Mental Health Services Act (MHSA) Capital Facilities and Technological Needs

PROPOSED GUIDELINES
For completing the

Technological Needs Project Proposal

FOR THE COUNTY'S THREE-YEAR PROGRAM AND EXPENDITURE PLAN

March 18, 2008

Mental Health Services Act
Technological Needs Project Proposal

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PART I. PURPOSE AND BACKGROUND

Purpose

This document provides proposed guidelines for the submission of the Technological Needs Project Proposal(s) to ensure that the Project(s) achieve the County and Department of Mental Health (DMH, Department) goals for a transformed public mental health system.

Technology Goals

All County MHSA Technological Needs Projects must be framed within the context of the guiding principles of MHSA and meet the General Standards in Section 3320 of the California Code of Regulations governing the MHSA. The Technological Needs Project Proposal must demonstrate the ability to serve and support the MHSA objectives through cost effective and efficient improvements to data processing and communications. These objectives allow for an overall transformation of processes that will require a phased approach of technology enhancements. DMH will be an active participant in supporting the successful implementation of these local Projects through inception, planning, implementation, and ongoing delivery. DMH will provide needed materials and tools through the DMH website including: County level Project summaries with current status and lessons learned, sample requests for proposals (RFP), Project readiness assessments, sample work plans and templates.

Evaluation and funding approval of Technological Needs Project Proposals will be made within the context of two goals:

- Increase **Client and Family Empowerment** and engagement by providing the tools for secure client and family access to health information that is culturally and linguistically competent within a wide variety of public and private settings.

- **Modernize and Transform** clinical and administrative information systems to ensure quality of care, parity, operational efficiency and cost effectiveness.

Client and Family Empowerment

Technology solutions have the potential to significantly improve quality of care and health outcomes. This can be accomplished by providing accurate and current information about a client's mental health history to the service provider, the client and his/her family when appropriate. Complete and accurate health information is crucial in reducing medical errors, improving care coordination and increasing client and family mental health literacy. Improved access to information has the potential to improve communication between clients and service providers, resulting in more meaningful client participation in the healthcare process. Having access to such information in a language they understand is empowering, enabling clients to be informed and make sensible choices within the mental health system.

As reported by the National Committee on Vital and Health Statistics, the potential benefits of client accessible health information systems can be applied to behavioral health and include:

- Support wellness activities
- Improve understanding of health issues
- Increase sense of control over health and well being

- Increase control over access to personal health information
- Support timely, appropriate preventive services
- Support healthcare decisions and responsibility for care
- Strengthen communication with providers
- Verify accuracy of information in provider records
- Support home monitoring for chronic diseases
- Support understanding and appropriate use of medications
- Support continuity of care across time and providers
- Manage insurance benefits and claims
- Avoid duplicate tests
- Reduce adverse drug interactions and allergic reactions
- Support convenient online appointment scheduling and prescription refills
- Increase access to providers via e-visits

A successful system of service delivery and coordination of care allows for+ client and family input and communication with their service provider in a culturally and linguistically competent manner. As evidenced throughout the stakeholder discussion process, clients and families have shown overwhelming support for expenditures in computer resources to improve communication. The basis of the relationship between service providers and clients and family is the delivery of high quality care with the utmost respect for client self-reliance and culturally and linguistically competent care. This can only be achieved with the knowledge that information is secure and confidential. The use of uniform policies and procedures to ensure that technology supports the client's privacy and security is essential. Technology can be used to securely provide clients with the ability to view and enter comments or data in their records, and the ability to share their journeys with a family member, friend and service provider as designated by the client.

A number of Projects that improve client and family empowerment and engagement are described later in this document under Client and Family Empowerment and Engagement Sample Projects.

Modernize and Transform Information Systems

Information is an essential tool for decision-making at all levels of the public mental health system (e.g. national, state, county, local, family and client). It is employed by service providers to provide appropriate, quality, and evidence-based care; by staff in utilizing resources in the most efficient manner; and by management in developing better methods of providing culturally and linguistically competent services. In a context of increased need, diverse ethnic and linguistic access need, increased geographical locations where care is provided, and changes in mental health treatment and recovery methodology, information is becoming even more important.

Mental health information systems should exist to enable a collaborative decision-making process with service providers, clients and families in all aspects of the mental health system. Information systems are an essential planning tool: they can provide reliable and consistent information about mental health services and clients' needs that are essential for improved client treatment and recovery. These systems can be tools to assist service providers with recording and monitoring the client needs. They can provide a means of reporting the utilized treatments that can be linked to the ongoing improvement of service quality and recovery. In addition, to the extent possible, information systems should have the ability to provide information in the preferred language of the client and family member with support tools available.

Projects that modernize and are transformative are described later in this document under Types of Projects.

Standards

In order to reach the technology goals, mental health information systems must be able to securely share timely and accurate client health and healthcare information. This system capability is possible with the use of technologies that incorporate **uniform standards** to transfer data from one source to another. The achievement of this capability, also known as interoperability, is challenged by dissimilar communication styles, disparate systems for storing and presenting information, differing work flow processes and data languages.

The uniform standards must address the interoperability challenges and emphasize the need for privacy and security of client information. They should support the ethical and legal use of personal health information, in accordance with established privacy laws and rights. Personal health information should be kept confidential and used only for approved purposes, and shared only among authorized individuals with informed consent, in accordance with the provisions of the Health Insurance Portability and Accountability Act (HIPAA); the Information Practices Act of 1977 (Civil Code 1798 et. seq.) and all applicable state law.

To ensure technology is properly configured and coordinated to meet the needs of the county service delivery providers, clients and their families, DMH established the MHSA IT Work Group comprised of state staff, industry experts, County and contract providers, consultants, clients and family members. The group reviews and recommends system requirements, standards, and policies that advance the statewide achievement of the technology goals.

For all Technological Needs Project Proposals, the County must address the applicable standards noted in the Appendix B when proposing the Projects to DMH.

PART II: FUNDING REQUIREMENTS

Evaluation and Approval Criteria

DMH will evaluate and approve Technological Needs Projects within the context of two steps:

Step 1 – Technological Needs Assessment (See Exhibit 2)

The Technological Needs Project Proposal will be evaluated on the consistency in addressing the significant assessment factors included in the:

- County Technology Strategic Plan
- Roadmap to achieving an Integrated Information Systems Infrastructure
- County Personnel Analysis (Management and Staffing)

Please see Exhibit 2 for detailed instructions on the development of the Technological Needs Assessment. NOTE: Only one Technological Needs Assessment is required regardless if the County proposes multiple Projects.

Step 2 - Technological Needs Project Proposal (See Exhibit 3)

The proposed Technological Needs Project(s) must meet the goals of modernization/transformation or client/family empowerment within a framework of an Integrated Information Systems Infrastructure. Counties may work together to submit a comprehensive multi-County Project Proposal using shared resources and with the appropriate level of detail comparable to the level of Project scope and funding. Each proposed Project must be described as detailed in Exhibits 1, and 3 through 6.

Projects meeting these goals include, but are not limited to:

- **Electronic Health Record (EHR) System Projects**
    - Infrastructure, Security, Privacy
    - Practice Management
    - Clinical Data Management
    - Computerized Provider Order Entry
    - Full EHR with Interoperability Components (for example, standard data exchanges with other counties, contract providers, labs, pharmacies)

- **Client and Family Empowerment Projects**
    - Client/Family Access to Computing Resources Projects
    - Personal Health Record (PHR) System Projects
    - Online Information Resource Projects (Expansion / Leveraging information sharing services)

- **Other Technological Needs Projects That Support MHSA Operations**
    - Telemedicine and other rural/underserved service access methods
    - Pilot Projects to monitor new programs and service outcome improvement
    - Data Warehousing Projects / Decision Support
    - Imaging / Paper Conversion Projects
    - Other

Types of Projects

The Department considers the Project types listed below as meeting the goals of modernization/transformation or client/family empowerment within a framework of an Integrated Information Systems Infrastructure. Expenditures must be specific to the proposed Project and cannot be for general technology needs of the County, such as a general increase in desktop computers, PDA's, etc. for new employees.

Once Counties have submitted a Roadmap (as required in the County's Technological Needs Assessment (Exhibit 2) for moving toward an Integrated Information Systems Infrastructure, they may propose Projects in addition to Electronic Health Record (EHR) System Project(s).

Electronic Health Record System Projects

The foundation for an Integrated Information Systems Infrastructure is the Electronic Health Record (EHR) system, which is a secure, real-time, point-of-care, client-driven information resource for service providers. If counties move toward an Integrated Information Systems Infrastructure through EHRs, they, in most cases, will be implementing EHR systems from external software vendors. These purchases could be for complete EHR systems or individual parts, (infrastructure, health record capture, decision support, reporting, data transfer) of an EHR system. DMH has developed minimum statewide standards listed in Appendix B, which Counties must address when purchasing and implementing the parts of an EHR system. These minimum standards, found in Appendix B, which will be promulgated in forthcoming regulations, will be modified periodically to achieve a statewide, fully integrated information system infrastructure.

EHR standards address the ability to access, exchange and assure security in the use of clinical information. The standards are divided into three categories:

- Functional Standards
- Connectivity and Language (interoperability)
- Client Access, Security and Privacy

Counties should evaluate the vendor's ability to meet current standards and commitment to meet evolving national standards prior to the purchase of any EHR related products.

> The minimum standards listed in Appendix B are applicable to the individual parts of the County's proposed EHR system. As Counties implement specific parts of an EHR, they must assure compliance with all minimum standards related to the implemented part of the EHR.

Client and Family Empowerment and Engagement Projects

Access to Computing Resources Projects

Mental health clients and family members need access to computer resources to find current electronic health and wellness information. Access to computer resources will provide clients and family members the ability to access data available through the county, communicate and learn from other client organizations and reference educational sites available through the Internet.

- Computer resources should include computer hardware, software, and broadband Internet connectivity.

- The placement of equipment in a convenient and secure physical environment is essential. These might include "computer labs" within service delivery settings allowing clients and families timely access before or after an appointment, or at housing facilities and wellness centers.

- Computer literacy training must be addressed to afford clients the ability to utilize all available information. This training should include timely and simple methods for clients to

get technical support and information about privacy and security. Note that this training includes client training for the use of PHR s.

Personal Health Record (PHR) System Projects

The PHR system is a tool for collecting, tracking and sharing important, up-to-date information about an individual's health or the health of someone in his/her care through similar information found in a "view" of the EHR. Using a PHR will help clients and family members make better health decisions and improve quality of care by allowing them to access and use information needed to communicate effectively with others about their healthcare.

The Markle Foundation (www.markle.org), representing industry leaders, and the Blue Cross Blue Shield Association provided the following proposed principles for the Client Empowerment Breakthrough Initiative under the American Health Information Community, which reports to the United States Secretary of Health and Human Services.

Principles for Personal Health Records:

- Each person controls his or her own Personal Health Record and decides who can access which parts of their PHR
- PHRs contain information for one's lifetime
- PHRs contain information from all health care providers
- PHRs should have data integrity: data sources and age of data should be cited; clients can annotate but are not permitted to destroy or change data electronically supplied by other systems
- Clients and permitted providers can access PHRs at any place and at any time
- PHRs should be portable; one system's PHR should permit easy exchange of information with other systems' PHRs
- PHRs are private and secure; all entities that provide or manage personal health information, whether or not defined as covered entities under HIPAA, should follow the privacy and security rules that apply to HIPAA-covered entities
- PHRs are transparent; clients should be able to view who has accessed which parts of their PHRs
- PHRs permit easy exchange of information; PHRs must comply with interoperability requirements such as those required by certification bodies, such as the Certification Commission for Healthcare Information Technology (CCHIT)

While the definition and scope of a PHR varies, Counties may request funding for PHR Projects that align with the above principles and that follow the applicable standards listed in Appendix B for EHRs.

Online Information Resource Projects

The Network of Care for Behavioral Health is an example of an online information resource for individuals, families and agencies concerned with mental and emotional wellness, substance abuse and developmental disabilities. For most counties, this web resource contains various functions such as: a service directory, a library, simple access to legislation, mental health organizational links, support and advocacy, and a user maintained personal health folder.

Counties may request funding to develop new Web site functions, language access technology or an expansion of information sharing services that improve mental health service delivery through fast and secure access to health information and providers.

Other Technological Needs Projects Support MHSA Operations

Below is a sampling of "Other" Technological Needs Projects that might be undertaken by the County. These Projects do not have pre-defined requirements and will be evaluated on a case by case basis. As with the above EHR and Client and Family Empowerment Projects, these Other Technological Needs Projects may include funding requests for hardware, software, communications devices and the installation services to install and maintain them.

Telemedicine/Tele-psychiatry and Other Rural/Underserved Service Access Methods

Telemedicine technology is a strategy to improve the accessibility of mental health care, particularly to areas underserved by service providers. Telemedicine, in the form of video, secure e-mail, and phone consultation, is one strategy to improve the accessibility of care in rural and underserved settings. Some benefits include personalized action and treatment plans, easier access without rigid schedules (increases both client and service provider satisfaction), improved visibility into client's needs (leads to better understanding of outcomes) and providing clients better understanding of their conditions, which in turn, requires fewer interventions.

Applications of telemedicine include assessments, support, discharge planning, review, client and family education, case conferencing, emergency consultations, web based applications, interpreter services and translation services.

Pilot Projects to Monitor New Programs and Service Outcome Improvement

Project monitoring follows a cyclical process that begins with monitoring clinical performance to identify successes or issues that influence clinical practice patterns and the causes. Once successes or issues are identified, practice modifications can be recommended and introduced, and the results assessed. Most important, by using the tools and systems to measure outcomes, information can be relayed back to service providers and administrators to improve a system's clinical performance while also addressing issues of accountability. These systems might measure clinical outcomes, including quality of life, relapse and re-hospitalization rates, adverse incidents monitoring and client and family satisfaction surveys.

Data Warehousing / Decision Support

Data Warehousing is a process requiring a set of hardware and software components that can be used to better analyze the massive amounts of data that health systems are accumulating to make better operational and/or strategic decisions. The data warehousing process does not consist of just adding data, but also requires the architecture and tools to collect, query, analyze and present information. Data warehousing is a process, not a product, for assembling and managing data from various sources, for the purpose of gaining a single, detailed view of part or all of a business. Data Warehouses can potentially provide numerous benefits to an organization with quality improvement, and decision support by enabling quick and efficient access to information from existing systems and linkage to multiple operational data sources.

Decision Support systems record data from various sources that are needed to manage mental health systems effectively*. Population data* describes demographic characteristics, medical and mental health status and level of functioning. *Enrollment data* describes demographic and baseline mental health status of enrollees. *Encounter data* characterizes all users of services (such as health and mental health status, diagnosis, symptoms, functional status), types of services used, and frequency of use. *Financial data* will reflect costs of services, administrative costs and other expenditures.

Imaging / Paper Conversion Projects

These Projects provide the capability to capture, store, manage, retrieve, and route documentation in a secure electronic manner. With document imaging, paper documents, photos, and graphics can be scanned and saved as images, organized into folders, linked to business applications, and retrieved by the users. Benefits of an image system include: ease of search and retrieval, Internet access of scanned images, transfer of images, microfilm replacement, space and storage reduction, and preservation of document integrity.

PART III. PLANNING AND SUBMISSION GUIDELINES

Planning

The Technological Needs Project Proposal planning process for proposed expenditures should include revisiting the priorities and discussions documented in previous MHSA Community Program Planning Processes (CPP Processes). As Counties move toward modernization and transformation of their information infrastructure and address the goal of increasing client and family empowerment, they should focus upon getting additional input from stakeholders with expertise in this subject area. In addition, each County must address the need for the continued involvement of stakeholder committees and/or key stakeholders regarding recommendations for proposed Projects. Counties may work together to submit a comprehensive multi-County Project Proposal using shared resources and with the appropriate level of detail comparable to the level of Project scope and funding.

Consistent with MHSA statutory requirements WIC Sections 5848(a) and (b) and Title 9 CCR Sections 3300 and 3315(b), each County Capital Facilities and Technological Needs Component Proposal and each Capital Facilities Project Proposal and Technological Needs Project Proposal shall be developed with local stakeholders and made available in draft form and circulated for review and comment for at least 30 days to representatives of stakeholder interests and any interested party who has requested a copy of the documents. Pursuant to WIC Section 5848(b), the Mental Health Board shall conduct a public hearing on the draft Capital Facilities and Technological Needs Component Proposal. If the Component Proposal is submitted along with a Project Proposal, the public hearing must address both. The County shall submit a summary and analysis of any substantive revisions made to its Component Proposal as a result of stakeholder input. No public hearing is required for Capital Facilities and Technological Needs Project Proposals submitted as updates to the approved Three-Year Plan. As noted in DMH Information Notice 06-13, funds are available for technology planning and assessment consultants to assist in the planning process.

County Technological Needs Project Proposal Submission

Technological Needs Project Proposals should be submitted to the Department electronically, with one unbound paper copy that includes the appropriate signatures. Technological Needs Project

Proposals will not be accepted via fax. The electronic copy of the Project Proposal should be emailed to DMH at the address below.

An original of the completed Technological Needs Project Proposal should be submitted to:

California Department of Mental Health,
Technological Needs Project Proposal
Attn: Child and Family Programs
1600 9th Street, Room 130
Sacramento, CA 95814

MHSA-CFTN@DMH.CA.GOV

Funding

Technological Needs Projects that benefit more than only mental health must include revenues from other funding sources so that the net cost to the MHSA is reflective of the benefit received by mental health. The County should use a reasonable allocation approach to determine the share of a Project's cost related to the MHSA, such as percent of total transactions or the number of clients served within programs (e.g. Mental Health clients versus substance abuse clients). The County must also comply with Welfare and Institutions Code Section 5891 addressing County obligations regarding non-supplanting. MHSA funds cannot be used to maintain a system/function already operational on November 2, 2004, but can be used to fully fund systems for mental health services that increase functionality consistent with the County's Technological Needs Assessment. The Budget Summary (Exhibit 4) provides the County with a template to list Project cost and the allocation to MHSA and other funding sources.

Welfare and Institutions Code Sections 5892(a)(2) and 5892(e) identify the percentage of MHSA revenues reserved for the Capital Facilities and Technological Needs component. The initial maximum amount of the Capital Facilities and Technological Needs funding available to each County (i.e., the Capital Facilities and Technological Needs Planning Estimate) is included in DMH Information Notice 08-02 which reflects actual deposits into the State MHS Fund through July 2, 2007. Counties may request less than their maximum funding total. The proposed Projects may not exceed the funding available. Additional funds will be dedicated to the Capital Facilities and Technological Needs component based on actual deposits into the State MHS Fund through June 30, 2008. Finally, Counties also have the ability to request funds from the Community Services and Supports component for capital facilities and technology beginning in FY 2008-09 provided that the total requested for capital facilities and technology, workforce education and training and the Prudent Reserve do not exceed 20% of the average amount of funds allocated to the County for the previous five years (Welfare and Institutions Code Section 5892(b)).

DMH Review Process

The review process for these proposed Projects and the approval for the funding will be completed within 60 days. DMH headquarters Information Technology (IT) staff will work closely with County staff to assist with submission, identify any needed additional information, and obtain Project approval. The review process will be dependent on a timely response by the County to additional information requests from DMH staff and will include review and comment from the MHSA Oversight and Accountability Commission. DMH headquarters IT staff will also coordinate input review and funding approval.

The Technological Needs Project Proposal will be evaluated in relation to the County's Technological Needs Assessment to ensure that the proposed Projects meet the long-term MHSA goals. If funded, a letter will be sent informing the County that the proposed Project has been funded and will be followed by an amendment to the MHSA Agreement.

Funded Projects are reviewed on an on-going basis in accordance with the Agreement to ensure they are meeting the objectives of the original request. DMH will review periodic County status reports to determine if there are any risks and/or issues that could compromise the success of the Project. If risks and/or issues are identified, additional consultation with the County will be needed to provide guidance, assistance and solicit clarification.

PART IV: INSTRUCTIONS AND REQUIRED DOCUMENTATION

Required Exhibits

The County Technological Needs Project Proposal and Status is comprised of a series of **six (6) Exhibits** that include the County's Technological Needs Assessment (Exhibit 2), proposed Project and related budget, stakeholder participation and, once approved, Project status. To request funds for a Technological Needs Project, the County must submit a Technological Needs Project Proposal consisting of Exhibits 1, and 3 through 5 for each Project, if more than one Project. A Technological Needs Project Proposal will be evaluated based on the consistency with the Technological Needs Assessment.

> Technological Needs Project Proposals must include one Technological Needs Assessment (Exhibit 2) and Exhibits 1, 3, 4 and 5 per Project for evaluation by DMH. Counties may jointly submit a Technological Needs Project Proposal for evaluation.

Exhibit Descriptions

Face Sheet (Exhibit 1)

This exhibit is a signed verification by the County's mental health director that all requirements for the Technological Needs Project Proposal have been considered and will be followed. It also provides the name and contact information of the director's designated point of contact for all matters related to this request.

Technological Needs Assessment (Exhibit 2)

This exhibit will provide to the Department, sufficient background information regarding the County's planned steps toward an Integrated Information System Infrastructure and the link to the proposed Technological Needs Project. This exhibit may be prepared with existing County documents and/or other documents.

DMH engaged the California External Quality Review Organization (CAEQRO) to meet Title 42 CFR, Section 438.2 requirements. Counties may include the results of the CAEQRO Information Systems Capabilities Assessment Report findings when applicable as supporting documentation. Small counties (under 200,000 in population) have the option of submitting a reduced Technological Needs Assessment as described below.

Provide a Technological Needs Assessment which addresses each of the following three elements:

County Technology Strategic Plan

> (Small Counties have the option to not complete this section.)
>
> County Technology Strategic Plans will be evaluated on their strategies for reaching the Department's technology goals of modernization / transformation and client / family empowerment through the implementation of an Integrated Information Systems Infrastructure that makes health information available to clients and service providers throughout California. This long-term plan will promote the transformation of county technology operations from a paper based process to a secure, fully integrated, client-driven electronic environment. Successful implementation of individual Projects will be critical to achieving the long-term plan.
>
> This section includes an assessment of the County's current status of technology solutions, its long-term business plan and the long-term technology plan that will define the ability of County Mental Health to achieve an integrated information systems infrastructure over time. Refer to the Template in Exhibit 4.

County Technology Roadmap for Achieving an Integrated Information Systems Infrastructure

> The *Roadmap* will define the plan, schedule and approach to achieving an Integrated Information Systems Infrastructure. It will include proposed Project milestones, plans for vendor selection and cost estimates over the life of the planning process.
>
> This section includes a plan, schedule and approach to achieving an Integrated Information Systems Infrastructure.
>
> At a minimum, the Roadmap must include:
>
> 1. A proposed implementation timeline with major milestones including; planning, training, communication approach, and systems review
> 2. An inventory of current systems and proposed purchases for any or all parts of an EHR system as identified in Enclosure 3
> 3. A proposed workflow assessment plan (Counties may complete this assessment during the implementation of a Project)
> 4. Criteria for vendor selection (such as a Request for Proposal)
> 5. Cost estimates associated with achieving the Integrated Information Systems Infrastructure (IISI)

County Personnel Analysis (Management and Staffing)

(Small Counties have the option to not complete this section.)

This element includes an assessment of the County's current status, its prior experience with information technology installation and the managerial resources it can bring to bear on the use and control of the technology, for example, Technological Needs Project manager, hardware and software specialists and/or training manager. The County may use the same analysis conducted under the Workforce Education and Training component of the Three-Year Plan to satisfy this requirement.

Technological Needs Project Proposal Description (Exhibit 3)

This exhibit is designed to give the Department a comprehensive understanding of the Proposed Technological Needs Project Proposal and how Project(s) relate to the Capital and Technological Needs Component Proposal and the goals of MHSA. This exhibit may be prepared in conjunction with multiple counties using already available, applicable materials such as a Joint Powers Authority (JPA) collaborative planning document, Request for Proposals (RFP's), California External Quality Review Organization (CAEQRO) Information Systems Capability Assessment (ISCA), and other documents developed in consultation with the DMH.

After submission and approval of the Technological Needs Assessment as described above, to receive funding for each proposed Project, the County shall submit a Technological Needs Project Proposal Description (Exhibit 3) with elements about the following categories:

- Project Management Overview
- Project Cost
- Nature of the Project
- Hardware Considerations
- Software Considerations
- Interagency Considerations
- Training and Implementation
- Security Process

County Technological Needs Project Proposal Descriptions must provide a sufficient level of detail to describe the underlying assumptions, feasibility, objectives, alternatives considered, technology environment, and proposed Project to accomplish the proposed solution. *Technological Needs Project Proposals that are for planning or preparation of technology are not required to include hardware, software, interagency, training or security detail.* DMH will review each Technological Needs Project Proposal placing emphasis on the following elements:

1. The quantifiable description of the benefit inherent in the Proposed Technological Needs Project Proposal. This benefit description may be a reference to a description in the Roadmap or other Technological Needs Assessment document.
2. A description of the assumptions used and the expected functionality associated with the proposal that explains how the stated benefits and objectives will be achieved. This description can be provided by a vendor if a technology solution has already been selected.
3. The description of the County's program(s), program objectives and current business processes that will be impacted by the Project.

4. A depiction of how the Project fits into the long-term strategy of the County's programs toward an Integrated Information System Infrastructure.

Each County is responsible for ensuring its Technological Needs Project Proposal meets DMH guidelines described herein. At its discretion, DMH may request additional information from the County.

Budget Summary (Exhibit 4)

These budget summaries allow the Counties to summarize proposed expenditures for each Project by type of expenditure; for example, personnel, hardware, software, training, support and consulting for each fiscal year. Expenditures for the proposed Technological Needs Project Proposal(s) should be easily identified and related to the Project(s) implementation schedule as defined in Exhibit 3.

Expenditures must be specific to the proposed Project(s) and cannot be for general technology needs of the County, such as a general increase in desktop computers for new employees.

Total estimated costs for the Project(s) minus any funding from alternative sources will equal the total MHSA funding requirement. For Projects providing services to multiple program clients (e.g. Mental Health and Alcohol and Drug Program clients) a description of estimated benefits and Project costs allocated to each program shall be identified.

> The total of the Technological Needs Project Proposal funding request(s) plus any request for Capital Facilities funding shall not exceed the total Capital Facilities and Technological Needs Planning Estimate identified for the County in DMH Information Notice 08-02. MHSA funding dedicated to the Capital Facilities and Technological Needs component must be spent within ten years or it will revert to the State for redistribution to all Counties.

Stakeholder Participation Report (Exhibit 5)

Include a description of stakeholder involvement, including the Community Program Planning Process (CPP Process) and the Local Review Process, in the Technological Needs Project Proposal. The CPP Process may have already been completed through the development of the Capital Facilities and Technological Needs Component of the Plan, as noted in Enclosure 1, in which case, simply attach a copy.

Status Report (Exhibit 6)

This exhibit describes the required reporting for County Technological Needs Project implementation progress only after the Project has been approved. The current version of this template is available from DMH MHSA Technology website at www.dmh.ca.gov/Prop_63/MHSA/Technology.

Counties shall submit this report, which may be prepared by the vendor, periodically as required in the Technological Needs Project Proposal. If the County does not submit the required status report information within the established timeframes, the Department may withhold MHSA funds.

A final Post Implementation Evaluation Report (PIER) section shall be submitted to DMH with the last Project status report. The PIER shall include, but is not limited to the following: (1) A comparison between the objectives approved and the objectives achieved, (2) Information regarding the acceptance of the completed Project by users and management, (3) A description of the lessons learned, best practices used to complete the Project, and any other factors that contributed to the Project's success or difficulties.

The PIER is an essential accountability and communication tool that allows DMH to report on the effectiveness of Technological Needs funding, as well as share lessons learned and best practices with other Counties. It also identifies additional work or funding needed to complete or enhance the Technological Needs Project to meet any incomplete objectives, including any required DMH data reporting.

Exhibit Templates

EXHIBIT 1 - FACE SHEET
FOR TECHNOLOGICAL NEEDS PROJECT PROPOSAL

County Name: _____

This Technological Needs Project Proposal is consistent with and supportive of the vision, values, mission, goals, objectives and proposed actions of the MHSA Capital Facilities and Technological Needs Component Proposal.

We are planning to, or have a strategy to modernize and transform clinical and administrative systems to improve quality of care, operational efficiency and cost effectiveness. Our Roadmap for moving toward an Integrated Information Systems Infrastructure, as described in our Technological Needs Assessment, has been completed. This Project Proposal also supports the Roadmap.

We recognize the need for increasing client and family empowerment by providing tools for secure client and family access to health information within a wide variety of public and private settings. The Proposal addresses these goals.

This proposed Project has been developed with contributions from stakeholders, the public and our contract service providers, in accordance with 9 CCR Sections 3300, 3310 and 3315(b). The draft proposal was circulated for 30 days to stakeholders for review and comment. All input has been considered, with adjustments made as appropriate.

Mental Health Services Act funds proposed in this Project are compliant with section CCR Section 3410, non-supplant.

All documents in the attached Proposal are true and correct.

County Director
Name   _____   Signed _____
Telephone   _____
E-Mail   _____   Date   _____

Chief Information Officer
Name   _____   Signed _____
Telephone   _____
E-Mail   _____   Date   _____

HIPPA Privacy / Security Officer
Name   _____   Signed _____
Telephone   _____
E-Mail   _____   Date   _____

EXHIBIT 2 - TECHNOLOGICAL NEEDS ASSESSMENT

Provide a Technological Needs Assessment which addresses each of the following three elements:

1. County Technology Strategic Plan Template
(*Small Counties have the option to not complete this section.)*

This section includes assessment of the County's current status of technology solutions, its long-term business plan and the long-term technology plan that will define the ability of County Mental Health to achieve an **Integrated Information Systems Infrastructure** over time.

Current Technology Assessment:

List below or attach the current technology systems in place.

1.1)   Systems overview:
_____
_____
_____
_____

List or attach a list of the hardware and software inventory to support current systems.

1.2)   Hardware:

1.3)   Software:

1.4)   Support (i.e. maintenance and/or technical support agreements):

Plan to achieve an Integrated Information Systems Infrastructure (IISI) to support MHSA Services:

Describe the plan to obtain the technology and resources not currently available in the county to implement and manage the IISI. (Counties may attach their IT Plans or complete the categories below).

1.5)   Describe how your Technological Needs Projects associated with the Integrated Information System Infrastructure will accomplish the goals of the County MHSA Three-year Plan:

1.6)   Describe the new technology system(s) required to achieve an Integrated Information System Infrastructure:

1.7)   Note the Implementation Resources currently available:

Oversight Committee:	Yes___	No__
Project Manager:	Yes___	No__
Budget:	Yes___	No__
Implementation Staff in place:	Yes___	No__
Project Priorities determined:	Yes___	No__

1.8)   Describe plan to complete resources marked no above:

1.9)   Describe the Technological Needs Project priorities and their relationship to supporting the MHSA Programs in the County:

2. Technological Needs Roadmap Template

This section includes a plan, schedule and approach to achieving an Integrated Information Systems Infrastructure. This Roadmap reflects the County's overall technological needs.

Complete a proposed implementation timeline with the following major milestones.

2.1)   List Integrated Information Systems Infrastructure Implementation Plan and schedule or attach a current Roadmap (example below):

2006	2008	2009	2010	2012	2014

Needs Assessment and RFP/Vendor Selection	Infrastructure	Practice Management	EHR "Lite" Clinical notes and history	Ordering and viewing-ePrescribing and Lab	Full EHR	Fully Integrated EHR and PHR
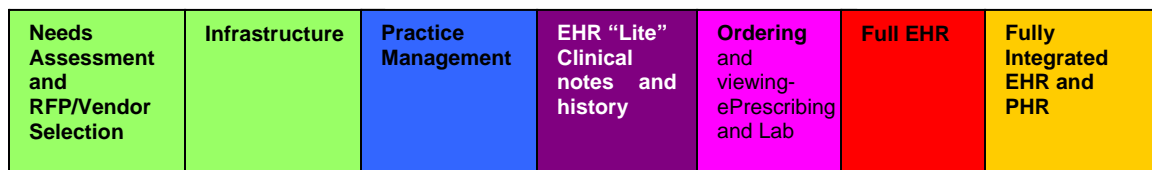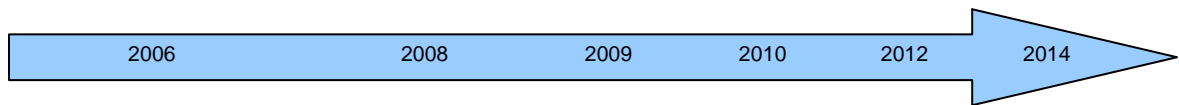
2.2)   Training and schedule (List or provide in timeline format, example below):

Training Schedule for 2008	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Basic System Nav	X													
Admin Staff	X													
Clinicians		X												
Contract Providers			X											
Client Look-Up				X										

2.3) Describe your communication approach to the Integrated Information Infrastructure with stakeholders (i.e. Clients and Family Members, Clinicians and Contract Providers):

2.4) Inventory of Current Systems: (may include system overview provided in County Technology Strategic Plan):

2.5) Please attach your Work Flow Assessment Plan and provide schedule and list of staff and consultants identified (may complete during the implementation of the Project or RFP):

2.6) Proposed EHR component purchases: (may include information on Project Proposal(s)):

2.7) Vendor selection criteria: (such as Request for Proposal):

2.8) Cost estimates associated with achieving the Integrated Information Systems Infrastructure:

3. County Personnel Analysis (Management and Staffing)
(Small Counties have the option to not complete this section.)

Major Information Technology Positions	Estimated # FTE Authorized	Position hard to fill? 1=Yes; 0=No	# FTE estimated to meet need in addition to # FTE authorized
(1)	(2)	(3)	(4)
A. Information Technology Staff (direct service):			
Chief Technology/Information Officer			
Hardware Specialist			
Software Specialist			
Other Technology staff			
Sub-total, A			
B. Project Managerial and Supervisory:			
CEO or manager above direct supervisor			
Supervising Project Manager			
Project Coordinator			
Other Project Leads			
Sub-total, B			
C. Technology Support Staff:			
Analysts, tech support, quality assurance			
Education and training			
Clerical, secretary, administrative assistants			
Other support staff (non-direct services)			
Sub-total, C			
TOTAL COUNTY TECHNOLOGY WORKFORCE (A+B+C)			

EXHIBIT 3 - TECHNOLOGICAL NEEDS PROJECT PROPOSAL DESCRIPTION

Date: _____   County _____

Project Title _____

- ***Please check at least one box from each group that describes this MHSA Technological Needs Project***

☐ New system
☐ Extend the number of users of an existing system
☐ Extend the functionality of an existing system
☐ Supports goal of modernization/transformation
☐ Supports goal of client and family empowerment

- ***Please indicate the type of MHSA Technological Needs Project***

  - **Electronic Health Record (EHR) System Projects (check all that apply)**
    ☐ Infrastructure, Security, Privacy
    ☐ Practice Management
    ☐ Clinical Data Management
    ☐ Computerized Provider Order Entry
    ☐ Full Electronic Health Record (EHR) with Interoperability Components (for example, standard data exchanges with other counties, contract providers, labs, pharmacies)
  - **Client and Family Empowerment Projects**
    ☐ Client/Family Access to Computing Resources Projects
    ☐ Personal Health Record (PHR) System Projects
    ☐ Online Information Resource Projects (Expansion / Leveraging information sharing services)
  - **Other Technological Needs Projects That Support MHSA Operations**
    ☐ Telemedicine and other rural/underserved service access methods
    ☐ Pilot Projects to monitor new programs and service outcome improvement
    ☐ Data Warehousing Projects / Decision Support
    ☐ Imaging / Paper Conversion Projects
    ☐ Other

- ***Please Indicate the Technological Needs Project Implementation Approach***

☐ Custom Application
  Name of Consultant or Vendor (if applicable) _____

☐ Commercial Off-The-Shelf (COTS) System
  Name of Vendor_____

☐ Product Installation
  Name of Consultant and/or Vendor (if applicable) _____

☐ Software Installation
  Name of Vendor _____

Project Description and Evaluation Criteria – Detailed Instructions

Complete each section listed below. Small counties (under 200,000 in population) have the option of submitting a reduced Project Proposal; however, they must describe how these criteria will be addressed during the implementation of the Project. A completed Technological Needs Assessment is required in addition to the Technological Needs Project Proposal. *Technological Needs Project Proposals that are for planning or preparation of technology are not required to include hardware, software, interagency, training, or security considerations. These items are indicated with a "*".*

Project Management Overview

Counties must provide a Project Management Overview based on the risk of the proposed Project. The Project must be assessed for risk level using the worksheet in Appendix A. For Projects with medium to high risk, the County shall provide information in the following Project management areas.

- Independent Project Oversight
- Integration Management
- Scope Management
- Time Management
- Cost Management
- Quality Management
- Human Resource Management (Consultants, Vendor, In-House Staff)
- Communications Management
- Procurement Management

For low risk Projects, as determined by the worksheet in Appendix A, the above Project management reporting is not required.   Instead, the County shall provide a Project Management Overview that describes the steps from concept to completion in sufficient detail to assure the DMH Technological Needs Project evaluators that the proposed solution can be successfully accomplished. For some Technological Needs Projects, the overview may be developed in conjunction with the vendor and may be provided after vendor selection.

Project Cost

Technological Needs Projects will be reviewed in terms of their cost justification. The appropriate use of resources and the sustainability of the system on an ongoing basis should be highlighted. Costs should be forecasted on a quarterly basis for the life of the Project. *Costs on a yearly and total basis will also be required for input on Exhibit 3 – Budget Summary.*

Nature of the Project

Describe:
- The extent to which the Project is critical to the accomplishment of the County, MHSA, and DMH goals and objectives
- The degree of centralization or decentralization required for this activity
- The data communication requirements associated with the activity
- The characteristics of the data to be collected and processed, i.e., source, volume, volatility, distribution, and security or confidentiality
- The degree to which the technology can be integrated with other parts of a system in achieving the Integrated Information Systems Infrastructure

---

Hardware Considerations *(as applicable)

Describe:
- Compatibility with existing hardware, including telecommunications equipment
- Physical space requirements necessary for proper operation of the equipment
- Hardware maintenance
- Backup processing capability
- Existing capacity, immediate required capacity and future capacity

Software Considerations * (as applicable)

Describe:
- Compatibility of computer languages with existing and planned activities
- Maintenance of the proposed software, e.g. vendor-supplied
- Availability of complete documentation of software capabilities
- Availability of necessary security features as defined in DMH standards noted in Appendix B
- Ability of the software to meet current technology standards or be modified to meet them in the future

Interagency Considerations* (as applicable)

Describe the County's interfaces with contract service providers and state and local agencies. Consideration must be given to compatibility of communications and sharing of data. The information technology needs of contract service providers must be considered in the local planning process.

Training and Implementation * (as applicable)

Describe the current status of workflow and the proposed process for assessment, implementation and training of new technology being considered.

Security Strategy * (as applicable)

Describe the County's policies and procedures related to Privacy and Security for the Project as they may differ from general Privacy and Security processes. Please address specifics related to:

- Protecting data security and privacy
- Operational Recovery Planning
- Business Continuity Planning
- Emergency Response Planning
- HIPAA Compliance
- State and Federal laws and regulations

Project Sponsor(s) Commitments (Small Counties may elect to not complete this section)

Sponsor(s) Name(s) and Title(s)
Identify the Project Sponsor name and title. If multiple Sponsors, identify each separately.

Commitment
Describe each Sponsor's commitment to the success of the Project, identifying resource and management commitment.

Approvals/Contacts

Please include separate signoff sheet with the names, titles, phone, e-mail, signatures and dates for:

- Individual(s) responsible for preparation of this Exhibit, such as the Project Lead or Project Sponsor(s)

EXHIBIT 4 - BUDGET SUMMARY
FOR TECHNOLOGICAL NEEDS PROJECT PROPOSAL

(List Dollars in Thousands)

County:
Project Name:

Category	(1) 07/08	(2) 08/09	(3) Future Years	(4) Total One-Time Costs (1+2+3)	Estimated Annual Ongoing Costs*
Personnel					
Total Staff (Salaries & Benefits)					
Hardware					
From Exhibit 2					
Total Hardware					
Software					
From Exhibit 2					
Total Software					
Contract Services (list services to be provided)					
Total Contract Services					
Administrative Overhead					
Other Expenses (Describe)					
Total Costs (A)					
Total Offsetting Revenues (B) **					
MHSA Funding Requirements (A-B)					

NOTES:

* Annual costs are the ongoing costs required to maintain the technology infrastructure after the one-time implementation.

** For Projects providing services to multiple program clients (e.g. Mental Health and Alcohol and Drug Program clients), attach a description of estimated benefits and Project costs allocated to each program.

EXHIBIT 5 - STAKEHOLDER PARTICIPATION
FOR TECHNOLOGICAL NEEDS PROJECT PROPOSAL

Counties are to provide a short summary of their Community Planning Process (for Projects), to include identifying stakeholder entities involved and the nature of the planning process; for example, description of the use of focus groups, planning meetings, teleconferences, electronic communication, and/or the use of regional partnerships.

Stakeholder Type	Meeting Type	Meeting Date
e.g. (contract provider, client, family member, clinician)	**e.g. public teleconference**	

EXHIBIT 6 - STATUS REPORT
FOR FUNDED TECHNOLOGICAL NEEDS PROJECT

PROJECT INFORMATION: County:		
Project Name:	**Report Period:**	
Project Sponsor: Title:	**County:**	
	Project Start Date: **Project End Date:**	
Project Risk Area	**Risk Category**	**Select Response – see below**
Financial	Budget Metrics Forecast	
Technology	Technology assessment Environment Performance	
Project Management	Project Risk Management Plan Steering Committee Communication	
Technical	Customizations Conversions Interfaces Reports	
Application	Functionality Release Stability Customization complexity	
People	FTE Commitment Customer Skills/Training Training/Skills Vendor staffing level	
Customer Satisfaction	Product Expectations Relationship with PGS	
Scope & Project Schedule	Scope Definition Scope Change Mgmt. Project Schedule	

Financial	*Risk of substantial financial exposure or large open A/R*	
Budget Metrics	Metrics show Project is under or on budget.	**Green**
	Metrics show Project is over but within 10% of budget.	**Yellow**
	Not using metrics, or Project is or projected to be, more than 10% over budget.	**Red**
Forecast	Expense forecast in approved format and Estimate-to-Complete updated.	**Green**
	Expense forecast in unapproved format &/or Estimate-to-Complete not updated.	**Red**
Technology	*Risk of technology constraints and/or issues*	
Technology assessment	No significant technology changes, or technology assessment performed	**Green**
	Significant tech changes & tech assessment not complete/acted upon. No Project impact.	**Yellow**
	Significant tech changes & tech assessment not complete/acted upon. Project affected.	**Red**
Environment	Hardware, network(s), software, etc. sufficient for Project.	**Green**
	Deficiencies in technical environment but not affecting nor expected to affect Project.	**Yellow**
	Deficiencies in technical environment affecting or expected to affect Project.	**Red**
Performance	Performance of application(s) acceptable & complies with contract or too early to know.	**Green**
	Performance of application(s) is not optimal but not affecting Project.	**Yellow**
	Performance of application(s) is poor and/or does not meet contractual requirement(s).	**Red**
Project Management	*Risk of poor Project management practices*	
Proposed Project	Integrated Project Plan with resources, leveled and baselined and maintained with actuals.	**Green**
	Integrated Project Plan with resources, leveled and baselined and NOT maintained with actuals.	**Yellow**
	No Integrated Project Plan with resources & current actuals or Plan not leveled/baselined.	**Red**
Risk Management Plan	Method for identifying risks; Risk Mgmt Plan updated with all risks and risk responses.	**Green**
	No risk identification method &/or Risk Mgmt Plan not updated with all risks & responses.	**Red**
Steering Committee	Steering Committee meets regularly and is effective.	**Green**
	Steering Committee does not meet regularly or is ineffective or there is no Committee.	**Red**
Communication	Communication Plan(s) prepared and executed effectively for team, organization, external	**Green**

	Informal Communication Plans but communication is effective.	**Yellow**
	Communication problems.	**Red**
Technical	***Risk of technical issues including customer modifications, conversions and interfaces***	
Architecture/Performance	The system technical architecture is adequately defined, and modeling, benchmarking and testing are being conducted (or are planned) appropriate to the current Project phase.	**Green**
	The system technical architecture is adequately defined, or modeling, benchmarking and testing indicates customization of technology is need prior to implementing the current Project phase.	**Yellow**
	The system technical architecture is not adequately defined, or modeling, benchmarking and testing are not being conducted (or are planned) appropriate to the current Project phase.	**Red**
Conversions	Clean data with no/minor manual adjustment required & build & test on-schedule or finished	**Green**
	Significant problems with data and/or build & test behind but within 10% of schedule.	**Yellow**
	Significant problems and/or currently (or will be) more than 10% behind schedule.	**Red**
Interfaces	Testing strategy & plan (will) include all required interfaces; on-schedule or finished.	**Green**
	Difficulties identifying all required interfaces &/or build/test but still within 10% of schedule.	**Yellow**
	Significant problems and/or currently (or will be) more than 10% behind schedule.	**Red**
Reports	Testing strategy & plan (will) include all required reports; on-schedule or finished.	**Green**
	Difficulties identifying all required reports &/or build/test but still within 10% of schedule.	**Yellow**
	Significant problems and/or currently (or will be) more than 10% behind schedule.	**Red**
Application	***Risk of applications not providing desired functionality and/or software defect***	
Functionality	Required client functionality is adequately defined, and is being successfully built into the system, given the current Project phase and per the contract.	**Green**
	One or more significant components of required client functionality are inadequately defined, or are not being successfully built into the system, given the current Project phase and without a plan to fix	**Yellow**
	Significant components of required client functionality are inadequately defined, or are not being successfully built into the system, components are not functioning.	**Red**
Release Stability	Release is stable and level of updates/fixes is low.	**Green**
	Some instability, major new release, &/or med level of fixes. No Project impact.	**Yellow**
	Unstable release, major new release,&/or med/high level of updates/fixes-Project impacted	**Red**

Customization complexity	Less than 10% of customizations are high complexity	**Green**
	Between 10% and 20%, inclusive, of customizations are high complexity	**Yellow**
	More than 20% of customizations are high complexity	**Red**
People FTE Commitment	***Risk of significant people issues impacting the Project***	
	Completion of one or more major tasks and/or acceptable products has required or is expected to require materially (>5%) fewer hours/staff than planned.	**Green**
	All major tasks have been completed and acceptable products created using the planned number of hours/staff (within 5%)	**Yellow**
	Completion of major tasks and/or acceptable products has required or is expected to require materially (>5%) more hours/staff than planned.	**Red**
Staff Skills/Training	Resources have appropriate skill levels or adequate training in place	**Green**
	Resources may not have needed skills/training and affecting Project <20%	**Yellow**
	Resources do not have necessary skills/training AND affecting Project	**Red**
Consultant Training/Skills	Consultants have appropriate skill levels or adequate training	**Green**
	Consultants may not have needed skills/training but not affecting Project	**Yellow**
	Consultants do not have necessary skills/training AND affecting Project	**Red**
Consultant staffing level	Completion of one or more major tasks and/or acceptable products has required or is expected to require materially (>5%) fewer hours/staff than planned.	**Green**
	All major tasks have been completed and acceptable products created using the planned number of hours/staff (within 5%)	**Yellow**
	Completion of major tasks and/or acceptable products has required or is expected to require materially (>15%) more hours/staff than planned.	**Red**
Customer Satisfaction	***Risk of poor customer satisfaction impacting the Project and/or risk of adverse reference***	
Product Expectations	Product meets county expectations	**Green**
	Product does not meet all of county expectations, but not impacting Project.	**Yellow**
	Product does not meet all of county expectations and Project impacted.	**Red**
Relationship with Contractor	Contractor is meeting expectations and working with county to address concerns	**Green**
	Contractor is not meeting expectations but is implementing corrective action plans	**Yellow**
	Contractor is not meeting expectations and is not implementing corrective action plans	**Red**

Scope & Project Schedule	*Risk of significant scope changes and/or delays in the Project adversely impacting the Project*	
Scope Definition	Scope is well defined per approved contract. Team knows what is in/out of scope.	**Green**
	Scope (being) defined per approved methodology. Team knows what is in/out of scope.	**Yellow**
	Scope not (being) defined per methodology &/or team doesn't know what is in/out of scope.	**Red**
Scope Change Mgmt.	A defined change management process for scope that is being used or N/A at this time.	**Green**
	No defined scope change management process being used.	**Red**
Project Schedule	Current tasks and milestones completed per current stage of Project and one or more tasks/milestones approve >5% early	**Green**
	All major tasks and milestones have been completed and approved according to plan. (Within 5%	**Yellow**
	One or more major tasks or milestones are expected to be delayed. (> 10%)	**Red**

EXHIBIT 6 –STATUS REPORT (continued)

POST IMPLEMENTATION EVALUATION REPORT

Please include the following sections in the County's <u>final</u> status report:

<table>
<tr><td colspan="2">County: Project:</td></tr>
<tr><td colspan="2" align="center">Objectives Achieved</td></tr>
<tr><td colspan="2">Describe the achieved objectives in comparison to the objectives listed in the Technology Assessment Project Proposal (Exhibit 3)   Also describe the user and management acceptance of the completed Project.

    •</td></tr>
<tr><td colspan="2" align="center">Lessons Learned</td></tr>
<tr><td colspan="2">Describe lessons learned, best practices used for the Project, any notable occurrences, or factors that contributed to the Project's success or problems, or other information, which could be helpful during future Project efforts. Describe problems that were encountered and how they were overcome.

    •</td></tr>
<tr><td colspan="2" align="center">Corrective Actions</td></tr>
<tr><td colspan="2"><i><u>Note:</u> This section will have to be included when the Project is deemed to be a limited success or failure, or when there are significant differences between Project expectations and Project results. If this condition applies, summarize alternatives for improving the outcome.</i>

    •</td></tr>
<tr><td colspan="2" align="center">Next Steps</td></tr>
<tr><td colspan="2">Describe if the Project has any future phases or enhancements; or will it be in maintenance phase

    •</td></tr>
</table>

EXHIBIT 6- STATUS REPORT (continued)

County Approvals
Prepared By
Name   Title
Signature   Date   Phone
MH Chief Information Officer (or in small counties, the person designated as responsible for MHSA functions)
Name
Signature   Date   Phone

APPENDIX A - PROJECT RISK ASSESSMENT

Category	Factor		Rating	Score
Estimated Cost of Project	Over $5 million		6	
	Over $3 million		4	
	Over $500,000		2	
	Under $500,000		1	
Project Manager Experience				
Like Projects completed in a "key staff" role	None		3	
	One		2	
	Two or More		1	
Team Experience				
Like Projects Completed by at least 75% of Key Staff	None		3	
	One		2	
	Two or More		1	
Elements of Project Type				
Hardware	New Install	Local Desktop/Server	1	
		Distributed/Enterprise Server	3	
	Update/Upgrade	Local Desktop/Server	1	
		Distributed/Enterprise Server	2	
	Infrastructure	Local Network/Cabling	1	
		Distributed Network	2	
		Data Center/Network Operations Center	3	
Software	Custom Development-		5	
	Application Service Provider		1	
	COTS* Installation	"Off-the-Shelf"	1	
		Modified COTS	3	
	Number of Users	Over 1,000	5	
		Over 100	3	
		Over 20	2	
		Under 20	1	
*Commercial Off-The-Shelf Software	Architecture	Browser/thin client based	1	
		Two-Tier (client / server)	2	
		Multi-Tier (client & web, database, application, etc. servers)	3	

Total Score	Project Risk Rating
25 – 31	High
16 – 24	Medium
8 – 15	Low

APPENDIX B - EHR AND PHR STANDARDS AND REQUIREMENTS

> The minimum standards listed below are applicable to the individual parts of the County's proposed EHR system. As Counties implement specific parts of an EHR, they must assure compliance with all minimum standards related to the implemented part of the EHR. PHR Projects may also have applicable standards as noted below.

1. Functional Standards

County projects MUST MOVE TOWARDS an Integrated Information Systems Infrastructure. The foundation for an Integrated Information Systems Infrastructure is a comprehensive Electronic Health Record (EHR) system, which is a secure, real-time, point-of-care, client-centric, information resource for service providers. *The applicable functional requirements a comprehensive EHR MUST meet are outlined in the CCHIT Functionality Criteria 2007 (*www.CCHIT.org*). A summary of the attributes of a comprehensive EHR is provided below (Health Care Information Management Services Society (HIMSS) Electronic Health Record Definitional Model Version. 1.1.) (www.HIMSS.org)*

- Provide secure, reliable, real-time access to client health record information where and when it is needed to support care.
- Function as a centralized and integrated information resource for clinicians during the provision of client care.
- Assist with the work of planning and delivering evidence-based care to individuals and groups of clients.
- Capture data used for continuous quality improvement, utilization review, risk management, resource planning, and performance measurement.
- Support clinical applications such as computerized order entry and decision support tools.
- Summarize via electronic prescribing, prescribed medications from all providers for quality management, coordination of care and for uses in the Personal Health Record.
- Provide compatibility with scheduling, billing and reporting applications as well as personal health record technologies.
- Capture and report California mental health specific cost reporting and performance outcome data.

User Friendly Interface Standard: The EHR Project **MUST** meet the following**:**

- Provide a useful and easy to understand interface, making it easy for clinicians and administrative personnel to operate.

The EHR Project **MUST MOVE TOWARDS** the following**:**
- Be Internet based, available from any standard web browser, so that consumers or family members may access their PHRs.
- Be able to transmit an approved form of a Continuity of Care Record as applicable.
- Provide ability of the client and family to communicate with the clinician and service provider, especially in the multi-lingual environment.

Vendor Commitment Standard: The EHR Project vendor **MUST** meet current industry and government standards. At a minimum, the technology must support current basic standards and the vendor must provide a written agreement to continually upgrade the technology to meet future standards as they become available. The vendor **MUST**:

- Include implementation plans that meet minimum staffing criteria for planning, implementation, conversion/migration, oversight, risk management and quality assurance of the technology.
- Specify how their product meets or is planning to address all State and federal regulations including but not limited to HIPAA regulations.
- Provide the necessary plan for the product to have application interfaces as necessary to meet California mental health reporting and claiming requirements.
- Meet the CCHIT behavioral health criteria within one year of the availability of final CCHIT behavioral health certification criteria.

2. Connectivity and Language (Interoperability) Standards

In addition to the functional requirements, the EHR Project must address the ability of the system to transfer data outside the County clinic. There are two types of data transfer: messaging and record exchange. Messaging is necessary when data is transferred between different systems with different data standards. Messaging requires the use of standardized protocols such as Health Level 7 (HL7). Health Level 7 (www.hl7.org) is one of several American National Standards Institute (ANSI) -accredited Standards Developing Organizations (SDOs) operating in the healthcare arena. Most SDOs produce standards (sometimes called specifications or protocols) for a particular healthcare domain such as pharmacy, medical devices, imaging or insurance (claims processing) transactions. Health Level 7's domain is clinical and administrative data. The format and method of data distribution should be standardized wherever possible.   Record exchange can occur where data is transferred between two systems that share a common structural design. Detailed requirements are shown below:

*Connectivity Standard: The EHR Project **MUST MOVE TOWARDS** the following*:
- Be compatible with modern local and wide area network technology supporting Internet and intranet communication.
- Be distributed, with "ownership" of the data remaining at both the sending and the receiving ends.
- Use standard protocols that include:
    - Extensible Markup Language (XML), a markup language for documents containing structured information. (www.XML.com)

    - Simple Object Access Protocol (SOAP) - a protocol for exchanging XML-based messages over computer networks, normally using HTTP. (See the World Wide Web Consortium (W3C) at www.w3.org.)
    - Security Assertion Markup Language (SAML) - an XML document standard for exchanging authentication and authorization data between an identity provider and a service provider. (See the Organization for the Advancement of Structural Information Standards (OASIS) at www.oasis-open.org.)
    - Web services used for application programming interfaces
    - Message-oriented middleware (or software that connects two or more software applications so that they can exchange data)

- Other fully documented and highly-supported application programming interfaces as applicable and developed over time

Language Standard:

The EHR Project **MUST** use industry standard coding and classification systems such as:
- International Classification of Diseases (ICD-9)
- Common Procedural Terminology (CPT) or the various nursing terminologies, which set up hierarchical models for specific descriptions of diagnoses, procedures, activities, etc.

The EHR Project **MUST** be able to capture and report:
- California specific cost reporting and performance outcome data

In addition, the EHR Project **MUST MOVE TOWARDS**:
- Standardized clinical nomenclature within structured messages (reference terminologies such as SNOMED (Standardized Nomenclature of Medicine)
- HL7 2.X (with vendor commitment to migrate to HL7 RIM)
- Logical Observation Identifiers Names and Codes (LOINC) as applicable
- Having a cross-mapping of terms from one formal terminology or classification to another consistent with federal, state and DMH standard languages

3. Client Access, Security and Privacy Standards

Technology solutions must also address the need for client access and security. The system must support the ethical and legal use of personal information, in accordance with established privacy principles and frameworks, which may be culturally or ethnically specific. The basis of the relationship between service provider and clients and family is the delivery of high quality care with the highest respect for client self-reliance. This can only be achieved with the knowledge that information is secure and confidential. Detailed requirements are shown below.

Privacy

Government Compliance Standard: The EHR Project **MUST** be continuously updated to comply with current federal and state laws. These include but are not limited to:
- The United States Department of Health and Human Services (DHHS) Health Insurance Portability and Accountability Act of 1996 (HIPAA) regulations
- The Information Practices Act of 1977 (Civ. Code 1798 et. seq.)
- The patient confidentiality provisions of section 5328 of the Welfare and Institutions Code
- The Confidentiality of Medical Information Act (Civ. Code 56 et seq.)
- The right to privacy under Article 1, Section 1 of the California Constitution
- All applicable privileges and rules of professional responsibility
- Any other applicable state and federal laws and regulations
- All California rules and regulations pertaining to the privacy and security of mental health and substance abuse information

Vendor proposals for technology solutions must specify how their product meets or plans to address all state and federal laws including, but not limited to, HIPAA regulations, Clinical Laboratory Improvement Amendments (CLIA), 42 CFR9 (Code of Federal Regulations),

Information Practices Act (IPA), California Medical Information Act (CMIA), California Family Code 6920-6929, Title VI of the Civil Rights Act, and the Patient's Access to Health Records Act.

Privacy Standard: The EHR Project **MUST** support the application of prevailing California privacy and confidentiality rules. The technology solution must support the restricting of components or sections of the system to authorized users and/or purposes. This restriction should include restrictions at the level of reading, writing, amendment, verification, and transmission or disclosure of data and records.

- *Support privacy and confidentiality restrictions at the level of both data sets and discrete data attributes.*
- *Support recording of informed consent for the creation of a client record.*

Client Access: The EHR project **MUST**:

- Address competency and literacy in the use of technology
- Comply with current Americans with Disabilities Act (ADA), Section 508 of the Rehabilitation Act requirements. Section 508 requires that individuals with disabilities, including Federal employees, have access to and use of information and data that is comparable to those without disabilities. To learn more about the regulations governing the accessibility of Federal electronic information, please see: www.hhs.gov/Accessibility.html.
- Address cultural and language issues to facilitate access and sharing of data. Many cultures do not support the idea of sharing client information. Others share information and decision making on health matters at the level of the extended family or larger group. Counties must ensure that language translation using technology supports cultural competency and linguistic objectives.

Security

*The EHR Project **MUST** follow the security criteria outlined in the CCHIT Ambulatory Security Criteria 2007, as applicable. The criteria include: Access Control, Audit, and Authentication. The general security standards are noted in the sample from International Standards Organization (www.iso.org) which is listed below:*
- ISO 17799 – Code of Practice for information security
- ISO 27799 – Security Management in health using ISO 17799
- ISO/CD TS 21298 – Health informatics functional and structural roles
- ISO/TS 21091:2005 – Directory services for security, communications and identification of professionals and clients
- ISO/TS 17090-1:2002 – Health informatics – Public Key infrastructure
- ISO 26000 – Standard on Social responsibility (In development – 2008)

A sample from ASTM International originally known as the American Society for Testing and Materials (www.astm.org) is listed below. (All of the following standards are American National Standards Institute (ANSI) approved.)
- E1762-95(2003) – Standard guide for electronic authentication of healthcare information
- E1985-98(2003) – Standard guide for user authentication and authorization
- E1986-98(2005) – Standard guide for information access privileges to health information

- E1869-04 – Standard guide for confidentiality, privacy, access and data security principles for health care including EHRs
- E1988-98 – Standard guide for training of persons who have access to health information
- E2147-01 – Standard specification for audit and disclosure logs for use in health information systems

Access Control Standard: the EHR **MUST** support measures to define, attach, modify and remove access rights to the whole system and/or sections.
- *Support measures to define, attach, modify and remove access rights for classes of users.*
- *Support measures to enable and restrict access to the whole and/or sections of the technology solution in accordance with prevailing consent and access rules.*
- *Support measures to separately control authority to add to and/or modify the technology solution from the control of authority to access the technology solution.*
- *Support measures to ensure the integrity of data stored in and transferred to and from other systems.*

Auditing Standard: The EHR **MUST** support recording of an audit trail of access to, and/or modifications of, data.
- *Support recording of the nature of each access and/or modification.*
- *Support audit capability sufficient to track accountability for each step or task in the clinical or operational processes recorded in the record including but not limited to the standards for e-signature auditing.*

Authentication Standard: *The EHR* ***MUST*** *support two factor authentication and work toward meeting the evolving standards for authentication as they become available.*