

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
 DF-46 (REV 10/20)

Fiscal Year 2022-23	Business Unit 4440	Department Department of State Hospitals	Priority No. 1
Budget Request Name 4440-061-BCP-2022-A1		Program 4400-ADMINISTRATION	Subprogram 4400020-HOSPITAL ADMINISTRATION

Budget Request Description

Pharmacy Modernization Project – Phase 3

Budget Request Summary

The Department of State Hospitals (DSH) requests a reappropriation of \$2.7 million General Fund from fiscal year 2021-22 to 2022-23 to continue the implementation phase of the Pharmacy Modernization project. In addition, DSH requests \$3.2 million General Fund in 2023-24, \$3 million General Fund in 2024-25, \$2.9 million General Fund in 2025-26 and \$1.2 million General Fund in 2026-27 to complete the implementation phase at all hospitals and cover initial maintenance and operations costs.

Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Code Section(s) to be Added/Amended/Repealed	
Does this BCP contain information technology (IT) components? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i>	Department CIO Andrew Hinkle	Date 4/1/2022

For IT requests, specify the project number, the most recent project approval document (FSR, SPR, S1BA, S2AA, S3SD, S4PRA), and the approval date. Project No. **4440-127** Project Approval Document: **S4SD** Approval Date: **11/18/2021**

If proposal affects another department, does other department concur with proposal? Yes No **Attach comments of affected department, signed and dated by the department director or designee.**

Prepared By Alicia Alvarado, PMO Director	Date 4/1/2022	Reviewed By Kim Vu, Chief	Date 4/1/2022
Department Director Stephanie Clendenin	Date 4/1/2022	Agency secretary Dr. Mark Ghaly	Date 4/1/2022

Department of Finance Use Only

Additional Review: Capital Outlay ITCU FSCU OSAE Dept. of Technology

PPBA Kia Cha	Date submitted to the Legislature 4/1/2022
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A. Budget Request Summary

The Department of State Hospitals (DSH) requests a reappropriation of \$2.7 million General Fund from fiscal year 2021-22 to 2022-23 to continue the implementation phase of the Pharmacy Modernization project. In addition, DSH requests \$3.2 million General Fund in 2023-24, \$3 million General Fund in 2024-25, \$2.9 million General Fund in 2025-26 and \$1.2 million General Fund in 2026-27.

This project includes the implementation of an inventory control system, unit dose re-packaging equipment, automated drug dispensing system equipment and pharmacy data integration. A reappropriation is needed due to delays in the Project Approval Lifecycle process, attributable to the impacts of the COVID-19 Pandemic and an extended procurement phase. The reappropriation will allow DSH to continue with the implementation in 2022-23. The additional funding in 2023-24 and 2024-25 will allow DSH to complete the implementation phase at all hospitals. The 2025-26 and 2026-27 funding will cover the initial ongoing support costs.

B. Background/History

DSH manages the nation's largest inpatient forensic mental health hospital system. Its mission is to provide evaluation and treatment in a safe and responsible manner, seeking innovation and excellence in state hospital operations, across a continuum of care and settings. DSH is responsible for the daily care and provision of mental health treatment of its patients. DSH oversees five state hospitals (Atascadero, Coalinga, Metropolitan, Napa, and Patton) and employs nearly 13,000 staff. In addition to state hospital treatment, DSH provides services in contracted jail-based competency treatment (JBCT), community-based restoration (CBR) and pre-trial felony mental health diversion programs, and the conditional release program (CONREP). DSH is responsible for the daily care to over 7,000 patients. In 2020-21, DSH served 7,813 across the state hospitals, 2,403 in JBCT and CBR contracted programs, and 841 in CONREP programs. In addition, as of December 31, 2020, a total of 276 individuals were diverted into county programs funded by DSH.

The Pharmacy Modernization project addresses the need to replace the current, manual processes used for inventory control, medication dispensing and security of controlled drugs. This will be accomplished with the implementation of automated, integrated systems, re-architecture of the pharmacy application environment, and equipment with standardized practices across the DSH system.

These improvements to DSH Pharmacy operations allow pharmacy staff to effectively manage medication inventory to minimize medication waste (drugs not used before their expiration date), support required medication dispensing guidelines (Title 22 controls for dispensing timeframe) and keep controlled medications secure. Standardized pharmacy operations provide the ability for DSH to measure improvements such as improved patient Medicare Part D claim reimbursements. The re-architecture of the Pharmacy application environment consolidates the five hospital systems and will provide a single connector for future use by the Department's proposed Electronic Health Records system.

The 2019 Budget Act included \$2.2 million General Fund in 2019-20 for Phase 1 (planning) of Pharmacy Modernization during which DSH intended to complete the Project Approval Lifecycle (PAL) stages 2 through 4.

Analysis of Problem

The 2020 Budget Act included \$928,000 General Fund in 2020-21, \$5.6 million General Fund in 2021-22, \$1.2 million General Fund in 2022-23 for Phase 2 (implementation) of Pharmacy Modernization. These costs were for all five hospitals based on the July 2019 Request for Information (RFI) which received two responses.

Resource History (Dollars in thousands)

Program Budget	2018-19	2019-20	2020-21	2021-22¹
Authorized Expenditures	\$194	\$2,200	\$928	\$5,600
Actual Expenditures	\$194	\$1,968	\$672	\$350
Revenues	0			
Authorized Positions ²	1.8			
Filled Positions	1.8			
Vacancies	0			
Hospital 1 Implementation				\$2,701

¹ Data as of November 2021

² Existing positions temporarily redirected in 2018-19

Workload History

Workload Measure	2018-19	2019-20	2020-21	2021-22
PAL Stage 2 Alternative Analysis	50% of year	33% of year		
Pal Stage 3 Solution Development		67% of year	50% of year	
PAL Stage 4 Project Readiness (includes contract negotiation & approvals)			50% of year	75% of year
Implementation of Hospital 1				25% of year

C. State Level Consideration

The Pharmacy Modernization project aligns with the California Health and Human Services Agency (CalHHS) Guiding Principle of adopting a culture of collaboration and its Strategic Plan core values and goals. With the implementation of this project, DSH will be keeping pace with the rapid health care marketplace and innovations significantly improving the operational and clinical performance with the use of all resources effectively, efficiently, and securely during day-to-day operations as well as during unexpected events.

The DSH 2018-2023 Strategic Plan includes the goals and objectives to foster safe environments: Create organizational and operational excellence, provide innovative treatment and forensic evaluation, and create an integrated behavioral health system. The Pharmacy Modernization project supports these goals by focusing on improving patient safety and improving DSH operations. These improvements are accomplished by providing pharmacy staff the tools to make sure patients are administered medications

Analysis of Problem

accurately, safely and in a timely manner. The project will increase organizational efficiencies by replacing manual processes with integrated, automated systems and supports the integrated behavioral health system with systems and standards for business processes and data management.

D. Justification

The Pharmacy Modernization project will address inefficiencies and issues encountered by the DSH pharmacy operations and nursing staff, and will help improve patient care and safety. Replacing existing, manual processes with integrated, automated systems provides DSH with the opportunity to recognize improved patient care and safety while implementing standardized business processes for staff. Furthermore, with these new systems, DSH will be able to significantly reduce revenue losses due to drug waste and refused billing claims from Medicare Part D due to erroneous National Drug Codes. The request addresses resource needs across three areas, which are described below:

1. Reappropriation of \$2.7 million of 2021-22 funding to 2022-23 to continue the implementation of the pharmacy modernization project for two of the five hospitals.
2. Additional funding of \$3.2 million in 2023-24 and \$3 million in 2024-25 to address expense escalations as a result of increased costs since the project was originally estimated in 2019.
3. Request \$2.9 million in 2025-26 and \$1.2 million in 2026-27 for the initial maintenance and operations of the pharmacy equipment, which was not included in prior budget requests until the project began the implementation phase.

2021-22 to 2022-23 Reappropriation

A reappropriation of funds from 2021-22 to 2022-23 is requested due to the extended project planning and procurement timeline which caused a delay in the target implementation schedule. While hospital one will be implemented in the last half of 2021-22, the reappropriation will allow DSH to complete implementation at another two of the five hospitals in 2022-23. Attachment B includes the proposed budget bill language for the reappropriation.

Planning was scheduled for completion in March 2021 however, over the 17 months, between June 2020 and November 2021 several events occurred which caused planning to be extended by eight months. These events included:

- Project priority changes for DSH and other partners due to COVID-19 response efforts that impacted resources.
- During Stage 4 of the Project Approval Lifecycle, a change in a vendor's "Best and Final Offer" initiated a second pass through the evaluation and contract negotiation processes. This resulted in higher costs than previously estimated through the request for information process conducted in 2019 and what was budgeted for in the event DSH was able to go with the first vendor.

Analysis of Problem

Additional Funding for Implementation to all Hospitals

The combination of the above issues moved the target start of implementation from Spring 2021 to early 2022. These factors required extending planning activities which incurred additional expenses by \$1.3 million. The Planning activities necessitated additional time from staff, inter-departmental consultants (California Department of Technology project oversight and technology procurement), external consultants for project management and technical analysts.

The request for additional funding for equipment costs is due to increased equipment lease costs including taxes, between the Stage 2 estimates (based on a 2019 Request for Information) and the final approved bid during Stage 4. This was identified and documented in the Stage 4 Cost Baseline information.

The procurement schedule was extended when the first, selected vendor withdrew their Best & Final Offer and replaced it with a bid significantly higher in all costs. The Evaluation and Selection process was restarted to compare all vendors and all vendor bids were significantly higher in costs than estimates from the 2019 RFI. The additional funding is necessary to complete implementation of two hospitals by 2024-25. This would complete the implementation of Pharmacy Modernization at all five hospitals.

Maintenance and Operation Costs

Maintenance and Operation (M&O) costs cover regularly scheduled equipment maintenance including parts and equipment replacement, annual licensing and software updates. M&O funding was not included in prior funding requests as actual costs are needed before determining the ongoing need. However, during the recent contract negotiation period, the selected vendor provided DSH with a five-year schedule that includes implementation and initial M&O costs. At this time, DSH is requesting the M&O costs included in this five-year schedule since those are known.

The Pharmacy Modernization project will:

1. Replace manual processes for inventory management and drug tracking with automated workflow.
2. Reduce staff repackaging time with standardized repackaging equipment.
3. Improve the accuracy and security of all dispensed medication to patients with the use of Automated Drug Dispensing Systems (ADDS).
4. Implement a single IT solution that will be leveraged by clinical staff at all five state hospitals supported by standardized equipment implementations and business processes thereby also supporting Electronic Health Records (EHR).

E. Outcomes and Accountability

The reappropriation will allow DSH to continue with the implementation in 2022-23.

Each of the following objectives will be met with each hospital implementation:

1. Improved inventory management and drug tracking:

Analysis of Problem

- a. Replace current manual inventory management and drug tracking processes with the implementation of an automated inventory management system and workflow.
2. Improve drug repackaging time:
 - a. Replace where needed and update existing drug repackaging equipment and manual processes which require an average twelve-hour processing time with equipment and standardized processes capable of an average of eight-hour processing time. Validate the expected four-hour time savings through reporting.
3. Increase the accuracy of reporting of drug dispensing and administration errors:
 - a. The Automated Drug Dispensing Systems (ADDS) produce dispensing data electronically which will be the source for statistical reporting of dispensed medications to patients via scheduled and ad-hoc reports. The ADDS data will be used to verify reduced, monthly variance of drugs dispensed to patients.
4. Improved controlled drug security in medical units and reduce of loss of diversion:
 - a. Controlled drug transactions will have medication accountability safeguards (locking cabinets and automated dispensing). The current manual accounting of these drugs will be replaced by scheduled and ad-hoc reports sourced from the ADDS'. The ADDS data will be used to verify reduced, monthly variance of controlled drugs dispensed to patients.
5. Improve patient specific medication billing for Medicare Part D:
 - a. Reduce the number of refused Medicare Part D Claims. This improvement will be realized by using billing data generated from Automated Drug Dispensing systems using National Drug Codes.
6. Improve pharmacy data integration:
 - a. Replace the existing, independent hospital systems which are supported with disparate business processes, with a single IT solution to be leveraged by clinical staff at each of the state hospitals. The solution will utilize the Department's Enterprise Service Bus (ESB) architecture (developed during the Planning Phase 1) to communicate with backend systems using standard HL-7 protocols (as required to support Electronic Health Records).

Projected Outcomes

Workload Measure	2021-22	2022-23	2023-24	2024-25	2025-26
Implementation	25%	100%	100%	34%	
M & O				66%	100%

F. Analysis of All Feasible Alternatives

Alternative 1: The Department of State Hospitals (DSH) requests a reappropriation of \$2.7 million General Fund from 2021-22 to 2022-23 to continue the implementation phase of the Pharmacy Modernization project. In addition, DSH requests \$3.2 million General Fund

Analysis of Problem

in 2023-24, \$3 million General Fund in 2024-25, \$2.9 million General Fund in 2025-26 and \$1.2 million General Fund in 2026-27.

Pros:

1. Supports the Pharmacy Modernization Phase 2 (Implementation) for all five state hospitals.
2. Significant improvements in hospital pharmacy processes for the management of administration of medications (including controlled drugs) to patients.
3. Enterprise-wide business processes promote efficiencies in hospital pharmacy operations.
4. These improvements help improve the safety of patients and staff.

Cons:

1. This proposal results in a change to the original 2021-22 and 2022-23 General funding plans.

Alternative 2: Approve only the reappropriation of \$2.7 million General Fund in 2021-22 to continue the implementation phase of the Pharmacy Modernization project.

Pros:

1. Supports the Pharmacy Modernization Phase 2 (Implementation) through 2022-23 at two of the five state hospitals and begins implementation at a third.
2. Significant improvements in hospital pharmacy processes for the management of administration of medications (including controlled drugs) to patients at three hospitals.
3. These improvements advance the safety of patients and staff.

Cons:

1. DSH would need a future funding request to proceed with full implementation at the remaining three hospitals.
2. Only two of five hospitals will have standardized business processes and data systems preventing enterprise-wide efficiencies and data analysis.
3. Hospitals without Pharmacy Modernization implemented would not be able to exchange information electronically for future use of the Electronic Health Record system, disrupting the continuum of care.

Alternative 3: Do not approve the proposed budget reappropriation of \$2.7 million General Fund in 2021-22 to 2022-23 or the \$3.2 million General Fund in 2023-24, \$3 million General Fund in 2024-25, \$2.9 million General Fund in 2025-26 and \$1.2 million General Fund in 2026-27 to complete the implementation phase of the Pharmacy Modernization project at all five state hospitals.

Pros:

1. No change in the General funding plans for 2021-22 or future years.

Cons:

Analysis of Problem

1. Ends DSH's ability to continue the project during 2022-23, after implementation of only one hospital.
2. Hospitals without Pharmacy Modernization implemented would not be able to exchange information electronically for future use of the Electronic Health Record system, disrupting the continuum of care.
3. Without these improvements, the hospitals are unable to advance the safety of patients and staff.
4. Delays to DSH's ability to realize improvements in Medicare Part D billing reimbursement (Automated Drug Dispensing systems (ADDS) would not be implemented in all five state hospitals which are the source of this claim data.)
5. Limits the security of administration of controlled substances where ADDS' are not implemented.

G. Implementation Plan

The high-level deployment plan for the re-appropriated funds is:

Description	Estimated Completion Date
Site surveys of pharmacies and med rooms	July 2022
Re-configuration of pharmacies and med rooms as necessary	October 2024 These tasks will occur as needed throughout the implementation period of the project.
Implementation at Hospital 1	October 2022
Implementation at Hospital 2	April 2023
Implementation at Hospital 3	October 2023
Implementation at Hospital 4	April 2024
Implementation at Hospital 5	October 2024

H. Supplemental Information

Attachment A: BCP Fiscal Detail Sheet

Attachment B: Proposed Budget Bill Language for Reappropriation

I. Recommendation

DSH recommends approval of Alternative 1 for budget reappropriation of \$2.7 million in General Fund to continue the implementation phase of the Pharmacy Modernization project and \$3.2 million General Fund in 2023-24, \$3 million General Fund in 2024-25, \$2.9 million General Fund in 2025-26, and \$1.2 million General Fund in 2026-27 for the implementation of an inventory control system, unit dose re-packaging equipment, automated drug dispensing system equipment deliver pharmacy data integration, and initial maintenance and operations costs.

A reappropriation is needed due to delays in the Project Approval Lifecycle process, attributable to the impacts of the COVID-19 Pandemic and an extended procurement phase. While hospital one will begin implementation in the last quarter of 2021-22, the

Analysis of Problem

reappropriation will allow DSH to complete implementation at hospital one and two in 2022-23.

Attachment A: BCP Fiscal Detail Sheet

BCP Title: DSH Pharmacy Modernization - Phase 3

BR Name: 4440-061-BCP-2022-A1

Budget Request Summary

	FY22					
	CY	BY	BY+1	BY+2	BY+3	BY+4
Operating Expenses and Equipment						
5340 - Consulting and Professional Services - External	0	2,700	3,200	3,000	2,900	1,200
Total Operating Expenses and Equipment	\$0	\$2,700	\$3,200	\$3,000	\$2,900	\$1,200
Total Budget Request	\$0	\$2,700	\$3,200	\$3,000	\$2,900	\$1,200
Fund Summary						
Fund Source - State Operations						
0001 - General Fund	0	2,700	3,200	3,000	2,900	1,200
Total State Operations Expenditures	\$0	\$2,700	\$3,200	\$3,000	\$2,900	\$1,200
Fund Source -						
Total Expenditures	\$0	\$0	\$0	\$0	\$0	\$0
Total All Funds	\$0	\$2,700	\$3,200	\$3,000	\$2,900	\$1,200
Program Summary						
Program Funding						
4400020 - Hospital Administration	0	2,700	3,200	3,000	2,900	1,200
Total All Programs	\$0	\$2,700	\$3,200	\$3,000	\$2,900	\$1,200

Attachment B: Proposed Budget Bill Language for Reappropriation

4440-490—Reappropriation, State Department of State Hospitals. The balances of the appropriations provided in the following citations are reappropriated for the purposes provided for in those appropriations and shall be available for encumbrance or expenditure until June 30, 2023:

0001—General Fund

(1) Item 4440-011-0001, Budget Act of 2021, Program 4400020 Hospital Administration shall support the Pharmacy Modernization project.