

February 25, 2014

2013-043

The Governor of California
President pro Tempore of the Senate
Speaker of the Assembly
State Capitol
Sacramento, California 95814

Dear Governor and Legislative Leaders:

Senate Bill 853 (Chapter 717, Statutes of 2010) requires the California State Auditor (state auditor) to monitor the transfer of operational responsibility for the California Medicaid Management Information System (CA-MMIS) to Affiliated Computer Services, a Xerox company, and the subsequent design, development, and implementation of a replacement system. This letter reports on the status of Xerox's implementation of a replacement for CA-MMIS, which will be called Health Enterprise.

On April 19, 2012, we reported on our oversight activities for the first time. We reported that Xerox had successfully assumed responsibility for operating CA-MMIS and had begun processing the State's California Medical Assistance Program (Medi-Cal) claims in September 2011 after two delays. We also reported that Xerox was in the preliminary stages of developing Health Enterprise.

At the time of our last letter report, the California Department of Health Care Services (Health Care Services) was also engaged in informal discussions with Xerox over costs associated with the second delay in Xerox's assumption of operational responsibility for CA-MMIS. We reported that Health Care Services had previously denied Xerox's claim for costs it asserted it incurred or expected to incur due to alleged scope changes and schedule delays related to its takeover of CA-MMIS. In May 2013 Health Care Services informed us it had settled this claim. According to the assistant deputy director of Health Care Services' CA-MMIS division (assistant deputy director), Health Care Services agreed to pay \$13 million of the \$71 million included in Xerox's final claim. He explained that Health Care Services agreed to pay Xerox \$13 million for actual costs it reasonably incurred for project-related equipment, software, and services, but that Health Care Services did not agree to pay Xerox's claim of nearly \$44 million for takeover delays.

We recently observed that the implementation of Health Enterprise has been delayed partly because project teams were not following the original software development approach, and turnover of key Xerox staff appears to have exacerbated this problem. Because of these delays, Health Care Services has not yet paid Xerox for any of its work on Health Enterprise. In addition, California's delays in implementing a replacement for CA-MMIS are similar to some other states' experiences with Xerox implementing similar systems. Leaders of the Health Enterprise project also recently announced that the project team would be transitioning to a new software development approach. Finally, certain controls over access to the existing CA-MMIS are not operating effectively.

Background

In 1965 Congress amended the federal Social Security Act to create Medicare, and in that same year established a state-optional medical assistance program known as Medicaid. As authorized by federal law, California implemented Medi-Cal, which provides health care services to eligible beneficiaries that the State and the federal government finance jointly. Health Care Services administers Medi-Cal. CA-MMIS is a computer system used to process payments to health care providers who participate in the Medi-Cal fee-for-service program, including physicians, pharmacies, hospitals, and other providers. CA-MMIS was originally developed in the late 1970s, and since 1987 was operated by Electronic Data Systems. Hewlett-Packard acquired Electronic Data Systems in 2008 and continued to operate CA-MMIS. Later in 2008, Health Care Services solicited proposals from firms qualified to assume operational responsibility for CA-MMIS, including processing provider claims for payment and providing certain other services to providers and beneficiaries under the current system, and to design, develop, implement, and operate a replacement system. According to Health Care Services, CA-MMIS needs to be replaced because it is over 30 years old, its operations are inefficient, maintenance is difficult, and the risk of system failure is high. In addition, CA-MMIS is not currently compliant with Medicaid Information Technology Architecture standards. Xerox was the successful bidder, and in 2010 Health Care Services awarded it a \$1.7 billion contract with an expiration date of June 30, 2016. However, optional extensions could allow the contract to be extended through December 31, 2022.

Health Care Services is ultimately responsible for overseeing the implementation of Health Enterprise. In addition, the California Department of Technology (CalTech) has a statutory responsibility to monitor Xerox's implementation of Health Enterprise. Health Care Services also contracts with Eclipse Solutions, Inc. (Eclipse). Eclipse initially provided independent project oversight and independent verification and validation services.¹ However, as we stated in our April 2012 report, we believe that these services should generally be performed by different vendors to help assure that project oversight is unbiased, independent, and effective. In July 2013 CalTech assumed responsibility for independent project oversight, thus separating this activity from Eclipse's independent verification and validation efforts.

As part of our own monitoring activities, our technical consultant reviews Eclipse's and CalTech's monthly oversight reports and meets regularly with their staff as well as the deputy director of Health Care Services' CA-MMIS division (deputy director) to stay apprised of project developments. We also observe CA-MMIS advisory group meetings, attended by leaders of Health Care Services, Xerox, Eclipse, and CalTech, to ensure that the group appropriately responds to emerging issues and risks. Finally, we attend periodic updates Health Care Services provides to legislative staff to confirm that it appropriately communicates the status of the implementation of Health Enterprise.

¹ *Project oversight* is an independent review and analysis of a project to determine if it is on track to be completed within the estimated schedule and cost, and will provide the functionality required by the sponsoring business entity. *Independent verification and validation* is the process of evaluating software to determine whether the products of a given development phase satisfy the conditions imposed at the start of that phase and evaluating software during or at the end of the development process to determine whether it satisfies specified requirements.

Implementation of Health Enterprise Has Been Delayed

In June 2013 the Health Enterprise project leadership group (project leaders), comprised of officials from Health Care Services and Xerox, reported in a special session of the CA-MMIS advisory group that Xerox and Health Care Services teams (project teams) working on the first phase of the replacement system were not making expected progress in finalizing requirements. They determined that this was occurring because project teams did not fully understand and/or were not following the agreed upon software development approach. They also reported that project teams had been approaching the requirements development process from a systems view rather than focusing on the business processes that the system should support.² The deputy director explained that this meant that project teams had essentially been proceeding as if they were developing new software, instead of determining how to adapt Xerox's existing software product to meet California's needs as originally intended.

In response to these concerns, the project leaders commenced what they initially proposed would be a 16-week "course correction," during which project teams would refocus on configuring Xerox's existing software product to meet California regulatory requirements and Health Care Services' business needs and objectives. A key deliverable—the requirements specification document for phase one—was due at the end of this course correction period in November 2013, and according to the assistant deputy director, the quality and timeliness of this document would signal whether the project was back on track. However, in September 2013, project leaders announced that planned activities would not be met within the 16 week schedule and that Xerox would not deliver the requirements specification document to Health Care Services until April 2014.

According to project leaders, this delay was partially due to the unanticipated complexity of the existing legacy system and processes, and because project teams were identifying additional business requirements that were not accounted for in the previous schedule. In addition, project teams had been trying to validate the requirements and identify system solutions simultaneously.³ The software development approach specified that solutions analysis should occur separately from requirements analysis. In November 2013 project leaders announced that project teams were refocused on completing requirements analysis and would perform solutions analysis activities later.

Xerox Has Continued to Experience Significant Staff Turnover

Health Care Services has also had ongoing concerns about Xerox's continued staffing turnover. In October 2013 the assistant deputy director sent a letter to Xerox expressing those concerns and the serious nature of the high turnover rate of Xerox's staff. He pointed out that over the previous 12 months turnover had occurred in nine out of 21 key Xerox positions, and that staff turnover creates a risk for the system replacement effort. He also stated that because of the recent announcement of the departure of Xerox's system replacement project director,

² *Requirements development* is the process of determining stakeholder needs, transforming those needs into testable requirements and validating the requirements by ensuring the requirements are correct and complete.

³ *Requirements analysis* is the process of developing an understanding of and documenting the business requirements that need to be solved; *solution analysis* is the process of determining which components of those business requirements can be addressed by Xerox's existing software product and which components require a modification to the software product.

Xerox's project team lacks leadership and cohesiveness. He directed Xerox to submit a corrective action plan to address these staffing and leadership concerns. Later in October, Xerox responded to his letter, stating in part that it agreed that it is incumbent on Xerox to attract, recruit, and retain qualified and experienced project staff and that this is essential to the success of the system replacement project.

Since then Xerox provided an initial and updated corrective action plan to both of which Health Care Services provided feedback. In its most recent corrective action plan sent to Health Care Services in December 2013, Xerox described its succession planning efforts for senior management and the actions it took to address staff turnover on the system replacement project team. Xerox also noted that its chief executive officer had spoken with Health Care Services' executives conveying Xerox's commitment to CA-MMIS.

In January 2014 the assistant deputy director notified Xerox that Health Care Services would accept its updated corrective action plan contingent on Xerox addressing some remaining concerns. For example, he stated that Xerox must fill all key positions with qualified and permanent staff, and it must update its human resources management plan to address the reporting of agreed-upon staff turnover metrics and changes to the level of detail provided in Xerox's organization charts. He directed Xerox to amend its corrective action plan to address the remaining issues and to submit the updated plan to Health Care Services by February 28, 2014. In addition, beginning in September 2013, Health Care Services' executives started meeting with Xerox corporate executives every month in Sacramento to discuss the status of the system replacement project and any Xerox staff turnover. As of February 14, 2014, one of Xerox's 21 key positions was still vacant but the remaining 20 positions were filled by individuals whose capacity was designated as permanent and not acting.

Health Care Services Has Not Paid Xerox for Any of Its System Replacement Work

According to the deputy director, Health Care Services has not paid Xerox for any of its work on the system replacement project because Xerox has not yet submitted any deliverables that require a payment under the contract. She stated that the requirements specification document for phase one, due in April 2014, will be the first deliverable that, once approved by Health Care Services, will result in a payment to Xerox for its system replacement efforts.

However, Health Care Services is incurring some ongoing costs related to the system replacement project. According to Health Care Services' project expenditure report, it spent an average of \$742,000 per month in fiscal year 2013–14 on expenses related to the system replacement project, and a total of \$18 million of its \$267 million system replacement budget, as of December 31, 2013. This includes Health Care Services' costs for staff dedicated to the system replacement project and other operating expenditures, costs for independent verification and validation services and independent project oversight services, and other miscellaneous costs for contracted services. According to the assistant deputy director, these costs are in addition to the \$10.8 million that Health Care Services expects to pay Xerox on average each month in fiscal year 2013–14 to operate the existing CA-MMIS. According to the assistant deputy director, generally the federal government funds 90 percent of system replacement costs and 75 percent of CA-MMIS operating costs. Despite this federal support, if project delays continue, the State's costs for the system replacement project could increase.

Xerox's Implementations of Medicaid Management Information Systems for Other States Also Experienced Delays

California's delays in implementing a replacement for CA-MMIS are similar to other states' experiences. As shown in Table 1 on the following page, Xerox has incurred substantial delays in implementing new Medicaid Management Information Systems (MMIS) in New Hampshire, Alaska, and North Dakota. The state of New Hampshire originally projected that its new MMIS would be complete by January 2008, but Xerox did not finish implementing the system until April 2013, more than five years later. Similarly, Alaska anticipated that its new MMIS would be completed by June 2010, but Xerox did not finish implementing the new system until October 2013, more than three years later. Finally, although North Dakota anticipated that its new MMIS would be completed by July 2009, Xerox did not finish implementing the system by that date. North Dakota currently projects that its new system will be launched in the second quarter of 2014, which would be nearly five years late.

Moreover, the state of Montana originally projected that its new MMIS would be implemented in March 2015. However, Montana has encountered delays and turnover of Xerox staff similar to California's experience. According to a report that Montana's Department of Public Health and Human Services prepared for a Montana Legislative Finance Committee meeting in December 2013, Xerox was approximately 14 to 18 months behind schedule because of a lack of development progress. The report also indicated that Xerox notified Montana in June 2013 that it was behind schedule and needed to enter a re-planning process to revise its project work plan and overall delivery schedule. However, according to the report, Xerox missed several key project milestones and every self-imposed deadline to submit the revised work plan. In addition, according to the report, Montana had not paid Xerox any money related to its development of the new MMIS. Montana's chief information officer testified in the meeting that he cannot estimate when the new system will be implemented until Xerox provides an updated work plan. He also reported that there had been some changes in Xerox's senior management assigned to the project. He also testified that in November 2013, Montana started charging Xerox liquidated damages of \$30,000 a day—\$10,000 a day for each of three missed milestones.

As shown in Table 1, California's Medi-Cal program is significantly larger than similar programs in these other states. For example, in federal fiscal year 2012 California spent \$50.2 billion providing services to beneficiaries. Of the other four states, Alaska spent the most on its Medicaid program in this period, spending \$1.3 billion to provide services to far fewer beneficiaries.

As discussed previously, Health Care Services has already experienced delays in the implementation of its new Health Enterprise system. The delays encountered by these other states with much smaller Medicaid programs strongly suggest that Health Care Services has a high risk of experiencing more delays before its new system is fully implemented. Health Care Services and other stakeholders should monitor Xerox's progress carefully and consider available remedies if significant delays continue. We will also continue to monitor Xerox's progress in implementing Health Enterprise.

Table 1
Status of Xerox’s Implementations of Medicaid Management Information Systems in California and Other States

STATE	TOTAL MEDICAID ENROLLMENT, FEDERAL FISCAL YEAR 2010	TOTAL MEDICAID SPENDING, FEDERAL FISCAL YEAR 2012	ORIGINAL PROJECTED IMPLEMENTATION DATE	ACTUAL OR CURRENT PROJECTED DATE OF IMPLEMENTATION	ACTUAL OR ANTICIPATED DELAY
New Hampshire	167,560	\$1,186,815,817	January 2008	April 2013	5 years, 3 months
Alaska	127,853	1,348,227,744	June 2010	October 2013	3 years, 4 months
North Dakota	82,762	744,160,777	July 2009	Second quarter of 2014	4 years, 8 to 11 months
Montana	128,792	972,565,512	March 2015	Unknown	Unknown
California	11,428,811	50,165,335,340	March 2016	Fourth quarter of 2016	6 to 9 months

Sources: The Kaiser Family Foundation State Health Facts, the California Department of Health Care Services, and publicly available records for Alaska, Montana, New Hampshire, and North Dakota.

Health Enterprise Is Transitioning to a New Software Development Approach

On February 12, 2014, project leaders announced in a special session of the CA-MMIS advisory group that the project team would be transitioning from its previously agreed-upon software development approach to a different one proposed by Xerox—known as an agile approach. While the previous approach focused on implementing Health Enterprise in four large distinct phases, the agile approach will focus on implementing business process functionality sooner and in smaller incremental steps. According to project leaders, this approach will deliver business benefits sooner while reducing risk by providing earlier and more frequent opportunities to observe team performance and product viability compared to the previous approach of deferring delivery of functioning software until substantial portions of the system are available at the end of each of the four phases.

Under the previous software development approach, the project team planned to roll out the replacement system in four phases, with specified functionality to be completed in each phase. As of January 2014 the first phase was scheduled to be completed in August 2015 and the fourth and final phase was projected to be completed by April 2017, which is approximately one year later than Health Care Services’ previous target date. In contrast, using the new agile approach, Xerox plans to roll out the replacement system in five releases as shown in Table 2 on the following page. In each release, Xerox will implement portions of the replacement system that will provide functionality for specific business processes. The first release, scheduled for completion in the fourth quarter of 2014, will provide a common infrastructure and core support services that will be leveraged in the four subsequent releases. For example, the first release will include the Health Enterprise Web site portal, a security framework, and a help desk. As shown in Table 2, Xerox projects that the fifth and final release of the new Health Enterprise system will be completed in the fourth quarter of 2016, which is a few months earlier than the planned April 2017 completion date under the previous approach.

Moreover, Xerox has formulated mitigation strategies to address potential risks associated with the new software development approach. These strategies include obtaining continued executive support from Health Care Services and Xerox and acceptance of project teams for the new approach. We will monitor the impact of the new software development approach on the system replacement project as well as the effectiveness of these mitigation strategies.

Table 2
Xerox's Schedule for Implementing Health Enterprise Using the New Agile Software Development Approach

RELEASE	KEY BUSINESS PROCESS FUNCTIONALITY ADDRESSED IN EACH RELEASE	IMPLEMENTATION DATE
1	Health Enterprise Web site portal, security framework, help desk, member eligibility service, provider data inquiry, reference and pricing data.	Fourth quarter of 2014
2	Processing of certain types of Medi-Cal claims, provider appeals, and case management.	Second quarter of 2015
3	Pharmacy, drug rebates, and accounts receivable.	Fourth quarter of 2015
4	Processing of additional types of Medi-Cal claims, third-party liability, and accounts payable.	First quarter of 2016
5	Program integrity and processing of remaining types of Medi-Cal claims.	Fourth quarter of 2016

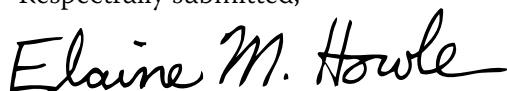
Source: Xerox.

Certain Controls Over Access to the Existing CA-MMIS Are Not Operating Effectively

In March 2013 we reported that certain information security and change management controls over CA-MMIS (the legacy system) were not operating effectively during fiscal year 2011–12. For example, we found that Xerox did not remove 39 of 198 terminated employees' access to CA-MMIS, and 15 of 17 individuals with system administrator privileges did not require that level of access based on their responsibilities. We determined that these conditions existed in part because of the transition of CA-MMIS to Xerox; however, we did not identify any questioned costs related to these conditions. Health Care Services agreed with this finding and provided a corrective action plan.

However, in September 2013 Ernst & Young, LLP issued a service organization control report for CA-MMIS covering fiscal year 2012–13, in which it reported some similar concerns. For example, Ernst & Young, LLP found that controls related to removing and disabling terminated users' access to systems supporting CA-MMIS were not consistently followed, and periodic reviews of the appropriateness of users' access to these systems were not consistently performed. In its response to the report, Xerox agreed with these findings. The assistant deputy director told us that Health Care Services sent a letter to Xerox in December 2013 requesting that Xerox provide a response indicating how and when it would resolve each of Ernst & Young, LLP's findings. He stated that Xerox's response is due on March 15, 2014. We will continue to monitor Health Care Services' and Xerox's response to these findings.

Respectfully submitted,



ELAINE M. HOWLE, CPA
State Auditor