## GLENN COUNTY HEALTH SERVICES AGENCY

Mental Health Department

Mental Health Services Act

# Technological Needs Project Proposal

Fiscal Year 2009-2010

POSTED April 20, 2009 through May 20, 2009

This MHSA Technological Needs Project Proposal is available for public review and comment through May 20, 2009. We welcome your feedback via phone, email, or by mail; or at the Public Hearing to be held on May 20, 2009.

## **Public Hearing Information:**

Wednesday, May 20, 2009 10:30 am – 12:00 noon Harmony House 343 Yolo Street, Orland, CA

## **Comments or Questions? Please contact:**

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Glenn County Mental Health
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Thank you!

#### FACE SHEET FOR TECHNOLOGICAL NEEDS PROJECT PROPOSAL

County: Glenn County Date: April 20, 2009

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.

| Health Agency Director  Name: Scott Gruendl  Phone: 530-934-6582 | Signature: <a href="mailto:signed after posting"><a after="" href="mailto:signed after posting after postin&lt;/th&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Email: &lt;u&gt;sgruendl@glenncountyhealth.ne&lt;/u&gt;&lt;/td&gt;&lt;td&gt;&lt;u&gt;t&lt;/u&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Chief Deputy Director&lt;br&gt;Name: Cecilia Hutsell&lt;br&gt;Phone: 530-934-6582&lt;/td&gt;&lt;td&gt;Signature: &lt;a href=" mailto:signed="" posting"=""><a href="mailto:signed after posting"><a href="mailto:signed after posting"></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a> |
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Executed at: Willows, CA

### **TECHNOLOGICAL NEEDS ASSESSMENT**

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

Note: Per CFTN guidelines, as a small county, Glenn County has opted out of completing the Strategic Plan (Section 1, A and B, this page).

## 1. County Technology Strategic Plan Template

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.

A. <u>Current Technology Assessment</u> \*Not Applicable to Glenn County\*

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):

# B. Plan to achieve an Integrated Information Systems Infrastructure \*Not Applicable to Glenn County\*

Describe the plan to obtain the technology and resources not currently available in the county to implement and manage the Integrated Information Systems Infrastructure (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:

| Oversignt 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 (see guidelines, page 20, for example):

#### Month 1

Finalize Workflow Assessment

#### Month 2

RFP Process

#### Month 3

• Equipment purchases and delivery

#### Month 4

- Installation, testing, and going live
  - Weeks 1 & 2 Main Willows Site
    - Assembly of main site server rack
      - Set up of server hardware (3 servers)
        - Install three servers into main site rack
        - Install and configure SAN device on main server
        - Install and configure two rack mount UPS units
      - Set up of server software (3 physical 2 virtual servers)
        - Configure 2 XenServers
          - o Install and configure XenApp (Citrix)
          - o Install and configure 2008 DC
          - o Install and configure 2008 File server
          - o Install and configure SQL server
          - o Install and configure Spector server
          - o Install and configure SIRE server
          - o Install and configure Envision server
          - Install and configure Cardlock server
        - Configure Citrix controller
  - o Weeks 3 & 4 Main Willows Site
    - Migration of application data to new servers
      - Active Directory
        - o FMSO roles and Global Catalogs
        - o DNS & DHCP
        - o Antivirus
        - o SQL
        - o SIRE
        - o Spector360
        - o Cardlock
        - WIC applications
        - File data

- Migrate roaming profiles to Citrix profiles and copy data
- Train staff at Willows, CRC, and Harmony House sites

#### Month 5

- Continued installation, testing, and going live for remaining 4 sites (2 cities)
  - o Week 1
    - Installation of two offsite servers at CRC and Harmony House sites
      - Install racks
      - Install and configure servers
        - o Configure for Active Directory
          - Set up DNS & DHCP
      - Convert workstation to use new onsite domain controller
    - Train staff
  - o Week 2
    - Installation of two offsite servers at Orland East and TAY sites
      - Install racks
      - Install and configure servers
        - o Configure for Active Directory
          - Set up DNS & DHCP
      - Convert workstation to use new onsite domain controller
    - Train staff
  - o Week 3
    - Quality assurance
      - Follow up with staff on quality of service
      - Address any outstanding issues
      - Provide additional training if required
    - Decommission application servers
  - o Week 4
    - Decommission old domain controllers and file servers
    - New System fully implemented
    - All old hardware will be wiped according to HIPAA requirements for data destruction and disposed of according to the county E-waste policies.
  - 2.2) Training and schedule/timeline:

## Citrix Virtual Applications Training

Matson & Isom will provide specific training to appropriate Glenn County staff for the Citrix portion of the new IT system; training will be provided on the following schedule:

- Month 4, weeks 3& 4
  - o Willows Main Office
  - o Harmony House site
  - o Hamilton City site
- Month 5, week 1
  - o CRC Site
- Month 5, week 2
  - Orland East Site
  - o TAY Site

#### Basic System Training - Train the Trainer Model

We plan to train up to two (2) trainers at both our Willows and Orland sites to train staff and consumers on using the basic system. These trainers will then conduct trainings for each of the following groups:

- Administrative and support staff
- Clinical and service delivery staff
- Consumer and family members

A training schedule for these staff trainings will be developed during the implementation phase of the IT Project, as it is dependent on staff work schedules and other time commitments. Matson & Isom will train the trainer for the clinical and administrative/support staff. Glenn County or a designee will train the trainer for the consumers and family members.

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

We have obtained input on the Integrated Information Systems Infrastructure from stakeholders in a number of different venues. We discussed options with the MHSA Executive Leadership Team (MELT), which is comprised of a number of different MHSA staff, supervisors, clients, and Health Services Agency managers. In addition, we discussed options with our family organization, Work For Tomorrow's Youth, and the MHSA Advisory Board. Obtaining ideas from these stakeholders provides important input into our planning process and the development of our Integrated Information Systems Infrastructure.

During the meetings with these stakeholders, we provided an overview of the Capital Facilities and Technological Needs components, the funding available to Glenn County, and the overall parameters for utilizing the funds. We then held discussions with each of the stakeholder groups to help guide us in the development of this Project.

Updates regarding this Technological Needs Project are provided on a monthly basis to inform each stakeholder group of the development of the Project; we will continue this practice to update stakeholders on the project implementation once we are funded. Consumers, family members, and staff are very supportive of our planning and implementation activities to update our eight-year old IT system.

2.4) Inventory of current systems:

#### Willows Main Site Servers

- GCHS1 6 years old. Windows 2003 Standard
  - o Primary Domain Controller
  - o Print Server for:
    - Willows Main site
    - Harmony House site
    - Hamilton City site
    - TAY site

- GCHSWILLOWS 5 years old. Windows Server 2003 Standard
  - o File Server for:
    - Willows Main Site
    - Hamilton City site
    - Harmony House site
  - o Backup Domain Controller
  - o Application Server
    - Document Imaging
    - Mental Health applications
    - MHSA applications
  - o Anti-Virus Server
  - Network Backup Media Server
    - Backs up all servers at all sites including itself
- GCHS-Exchange Less than a year old. Windows Server 2008
  - o Exchange 2007 Mail Server
- GCHS-SQL 4 years old. Windows
  - o Microsoft SQL 2000 Database Sever
    - Document Imaging Database
- GCHS-Spector 3 years old. Windows XP Professional
  - o Spector360 Monitoring System
    - HIPAA Logs
    - User Activity Logs
- GCHS-CardLock 9 years old. Windows XP Professional
  - o Card lock Security Management System
- TerraStore 5 years old. Network Attached Storage
  - o Document Imaging Data

#### Orland CRC Site Server

- GCHS3 8 years old. Windows Server 2000
  - Back up Domain Controller
  - o File Server for CRC Site
  - o Application Server for CRC Site
  - o Print Server for CRC Site

#### Orland East Site Server

- GCHS-OE -8 years old. Windows Server 2000
  - o Back up Domain Controller
  - o File Server for:
    - Orland East Site
    - TAY Site
  - o Application Server for Orland East Site
  - o Print Server for Orland East Site

#### Workstations - All Sites

- 120 Desktop and Laptop computers 1 to 8 years old. Windows XP Professional
  - o 41 with Windows Vista Business & Office 2007 Professional Plus Licenses
    - Downgraded to Windows XP Professional for compatibility
    - Downgraded to Office 2003 Professional for compatibility

- o 61 with Windows XP Professional
  - Office 2003 Professional
- 2.5) Please attach your Work Flow Assessment Plan and provide schedule and list of staff and consultants identified:

#### Month 1

- Communications backbone assessment Week 1
  - o Cory Davies Matson & Isom Technology Consulting
  - o Samantha Back Matson & Isom Technology Consulting
  - o David Jensen Matson & Isom Technology Consulting
  - o John Harris Matson & Isom Technology Consulting
- Site assessment needs focus groups Weeks 1-3
  - o Program Managers and associated Deputy Director
  - o Samantha Back Matson & Isom Technology Consulting
  - o Tyler Smith Matson & Isom Technology Consulting
  - o John Harris Matson & Isom Technology Consulting
- Applications assessment Week 2
  - o Tyler Smith Matson & Isom Technology Consulting
  - o Samantha Back Matson & Isom Technology Consulting
  - o David Jensen Matson & Isom Technology Consulting
  - o John Harris Matson & Isom Technology Consulting
- Systems Planning Week 2 &3
  - o Tyler Smith Matson & Isom Technology Consulting
  - o Samantha Back Matson & Isom Technology Consulting
  - o David Jensen Matson & Isom Technology Consulting
  - o John Harris Matson & Isom Technology Consulting
  - Scott Gruendl Director
  - o Cecilia Hutsell Chief Deputy Director
- Preliminary Engineering Week 3
  - o Tyler Smith Matson & Isom Technology Consulting
  - o Samantha Back Matson & Isom Technology Consulting
  - o David Jensen Matson & Isom Technology Consulting
  - o John Harris Matson & Isom Technology Consulting
- System solutions research and design Week 3 & 4
  - o Tyler Smith Matson & Isom Technology Consulting
  - o Samantha Back Matson & Isom Technology Consulting
  - o Michael Hering Matson & Isom Technology Consulting
  - o David Jensen Matson & Isom Technology Consulting
  - o John Harris Matson & Isom Technology Consulting
- System solution approval process Week 4
  - o Scott Gruendl Director
  - o Cecilia Hutsell Chief Deputy Director

- o Kathy Montero Deputy Director, Mental Health
- o Grinnell Norton Deputy Director, Public Health
- o Samantha Back Matson & Isom Technology Consulting
- o John Harris Matson & Isom Technology Consulting

#### Month 5

- Performance Assessment Week 3 & 4
  - o Samantha Back Matson & Isom Technology Consulting
  - o John Harris Matson & Isom Technology Consulting
  - o Tami Hanni, Office Technician
  - o Erin Valdez, Program Manager, Fiscal
  - 2.6) Proposed EHR component purchases:

The proposed purchases for our EHR project have been included in the EHR Project Proposal document. Please see *Exhibit 3 – EHR Project* for more information.

#### 2.7) Vendor selection criteria:

Glenn County has a countywide contract with Matson & Isom Technology Consulting for all computing needs. Glenn County is a small northern county and we do not have an IT Department as some of the larger counties do. Therefore, every year Glenn County negotiates a new contract with this vendor and it is a sole source contract that allows Glenn County to work toward countywide interoperatibility. The original contract was the result of an RFP that was issued by our County Administrative Officer's Office. All bids were reviewed and Matson & Isom Technology Consulting was chosen not only for being cost effective but also having highly qualified staff.

Matson & Isom Technology Consulting put together a list of hardware and software that would be needed to update and transform our system. The list of hardware and software required was sent to EMC, CDWG and Dell for quotes. EMC and CDWG came in with a quote of \$301,838.73 while Dell came in with a quote of \$265,543.51, a difference of \$36,295.22 along with the benefit of dealing with one vendor. These quotes were used to get an estimate of how much the system would cost. After approval of this plan, Glenn County will issue a RFP, or conduct the same process described above, to comply with County Code.

Netsmart Technologies is our vendor for behavioral health software. In this plan we propose to finish implementing the Clinical Workstation module. The Clinical Workstation module will allow clinicians to have timely information of their client records, as well as having a complete electronic file. This module will link with our Practice Management module to allow for an integrated information system infrastructure where we can securely access and exchange information.

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

The total cost estimate for achieving the IISI in Glenn County is \$428,000.

## 3. County Personnel Analysis (Management and Staffing)

Note: Per CFTN guidelines, as a small county, Glenn County has opted out of completing the Personnel Analysis (Section 3, this page).

| Major IT Positions                        | Estimated # FTE<br>Authorized | Position hard<br>to fill?<br>Yes = 1; No = 0 | # FTE estimated<br>to meet need in<br>addition to # FTE<br>authorized |
|---|-------------------------------|--|---|
| (1)                                       | (2)                           | (3)  | (4)   |
| A. IT Staff                               |                               |  |   |
| Chief Technology/Information Officer      |                               |  |   |
| Hardware Specialist                       |                               |  |   |
| Software Specialist                       |                               |  |   |
| Other Tech Staff                          |                               |  |   |
| Subtotal – IT Staff                       |                               |  |   |
| B. Project Managerial and Supervisory     |                               |  |   |
| CEO or manager above direct supervisor    |                               |  |   |
| Supervising Project Manager               |                               |  |   |
| Project Coordinator                       |                               |  |   |
| Other Project Leads                       |                               |  |   |
| Subtotal – Project Managerial             |                               |  |   |
| C. Tech Support Staff                     |                               |  |   |
| Analysts, tech support, quality assurance |                               |  |   |
| Education and training                    |                               |  |   |
| Clerical, secretary, admin assistants     |                               |  |   |
| Other support staff (non-direct services) |                               |  |   |
| Subtotal – Tech Support                   |                               |  |   |
| Total County Technology Workforce (A+B+C) |                               |  |   |

#### TECHNOLOGICAL NEEDS PROJECT PROPOSAL DESCRIPTION

## Project Title: IT Infrastructure Upgrade

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: Matson & Isom Technology Consulting
- ✓ Commercial Off-The-Shelf (COTS) System
  - Name of Vendor. Avatar/Netsmart
- □ Product Installation
  - Name of Consultant and/or Vendor (if applicable): Not applicable
- ✓ Software Installation
  - Name of Vendor: Matson & Isom Technology Consulting

## **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.

The planning stage of this project began by conducting several focus groups and by distributing a survey to stakeholders at various locations and various committees. The results of the focus groups and surveys showed that our stakeholders were very concerned with security, privacy, interoperability with pharmacies, client access to computing resources, Personal Health Records, and an integrated behavioral health system. These issues were discussed at our monthly MHSA meetings and a plan was developed based on the priorities outlined through our planning process.

The update and redesign of our current base system and completion of the Clinical Workstation module will address enhanced security, privacy, timely access to computing resources at all sites, as well as facilitate the highest quality, cost-effective services and supports for clients and their families.

The new system will provide a strong foundation for collecting client level data, analyzing the data, producing management decision support tools, and ensuring confidentiality and security of the data. It will increase our IS capacity and greatly improve access and performance for all of our sites, but especially our remote sites. It will also allow us to communicate with pharmacies and other health organizations, as needed. In addition, the system will ensure that our fiscal and billing needs are timely and accurate.

## **Project Cost Justification**

|                       | Hardware  | Software  | Contract<br>Services | Total     |
|-----------------------|-----------|-----------|----------------------|-----------|
| FY 09/10              |           |           |                      |           |
| Quarter 1             | \$139,061 | \$125,939 | \$29,500             | \$294,500 |
| Quarter 2             |           |           | \$74,500             | \$74,500  |
| Quarter 3             |           |           | \$29,500             | \$29,500  |
| Quarter 4             |           |           | \$29,500             | \$29,500  |
| <b>Total FY 09/10</b> | \$139,061 | \$125,939 | \$163,000            | \$428,000 |

The Hardware and Software costs are comprised of all elements needed to install the new network. These purchases will be made during the first quarter of the project, after the workflow assessment and RFP process are complete.

The associated labor for this project will be provided by Matson & Isom Technology Consulting, the County's IT vendor. Contract Services for this project are estimated at \$45,000. The actual installation of the new network is scheduled to take place during the second quarter of the project.

The other Contract Services costs amount to \$29,500 per quarter. These costs represent the amount necessary to implement the Avatar Clinical Workstation.

## **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

This project is critical to the successful implementation of all of our MHSA activities and the broader system-level goals of the Glenn County Health Services Agency. The mission and vision of our Agency is to use data and outcomes to ensure access, quality, and the cost-effectiveness of our programs. Some components of our existing IT system are over eight years old and inefficient at the remote sites. Staff are required to log on to the system from remote locations; they frequently wait up to twenty (20) minutes for the system to respond. In order to fully accomplish the Agency goals, we must have an information system which is easy-to-use, responsive to user needs, collects data in a reliable manner, and produces accurate data reports for management decision support.

We have been implementing our new Avatar system over the past six months and will soon implement the clinician's desktop feature. A new IT system will provide the core infrastructure for our new software and ensure that the system can process and meet the demands of this new software and user interface.

As the health industry continues to move toward increased accountability and the use of data and outcomes, it is critical to have an IT system which can fully support the demands of a comprehensive decision support system. The purchase of this IT system upgrade will enable us to accomplish the goals of the MHSA, the Glenn County Health Services Agency, and the California Department of Mental Health.

• The degree of centralization or decentralization required for this activity

The system with be centralized into three separate nodes, with two of the nodes being located at the Willows Main site for local data and application virtualization. The third node is the AVATAR system that is a hosted system off-site. The local system will ensure a high productivity level for all users at all sites while enhancing security and it will allow Glenn County to move forward in complying with the Federally Mandated Desktop Security policies.

• The data communication requirements associated with the activity

The communication requirements for the new system are similar to the requirements for the legacy system that is currently in use. The current point-to-point T1 network will comprise the backbone of the project. Some satellite offices will connect into the system via secure encrypted DSL connections. Connections to the AVATAR system require connectivity to the Internet as well as either VPN software or VPN hardware to create a secure encrypted tunnel to the hosted AVATAR system that is located at the Netsmart headquarters.

• The characteristics of the data to be collected and processed, i.e., source, volume, volatility, distribution, and security or confidentiality

The new IT system will collect all of the data elements required by the California Department of Mental Health. These data elements include client-level demographic data, such as client ID, social security number, date of birth, gender, race/ethnicity, diagnosis, and family composition. In addition, the system will collect service-level data, including date of service, type of service, duration, and location. Staff-level data will provide information on service delivery staff (e.g., license, job title, etc.). Outcome-level data will be collected on each client and includes living situation, education, employment, arrest history, and satisfaction with services.

The IT system will also be used as an accounting system to submit claims to Medi-Cal and other payor sources. It will also track reimbursement for paid claims.

It is anticipated that the new IT system will be able to collect data on over 800 clients each year, with an average volume of 1.25 GB per client.

The volatility quotient of the system is significantly small due to modularity of the multi-node design coupled with the implementation of a multi-tier security policy. The system is fully redundant with a Storage Area Network array running RAID 10 that can be expanded. Also more Storage Area Network array's can be added on or off site for a RAID 1 redundancy between all the Storage Area Network devices. Multiprocessing is done by an array of servers to load balance the work flow and more servers can be added as workflow increases.

Distribution of workflow is handled by an array of servers that highly leverages virtualization. This level of virtualization separates the software functionality from the physical hardware layer and allows Glenn County to securely move the virtualized environment from one location or hardware platform to another location and even to another site if required. This furnishes Glenn County with the ability to evenly distribute the work load across the entire wide area network by adding more nodes to the system.

The system will maintain a high level of data security and integrity through secure encryption of data in-transit and data at-rest solutions required by HIPAA and other policies that govern the protection of Protected Health Information, plus a role-based security model and activity-level monitoring of the system and data. We will utilize state-of-the-art encoding and encryption software to ensure the security and confidentiality of our client-level and staff-level data, in compliance with all federal, state, and local confidentiality requirements. Also, the system will allow Glenn County to implement new technology to meet compliance with Glenn County's county wide "Digital Signature and Digital Certificate" initiatives.

 The degree to which the technology can be integrated with other parts of a system in achieving the Integrated Information Systems Infrastructure

The system is based upon current standardized technology solutions that are well suited for the availability, flexibility, scalability and interconnectivity across a wide base of IT/IS systems that are currently in use today. This will provide the backbone in Glenn County for the integration of the system into the Integrated Information Systems Infrastructure initiative. The system is

Glenn County Health Services Agency

flexible and modular enough to host connections to a variety of other parts of an Integrated Information Systems Infrastructure.

### **Hardware Considerations**

#### Describe:

• Compatibility with existing hardware, including telecommunications equipment

The proposed system will be compatible with current system hardware while increasing productivity and enhancing Glenn County's security model.

Physical space requirements necessary for proper operation of the equipment

All locations receiving the proposed hardware have sufficient space to accommodate the new systems.

Hardware maintenance

Glenn County has a regular weekly schedule for maintenance. The new system will be maintained on a weekly basis according to this maintenance schedule. The hardware comes with a three year 24/7 on-site emergency hardware replacement/repair warranty.

• Backup processing capability

The system has redundant backup processing capability built into it with fail-over redundancy and load balancing. The system is modular and can also be multi-node enabled for security and redundancy of data and processing.

Existing capacity, immediate required capacity, and future capacity

The existing legacy system capacity is at or near 90% of total capacity for the number of current users and/or stored data. The new system has four times the capacity than the legacy system and is expandable to double that capacity, at a minimum, when needed. Since the system is modular, more modules can be added, to easily to handle any future requirements.

#### **Software Considerations**

## Describe:

Compatibility of computer languages with existing and planned activities

The system is compatible with all existing and planned activities.

• Maintenance of the proposed software, e.g. vendor-supplied

Glenn County has a regular weekly schedule for maintenance. The new system will be maintained on a weekly basis according to this maintenance schedule. The software comes with upgrade and technical support packages.

Availability of complete documentation of software capabilities

Glenn County keeps documentation on all purchased software. Where local documentation is required, it will be developed by Glenn County or Glenn County's IT contractor.

 Availability of necessary security features as defined in DMH standards noted in Appendix B

<u>Access Control Standard</u>: the EHR MUST support measures to define, attach, modify and remove access rights to the whole system and/or sections. **YES based on a role based security model with a high level of granularity.** 

- Support measures to define, attach, modify and remove access rights for classes of users.
   YES
- 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. YES
- 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. YES
- Support measures to ensure the integrity of data stored in and transferred to and from other systems. YES

<u>Auditing Standard</u>: The EHR MUST support recording of an audit trail of access to, and/or modifications of, data. **YES** 

- Support recording of the nature of each access and/or modification. YES
- 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. YES

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

 Ability of the software to meet current technology standards or be modified to meet them in the future

The selected software vendors were chosen because they meet the current technology standards and have a proven track record for keeping pace with the "now current" standards, as these standards have changed in the past.

## **Interagency Considerations**

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.

Glenn County, at this time, does not have any contract service providers that use our system. The new system design will allow for contract providers to access if needed. The update of our base system will enhance our compatibility with both state and local agencies, as well as

enhancing internet access for clients and their families. The completion of the Clinical Workstation will allow interagency coordination as Case Managers from various agencies that are working with the same client share up-to-date information. This impact will have lasting benefits that move the mental health system towards the goals of wellness, recovery, resiliency, and expansion of opportunities for accessible community-based services for clients and their families through interagency coordination.

## **Training and Implementation**

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

The current workflow is in transition; we are in the process of going from a manual client record system to an electronic record system. The first step was to implement a Program Management system for our billing, CSI, and general information of our clients. The next step in our plan is to implement Clinical Workstation, this is one more step closer to our goal of Electronic Medical Records. Glenn County is a rural community with multiple sites throughout the county. Our base system is very old and cannot support this type of transition. The proposed system will allow for portability, security, speed and efficiency, centralized management, and integrity of the system.

The implementation will be done by our current technology consultants over a five month period. Training on the new system is included in the implementation schedule. Matson & Isom will provide specific training to appropriate Glenn County staff for the Citrix portion of the new IT system; training will be provided per the schedule noted earlier in this document. We plan to train up to two (2) trainers at both our Willows and Orland sites to train staff and consumers on using the basic system. These trainers will then conduct trainings administrative and support staff; clinical and service delivery staff; and consumers and family members. Training for Clinical Workstation is first done by Netsmart for our project team leaders; training will then be conducted by the team leaders to individual staff members affected by the change.

## **Security Strategy**

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.

The project and the implementation of the project will meet all the security and privacy policies for Glenn County. These policies and procedures were established by the county HIPAA Officer. Glenn County also has a countywide Business Continuity Plan that includes Operational Recovery and Emergency Response. All of our plans, policy and procedures are in compliance with all State and Federal laws and regulations. We do not anticipate any policy or procedural changes as a result of this project.

## **Project Sponsor(s) Commitments**

Note: Per CFTN guidelines, as a small county, Glenn County has opted out of completing the Project Sponsor Commitment.

## Sponsor(s) Name(s) and Title(s)

Identify the Project Sponsor name and title. If multiple Sponsors, identify each separately.

Not applicable to Glenn County.

## Commitment

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

Not applicable to Glenn County.

## **Approvals/Contacts**

Please include separate signoff sheet with the names, titles, phone, e-mail, signatures and dates for the individual responsible for preparation of this Exhibit, such as the Project Lead or Project Sponsor(s)

## **Project Lead**

Name: Cecilia Hutsell, Chief Deputy Director

Phone: 530-934-6582

Email: <a href="mailto:chutsell@glenncountyhealth.net">chutsell@glenncountyhealth.net</a>

Signature: <<u>to be signed prior to submission to DMH.</u>>
Date:

## **EXHIBIT 4 - BUDGET SUMMARY** FOR TECHNOLOGICAL NEEDS PROJECT PROPOSAL

County: Glenn
Project Name: IT Infrastructure Upgrade

|  | (1)   | (2)   | (3)     | (4)      |           |
|--|-------|-------|---------|----------|-----------|
| Category   |       |       |         | Total    | Estimated |
|  | 07/08 | 08/09 | Future  | One-Time | Annual    |
|  |       |       | Years   | Costs    | Ongoing   |
|  |       |       |         | (1+2+3)  | Costs*    |
| Personnel  |       |       |         |          |           |
| None   |       |       |         |          |           |
| Total Staff (Salaries & Benefits)                    |       |       |         |          |           |
|  |       |       |         |          |           |
| Hardware   |       |       |         |          |           |
| From Exhibit 2                                       |       |       |         |          |           |
| Network Switch for iSCSI connection between          |       |       |         |          |           |
| Servers and SAN                                      |       |       | 2,178   | 2,178    |           |
| 4 Off-Site Servers & 1 for Citrix Monitoring, Quad-  |       |       |         |          |           |
| Core Xeon 2GHz, 2 GB each RAM, 2 each(10)            |       |       |         |          |           |
| 146 GB SAS 15K RPM 3Gbps Hot swappable               |       |       |         |          |           |
| drives RAID 1, Duel NIC, Dell Rack mount             |       |       |         |          |           |
| hardware for servers                                 |       |       | 17,227  | 17,227   |           |
| 8 Rack mount shelves, 4 Dell racks for Server        |       |       |         |          |           |
| hardware, 4 APC Smart-UPS 1000 rack mount            |       |       |         |          |           |
| version (1 for each site), 5 3 year mission critical |       |       |         |          |           |
| 4 hour support on all Off-site Servers               |       |       | 7,011   | 7,011    |           |
|  |       |       |         |          |           |
| Backup Solution device (must fit data retention      |       |       |         |          |           |
| requirements), Dell rack for Main Site hardware      |       |       | 22,219  | 22,219   |           |
| 2 High Performance Servers for VM's, 2 each          |       |       |         |          |           |
| Quad-Core Xeon 2GHz or above, 32 GB each             |       |       |         |          |           |
| RAM, 2 each Dual NIC Ethernet boards, Dell           |       |       |         |          |           |
| Rack mount hardware for Servers at Main Site, 2      |       |       |         |          |           |
| 3 year mission critical 4 hour support on all        |       |       |         |          |           |
| hardware   |       |       | 19,862  | 19,862   |           |
| UPS  |       |       | 6,608   | 6,608    |           |
| SAN Storage Device, 4 TB Usable Storage              |       |       |         |          |           |
| space, SAS Drives - 15K RPM 3Gbps Hot                |       |       |         |          |           |
| swappable, SAN Expandable to 8TB or more             |       |       |         |          |           |
| (open slots), Move partitions in real time, Rack     |       |       |         |          |           |
| mount hardware for SAN, Encryption for SAN           |       |       |         |          |           |
| Device   |       |       | 63,956  | 63,956   |           |
| Total Hardware                                       |       |       | 139,061 | 139,061  |           |

| Software                                      |  |         |         |         |
|---|--|---------|---------|---------|
| From Exhibit 2                                |  |         |         |         |
|   |  |         |         |         |
| XenServer Platinum with support, 125 user     |  |         |         |         |
| XenApp 5 Platinum with support, 84 CAL Office |  |         |         |         |
| 2007 Professional Plus, 4 CPU Windows Server  |  |         |         |         |
| 2008 Datacenter (Open License Version), 125   |  |         |         |         |
| CAL Windows Server 2008 User CAL's for        |  |         |         |         |
| network, 125 CAL Terminal Servies CAL's, SQL  |  |         |         |         |
| Server 2008 Enterprise, 25 CAL SQL 2008       |  |         |         |         |
| Enterprise CAL's, 1 each (5) Windows Server   |  |         |         |         |
| 2008 Standard (Open License Version), Backup  |  |         |         |         |
| Solution software (Be able to backup Exchange |  |         |         |         |
| 2007 on separate server)                      |  | 125,939 | 125,939 |         |
| Total Software                                |  | 125,939 | 125,939 | -       |
|   |  |         |         |         |
| Contract Services (list services to be        |  |         |         |         |
| provided)                                     |  |         |         |         |
| Network Installation                          |  | 45,000  | 45,000  |         |
| Netsmart - Continued Project Management and   |  |         |         |         |
| Clinician Workstation Implementations         |  | 118,000 | 118,000 | 122,000 |
| Total Contract Services                       |  | 163,000 | 163,000 |         |
| Administrative Overhead                       |  |         |         |         |
| Other Expenses (Describe)                     |  |         |         |         |
|   |  |         |         |         |
|   |  |         |         |         |
|   |  |         |         |         |
| T-(-10(-1)                                    |  | 400.000 | 100.000 |         |
| Total Costs (A)                               |  | 428,000 | 428,000 |         |
| Total Offsetting Revenues (B)**               |  |         |         |         |
| MHSA Funding Requirements (A-B)               |  |         |         |         |

## NOTES:

<sup>\*</sup>Annual costs are the ongoing costs required to maintain the technology infrastructure after the one-time implementation.

<sup>\*\*</sup>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.

#### STAKEHOLDER PARTICIPATION

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.

The Glenn County Technological Needs planning process continued the comprehensive work of our earlier MHSA planning efforts by utilizing our excellent partnership with consumers, family members, staff, and community stakeholders. Input on the Technology Project was obtained through a variety of sources, including a Technological Needs survey, our monthly MHSA Executive Leadership Team meetings, our monthly MHSA Consumer meetings, Children's Interagency Coordinating Council meetings, Management and Planning Team meetings, Advisory Board meetings, and individual communications with clients and family members. Meetings and focus groups included representation from traditionally unserved and underserved populations, including Transition Age Youth, Latinos, Native Americans, and older adults; there was extensive consumer and family member participation as well.

We developed a survey that provided staff, volunteers, and consumers the opportunity to give feedback on technology needs in the Glenn County mental health system. The survey was distributed to persons throughout the county; over 128 Technological Needs surveys were completed.

The MHSA Executive Leadership Team, comprised of consumers, family members, staff, and other stakeholders reviewed and discussed the results of the Technological Needs survey. The Team used this tool and additional input from key stakeholders to determine the highest priorities for the Technology projects. Input from these planning activities were compiled and developed into the core components of the Technological Needs Project Proposal.

<u>Public Review and Comment Period</u>: A draft of this Technological Needs Project Proposal has been posted on our website for 30 days from April 20, 2009 through May 20, 2009. The Proposal is available on the Glenn County website. The Technological Needs Project Proposal has also been distributed across the county and placed with allied agencies, at the court house, and at public libraries.

<u>Public Hearing</u>: A public hearing will be held on Wednesday, May 20, 2009 from 10:30 am – 12:00 noon at Harmony House (343 Yolo Street, Orland, CA). Input on the Technological Needs Project Proposal will be reviewed and incorporated into the final document, as appropriate, prior to submission to DMH for approval.

## APPENDIX A - PROJECT RISK ASSESSMENT

Glenn County

| Category                  |                     | Factor                              | Rating | Score |  |
|---------------------------|---------------------|-------------------------------------|--------|-------|--|
| Estimated Cost of Project |                     | Over \$5 million                    | 6      |       |  |
|                           |                     | Over \$3 million                    | 4      |       |  |
|                           |                     | Over \$500,000                      | 2      | 1     |  |
|                           |                     | Under \$500,000                     | 1      |       |  |
| Project Mai               | nager Experience    |                                     |        |       |  |
| Like Projects             | completed in a "key | None                                | 3      |       |  |
| staff" role               |                     | One                                 | 2      | 1     |  |
|                           |                     | Two or More                         | 1      |       |  |
| Team Expe                 | rience              |                                     |        |       |  |
| Like Projects             | Completed by at     | None                                | 3      |       |  |
| least 75% of k            | Key Staff           | One                                 | 2      | 1     |  |
|                           |                     | Two or More                         | 1      |       |  |
| Elements o                | f Project Type      |                                     |        | •     |  |
|                           |                     | Local Desktop/Server                | 1      |       |  |
|                           | New Install         | Distributed/Enterprise Server       | 3      | 3     |  |
|                           | Lindata/Linaunada   | Local Desktop/Server                | 1      | 3     |  |
| Handurana                 | Update/Upgrade      | Distributed/Enterprise Server       | 2      |       |  |
| Hardware                  |                     | Local Network/Cabling               | 1      |       |  |
|                           | Infrastructure Dis  | Distributed Network                 | 2      |       |  |
| illiastructure            |                     | Data Center/Network Operations      | 3      | 3     |  |
|                           |                     | Center                              |        |       |  |
|                           | Custom              |                                     | 5      |       |  |
|                           | Development-        |                                     |        |       |  |
|                           | Application Service |                                     | 1      | 3     |  |
| Software                  | Provider            |                                     |        | ] 3   |  |
|                           | COTS* Installation  | "Off-the-Shelf"                     | 1      |       |  |
|                           |                     | Modified COTS                       | 3      |       |  |
|                           | Number of Users     | Over 1,000                          | 5      |       |  |
|                           |                     | Over 100                            | 3      | 2     |  |
|                           |                     | Over 20                             | 2      |       |  |
|                           |                     | Under 20                            | 1      |       |  |
|                           |                     | P                                   | 1      |       |  |
|                           |                     |                                     | 2      | 1     |  |
|                           |                     | Multi-Tier (client & web, database, | 3      | '     |  |
| Software                  |                     | application, etc. servers)          |        |       |  |

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

15 total