errors and workarounds for its front-line staff that use Linkin.

The Ministry developed a plan with the Ministry of Central Services to upgrade the Linkin application by March 2019. The upgrade is expected to cost the Ministry over \$2 million.

At August 2018, the Ministry had not developed a plan for upgrading and patching Linkin over its expected remaining life. It expects to use the Linkin system for the foreseeable future. Such a plan is necessary to facilitate a schedule and budget for upgrading and patching Linkin over its expected remaining life.

Routinely upgrading and patching is key to address the risk exposure of sensitive and business critical systems, like Linkin. Allowing applications to exceed their end-of-support dates makes them susceptible to compromise and failure. Timely security patches (e.g., annual or more frequent) provide protection against known vulnerabilities.

3.2 Expected Timeframes for Removing User Access Established

We recommended that the Ministry of Social Services set out, in a policy, expected timeframes for removing Linkin user access. (2016 Report – Volume

1; Public Accounts Committee agreement March 14, 2017)

Status - Implemented

The Ministry established reasonable timeframes for removing Linkin user access, and was removing access within those timeframes.

The Ministry requires Linkin users have system access removed on an employee's last day of employment or the day they transfer to a position that no longer requires Linkin system access.

In 2017, the Ministry created a checklist, which supervisors complete upon an employee's last day of employment or transfer. This checklist requires removing the employee's IT user access, as well as collecting the employee's token (which is small hardware device that users must use to access Linkin) immediately.

We found, through our testing of 15 terminated or transferred users, Ministry supervisors were appropriately completing the checklist in a timely manner.

3.3 Childcare Provider Information Appropriately Verified in Linkin

We recommended that the Ministry of Social Services follow its processes to verify the completeness of Linkin case management information entered about care providers of children in care. (2016 Report –

Volume 1; Public Accounts Committee agreement March 14, 2017)

Status - Implemented

The Ministry sufficiently verified care provider information in Linkin.

The Ministry has documented responsibilities for entering information into Linkin once childcare providers' applications are received. The process establishes who is responsible for entering, reviewing, and approving (i.e., verifying) childcare provider information.

For the five items we tested, childcare providers' information was appropriately entered and approved in Linkin.

3.4 Unusual Payment Reports Reviewed

We recommended that the Ministry of Social Services consistently document its review of Linkin reports designed to identify unusual payments. (2016 Report – Volume 1; Public Accounts Committee agreement March 14, 2017)

Status - Implemented

The Ministry routinely reviewed Linkin reports for unusual payments.

The Ministry's Financial Services Branch is responsible for approving Linkin reports and payments made to care providers. The Branch receives daily Linkin reports. These reports identify unusual payments such as payments exceeding \$10,000 to individual care providers, and supervisor overrides exceeding \$1,500.



Linkin tracks these overrides, and puts the payment on hold until the division manager approves it. If the override exceeds \$1,500, the Financial Services Branch must follow up with the manager and supervisor responsible for the childcare provider to verify the accuracy of the override.¹

The Ministry maintains a listing of all childcare providers who it has approved to receive payments exceeding \$10,000.

We assessed whether individuals on this listing were appropriate and properly approved. For a sample of eight payments over \$10,000 we tested, the Ministry's Financial Services Branch followed its process to identify and approve these high-value payments. Also, we examined one override exceeding \$1,500, and found the Ministry followed its processes.

In addition, we confirmed the Ministry has a validation process to confirm the daily payment amounts approved in Linkin equal the amounts approved for payment in the Government's key financial system (called MIDAS).² This system issues payment by cheque or electronic fund transfer.

¹ Supervisor overrides are where a supervisor has changed (overridden) the amount of the payment.

² Multi-Informational Database Applications System (MIDAS) financials includes modules for general ledger, cash management, accounts payable, accounts receivable, purchasing, payments, forecasting, capital assets, and inventory. It accounts for financial transactions of government ministries. The Ministry of Finance owns and administers this application.