



December 17, 2020

2020-043

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, we have been monitoring the design, development, and implementation of a replacement for the California Medicaid Management Information System (CA-MMIS). In 2018 we reported that the Department of Health Care Services (DHCS) had made significant changes to its implementation approach to replacing CA-MMIS: it is moving to a modular approach that replaces discrete system components over time instead of replacing the entire system at once. In this letter, we provide an update on DHCS's efforts to replace CA-MMIS, and we highlight the following issues:

- DHCS recently decided to incorporate the CA-MMIS modernization into a broader effort to modernize all of its Medi-Cal information technology systems. This change has created uncertainty about the budget and schedule for the replacement of CA-MMIS.
- DHCS lacks an adequate governance structure for managing the development of CA-MMIS modules as part of its broader Medi-Cal modernization effort.
- The California Department of Technology (CDT) is in the very early stages of developing standards for overseeing state agencies' modular modernization efforts to ensure that modules ultimately function together as a system.

Background

DHCS is in the process of modernizing CA-MMIS, the computer system originally developed in the late 1970s to process payments to health care providers who participate in the Medi-Cal fee-for-service program. The textbox presents key facts about Medi-Cal. CA-MMIS is a collection of about 92 subsystems that perform a variety of functions related to determining eligibility and enrolling members in Medi-Cal, as well as managing provider information. According to DHCS, in 2019 CA-MMIS processed approximately \$19 billion in payments to health care providers, including physicians, pharmacies, and hospitals. DHCS stated that CA-MMIS needs replacement because it is more than 40 years old, its operations are inefficient, its maintenance is difficult, and it has a high risk of failure.

Key Facts About Medi-Cal

- DHCS administers Medi-Cal in partnership with the federal Centers for Medicare & Medicaid Services.
- Medi-Cal receives funding from both the federal Medicaid program and the State, and it provides health care services to eligible beneficiaries.
- California receives federal funding for 90 percent of the design, development, and installation of new CA-MMIS modules.

In addition, DHCS explained that CA-MMIS is not currently compliant with federal Medicaid Information Technology Architecture standards, which are national guidelines for technologies and processes that can enable improved program administration. According to DHCS, compliance is a key strategic driver of the current system replacement.

When DHCS first began its efforts to replace CA-MMIS in 2010, its intention was to replace the whole system at once as a single project; however, in 2016 DHCS began shifting to using a modular approach, in part to comply with the requirements that the Centers for Medicare & Medicaid Services (CMS) has established. This modular approach splits the complex functions of CA-MMIS into multiple stand-alone components, or modules, that DHCS can implement independently instead of replacing the entire system all at once. DHCS is responsible for integrating the modules to ensure that they function together and with the legacy components that will stay operational until their replacement. In 2018 we reported that neither DHCS nor CDT had significant experience using or monitoring this modular approach on such a large and complex project. We recommended in our 2018 report that CDT examine the individual modules closely and oversee DHCS's efforts to integrate the multiple modules into a complete functioning system.

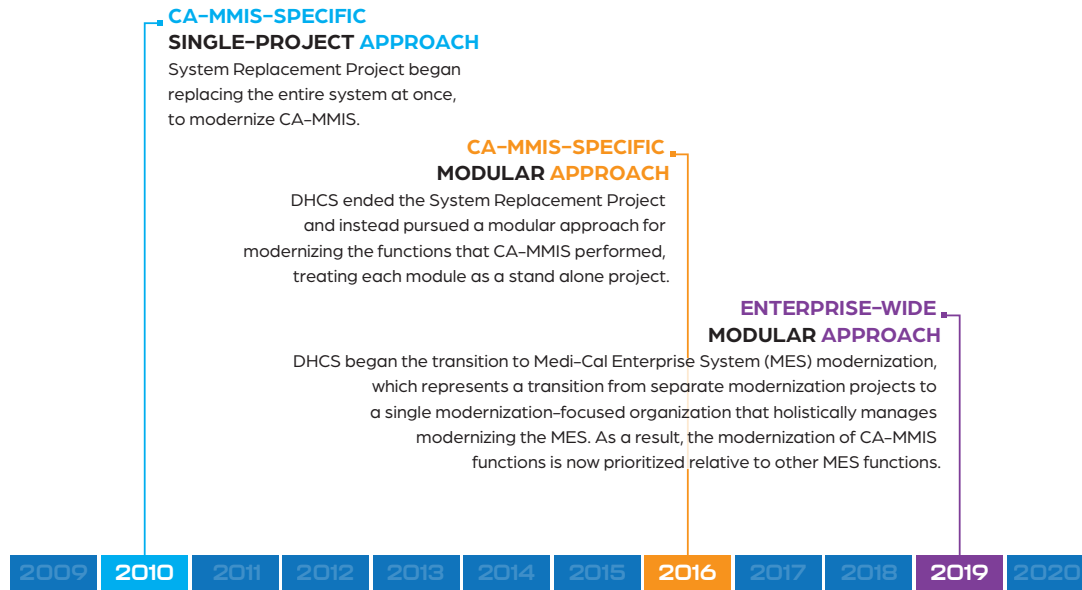
DHCS's New Approach for Modernizing Its Medi-Cal IT Systems Has Created Uncertainty About the Budget and Schedule for Modernizing CA-MMIS

DHCS reported in October 2019 that it was once again shifting its approach for modernizing CA-MMIS and that it now planned to incorporate CA-MMIS into a wider effort to modernize all of its Medi-Cal information technology systems. It refers to these systems collectively as its *Medi-Cal Enterprise System* (MES), which it defines as the business processes that support the administration of Medi-Cal. Figure 1 presents the timeline of DHCS's effort to modernize CA-MMIS. As of July 2020, CA-MMIS became part of the broader MES modernization effort to align with practices encouraged by CMS, and DHCS no longer considers the replacement of CA-MMIS to be a distinct project. However, DHCS has not yet provided details about the new approach or its impact on CA-MMIS's modernization. Because DHCS's new approach represents a significant change, the State will likely need to adjust the way it oversees DHCS's progress and the cost of modernizing CA-MMIS functionality.

Thus far, DHCS has provided only high-level descriptions of its new MES modernization approach. In an October 2019 legislative briefing about this approach, it reported that it is shifting its approach to modernizing its Medi-Cal systems and further explained in a January 2020 legislative briefing that it planned to transition from an individual project approach to an enterprise-focused approach. This change means that DHCS will no longer be modernizing systems such as CA-MMIS as separate, discrete projects with their own modules; instead, it will identify and prioritize modules of functionality that can be used across MES. Although DHCS has stated that it will be a multiyear transformation, it has not yet established a timeline. It expects its shift in approach to yield the following benefits:

- Improve its modernization efforts' alignment with department, agency, and federal strategies.
- Improve clarity of funding.
- Improve visibility of the holistic roadmap for MES modernization.
- Strengthen its governance so that it can better make decisions, prioritize, and guide the modernization efforts.

Figure 1
DHCS's Approach to Modernizing CA-MMIS Has Shifted Significantly Since the Project Began



Source: DHCS documents.

Although DHCS's use of an enterprise-wide modular approach could provide certain benefits, tracking CA-MMIS as a distinct project will be difficult as DHCS incorporates it into the broader MES modernization effort. In addition to CA-MMIS, DHCS intends MES modernization to include the Medi-Cal Eligibility Data System (MEDS), the Comprehensive Behavioral Health Data Systems Project, and future Medi-Cal technology modernization needs. The text box describes MEDS and the Comprehensive Behavioral Health Data Systems Project. We are concerned that the intermingling of all of these system updates into one modernization effort significantly reduces the transparency of DHCS's efforts to modernize all of the legacy CA-MMIS functionality and inhibits monitoring of those efforts. For instance, CDT—the agency responsible for providing independent oversight of information technology (IT) projects—stated that because CA-MMIS was officially incorporated into the MES modernization effort effective July 1, 2020, it would no longer use the term “CA-MMIS modernization project” in its oversight reports. Further, CDT reported in its September 2020 MES oversight report that its oversight focus had changed to MES modernization from CA-MMIS modernization and that starting in October 2020, it would change its oversight report frequency to quarterly instead of monthly. The focus of that reporting will be on the governance and cost of the MES modernization effort. Although the current scope of CDT's oversight for MES includes only governance and cost, as the MES effort becomes more complete with established baselines, CDT indicated it will oversee the full scope of this effort.

MES Includes Systems in Addition to CA-MMIS

MEDS: MEDS is a statewide information system used for a variety of eligibility, enrollment, and reporting functions specific to Californians receiving Medi-Cal and other state and federal health benefits.

Comprehensive Behavioral Health Data Systems

Project: This project is intended to develop a consolidated reporting and analysis platform that integrates data from 12 existing behavioral health data systems.

Source: DHCS.

DHCS's lack of a detailed approach for MES modernization further complicates the tracking of CA-MMIS's modernization and creates concerns about the shift's impact. In 2018 DHCS indicated that the CA-MMIS modernization would require roughly 10 years to complete and cost approximately \$500 million, which would make the State's share \$50 million after accounting for federal reimbursements. However, CDT stated in a June 2020 oversight report that because of the transition to the MES modernization, the business objectives, scope, timeline, and budget for CA-MMIS's modernization were uncertain and could not be evaluated. A year has passed since DHCS first reported the shift to MES modernization in its October 2019 legislative briefing, yet it continues to lack a detailed plan.

DHCS has not developed plans for modernizing the remainder of CA-MMIS beyond the three modules currently in progress. Table 1 shows the status of these modules, which DHCS and CDT are handling as individual projects. However, DHCS has not yet developed a long-term plan for replacing all of the CA-MMIS functionality, such as a budget, schedule, or description of future modules. In fact, DHCS does not know how many modules it will need to develop to replace CA-MMIS. According to DHCS, it will prioritize its efforts to modernize CA-MMIS functions based on its business strategy. DHCS explained that it has not fully developed its plans for MES modernization because the size and scope of this effort requires additional funding and staff resources to support the transition from individual projects to an enterprise modernization approach. Nevertheless, until DHCS develops a more detailed approach, it cannot identify the impact the transition to MES modernization will have on the priority and timing of its efforts to modernize the remaining CA-MMIS functionality.

Table 1
Status of CA-MMIS Modules in Development

MODULE	DESCRIPTION	DURATION/COST	STATUS AS OF SEPTEMBER 2020
Federal Draw and Reporting (FDR)	Financial management solution to manage federal and state funding and to produce reporting to meet federal requirements.	2 years/ \$40.4 million	DHCS deployed into operation the first production release on October 1, 2020.
California Automated Recovery Management (Cal-ARM)	Solution for the automated identification, calculation, recovery, and reconciliation of Medi-Cal expenses to comply with state and federal requirements that Medi-Cal be the payer of last resort.	2.5 years/ \$12.3 million	DHCS experienced delays in publishing a request for proposals (RFP) soliciting solutions from vendors. COVID-19 related budgetary uncertainty affected this module's funding, delaying solicitation and contract award to fiscal year 2021–22.
Claims Modernization	Modernization of the claims engine, which is the core of CA-MMIS that processes fee-for-service claims.	4 years/ \$204.5 million	DHCS has been in the middle of planning efforts to evaluate potential systems for processing fee-for-service claims. DHCS reported in November 2020 that this effort is on hold because it is not currently funded.

Source: CDT's Independent Project Oversight reports and DHCS documents.

DHCS must provide a plan for its MES modernization to ensure that the State can adequately monitor its efforts. CDT has recommended that DHCS map the current 92 CA-MMIS subsystems to the expected modules to validate that those modules fully cover the functions of the legacy system. CDT has also recommended that DHCS develop a new MES approach document to identify its new strategy for its CA-MMIS modernization, the revised proposed modules, and the estimated time frame and cost. We believe these actions will greatly enhance the transparency of DHCS's efforts to modernize CA-MMIS. However, despite CDT's making these recommendations several months ago, DHCS has not yet implemented them. In its September 2020 oversight report, CDT indicated that it understood that the complete MES modernization strategy might not be available for some time; however, CDT also indicated that a preliminary, high-level document would clarify the current

MES modernization approach. According to DHCS's chief information officer, DHCS intends to develop a high-level approach document and map the modernization of CA-MMIS subsystems and it is working toward securing funding for this effort. However, he indicated that it is unlikely that it will complete this work before November 2021. We believe that DHCS needs to prioritize the mapping of CA-MMIS subsystems to future modules to provide transparency into its modernization efforts.

DHCS Lacks Adequate Governance and Experience for Managing and Integrating CA-MMIS Modules

DHCS's inadequate governance structure for incorporating CA-MMIS modules into the broader MES modernization effort creates a risk of duplicated effort and increased costs. DHCS has been managing each CA-MMIS module as an individual project rather than managing the modules collectively, and it does not have an executive-level governance body overseeing the entire CA-MMIS modernization. Consequently, DHCS risks a lack of strategic alignment and consistency among the modules. This lack of alignment may lead to duplication of development effort and failure to identify common issues or dependencies among the modules, which might result in delays and additional costs to the State. Appropriately managing the risk of developing multiple CA-MMIS modules will be a significant and critical task for DHCS—a task that will become more challenging with CA-MMIS development transitioning to the larger, more complex MES modernization effort with its additional projects and functionality.

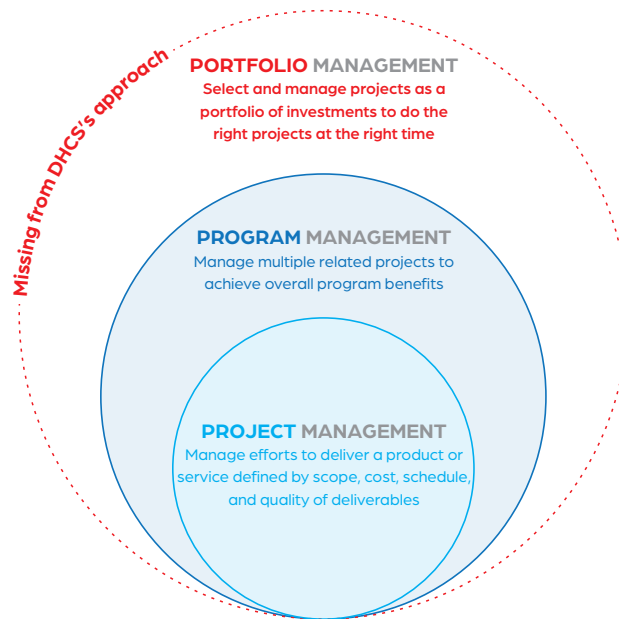
Implementing a management process known as *portfolio management* as part of its governance would help DHCS to oversee and minimize these risks. According to the Project Management Institute, organizations can manage their projects at three levels: project management, program management, and portfolio management.¹ As Figure 2 shows, portfolio management is fundamentally different from project management and program management. According to a conference paper published on the Project Management Institute's website, project and program management are about execution and delivery—doing projects right.² In contrast, portfolio management focuses on doing the right projects at the right time by selecting and managing projects as a portfolio of investments. It requires different techniques and perspectives. Good portfolio management increases business value by aligning projects with an organization's strategic direction, making the best use of limited resources, and building synergies between projects.

However, DHCS has not implemented a portfolio approach for managing CA-MMIS's modernization, nor has it done so for the larger MES effort. CDT reported for more than a year that the CA-MMIS modernization—and more recently the MES modernization—lacked a portfolio-level governance structure and management processes, including reporting structures for portfolio management. Although each individual module is expected to have its own project management plan, DHCS's overall process for managing the CA-MMIS and MES modernization is deficient. In its January 2020 legislative briefing, DHCS did indicate that it would build a strategic project portfolio management approach as part of the organizational changes that it would make to enable the MES modernization efforts. CDT also indicated in its June 2020 oversight report that DHCS was working on draft changes to governance, and DHCS stated that it anticipates finalizing its new governance plans within the next 12 months. However, we find this year-long delay concerning. Until it develops a portfolio-level governance structure, DHCS will lack an adequate strategic management process to guide its implementation of the multiple projects under MES, which could lead to misaligned priorities and an inefficient use of resources.

¹ The Project Management Institute is a not-for-profit professional membership association for the project management profession, and it develops standards for project, program, and portfolio management.

² Oltmann, J. (2008). Project portfolio management: how to do the right projects at the right time. Paper presented at PMI® Global Congress 2008—North America, Denver, CO. Newtown Square, PA: Project Management Institute.

Figure 2
Portfolio Management Encompasses Program and Project Management



Source: Analysis of articles from Project Management Institute and other management organizations, and CDT's Independent Project Oversight reports.

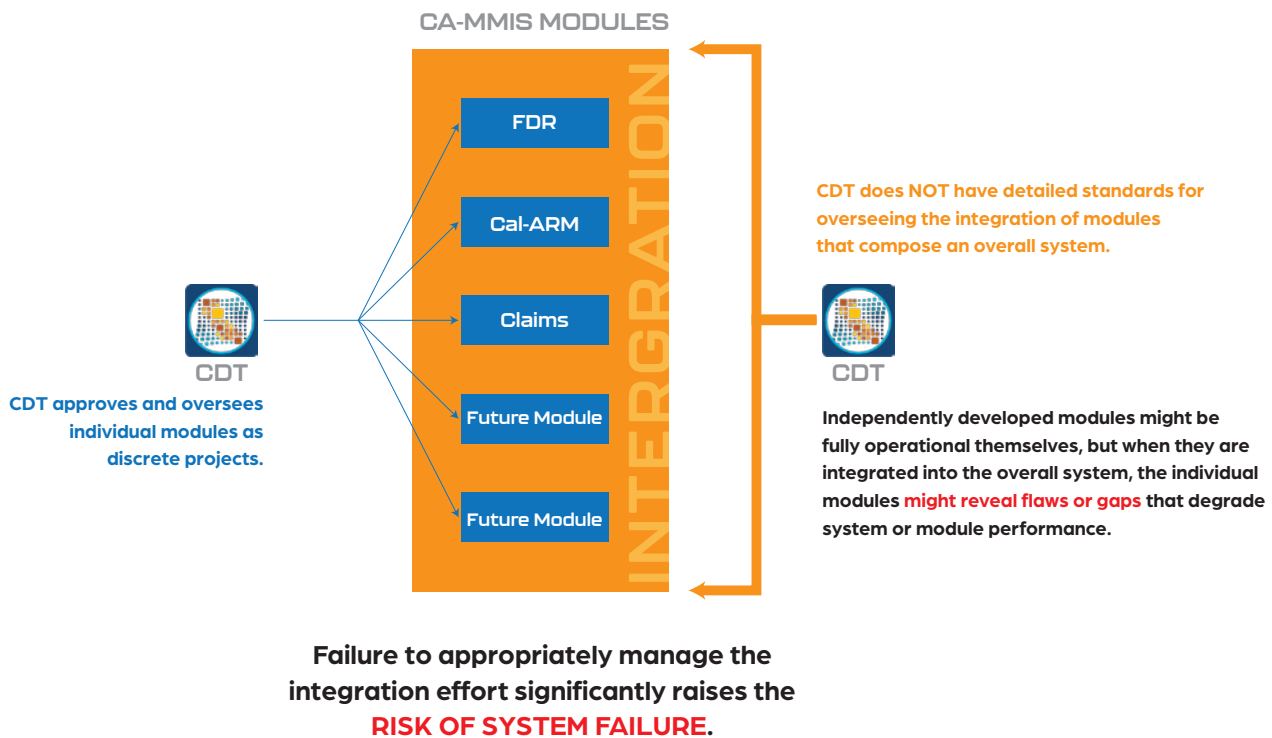
Furthermore, because of the complexity of CA-MMIS and its modernization needs, we remain concerned about DHCS's ability to integrate CA-MMIS modules into a functioning system—a concern that is heightened by DHCS's inclusion of CA-MMIS into the broader MES modernization effort. Failure to appropriately manage the integration effort significantly raises the risk of system failure, which might result in delayed or unpaid claims and system outages. We previously reported that the work of systems integration is highly specialized and is not a role with which the CA-MMIS division has direct experience, a concern which CDT echoed in its July 2020 report. Further, in its June 2020 report, CDT cited a lack of information on DHCS's approach to integrating modules both with the legacy system and with other modules; on data exchange and data management strategy, which are critical areas for a project's success; and on plans for the overall CA-MMIS modernization project. According to CDT's June 2020 report, DHCS will need to identify and manage the risks and issues related to these significant focus areas in the modular development approach to ensure CA-MMIS functions correctly.

CDT Is in the Very Early Stages of Developing Its Approach to Overseeing Modular Modernization Efforts

Although we believe CDT is raising important issues related to CA-MMIS's modernization, we remain concerned that it does not yet have standards for monitoring modular efforts on large and complex systems, which could become more prevalent in the future. For example, and as we indicated in our 2018 report, 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, an agency incrementally contracts for and manages the individual components or projects that make up the overall system. Although CDT decided to approve and oversee individual modules as discrete

projects of the CA-MMIS modernization effort, it does not have detailed standards for how it will oversee future modular efforts. Additionally, as Figure 3 shows, CDT does not yet have detailed standards for overseeing the integration of modules into an overall system.

Figure 3
CDT's Lack of Standards for Managing the Integration of Modules Increases Risk



Source: CDT documents, U.S. General Services Administration Whitepaper.

CDT has outlined a preliminary plan for overseeing the MES modernization that it could refine to function as an oversight template for future modular efforts. Specifically, it is proposing to oversee the development and implementation of the strategy and roadmap for the MES modernization effort but with a focus limited to governance, status, and risks. CDT indicated that it is also developing a process for annual reporting and monitoring of iterative projects, such as those employing a modular approach. The iterative project report process will include a focus on progress, expenditures, and any plan changes or refinement. CDT added that the iterative project report will be a planning and commitment document, similar to a special project report, in which a department commits to making a specified amount of progress based on the planned, scope, schedule, and budget (cost) constraints. The annual iterative project report will be the basis for and confirmation of annual funding requested through the budget process. We believe CDT should refine, formalize, and implement these processes for overseeing future modular modernization of IT systems in California. CDT should further establish guidelines for how state agencies must plan and budget for such efforts, develop overall strategies or roadmaps, and track and report progress toward completion. The processes should identify both how CDT will approve and oversee the development of individual modules and the integration of those modules into an overall functioning

system. This will help to ensure that the individual module projects benefit from identifying and sharing common risks and lessons learned, as well as resolving discrepancies and compatibility issues. Without such processes, the State will lack a consistent approach for approving and monitoring any future modular modernization projects.

Our Monitoring Will Focus on DHCS's Progress Toward Developing a Strategic Approach for Modernizing CA-MMIS Functions

Because the nature of DHCS's CA-MMIS modernization effort has shifted significantly since the Legislature first tasked us with monitoring the CA-MMIS project, we will focus on the risks associated with this shift in approach. As we specify throughout this report, DHCS's move to an enterprise approach and away from a project-specific approach leaves us with significant uncertainty about its future CA-MMIS-specific modernization efforts. Currently, DHCS has not planned any CA-MMIS modules beyond those already in progress, and it remains unclear when DHCS will prioritize modernizing additional CA-MMIS functions. As we have previously noted, DHCS faces risk in the strategic planning for, and integration of, CA-MMIS modules into a complete system. We will therefore focus our future monitoring efforts on DHCS's development of a strategic approach for its CA-MMIS modernization efforts as a subset of its MES modernization and on integration of CA-MMIS modules into a functioning system. We will continue to report concerns in these areas and provide recommendations as necessary.

Recommendations

As soon as possible, DHCS should implement CDT's recommendations, including, but not limited to, the following:

- Develop an MES modernization approach document that includes the strategy, time frame, and cost for modernizing CA-MMIS.
- Map the CA-MMIS subsystems to the proposed modules.
- Implement a portfolio-level governance structure for the MES project.
- Implement a process for identifying and mitigating risks related to its MES modernization effort, including the modernization of CA-MMIS.

The Legislature should amend state law to require CDT to implement processes for overseeing the State's modular modernization efforts, including a process for approving and overseeing the development of modules and their integration into an overall system. This process should set expectations for state agencies to plan and develop cost estimates for such projects, including developing an overall strategy or roadmap and reporting progress toward completion. The process should also require state agencies to establish a plan for integrating modules into a complete system.

Respectfully submitted,



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