

**UNIVERSITY OF CALIFORNIA, SAN FRANCISCO  
AUDIT AND ADVISORY SERVICES**

**Digital Patient Experience Program  
Project #22-063**

**June 2022**



University of California  
San Francisco

**Audit & Advisory Services**

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**SUBJECT: Digital Patient Experience Program**

Audit & Advisory Services (“A&AS”) conducted a review to determine the accuracy and completeness of expenses charged to the Digital Patient Experience (DPE) program, and to assess the adequacy of internal controls and processes in place for ensuring that there is a clear separation of accounting and allocation of expenses between Campus and Health.

Our services were performed in accordance with the applicable International Standards for the Professional Practice of Internal Auditing as prescribed by the Institute of Internal Auditors (the “IIA Standards”).

Our review was completed and the preliminary draft report was provided to department management in May 2022. Management provided their final comments and responses to our observations in June 2022. The observations and corrective actions have been discussed and agreed upon with department management and it is management’s responsibility to implement the corrective actions stated in the report. A&AS will periodically follow up to confirm that the agreed upon management corrective actions are completed within the dates specified in the final report.

This report is intended solely for the information and internal use of UCSF management and the Ethics, Compliance and Audit Committee, and is not intended to be and should not be used by any other person or entity.

Sincerely,

Irene McGlynn  
Chief Audit Officer  
UCSF Audit and Advisory Services



**EXECUTIVE SUMMARY**

**I. BACKGROUND**

Audit & Advisory Services (A&AS) conducted a review to (1) determine the accuracy and completeness of expenses charged to the Digital Patient Experience (DPE) program, and (2) to assess the adequacy of internal controls and processes in place for ensuring that there is clear separation of accounting and allocation of expenses between Campus and Health.

DPE is a program coordinated by the Center for Digital Health Innovation (CDHI) that includes budgeted resources across multiple UCSF departments, including CDHI, Clinical Systems, IT, Marketing, and others. “The DPE program is a multidisciplinary collaboration across UCSF to create a unified digital experience to enable patients to access and interact with care delivery that is empathic, delightful, personalized, and modern.”

The DPE program was initiated in FY 2019 to leverage CDHI’s success in creating industry collaborations and products to:

- Transform patient experience in seeking, accessing, and receiving care
- Increase the efficiency of operational processes through automation
- Create new revenue streams for Health

From July 2018 through November 2021, the DPE program was overseen by an executive steering committee which met monthly.

The DPE program has become the foundation for USCF Health’s Vision 2025 Strategic Plan’s Innovation at Scale pillar. As of FY 21 there was a total of 29 (20 in progress, and 9 completed) projects within the DPE program. Operating expenses for the DPE program for fiscal years 2019 through 2021 are outlined in the table below:

	<b>FY 19</b>	<b>FY 20</b>	<b>FY 21</b>
<b>Total Expenses</b>	\$3,915,846	\$3,936,359	\$8,702,535

**II. AUDIT PURPOSE AND SCOPE**

The purpose of this review was to determine the accuracy and completeness of expenses charged to the Digital Patient Experience (DPE) program, and to assess the adequacy of internal controls and processes in place for ensuring that there is clear separation of accounting and allocation of expenses between Campus and Health, including ensuring that sponsored funding received to support DPE is correctly applied.

Excluded from the scope were assessment of Return on Investment (ROI), and accuracy of capitalization cost.

The scope of the review covered labor and consultant/contractor costs allocated to DPE in FY21.

Procedures performed as part of the review included interviews and walkthroughs with relevant personnel to identify internal controls and processes in place for the accounting

and allocation of costs between Campus and Health; interviews of selected employees to determine projects they worked on during FY21; and validation testing of a sample of contractor invoices selected from the general ledger (GL) to determine that payments are valid, accurate, approved, adequately supported, and were allocated appropriately. For more detailed procedure steps, please refer to Appendix A.

Work performed was limited to the specific activities and procedures described above. As such, this report is not intended to, nor can it be relied upon to provide an assessment of compliance beyond those areas specifically reviewed. Fieldwork was completed in April 2022.

### III. **SUMMARY**

Based on work performed, we were not able to determine the accuracy of expenses charged to DPE or to validate the allocation of expenses between CDHI and DPE. We were able to verify in our sample selection that sponsored funds received by CDHI were allocated appropriately, and consultant/contractor costs were supported by adequate supporting documentation.

During the time period under review, CDHI did not have a tool in place to track employees' and contract employees' time/effort by project. Allocation of labor costs has been done based on the estimates, and no true up is performed at the end of the year. In the absence of a tracking tool, the project managers meet with the team on a weekly basis to discuss the projects their teams are working on. Since then, CDHI has started working with Health Administration and IT to develop the MyPPM portfolio management tool that will enable the provision of project level time/effort tracking.

The review identified opportunities for improvement related to tracking of actual effort, and tracking of costs by project. The specific observations from this review are listed below as well as in Section IV.

1. Labor costs were allocated to DPE based on estimated effort and reconciliation was not performed; therefore, accuracy and allocation of labor costs could not be validated.
2. Tracking of costs was not performed at the project level.

**IV. OBSERVATIONS AND MANAGEMENT CORRECTIVE ACTIONS (MCA)**

<b>No.</b>	<b>Observation</b>	<b>Risk/Effect</b>	<b>Recommendation</b>	<b>MCA</b>
1.	<p><b><i>Labor costs were allocated to DPE based on estimated effort and reconciliation was not performed; therefore, accuracy and allocation of labor costs could not be validated.</i></b></p> <p>There was no tool in place to track actual time/effort spent on projects by employees and consultant/contractor employees. The majority of the costs allocated to the DPE program consist of labor charges (approximately 91% of FY 21 costs were labor costs). CDHI allocated labor cost based on an estimated percentage effort, and no true up was performed at the end of the year. An excel worksheet “CDHI labor allocations” was prepared for the year, which provides estimated percentage effort allocation for all employees by cost center. The estimated effort percentage was used for allocating labor costs to various CDHI cost centers on a monthly basis.</p> <p>In addition to the CDHI labor allocations worksheet, separate excel worksheets were maintained for each project within the DPE program. These project worksheets provided names, and effort percentage by task for the team members. We attempted to reconcile the effort percentages listed on the CDHI labor allocation worksheet to the individual DPE project worksheet for a sample of employees; however, we were not able to reconcile, and identified significant variances for the sample reviewed. Upon inquiry, it was noted that the DPE project worksheets was not updated on a frequent basis, and the data may not be complete and accurate.</p>	<p>In the absence of a tracking tool to record employee, and contractor time/effort by project, there is a risk of inaccurate allocation of labor costs between projects.</p>	<ul style="list-style-type: none"> <li>• CDHI management should explore options for tools that could be used to capture labor time/effort by project.</li> <li>• Monthly reports from the effort/time recording tool should be used to allocate labor costs to appropriate projects.</li> </ul>	<p><b>Action:</b></p> <p>CDHI has implemented MyPPM portfolio management tool which will be used to track effort for all projects (DPE and CDHI).</p> <p>Allocation of effort to projects will be based on the effort reported in MyPPM.</p> <p><b>Target Completion Date:</b> August 1, 2022</p> <p><b>Responsible Party:</b> Vice President, Digital Health</p>

No.	Observation	Risk/Effect	Recommendation	MCA
	<p>In the absence of a tracking tool, the project managers met with the team on a weekly basis to discuss the projects they are working on. When there were any changes in the effort percentage, they would communicate this to finance. However, as noted above, no true up was performed at the end of the year. Furthermore, no changes or fluctuations in the estimated effort allocation were seen in the scope period tested.</p>			
<p>2.</p>	<p><b>Tracking of costs was not performed at the project level.</b></p> <p>During FY 21 the DPE program had a total of 29 programs with total costs of approximately \$8.7M. We were not able to obtain the breakdown of the total costs by individual project.</p> <p>The DPE budget was prepared by project, and approved by the executive steering committee. However, the actual costs were not tracked by project since DPE Operating expenses were tracked under one chartstring<sup>1</sup>, and the costs for all DPE projects were charged to this one chartstring. Monitoring of costs was performed against the budget at the program level and not at the project level.</p> <p>Lack of tracking costs at the project level limits the ability to determine the actual costs incurred by a project.</p>	<ul style="list-style-type: none"> <li>• Lack of tracking of costs at the project level limits the ability to hold project managers accountable and ensure that projects are completed within budget.</li> <li>• Projects without cost control measures in place risk running overbudget.</li> </ul>	<p>Management should consider formalizing a process to track and perform monitoring of costs at the project level.</p>	<p><b>Action:</b></p> <ol style="list-style-type: none"> <li>1. Rebuild a CDHI/DPE dashboard for staff and project managers to accurately track progress of effort and cost. This will result in true-up between MyReport and MyPPM monthly. True-up will not be a 100% match as contractor invoices and bi-weekly payroll add integration complexity.</li> </ol>

<sup>1</sup>UCSF's chart of accounts (COA) is the coding structure that defines operations in financial terms. The COA serves as the foundation of the general ledger. The UCSF chartstring is a 38-character coding string that consists of 8 individual "blocks", or segments, called chartfields. The chartfields and resulting chartstring facilitate accounting, reporting, and budgeting.

<u>No.</u>	<u>Observation</u>	<u>Risk/Effect</u>	<u>Recommendation</u>	<u>MCA</u>
				<p><b>Target Completion Date:</b> September 1, 2022</p> <p><b>Responsible Party:</b> Vice President. Digital Health</p> <p>2. Continue with regular monthly meetings with UCSF Health Finance team to discuss financial status.</p> <p><b>Action Complete</b></p>

**APPENDIX A – Procedures Performed**

To conduct our review, the following procedures were performed for the areas in scope:

- Interviewed key personnel and performed walkthroughs to get an understanding of activities under examination.
- Interviewed a selected sample of employees and contractors to understand their roles and responsibilities, and determine projects they worked on during FY 21, including the use of any effort tracking system.
- For a sample of employees traced the percentage effort allocation to the Distribution of Payroll expense report and verified whether salary allocation was in accordance with the estimated percentage effort.
- Reviewed a sample of sponsored awards and verified whether funds were allocated appropriately between Campus and Health.
- Reviewed a sample of journal entries and verified whether the journals were supported and applied accurately to DPE.
- Selected a sample of contractor/consultant payments from the GL and verified whether the charges were supported by appropriate supporting documentation, valid, approved, and in compliance with the statement of work.