

June 26, 2018

Letter Report 2017-043

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

Dear Governor and Legislative Leaders:

As Senate Bill 853 (Chapter 717, Statutes of 2010) requires, the California State Auditor has been monitoring the transfer of operational responsibility for the California Medicaid Management Information System (CA-MMIS) and the subsequent design, development, and implementation of a replacement to the CA-MMIS system (replacement system). This letter report provides an update on events related to CA-MMIS and the status of the California Department of Health Care Services' (DHCS) efforts to take over the replacement of CA-MMIS, and it highlights the following issues:

- DHCS is pursuing a modular implementation approach to replacing CA-MMIS that partitions the complex functions of CA-MMIS into discrete, scalable components, or modules, that can be procured or built and implemented independently.
- DHCS has decided to take on the responsibility for integrating the various components of the replacement system ensuring those components function together, despite having limited experience in such a role.
- Independent oversight by the State and consultants must examine closely several projects to procure or build individual modules, as well as the integration of individual modules into a functioning system.

Background

Medi-Cal operates with funding from both the federal Medicaid program and the State, and it provides health care services to eligible beneficiaries. DHCS administers Medi-Cal in partnership with the federal Centers for Medicare & Medicaid Services (CMS). CA-MMIS is the computer system originally developed in the late 1970s and still 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. In 2010 DHCS awarded Xerox State Healthcare, LLC (Xerox), formerly known as ACS State Healthcare, LLC, a \$1.7 billion contract to assume operational responsibility for CA-MMIS and provide services such as processing provider claims for payment and providing certain other services to providers and beneficiaries. Furthermore, Xerox was to design, develop, implement, and operate a replacement system. DHCS says that CA-MMIS needs to be replaced because it is more than 40 years old, its operations are inefficient, maintaining the system is difficult, and there is a high risk of system failure. In addition, according to DHCS, CA-MMIS is not currently compliant with federal Medicaid Information Technology Architecture (MITA) standards, which establish national guidelines for technologies and processes that can enable improved program administration, and compliance is a key strategic driver of the current system replacement.

Although it successfully assumed operational responsibility for CA-MMIS in September 2011, Xerox announced in October 2015 that it would not fully complete the CA-MMIS system replacement project. In April 2016, DHCS and Xerox management signed an approximate \$123 million settlement agreement that formally terminated the contractual relationship for the system replacement project. The settlement terms included Xerox's agreement to pay DHCS \$103.3 million in cash and provide \$15 million in hardware and software products. Xerox also gave to DHCS ownership of Release 1 (system sign-on functionality) and Release 2 (certain eligibility determination functionality) deliverables from the system replacement project, and it agreed to waive \$5 million in claims against DHCS for work performed. According to DHCS, the settlement included all federal and state costs related to the procurement and the full \$9 million it previously paid to Xerox for project work. DHCS reported that Xerox made the final payment on December 29, 2016, and that the closeout of activities and transition of assets for the system replacement project were completed in April 2017. Xerox, now known as Conduent State Healthcare, LLC (Conduent), remains the fiscal intermediary—the contractor that operates CA-MMIS and processes claims for payment—and is scheduled to serve in that role until September 30, 2019.

DHCS Faces Challenges After Taking Over Responsibility for Replacing CA-MMIS

After terminating the system replacement project, DHCS has made some significant changes to its operations and organization. First, DHCS is working to ensure stable operations of the CA-MMIS system while it pursues a replacement. To accomplish this, DHCS is working to replace Conduent as the fiscal intermediary by contracting separately for its CA-MMIS maintenance and operations services and for business operations services, such as a call center, provider services, and claims processing. These two procurements are scheduled to be completed later in 2018, and their timing is critical because Conduent is expected to turn over operations of CA-MMIS to DHCS on September 30, 2019.

Consistent with CMS requirements, DHCS is pursuing a modular approach to replacing the CA-MMIS system components over time rather than replacing the entire system at once. This approach partitions the complex functions of CA-MMIS into discrete, scalable components, or modules, that DHCS can procure or build and implement independent from one another. The change is intended to more quickly replace components of the system and allow CMS to certify modules as they are completed rather than waiting for the entire system's completion. According to the U.S. Office of Management and Budget, this approach can reduce overall investment risk as agencies plan for smaller projects and increments—each project has a greater likelihood of achieving cost, schedule, and performance goals than a larger all-inclusive development effort. CMS provides federal funding for 90 percent of state spending for the design, development, and implementation of modular replacement projects whose plans it approves.

Our information technology expert (IT expert) also believes that the modular approach has merit, but he notes that it has risks as well: this approach is not widely used in California government, and DHCS and the Department of Technology (CDT) do not have significant experience using this modular approach or monitoring modular efforts on such a large and complex project. For example, the State's *Information Technology Project Oversight Framework* (the criteria that CDT uses to assess the risk, level of criticality, and oversight for IT projects) does not offer detailed guidance for modular projects. Furthermore, state IT approval processes have historically expected the entire project to be planned and budgeted at the outset, whereas

under the modular approach the agency incrementally contracts for, and manages individual components of the program. Table 1 details some of the other challenges that agencies can expect to face when using modular development strategies.

Table 1
Summary of Challenges Associated with Modular Development

CHALLENGE	DESCRIPTION
Outdated risk management process	Risk management processes may require updating because they may be aligned to the traditional “waterfall” approach, which begins with developing requirements and continues sequentially through other phases.
Integration	The more projects, or modules, the greater the potential challenge to integrate the parts (and the contractors if there are different contractors completing different parts); gaps may develop in responsibility and accountability.
Communication	Compartmentalized work may increase communication challenges among DHCS and its contractors.
Workload and schedule	Each project potentially creates additional workload and can add to the total time required to deliver capability.

Source: Analysis of U.S. Office of Management and Budget’s Contracting Guidance to Support Modular Development.

The issues above could additionally challenge DHCS because it is transitioning from its previous role as *overseer* of Xerox’s efforts to now being responsible for the entire replacement effort. In particular, the CA-MMIS division of DHCS is now responsible for day-to-day management of the system replacement, for merging the various functional components of the system into an integrated solution, and for ensuring that all those components will function effectively together. This will involve selecting and managing vendors, managing multiple contracts, implementing each individual new module, and managing associated risks. The deputy director of DHCS’s CA-MMIS division said that it has reorganized the division to be able to perform its new role, that it is hiring additional staff with specific expertise, and that it is contracting for integration services and project management support services. However, as our IT expert attests, the work of systems integration is highly specialized and is not a role with which the CA-MMIS division has direct experience, and it will be a significant and critical task for DHCS to appropriately manage risk.

In a May 2018 briefing to legislative staff, DHCS provided its CA-MMIS modernization approach and reported that it has begun planning for two modules—Federal Draw and Reporting and Cal-ARM—whose efforts are scheduled to continue in fiscal year 2018–19, and whose details appear in the text box. The Budget Act of 2017 required DHCS to include in its January 2018 proposed budget a description of the full proposed modular project approach, the purposes and progress for each module, a complete timeline, and an estimate of the total project cost. Although DHCS developed more detailed cost estimates and approximate development durations for these two modules and for some of the other modules that it anticipates (claims modernization, financial management, provider management, and care management), it has yet to develop detailed plans for all the modules necessary to replace CA-MMIS.

Two Modules Are in Planning Stages

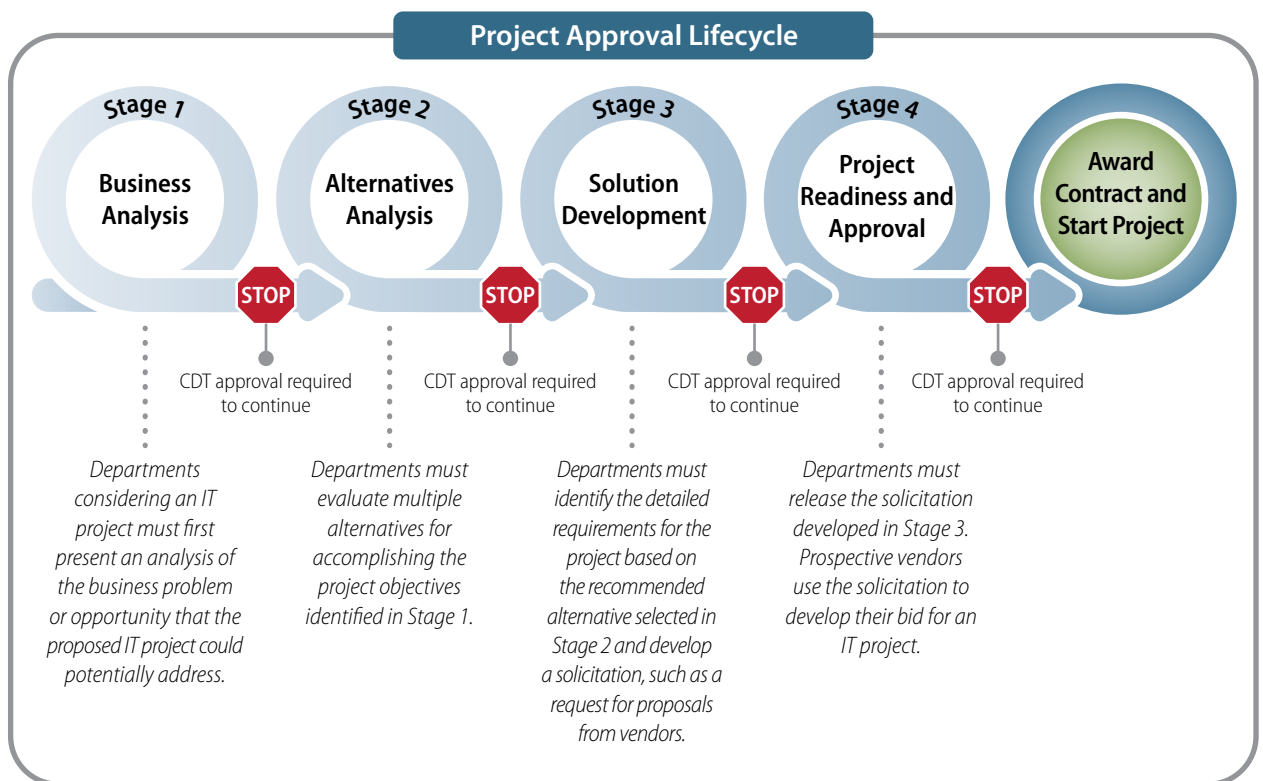
Federal Draw and Reporting: Allocate and schedule payments to providers and other payees according to federal funding guidelines.

Cal-ARM: Identify payments made by Medi-Cal that can be recovered from third-party payors, such as private insurance.

Source: DHCS’s May 2018 Legislative Briefing.

As the department responsible for approving and overseeing state IT projects, CDT has stated that each individual CA-MMIS module will be subject to its project approval lifecycle, as we outline in Figure 1. The Federal Draw and Reporting and Cal-ARM modules are currently in Stage 2 and CDT expects them to complete that stage during the summer of 2018. DHCS anticipates beginning the selection process for prospective vendors in the summer of 2018 for Federal Draw and Reporting and expects to award a contract for Cal-ARM by spring of 2019.

Figure 1
 The State's Project Approval Lifecycle for IT Projects



Source: Analysis of California's Statewide Information Management Manual.

DHCS anticipates beginning additional modules in fiscal year 2018–19, depending on approval from the Department of Finance and review by CDT. DHCS also indicated that it will begin evaluating commercially available solutions to replace the CA-MMIS claims subsystem—the part of the system used to process, adjudicate, and pay claims. DHCS estimates the combined state and vendor costs for CA-MMIS replacement to be roughly \$500 million, plus or minus 20 percent, over as many as 10 years. According to the CA-MMIS division of DHCS, it identified the CA-MMIS business services it supports and aligned those services with the MITA standards established by CMS. It identified the modules that will replace CA-MMIS components that are critical and are operating on unstable legacy applications and infrastructure. After the federal reimbursement of 90 percent of state costs for design, development and implementation of the project, DHCS estimates that the State's share would be roughly \$50 million. This cost is in addition to the approximate \$30 million DHCS has stated it paid annually for maintaining the legacy system. According to DHCS, future annual maintenance costs for the legacy system will

likely decline as new modules replace existing functionality. As the replacement effort progresses and more modules are developed, DHCS indicated that future estimates will be refined and made more precise as it develops details for future budget requests.

Oversight of DHCS's System Replacement Efforts Needs to Consider the Entire Project

With the shift to a modular development approach, oversight entities, such as independent project oversight (IPO) and independent verification and validation (IV&V), which are defined in the text box, focus their efforts on each module as it is identified and begins to go through the procurement, development, and implementation processes. We believe it is important that DHCS and oversight entities also give adequate and timely attention to the integration of those modules into a whole. According to CDT, the IPO it typically provides will begin with IPO managers participating in the approval process for each module starting in Stage 2 and include procurement activities. Yet, CDT is still considering how its IPO will oversee the integration of the multiple modules into a complete system. CDT also stated that it has identified the staff person who will be performing IPO for the first two modules and that it will begin monthly reporting after each module completes the project approval process.

Definitions of Oversight Functions

IPO: The purpose of IPO is to provide an independent review and analysis to determine whether the project is properly managed and on track to be completed within the estimated schedule and cost, and that it will provide the functionality the State requires.

IV&V: The IV&V function provides technical oversight of an IT system's products and processes as they are being developed and implemented. IV&V feedback provides an early warning if quality issues arise to limit later problems or system changes that might result in greater costs and schedule delays.

Source: *Analysis of California's Statewide Information Management Manual.*

In addition, DHCS is in the process of obtaining IV&V services. The contract for IV&V services will include tasks to help ensure CMS certification of the modules, such as completing certification progress reports and checklists. Both IPO and IV&V are critical to ensuring that stakeholders have insight into the progress, cost, and risks facing the replacement effort.

We will continue to monitor CDT's and DHCS' efforts to implement IPO and IV&V that will oversee DHCS' efforts to replace CA-MMIS. We currently meet with CA-MMIS division staff and the deputy director to stay apprised of project developments, and we attend the periodic updates that the division provides to legislative staff to confirm that DHCS is appropriately communicating the status of the system replacement effort. As part of our monitoring activities, our IT expert will review IPO and IV&V oversight reports when they are available. We previously attended CA-MMIS advisory group meetings, which were also attended by representatives of DHCS, Xerox, IPO, IV&V, the Department of Finance, and the Legislative Analyst's Office, to ensure that the group appropriately responded to emerging issues and risks. However, DHCS eliminated these meetings as it closed out the system replacement project with Xerox. DHCS stated that by August 2018 it will re-institute meetings as a regular forum for discussing the progress of the CA-MMIS system replacement. Such meetings would provide an opportunity to keep stakeholders apprised of significant developments and enhance transparent decision-making and governance.

Recommendations

CDT should perform comprehensive IPO for the CA-MMIS replacement effort.

DHCS should obtain comprehensive IV&V services for the CA-MMIS replacement effort as soon as possible.

DHCS should reinstitute and regularly schedule meetings, similar to the former CA-MMIS advisory group meetings, as a forum for providing updates on the status of the system replacement effort, and the meetings should include presentations of the risks and issues that IPO and IV&V identified and that the program and its subordinate module implementation projects are facing. The reinstated meetings should include appropriate staff from DHCS, including the CA-MMIS division, and Health and Human Services Agency, as well as the Department of Finance, CDT, the Legislative Analyst's Office, and the State Auditor's Office.

Respectfully submitted,



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State Auditor

Date: June 26, 2018

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