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sonoma county
DEPARTMENT OF HEALTH SERVICES
BEHAVIORAL HEALTH DIVISION

Sonoma County Innovation Plan Proposal

California Mental Health Services Authority (CalMHSA): Semi-Statewide Enterprise Health Record

California Mental Health Services Authority (CalMHSA):
Semi-Statewide Enterprise Health Record for Sonoma County

Innovation (INN) Project Name:	Semi-Statewide Enterprise Health Record
Total INN and CFTN Funding Requested:	$5,526,045
Duration of INN Project:	Five (5) Calendar Years: 2022-2026

Community Program Planning:

Dates Project Shared with Stakeholders:	May 11 and 17, 2022
Public Comment Period:	June 20, 2022- July 19, 2022
Mental Health Board Public Hearing Scheduled:	July 19, 2022
Scheduled for review by the County Board of Supervisors:	August 2, 2022

GENERAL REQUIREMENT AND PRIMARY PURPOSE

General Requirement

X	Introduces a new practice or approach to the overall mental health system, including prevention and early intervention
	Makes a change to an existing practice in the field of mental health, including but not limited to, application to a different population
	Applies a promising community driven practice or approach that has been successful in non-mental health context or setting to the mental health system

Primary Purpose

	Increases access to mental health services to underserved groups
X	Increases the quality of mental health services, including measured outcomes
X	Promotes interagency and community collaboration related to mental health services or supports or outcomes
	Increases access to mental health services, including but not limited to, services provided through permanent supportive housing

Primary Problem

Behavioral Health Plans in California have had a limited number of options from which to choose when seeking to implement a new Electronic Health Record (EHR). The majority of EHR vendors develop products to meet the needs of the much larger physical health care market, while the few national vendors that cater to the behavioral health market have been disincentivized from operating in California by the many unique aspects of the California behavioral health landscape. This has resulted in the majority of county BHPs largely dissatisfied with their current EHRs, yet with few viable choices when it comes to implementing new solutions. The pervasive difficulties of 1) configuring the existing EHRs to meet the everchanging California requirements, 2) collecting and reporting on meaningful outcomes for all of the county BH services (including MHSA-funded activities), and 3) providing direct service staff and the clients they serve with tools that enhance rather than hinder care have been difficult and costly to tackle on an individual county basis.

Currently, EHRs have been identified as a source of burnout and dissatisfaction among healthcare direct service staff. EHRs, which were first and foremost designed as billing engines, have not evolved to prioritize the user experience of either the providers or recipients of care. The impact of this design issue is telling – an estimated 40% of a healthcare staff person's workday is currently spent in documenting encounters, instead of providing direct client care. This estimate does not consider the full breath of the BHP workforce, which relies on a wide diversity of provider types needed to respond to the Medi-Cal population.

Sonoma County Behavioral Health currently utilizes 3 primary systems (Avatar, SWITS, and DCAR) to manage clinical documentation, mandated data reporting, and billing/claiming (primarily Medi-Cal). Current FY 21/22 contract amounts for these systems totals of $857,701, $91,970, and $34,500, respectively.

Within the last year, CalMHSA has developed a plan to procure and administer a Semi-Statewide Electronic Health Record (EHR) for California Counties. The goal of CalMHSA's effort is to partner with the EHR Contractor and participating counties to configure a California-centric Enterprise Health Record that will then be implemented across multiple counties.

Sonoma County, like many California Counties, has struggled with implementing Federal and State requirements, in particular with our current EHR vendors and systems. The Division has minimal resources to administer our systems, and lack technical expertise in the area of modification, enhancement, implementation and maintenance of our EHR systems.

The Division's efforts over the years to implement Avatar has been challenging and expensive, and there have been significant delays with project timelines and deliverables. SWITS provides a basic system that has been used for over a decade. As we move towards implementing the Drug Medi-Cal Organized Delivery System (DMC-ODS), SWITS will require significant upgrades, changes to configuration, and

enhancements in order to comply with the various regulatory requirements associated with DMC-ODS.

The Division has been unsuccessful with implementing the use of Avatar with our community-based organizations, which provide approximately 40% of our mental health services. As a result, we have continued to use the CANS/ANSA Data Collection and Reporting (DCAR) System in order to track and submit required CANS/ANSA outcomes data.

California Advancing and Innovating Medi-Cal (CalAIM) changes target documentation redesign, payment reform and data exchange requirements bringing California BH requirements into greater alignment with national physical healthcare standards, thereby creating a lower-barrier entry to EHR vendors seeking to serve California. At the same time, the COVID-19 pandemic has increased the demand for behavioral health services, had disproportionately impacted communities of color, and has factored into the staggering workforce shortages faced by counties throughout California. BHPs need to foundationally revamp their primary service tool to meet the challenges and opportunities of this moment. BHPs, in partnership with CalMHSA are positioned to do just that through the Semi-Statewide EHR initiative. Clearly, this current moment provides both the opportunity and the imperative for counties to take a substantial leap forward with regard to EHRs.

In addition, CalAIM is a massive initiative requiring all California counties to implement various goals and milestones. With this comes several new requirements which will need to be addressed through updates and modification to each County's EHR such as payment reform, data exchange, and behavioral health policy changes (ie screening tools and clinical documentation).

***Proposed Solution*:** Sonoma County Department of Health Services, Behavioral Health Division Participates in the *Semi-Statewide Enterprise Health Record Project*

Sonoma County Behavioral Health Division is proposing to use MHSA Innovation (INN) and Capital Facility and Technology funds to contract and participate with California Mental Health Services Authority (CalMHSA) to implement a Semi-Statewide Electronic Health Record (EHR) that meets the new CalAIM requirements.

California Mental Health Services Authority (CalMHSA) is a Joint Powers of Authority (JPA), formed in 2009, for the purpose of creating a separate public entity to provide administrative and fiscal services in support of County Behavioral Health Departments. They serve California Counties in the dynamic delivery of behavioral health and supportive services by promoting efficiency, effectiveness, and enterprising among all 58 Counties. In response to CalAIM, CalMHSA has proposed a Semi-Statewide Electronic Health Record.

CalMHSA is currently partnering with 20+ California Counties – collectively responsible for over half of the state's Medi-Cal beneficiaries – to enter into a Semi-Statewide Enterprise Health Record project. This project is unique in that it engages counties to collaboratively design a lean and modern EHR to meet the needs of counties and the communities they serve both now and into the intermediate future. The key principles of the EHR project include:

- **Enterprise Solution**: Acquisition of an EHR that supports the entirety of the complex business needs (the entire "enterprise") of County Behavioral Health Plans.

- **Collective Activism**: Moving from solutions developed within individual counties to a semi-statewide scale allows counties to achieve alignment, pool resources, and bring forward scaled solutions to current problems, thus reducing waste, mitigating risk, and improving quality.

- **Leveraging CalAIM**: CalAIM implementation represents a transformative moment when primary components within an EHR are being re-designed (clinical documentation and Medi-Cal claiming) while data exchange and interoperability with physical health care towards improving care coordination and client outcomes are being both required and supported by the State.

Optimizing EHR platforms used by providers to meet their daily workflow needs can enhance their working conditions, increase efficiencies, and reduce burnout. This increased efficiency translates into more time to meet the needs of Californians with serious behavioral health challenges, while improving overall client care and increasing provider retention.

Additionally, the State has introduced new regulations that require a more sophisticated and customizable electronic health record. Centers for Medicare & Medicaid Services (CMS) announced that they had approved the California Department of Health Care Services' (DHCS') request for a five-year extension of its Medicaid section 1115 demonstration and a five-year extension of its Medicaid managed care section 1915(b) waiver. Both were scheduled to expire on December 31, 2021. The demonstration and managed care 1915(b) combination, re-named "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.

The INN project will have three (3) phases:

1) **Formative Evaluation**: Prior to implementation of the new EHR, the project will measure key indicators of time, effort, cognitive burden, and satisfaction while providers utilize their current or "legacy" EHR systems. The data collected by direct observation of staff workflows currently in use will then be assembled and analyzed using quantitative scales. Objective data for example, length of time

moving between screens, number of mouse clicks, and amount of time required, as well as subjective data to measure user satisfaction, will be incorporated into the evaluation process.

2) **Design Phase**: Based on data gathered from the initial phase, Human-centered design (HCD) experts will assist with identifying solutions to problems identified during the evaluation of the legacy products. This process will help ensure the needs of service providers, inclusive of licensed professionals, paraprofessionals, and peers, and in turn their clients, will be at the forefront of the design and implementation of the new EHR. In order to create as many efficiencies as feasible, the design phase will be iterative, to assure feedback from users and stakeholders is incorporated throughout the process.
3) **Summative Evaluation**: After implementation of the new EHR, the same variables collected during the Formulative Evaluation will be re-measured to assess the impact of the Design Phase interventions.

The HCD approach is supported by research and is a key component of this project. Enlisting providers' knowledge and expertise of their daily clinical operations in order to inform solutions in the Design Phase is vital to ensuring the new EHR is responsive to the needs of the BHP workforce as well as the clients they serve.

Project Management and Administration

- **CalMHSA**: CalMHSA will serve as the Administrative Entity and Project Manager. CalMHSA will execute Participation Agreements with each respective county, as well as contracts with the selected EHR Vendor and Evaluator.
- **Streamline Healthcare Solutions**: This vendor will be responsible for the development, implementation, and maintenance of the Semi-Statewide EHR.
- **RAND**: As the evaluation vendor, RAND will assist in ensuring the INN project is congruent with quantitative and qualitative data reporting on key indicators, as determined by the INN project. These indicators include, but may not be limited to, impacts of human-centered design principles with emphasis on provider satisfaction, efficiencies, and retention. In addition, RAND will subcontract with a subject matter expert in the science of human-centered design to ensure the project is developed in a manner that is most congruent to the needs of the behavioral health workforce and the diverse communities they serve.

Project Objectives

CalMHSA will partner with RAND to achieve the following preliminary objectives:

- **Objective I**: *Shared decision making and collective impact*. Over the course of the EHR project, RAND will evaluate stakeholder perceptions of and satisfaction with the decision-making process as well as suggestions for improvement.
- **Objective II**: *Formative assessment*. RAND will conduct formative assessments to iteratively improve the new EHR's user experience and usability during design, development, and pilot implementation phases. This will include:

- A discovery process identifying key challenges that the new EHR is aiming to improve and establish strategic areas for testing (e.g., efficiency, cognitive load, effectiveness, naturalness, satisfaction).
- Testing EHR usage with core workflows (e.g., writing progress notes; creating a new client records) as well as common case scenarios (e.g., potential client calls an "Access Center" for services, before or after hours; sending referrals to other agencies or teams) in order to identify opportunities for increased efficiencies / standardization.
- Iterative testing and feedback of new EHR vendor's design (wireframes and prototypes) using agreed-upon scenarios, including interviews and heuristic evaluation workshops as appropriate.
- Identifying performance indicators to gauge success, such as measures of efficiency (e.g., amount of time spent completing a task; number of clicks to access a needed form or pertinent client information), provider effectiveness, naturalness of a task, and provider cognitive load / burden and satisfaction.

- **Objective III**: *Summative assessment*. Conduct a summative evaluation of user experience and satisfaction with the new EHR compared to legacy EHRs, as well as a post-implementation assessment of key indicators.

Project Learning Goals

1. Using a Human Centered Design approach, identify the design elements of a new Enterprise Health Record to improve California's public mental health workforce's job effectiveness, satisfaction, and retention.

2. Implement a new EHR that is more efficient to use, resulting in a projected 30% reduction in time spent documenting services, thereby increasing the time spent providing direct client care.

3. Implement a new EHR that facilitates a client-centered approach to service delivery, founded upon creating and supporting a positive therapeutic alliance between the service provider and the client.

Budget

The amount of Sonoma County's MHSA Innovation (INN) funding is **$4,288,215.07** and the total amount of MHSA funding for the project over seven years is **$5,825,991.07.** The final two years of the project, calendar years 2027 and 2028, will be funded with Sonoma County's MHSA Capital Facilities and Technological Needs (CFTN) component.

Year	MHSA Funding Component	Amount
2022	INN	$1,038,189.84
2023	INN	$943,361.23
2024	INN	$768,888.00
2025	INN	$768,888.00
2026	INN	$768,888.00
2027	CFTN	$768,888.00
2028	CFTN	$768,888.00
	Total Innovation Funding	$4,288,215.07
	Total Cost Over 7 Years	**$5,825,991.07**

Fees:

Description	7 Year Total
One-Time Fees	$596,059.07
Implementation Fees	$872,900.00
Subscription Fees	$4,357,032.00

Description	Unit	Fee Type	7 Year Total
Timeline			
Participant Instance Installation	1	One-Time	$250,000.00
System Acquisition Fee	1	One-Time	$115,353.02
Initial Development Fee (Customization and Security)	1	One-Time	$115,353.02
Discretionary Development Budget	1	One-Time	$115,353.02
Professional Services Implementation	1	One-Time	$800,000.00
SmartCare Patient Portal Implementation	1	One-Time	$2,400.00
SmartCare IP/Residential Implementation	1	One-Time	$7,500.00
SmartCare OE/EMAR Implementation	1	One-Time	$18,000.00
SmartCare Pharmacy Interface Implementation	1	One-Time	$15,000.00

SmartCare Pyxis Interface Implementation	0	One-Time	$0.00
SmartCare HIE / MCO Interface via FHIR Implementation	1	One-Time	$12,000.00
High Availability Cloud Infrastructure Implementation	1	One-Time	$12,000.00
Disaster Recovery Implementation	1	One-Time	$6,000.00
SmartCare CalMHSA Package	800	Monthly	$2,997,440.00
SmartCare Rx Prescribers Subscription	60	Monthly	$487,968.00
SmartCare Patient Portal Subscription	4000	Monthly	$25,024.00
SmartCare IP/Residential Subscription	1	Monthly	$97,750.00
SmartCare OE/EMAR Subscription	1	Monthly	$97,750.00
SmartCare Pharmacy Interface Subscription	1	Monthly	$19,550.00
SmartCare Pyxis Interface Subscription	0	Monthly	$0.00
SmartCare HIE / MCO Interface via FHIR	1	Monthly	$19,550.00
SmartCare Add-On Hosting Storage Subscription	1000	Monthly	$68,000.00
High Availability Cloud Infrastructure Subscription	1	Monthly	$380,800.00
Disaster Recovery Subscription	1	Monthly	$163,200.00