California Health IT Landscape Assessment – Part 2

Final Report – September 2022

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Project Goal

California Advancing and Innovating Medi-Cal (CalAIM) is "a long-term commitment to transform and strengthen Medi-Cal, offering Californians a more equitable, coordinated, and person-centered approach to maximizing their health and life trajectory." As a part of CalAIM, the state Data Exchange Framework will govern and require the exchange of health information among health care entities and government agencies. The goal of this specific project was to characterize the availability of health information technology (HIT) systems to support CalAIM in sectors outside of the traditional medical setting.

Focal Sectors

A list of sectors was developed and prioritized through discussions with UCSF, DHCS and CHCF. Data collection for this project focused on the entities in the following sectors in California:

Table 1: Summary of Focal Sectors

Sector	County Entity?	Number of entities
Continuum of Care	Yes	44 entities across the state (some entities cover multiple counties)
County Behavioral Health	Yes	1 entity per county
County Child Welfare/Social Services	Yes	1 entity per county
County In-Home Supportive Services	Yes	1 entity per county
County Jails	Yes	~115 jails located in 56 counties (many counties have multiple jails, while others have none)
Medicaid Managed Care Plans	No	~40 plans across the state (county and commercial plans)
Respite/Recuperative Care	Sometimes	~40 entities across the state (some run by CBOs, county homeless services, county health department, health system, etc)
School-based Health Centers	No	291 health centers across the state (many counties have multiple health centers, while others have none)
Sobering Centers	Sometimes	12 facilities located in 11 counties (Most are private or non-profit entities, but some are run by DPH or in collaboration with county behavioral health.)
State Prisons	No	34 facilities across the state

Summarized Approach

We employed three data collection approaches: 1) surveys, 2) key informant interviews and 3) reliance on existing data sources with supplementary interviews. For sectors where no IT information has been systematically collected and we have contact information for respondents, we developed and administered brief surveys. For sectors where a single, state-wide system is in use and we have connections to the entities that manage the system, we used key informant interviews. For sectors where IT information has been systematically collected in the past, we relied on this existing data and supplemented it with interviews. The summarized approach can be found in Table 2.

Table 2: Summary of Data Collection Methodology by Sector

Data Collection Methodology	Sector
Survey	Sobering Centers
	County Jails
	Medical Respite
	Medicaid Managed Care Plans
Key Informant Interview(s)	County In-Home Supportive Services
	County Child Welfare/Social Services
	State Prisons
Reliance on Existing Data Sources with Supplementary Interviews	County Behavioral Health
	Continuum of Care
	School-based Health Centers

Methods & Results by Data Collection Approach and Sector

Survey

Sobering Centers

Overview of IT Systems

There are currently 12 sobering centers operating in California. Sobering centers use varied IT systems to capture and share health-related data, including traditional EHRs (e.g., Epic) as well as other types of systems (e.g., Excel, ETO).

Survey Instrument & Distribution

To capture the current state of sobering center vendor, types of system users, extent of health-related data captured, and approaches to data sharing, we fielded a survey of sobering centers. The survey was refined based on feedback from DHCS, CHCF, Manatt, Phelps & Phillips, and Dr. Shannon Smith-Bernardin, a sobering center expert. The survey was pilot tested, and the final instrument can be found in Appendix A. Dr. Smith-Bernardin provided contact information for the 12 California sobering centers that we used to distribute the Qualtrics survey.

Results

The survey was in the field from August 2, 2022 – September 23, 2022. We received responses from 10 of 12 (83%) sobering center (Table 3).

Table 3: Sobering Center Survey Respondents

County	Name
Alameda	Horizon Services - Cherry Hill Sobering Center
Kern	Kern Behavioral Health and Recovery Services (Bakersfield & Delano)
Los Angeles	David L. Murphy Sobering Center/ Exodus Recovery
Monterey	Sun Street Centers
San Diego	McAlister Institute Treatment and Education
San Francisco	SF Sobering Center
San Francisco	SoMA RISE (HealthRight 360)
San Mateo	First Chance Sobering Station/ StarVista
Santa Barbara	Good Samaritan Shelter - CREDO 47 Stabilization Center and Santa Maria Sobering Center
Santa Clara	Horizon Services - Mission Street Sobering Center

The tables below summarize the survey responses across sobering centers. Full survey responses from each entity will be provided in a separate file to DHCS and CHCF.

Table 4 summarizes key health IT information across responding sobering centers. 60% of sobering centers reported using more than one IT system. Though there was wide variation in the IT systems used, Excel was the mostly commonly reported system (50%). If sobering centers had

more than one IT system, it was most commonly an EHR system plus a spreadsheet system. There were no clear patterns of combinations of specific vendors used. Additionally, 40% of sobering centers reported using some national data standards.

Table 4: Sobering Center Health IT System Information Summarized by Entity (n=10 sobering centers)

	Freq	%
Number of Health IT systems used		
1	4	40
2	3	30
3	3	30
IT System Type (entity could list up to 3 systems)		
EHR	8	42
Spreadsheet	5	26
Case or Care Management	4	21
HMIS	1	5
Other	1	5
Vendors used (entity could list up to 3 vendors)		
Excel	5	50
Epic	2	20
ETO	2	20
HMIS	1	10
Cerner	1	10
Other (some entities listed more than 1 in this category; counted only once in this table)	6	60
Use of national standards		
Use all standards	0	0
Use some standards	4	40
Use few/no standards	1	10

Table 4: Sobering Center Health IT System Information Summarized by Entity (n=10 sobering centers)

	Freq	%
Don't know	5	50
Staff position assigned to data processing		
Yes	10	100
No	0	0
Don't know	0	0

Table 5 summarizes key IT system information across all IT systems reported (each sobering center entity could report up to 3 systems). The majority of IT systems were implemented after 2015 and have 1-10 total users. System users are typically clinical staff and administrative staff. For the most part, the IT systems were rated as very easy or somewhat easy to use.

Table 5: Sobering Center Health IT system Information (n=19 systems used in sobering centers)

	Freq	%
When implemented		
Before 2010	0	0
2010-2014	0	0
2015-2019	7	37
Since 2020	6	32
Don't know	2	11
Missing	4	21
Total number of system users		
1-10	14	74
11-50	4	21
51+	1	5
Type of users with access to system (check all that apply)		
Clinical Staff	10	53

Table 5: Sobering Center Health IT system Information (n=19 systems used in sobering centers)

	Freq	%
Admin Staff	9	47
Outside Staff	4	21
Other Staff	4	21
Ease of use		
Very easy	6	32
Somewhat easy	6	32
Somewhat difficult	5	26
Very difficult	0	0
Don't know	2	11
Entity responsible for system maintenance (check all that apply)		
Internal IT group	5	24
Third-party contractors	0	0
Vendor	0	0
Other county entity	0	0
Other	0	0
Don't know	6	20
Future status of system		
No plan to replace	6	29
Plan to replace in next 2 years	1	5
Plan to replace in 3-5 years	0	0
Plan to replace in 6+ years	0	0
Don't know	4	19
Missing	10	48

Table 6 summarizes what health-related data is captured in sobering center systems and in what format (structured or unstructured). For the most part, sobering centers capture many of the data elements asked about, though there is variability in whether the data is captured in a structured,

unstructured, or mixed format. The data elements sobering centers most commonly capture in a fully structured way are race/ethnicity (60% capture as structured), housing status (50% capture as structured), and contact information (50% capture as structured). The data elements that sobering centers capture the least include dietary patterns (100% don't capture), physical activity (90% don't capture), and social connection/isolation (50% don't capture).

Table 6: Data Captured in Sobering Center IT Systems (n=10 sobering centers)

	Freq	%
Race/ethnicity		
Capture all structured	6	60
Capture all unstructured	2	20
Capture mix structured unstructured	2	20
Don't capture	0	0
Language spoken		
Capture all structured	3	30
Capture all unstructured	2	20
Capture mix structured unstructured	4	40
Don't capture	1	10
Sexual orientation and gender identity		
Capture all structured	3	30
Capture all unstructured	1	10
Capture mix structured unstructured	3	30
Don't capture	3	30
Contact information		
Capture all structured	5	50
Capture all unstructured	2	20
Capture mix structured unstructured	3	30
Don't capture	0	0
Housing status		
Capture all structured	5	50

Table 6: Data Captured in Sobering Center IT Systems (n=10 sobering centers)

	Freq	%
Capture all unstructured	2	20
Capture mix structured unstructured	3	30
Don't capture	0	0
Incarceration status		
Capture all structured	1	10
Capture all unstructured	1	10
Capture mix structured unstructured	4	40
Don't capture	4	40
Probation status		
Capture all structured	2	20
Capture all unstructured	2	20
Capture mix structured unstructured	3	30
Don't capture	3	30
Employment status		
Capture all structured	3	30
Capture all unstructured	1	10
Capture mix structured unstructured	4	40
Don't capture	2	20
Food insecurity		
Capture all structured	3	30
Capture all unstructured	2	20
Capture mix structured unstructured	4	40
Don't capture	1	10
Educational attainment		
Capture all structured	2	20
Capture all unstructured	1	10

Table 6: Data Captured in Sobering Center IT Systems (n=10 sobering centers)

	Freq	%
Capture mix structured unstructured	3	30
Don't capture	4	40
Transportation access		
Capture all structured	2	20
Capture all unstructured	0	0
Capture mix structured unstructured	4	40
Don't capture	4	40
Exposure to violence/intimate partner violence		
Capture all structured	1	10
Capture all unstructured	1	10
Capture mix structured unstructured	3	30
Don't capture	5	50
Social connections/Isolation		
Capture all structured	1	10
Capture all unstructured	0	0
Capture mix structured unstructured	4	40
Don't capture	5	50
Substance(s) used in general		
Capture all structured	2	20
Capture all unstructured	1	10
Capture mix structured unstructured	6	60
Don't capture	1	10
Diagnosis of substance use disorder		
Capture all structured	2	20
Capture all unstructured	0	0
Capture mix structured unstructured	5	50

Table 6: Data Captured in Sobering Center IT Systems (n=10 sobering centers)

	Freq	%
Don't capture	3	30
Dietary patterns		
Capture all structured	0	0
Capture all unstructured	0	0
Capture mix structured unstructured	0	0
Don't capture	10	100
Physical activity		
Capture all structured	0	0
Capture all unstructured	1	10
Capture mix structured unstructured	0	0
Don't capture	9	90
Referring Parties		
Capture all structured	4	40
Capture all unstructured	2	20
Capture mix structured unstructured	4	40
Don't capture	0	0
Transportation In		
Capture all structured	2	20
Capture all unstructured	3	30
Capture mix structured unstructured	3	30
Don't capture	2	20
Transportation Out		
Capture all structured	2	20
Capture all unstructured	2	20
Capture mix structured unstructured	4	40
Don't capture	2	20

Table 6: Data Captured in Sobering Center IT Systems (n=10 sobering centers)

	Freq	%
Disposition*		
Capture all structured	1	10
Capture all unstructured	3	30
Capture mix structured unstructured	2	20
Don't capture	3	30
What drugs/alcohol contributing to current intoxication		
Capture all structured	2	20
Capture all unstructured	4	40
Capture mix structured unstructured	3	30
Don't capture	1	10
Blood alcohol concentration (BAC)		
Capture all structured	2	20
Capture all unstructured	3	30
Capture mix structured unstructured	1	10
Don't capture	4	40
Onsite services provided		
Capture all structured	1	10
Capture all unstructured	2	20
Capture mix structured unstructured	5	50
Don't capture	2	20

*1 missing value for "Disposition"

Table 7 shows that sobering centers both share and receive data using a variety of methods including manual, electronic and automatically through their systems. 70% of sobering centers reported using at least 1 outside system to view data.

Table 7: Sobering Center Methods to Send, Receive and View Data (n=10 sobering centers)

	Freq	%
Methods to send data (check all that apply)		
Do not send or make available	3	30
Yes, using manual methods	2	20
Yes, using electronic exchange	4	40
Yes, automatic via system	3	30
Methods to receive data (check all that apply)		
Do not receive data	2	20
Yes, using manual methods	4	40
Yes, using electronic exchange	2	20
Yes, automatic via system	2	20
Number of outside systems used to view data		
0	3	30
1	2	20
2	2	20
3	3	30

Table 8 summarizes what specific methods sobering centers use to send or receive health-related information. Methods like fax/eFax/Secure Fax and secure email are commonly used, while more sophisticated methods (HL7 message, API, HIE etc) are less commonly used.

Table 8: Sobering Center Methods to Send and Receive Data (n=10 sobering centers)

	Send		Receive	
	Freq	**%**	**Freq**	**%**
Fax/eFax/Secure Fax				
Often/Routinely	4	40	3	30
Sometimes/Rarely	5	50	3	30
Never/Not applicable	0	0	1	10
Missing	1	10	3	30
Secure email				
Often/Routinely	4	40	3	30
Sometimes/Rarely	4	40	3	30
Never/Not applicable	0	0	1	10
Missing	2	20	3	30
SFTP				
Often/Routinely	0	0	0	0
Sometimes/Rarely	1	10	0	0
Never/Not applicable	3	30	4	40
Missing	6	60	6	60
HL7 Message				
Often/Routinely	0	0	0	0
Sometimes/Rarely	0	0	0	0
Never/Not applicable	3	30	4	40
Missing	7	70	6	60
API				
Often/Routinely	0	0	0	0
Sometimes/Rarely	0	0	0	0

Table 8: Sobering Center Methods to Send and Receive Data (n=10 sobering centers)

	Send		Receive	
	Freq	**%**	**Freq**	**%**
Never/Not applicable	3	30	4	40
Missing	7	70	6	60
Via local/regional HIE/HIO				
Often/Routinely	0	0	0	0
Sometimes/Rarely	0	0	0	0
Never/Not applicable	3	30	4	40
Missing	7	70	6	60
Via community HIE (e.g., Find Help, Unite Us)				
Often/Routinely	1	10	0	0
Sometimes/Rarely	1	10	0	0
Never/Not applicable	2	20	4	40
Missing	6	60	6	60
Portal				
Often/Routinely	0	0	0	0
Sometimes/Rarely	0	0	0	0
Never/Not applicable	3	30	4	40
Missing	7	70	6	60

CalAIM Considerations

Most sobering center (7/10) entities did not cite any specific investments they plan on making in preparation for CalAIM or any IT challenges they anticipate facing. Those that are making investments to support CalAIM (3/10) are focusing on improving technology infrastructure by purchasing new computers and upgrading servers. One sobering center is looking to invest in a new EHR system called Best Notes. Sobering centers also anticipate increased partnership work with managed care plans.

Regarding CalAIM IT challenges, (2/10) sobering centers reported general technology issues (i.e., staff unable to log on, servers down) and additional staff training time as of highest concern. One sobering center is currently transitioning to a new EHR, so they have budgeted

significant training time for staff to learn the new system. The remaining 8 sobering centers did not cite any anticipated CalAIM-related challenges.

County Jails

Overview of IT Systems

There are approximately 115 county jails operating across 56 counties in California (2 counties do not have jail facilities). County jail IT systems may be county-wide, integrated EHR systems from commercial EHR vendors, private, specialized EHR vendors, academic or public health partnerships, or home-grown. Common vendors in the jail health space include Epic, Wellpath, Centurion, Fusion, NextGen, CorEM and eClinicalWorks.

Survey Instrument & Distribution

To capture the current state of county jail vendors, types of system users, extent of health-related data captured, and approaches to data sharing, we fielded a survey of county jails. The survey was refined based on feedback from DHCS, CHCF, Manatt, Phelps & Phillips, and the Warner, Park, Salzillo & Sanchez (WPSS) Group. The survey was pilot tested, and the final instrument can be found in Appendix B. The WPSS Group has been coordinating Cal Sheriff participation in various CalAIM planning efforts. They distributed the survey, via a Qualtrics link, to their Sheriff, Second in Command, and Detention email listserv. The survey was in the field from August 8, 2022 – September 23, 2022.

Results

We received 21 responses, covering 22 counties. One survey response came from a vendor and thus the answers covered multiple counties. The counties with data included in the survey results can be found in Table 9.

Table 9: County Jail Survey Respondents

County (with jail facility)
Alameda County
Butte County
El Dorado Count
Fresno County
Kings County
Lassen County
Los Angeles County
Modoc County
Mono County
Napa County
Orange County
Placer County
San Bernardino County
San Diego County
San Luis Obispo County
Santa Barbara County
Santa Cruz County

| Shasta County |
| Stanislaus County |
| Trinity County |
| Tulare County |
| Ventura County |

The tables below summarize the survey responses across counties. Full survey responses from each county will be provided in a separate file to DHCS and CHCF.

Table 10 summarizes key health IT information at the county-level. 62% of counties reported using only 1 jail health IT system with the most common vendor being CorEMR (52%). If county jails had more than one IT system, it was most commonly an EHR system plus a Jail Management System. There were no clear patterns of combinations of specific vendors used. 43% of counties reported using only manual methods to exchange data, while another 43% reported using electronic methods in some instances. Over 50% of counties reported using at least 1 outside system to view data. The most common method to view data is through a portal (38%).

Table 10: Jail Health IT System Information by Entity (n=21)

	Freq	%
Do all jail facilities use same electronic system to document health info		
Yes	14	67
No, but predominant system	2	10
No, different systems	0	0
N/A - only 1 jail facility	5	24
Number of Health IT systems used		
1	13	62
2	4	19
3	4	19
IT System by Type (entity could list up to 3 systems)		
EHR	20	61
Jail Management	10	30
Case or Care Management	1	3

Table 10: Jail Health IT System Information by Entity (n=21)

	Freq	%
Criminal Justice Public Records System	1	3
State Database	1	3
Vendors used (entity could list up to 3 vendors)		
CorEMR	11	52
TechCare	3	14
RIMS	3	14
Spillman	2	10
ATIMS	1	5
Cerner	1	5
Other (some entities listed more than 1 in this category; counted only once in this table)	7	33
Electronic data sharing		
No, exclusively manual	9	43
Yes, for some	9	43
Yes, for all/most	1	5
Don't know	2	10
Number of outside systems used to view data		
0	10	48
1	7	33
2	1	5
3	2	10
4	1	5
Methods Used to View Data		
Through electronic system (e.g., EHR)	3	14
Portal that requires separate login	8	38
Other	0	0

Table 10: Jail Health IT System Information by Entity (n=21)

	Freq	%
N/A or Missing	10	48

Table 11 summarizes key IT system information across all IT systems reported (each county entity could report up to 3 systems). The majority of IT systems were implemented after 2015 and have more than 51 total users. System users are typically clinical staff, administrative staff, or outside staff. For the most part, the IT systems were rated as very easy or somewhat easy to use.

Table 11: Jail Health IT System Information (n=33 systems used in jail facilities)

	Freq	%
When implemented		
Before 2010	4	12
2010-2014	2	6
2015-2019	13	39
Since 2020	4	12
Don't know	4	12
Missing	6	18
Total number of system users		
1-10	1	3
11-50	9	27
51+	18	55
Don't Know	5	15
Type of users with access to system (check all that apply)		
Clinical Staff	27	82
Admin Staff	25	76
Outside Staff	17	52
Other Staff	7	21

Table 11: Jail Health IT System Information (n=33 systems used in jail facilities)

	Freq	%
Don't know	3	9
Ease of use		
Very easy	7	21
Somewhat easy	17	52
Somewhat difficult	6	18
Very difficult	0	0
Don't know	3	9

Table 12 summarizes what health-related data is captured by county jail IT systems. While county jails collect many of the typical health-related data elements, social determinants of health data (food insecurity, educational attainment, transportation access etc) are less commonly captured.

Table 12: Data Captured in County Jail IT Systems (n=21)

	Freq	%
Race/ethnicity		
Capture	20	95
Don't capture	1	5
Language spoken		
Capture	17	81
Don't capture	4	19
Sexual orientation and gender identity		
Capture	16	76
Don't capture	5	24
Contact information		
Capture	19	90
Don't capture	2	10

Table 12: Data Captured in County Jail IT Systems (n=21)

	Freq	%
Housing status		
Capture	18	86
Don't capture	3	14
Employment status		
Capture	16	76
Don't capture	5	24
Food insecurity		
Capture	7	33
Don't capture	14	67
Educational attainment		
Capture	4	19
Don't capture	17	81
Transportation access		
Capture	2	10
Don't capture	19	90
Exposure to violence/intimate partner violence		
Capture	11	52
Don't capture	10	48
Social connections/Isolation		
Capture	5	24
Don't capture	16	76
Substance(s) used in general		
Capture	20	95
Don't capture	1	5
Dietary patterns		

Table 12: Data Captured in County Jail IT Systems (n=21)

	Freq	%
Capture	10	48
Don't capture	11	52
Physical activity		
Capture	5	24
Don't capture	16	76
Mental illness		
Capture	21	100
Don't capture	0	0
Substance Use Disorders		
Capture	21	100
Don't capture	0	0
Chronic conditions		
Capture	21	100
Don't capture	0	0
Intellectual or developmental disability		
Capture	21	100
Don't capture	0	0
HIV/AIDS		
Capture	20	95
Don't capture	1	5
Pregnant or Postpartum		
Capture	21	100
Don't capture	0	0

CalAIM Considerations

About half of the counties (10/21) that responded were unsure of, or did not mention, any investments they are making to their current systems in preparation for CalAIM. Of the counties that are making investments to prepare for CalAIM, several (7/21) reported working with local county and community providers to implement system upgrades, such as automatic file transfers and improved data access. Other counties are focusing their investments on increasing staff. For example, one county is hiring a consultant to help identify infrastructure, technology, and staffing needs.

14 county jails reported IT-related challenges as they prepare for CalAIM. Challenges varied by generally related to data access, network capabilities, and technology infrastructure. Some county jails are concerned with issues such as inter-agency system compatibility, system preparedness, and MediCal billing. One county jail stated their IT infrastructure is in place, and as a result does not anticipate facing any challenges. The remaining 7 respondents were not yet sure or did not mention any IT-related challenges they anticipate facing.

Medicaid Managed Care Plans

Overview of IT Systems

There are 26 Medicaid Managed Care Plans (MCPs) across the state, spanning commercial and county plans. MCPs typically have multiple systems in place to support different business needs; while systems that track membership and claims may contain some health-related information, the primary systems of record with health-related information are utilization management, care/case management, and/or population health systems. While some MCPs have traditional EHRs (e.g., Epic) others use payer-tailored systems (e.g., MedHOK, Gainwell, Cognizant).

Survey Instrument & Distribution

To capture the current state of MCP vendors, types of system users, extent of health-related data captured, and approaches to data sharing, we fielded a survey of all MCPs. The survey was refined based on feedback from DHCS, CHCF, and Manatt, Phelps & Phillips. The survey was pilot tested, and the final instrument can be found in Appendix C. The survey was sent to the Healthcare Delivery Systems Division at DHCS, for distribution to their email listserv of commercial and county MCPs. The survey was accessed via a link from the survey software Qualtrics and was in the field from August 12, 2022 to September 23, 2022.

Results

We received responses from 14 (54%) of 26 MCPs, covering 31 counties in total. The MCPs with data included in the survey results can be found in Table 13.

Table 13: MCP Survey Respondents

Plan Name	Counties Covered
CalOptima	Orange
Central California Alliance for Health	Santa Cruz, Merced, Monterey
Contra Costa Health Plan	Contra Costa
Gold Coast Health Plan	Ventura
Health Net Community Solutions, Inc.	Kern, Los Angeles, Sacramento, San Diego, San Joaquin, Stanislaus, Tulare
Health Plan of San Joaquin	Stanislaus, San Joaquin
Health Plan of San Mateo	San Mateo
Inland Empire Health Plan	Riverside, San Bernardino
Kaiser Permanente - Northern CA	Sacramento
Kaiser Permanente - Southern CA	San Diego
L. A. Care Health Plan	Los Angeles
Molina Healthcare of California Partner Plan, Inc.	Imperial, Riverside, Sacramento, San Bernardino, San Diego
Partnership Health Plan of California	Del Norte, Humboldt, Lake, Lassen, Marin, Mendocino, Modoc, Napa, Shasta, Siskiyou, Solano, Sonoma, Trinity, Yolo
San Francisco Health Plan	San Francisco

The tables below summarize the survey responses across MCPs. Full survey responses from each MCP will be provided in a separate file to DHCS and CHCF.

Table 14 summarizes key health IT system information at the MCP level. The majority (79%) of MCPs report utilizing 3 or more IT systems. 100% of MCPs report using a Utilization Management System, Case/Care Management System, and Claims Systems. 86% of MCPs also utilize a Membership system and 64% of MCPs use a Population Health System. 93% of MCPs report using some or all national data standards and 50% are currently collecting all DHCS priority Z-codes.

Table 14: MCP Health IT System Information by Entity (n=14)

	Freq	%
Number of Health IT systems used		
1-2	2	14
3-5	7	50
6+	4	29
Missing	1	7
Types of systems of record (check all that apply)		
Utilization management system	14	100
Care/case management system	14	100
Population health system	9	64
Membership system	12	86
Claims system	14	100
Other	9	64
Vendors: Utilization management system		
Epic	3	21
MedHOK	2	14
Cognizant	1	7
Gainwell	2	14
RAM	1	7
Other	3	21
N/A or Missing	2	14

Table 14: MCP Health IT System Information by Entity (n=14)

	Freq	%
Vendors: Care/case management system		
Epic	3	21
MedHOK	2	14
Cognizant	1	7
Gainwell	2	14
RAM	0	0
Other	5	36
N/A or Missing	1	7
Vendors: Population health system		
Epic	1	7
MedHOK	0	0
Cognizant	1	7
Gainwell	1	7
RAM	0	0
Other	5	36
N/A or Missing	6	43
Vendors: Membership system		
Epic	1	7
MedHOK	0	0
Cognizant	3	21
Gainwell	0	0
RAM	1	7
Other	6	43
N/A or Missing	3	21
Vendors: Claims system		
Epic	3	21
MedHOK	0	0

Table 14: MCP Health IT System Information by Entity (n=14)

	Freq	%
Cognizant	3	21
Gainwell	0	0
RAM	1	7
Other	5	36
N/A or Missing	2	14
Vendors: Other system		
Epic	0	0
MedHOK	0	0
Cognizant	2	14
Gainwell	0	0
RAM	0	0
Other	5	36
N/A or Missing	7	50
Use of national standards		
Use all standards	6	43
Use some standards	7	50
Use few/no standards	0	0
Don't know	0	0
Missing	1	7
Z-codes captured		
All Z-codes	7	50
Over half of Z-codes	1	7
Don't know	4	29
Missing	2	14

Table 15 summarizes key IT system information across all IT systems reported (each MCP entity could report multiple systems). New systems have been steadily implemented since 2010. The majority (77%) of systems have more than 51 users, who are predominately clinical or

administrative staff. 27% of MCPs report a desire to switch at least one of their IT system vendors in the next 2 years.

Table 15: MCP Health IT System Information (n=71 systems used by MCPs)

	Freq	%
When implemented		
Before 2010	0	0
2010-2014	26	37
2015-2019	10	14
Since 2020	14	20
Don't know	7	10
Missing	14	20
Total number of system users		
11-50	13	18
51+	55	77
Missing	3	4
Type of users with access to system (check all that apply)		
Clinical Staff	61	86
Admin Staff	62	87
Outside Staff	23	32
Other Staff	4	6
Future status of system		
No plan to replace	40	56
Plan to replace in next 2 years	19	27
Plan to replace in 3-5 years	1	1
Plan to replace in 6+ years	1	1
Don't know	7	10
Missing	3	4

Table 16 summarizes what health-related data is captured by MCPs and in what format (structured or unstructured). For the most part, the majority of MCPs collect the data elements asked about, though there is variability in whether the data is captured in a structured, unstructured or mixed format. The data elements that MCPs capture the least include probation status (50% don't capture), incarceration status (43% don't capture), and sexual orientation and gender identity (29% don't capture).

Table 16: Data Captured in MCP IT Systems (n=14)

	Freq	%
Race/ethnicity		
Capture all structured	8	57
Capture all unstructured	1	7
Capture mix structured unstructured	4	29
Don't capture	0	0
Missing	1	7
Language spoken		
Capture all structured	8	57
Capture all unstructured	1	7
Capture mix structured unstructured	4	29
Don't capture	0	0
Missing	1	7
Sexual orientation and gender identity		
Capture all structured	2	14
Capture all unstructured	0	0
Capture mix structured unstructured	6	43
Don't capture	4	29
Missing	2	14
Contact information		
Capture all structured	9	64
Capture all unstructured	1	7
Capture mix structured unstructured	3	21
Don't capture	0	0

Table 16: Data Captured in MCP IT Systems (n=14)

	Freq	%
Missing	1	7
Housing status		
Capture all structured	0	0
Capture all unstructured	2	14
Capture mix structured unstructured	10	71
Don't capture	0	0
Missing	2	14
Incarceration status		
Capture all structured	1	7
Capture all unstructured	1	7
Capture mix structured unstructured	3	21
Don't capture	6	43
Missing	3	21
Probation status		
Capture all structured	0	0
Capture all unstructured	0	0
Capture mix structured unstructured	4	29
Don't capture	7	50
Missing	3	21
Employment status		
Capture all structured	0	0
Capture all unstructured	5	36
Capture mix structured unstructured	4	29
Don't capture	2	14
Missing	3	21
Food insecurity		
Capture all structured	0	0

Table 16: Data Captured in MCP IT Systems (n=14)

	Freq	%
Capture all unstructured	4	29
Capture mix structured unstructured	6	43
Don't capture	2	14
Missing	2	14
Educational attainment		
Capture all structured	1	7
Capture all unstructured	4	29
Capture mix structured unstructured	4	29
Don't capture	2	14
Missing	3	21
Transportation access		
Capture all structured	3	21
Capture all unstructured	4	29
Capture mix structured unstructured	5	36
Don't capture	0	0
Missing	2	14
Exposure to violence/intimate partner violence		
Capture all structured	1	7
Capture all unstructured	4	29
Capture mix structured unstructured	4	29
Don't capture	3	21
Missing	2	14
Social connections/Isolation		
Capture all structured	0	0
Capture all unstructured	4	29
Capture mix structured unstructured	6	43
Don't capture	2	14

Table 16: Data Captured in MCP IT Systems (n=14)

	Freq	%
Missing	2	14
Substance(s) used in general		
Capture all structured	1	7
Capture all unstructured	5	36
Capture mix structured unstructured	6	43
Don't capture	0	0
Missing	2	14
Diagnosis of substance use disorder		
Capture all structured	5	36
Capture all unstructured	1	7
Capture mix structured unstructured	6	43
Don't capture	0	0
Missing	2	14
Dietary patterns		
Capture all structured	0	0
Capture all unstructured	5	36
Capture mix structured unstructured	6	43
Don't capture	0	0
Missing	3	21
Physical activity		
Capture all structured	0	0
Capture all unstructured	4	29
Capture mix structured unstructured	7	50
Don't capture	0	0
Missing	3	21

Table 17 summarizes what methods MCPs are using to exchange and view data. The majority of MCPs report using a mix of electronic and manual methods to send and receive data and utilizing

at least one outside system to view data. The most common method to view data is through a portal.

Table 17: MCP Methods to Send, Receive and View Data (n=14)

	Freq	%
Methods to send data (check all that apply)		
None	0	0
Only manual methods	1	7
Mix manual and electronic methods	9	64
Only electronic methods	3	21
Missing	1	7
Methods to receive data (check all that apply)		
None	0	0
Only manual methods	1	7
Mix manual and electronic methods	11	79
Only electronic methods	1	7
Missing	1	7
Number of outside systems used to view data		
0	4	29
1	3	21
2	2	14
3	1	7
4	2	14
6	2	14
Methods used to view data		
Through electronic system (e.g., EHR)	2	14
Portal that requires separate login	10	71
Other	1	7
N/A or Missing	4	29

Table 18 summarizes the data exchange formats that MCPs support. Presently 57%, 79% and 50% of MCPs, respectively, support C-CDA, X-12 and UCSDI data formats.

Table 18: Data Exchange Formats by MCPs (n=14)

	Freq	%
C-CDA		
Yes, Now	8	57
Yes, Future	4	29
No	1	7
N/A or Missing	1	7
X-12		
Yes, Now	11	79
Yes, Future	0	0
No	0	0
N/A or Missing	3	21
USCDI		
Yes, Now	7	50
Yes, Future	3	21
No	0	0
N/A or Missing	4	29
Other data formats		
Yes, Now	3	21
Yes, Future	0	0
No	0	0
N/A or Missing	11	79

Table 19 summarizes MCP participation in Health Information Exchange (HIE). 43%, 64% and 50% of MCPs report participation in National Exchange Networks, Local/Regional HIEs, and Community HIEs, respectively. Within each type of exchange network, at least 25% of MCPs report bidirectional exchange.

Table 19: MCP HIE Participation (n=14)

	Freq	%
National Exchange Network/Framework		
Inbound only	2	14
Outbound only	0	0
Bidirectional	4	29
N/A or Missing	8	57
Local/Regional HIE/HIO		
Inbound only	1	7
Outbound only	1	7
Bidirectional	7	50
N/A or Missing	5	36
Community HIE		
Inbound only	2	14
Outbound only	1	7
Bidirectional	4	29
N/A or Missing	7	50

CalAIM Considerations

Half (7/14) of responding MCPs are preparing for CalAIM by making changes in the integration/configuration of their systems. MCPs hope these system investments translate to increased case capacity, implementation of closed-loop referral systems, and better system integration. Other investments by MCPs include improving data access and installing new systems, increasing staff, and adapting billing infrastructure. Only two MCPs did not mention any investments they plan on making in their current systems in preparation for CalAIM.

MCPs anticipate several challenges as they prepare for CalAIM. Challenges surrounding data exchange, such as the need to use standardized data sharing mechanisms and establish data sharing with non-traditional community support providers, were among the most commonly cited. MCPs were also concerned with CalAIM program requirements, such as the need to change the specifications of submissions to DHCS and the IT demands created by CalAIM alongside CMS Interoperability standards. Four MCPs did not mention any challenges they anticipate facing in preparation for CalAIM.

Medical Respite

Overview of IT Systems

There are approximately 40 entities responsible for medical respite across the state. There is a range of systems implemented, including traditional EHRs (e.g., Epic) and case management tools (e.g., Apricot).

Survey Instrument & Distribution

To capture the current state of medical respite vendors, types of system users, extent of health-related data captured, and approaches to data sharing, we fielded a survey of medical respite facilities. The survey was refined based on feedback from DHCS, CHCF, and Manatt, Phelps & Phillips. The survey was pilot tested, and the final instrument can be found in Appendix D. Contact information for the respondents was sourced through the National Institute for Medical Respite Care directory and supplemented by the team at Aurerra Health who recently conducted a medical respite survey. The survey was distributed via the survey software Qualtrics and was in the field from August 2, 2022 – September 23, 2022.

Results

We received responses from 16 (38%) of the 42 medical respite entities contacted (Table 20).

Table 20: Medical Respite Survey Respondents

Organization	County Served
Community Homeless Solutions - Central Coast Respite Center	Monterey
COTS - Petaluma Recuperative Care	Sonoma
County of Santa Cruz Health Services Agency	Santa Cruz
EOCP	Alameda
Harbor Care Foundation	Los Angeles, Ventura, San Bernardino
Holliday's Helping Hands - Serenity Recuperative Care	Los Angeles
Horizon Recuperative Care	Los Angeles
JWCH Institute	Los Angeles
LifeLong Medical Care	Alameda, Contra Costa, Marin
Mission Merced Inc	Merced
Providence St. Joseph Health - Humboldt Medical Respite Program	Humboldt
Santa Clara Medical Respite Program	Santa Clara
Shasta Community Health Center	Shasta
The Gathering Inn, Medical Respite Program	Placer
The People Concern - Solar Recuperative Care	Los Angeles
Ventura County Health Care Agency	Ventura

The tables below summarize the survey responses across medical respite facilities. Full survey responses from each entity will be provided in a separate file to DHCS and CHCF.

Table 21 summarizes key health IT information at the entity level for each medical respite facility that responded. 57% of medical respite facilities reported using more than one IT system. Though there was wide variation in the IT systems used, HMIS, Epic and Excel were the most commonly reported systems. If medical respite facilities had more than one IT system, it was most commonly an EHR plus an HMIS. There were no clear patterns of combinations of specific vendors used. Additionally, 18% of medical respite facilities reported using some or all national data standards.

Table 21: Medical Respite Health IT System Information Summarized by Entity (n=16)

	Freq	%
Number of Health IT systems used		
1	7	44
2	6	38
3	3	19
IT Systems by Type (entity could list up to 3 systems)		
EHR	13	46
HMIS	6	21
Case or Care Management	4	14
Spreadsheet	3	11
Social Risk Management	1	4
Dental	1	4
Vendors used (entity could list up to 3 vendors)		
HMIS	6	38
Epic	5	31
NextGen	2	12
PointClickCare	2	12
Excel	3	19
Other (some entities listed more than 1 in this category; counted only once in this table)	8	50

Table 21: Medical Respite Health IT System Information Summarized by Entity (n=16)

	Freq	%
Use of national standards		
Use all standards	1	6
Use some standards	2	12
Use few/no standards	2	12
Don't know	8	50
Missing	3	19
Position assigned to data processing		
Yes	6	38
No	10	62
Don't know	0	0
Missing	0	0

Table 22 summarizes key IT system information across all IT systems reported (each medical respite entity could report up to 3 systems). 29% of IT systems have been implemented since 2020. The number of IT system users varies – 32%, 21% and 43% of IT systems have 1-10, 11-50, and 51+ users respectively. There is also variability in terms of system user types, though clinical and administrative staff are the most common users. Typically, IT systems are maintained by either the vendor or an internal IT group, and, for the most part, the IT systems were rated as very easy or somewhat easy to use.

Table 22: Medical Respite Health IT System Information (n=28 systems used in medical respite facilities)

	Freq	%
When implemented		
Before 2010	1	4
2010-2014	3	11
2015-2019	2	7
Since 2020	8	29
Don't know	3	11
Missing	11	39

Table 22: Medical Respite Health IT System Information (n=28 systems used in medical respite facilities)

	Freq	%
Total number of system users		
1-10	9	32
11-50	6	21
51+	12	43
Don't Know	1	4
Type of users with access to system (check all that apply)		
Clinical Staff	19	68
Admin Staff	16	57
Outside Staff	7	25
Other Staff	11	39
Don't know	1	4
Ease of use		
Very easy	3	11
Somewhat easy	14	50
Somewhat difficult	9	32
Very difficult	1	4
Don't know	1	4
Entity responsible for system maintenance (check all that apply)		
Internal IT group	10	36
Third-party contractors	1	4
Vendor	18	38
Other county entity	3	6
Don't know	9	19
Future status of system		
No plan to replace	10	36

Table 22: Medical Respite Health IT System Information (n=28 systems used in medical respite facilities)

	Freq	%
Plan to replace in next 2 years	2	7
Plan to replace in 3-5 years	0	0
Plan to replace in 6+ years	0	0
Don't know	9	32
Missing	7	25

Table 23 summarizes what health-related data is captured by medical respite facilities and in what format (structured or unstructured). For the most part, medical respite facilities capture many data elements asked about, but it varies in the used of structured, unstructured or mixed formats. The least captured data element by medical respite facilities is incarceration status (50% don't capture). Social determinant of health, such as educational attainment, physical activity, and dietary pattern are also not widely captured (44%, 44% and 38% respectively don't capture this information).

Table 23: Data Captured in Medical Respite IT Systems (n=16)

	Freq	%
Race/ethnicity		
Capture all structured	11	69
Capture all unstructured	0	0
Capture mix structured unstructured	4	25
Don't capture	0	0
Missing	1	6
Language spoken		
Capture all structured	9	56
Capture all unstructured	0	0
Capture mix structured unstructured	4	25
Don't capture	2	12
Missing	1	6
Sexual orientation and gender identity		
Capture all structured	8	50

Table 23: Data Captured in Medical Respite IT Systems (n=16)

	Freq	%
Capture all unstructured	1	6
Capture mix structured unstructured	4	25
Don't capture	2	12
Missing	1	6
Contact information		
Capture all structured	11	69
Capture all unstructured	1	6
Capture mix structured unstructured	3	19
Don't capture	0	0
Missing	1	6
Housing status		
Capture all structured	8	50
Capture all unstructured	1	6
Capture mix structured unstructured	6	38
Don't capture	1	6
Incarceration status		
Capture all structured	3	19
Capture all unstructured	2	12
Capture mix structured unstructured	3	19
Don't capture	8	50
Probation status		
Capture all structured	2	12
Capture all unstructured	3	19
Capture mix structured unstructured	4	25
Don't capture	6	38
Missing	1	6
Employment status		

Table 23: Data Captured in Medical Respite IT Systems (n=16)

	Freq	%
Capture all structured	6	38
Capture all unstructured	3	19
Capture mix structured unstructured	3	19
Don't capture	4	25
Food insecurity		
Capture all structured	4	25
Capture all unstructured	4	25
Capture mix structured unstructured	4	25
Don't capture	4	25
Educational attainment		
Capture all structured	0	0
Capture all unstructured	5	31
Capture mix structured unstructured	4	25
Don't capture	7	44
Transportation access		
Capture all structured	3	19
Capture all unstructured	5	31
Capture mix structured unstructured	3	19
Don't capture	5	31
Exposure to violence/intimate partner violence		
Capture all structured	5	31
Capture all unstructured	4	25
Capture mix structured unstructured	2	12
Don't capture	5	31
Social connections/Isolation		
Capture all structured	5	31
Capture all unstructured	2	12

Table 23: Data Captured in Medical Respite IT Systems (n=16)

	Freq	%
Capture mix structured unstructured	5	31
Don't capture	4	25
Substance(s) used in general		
Capture all structured	6	38
Capture all unstructured	1	6
Capture mix structured unstructured	8	50
Don't capture	1	6
Diagnosis of substance use disorder		
Capture all structured	8	50
Capture all unstructured	1	6
Capture mix structured unstructured	7	44
Don't capture	0	0
Dietary patterns		
Capture all structured	2	12
Capture all unstructured	3	19
Capture mix structured unstructured	5	31
Don't capture	6	38
Physical activity		
Capture all structured	2	12
Capture all unstructured	3	19
Capture mix structured unstructured	4	25
Don't capture	7	44

Table 24 displays the methods that medical respite facilities use to exchange or view data. Medical respite facilities both share and receive data using a variety of methods including manual and electronic methods. 81% of medical respite facilities reported using at least 1 outside system to view data.

Table 24: Medical Respite's Methods Used to Send, Receive and View Data (n=16)

	Freq	%
Methods to send data (check all that apply)		
Do not send or make available	3	19
Yes, using manual methods	10	62
Yes, using electronic exchange	7	44
Yes, automatic via system	4	25
Methods to receive data (check all that apply)		
Do not receive data	1	6
Yes, using manual methods	11	69
Yes, using electronic exchange	7	44
Yes, automatic via system	3	19
Number of outside systems used to view data		
0	3	19
1	8	50
2	3	19
3	1	6
5	1	6

Table 25 summarizes what specific methods medical respite facilities use to send or receive health-related information. Methods like fax/eFax/Secure Fax and secure email are commonly used, while more sophisticated methods (HL7 message, API, HIE) are less commonly used.

Table 25: Medical Respite Methods to Send and Receive Data (n=16)

	Send		Receive	
	Freq	%	Freq	%
Fax/eFax/Secure Fax				
Often/Routinely	11	69	10	62
Sometimes/Rarely	4	25	2	12
Never/Not applicable	0	0	0	0
Missing	1	6	4	25

Table 25: Medical Respite Methods to Send and Receive Data (n=16)

	Send		Receive	
	Freq	**%**	**Freq**	**%**
Secure email				
Often/Routinely	11	69	11	69
Sometimes/Rarely	4	25	1	6
Never/Not applicable	0	0	0	0
Missing	1	6	4	25
SFTP				
Often/Routinely	4	25	3	19
Sometimes/Rarely	2	12	1	6
Never/Not applicable	3	19	3	19
Missing	7	44	9	56
HL7 Message				
Often/Routinely	1	6	0	0
Sometimes/Rarely	1	6	0	0
Never/Not applicable	6	38	6	38
Missing	8	50	10	62
API				
Often/Routinely	0	0	0	0
Sometimes/Rarely	0	0	0	0
Never/Not applicable	8	50	6	38
Missing	8	50	10	62
Via local/regional HIE/HIO				
Often/Routinely	1	6	0	0
Sometimes/Rarely	0	0	0	0
Never/Not applicable	7	44	6	38
Missing	8	50	10	62
Via community HIE (e.g., Find Help, Unite Us)				

Table 25: Medical Respite Methods to Send and Receive Data (n=16)

	Send		Receive	
	Freq	**%**	**Freq**	**%**
Often/Routinely	1	6	1	6
Sometimes/Rarely	0	0	0	0
Never/Not applicable	7	44	5	31
Missing	8	50	10	62
Portal				
Often/Routinely	4	25	2	12
Sometimes/Rarely	3	19	2	12
Never/Not applicable	2	12	3	19
Missing	7	44	9	56

CalAIM Considerations

The majority of medical respite facilities are investing in data management and new systems in preparation for CalAIM. These investments include transitioning to a more user-friendly EHR, implementing new population identification algorithms, and purchasing EMR enhancement modules for behavioral health. Other areas of investment include increasing staffing and staff training. One entity is working directly with a consultant in preparation for CalAIM. Three medical respite facilities did not mention any investment plans in preparation for CalAIM.

Respite facilities reported a range of IT-related challenges they anticipate facing in preparing for CalAIM. Almost half (7/16) of facilities mention data or information access-related challenges, such as a disconnect between care management systems and the claims billing module as well as challenges sharing personal health information securely. Some facilities mentioned general financial challenges and others mentioned the need to train staff for the CalAIM requirements. Two facilities were unsure of or did not mention any IT-related challenges they anticipate in preparation for CalAIM.

Key Informant Interview(s)

County In-Home Supportive Services

Overview of IT Systems

The main IT system used by County In-Home Supportive Services (IHSS) is the Case Management Information and Payrolling System (CMIPS). This system was established in 1980 and is run by the state of California. CMIPS supports case management for over 620,000 active IHSS recipients, payroll for service providers, reporting, and customer support. CMIPS has about 6,000 end users across all 58 California counties. CMIPS is continuously updated; for example, it was most recently updated to meet the 2020 Electronic Visit Verification federal mandate. The Office of System Integrations (OSI) at the state of California manages CMIPS and the primary CMIPS vendor is CGI Technology and Solutions, Inc.

Data Collection Methods

Given that CMIPS is a state-wide system with no county-level variability, we used data from key informant interviews to provide a single description of how the system operates and is used in all counties. We completed interviews with the California Department of State Services - Adult Programs Division, the County Welfare Directors Association of California, and the San Francisco Human Services Agency.

Findings

Data Capture

While CMIPS was originally a payrolling system to capture providers' hours, payment corrections, and transactions, over time it expanded to a case management system that captures information from individuals' applications for IHSS, IHSS eligibility, in-home assessments to define IHSS needs, and ongoing capture of data as part of IHSS receipt. During the initial in-home assessment, social workers use a structured form that captures varied information on the individual's functional status and associated needs (e.g., level of care needed, number of hours for each service required). The form covers some SDOH (e.g., access to food or transportation). If a social worker determines that the recipient requires services outside of the scope of IHSS, they document the need for such a referral in CMIPS. During receipt of IHSS, narrative notes capture summaries of the visits. Overall, there is minimal health information in CMIPS. While the IHSS application includes physician certification that the individual has a condition requiring IHSS, any clinical information associated with the certification is not entered into CMIPS.

Data Sharing

CMIPS allows for all data documented in the system to be viewed across all counties in California. The CMIPS vendor, in partnership with OSI, manages and creates interfaces via a standardized process. Interfaces are to state systems and focus on administrative data sharing. For example, CMIPS interfaces with the Medi-Cal system since all applicants must go through Medi-Cal eligibility determination. CMIPS also interfaces with other state systems from CDPH on eligibility and vital statistics, such that IHSS can identify potential duplication of services. CMIPS is not interfaced with provider EHRs, limiting IHSS staff's abilities to access physician

notes or data from inpatient stays. Some counties choose to share CMIPS data manually; for example, in San Francisco County, they use CMIPS extracts to coordinate services with a food bank.

System Maintenance

Since CMIPS is managed at the state level, there is no pathway to customize the system at the county level. However, there is a process for counties to suggest changes, which, if approved, would then be made to the core system for all counties.

County Child Welfare/Social Services

Overview of IT Systems

The main IT system used in the county child welfare and social services sector is the Child Welfare Services/Case Management System (CWS/CMS) which has been in use since 1997. This statewide system from IBM is maintained and operated by Child Welfare Digital Services (CWDS), a collaboration between California state and local government agencies. CWDS is made up of representatives from the California Department of Social Services (CDSS), the California Office of Systems Integration (OSI), and the County Welfare Directors Association of California (CWDA).

A new statewide system, known as the Child Welfare Services - California Automated Response and Engagement System (CWS-CARES), is currently in development by CWDS. In early 2022, CWDS conducted a demonstration project which involved piloting the development methodology, engagement model, services delivery, and infrastructure for CWS-CARES with several counties. With the demonstration project successfully complete, CWDS has now begun building the new system. CWS-CARES is intended to be built and released in 2 versions. CWDS intends to build Version 1 of the system over the next three years, followed by piloting, training and implementation. Version 1 will include all the capabilities within CWS/CMS, as well as a handful of additional capabilities. Version 2 will expand upon Version 1 by including additional interfaces and analytics and financial management capabilities.

CWS-CARES is intended to provide an intuitive user experience along with capabilities not currently provided by CWS/CMS. The service areas for CARES include Intake, Case Management, Resource Management, Financial Management, Licensing (CALS), Eligibility, Courts, Data & Reporting Management, and CARES Administration. For CWS-CARES, Salesforce provides the front-end software; CWDS provides the backend longitudinal data warehouse; Deloitte is the vendor for system integration; KPMG is the vendor for research and product value services; and OnCore is the vendor managing the data infrastructure.

Data Collection Methods

Since all counties currently use CWS/CMS and will eventually use CWS-CARES, we collected information on these systems through key informant interviews. Interviews were conducted via Zoom between May and September 2022. Each interview was attended by two project team members, one to lead the interview and one to take notes and record the interview. We used the Zoom recording and written notes to synthesize and summarize key findings. We conducted interviews with the County Welfare Directors Association of California, the California Department of Social Services, and the California Office of Systems Integration.

Findings

Data Capture

Within the CWS/CMS system, the Health and Education Passport (HEP) is the designated repository for information on health services provided to a child including medical, mental health, and dental. Specific data includes diagnosed conditions, observed conditions,

medications, hospitalizations, medical tests, referrals, immunizations, birth history, screenings, medical and dental exams, and well child exams. Each data type also includes service provider data and service dates. Data is manually entered by social workers or public health nurses and then combined to generate the HEP. Most of the data is structured; however, documents and progress notes are unstructured. Other CWS/CMS users include child welfare workers, probation workers, social workers, and administrative workers (clerical and fiscal).

CWS-CARES will promote more systematic and standardized capture of health information, which includes expanded data fields such as psychotropic medication use and data from the Child and Adolescent Needs and Strengths (CANS) Tool. CANS data includes ratings on health and social domains such as mental health, substance use, depression, anxiety, and hyperactivity, among others.

Data Sharing

Planned implementation of varied interfaces will allow for a more human-centered and holistic view of an individual, regardless of which entity collects and enters the data. CWS-CARES has a variety of data interfaces planned that will allow for greater sharing of information and will reduce data entry duplication and burden. CWS-CARES plans to eventually interface with the following systems (likely in Version 2 or beyond):
- California Department of Education
- County Behavioral Health EHR Systems
- California Immunization Registry
- California Electronic Death Registration System
- California Department of Health Care Services - Medi-Cal System
- County EHR Systems
- Department of Justice - Court and Probation Systems

To connect with county level systems, CWDS plans to explore a standard dataset via a standards-based API to which each county system could connect. Given that Child Welfare providers are not HIPAA covered entities, APIs will only make available to counties the medical information that is necessary to provide care to children in their jurisdiction. Often this includes status of referrals, diagnosis, assessment/screening, service dates, service types, and behavioral changes.

IT Governance

The development of CWS-CARES is sponsored and chaired by CDSS. The project has a three-pronged governance structure run by project leaders from CDSS, OSI, and CWDA, the agencies that collectively make up CWDS. CWDS is supported by a variety of vendors and subject matter experts and reports to a Board of Directors, also made up of executives from CDSS, OSI and CWDA. This governance system will stay in place throughout the development and implementation of CWS-CARES. The number of vendors and contractors will likely be scaled back once the system is fully implemented and in its long-term enhancement and growth phase.

CalAIM Considerations

As CWS-CARES develops, the team anticipates better coordination with CalAIM efforts. At present, the two efforts have not been coordinated but the CWS-CARES team hopes that there will be opportunity for leveraging data from outside sources to reduce the need for manual data entry.

State Prisons

Overview of IT System

The Electronic Health Records System (EHRS) is the main IT system used in California state prisons for patient health records. EHRS is a fully integrated electronic health record provided by Oracle Cerner Corp and implemented in 2016. Following EHRS implementation, the California Correctional Health Care Services (CCHCS) received Stage 6 certification by HIMSS at all institutions and is the first correctional facility in the United States to do so. The system includes more than 100,000 patient records and supports more than 9 million medical record transactions daily. EHRS is an enterprise system that spans all 34 CDCR (California Department of Corrections and Rehabilitation) prison institutions, headquarters locations, and Central Fill pharmacy. EHRS is managed by CCHCS.

Data Collection Methods

Since all prisons across the state use EHRS, we collected information on this system through a key informant interview with the CCHCS team. The interview was conducted via Zoom in April 2022. The interview was attended by two project team members, one to lead the interview and one to take notes and record the interview. We used the Zoom recording and written notes to synthesize and summarize key findings.

Findings

Data Capture

State prison health facilities provide both inpatient and outpatient care. Thus, the information breadth captured in EHRS is very similar to a standard medical EHR. EHRS contains no major modifications to the base Cerner product, but does have customized workflows. Medical, mental health, and dental records are all integrated within EHRS and providers from the following disciplines document health-related information in EHRS: medical, nursing, dental, mental health, pharmacy, lab, and radiology. EHRS is used by healthcare staff to identify and manage individual patients, improve healthcare processes, and implement the Complete Care Model.

Data Sharing

The majority of data exchange occurs when inmates are released into the community or are sent to specialist providers for services not available within the prison. While EHRS has the capability to share data electronically, data exchange (including the mix of manual and electronic methods used) looks different for each provider and county based on the availability and maturity of data systems in the counties.

Prior to release into the community, health information is normally shared via PDF to county health departments or county behavioral health departments upon request. For some counties, a Secure File Transfer Protocol (SFTP) Portal is used to share demographic and medical record information with the individual who will provide custodial oversight for the inmate. For access to the SFTP portal, CCHCS requires a data use agreement. Data Sharing Agreements for electronic data sharing with identified data elements are in place with the following counties:
- Alameda

- Butte
- Los Angeles
- Marin
- Monterey
- Napa
- Orange
- Riverside
- Sacramento
- Santa Barbara
- San Bernardino
- Santa Cruz
- San Diego
- Shasta
- Siskiyou

For specialty consultations, data is often shared with specialty providers via a CD sent with the inmate to the appointment; however electronic data transfers are becoming more common.

CCHCS also provides portal access to EHRS for a variety of external stakeholders. Additionally, CCHCS has public dashboards available to report aggregate EHRS data on key performance indicators such as patient outcomes, access to care, utilization, and cost.

System Maintenance and IT Governance

System maintenance and governance involves a variety of stakeholders including the Clinical Leadership Advisory Committee (CLAC), which is comprised of subject matter experts from each discipline (medical, nursing, mental health, pharmacy, lab, radiology, dental). When EHRS changes are required, it involves a collaborative effort between CCHCS IT and the relevant clinical disciplines. Changes are then proposed, approved, designed, and implemented in collaboration with Cerner. Approval for changes to EHRS is required by CLAC at a minimum, with substantial changes requiring approval from the Department's IT Governance Board, and Executive Leadership, when appropriate.

CalAIM Considerations

CCHCS expressed some concern about the ability of county human service agencies and Medicaid offices to implement the technical capabilities needed to support robust information sharing. From their point of view, CCHCS currently has the ability to share data electronically, but is limited by the capabilities of the counties. Without funding for the counties to implement IT systems that have capabilities to receive and share data in a standardized way, CCHCS is concerned about the number of different data sharing processes that may arise in the near future. They point to the need for standard data sharing approaches across counties to promote interoperability.

Reliance on Existing Data with Supplementary Interviews

County Behavioral Health

Overview of IT Systems

While there is currently wide variation in IT systems used in the behavioral health sector, an estimated 25 county behavioral health will be adopting a new EHR in 2023, Smartcare by Streamline, which was selected through a competitive bidding process run by the California Mental Health Services Authority (CalMHSA). Other counties currently (and will likely continue to) use other EHR vendors including Epic, NetSmart, and Cerner.

Existing Data Source

Behavioral Health Concepts (serving as California's External Quality Review Organization) authored a set of reports that capture the Information Systems (IS) used by each county's Mental Health Plan (MHP) in FY21-22. As context, in almost all cases, a single county behavioral health agency operates an MHP, in addition to providing some mental health services and contracting with community-based organizations (CBOs) to provide others. This is not the case in Sutter and Yuba counties, which have a joint county behavioral health entity but separate MHPs. In Alameda and Los Angeles counties, there are also behavioral health agencies that operate independently from the county agency. In Alameda County, the City of Berkeley has a separate behavioral health department and in Los Angeles County, Tri-City Medical provides behavioral health services to a distinct region of Los Angeles. Besides these exceptions, the MHPs and the providers will typically use the same IS within a given county. Data from 52 reporting counties (of 58 total in California) was extracted from these reports. Tables 26-28 report summary statistics. A table with county-level data can be found in Appendix E.

Table 26 shows that the majority (44%) of MHPs use Cerner with other common vendors including NetSmart, Krasson, InSync, Krasson Incorporated, InSync, Epic, The Echo Group FEI Systems (38%, 6%, 4%, 2%, 2%, 2%, respectively). There is one county (2%) that currently does not use an EHR. Table 27 shows that MHP IS have been used for more than a decade on average and have an average of about 800 users. There are high levels of variability across measures of personnel – both users and IS support staff. Table 28 shows contract providers' approach to submitting beneficiary information to MHPs as a percent of all beneficiary information received. Beneficiary information includes practice management and service data such as progress notes and medication information. Results show that, on average, MHPs are receiving more than half their beneficiary information via manual data entry by provider staff with e-mail/fax and paper delivery being lower (16% and 12%, respectively).

Table 26: California MHPs (N=52 county MHPs) Primary IS Vendor

IS Vendor	Percent of Counties
Cerner	44.23%
NetSmart	38.46%
Krasson Incorporated	5.77%
InSync	3.85%
Epic	1.92%
The Echo Group	1.92%
FEI Systems	1.92%
Does not use EHR	1.92%

Table 27: California MHPs (N=52 county MHPs) IS Support, Length of Use, and User Data

Measures	Mean (SD)
Time Primary IS Used (years)	10.89 (5.24)
Number of IS Support Staff	12.67 (34.28)
Percent Budget for IS Support	3.82% (1.88)
Number of Users	798.59 (1182.09)
Number of County-Operated Staff	401.70 (616.09)
Number of Contracted Staff	411.65 (751.05)

Table 28: Contract Providers' Transmission of Beneficiary Information to California MHPs IS (N=52 county MHPs), as a Percentage of MHPs Total Information Received

Submittal Method	Submittal Method Percentage
Data Entry by Provider Staff	53.88% (38.86)
Documents E-Mailed or Faxed	16.48% (26.43)
Paper Documents Delivered	11.73% (24.55)

Supplemental Data Source

Data Collection Methods

To understand what data is captured in these systems, and how data is shared and viewed across systems, we interviewed:

(1) Behavioral health entities from 5 counties representing diversity in terms of vendor used, county size, and geographic location. We sourced suggested interviewee candidates from CalMHSA, CBHDA, and the Behavioral Health Concepts reports based on these criteria. Interviews were conducted via Zoom with representatives from Los Angeles, Madera, Merced, Orange, and Humboldt Counties between April and September 2022 (Table 29). We interviewed

LA Department of Mental Health as part of our initial outreach, and it was recommended we also speak to LA Substance Abuse Prevention and Control to provide a more complete picture of Behavioral Health IT in Los Angeles County.

Table 29: County Behavioral Health Interviewees

County / Entity
Los Angeles Department of Mental Health (DMH)
Madera County Department of Behavioral Health Services
Merced County Behavioral Health and Recovery Services
Orange County Health Care Agency, Mental Health and Recovery Services
Humboldt County Behavioral Health Services
Los Angeles Substance Abuse Prevention and Control (SAPC)

(2) CalMHSA provided information on SmartCare by Streamline, the EHR that they are procuring to be implemented in an estimated 25 counties in 2023.

Findings – Five County Behavioral Health Department Interviews

<u>Data Capture</u>

There was little variation in data captured. All counties routinely document basic demographic data (e.g., zip code, race/ethnicity), problem lists, assessment data, care plans, and screening outcomes (e.g., CANS, PHQ-9). These data are mostly in structured fields. Some SDOH are documented, often through a separate form, rather than the standard assessment. Orange County stated that their SDOH form is currently on paper and is not uploaded to their EHR. In cases where counties operate other facilities or services on the same EHR, those data are also captured. For example, Humboldt County operates an inpatient psychiatric unit and therefore captures associated clinical data (e.g., orders, vitals) in their system. Madera and Humboldt Counties offer SUD treatment services; while they use the same EHR, patients' records are segmented with different access permissions for mental health care and substance abuse treatment data.

<u>Data Sharing</u>

Four counties are not currently able to share data electronically between their EHR and outside systems. Any outside data must be either manually entered or faxed and scanned into the system. Los Angeles County is the exception. Los Angeles SAPC electronically shares operations data with county agencies as part of their funding requirements; they share minimal health data with a few other county entities (e.g., Department of Public Social Services, Department of Children and Family Services) due to the restrictions of 42 CFR Part 2. They are also in the process of establishing infrastructure with local MCPs and a local HIE. Los Angeles DMH is currently participating in the Los Angeles Network for Enhanced Services (LANES), a local HIE, as well as exploring future connections with Carequality and the Emergency Department Information Exchange (EDIE). LA DMH is also developing FHIR-based APIs so they can replace their

existing custom-built web services with FHIR services. This will allow them to expand upon the scope of data that can be exchanged and facilitate greater connections with contractors.

Merced County is currently implementing a module to allow bi-directional HIE with Manifest MedEx to share ADT feeds (although they may look to share other data beyond this). A few Humboldt County administrators have access to a local primary care network's EHR via a portal; they use this to obtain medication lists for shared patients. Orange County is in a unique position with their system given that their vendor contract prevents them from extracting any data to generate internal reports or share externally.

System Users, Access, Maintenance, & IT Governance

The county behavioral health departments we interviewed typically serve as the administrators of their own system to address IT issues and provision user access, sometimes with the help of in-house IT teams. Changes to the system (e.g., adding forms, auto-generating reports) typically require them to work with the vendor, with the exception of Los Angeles County. They use a modeling tool called RadPlus which allows them to create their own new forms (and underlying database tables), reports and widgets without direct involvement from the vendor. Large purchasing decisions often have to go through the department head and the county Board of Supervisors for approval.

Three county behavioral health departments allow contracted staff to have direct access to the system (Madera, Merced and Orange). Humboldt County does not work with any contractors and Los Angeles County has either real-time integration between their system and the EHRs used by their contractors or gives their contractors portal access to their EHR for specific functions. Due to the sensitivity of behavioral health data, the EHRs have varied level of access permissions (e.g., administrators have limited access to clinical data).

CalAIM Considerations

The county behavioral health departments are aware of the upcoming CalAIM requirements but do not feel prepared to meet them from an IT perspective. Given their current limited data-sharing capabilities, many will have to either implement a new system or make substantial investments in their current system. Three have applied to BHQIP – Humboldt County received FY 2021-2022 funding, Orange County applied to and is receiving FY 2023-2024 funding, Madera County applied for FY 2023-2024 funding. Humboldt County is also planning on joining the CalMHSA EHR due to their dissatisfaction with the current system and their inability to meet CalAIM requirements. They still anticipate challenges with moving onto this EHR due to the tight timeline and heavy workload to implement a new system that also meets CalAIM requirements (e.g., technical aspects, training). Madera County has started conversations with their vendor to establish interfaces with other systems; if this is not feasible, they are considering switching to the CalMHSA EHR. Merced County is currently testing their system's capabilities for CalAIM and working with their MCP to close any gaps.

Findings - CalMHSA's SmartCare by Streamline Interview

System Overview

In spring 2022, CalMHSA selected Streamline Healthcare Solutions' SmartCare EHR to implement in counties across the state. SmartCare is a Behavioral Health and Human Services EHR, is hosted on Microsoft's Azure and is a fully web-based application. SmartCare manages all types of services across all levels of care in a single platform. The unified interface, processes, and workflows are intended to enable integrated care management and improved organizational efficiency. The SmartCare interface can also be individualized for each user and the clients they serve.

CalMHSA's SmartCare will act as a master system that is replicated, such that each county has an individual, duplicate instance of the system. This decision was made to protect the security of the systems and the privacy of individual county data. Despite this, CalMHSA will be considered the business owner and will be responsible for technical maintenance of the master system. When individual counties pursue customizations, such as new grants with specific reporting criteria, they will work with CalMHSA on the best approaches to measure, collect and report the needed information.

System Users

SmartCare is being piloted by three counties beginning on February 1, 2023 and is set to go-live in all participating counties on July 1, 2023. At this point in time, the list of counties who will be joining CalMHSA's effort is not publicly available; however the final list of participating counties will be published on the [CalMHSA website](#). At this time, CalMHSA anticipates that 25 counties will participate. As such, there will be thousands of SmartCare users across California's county behavioral health systems and roughly 30% of the MediCal population will be included in this medical record system. System users include behavioral health providers, administrators, and contractors. It is up to each individual county to determine who has access to their system.

Data Capture

A key goal of CalMHSA's SmartCare system is to create alignment between physical and mental health data. At present, behavioral health entities create such high volumes of data, due to regulatory requirements, that there is little demand for behavioral health data sharing and very little alignment with physical health data. To address this, CalMHSA plans to align their data capture processes in SmartCare with standard physical health EHR methodologies like the Problem List. By utilizing a Problem List, there is greater opportunity for behavioral health data sharing and interoperability. Along with the use of more standardized modules, CalMHSA is promoting adherence to the use of standardized data elements that are aligned with the most recent version of USCDI. CalMHSA also plans to codify many social determinants of health, including housing status and food insecurity, into structured data elements captured using Z Codes. Though counties can customize what data is captured within the standardized modules, CalMHSA will discourage the use of custom modules as it impedes interoperability.

CalMHSA also plans to include standardized assessment and screening tools for behavioral health in its SmartCare build. This will specifically support multiple efforts across the state to

implement such tools, including standard level of care assessments, GAD-7 and PHQ-9 tools, and standard, domain-based functional assessments.

Data Sharing

CalMHSA intends to develop advanced capabilities in SmartCare for electronic sharing via FHIR APIs. While these capabilities and others will exist, it is unclear at this time whether they will be utilized. CalMHSA's SmartCare program is currently recruiting a Director of Interoperability to pursue opportunities in this space and identify data sharing partners.

Typical behavioral health data sharing partners include hospitals, primary care providers, health plans, social service providers, education/schools, HIEs, and justice partners. While CalMHSA will be defining best practice methodologies for counties to connect to the various partners and share data, it will be up to each individual county to pursue the technical connections and associated governance. In terms of inbound data, CalMHSA also hopes to develop a state-wide solution that allows real-time information from the statewide CalWorks eligibility system to flow into SmartCare. CalMHSA also recently began discussion with select HIEs in California about connection opportunities. However, the specific decisions and prioritizations will depend on state-wide data exchange and consent efforts.

Continuum of Care

Overview of IT Systems

The main IT system used by Continuum of Care (CoC) entities is the Homeless Management Information System. Each CoC selects their own HMIS software vendor that must comply with standards set forth by the U.S. Department of Housing and Urban Development (HUD). Common HMIS vendors in California include Bitfocus, Social Solutions, WellSky, Eccovia Solutions, and Bell Data Systems.

Federal and State Regulations on CoC Data Capture & Reporting

The HUD Universal Data Elements and Common Data Elements are required to be collected by all federally-funded projects using an HMIS software. This allow for the HMIS to record unique, unduplicated client records, and identify clients who meet the criteria for chronic homelessness. Universal Data Elements include basic elements such as name, social security number, and date of birth. Common data elements provide characteristics of clients, services that are provided, and client outcomes. Examples of common data elements include income amount and income sources, health insurance, and physical disability status.

In September 2021, California Assembly Bill (AB) 977 became law following governor approval and outlines new requirements in HMIS Program Data Reporting Requirements for CoCs operating in the state. Beginning January 1, 2023, "a grantee or entity operating specified state homelessness programs must enter Universal Data Elements and Common Data Elements, as defined by HUD Homeless Management Information System Data Standards." Though CoCs already collect this information to comply with HUD regulations, AB 977 requires CoCs to also report this information to the state, specifically into the California Homeless Data Integration System (HDIS). AB 977 intends to allow policymakers to better track and evaluate the effectiveness of the various programs in the state and was drafted following audit reports which deemed California's approach to homelessness "uncoordinated" and "disjointed."

Existing Data Source

CoC HMIS vendor information for state COCs has already been collected, as recently as 2021, by a non-profit called Homeless Strategies for California. In 2021, the primary HMIS vendor was Bitfocus Inc; however other HMIS vendors maintain market share in the state (Table 30). Homeless Strategies for California also reports that nearly half of CoCs changed their HMIS vendor between 2015 and 2021, showing significant movement in this space. Detailed HMIS vendor data over time for each CoC can be found in Appendix F.

Table 30: California Continuum of Care HMIS Vendor Landscape (2021; n=44)

Vendor	% of CoCs using Vendor
Bitfocus Inc	50%
WellSky	25%
Bell Data Systems, Inc	11%
Social Solutions	7%
Eccovia Solutions	7%

Supplemental Data Source

Data Collection Methods

To supplement the HMIS vendor data, we interviewed 7 CoCs, representing varied HMIS vendors used, CoC size, and geographic location. To identify specific CoCs, we used data from the Homeless Strategies for California on HMIS vendor and geographic location (Northern, Central or Southern). We also assigned each CoC to size categories Small, Medium and Large based on the 2019 CoC Homeless Count results. CoCs were considered Small if they reported 1-1000 individuals who were homeless, Medium if they reported 1001-2000, and Large if they reported more than 2000. With these parameters in mind, Homeless Strategies for California recommended CoCs for us to interview and provided contact information. To ensure we got representation from every HMIS vendor group, we added additional CoCs to the outreach list and sourced contact information for them via HUD's CoC contact list. Table 31 shows the list of CoCs we interviewed.

Table 31: Continuum of Care Interviewees and Demographics

Counties Covered by CoC	**Size**	**Location**	**HMIS Vendor**
Placer and Nevada	Small	Northern	WellSky
Merced	Small	Central	BitFocus
Shasta, Modoc, Siskiyou, Lassen, Plumas, Sierra, and Del Norte	Medium	Northern	WellSky
San Luis Obispo	Medium	Southern	Bell Data Systems, Inc.
Kings and Tulare	Medium	Central	Eccovia Solutions
Sonoma	Large	Northern	Social Solutions
San Diego	Large	Southern	BitFocus

Findings

Data Capture

All Continuum of Care entities running a federally funded project must collect the following HUD Universal Data Elements:
- 3.1 Name
- 3.2 Social Security Number
- 3.3 Date of Birth
- 3.4 Race
- 3.5 Ethnicity
- 3.6 Gender
- 3.7 Veteran Status
- 3.8 Disabling Condition
- 3.10 Project Start Date
- 3.11 Project Exit Date

- 3.12 Destination
- 3.15 Relationship to Head of Household
- 3.16 Client Location
- 3.20 Housing Move-in Date
- 3.917 Living Situation

In addition, program-specific data elements may be required for federal reporting. The following list are the most common data elements required across federal partners:
- 4.2 Income and Sources
- 4.3 Non-Cash Benefits
- 4.4 Health Insurance
- 4.5 Physical Disability
- 4.6 Developmental Disability
- 4.7 Chronic Health Condition
- 4.8 HIV/AIDS
- 4.9 Mental Health Problem
- 4.10 Substance Abuse
- 4.11 Domestic Violence
- 4.12 Contact
- 4.13 Date of Engagement
- 4.14 Bed-Night Date
- 4.18 Housing Assessment Disposition

The most common intake assessment used by the CoCs we interviewed to collect this information is the Vulnerability Index – Service Prioritization Decision Assistance Tool (VI-SPDAT). Providers must choose the most appropriate version of the VI-SPDAT to use depending on which group a client falls into: single adult, family, or transition age youth. While the VI-SPDAT is a standard screening tool, CoCs may adapt it or add additional questions to align with their specific program or project data collection needs. The VI-SPDAT collects some self-reported health information including HIV/AIDS status, physical disabilities, developmental disabilities, substance use, mental health concerns, chronic disease status and domestic violence, among others. However, the VI-SPDAT only collects Yes and No responses. For example, the VI-SPDAT collects whether or not an individual has a chronic condition but does not collect which chronic conditions they have. Once the VI-SPDAT is complete, a score is generated for a given client, which helps the CoC prioritize which clients should receive services or housing first.

Data Sharing

All CoCs are required to share data with the California Homeless Data Integration System (HDIS). This system integrates data from all California CoCs to allow for more streamlined access to information for analysis purposes. The CoCs we interviewed reported sending data to HDIS either via data exports and uploads or via API. Additionally, CoCs commonly export data from their various programs and projects for reporting purposes. Beyond reporting, the CoCs we interviewed approached data sharing in varied ways. Of the 7 CoCs interviewed, 4 CoCs (Placer/Nevada, Kings/Tulare, Sonoma, and NorCal CoC) reported no data sharing beyond reporting and 2 CoCs (San Luis Obispo and San Diego/Imperial) reported receiving data imports

from other homeless service provider agencies. Only 1 CoC (San Diego/Imperial) currently sends data out of their system – in this case to their local Community Information Exchange (CIE). However, 2 CoCs (Merced and San Luis Obispo) reported being in discussions with local hospital systems to share data and 4 CoCs (Placer/Nevada, San Luis Obispo, Merced and San Diego) reported being in discussions with their respective managed care plans around data sharing for CalAIM.

System Users, Access, Maintenance & IT Governance

In general, the CoCs we interviewed serve as the administrators of their systems, with the exception of the Kings/Tulare CoC that contracts out system administration. In terms of system customization and maintenance, most CoCs reported being able to make minor modifications to their systems internally and going to the vendor when more major modifications were required.

Outside of the CoC itself, user access is provisioned to relevant county departments, non-profit agencies and religious-based organizations that are providing services to individuals experiencing homelessness. Typically, it is the CoC that provisions system access, collects licensing fees, and provides system training and technical assistance. The total number of HMIS system users in a given county can range from 75-1200 users, primarily made up of case managers and clinical staff.

While each CoC has a unique IT governance structure, IT decision making for major decisions typically sits with either a CoC Board or a county Board of Supervisors. In general, the CoCs described that if they were seeking to change IT vendors, the CoC would put together a proposal, send it to various IT and HMIS committees, and ultimately send it to the relevant Board for a final decision.

CalAIM Considerations

The CoCs we interviewed were at various stages of preparedness for CalAIM. Several CoCs reported knowing little about CalAIM and what implications it will have. However, when prompted, all CoCs reported that their systems would theoretically have the capabilities to share data with managed care plans or collect expanded health data elements, but that additional technical work and staff training would be necessary. 5 CoCs (Placer/Nevada, San Luis Obispo, Merced, San Diego and NorCal CoC) have already begun discussions with their respective managed care plans around data sharing for CalAIM. Additionally, 4 CoCs (Placer/Nevada, San Luis Obispo, Sonoma and NorCal CoC) reported active involvement in applications and planning for the CalAIM Housing and Homeless Incentive Program (HHIP). The biggest challenges CoCs anticipate facing regarding CalAIM include staff capacity for more advanced reporting and staff training. Additionally, both the San Diego/Imperial CoC and the NorCal CoC expressed concerns about having to become Business Associates of a Covered Entity, and thus HIPAA compliant, in order to enter data sharing agreements with managed care plans.

School-based Health Centers

Overview of IT Systems

There are approximately 300 school-based health centers (SBHCs) in California. SBHC IT systems range in maturity and include commercial EHR vendor systems (e.g., Epic, NextGen), home-grown systems, and documentation maintained through tools such as Microsoft Excel.

Existing Data Source

Our collaborator, Dr. Samira Soleimanpour, included 3 health IT questions on the School-Based Health Alliance's 2022 National Census of School-Based Health Centers (Tables 32-34 below). The survey was fielded from May to September of 2022. 103 California SBHCs (about 33%) responded. Most SBHCs used Epic (24%), NextGen (17%), or Welligent (16%) EHRs with a total of 18 unique systems used across respondents. 6% of SBHCs reported not using an EHR system. 96% of systems were used to document information with 4% of systems used to review information only. 76% of respondents indicated that SBHC primary care and behavioral health providers use the same EHR system to document client encounter information.

Table 32: EHR Vendor Overview. (Note: Columns marked with an asterisk have lower response rates than overall survey; data limited to cell sizes>5)

Vendor	Number (%) Adopted	% that Use EMR/EHR to document encounter information*	% that Use EMR/EHR to review information only*
Epic	25 (24%)	96%	4%
NextGen	18 (17%)	93%	7%
Welligent	16 (16%)	100%	0%
Dentrix	12 (12%)	100%	0%
Other	11 (11%)	91%	9%
eClinical Works	8 (8%)	67%	33%
Practice Fusion	7 (7%)	100%	0%
Theranest	7 (7%)	100%	0%
None, we do not use an EHR/EMR system	6 (6%)	N/A	N/A

Table 33: Health IT for SBHC Primary Care vs. Behavioral Health Providers. (Note: Columns marked with an asterisk have lower response rates than overall survey; data limited to cell sizes>5.)

Do SBHC primary care and behavioral health providers use the same EHR/EMR system to document client encounter information? Select one.		
Answer	**Percent***	**Count***
Yes	76%	58
No	24%	18

Supplemental Data Source

Data Collection Methods

We supplemented survey data by interviewing 6 SBHCs to capture more detail about how these systems are used, how data are shared, IT oversight and governance, and how SBHCs are preparing for CalAIM. We asked experts from the California School-Based Health Alliance, Amy Blackshaw and Amy Ranger, to recommend SBHCs to interview that vary in size, rurality, and approach to data capturing and/or sharing. They also recommended that we select SBHCs to interview that vary by who operates them – FQHCs, school districts, and CBOs. A report published in 2020 shows that 52% of SBHCs were operated by FQHCs, 27% by school districts, and 22% by other lead organizations.[1] The selected list is shown in Table 34.

Table 34: SBHC Interviewees and Demographics

Interviewee Organization	County	Lead Agency or Organization	Principal EHR Vendor
La Clínica de La Raza	Alameda	County PHA, partnered with an FQHC	Epic
The Los Angeles Trust for Children's Health	Los Angeles	Non-profit	NextGen and eClinicalWorks
Bishop SBHC	Inyo	Healthcare District	Cerner
Clínica Sierra Vista	Fresno	FQHC	Epic
All 4 Youth	Fresno	School District, partnered with the County Behavioral Health Department	NetSmart
SHOP 55 Wellness Center	Alameda	CBO, partnered with an FQHC	Apricot

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[1] School-Based Health Centers in California: A Growing Trend. Published online November 2020. https://www.schoolhealthcenters.org/wp-content/uploads/2020/11/CSHA-Key-Indicators-Map-20-21.pdf

Findings

Data Capture

SBHCs regularly document demographic and clinical data in their EHR that is relevant to the services they most commonly provide – sports physicals, reproductive healthcare, and immunizations. While some SDOH data may be captured (e.g., food insecurity, family history), these data are not consistently captured unless SBHCs partner with behavioral health providers that offer these services. When SDOH data is documented, it typically includes social assessment data, screening tool outcomes (e.g., PSE, CANS, PHQ-9), and care plans in the EHR. Additionally, SBHCs document patients' school district and school information, primarily to support reporting.

As an example of an SBHC that provides and documents behavioral health services, in Fresno County, All 4 Youth is a partnership between Fresno County Superintendent of Schools and the Fresno County Department of Behavioral Health to provide mental health services to students across the county. County behavioral health providers use the county department EHR, Avatar by NetSmart, to document clinical outcomes (e.g., progress on therapy, screening results), demographic information, and education-related outcomes (e.g., attendance, suspension). Fresno Unified School District uses their own system to track referrals. At the time we spoke with them, All 4 Youth used a system called FileMaker but are planning to transition to Apricot within the next 3-6 months.

Data Sharing

SBHCs' data-sharing capabilities are largely determined by the entity operating the center. We found examples in three categories:

No Data Sharing: SHOP 55 Wellness Center, serves the 1500 students at Oakland High School in Alameda County. This SBHC is a partnership between EBAYC (a youth-focused community benefit organization) and three different healthcare providers – Asian Health Services (a FQHC that uses Epic), Lincoln (a child and family organization that uses a solution developed by Seneca Family Agencies), Wellness Together (a school mental health organization; system not reported), and Oakland Unified School District Health Services (Aeries system). The primary health services provided at SHOP 55 Wellness Center include medical care, dental care, reproductive health services, sports physicals, and mental health (individual, group, crisis). While EBAYC uses a system from Apricot, it is not used to track any health-related information; instead, the system supports their provision of case management services to track goals and outcomes set for students (which are focused on academics, attendance, and/or social and emotional health) as well as to track utilization and evaluate the delivery of services. Currently, there are no interfaces between Apricot and any of the EHRs or among the EHRs. While this precludes creating a holistic record across the different programs and services, our contact did not view this as problematic and felt that manual methods allowed EBAYC to evaluate how well services are being delivered and coordinate effectively. The only other source of data routinely used by EBAYC is Qualtrics that captures provision of first aid, and individual and group behavioral health utilization delivered by EBAYC staff and SHOP 55 Partners and might include records for the students EBAYC is supporting.

Moderate Data Sharing: SBHCs run by FQHCs or who contract with FQHCs to provide medical care (La Clínica, Los Angeles Unified School District Wellness Center Partners, Clínica Sierra Vista, and SHOP 55 Wellness Center) are typically able to see all information in the given EHR, much of which comes from non-SBHC encounters (i.e., the other sites run by the FQHC). Another example of this, in Inyo County, the Northern Inyo Healthcare District runs the SBHC and a small critical access hospital. The provider at the SBHC reported being able to view the hospital providers' notes from hospital encounters but that the hospital cannot see the SBHC or pediatric providers' records to maintain student confidentiality – especially around reproductive care. Similarly, All 4 Youth reported that community providers who also use Avatar can view data from county behavioral health providers. Additionally, they use SciSense, a subsystem of Avatar, which allows supervisors to view treatment plans, assessment documentation, and billing data. However, data is not able to be shared with any other county entities outside of the behavioral health department.

Extensive Data Sharing (but only for reporting purposes): We found one example of novel SBHC-based information sharing. The Los Angeles Trust for Children's Health merges data from 20 SBHCs as well as other systems (e.g., lab data to track COVID-19 cases, immunization data). They have a proprietary, customized technical infrastructure called the Los Angeles Trust for Children's Health Data xChange that matches health data from SBHCs to academic data from the schools in a manner that is compliant with both HIPAA and FERPA. SBHCs compile and send this data to the Los Angeles Trust for Children's Health monthly from a varied set of EHRs. Clinics send monthly data reports by logging into a portal and authorizing the system to run a SQL query generated by the vendor to extract data from the clinic's system. The system is also able to extract and report data from CSV files if clinics do not store data in an EHR. Via these data, the Los Angeles Trust for Children's Health develops value metrics (e.g., attendance days saved) and also identifies needs for more student services (e.g., an uptick in depression diagnoses may prompt a principal to hire a social worker). Aggregated reports are then sent to the Los Angeles Unified School District (i.e., these data are not sent back at individual level to support SBHC care coordination).

System Users, Access, Maintenance and IT Governance

In general, the organization operating the SBHC serves as the administrator of their system(s) and provisions access to those providers that are contracted to work at the SBHC. Any IT tickets or change requests are routed to their IT departments and handled as they would handle a request coming from an outpatient clinician. Similarly, purchasing decisions are made through the operating organization's process, with minimal input from the school or school district.

CalAIM Considerations

The providers we interviewed were not broadly aware of CalAIM or its requirements. That being said, they understood the need for interoperability within and across school districts as well as between SBHCs and community providers. One clinic reported that they had heard senior leadership of the FQHC discussing CalAIM requirements but had not received guidance from the school district. The Los Angeles Trust for Children's Health for Children's Health reported that it is currently unclear if their organization would serve as the reporting hub or if each clinic would have to do their own reporting under CalAIM.

Appendix

Appendix A: Sobering Center Survey Instrument

This survey is being sent to you by a UCSF research team that is leading a project funded by CA DHCS to better understand the electronic system(s) that you use to document and/or view health-related information. Such systems may be full-fledged electronic health records/electronic medical records or electronic systems whose primary purpose is not focused on health but capture one or more types of health-related information. This information will help support CalAIM planning efforts. Click here for more information on CalAIM.

 The survey should take less than 20 minutes to complete. If you have any questions about the survey or the broader project, please reach out to Grace Krueger (grace.krueger@ucsf.edu).

Data Sharing:
 Your responses to this survey will be included in a report submitted by UCSF to the CA DHCS and the California Health Care Foundation. The report will describe, for each sector and county, the current state of IT capabilities and data capture/data sharing for health-related information. Your survey responses will only be available to UCSF, DHCS, and CHCF, although DHCS or CHCF may provide summary information in a public report in Fall 2022.

Organization Name

_____

_____

Which counties do you service or operate in?

_____

_____

Does your organization capture any of the following types of information in a system that you maintain with respect to the clients/patients to whom you provide services? This information could come from an outside source or be collected directly by your organization.

- **Structured data:** Data that is clearly defined and organized into specific fields as part of a schema, with each field having a defined purpose (e.g., name, lab values, vital signs etc)
- **Unstructured data:** Data that is stored in its native format and cannot be easily organized using pre-defined structures (e.g., free text notes, images etc)

	Don't Capture	Capture - All Structured Data	Capture - Mix of Structured-Unstructured Data	Capture - All Unstructured Data
Race/Ethnicity	○	○	○	○
Language Spoken	○	○	○	○
Sexual Orientation and Gender Identity (SOGI)	○	○	○	○
Contact Information	○	○	○	○
Housing Status	○	○	○	○
Incarceration Status	○	○	○	○
Probation Status	○	○	○	○
Employment Status	○	○	○	○
Food Insecurity	○	○	○	○
Educational Attainment	○	○	○	○
Transportation Access	○	○	○	○
Exposure to Violence/Intimate Partner Violence	○	○	○	○
Social Connections/Isolation	○	○	○	○
Substance(s) Used in General	○	○	○	○

Diagnosis of Substance Use Disorder	○	○	○	○
Dietary Patterns	○	○	○	○
Physical Activity	○	○	○	○
Referring Parties	○	○	○	○
Transportation In	○	○	○	○
Transportation Out	○	○	○	○
Disposition	○	○	○	○
What drugs/alcohol contributing to current intoxication	○	○	○	○
Blood alcohol concentration (BAC)	○	○	○	○
Onsite services provided	○	○	○	○

Do you capture any types of clinical/medical information (e.g., diagnoses, procedures, vital signs, medications)? Please list:

_____

_____

_____

For information that is structured, to what extent do you <u>use available national standards or other external code sets or definitions</u> for the content? For example, <u>US Core Data for Interoperability (USCDI)</u>is a national standardized set of health data classes and constituent data elements.

○ Use all available national standards/external definitions

○ Use some available national standards/external definitions

○ Use few/no available national standards/external definitions

○ Don't know

Please list the name of the software used as your electronic system(s) (e.g. EHR, Excel spreadsheet, case management system) to document health-related information. If not applicable, please leave blank.

○ System 1 _____

○ System 2 (if applicable) _____

○ System 3 (if applicable) _____

For your system, ${Q5/ChoiceTextEntryValue/1}, please answer the following questions.

○ Vendor _____

○ When Implemented _____

Type of users with access to this system? Select all that apply.

☐ Clinical staff

☐ Administrative staff

☐ Outside staff (contractors, health dept, etc)

☐ Other _____

☐ Don't Know

Total number of current system users?

- ○ 1-10

- ○ 11-50

- ○ 51+

- ○ Don't Know

How easy is it to use this system to do your work?

- ○ Very easy

- ○ Somewhat easy

- ○ Somewhat difficult

- ○ Very difficult

- ○ Don't Know

For your system, ${Q5/ChoiceTextEntryValue/2}, please answer the following questions.

- ○ Vendor _____

- ○ When Implemented _____

Type of users with access to this system? Select all that apply.

☐   Clinical staff

☐   Administrative staff

☐   Outside staff (contractors, health dept, etc)

☐   Other _____

☐   Don't Know

Total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

How easy is it to use this system to do your work?

○ Very easy

○ Somewhat easy

○ Somewhat difficult

○ Very difficult

○ Don't Know

For your system, ${Q5/ChoiceTextEntryValue/3}, please answer the following questions.

○ Vendor _____

○ When Implemented _____

Type of users with access to this system? Select all that apply.

☐ Clinical staff

☐ Administrative staff

☐ Outside staff (contractors, health dept, etc)

☐ Other _____

☐ Don't Know

Total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

How easy is it to use this system to do your work?

○ Very easy

○ Somewhat easy

○ Somewhat difficult

○ Very difficult

○ Don't Know

Do you have a position specifically assigned to data processing including data entry, cleaning, analysis, and/ or evaluation?

○ Yes

○ No

○ Don't Know

Display This Question:

If Do you have a position specifically assigned to data processing including data entry, cleaning, a... = Yes

Is this position and the time allotted currently sufficient to your data needs?

○ Yes

○ No

○ Don't Know

Do your staff routinely view health-related information in "outside" systems (i.e., systems that you don't maintain)? These may include systems of community-based organizations (CBOs), other county entities, state systems, etc.

	Entity that Maintains It	**How Is It Accessed by Your Staff**		
	Name of Entity	Through your electronic system (e.g. EHR)	Portal that Requires Separate Log-in	Other
Name of System		○	○	○
Name of System		○	○	○
Name of System		○	○	○
Name of System		○	○	○

To what extent are you able to easily access timely and complete information from the outside system(s) in the prior question?

○ Often/Routinely

○ Sometimes

○ Rarely

○ Never

Thinking about the health-related information in your system, do you SEND IT/MAKE IT AVAILABLE to outside organizations (e.g., to CBOs, healthcare delivery organizations or other county entities when you are making a referral for consultation or handoff)? Select all that apply.

☐ ⊗ No

☐ Yes, using manual methods (phone, fax, secure fax etc.)

☐ Yes, using electronic exchange methods (secure email, SFTP, HL7 messages, APIs, via a local/regional HIE/HIO, via a community HIE like Find Help/Unite Us, via a portal, etc.)

☐ Yes, happens automatically via system (i.e., EHR makes it available)

Thinking about the health-related information in your system, do you RECEIVE any of it from outside organizations (e.g., information from CBOs, healthcare delivery organizations or other county entities when you are receiving a referral)? Select all that apply.

☒ No

☐ Yes, using manual methods (phone, fax, secure fax etc.)

☐ Yes, using electronic exchange methods (secure email, SFTP, HL7 messages, APIs, via a local/regional HIE/HIO, via a community HIE like Find Help/Unite Us, via a portal, etc.)

☐ Yes, happens automatically via system (i.e., access via EHR)

Please describe your current **consent procedures** related to sending and receiving patient/client health-related information.

_____

_____

_____

_____

_____

What investments are you making in your current systems to prepare for CalAIM?

_____

_____

_____

_____

_____

What is the biggest IT-related challenge you anticipate facing as you prepare for CalAIM?

_____

_____

_____

_____

_____

If applicable, which CalAIM funding opportunities have you or will you apply for? Select all that apply.

- ☐ Providing Access and Transforming Health (PATH)

- ☐ CalAIM Incentive Payment Program (IPP)

- ☐ Housing and Homelessness Incentive Program (HHIP)

- ☐ Behavioral Health Quality Improvement Program (BH-QIP)

- ☐ Other _____

- ☐ Don't Know

The following questions may require specific IT knowledge and expertise. If you are able to complete them or are willing to consult with IT staff to complete them, we would value the additional information. If you cannot complete them, please leave the questions blank and click "next" until you reach the end of the survey.

In addition to the information already provided on your electronic system, ${Q5/ChoiceTextEntryValue/1}, please answer the following more detailed questions.

- ○ Product _____

- ○ Version _____

Who maintains the system? Select all that apply.

☐ Internal IT group

☐ Third-party contractors

☐ Vendor

☐ Other county entity

☐ Other: _____

☐ Don't know

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Estimated Number of Users who Document Health-related Information

○ Staff you employ _____

○ Third-party contractors _____

○ Other _____

In addition to the information already provided on your electronic system, ${Q5/ChoiceTextEntryValue/2}, please answer the following more detailed questions.

○ Product _____

○ Version _____

Who maintains the system? Select all that apply.

☐ Internal IT group

☐ Third-party contractors

☐ Vendor

☐ Other county entity

☐ Other: _____

☐ Don't know

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Estimated Number of Users who Document Health-related Information

○ Staff you employ _____

○ Third-party contractors _____

○ Other _____

In addition to the information already provided on your electronic system, ${Q5/ChoiceTextEntryValue/3}, please answer the following more detailed questions.

○ Product _____

○ Version _____

Who maintains the system? Select all that apply.

☐ Internal IT group

☐ Third-party contractors

☐ Vendor

☐ Other county entity

☐ Other: _____

☐ Don't know

What is the future status of the system?

◯ No plan to replace

◯ Plan to replace in next 2 years

◯ Plan to replace in 3-5 years

◯ Plan to replace in 6+ years

◯ Don't know

Estimated Number of Users who Document Health-related Information

◯ Staff you employ _____

◯ Third-party contractors _____

◯ Other _____

Please indicate the extent to which each method is used to SEND/MAKE AVAILABLE health-related information from your system(s) to outside organizations (e.g. when you are making a referral for consultation or handoff):

Hover mouse over underlined terms for definitions.

	How Often Used			Types of Entities to Which Information is Sent Using this Method
	Often/Routinely	Sometimes/Rarely	Never/Not Applicable	Type of Entity

Fax/eFax/Secure Fax	○	○	○	
Secure Email	○	○	○	
SFTP	○	○	○	
HL7 Message	○	○	○	
API	○	○	○	
Via local/regional HIE/HIO	○	○	○	
Via community HIE (e.g. Find Help, Unite Us)	○	○	○	
Portal	○	○	○	

	Often/Routinely	Sometimes/Rarely	Never/Not Applicable	Type of Entity
Other	○	○	○	
Other	○	○	○	

Please indicate the extent to which each method is used to RECEIVE health-related information from outside systems to your system(s) (e.g. when you are receiving a referral):

Hover mouse over underlined terms for definitions.

	How Often Used			Types of Entities from Which Information is Received Using this Method
	Often/Routinely	Sometimes/Rarely	Never/Not Applicable	Type of Entity
Fax/eFax/Secure Fax	○	○	○	
Secure Email	○	○	○	

SFTP	○	○	○
HL7 Message	○	○	○
API	○	○	○
Via local/regional HIE/HIO	○	○	○
Via community HIE (e.g. Find Help, Unite Us)	○	○	○
Portal	○	○	○
Other	○	○	○
Other	○	○	○

Appendix B: County Jail Survey Instrument

This survey is being sent to you by a UCSF research team that is leading a project funded by CA DHCS to better understand the electronic system(s) that you use to document and/or view health-related information. Such systems may be full-fledged electronic health records/electronic medical records or electronic systems whose primary purpose is not focused on health but capture one or more types of health-related information. This information will help support CalAIM planning efforts. Click herefor more information on CalAIM.

 The survey should take less than 20 minutes to complete. If you have any questions about the survey or the broader project, please reach out to Grace Krueger (grace.krueger@ucsf.edu).

 Data Sharing:
 Your responses to this survey will be included in a report submitted by UCSF to the CA DHCS and the California Health Care Foundation. The report will describe, for each sector and county, the current state of IT capabilities and data capture/data sharing for health-related information. Your survey responses will only be available to UCSF, DHCS, and CHCF, although DHCS or CHCF may provide summary information in a public report in Fall 2022.

Respondent name and email:

○ Name _____

○ Email _____

In which California counties do you have jail facilities?

_____

_____

_____

Do all your jail facilities use the same electronic system to document health-related information?

○ Yes

○ No, but there is a predominant system used in most of our jails

○ No, there are different systems implemented in different jails

○ N/A – only have one jail facility

Display This Question:

If Do all your jail facilities use the same electronic system to document health-related information? = No, but there is a predominant system used in most of our jails

Please list the jail facilities that share this predominant electronic system.

_____

_____

_____

Display This Question:

If If Please list the jail facilities that share this predominant electronic system. Text Response Is Displayed

For the remainder of the survey, please respond based on the jail facilities you listed in the previous question that share this predominant electronic system.

Do you routinely capture any of the following types of information in an electronic system that you maintain for the individuals in your jail(s)? This information could come from an outside source or be collected directly by your staff.

	Capture	Don't Capture
Race/Ethnicity	○	○
Language Spoken	○	○
Sexual Orientation and Gender Identity (SOGI)	○	○
Contact Information	○	○
Housing Status	○	○
Employment Status	○	○
Food Insecurity	○	○
Educational Attainment	○	○
Transportation Access	○	○
Exposure to Violence/Intimate Partner Violence	○	○
Social Connections/Isolation	○	○
Substance(s) Used in General	○	○
Dietary Patterns	○	○
Physical Activity	○	○
Mental Illness	○	○
Substance Use Disorder	○	○

Chronic Conditions	○	○
Intellectual or Developmental Disability	○	○
HIV/AIDS	○	○
Pregnant or Postpartum	○	○

Please list the name of the software used as your electronic system(s) (e.g. EHR, Excel spreadsheet, case management system) to document health-related information. If not applicable, please leave blank.

○ System 1 _____

○ System 2 (if applicable) _____

○ System 3 (if applicable) _____

Since you have multiple electronic systems implemented across your jails, our survey coordinator will follow up with you individually to gather more information.

For your system, ${Q4/ChoiceTextEntryValue/1}, please answer the following questions.

○ Vendor _____

○ When Implemented _____

Type of users with access to this system? Select all that apply.

☐   Clinical staff

☐   Administrative staff

☐   Outside staff (contractors, health dept, etc)

☐   Other _____

☐   Don't Know

Total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

How easy is it to use this system to do your work?

○ Very easy

○ Somewhat easy

○ Somewhat difficult

○ Very difficult

○ Don't Know

For your system, ${Q4/ChoiceTextEntryValue/2}, please answer the following questions.

○ Vendor _____

○ When Implemented _____

Type of users with access to this system? Select all that apply.

☐   Clinical staff

☐   Administrative staff

☐   Outside staff (contractors, health dept, etc)

☐   Other _____

☐   Don't Know

Total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

How easy is it to use this system to do your work?

○ Very easy

○ Somewhat easy

○ Somewhat difficult

○ Very difficult

○ Don't Know

For your system, ${Q4/ChoiceTextEntryValue/3}, please answer the following questions.

○ Vendor _____

○ When Implemented _____

Type of users with access to this system? Select all that apply.

☐   Clinical staff

☐   Administrative staff

☐   Outside staff (contractors, health dept, etc)

☐   Other _____

☐   Don't Know

Total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

How easy is it to use this system to do your work?

○ Very easy

○ Somewhat easy

○ Somewhat difficult

○ Very difficult

○ Don't Know

Do your staff routinely view health-related information in "outside" systems (i.e., systems that you don't maintain)? These may include systems of community-based organizations (CBOs), other county entities, state systems, community providers, etc.

	How Is It Accessed by Your Staff?		
	Single-sign on/Integrated with Your System	Portal that Requires Separate Log-in	Other
Name of Organization/Entity	○	○	○
Name of Organization/Entity	○	○	○
Name of Organization/Entity	○	○	○
Name of Organization/Entity	○	○	○

Thinking about the health-related information in your system, do you SEND IT/MAKE IT AVAILABLE **electronically** to outside organizations (e.g., to CBOs, healthcare delivery organizations)?

      ○ ⊗No, we rely exclusively on manual methods (e.g., Fax/eFax, Secure Fax, CDs)

      ○ Yes, for some outside organizations

      ○ Yes, for all/most outside organizations

      ○ Don't Know

What investments are you making in your current systems to prepare for CalAIM?

_____

_____

_____

What is the biggest IT-related challenge you anticipate facing as you prepare for CalAIM?

_____

_____

If applicable, which CalAIM funding opportunities have you or will you apply for? Select all that apply.

    ☐   Providing Access and Transforming Health (PATH)

    ☐   CalAIM Incentive Payment Program (IPP)

    ☐   Housing and Homelessness Incentive Program (HHIP)

    ☐   Behavioral Health Quality Improvement Program (BH-QIP)

    ☐   Other _____

    ☐   Don't Know

Appendix C: Managed Care Plan Survey Instrument

This survey is being sent to you by a UCSF research team that is leading a project funded by CA DHCS to better understand the electronic system(s) that you use to document and/or view health-related information. Such systems may be full-fledged electronic health records/electronic medical records or electronic systems whose primary purpose is not focused on health but capture one or more types of health-related information. This information will help support CalAIM planning efforts. Click herefor more information on CalAIM.

 The survey should take less than 20 minutes to complete. If you have any questions about the survey or the broader project, please reach out to Grace Krueger (grace.krueger@ucsf.edu).

Data Sharing:
 Your responses to this survey will be included in a report submitted by UCSF to the CA DHCS and the California Health Care Foundation. The report will describe, for each sector and county, the current state of IT capabilities and data capture/data sharing for health-related information. Your survey responses will only be available to UCSF, DHCS, and CHCF, although DHCS or CHCF may provide summary information in a public report in Fall 2022.

Respondent name and email address:

○ Name _____

○ Email Address _____

Name of Medi-Cal Managed Care Plan

_____

_____

In which California counties do you have Medi-Cal Managed Care members?

_____

_____

How many systems of record will serve as sources of data to support CalAIM?

_____

Which type of system(s) of record will serve as sources of data to support CalAIM? Select all that apply.

- ☐ Utilization management system

- ☐ Care/case management system

- ☐ Population health system

- ☐ Membership system

- ☐ Claims system

- ☐ Other: _____

- ☐ Other: _____

Please answer the following questions about your Utilization Management System.

○ Vendor _____

○ Product _____

○ Version (if known) _____

○ When Implemented? _____

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Type of users with access to this system? Select all that apply.

☐   Clinical staff

☐   Administrative staff

☐   Outside staff (contractors, health dept, etc)

☐   Other _____

☐   Don't Know

Estimated total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

Please answer the following questions about your Care/Case Management System.

○ Vendor _____

○ Product _____

○ Version (if known) _____

○ When Implemented? _____

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Type of users with access to this system? Select all that apply.

☐ Clinical staff

☐ Administrative staff

☐ Outside staff (contractors, health dept, etc)

☐ Other _____

☐ Don't Know

Estimated total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

Please answer the following questions about your Population Health System.

○ Vendor _____

○ Product _____

○ Version (if known) _____

○ When Implemented? _____

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Type of users with access to this system? Select all that apply.

☐ Clinical staff

☐ Administrative staff

☐ Outside staff (contractors, health dept, etc)

☐ Other _____

☐ Don't Know

Estimated total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

Please answer the following questions about your Membership System.

○ Vendor _____

○ Product _____

○ Version (if known) _____

○ When Implemented? _____

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Type of users with access to this system? Select all that apply.

☐ Clinical staff

☐ Administrative staff

☐ Outside staff (contractors, health dept, etc)

☐ Other _____

☐ Don't Know

Estimated total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

Please answer the following questions about your Claims System.

○ Vendor _____

○ Product _____

○ Version (if known) _____

○ When Implemented? _____

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Type of users with access to this system? Select all that apply.

☐ Clinical staff

☐ Administrative staff

☐ Outside staff (contractors, health dept, etc)

☐ Other _____

☐ Don't Know

Estimated total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

Please answer the following questions about your Other System: ${Q6/ChoiceTextEntryValue/9}

○ Vendor _____

○ Product _____

○ Version (if known) _____

○ When Implemented? _____

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Type of users with access to this system? Select all that apply.

☐ Clinical staff

☐ Administrative staff

☐ Outside staff (contractors, health dept, etc)

☐ Other _____

☐ Don't Know

Estimated total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

Please answer the following questions about your Other
System: ${Q6/ChoiceTextEntryValue/10}

○ Vendor _____

○ Product _____

○ Version (if known) _____

○ When Implemented? _____

What is the future status of the system?

◯ No plan to replace

◯ Plan to replace in next 2 years

◯ Plan to replace in 3-5 years

◯ Plan to replace in 6+ years

◯ Don't know

Type of users with access to this system? Select all that apply.

☐ Clinical staff

☐ Administrative staff

☐ Outside staff (contractors, health dept, etc)

☐ Other _____

☐ Don't Know

Estimated total number of current system users?

◯ 1-10

◯ 11-50

◯ 51+

◯ Don't Know

Display This Question:

If If Which type of system(s) of record will serve as sources of data to support CalAIM? Select all tha...
q://QID83/SelectedChoicesCount Is Greater Than 1

Please briefly describe the extent to which your systems are internally integrated.

_____

_____

_____

Across your system(s) of record that will support CalAIM, which of the CA Department of Health Care Services (DHCS) priority Z-codes do you routinely capture?

- ⊗ All

- ⊗ Don't Know

- ☐ Z55.0: Illiteracy and low-level literacy

- ☐ Z58.6: Inadequate drinking-water supply

- ☐ Z59.00: Homelessness unspecified

- ☐ Z59.01: Sheltered homelessness

- ☐ Z59.02: Unsheltered homelessness

- ☐ Z59.1: Inadequate housing (lack of heating/space, unsatisfactory surroundings)

- ☐ Z59.3: Problems related to living in residential institution

- ☐ Z59.41: Food insecurity

- ☐ Z59.48: Other specified lack of adequate food

- ☐ Z59.7: Insufficient social insurance and welfare support

- ☐ Z59.811: Housing instability, housed, with risk of homelessness

- ☐ Z59.812: Housing instability, housed, homelessness in past 12 months

- ☐ Z59.819 Housing instability, housed unspecified

☐   Z59.89: Other problems related to housing and economic circumstances

☐   Z60.2: Problems related to living alone

☐   Z60.4: Social exclusion and rejection (physical appearance, illness or behavior)

☐   Z62.819: Personal history of unspecified abuse in childhood

☐   Z63.0: Problems in relationship with spouse or partner

☐   Z63.4: Disappearance & death of family member (assumed death, bereavement)

☐   Z63.5: Disruption of family by separation and divorce (marital estrangement)

☐   Z63.6: Dependent relative needing care at home

☐   Z63.72: Alcoholism and drug addiction in family

☐   Z65.1: Imprisonment and other incarceration

☐   Z65.2: Problems related to release from prison

☐   Z65.8: Other specified problems related to psychosocial circumstances (religious or spiritual problem)

Beyond DHCS priority Z-codes, which of the following data types does your organization routinely capture in your system(s) of record that will support CalAIM? This information could come from an outside source or be collected directly by your organization.

- **Structured data:** Data that is clearly defined and organized into specific fields as part of a schema, with each field having a defined purpose (e.g., name, lab values, vital signs etc)
- **Unstructured data:** Data that is stored in its native format and cannot be easily organized using pre-defined structures (e.g., free text notes, images etc)

	Don't Capture	Capture - All Structured Data	Capture - Mix of Structured-Unstructured Data	Capture - All Unstructured Data
Race/Ethnicity	○	○	○	○
Language Spoken	○	○	○	○
Sexual Orientation and Gender Identity (SOGI)	○	○	○	○
Contact Information	○	○	○	○
Housing Status	○	○	○	○
Incarceration Status	○	○	○	○
Probation Status	○	○	○	○
Employment Status	○	○	○	○
Food Insecurity	○	○	○	○
Educational Attainment	○	○	○	○
Transportation Access	○	○	○	○
Exposure to Violence/Intimate Partner Violence	○	○	○	○
Social Connections/Isolation	○	○	○	○
Substance(s) Used in General	○	○	○	○

Diagnosis of Substance Use Disorder	○	○	○	○
Dietary Patterns	○	○	○	○
Physical Activity	○	○	○	○

For data that is structured, to what extent do you <u>use available national standards or other external code sets or definitions</u> for the content? For example, <u>US Core Data for Interoperability (USCDI)</u>is a national standardized set of health data classes and constituent data elements.

○ Use all available national standards/external definitions

○ Use some available national standards/external definitions

○ Use few/no available national standards/external definitions

○ Don't know

Do your staff routinely view health-related information in "outside" systems (i.e., systems that you don't maintain)? These may include systems of community-based organizations (CBOs), other county entities, state systems, etc.

	Entity that Maintains It	How Is It Accessed by Your Staff		
	Name of Entity	Single-sign on/Integrated with Your System	Portal that Requires Separate Log-in	Other

Name of System		○	○	○
Name of System		○	○	○
Name of System		○	○	○

Thinking about the health-related information in your system(s) of record, do you SEND IT/MAKE IT AVAILABLE to outside organizations (e.g., to CBOs, healthcare delivery organizations or other county entities)?

○ ⊗No

○ Yes, using only manual methods (phone, fax, secure fax etc.)

○ Yes, using a combination of manual and electronic methods (directed exchange, query-based exchange)

○ Yes, using only electronic methods

Thinking about the health-related information in your system(s) of record, do you RECEIVE any of it from outside organizations (e.g., information from CBOs, healthcare delivery organizations or other county entities)?

○ ⊗No

○ Yes, using only manual methods (phone, fax, secure fax etc.)

○ Yes, using a combination of manual and electronic methods (directed exchange, query-based exchange)

○ Yes, using only electronic methods

Please indicate which data formats you support to exchange health-related information:

	Capable of supporting this data format		
	Yes, Now	Yes, Future	No
C-CDA	○	○	○
X12	○	○	○
USCDI (any version)	○	○	○
Other	○	○	○
Other	○	○	○

How often used?

	How often used?		
	Often/Routinely	Sometimes/Rarely	Never/Not Applicable
C-CDA	○	○	○
X12	○	○	○
USCDI (any version)	○	○	○
Other	○	○	○
Other	○	○	○

Please indicate which type of HIE networks you participate in to exchange health-related information:

	Exchange Direction			**How Often Used**			**Name of Network(s)/Platform(s)**
	Inbound only	Outbound only	Bidirectional	Often/Routinely	Sometimes/Rarely	Never/Not Applicable	
National Exchange Network/Framework	○	○	○	○	○	○	
Local/regional HIE/HIO	○	○	○	○	○	○	
Community HIE (e.g., Find Help, Unite Us)	○	○	○	○	○	○	

Display This Question:

If Which type of system(s) of record will serve as sources of data to support CalAIM? Select all tha... = Care/case management system

Or Which type of system(s) of record will serve as sources of data to support CalAIM? Select all tha... = Population health system

For care/case management and population health management systems, to what degree are electronic information exchange functions well integrated into provider workflow?

	Degree of Workflow Integration				
	Highly Integrated	Moderately Integrated	Poorly Integrated	Don't Know	N/A
When sending/making data available to external entities	○	○	○	○	○
When receiving/querying data from external entities	○	○	○	○	○

Please briefly describe your current method of member authorization for use/disclosure of health-related information.

_____

_____

_____

_____

_____

What investments are you making in your current systems to prepare for CalAIM?

_____

_____

_____

_____

_____

What is the biggest IT-related challenge you anticipate facing as you prepare for CalAIM?

_____

_____

_____

_____

_____

If applicable, which CalAIM funding opportunities have you or will you apply for? Select all that apply.

- ☐ Providing Access and Transforming Health (PATH)

- ☐ CalAIM Incentive Payment Program (IPP)

- ☐ Housing and Homelessness Incentive Program (HHIP)

- ☐ Behavioral Health Quality Improvement Program (BH-QIP)

- ☐ Other _____

- ☐ Don't Know

Appendix D: Medical Respite Survey Instrument

This survey is being sent to you by a UCSF research team that is leading a project funded by CA DHCS to better understand the electronic system(s) that you use to document and/or view health-related information. Such systems may be full-fledged electronic health records/electronic medical records or electronic systems whose primary purpose is not focused on health but capture one or more types of health-related information. This information will help support CalAIM planning efforts. Click here for more information on CalAIM.

The survey should take less than 20 minutes to complete. If you have any questions about the survey or the broader project, please reach out to Grace Krueger (grace.krueger@ucsf.edu).

Data Sharing:
Your responses to this survey will be included in a report submitted by UCSF to the CA DHCS and the California Health Care Foundation. The report will describe, for each sector and county, the current state of IT capabilities and data capture/data sharing for health-related information. Your survey responses will only be available to UCSF, DHCS, and CHCF, although DHCS or CHCF may provide summary information in a public report in Fall 2022.

Organization Name

_____

Which counties do you service or operate in?

_____

_____

Does your organization capture any of the following types of information in a system that you maintain with respect to the clients/patients to whom you provide services? This information could come from an outside source or be collected directly by your organization.

- **Structured data:** Data that is clearly defined and organized into specific fields as part of a schema, with each field having a defined purpose (e.g., name, lab values, vital signs etc)

- **Unstructured data:** Data that is stored in its native format and cannot be easily organized using pre-defined structures (e.g., free text notes, images etc)

	Don't Capture	Capture - All Structured Data	Capture - Mix of Structured-Unstructured Data	Capture - All Unstructured Data
Race/Ethnicity	○	○	○	○
Language Spoken	○	○	○	○
Sexual Orientation and Gender Identity (SOGI)	○	○	○	○
Contact Information	○	○	○	○
Housing Status	○	○	○	○
Incarceration Status	○	○	○	○
Probation Status	○	○	○	○
Employment Status	○	○	○	○
Food Insecurity	○	○	○	○
Educational Attainment	○	○	○	○
Transportation Access	○	○	○	○
Exposure to Violence/Intimate Partner Violence	○	○	○	○
Social Connections/Isolation	○	○	○	○
Substance(s) Used in General	○	○	○	○

Diagnosis of Substance Use Disorder	○	○	○	○
Dietary Patterns	○	○	○	○
Physical Activity	○	○	○	○

Do you capture any types of clinical/medical information (e.g., diagnoses, procedures, vital signs, medications)? Please list:

_____

_____

_____

_____

_____

For information that is structured, to what extent do you <u>use available national standards or other external code sets or definitions</u> for the content? For example, <u>US Core Data for Interoperability (USCDI)</u>is a national standardized set of health data classes and constituent data elements.

○ Use all available national standards/external definitions

○ Use some available national standards/external definitions

○ Use few/no available national standards/external definitions

○ Don't know

Please list the name of the software used as your electronic system(s) (e.g. EHR, Excel spreadsheet, case management system) to document health-related information. If not applicable, please leave blank.

○ System 1 _____

○ System 2 (if applicable) _____

○ System 3 (if applicable) _____

For your system, ${Q5/ChoiceTextEntryValue/1}, please answer the following questions.

○ Vendor _____

○ When Implemented _____

Type of users with access to this system? Select all that apply.

☐   Clinical staff

☐   Administrative staff

☐   Outside staff (contractors, health dept, etc)

☐   Other _____

☐   Don't Know

Total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

How easy is it to use this system to do your work?

○ Very easy

○ Somewhat easy

○ Somewhat difficult

○ Very difficult

○ Don't Know

For your system, ${Q5/ChoiceTextEntryValue/2}, please answer the following questions.

○ Vendor _____

○ When Implemented _____

Type of users with access to this system? Select all that apply.

☐   Clinical staff

☐   Administrative staff

☐   Outside staff (contractors, health dept, etc)

☐   Other _____

☐   Don't Know

Total number of current system users?

○ 1-10

○ 11-50

○ 51+

○ Don't Know

How easy is it to use this system to do your work?

○ Very easy

○ Somewhat easy

○ Somewhat difficult

○ Very difficult

○ Don't Know

For your system, ${Q5/ChoiceTextEntryValue/3}, please answer the following questions.

○ Vendor _____

○ When Implemented _____

Type of users with access to this system? Select all that apply.

- ☐ Clinical staff

- ☐ Administrative staff

- ☐ Outside staff (contractors, health dept, etc)

- ☐ Other _____

- ☐ Don't Know

Total number of current system users?

- ○ 1-10

- ○ 11-50

- ○ 51+

- ○ Don't Know

How easy is it to use this system to do your work?

- ○ Very easy

- ○ Somewhat easy

- ○ Somewhat difficult

- ○ Very difficult

- ○ Don't Know

Do you have a position specifically assigned to data processing including data entry, cleaning, analysis, and/ or evaluation?

○ Yes

○ No

○ Don't Know

Is this position and the time allotted currently sufficient to your data needs?

○ Yes

○ No

○ Don't Know

Do your staff routinely view health-related information in "outside" systems (i.e., systems that you don't maintain)? These may include systems of community-based organizations (CBOs), other county entities, state systems, etc.

	Entity that Maintains It	How Is It Accessed by Your Staff		
	Name of Entity	Through your electronic system (e.g. EHR)	Portal that Requires Separate Log-in	Other

Name of System		○	○	○
Name of System		○	○	○
Name of System		○	○	○

To what extent are you able to easily access timely and complete information from the outside system(s) in the prior question?

○ Often/Routinely

○ Sometimes

○ Rarely

○ Never

Thinking about the health-related information in your system, do you SEND IT/MAKE IT AVAILABLE to outside organizations (e.g., to CBOs, healthcare delivery organizations or other county entities when you are making a referral for consultation or handoff)? Select all that apply.

☐   ⊗ No

☐   Yes, using manual methods (phone, fax, secure fax etc.)

☐   Yes, using electronic exchange methods (secure email, SFTP, HL7 messages, APIs, via a local/regional HIE/HIO, via a community HIE like Find Help/Unite Us, via a portal, etc.)

☐   Yes, happens automatically via system (i.e., EHR makes it available)

Thinking about the health-related information in your system, do you RECEIVE any of it from outside organizations (e.g., information from CBOs, healthcare delivery organizations or other county entities when you are receiving a referral)? Select all that apply.

☐   ⊗ No

☐   Yes, using manual methods (phone, fax, secure fax etc.)

☐   Yes, using electronic exchange methods (secure email, SFTP, HL7 messages, APIs, via a local/regional HIE/HIO, via a community HIE like Find Help/Unite Us, via a portal, etc.)

☐   Yes, happens automatically via system (i.e., access via EHR)

Please describe your current **consent procedures** related to sending and receiving patient/client health-related information.

_____

_____

_____

_____

_____

What investments are you making in your current systems to prepare for CalAIM?

_____

_____

_____

_____

_____

What is the biggest IT-related challenge you anticipate facing as you prepare for CalAIM?

_____

_____

_____

_____

_____

If applicable, which CalAIM funding opportunities have you or will you apply for? Select all that apply.

☐　　Providing Access and Transforming Health (PATH)

☐　　CalAIM Incentive Payment Program (IPP)

☐　　Housing and Homelessness Incentive Program (HHIP)

☐　　Behavioral Health Quality Improvement Program (BH-QIP)

☐　　Other _____

☐　　Don't Know

The following questions may require specific IT knowledge and expertise. If you are able to complete them or are willing to consult with IT staff to complete them, we would value the additional information. If you cannot complete them, please leave the questions blank and click "next" until you reach the end of the survey.

In addition to the information already provided on your electronic system, ${Q5/ChoiceTextEntryValue/1}, please answer the following more detailed questions.

○ Product _____

○ Version _____

Who maintains the system? Select all that apply.

☐ Internal IT group

☐ Third-party contractors

☐ Vendor

☐ Other county entity

☐ Other: _____

☐ Don't know

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Estimated Number of Users who Document Health-related Information

○ Staff you employ _____

○ Third-party contractors _____

○ Other _____

In addition to the information already provided on your electronic system,
${Q5/ChoiceTextEntryValue/2}, please answer the following more detailed questions.

○ Product _____

○ Version _____

Who maintains the system? Select all that apply.

☐   Internal IT group

☐   Third-party contractors

☐   Vendor

☐   Other county entity

☐   Other: _____

☐   Don't know

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Estimated Number of Users who Document Health-related Information

○ Staff you employ _____

○ Third-party contractors _____

○ Other _____

In addition to the information already provided on your electronic system, ${Q5/ChoiceTextEntryValue/3}, please answer the following more detailed questions.

○ Product _____

○ Version _____

Who maintains the system? Select all that apply.

☐   Internal IT group

☐   Third-party contractors

☐   Vendor

☐   Other county entity

☐   Other: _____

☐   Don't know

What is the future status of the system?

○ No plan to replace

○ Plan to replace in next 2 years

○ Plan to replace in 3-5 years

○ Plan to replace in 6+ years

○ Don't know

Estimated Number of Users who Document Health-related Information

○ Staff you employ _____

○ Third-party contractors _____

○ Other _____

Please indicate the extent to which each method is used to SEND/MAKE AVAILABLE health-related information from your system(s) to outside organizations (e.g. when you are making a

referral for consultation or handoff): Hover mouse over underlined terms for definitions.

	How Often Used			Types of Entities to Which Information is Sent Using this Method
	Often/Routinely	Sometimes/Rarely	Never/Not Applicable	Type of Entity
Fax/eFax/Secure Fax	○	○	○	
Secure Email	○	○	○	
SFTP	○	○	○	
HL7 Message	○	○	○	
API	○	○	○	

Via local/regional HIE/HIO	○	○	○
Via community HIE (e.g. Find Help, Unite Us)	○	○	○
Portal	○	○	○
Other	○	○	○
Other	○	○	○

Please indicate the extent to which each method is used to RECEIVE health-related information from outside systems to your system(s) (e.g. when you are receiving a referral):

Hover mouse over underlined terms for definitions.

	How Often Used	Types of Entities from Which Information is Received Using this Method

	Often/Routinely	Sometimes/Rarely	Never/Not Applicable	Type of Entity
Fax/eFax/Secure Fax	○	○	○	
Secure Email	○	○	○	
SFTP	○	○	○	
HL7 Message	○	○	○	
API	○	○	○	
Via local/regional HIE/HIO	○	○	○	
Via community HIE (e.g. Find Help, Unite Us)	○	○	○	

Portal	○	○	○	
Other	○	○	○	
Other	○	○	○	
Other	○	○	○	

Appendix E: County-Level Mental Health Plans Information System (IS) Data (FY21-22) (N=52).

County	System #1 Used (Product)	System #1 Used (Vendor)	Time System #1 Used (years)
Alameda	InSyst	The Echo Group	30
Alpine	Community Behavioral Health	Cerner	10
Amador	Anasazi	Cerner	8
Butte	MyAvatar	NetSmart	12
Calaveras	Community Behavioral Health	Cerner	8
Colusa	Anasazi	Cerner	10
Contra Costa	ccLink	Epic	4
El Dorado	MyAvatar	NetSmart	15
Fresno	MyAvatar	NetSmart	11
Glenn	Community Behavioral Health	Cerner	9
Humboldt	MyAvatar	Netsmart	7
Imperial	MyAvatar	Netsmart	18
Kern	Anasazi	Cerner	15
Kings	Community Behavioral Health	Cerner	14
Lake	Community Behavioral Health	Cerner	13
Lassen	WITS	FEI Systems	0.5
Los Angeles	MyAvatar	Netsmart	8
Madera	InSync	InSync	1
Marin	Clinician's Gateway	Krasson Incorporated	15
Mariposa	InSync	InSync	1
Mendocino	MyAvatar	Netsmart	18
Merced	Community Behavioral Health	Cerner	11
Modoc	Community Behavioral Health	Cerner	10
Monterey	MyAvatar	NetSmart	12
Napa	Anasazi	Cerner	14
Nevada	Community Behavioral Health	Cerner	10
Orange	Millennium	Cerner	18
Placer/Sierra	MyAvatar	NetSmart	18
Plumas	Anasazi	Cerner	11

County	System #1 Used (Product)	System #1 Used (Vendor)	Time System #1 Used (years)
Sacramento	MyAvatar	Netsmart	12
San Benito	Community Behavioral Health	Cerner	15
San Bernadino	MyAvatar	NetSmart	1
San Diego	Community Behavioral Health	Cerner	13
San Francisco	MyAvatar	NetSmart	11
San Joaquin	Clinician's Gateway	Krasson Incorporated	13
San Luis Obispo	Anasazi	Cerner	10.4
San Mateo	MyAvatar	NetSmart	12
Santa Barbara	Clinician's Gateway	Krasson Incorporated	15
Santa Clara	MyAvatar	NetSmart	1
Santa Cruz	MyAvatar	NetSmart	6
Shasta	Community Behavioral Health	Cerner	10
Siskiyou	Anasazi	Cerner	8
Solano	MyAvatar	NetSmart	8
Sonoma	MyAvatar	NetSmart	9
Stanislaus	Community Behavioral Health	Cerner	9.5
Sutter/Yuba	Community Behavioral Health	Cerner	9
Tehama	NA (does not use EHR, uses Netsmart CMHC for claiming/performance management)	NA	NA
Trinity	Community Behavioral Health	Cerner	12
Tulare	MyAvatar	NetSmart	8
Tuolumne	Community Behavioral Health	Cerner	14
Ventura	MyAvatar	NetSmart	12
Yolo	MyAvatar	NetSmart	15

County	% Budget for IS Support	Budget Determination Process	# of Users	# of County-Operated Staff	# of Contracted Staff
Alameda	4.21	Under MHP control	2732	619	2113
Alpine	3	Allocated to MHP but managed by other county department	8	6	2
Amador	3.4	Managed by county IT department	40	29	11
Butte	3	Under MHP control	577	531	46
Calaveras	4.9	Combined MHP control and another county department	66.5	45.5	21
Colusa	6	Combined MHP control and another county department	47	47	0
Contra Costa	2	Allocated to MHP but managed by other county department	789	619	170
El Dorado	3.4	Combined MHP control and another county department	117	82	35
Fresno	2.4	Under MHP control	1127	434	693
Glenn	4.12	Combined MHP control and another county department	79	77	2
Humboldt	3	Combined MHP control and another county department	320	320	0
Imperial	3.8	Under MHP control	531	519	12
Kern	3.4	Combined MHP control and another county department	1726	826	900
Kings	4.01	Combined MHP control and another county department	141	39	102
Lake	1.93	Under MHP control	95	60	35
Lassen	3	Allocated to MHP but managed by other county department	38	33	5
Los Angeles	2.3	Under MHP control	5553	3928	1625
Madera	9.13	Combined MHP control and another county department	150	145	5
Marin	3.49	Combined MHP control and another county department	293	152	141

County	% Budget for IS Support	Budget Determination Process	# of Users	# of County-Operated Staff	# of Contracted Staff
Mariposa	6.39	Combined MHP control and another county department	50	36	14
Mendocino	7	Under MHP control	43		
Merced	4.11	Combined MHP control and another county department	359	221	138
Modoc	5	Under MHP control	28	26	2
Monterey	2.37	Combined MHP control and another county department	680	450	230
Napa	2	Combined MHP control and another county department	358	130	228
Nevada	1.5	Combined MHP control and another county department	220	68	152
Orange	5.7	Combined MHP control and another county department	2893	850	2043
Placer/Sierra	7	Combined MHP control and another county department	256	238	18
Plumas	5	Under MHP control	54	43	11
Sacramento	4.12	Combined MHP control and another county department	1960	540	1420
San Benito	2	Combined MHP control and another county department	57	54	3
San Bernadino	6.12	Combined MHP control and another county department	1715	1121	594
San Diego	7.2	Combined MHP control and another county department	4460	610	3850
San Francisco	1.24	Combined MHP control and another county department	3208	1123	2085
San Joaquin	1.5	Combined MHP control and another county department	1098	683	415
San Luis Obispo	2.63	Combined MHP control and another county department	469	243	226
San Mateo	3	Combined MHP control and another county department	604	565	39
Santa Barbara	4.5	Combined MHP control and another county department	865	363	502
Santa Clara	1.3	Combined MHP control and another county department	2899	1799	1100

County	% Budget for IS Support	Budget Determination Process	# of Users	# of County-Operated Staff	# of Contracted Staff
Santa Cruz	1.2	Allocated to MHP but managed by the HSA	550	206	344
Shasta	1.5	Combined MHP control and another county department	179	179	0
Siskiyou	6	Under MHP control	63	55	8
Solano	3.28	Combined MHP control and another county department	367	228	139
Sonoma	2.14	Combined MHP control and another county department	337	312	25
Stanislaus	3.48	Combined MHP control and another county department	1193	553	640
Sutter/Yuba	3.6	Under MHP control	236	196	40
Tehama	3.9	Under MHP control	91	91	0
Trinity	6.29	Under MHP control	39	34	5
Tulare	3	combined MHP control and its umbrella agency, the HHS, and the county IT	748	259	487
Tuolumne	5	Combined MHP control and another county department	53	46	7
Ventura	7.03	Combined MHP control and another county department	752	554	198
Yolo	1.9	Under MHP control	213	99	113

County	Contract Providers' Submittal Methods to Transmit Beneficiary Information to MHP IS					
	Manual Data Entry Percentage	Email/Fax Percentage	Paper Delivery Percentage	HIE Percentage	Electronic Data Interchange Percentage	Electronic Batch File Transfer Percentage
Alameda	55	0	10	0	35	55
Alpine	0	0	0	0	0	0
Amador	100	0	0	0	0	100
Butte	65	2	0	8	25	65
Calaveras	50	35	15	0	0	50
Colusa	0	0	0	0	0	0
Contra Costa	88	0	0	0	12	88
El Dorado	34	1	0	0	65	34
Fresno	65	0	8	0	27	65
Glenn	90	2	8	0	0	90
Humboldt	0	0	100	0	0	0
Imperial	75	25	0	0	0	75
Kern	100	0	0	0	0	100
Kings	90	5	5	0	0	90
Lake	20	50	30	0	0	20
Lassen	0	0	0	0	0	0
Los Angeles	10	5	5	80	0	10
Madera	25	50	25	0	0	25
Marin	50	50	0	0	0	50
Mariposa	100	0	0	0	0	100
Mendocino	0	0	5	95	0	0
Merced	57	41	2	0	0	57
Modoc	80	20	0	0	0	80
Monterey	100	0	0	0	0	100

County	Contract Providers' Submittal Methods to Transmit Beneficiary Information to MHP IS					
	Manual Data Entry Percentage	Email/Fax Percentage	Paper Delivery Percentage	HIE Percentage	Electronic Data Interchange Percentage	Electronic Batch File Transfer Percentage
Napa	7	93	0	0	0	0
Nevada	37	22	41	0	0	0
Orange	97	0	0	0	0	3
Placer/Sierra	60	40	0	0	0	0
Plumas	100	0	0	0	0	0
Sacramento	90	10	0	0	0	0
San Benito	0	100	0	0	0	0
San Bernardino	69	0	0	0	12	19
San Diego	100	0	0	0	0	0
San Francisco	75	0	0	0	0	25
San Joaquin	100	0	0	0	0	0
San Luis Obispo	60	5	5	0	0	30
San Mateo	10	55	5	0	0	30
Santa Barbara	93	3	4	0	0	0
Santa Clara	30	0	0	0	0	70
Santa Cruz	80	5	15	0	0	0
Shasta	0	45	55	0	0	0
Siskiyou	0	15	85	0	0	0
Solano	5	0	0	0	0	95
Sonoma	0	100	0	0	0	0
Stanislaus	100	0	0	0	0	0
Sutter/Yuba	100	0	0	0	0	0
Tehama	0	10	90	0	0	0
Trinity	90	0	10	0	0	0

County	Contract Providers' Submittal Methods to Transmit Beneficiary Information to MHP IS					
	Manual Data Entry Percentage	Email/Fax Percentage	Paper Delivery Percentage	HIE Percentage	Electronic Data Interchange Percentage	Electronic Batch File Transfer Percentage
Tulare	84	16	0	0	0	0
Tuolumne	16	12	72	0	0	0
Ventura	100	0	0	0	0	0
Yolo	45	40	15	0	0	0

Appendix F: Continuum of Care HMIS Vendor Data (2015-2021)

CoC #	CoC Name	County	2015	2017	2019	2021
CA-500	San Jose/Santa Clara City & County CoC	Santa Clara	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-501	San Francisco CoC	San Francisco	Social Solutions	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-502	Oakland, Berkeley/Alameda County CoC	Alameda	WellSky	WellSky	Bitfocus, Inc	Bitfocus, Inc
CA-503	Sacramento City & County CoC	Sacramento	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-504	Santa Rosa, Petaluma/Sonoma County CoC	Sonoma	Social Solutions	Social Solutions	Social Solutions	Social Solutions
CA-505	Richmond/Contra Costa County CoC	Contra Costa	WellSky	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-506	Salinas/Monterey, San Benito Counties CoC	Monterey, San Benito	Community Technology Alliance	WellSky	WellSky	WellSky
CA-507	Marin County CoC	Marin	Caseworthy	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-508	Watsonville/Santa Cruz City & County CoC	Santa Cruz	WellSky	WellSky	Bitfocus, Inc	Bitfocus, Inc
CA-509	Mendocino County CoC	Mendocino	Eccovia Solutions	Eccovia Solutions	Eccovia Solutions	WellSky
CA-510	Turlock, Modesto/Stanislaus County CoC	Stanislaus	Eccovia Solutions	Eccovia Solutions	Eccovia Solutions	Eccovia Solutions
CA-510	Stockton/San Joaquin County CoC	San Joaquin	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-512	Daly City/San Mateo County CoC	San Mateo	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-513	Visalia/Kings, Tulare Counties CoC	Kings, Tulare	Eccovia Solutions	Eccovia Solutions	Eccovia Solutions	Eccovia Solutions
CA-514	Fresno City & County/Madera County CoC	Fresno, Madera	WellSky	WellSky	WellSky	WellSky
CA-515	Roseville, Rocklin/Placer County CoC	Placer	WellSky	WellSky	WellSky	WellSky
CA-516	Redding/Shasta County CoC	Shasta, Siskiyou, Lassen, Plumas, Del Norte, Modoc, Sierra	Bell Data Systems, Inc.	WellSky	WellSky	WellSky
CA-517	Napa City & County CoC	Napa	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-518	Vallejo/Solano County CoC	Solano	WellSky	WellSky	WellSky	WellSky
CA-519	Chico, Paradise/Butte County CoC	Butte	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-520	Merced City & County CoC	Merced	WellSky	WellSky	WellSky	Bitfocus, Inc

CA-521	Davis, Woodland/Yolo County CoC	Yolo	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-522	Humboldt County CoC	Humboldt	WellSky	WellSky	WellSky	WellSky
CA-523	Colusa, Glen, Trinity Counties CoC	Colusa, Glenn, Trinity	Bell Data Systems, Inc.	WellSky	WellSky	WellSky
CA-524	Yuba City/Sutter County CoC	Yuba, Sutter	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.
CA-525	El Dorado County CoC	El Dorado	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.
CA-526	Tuolumne, Amador, Calaveras, Mariposa Counties CoC	Tuolumne, Amador, Calveras, Mariposa	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.
CA-527	Tehama County CoC	Tehama	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Social Solutions
CA-529	Lake County CoC	Lake	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc	Social Solutions
CA-530	Alpine, Inyo, Mono Counties CoC	Alpine, Inyo, Mono	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.
CA-531	Nevada County CoC	Nevada	WellSky	WellSky	WellSky	WellSky
CA-600	Los Angeles City & County CoC	Los Angeles	Adsystech	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-601	San Diego City and County CoC	San Diego	WellSky	WellSky	Bitfocus, Inc	Bitfocus, Inc
CA-602	Santa Ana, Anaheim/Orange County CoC	Orange	Adsystech	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-603	Santa Maria/Santa Barbara County CoC	Santa Barbara	WellSky	WellSky	WellSky	WellSky
CA-604	Bakersfield/Kern County CoC	Kern	Eccovia Solutions	Eccovia Solutions	Bitfocus, Inc	Bitfocus, Inc
CA-606	Long Beach CoC	Los Angeles	Eccovia Solutions	WellSky	WellSky	Bitfocus, Inc
CA-607	Pasadena CoC	Los Angeles	Adsystech	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-608	Riverside City & County CoC	Riverside	Eccovia Solutions	Eccovia Solutions	Eccovia Solutions	Bitfocus, Inc
CA-609	San Bernardino City & County CoC	San Bernardino	Eccovia Solutions	Eccovia Solutions	Eccovia Solutions	Eccovia Solutions
CA-611	Oxnard, San Buenaventura/Ventura County CoC	Ventura	WellSky	WellSky	WellSky	WellSky
CA-612	Glendale CoC	Los Angeles	Adsystech	Bitfocus, Inc	Bitfocus, Inc	Bitfocus, Inc
CA-613	Imperial County CoC	Imperial	WellSky	WellSky	Bitfocus, Inc	Bitfocus, Inc
CA-614	San Luis Obispo County CoC	San Luis Obispo	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.	Bell Data Systems, Inc.