

A full Dental Module will contain two (2) sub modules, Dental Services and Dental Administration and will allow for accessibility to electronic dental images.

6. Correctional Mental Health Module

The mental health needs of inmates and juveniles will be tracked and fulfilled using this module. Additional mental health functionality specific to juveniles will be available in the Juvenile Health module. Diagnostic codes, procedures etc., will be compatible with Forensic Mental Health System (ELMR) so that data, if needed, could be transferred seamlessly from the EHR system to the IRIS system.

7. Juvenile Health Module

A full Juvenile Health Module will encompass the special needs for juveniles not already covered in other modules. This module will include eligibility checking, specific juvenile programs tracking such as immunizations, additional reporting and consent requirements specific to minors.

8. Clerical Module

The Clerical Module will deal with functions such as staff professional licensing, credentialing and continuing education.

9. Imaging and Document Management Module

This module will handle the images of scanned records and forms from past bookings.

10. Interface Management Module

This module will handle all of the execution and maintenance of interfaces to other systems.

11. Systems Administration Module

The Systems Administration Module will be where administrative functions such as access rights or creating ad hoc queries will be performed.

12. Digital Radiographic Module

A Digital Radiographic Module or an application interface to an existing radiographic system is required for the screening of Tuberculosis (TB) and to take routine X-rays, as requested by medical staff. This module shall be in compliance with the latest Digital Imaging and Communications in Medicine (DICOM) and Health Level Seven (HL7) standards.

13. Pulmonary Disease Services Module

A Pulmonary Disease Services Module is required by Public Health for the

administration of drugs used to treat patients diagnosed with tuberculosis. This module is expected to meet or exceed the requirements of the previous system.

B. EHR SYSTEM REQUIREMENTS

1. EHR System Architecture

The EHR system must provide the specific functionality needed to support the medical, mental health and juvenile programs of CHCS, Public Health Pulmonary Disease Services and must be compatible with the overall architecture required by the County's Information Technology department (RCIT). System architecture shall include:

- a) A client/server, non-mainframe EHR system that maintains a centralized data repository and processes the data on a central application server.
- b) Desktop accesses over a local area network and/or a wide area network through a standard internet browser.
- c) Operating the EHR system on a network developed, maintained and supported by RCIT. This network will include Local and Wide Area Networks (LANs/WANs).
- d) A secure Internet site with a web portal for access to the EHR system by users at remote sites who may not have direct access to the County of Riverside network.
- e) An EHR system with hardware, operating system, database management system and programming languages that use current commonly used IT standards.
- f) A Master Patient Index that uniquely identifies each CHCS inmate or juvenile using an RCN for adults and the Juvenile Number for minors or another unique identifier as designated by population.
- g) Use of healthcare industry standards for transaction formats, codes and protocols for data which must interface between CHCS and other systems, such as HL7 and International Classifications of Diseases (ICD)-10 coding.
- h) An Interface Engine to convert and transfer data between different systems. Use of Health Insurance Portability and Accountability Act (HIPAA) standards for data elements and data formats for data which must interface between CHCS and other systems.
- i) A Clinical Data Repository (CDR) which shall allow the storage of data captured by different "front end" transaction applications other than EHR system.

- j) Use of a data dictionary or similar technology which facilitates the maintenance of tables or metadata identifying sources, formats, codes, descriptions and other information about data in the CDR.
- k) Interface to a common data warehouse that can be populated by data from the CDR.
- l) Public Key Infrastructure security for Web-based transactions.

2. Technology Requirements

The EHR system must be able to operate within the existing COUNTY environment including the Local Area Network, hardware, and software infrastructure. It must comply with internal RCIT standards so that the EHR system does not require its own separate technical environment. It must be capable of interoperation and interfacing with other COUNTY systems and with standard office automation products, as outlined below.

3. Conformity and Support

The EHR system must fully conform with and support the following COUNTY infrastructure and environment requirements:

- a) Microsoft Windows Server 2008 or higher operating system.
- b) Microsoft Windows 7 Professional PC workstation operating system with full Graphical User Interface (GUI).
- c) Microsoft Windows Intel or Intel-compatible PC workstations.
- d) ANSI SQL and ODBC-compliant relational or post-relational database management system (DBMS)
- e) 10/100/1000 Base-T switched Ethernet Local Area Network (LAN) topology and-TCP/IP protocol.
- f) Existing RCIT broadband based Wide Area Network.
- g) Latest Microsoft Internet Explorer Web browser compatible with TechCare.
- h) Use of either Visual Basic, C++, or C# as the applications language or Java with Active X extension or XML support for Web usage, although other ANSI standard languages shall be considered.
- i) Use of generally accepted IT industry methodologies for software design,

especially for external data exchange interfaces, application programming interfaces (APIs) and interfaces to common infrastructure support services such as OLE 2.0, MAPI 1.0, TAPI 2.0, SAPI 1.0 and CCOW.

- j) Where appropriate, use of generally accepted healthcare industry data format and transactions standards including, but not restricted to, HL7, CORBA, and ANSI X.12.
- k) Full scalability for the application and any required hardware/software platform.

4. Compliance

The EHR system must comply with the healthcare industry transaction and reporting standards listed below:

- a) Joint Committee on the Accreditation of Healthcare Organizations (JCAHO), American Hospital Association, Title 15, Article 11, CPC, Institute for Medical Quality (IMQ), National Commission on Correctional Health Care (NCCHC), Office of the National Coordinator for Health Information Technology (ONC HIT) 2014, and HL7 messaging formats, and other national accreditation standards applicable to health care software systems.
- b) HIPAA standards including those relating to healthcare industry standard coding, identifiers, and transaction formats of which these must include support for:
 - i. CPT Service Coding
 - ii. Diagnostics Statistical Manual (DSM) IV and ICD-10 Diagnosis Coding
 - iii. National Drug Codes (NDC)
 - iv. Provide Identifier
 - v. Client Identifier
 - vi. Security and Confidentiality
- c) Other HIPAA standards as they become enacted. This might include issues such as privacy and tracking of request for information from a medical record.

5. Compatibility

The EHR system must be compatible with the following:

- a) Microsoft Windows 2008 server or higher and network operating systems.
- b) Microsoft SQL Server 7.0 or later database management system.
- c) Cognos data warehousing and or Crystal Reports and or online analytical processing (OLAP) tools.

- d) Microsoft Office suite.
- e) Microsoft System Management Software (SMS) and Patchlink for automated software distribution across the network.
- f) Symantec Anti-Virus

6. General Capabilities and Features

The EHR system shall meet the following requirements for general, non-function specific requirements:

- a) Adhere to CONTRACTOR Security Requirements as stated in Exhibit E.
- b) Information shall be entered only once for all users and for all modules within the application.
- c) Support ad hoc reporting from an industry standard report generator, accessible from within the application. (The user should not have to exit the application in order to do ad hoc reporting.) This report generator is in addition to the ability to pre-define reports within the application.
- d) Provide a built in report generator that allows designated users to create new user reports which can then be attached to the application and simple queries which can be output to the printer.
- e) Contain predefined, standard reports selectable from within the application.
- f) Have enhanced end user reporting with the ability to extract and download data into COUNTY-approved desktop end user report tools such as those found in the Microsoft Office 2010 suite. (e.g. Word, Excel, PowerPoint, etc.).
- g) Provide for an open architecture for future software developments.
- h) Be scalable to allow for increases in the number of transactions or in the number of users on the new EHR System.
- i) Be upgradeable to the next generation of operating systems and user interfaces.
- j) Have a help system/user's manual for every screen and every module within the application.
- k) Have real time updates to master records tables in order to provide current information to all queries and reports.
- l) Provisions shall be made for updating from a manual fallback system of data

collection forms that shall allow for the continued collection of data during a system outage. The data on these forms shall be entered and updated when the EHR System comes back online.

m) Have the ability for the user to print documents to either a locally attached printer or to a choice of networked printers.

n) Be based on a GUI with graphical screen objects such as radio buttons, drop down lists, tabs, etc. used to select and activate functions rather than entry into text based screens. Screens shall support flexible and direct screen navigation rather than hierarchical navigation through multiple levels. A browser-compatible GUI shall also be acceptable.

o) Be flexible and include the ability to significantly modify EHR System functionality and logic through the use of user-defined and maintained EHR System parameter tables, which are external to the software source code.

p) Include the ability for the user to add new COUNTY business units, cost centers, providers, as well as the ability to accommodate significant future growth in overall patients, providers and staff.

q) Include the ability to interface with other enterprise-wide application software which may be implemented or acquired by COUNTY and is compatible with its standards.

r) Include the need to integrate clinical content into the EHR System functions including private and public sector information sources. (E.g. drug use protocols, nursing protocols).

s) Include the ability to generate on-line alerts, emails or tickler reports to remind staff and supervisors of scheduled pending, overdue or potentially noteworthy activities or statuses (e.g., alerts for appointments, notification of allergies, request of test completed, abnormal test condition).

t) Include the ability to perform comprehensive data validation checks and enforcement of data integrity across all EHR System transactions.

u) Provide fault tolerant, 24 X 7 access with a minimum of 99% up-time reliability using hardware and software fault tolerance methods.

v) Include the need for a very strong role-based model of security and

confidentiality with easy to administer security capabilities. This model shall also incorporate the use of patient authorizations where applicable.

w) Include the need for multiple levels of access only to those portions of the medical record that are relevant to the particular transaction that the person is authorized to perform.

x) Maintain an extensive EHR System audit trail which records all EHR System transactions and which identifies the date and time of the change, the user making changes and the pre and post-change images of any affected data.

y) Maintain multiple segments of history on values of key fields such as eligibility, addresses, phone numbers and others where changes are likely and previous values shall be maintained. The CONTRACTOR shall work with COUNTY to identify the fields for which history shall be maintained.

z) Shall have data archive and restore capabilities.

aa) Include the ability to archive data for near-line or off-line storage in accordance with the listed specifications by the Records Control Schedule of COUNTY for retention of "office" documents. The storage media shall be defined by COUNTY.

bb) Data Retention Requirements for CHCS Medical/Mental Health Records:

- i. Adult Medical/Mental Health Data — records shall be retained for ten (10) years after discharge.
- ii. Juvenile's Medical/Mental Health Data — Juvenile records shall be retained for ten (10) years after discharge and/or until the juvenile reaches twenty-five (25) years of age. However, for a female juvenile who gives birth while incarcerated, the mother's medical record must be maintained on line until the mother reaches the age of eighteen (18) years. Then the record can be archived for storage until the child reaches the age of twenty-five (25) years.
- iii. Include the capability to select the data to be archived using such criteria as Booking Number, Juvenile Number, age, name, program, record type, yet to be determined unique identifiers and combinations of those and other criteria.
- iv. Shall support barcode symbology necessary for the identification of

inmates via a handheld scanner. Identification of inmates, via a barcode scanner, shall be used to expedite the distribution of medications to inmates and subsequent updating of the Medical Administration Record (MAR) but, it shall not be limited to just this purpose.

7. Requirements for Specific Modules

Demographics and Registration:

a) Demographics and Registration General Requirement;

This module is where information such as Name, Booking Number, OCN identifier, Federal Detainee number, unique identifiers and other demographic information reside. It is in this module where past medical records and past bookings are linked to the inmate. Here is located the identifiers which allow information about the inmate to be shared with other programs. (It is also here, where a restriction on the release of such information is imposed.) The Demographic Module shall also control the interface to the County/COUNTY Master Patient Index.

b) Demographics & Registration Functional Requirements

i. Link to County/COUNTY Master Patient Index: A unique identifier is created by the Master Patient Index upon the first registration of a patient in any of the County programs. Once that unique identifier is established it is used to track a patient as he/she is provided services throughout the County. Listed below are the processes where the EHR system interacts with the Master Patient Index:

- ✓ If inmate is not registered in Master Patient Index, create record.
- ✓ If inmate is already registered in Master Patient Index, confirm registration in the EHR system.
- ✓ Edit and update Master Client Index as necessary.
- ✓ If a duplicate entry in Master Patient Index is determined, notify System COUNTY of Master Patient Index so that duplicate Master Patient Index record can be merged.

ii. Input & Edit EHR Inmate Demographic Information;

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- ✓ Standardize information screen format consistent with screen appearance with other modules.
 - ✓ Admin assigns rights to edit selected demographic information.
 - ✓ Capture data on inmate racial, cultural and other demographic information.
 - ✓ Data gathered in demographic module available to all other modules.
 - ✓ If inmate is already registered in EHR demographic information need not be reentered, but can be edited.
- iii. Assign Booking Number, RCN and other unique identifiers;
- ✓ Link with Interface Management and Systems Administration module to trigger upload from SDS.
 - ✓ Link with Interface Management and Systems Administration module to stop upload from SDS.
 - ✓ Link to Systems Administration module for booking number errors or duplications.
- iv. Inmate Location;
- ✓ Drives administration and packaging of medications.
 - ✓ Drives PPD administration and tracking.
 - ✓ Drives Scheduling module
 - ✓ Contains information on facility, module, tank, and bed locations.
- v. Check for Prior Registration into CHCS system;
- ✓ Search for inmate in database using multiple criteria.
 - ✓ Allow for search on inmate using demographic variables as well as Booking Numbers, RCN and other identifiers which must be Common Application Transaction System (CATS) compliant.
 - ✓ Display findings in summary format allowing user to order on multiple fields.

- vi. Inmate Registration into CHCS system;
 - ✓ Requires the assignment of a temporary booking number until a permanent booking number is provided by the SDS.
 - ✓ Actual booking number assigned when upload from SDS occurs.
 - ✓ RCN assigned at upload for new inmates.
 - ✓ RCN merged with demographics if inmate is a repeat.
 - ✓ Distributes other demographic data imported from SDS upload.
 - ✓ Other unique identifier as required by population
- vii. AKA Tracking;
 - ✓ List all known AKAs
 - ✓ Be able to edit or add to AKAs
 - ✓ Be able to report on AKAs
- viii. Link to Systems Administration module and Interface Management to Process Past Medical Records;
 - ✓ Links to Systems Administration module to be able to resolve demographic data inconsistency.
 - ✓ Link to Interface Management to run merge and other utilities concerning the upload from SDS.
 - ✓ Link to Medical Services for summary of Medical History for repeat inmates.
- ix. Inmate Discharge Processing;
 - ✓ Link to Clerical for Medical Records summary and closure.
 - ✓ Link to Interface Management for data down load to IRIS.
- x. Link to Clerical for Medical Chart Summary;
 - ✓ Link to Clerical for preparation of Medical Summaries and Reports to outside agencies and providers.
- xi. Demographic Reporting;
 - ✓ Generate standard reports related to Demographic and

Registration information.

- ✓ Alpha Roster. List by facility in alpha order, all patients in Custody by date range.
- ✓ Dental Intake. List of all inmates with Dental complaints at intake.
- ✓ Psychiatric Intake. List of all inmates with Psychiatric complaints at intake.
- ✓ Pregnant intake. List of all inmates whose urine pregnancy test was positive at intake.
- ✓ Chronic care intake. List of inmates with chronic care issues at intake.
- ✓ HIV positive at intake
- ✓ Link to Administration for Ad Hoc Reporting as defined by Systems Administrator.

8. CHCS Functional Requirements

Information on all Medical Services that are provided to the inmate is entered and edited in this module.

- a) Intake Screening and Evaluation. Integrated Intake Screening Notes;
 - i. Shall be free form and searchable.
 - ii. Shall be displayed in SOAP format.
- b) Intake Screening and Evaluation, Medical History & Evaluation;
 - i. Structured check off form.
 - ii. Uses ICD-10 definitions.
- c) Intake Screening and Evaluation, Triage;
 - i. Shall be based on standard Triage form
 - ii. Shall use standard medical categories and definitions.
 - iii. Shall be customizable as needs change.
- d) Intake Screening and Evaluation, PPD Tracking;
 - i. Ties into scheduling module.
 - ii. Contains preset reports to choose from
- e) Intake Screening and Evaluation, HIV Tracking;

- Flagged for statistics reporting
- f) Medical Classification, User Editable database or table;
Based on commercially available database.
 - g) Medical Classification, Standard Medical Classification Database;
 - i. CPT
 - ii. ICD-10
 - iii. DSM-IV
 - iv. Other standard medical classification tables.
 - h) Nursing Templates, Over-The-Counter (OTC) medication and legend drugs;
 - i. OTC medications and legend drugs ordered using templates based on the CHCS Nursing Standardized Procedures Manual.
 - ii. Shall be displayed in SOAP format.
 - i) Nursing Templates, Detox for alcohol and/or Opiates;
 - i. User defined standard orders and protocols
 - ii. Shall be displayed in SOAP format.
 - j) Nursing Templates, Other Defined Templates;
 - i. User defined standard orders and protocols for other procedures, orders and protocols.
 - ii. Shall be displayed in SOAP format.
 - k) Problem Oriented Care Plans, Integrated Care Plan Notes;
 - i. Free form and searchable.
 - ii. Shall be displayed in SOAP format.
 - iii. Any free form notes or comments shall have spell checking, recognize standard medical abbreviations and automatically convert those abbreviations to actual phrases.
 - l) Problem Oriented Care Plans, Standard Treatment Protocols;
 - i. Chosen from attached standard treatment database.
 - ii. Standard treatments can be edited or notes attached.
 - iii. Shall be displayed in SOAP format.
 - m) Problem Oriented Care Plans, Outcome Monitoring;

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- i. Outcomes based on standard results table.
 - ii. Attached, preset report shall show progress to date.
 - n) "SOAP" Encounter Processing, Integrated "SOAP" notes;
 - i. Structured notes following "SOAP" format.
 - ii. Ability to add free form comments.
 - iii. Any free form notes or comments shall have spell checking, recognize standard medical abbreviations and automatically convert those abbreviations to actual phrases.
 - o) "SOAP" Encounter Processing, Sick Call and Triage Processing;
Follows standardized editable forms and procedures.
 - p) "SOAP" Encounter Processing, Clinic or Infirmary Processing;
Follows standardized editable forms and procedures.
 - q) "SOAP" Encounter Processing, Exams, Vital Signs, Diagnosis;
Follows standardized editable forms and procedures.
 - r) "SOAP" Encounter Processing, Referrals and Statistics;
 - i. Look up from Referrals table.
 - ii. Can choose to print predefined Statistics reports attached here.
 - s) Physician Orders, Integrated Physician Notes;
 - i. Structured notes following standard Physicians notes formats using ICD-10 and DSM-IV codes.
 - ii. Ability to add free form comments.
 - iii. Shall be displayed in SOAP format.
 - iv. Any free form notes or comments shall have spell checking, recognize standard medical abbreviations and automatically convert those abbreviations to actual phrases.
 - t) Physician Orders, Medication, Lab, Radiology, Dietary orders Tracking;
 - i. Medication orders based on ICD-10 and drug codes chosen from a pick list.
 - ii. Input from choices on a standard Lab, and Radiology form with comment fields.
 - iii. Dietary orders chosen from an editable pick list of available

diets.

- u) Shall be displayed in SOAP format;
 - i. Physician Orders, Treatment and Therapy Tracking
 - ii. Choose from standard treatments and therapies list.
 - iii. The choices could be editable to allow for flexibility.
 - iv. Shall be displayed in SOAP format.
- v) Physician Orders, Housing, Work, Activity Restrictions tracking;
 - i. Housing locations determined by data imported from AJS system.
 - ii. Work activities and restrictions based on pull down list of standard activities.
- w) Geriatric & Special Needs Management, Integrated Geriatric Notes;
 - i. Free form and searchable.
 - ii. Linked to other modules.
 - iii. Shall be displayed in SOAP format.
 - iv. Any free form notes or comments shall have spell checking, recognize standard medical abbreviations and automatically convert those abbreviations to actual phrases.
- x) Geriatric & Special Needs Management, Statistics Gathering;
 - i. Pre designed report attached here for choice to print statistics on Geriatrics information.
 - ii. Same report choice available from within other modules.
 - iii. Encounter Processing, Medical Nursing Encounter
 - iv. Data entered through standard Nursing encounter form.
 - v. Uses pull down pick lists of standard Nursing procedures, protocols and medications.
 - vi. Shall contain searchable free form comments.
 - vii. Shall be displayed in SOAP format.
 - viii. Any free form notes or comments shall have spell checking, recognize standard medical abbreviations and automatically convert those abbreviations to actual phrases.

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- y) Encounter Processing, Medical Physician Encounter;
- i. Data entered through standard Physician encounter form.
 - ii. Uses pull down pick lists of standard Physician procedures, protocols and meds.
 - iii. Shall contain searchable free form comments.
 - iv. Shall be displayed in SOAP format.
 - v. Any free form notes or comments shall have spell checking, recognize standard medical abbreviations and automatically convert those abbreviations to actual phrases.
- z) Encounter Processing, Medical Services Reporting;
- i. Generate standard reports related to Medical Services information.
 - ii. Medication List.
 - iii. Medications list by facility and service for medications due at date and time range.
 - iv. Labels attached to medications envelope carried by inmate or by Sheriff personnel.
 - v. Renewable Medications.
 - vi. List of medications requiring renewal within next seven (7) days.
 - vii. Dietary List.
 - viii. List by facility of all inmates who need a special diet.
 - ix. PPD's (TB Test) to give.
 - x. List by facility of inmates who need to have PPD given.
 - xi. PPD's to Read.
 - xii. List by facility of inmates who need to have PPD read
 - xiii. PPD's Positive.
 - xiv. List by facility of inmates who have positive PPD and no scheduled Chest X-ray to be scheduled for follow up.
 - xv. Completed MAR.
 - xvi. Print all of the completed MAR entries for date range.

xvii. Link to Administration for Ad Hoc Reporting.

9. Tracking

Tracking General Requirements:

The Tracking Module shall handle tracking of clinical appointments and medical encounters.

Examples of the functions that the Scheduling Module shall handle are:

a) Scheduling and Tracking Functional Requirements:

- i. Tickler/Recall System
 - ✓ Exams & Chronic Care Follow Ups
 - ✓ Attach a follow up date flag for the results of exams.
 - ✓ Attach a reoccurring follow up date flag for chronic or on-going care.
 - ✓ Tie into scheduling module.
- ii. Medications Due to Expire
 - ✓ Flag all Medication orders due to expire within a user defined date range.
 - ✓ All medications due to expire shall be listed out when medical staff logs on.
 - ✓ When certain individuals (i.e.' the ordering physician) logs on, a list of expiring medications for that physician shall pop up.
- iii. Other User Definable Ticklers
- iv. Attach a date flag for other user definable events.
- v. Tie into schedule module.
- vi. Lab Tests
 - ✓ Date flag for reviewing lab tests results.
 - ✓ Tie into schedule module
- vii. X-rays
 - ✓ Date flag for reviewing X-ray results.
 - ✓ Tie into schedule module
- viii. Scheduling System;
- ix. Integrated Scheduling Notes
- x. Task oriented notes attached to schedules.
- xi. Link to outside schedules.

- xii. Individual Inmates and Groups Ability to schedule individual inmates as well as groups of inmates.
- xiii. Attendance & Status Reporting
 - ✓ Ability to track attendance at scheduled events (i.e. Clinics).
 - ✓ Report on status of attendance.
- xiv. Interface to Call-Outs
 - ✓ Report back to or interface with SDS concerning call outs for medical services.
- xv. Court Appearance
 - ✓ Schedule court appearance
 - ✓ Track inmate's court appearance schedule and coordinate with any scheduled medications.
- xvi. Sick Call
 - ✓ Schedule sick calls
 - ✓ Track results and recommendations.
 - ✓ Tracking screen should be user definable.
- xvii. Off-Site Specialty Clinic Appointments
 - ✓ Track scheduled appointments.
 - ✓ Tracking screen should be user definable.
- xviii. Tracking;
- xix. Treatment Authorization Request (TARS)
 - ✓ Track all TARS
 - ✓ Ability to run pre-defined reports on TARS.
 - ✓ Tracking screen should be user definable.
- xx. Other Outside Providers
- xxi. Track other outside providers and be able to report on them.
- xxii. Tracking screen should be user definable.
- xxiii. Passes for Inmate Movement
 - ✓ Track Passes for Inmate Movement.
 - ✓ Access pre-defined report listing inmates' movements.

10. Pharmacy and Drugs

Pharmacy and Drugs General Requirements:

All of the medications prescribed and administered shall be tracked and reported through the Pharmacy and Drug Module. The module shall exchange data with Correctional Institutional Pharmacy System (CIPS).

- a) Pharmacy and Drugs Processing Requirements:
 - i. Drug Processing
 - ii. Integrated Drug Processing Notes
- b) Drugs notes to follow standard Pharmacy coding.
 - i. Drug-Drug Compatibility Checking
- c) From a pull down list based on commercial drug compatibility application.
 - i. Drug Interactions Warnings
- d) From a pull down list based on commercial drug compatibility application.
- e) Unit Dosing
- f) Can calculate unit doses
- g) Titrated Medications
- h) Can properly deal with Titrated Medications
- i) Medication Administration Records
- j) Accurately track administration of medications
- k) Warns when prescription for medications differs from medications administered
- l) Pill Line Processing (Automated Drug Dispensing Machine)
- m) Generates medication lists that shall operate the Pill Line Processing Machine
- n) Drug Utilization Review
- o) Pre-defined reports that can be viewed and printed for review of the Drug Utilization.
- p) In Custody Billing Process
- q) Query data base for reimbursable drugs and or services
- r) Generate a report to be sent to responsible party
- s) Pharmacy Administration Requirements
- t) Prepare and monitor staffing assignments, their locations and availability

- u) Credentialing
- v) Monitor credentialing status of Pharmacy staff
- w) Statistics and Reports
- x) Pre designed reports for administrative review and for statistical reporting
- y) Drug Inventory Tracking Requirements
- z) Inventory and Ordering
 - aa) Drug Inventory Control
 - bb) Able to order, track usage and reorder of the full range of drugs on hand
 - cc) Track the amount of drugs dispensed and automatically initiate a purchase order when drug inventory levels drop below presets
 - dd) Link to Pharmacy Supply Automated Ordering Systems
 - ee) Link to interface with the automated ordering system of Pharmacy supply houses

11. Dental

a) Dental General Requirements:

A full Dental module shall contain two sub modules: Dental Services and Dental Administration.

b) Dental Services Requirements:

Integrated Dental Notes:

- i. Shall be forms based and use standard Dental nomenclature.
- ii. Shall have comments that are free form and searchable.
- iii. Any free form notes or comments shall have spell checking, recognize standard medical abbreviations and automatically convert those abbreviations to actual phrases.

c) On-line Tooth Chart & History:

Graphical based Tooth Chart that can be "checked off" and comments attached to the tooth or groups of teeth.

d) Intake Dental screening;

- i. Forms based using standard medical and dental classifications from pull down lists.

e) Dental Encounter;

- i. Forms based encounter using standard medical and dental codes and classification from pull down lists.
 - f) Choose standard dental protocols and procedures from pull down lists of standard dental codes.
 - g) Exam;
 - i. Forms based using standard medical and dental classifications from pull down lists.
 - h) Treatment;
 - i. Forms based treatments using standard medical and dental codes and classifications from pull down lists.
 - ii. Choose standard dental protocols and procedures from pull down lists of standard dental codes.
 - i) Surgery;
 - i. Forms based surgical procedures using standard medical and dental codes and classification from pull down lists.
 - ii. Choose standard dental surgical protocols and procedures from pull down lists of standard dental codes.
 - j) Dental Administration Requirements:
 - i. Dental Staff Credentialing Monitor Credentialing status of Dental staff.
 - k) Statistics and Reports
 - i. Pre designed reports for administrative review and for statistical reporting.

12. CHCS Mental Health

CHCS Mental Health General Requirements:

- a) All of the mental health needs of the inmates shall be tracked and fulfilled using this module.
- b) CHCS Mental Health Functional Requirements
- c) Medical Restraints/Seclusion Monitoring, Flag and track those inmates needing Medical Restraints or Seclusion. Complete Five Axis DSM-IV Diagnosis Standardized diagnosis using DSM-IV codes.
- d) Psychological Testing

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- i. Attached at this location shall be standardized Psychological testing applications, scoring and scoring results.
 - ii. Also attached here shall be the gathering of statistics over the entire inmate population and the reporting of those statistics.
 - e) Individual Treatment Plans
 - i. Standardization of treatment plans using DSM-IV and other industry standard codes.
 - ii. These treatment plans shall have the ability for the Physician to add free form notes or comments.
 - f) Outcome Monitoring
 - i. Pull down list of standard outcomes with the ability to modify and add comments.
 - ii. Shall be searchable.
 - g) Dual Diagnosis Mental Health Habilitation Plans, standardization of plans using industry standard codes.
 - h) Intake Mental Health Screening, forms based screening with check off boxes and pull down choices with the ability to add comments.
 - i) Mental Health Nursing Encounter Tracking
 - i. Data entered through standard Mental Health Nursing encounter form.
 - ii. Uses pull down pick lists of standard Mental Health Nursing procedures, protocols and medications.
 - iii. Shall contain searchable free form comments.
 - j) Mental Health Physician Encounter Tracking
 - i. Data entered through standard Mental Health Physician encounter form.
 - ii. Uses pull down pick lists of standard Mental Health Physician procedures, protocols and medications.
 - iii. Shall contain searchable free form comments.
 - k) Prepare Standard Mental Health Management Reports
 - i. Pre designed reports shall be attached here for selection.

- ii. Linked to Systems Administration module for creation of new, pre designed reports.
- l) Substance Abuse Component
 - i. Integrated Substance Abuse Notes
 - i. Shall be forms based and use standard medical nomenclature.
 - ii. National Institute on Drug Abuse (NIDA) Minimum and Optional Data Bases
- m) Searchable and editable
 - i. Treatment Protocols and Treatment Plans.
 - ii. Choose from standard Treatment Protocols and Treatment Plans list.
 - iii. The choices shall be editable to allow for flexibility.
- n) Substance Abuse Outcome Monitoring
 - i. Pull down list of standard Substance Abuse outcomes with the ability to modify and add comments.
 - ii. Shall be searchable.
- o) Urinalysis Screening
 - i. Input and report on the results of Urinalysis Screening.
- p) Interface to IRIS
 - i. Bi-directional data flow from EHR system to IRIS system.

13. CHCS Juvenile Health General Requirements

A full Juvenile health module shall encompass the following:

- a) Juvenile Health Functional Requirements
 - i. Case Management;
 - ✓ Entry of demographic information.
 - ✓ Assigning of Juvenile Health Number and other identifiers.
 - ✓ Tracking of housing assignments.
 - ✓ Tracking of prior medical and other records.
 - ii. Testing and Assessment;
 - ✓ Testing and assessment using standardized assessment instruments.

- ✓ Recording and evaluating the results of testing and assessments.
 - ✓ Reports on results of testing and assessments.
- iii. Objective Classification
- ✓ Based on industry standard classification chosen from pull down lists.
 - ✓ Classifications shall be editable or be able to add comments.
- iv. Identifying Risks and Needs
- ✓ Risk and Needs assessments based on industry standards;
 - ✓ Reports on results of assessments.
- v. Evaluating Security Level via Housing Assignments;
- ✓ Risk and Needs assessments based on industry standards.
 - ✓ Classifications shall be editable or be able to add comments.
 - ✓ Evaluates severity risk and makes housing assignments based on those risks.
- vi. Collecting Medical Information: Allergies, Conditions, Medications, Vaccinations, Behavioral/Substance Abuse Problems;
- ✓ Data entered through standard encounter form.
 - ✓ Uses pull down pick lists of standard procedures, protocols, allergies, conditions, medications, vaccinations, behavioral/substance abuse problems.
 - ✓ Shall contain searchable free form comments.
- vii. Treatment Plans with Outcomes;
- ✓ Chosen from attached standard treatment database.
 - ✓ Standard treatments can be edited or notes attached.
- viii. Integrated Juvenile Health Progress Notes;
- ✓ Shall be forms based and use standard Juvenile Health nomenclature.
 - ✓ Shall have comments that are free form and searchable.
 - ✓ Any free form notes or comments shall have spell checking, recognize standard medical abbreviations and automatically convert those abbreviations to actual phrases.
- ix. Identification of Youth with Suicidal Tendencies or “Run Away” History;

- ✓ Ability to flag certain types of issues with minors.
 - ✓ Track and report on incidents of “issues”.
- x. Continuum-of-Supervision;
 - ✓ Track the supervision of a minor as he/she moves through programs.
- xi. Tracking of Movements, Transfers;
 - ✓ Track and report out movements and transfers of individual minor
 - ✓ Coordinate movement with medical exposures
- xii. Matching Youths to available Facilities, Programs and Services;
 - ✓ Coordination of minor, facilities, programs and services.
 - ✓ Report on minor’s movement through facilities, programs, and services.
- xiii. Tracking Services, Programs Attended, Referrals, and Community Placements;
 - ✓ Extension of Above.
- xiv. Disciplinary/infractions/grievances/appeal Tracking;
 - i. Tracking of disciplinary procedures for individual minor.
- xv. Extensive Quality Assurance and Risk Management Controls;
 - i. Track quality assurance and risk management.
 - ii. Report on results of the tracking.
- xvi. Security and Confidentiality Controls;
 - i. Assign security restrictions on confidential information.
 - ii. Link to security issues in Admin Module.

14. Clerical General Requirements

A full Clerical Module that shall encompass the following:

- a) Clerical Functional Requirements;
 - i. Medical Record Chart Tracking and Deficiency Monitoring
 - ii. Monitor information into chart and flag deficiencies for action.
- b) Records Consolidation;
 - i. Consolidate data in old record not currently on system with present record.

- ii. Staff Licensing Credentialing Track and report on the Staff Licensing and Credentialing.
- iii. Link to Scheduling module for scheduling.
- c) Discharge Summary;
 - i. Need to be user definable.
 - ii. Pre-defined summaries accessible here.
 - iii. Link to Ad Hoc query for more detailed summaries.

15. Imaging and Document Management General Requirements

A full Imaging and Document Management Module that shall encompass the following:

Imaging and Document Management Functional Requirements

- a) Interface to Document Imaging System;
 - i. Drop down to document imaging system.
- b) Online Access to Documentation;
 - i. CHCS standardized procedures
 - ii. Nursing operational procedures
 - iii. Infection control manuals
 - iv. Pharmacy formulary
 - v. Nursing 99
 - vi. Physician's desk reference
 - vii. Other Reference tools
- c) Online Patient Information and Instructions;
 - i. Routine Pre-op instructions
 - ii. Instructions for various labs and x-ray procedures
 - iii. Patient education handouts for prescribed medications
 - iv. Shall be user definable
 - v. Linked to Dental, Pharmacy and CHCS Mental Health modules
- d) Attached Image as a Note;
 - i. Attach image as a viewable note to EHR system.
 - ii. Use a graphics viewer to be able to read the image.

16. Systems Administration and Security

Systems Administration General Requirements:

-
- a) In the Systems Administration Module the daily operations of administration and security are performed.
 - b) Systems Administration Functional Requirements:
 - i. Assign Rights And Privileges;
 - ii. Assign Group Rights and Passwords
 - iii. Create group with specific viewing, editing and access rights.
 - iv. Assign and maintain passwords.
 - c) Lock Out Groups from Certain Data Down to the Field Level
 - i. Prevent certain groups from being able to access or even see certain data, down to the field level.
 - d) Add and Remove Group Members
 - i. Add, delete and edit Group members' information and rights.
 - e) Create Audit Trails for Data Changes
 - i. Audit trails allow for tracking changes in data.
 - f) Manage Audit Logs
 - g) View, edit and report on audit logs.
 - h) Update The System;
 - i) Maintain Data Transfer from interfaces
 - j) Execute data transfer scripts, macros, or applications.
 - k) Create, maintain, trouble shoot, and edit data transfer scripts.
 - l) Create & Update Lookup or Validity Tables
 - m) Create or modify lookup and validity check tables.
 - n) Install or update commercially available lookup tables.
 - o) Edit or customize commercially available lookup tables.
 - p) Test Proposed Changes to Modules
 - i. Test all changes to modules using the backup server.
 - q) Work with COUNTY to customize Module
 - i. Working with COUNTY, make changes to application that shall streamline it for CHCS's use.
 - r) Time Delayed Data Entry
 - i. System must allow authorized user to enter time delayed data and

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- append it to the EHR.
 - ii. Data must be "verified" (time stamped and referenced to the actual date/time of the orders) and "signed off" by medical staff issuing orders.
 - iii. Must become part of audit trail.
17. Systems Administration
- a) Trouble Shoot the EHR System
 - i. Use system utilities to trouble shoot problems.
 - b) Point of Contact to COUNTY for Problem Solving
 - i. Provide first point of contact of CONTRACTOR for support when problem solving.
 - ii. Coordinate activities of other COUNTY groups with CONTRACTOR for trouble shooting.
 - c) Manage Maintenance Scheduling
 - i. Setup and manage schedule for normal maintenance tasks.
 - d) Run Statistics on System Operations and Performance
 - i. Run system performance statistics on a scheduled basis.
 - ii. Manage Request for Ad Hoc Query
 - iii. Coordinate and act as first point of contact for all Ad Hoc Query requests.
 - e) Ad Hoc Query and Batch Processing;
 - i. Create Ad Hoc Queries
 - ii. Create new or edit existing Ad Hoc Query.
 - iii. When necessary, change Ad Hoc Query to standard query and attach to appropriate module of application.
 - f) Process Ad Hoc Queries and Print Reports
 - i. Process Ad Hoc Queries and output to printed reports, to print file, or to other standard file formats.
 - g) Manage any Batch Processes and Batch Printing
 - i. Run batch process Systems Administration
 - h) Trouble Shoot the EHR System

- i. Use system utilities to trouble shoot problems.
- i) Point of Contact to CONTRACTOR for Problem Solving
 - i. Provide first point of contact to CONTRACTOR for support when problem solving.
 - ii. Coordinate activities of other COUNTY groups with CONTRACTOR for trouble shooting.
- j) Manage Maintenance Scheduling
 - i. Setup and manage schedule for normal maintenance tasks.
- k) Run Statistics on System Operations and Performance
 - i. Run system performance statistics on a scheduled basis.
 - ii. Manage Request for Ad Hoc Query
 - iii. Coordinate and act as first point of contact for all Ad Hoc Query requests.
- l) Ad Hoc Query and Batch Processing;
 - i. Create Ad Hoc Queries
 - ii. Create new or edit existing Ad Hoc Query.
 - iii. When necessary, change Ad Hoc Query to standard query and attach to appropriate module of application.
- m) Process Ad Hoc Queries and Print Reports
 - i. Process Ad Hoc Queries and output to printed reports, to print file, or to other standard file formats.
- n) Manage any Batch Processes and Batch Printing
 - i. Run batch processes and batch printing.
- o) Manage & Trouble Shoot All Print Queues
 - i. Maintain existing and create new print Queues.

18. Interfacing Management General Requirements

A full Interfacing Management Module that shall encompass the following:

Interfacing Management Functional Requirements

- a) SDS;
 - i. Real-time bi-directional data transfer.
 - ii. From SDS to EHR system.
 - iii. From EHR system back to SDS.

- b) Labs;
 - i. Bi-directional data transfer from Labs systems to EHR system.
- c) Automated Machine;
 - i. Unidirectional data transfer from EHR system to pill packaging (Automated) machine application.
- d) Imaging System;
 - i. Bi-directional data transfer.
 - ii. Drop down out of EHR system to document imaging system.
 - iii. Search for and/or edit image.
 - iv. Attach image to EHR system.
 - v. Return to EHR system.
- e) Interface to IRIS;
 - i. Bi-directional data transfer.
 - ii. From IRIS to EHR system,
 - iii. From EHR system to IRIS system.
- f) Interface to Juvenile Justice System;
 - i. Bi-directional data transfer
 - ii. From EHR system to Juvenile Justice System.
- g) After Care — Medical Summary Sheets;
 - i. Bi-directional data transfer.
 - ii. Medical Summary sheet delivered in hard copy or electronically.
 - iii. From EHR system to Social Services Department system/ coordination of care or output to reports.
- h) After Care — Continuum of Care;
 - i. Through summaries or extracts of data in hard copy format for inmate transfers.
- i) After Care — Interfacing with COUNTY network;
 - i. Connection with email allows attachment of memos and documents (formatted reports).
- j) After Care — Interface to Other County or Community Based Programs;
 - i. Through gateway to County network allowing encrypted email

- attachments.
- k) Interface to CIPS;
 - i. Bi-directional data transfer
 - ii. From EHR to CIPS
 - iii. From CIPS to EHR
 - l) Dental;
 - i. Interface to Dental Images
 - m) Interface to picture archiving and communication system (PACS);
 - i. Bi-directional data transfer
 - ii. From EHR to PACS
 - iii. From PACS to EHR

19. Digital Radiology

An application interface to an existing radiology system used for the screening of Tuberculosis (TB) and to take routine X-rays, as requested by medical staff, shall be required of the EHR system. This module shall be in compliance with the latest Digital Imaging and Communications in Medicine (DICOM) and Health Level Seven (HL7) standards. Requirements for the module are to be identified jointly between the vendor and HCA.

20. Pulmonary Disease Services

A Pulmonary Disease Services module is required by Public Health for the administration / treatment of patients diagnosed with Tuberculosis. A special module exists within the current CHART system for this purpose and it is expected that the new system will meet or exceed the requirements of the current system. Requirements for the system are to be identified jointly between the vendor and CHCS.

C. DATA REQUIREMENTS

1. The data that has been identified to support the functional requirements of the EHR system are minimal. CONTRACTOR may not have all of the specific data elements identified for the EHR but CONTRACTOR must be able to capture and process all data elements that are required for EHR's functionality. It is necessary that the EHR system incorporate the following general principles for identifying the data needed to support the

EHR system defined functional requirements:

a) Data Common to All Modules.

Data that is common to all modules such as inmate or juvenile demographics (e.g. Booking Number, Juvenile Number, RCN; Name, sex, etc.) shall be captured and maintained once in a table accessible to all of the modules.

b) Data Associated with Specific Modules

Data that is common to a specific module such as dental (e.g. Dental notes, Dental diagnosis, etc.) shall be captured and maintained in a table accessible to that particular module.

c) Generalized Data Elements With a Type Code.

The use of a generalized data element along with a "type" code that is used to differentiate between different values, (e.g. a type code used to differentiate between an adult inmate and a juvenile offender, etc.) shall serve to clearly segregate the juveniles' information from that of the adults.

2. The data groups currently defined for the EHR system corresponds to the modular structure described earlier. The specific data model used to define these modules is largely normalized to eliminate redundancy of data except for primary and foreign key fields, which are needed to link data across tables. The data groups defined as modules are:

a) Demographics and Registration

Includes inmate or juvenile specific data tables associating the inmate or juvenile with his/her demographic information.

b) Medical Services

Linked tables containing the data generated on the medical services provided to individual inmates or juveniles.

c) Scheduling and Tracking

Data tables used in scheduling and tracking the inmates and juveniles, the staff, the tests and procedures, appointments and movements within the facilities.

d) Pharmacy and Drugs

Tables used to track all drugs prescribed, their interactions and warnings, their packaging and distribution within the facilities.

- e) Dental
This includes tables containing data of the dental services provided to the inmates and juveniles.
- f) Mental Health
Tables containing the data relating the mental health services provided to inmates and to juveniles. Because of confidentiality issues, much of the data captured must be kept segregated.
- g) Juvenile Health
Contains linked tables with data unique to juveniles; there is need to safe guard the confidentiality of the services provided to juveniles. Part of this is accomplished by keeping some data in separate tables and then only linking the tables based on the access rights of the user and provider.
- h) Clerical
Tables are kept containing data relating to the clerical function. This may include data that is not actually part of a medical record but is necessary to the functioning of CHCS.
- i) Imaging and Document Management
This module contains the table with the elements necessary to allow the user to drop down from the EHR application and into the Imaging and Document Management system. In this sub system are stored graphic images such as scanned documents of archived paper charts or digitized pictures.
- j) Systems Administration and Security
Contained in these tables shall be the defined access rights of the users allowed to access the system. These tables shall define down to the field level, which modules and which functions each user is authorized for access.
- k) Digital Radiology
Tables are kept containing data relating to the radiology function. This may include data that is stored in a picture archiving and communications system (PACS).
- l) Pulmonary Disease Services
Contains linked tables with data unique to clients with TB for Public Health. Data kept in these tables shall remain separate from the tables used to house CHCS data.

D. DATA RETENTION REQUIREMENTS

Because the CHCS records contain medical records, data retention requirements are more stringent than would be for standard office files.

1. Retention of Adult Records:

CHCS Mental/Medical health records shall be retained for ten (10) years after discharge.

2. Retention of CHCS Juvenile Records:

Juvenile records shall also be retained for ten (10) years after discharge and/or until the juvenile reaches twenty-five (25) years of age. However, for a female juvenile who gives birth while incarcerated, the mother's medical record must be maintained on line until the mother reaches the age of 18 years. Then the record can be archived for storage until the child reaches the age of twenty-five (25) years.

E. PERFORMANCE REQUIREMENTS

1. Location Requirements

The EHR system shall be multi-user at multiple sites at multiple facilities. Each facility shall be connected to the servers over the COUNTY wide area network using various types of communications lines.

2. Hours of Operation

The EHR system shall be operational twenty four (24) hours a day, seven (7) days a week. This shall include all weekends and holidays.

3. Peak Times

The Riverside County Jail system is operational twenty four (24) hours a day, every day, and three hundred sixty five days a year. Because inmates are booked into the system at all times of the day and night, there will be no peak time where the load on the system will be highest. There may be seasonal increases due to holiday arrests; the load to the system will be proportionally greater throughout the entire day during such seasons.

4. On-line Response Time

Data entry functions shall experience no more than a two (2)–three (3) second response time during a screen change. Most reports shall be run against a data warehouse; updated ad hoc report queries shall pose no noticeable interruption to normal data entry by another user.

F. SYSTEM CONSTRAINTS**1. Legal or Policy Restrictions**

The EHR system shall be used within the confines of the adult jail and the juvenile correctional facilities. Legal and policy restrictions of the Riverside County Sheriff's Department, the Probation Department and the Department of Social Services apply to the collection, use and distribution of data within the system.

2. Exceptional Security Measures Required

The entire EHR system shall be housed within a correctional institute or a secured computer room and as such, that constitutes Exceptional Security Measures. What is considered "usual and "customary" in this situation may not be "usual and customary" for any correctional institute. All equipment must be secured in such a way that none of the inmates has access to any of the equipment.

3. Auditing Requirements

The EHR system shall be required to have the ability to record audit trails for all transactions, permissions and requests. These audit trails shall be recorded in a log that cannot be altered. Changes in a submitted transaction must be made by retaining the old transaction, making the changes including a time/date/user stamp and a reason for that change. This information will be recorded in the audit trail and/or transactions log.

G. OPERATIONAL REQUIREMENTS**1. CHCS Staff Training Needs****a) General Windows Training:**

Since the system shall be a Windows based application and many of the staff at CHCS is accustomed to a Windows based environment, it is expected that the training requirements for Windows will be minimal.

b) Ad Hoc Report Training:

The EHR system shall have the ability to do ad hoc reporting on the data in a data warehouse. Many of the reports that the staff may need shall be incorporated into the application and made available simply by clicking on them. Since the new EHR will have a

built in report generator, only certain staff members will have access to use the ad hoc reporting tools. For these users, it will be necessary to provide training in the use of the ad hoc report generator.

c) "Super User" Training:

The implementation of the EHR system calls for certain personnel to become more deeply informed about the unique aspects of the application, problem solving, and diagnosis and problem resolution. There should be one such "Super User" per shift per major facility. This shall establish a chain of command allocating problem solving. This shall also provide a focal point to be able to see the larger picture and be able to spot problems that effect more than one user.

To accomplish this, a sufficient number of "Super Users" shall be trained. The training for these "Super Users" shall encompass the training that a regular user gets, plus problem solving and resolution.

d) User Application Specific Training:

With the implementation of the EHR system, it becomes necessary for all potential users to be trained on the use of that application. Their level of training shall correspond to the access rights granted to the group that the user is part of. In addition to the training requirements identified in this Agreement, it is expected that the CONTRACTOR shall provide training for all the functionality provided by the EHR system, including third party contractors.

2. Documentation Requirements

a) Interface Documentation:

The COUNTY'S IT System Administrator shall be provided with documentation detailing the use and function of the interfaces used by the EHR system. Documentation shall cover all interfaces used by the EHR system and shall not be limited to the interfaces listed below:

- i. The interface to the SDS. This system shall transfer inmate booking data from the SDS to the EHR system and transmit back inmate tracking information and work status information.
- ii. The interface to the IRIS system. This system transfers selected mental health data from the EHR system to the IRIS system.

- iii. The interface to the Pill Line Processing system. This system transfers the list of medications ordered from the EHR system to the pill-line processing machine for packaging and distribution.
- iv. The interface to a Digital Radiography system. This system takes digital radiographic intake images of the chest for TB screening and other X-ray services, as requested by medical staff. Digital radiographic images are read offsite.
- v. The interface to the COUNTY Public Health Lab and contract lab facilities. These interfaces will allow CHCS to submit and receive lab data via an electronic transfer.

b) Application/Server Documentation:

The COUNTY'S IT System Administrator shall be provided with the following Application/Server documentation:

- i. How to report and trouble shoot server related hang-ups and problems.
- ii. How to check to see if the user has lost a connection to the server/application.
- iii. How to add and delete user ID's.
- iv. How to assign rights and privileges.
- v. How to set up, clear and trouble shoot print queues.
- vi. How to assign and clear a user password.
- vii. How to set-up and clear a standard desktop.
- viii. How to report an application specific problem. How to maintain the interface to the SDS.
- ix. How to maintain the interface to the IRIS system.
- x. How to maintain the interface to the Pill Pine Processing system (the Automated machine).
- xi. How to maintain all interfaces.

c) Application User Documentation:

Super Users will need the following application documentation;

- i. How to enter data into the application, find data already entered, and to generate reports appropriate to their group rights.

- ii. How to check to see if he/she has lost a connection to the application.
- iii. How to check print queues.
- iv. How to change his/her own password.

d) In addition to the documentation requirements identified in this Agreement, CONTRACTOR shall provide documentation for all the functionality provided by the EHR system, including third party applications.

H. INTERFACE REQUIREMENTS

1. The EHR system is required to interface with several existing COUNTY, external and internal systems. Specific EHR interfaces have been identified in support of the staff within the correctional facilities, within other programs and between internal processes. These interfaces are described in the following paragraphs.

a) General Interface Requirements:

The EHR system must be capable of transmitting information within COUNTY through email, network transfer protocols, commercially available workflow software, or through extraction and down load to common data formats. The interfaces must support MAPI and other common email standards.

b) Internal CHCS and COUNTY Interfaces:

The EHR system must be able to support internal reporting and connectivity systems. Such systems shall consist of Clinical Assessment and Outcome Reporting systems and a hardware connection to a Pill Line Processing System.

c) Third Party Clinical Assessment & Outcome Reporting System:

The following are interface requirements for a Clinical Assessment & Outcome Reporting System. Due to security concerns in the following systems, the data transfer may simply be electronic transfer of a report which shall then be entered into these systems. These systems are generally accessed from Juvenile Hall.

- i. Child Behavior Checklist (CBCL)

- ii. Youth Services Reporting (YSR)
- iii. Child & Adolescent Function Assessment Scale (CAFAS)
- iv. Child Living Environments Profile (CLEP)
- v. Addiction Severity Index (ASI) — Accucare System

d) Pill Line Processing System:

The Pill Line Processing System is driven by the creation and transmittal of a medications list. This list is created by the EHR system and is transmitted over the network to the Pill Line Processing Machine. The list is reviewed by the Pharmacists and then executed. The Pill Line machine packages the drugs in individual packages, labels them and sorts them according to their destination. The Pharmacy reviews the packaging run, approves it, and then executes a command, which reports to the EHR application. The EHR application will then notify the medical staff that the medications are ready for distribution to the inmates.

e) Digital Dental System:

A full Dental module will contain two (2) sub modules, Dental Services and Dental Administration. In addition to the two sub modules identified above, it is expected that the Dental module will contain an interface for viewing digital dental images stored in a shared folder. Files are stored / retrieved via a file indexing system.

f) Digital Radiology System:

An application interface to an existing picture archiving and communication system (PACS) used for the screening of Tuberculosis (TB) and to take routine X-rays, as requested by medical staff, is required of the EHR system. This module shall be in compliance with the latest Digital Imaging and Communications in Medicine (DICOM) and Health Level Seven (HL7) standards. The application interface will allow images and diagnoses, stored within the PACS, to be viewed seamlessly from the EHR system. Full identification of requirements shall be developed jointly between the vendor and HCA.

g) External and other County Systems Interfaces:

The proposed approach to external interfaces can consist of an Interface Engine, a point to point custom interface, Application Programming Interface (API), some other methods or some combination of those methods.

2. The external and other County systems interfaces are as follows:

a) Sheriff Data System:

- i. The SDS provides the EHR system with certain demographic, inmate identification, cell assignment and other booking information. This transmission is a continuous data stream of fixed length records. These records must be captured by the EHR system and appended to and reconciled with the data already entered on the inmate. For security reasons, the inmate is often moved from cell location to cell location. The next transfer will reflect this change in the cell location of the inmate and must be noted and tracked by the EHR system.
- ii. Data elements to be transferred - the data elements currently being transferred are as follows: (This shall be considered the minimum capabilities of the interface.)

FORMAT;Variable;Extract;Extract;desc.

;LNM;1;16;LAST NAME

;FNM;17;28;FIRST NAME

;MNM;29;38;MIDDLE NAME

;TTL;39;40;TITLE

;BKN;41;48;Booking Number

;BKD;49;56;Booking Date

;DOB;57;64;Date of Birth

;SEX;65;65;SEX

;RCE;66;66;RACE

;HGT;67;69;Height

;WGT;70;72;Weight

;RCN;73;80;Riverside County Number

;KIC;81;88;KICKOUT DATE 81-84 BOOKING STATUS

;PAR;89;96;PAROLE DATE 85-96 CASE NUMBER
;LOC;97;108;LOCATION CODE
;FDT;109;118;FILE DATE
;TMP;119;126;TEMPORARY NUMBER
;CDT;127;134;COURT DATE

iii. Data elements considered for transfer include:

Inmate's AKA's.
Mother's maiden name.
Place of birth.
SS#
Street Address
City
State
Zip Code
Telephone #
Emergency Contact
Marital Status
Occupation
Employment Status
Driver's License #
Sentence Ending Date
Court Date
Next of Kin
Detainee Number

b) Behavioral Health Information System:

i. EHR system shall be able to download the query information from the EHR system to SDS or to standard format reports. The most probable information shall be statistical information about the tracking of inmates through the EHR system.

ii. Because Behavioral Health is not part of CHCS, Behavioral Health must be treated, as would any other outside provider. A request for medical records must be requested from CHCS and that request must be accompanied by a signed release from the inmate (patient). The request, release and transfer of the record must be tracked within the EHR.

iii. Once the request and the release are received by CHCS, the requested record or part of a record can be transferred electronically in a format that can be used in IRIS. The transfer of data can be accomplished through email, network transfer protocols, commercially available workflow software, or through extraction and download to common data formats.

c) County and Agreement Lab Systems:

CONTRACTOR shall provide an interface to COUNTY'S Laboratory Information System (LIS). This interface shall allow the EHR to electronically specify laboratory tests to a laboratory system and to electronically receive the results of those tests from laboratory information systems.

d) Probation Department:

CONTRACTOR shall provide an interface to the Riverside County Probation Department's juvenile offender's information system. This system contains the juvenile equivalent of a booking number, demographic information and housing location information. The EHR system shall be able to acquire this information via electronic interface from the Probation Department's system. The specific requirements of the interface shall be developed in consultation with the Probation Department.

e) Department of Social Services:

CONTRACTOR shall provide an interface to the Department of Social Services' information system. This system contains an intake number, demographic information and housing location information. The EHR system shall be able to acquire this information via electronic interface

from the Department of Social Services' system. The specific requirements of the interface shall be developed in consultation with the Department of Social Services.

I. REPORTING REQUIREMENTS

The EHR shall have three (3) levels of reporting:

- a) The first level shall be predefined standard medical reports (for example, a medical history form);
- b) The second level shall allow the user to generate regularly used reports using an internal report generator. The internal report generator shall have the ability to save the report format and add it to a list of accessible stored reports as well as allow the user the ability to edit and rename the report as needed. CONTRACTOR or other third parties may supply standard templates that the user could save and edit using the internal report generator;
- c) The third level shall provide the user the ability to create Ad Hoc reports using either an external third party report generator. These reports shall be those that are not used on a regular basis, are for a very narrow or specific data or for reports that cannot be generated by the internal report generator. This level of reporting shall require a higher level of user training and experience.

J. SECURITY AND CONFIDENTIALITY REQUIREMENTS

1. Security and Confidentiality requirements must comply completely with:
 - a) All federal and state regulations.
 - b) Current and future HIPAA regulations.
 - c) Security and privacy regulations imposed by the Riverside County Sheriff's Department and contracted agencies (e.g. Marshall, Federal).
 - d) Security and privacy regulations imposed by the Probation Department.
 - e) Security and privacy regulations imposed by the Department of Social Services.
 - f) Procedures and regulations specific to Juveniles.
 - g) Background checks conducted by the Riverside County Sheriff's Department.

K. EXTRACT TO DATA WAREHOUSE

Some of the data contained in the new EHR system will have value for statistical and other managerial analysis. The EHR system shall have the ability to extract data, minus the identifier information, and deposit that data in an enterprise wide data warehouse. Once there, the information will be available for statistical analysis by members of the enterprise network. CONTRACTOR will provide a data repository for patient information produced during COUNTY's use of the EHR for the purposes of disaster recovery at no additional cost to the COUNTY upon written request by COUNTY.

L. SUPPORT REQUIREMENTS

1. The CONTRACTOR shall be responsible for maintaining and supporting application software beginning after full acceptance of the EHR system and under ongoing software license renewals with accompanying payments.

2. The cost of such support will be borne by the CONTRACTOR unless the problems can be shown to be attributable to the hardware, network, operating system or other system components whose operation and maintenance is the responsibility of COUNTY.

3. COUNTY will be the initial line of contact for system users through a "Super Users" program at each correctional facility. COUNTY Service Desk will then diagnose and resolve problems which clearly relate to COUNTY areas of responsibility. Problems which cannot be resolved by COUNTY will be referred to CONTRACTOR. Support for the EHR system will be structured in three (3) tiers. COUNTY is responsible for Tier zero (0), one (1) and two (2); the CONTRACTOR is responsible for Tier three (3) support and services. Definitions of these support tiers are provided in the table below.

Tier	Responsibilities
COUNTY Super Users Tier 0	<ul style="list-style-type: none"> • At each CHCS location, a “Super User” will be selected with good overall working knowledge of computers and the EHR application. These persons will assist local EHR users with general computer and application problems and will be able to generally distinguish between hardware, operating system, network and application errors. If Tier zero (0) is unable to resolve the problem, it will be referred to the Tier one (1) Service Desk.
COUNTY Service Desk Tier 1	<ul style="list-style-type: none"> • Functioning as secondary line of support during normal working hours; resolving service tickets involving system access problems, passwords, system downtime and errors • Provide user assistance in use of the EHR system and any related third party software • Refer as needed any clearly identified problems to COUNTY IT (Tier 2) or the CONTRACTOR (Tier 3) • COUNTY after hours support or a designee shall facilitate communications between CONTRACTOR and CHCS in the event an issue arises after hours.
COUNTY Software Support Tier 2	<ul style="list-style-type: none"> • Troubleshoot all hardware and network problems • Troubleshoot all database integrity and performance problems • Responsible for restore from backup, routine maintenance, software updates and enhancement loads • Resolve operational problems such as scheduling and production • Maintain all required third party software licenses • Coordinate problem resolution between all third party vendors - not related to the EHR application • Refer as needed any identified problems to CONTRACTOR (Tier 3)

Tier	Responsibilities
CONTRACTOR Support Tier 3	<ul style="list-style-type: none"> • Provide "24 X 7" support to diagnose and resolve application errors • Resolve problems with the EHR system applications software including all core functionality, interfaces and other middleware provided by or through the CONTRACTOR • Resolve problems with any third party software which has been imbedded or integrated with the EHR system.

4. The CONTRACTOR shall be responsible for establishing the operations and maintenance procedures for the EHR system. The CONTRACTOR shall provide the necessary documentation and procedures to support COUNTY's operations of the EHR system on a twenty four (24) hours a day, seven (7) days a week basis.

5. The CONTRACTOR shall perform the following:

- a) Maintain the EHR program code to provide the functionality defined in project analysis and design documents.
- b) Distribute any software upgrades or version replacements to which COUNTY is entitled under the software license along with updated user and operational documentation and assist in its installation in the test environment and migration to production.
- c) Maintain compatibility and integration with any third party outcome reporting tools which have been implemented as part of this Agreement. Should any of these packages be upgraded, COUNTY will notify the CONTRACTOR in advance, so that analysis and code changes can be implemented as quickly as possible.
- d) Maintain comprehensive change control procedures to control software versions and releases. All changes to be implemented at COUNTY are at the discretion of the COUNTY. Develop procedures for software distribution to COUNTY and its business partners who may be users of the system including any application server software and any client software (if needed).

- e) Correct any errors in functionality which is reported by COUNTY or other CONTRACTOR clients, or which is identified by the CONTRACTOR within a reasonable period, depending upon the severity of the error.
- f) Utilize a Severity Index for categorizing and prioritizing application errors. The severity of errors will be based on the following criteria:
- g) Severity 1 - Application errors that cause problems which:
 - i. Problems in completing 10% or more of business transactions
 - ii. Problems having an immediate adverse impact to business
 - iii. Disruption in service to ten (10) or more clients due to software failure
- h) Severity 2 - Application errors that cause problems which:
 - i. Have major operational impact, even if workarounds or bypasses are available
 - ii. Problems in completing 3-10% or more of business transactions
 - iii. Problems having an adverse impact to business within 24 hours
 - iv. Disruption in service to five (5) – nine (9) clients due to software failure
- i) For a Severity 1 problem, the CONTRACTOR must acknowledge receipt of the problem report within one (1) hour, must be working on the problem within four (4) hours of initial report, and must fix the problem within twenty four (24) hours of initial report. Periodic status reports are required during this period.
- j) For a Severity 2 problem, the CONTRACTOR must acknowledge receipt of the problem report within one (1) hour, must be working on the problem by the next working day, and must have the problem corrected on a schedule to be negotiated with COUNTY. Periodic status reports are required during this period.
- k) Establish and maintain a source code escrow so that COUNTY will have access to program source code in the event of bankruptcy, dissolution, merger or other situation which may impact the CONTRACTOR's ability or willingness to support the EHR system software.

- l) Provide a means for COUNTY IT to report EHR problems via email, telephone, or online submission.
- m) Ensure that responses are made to COUNTY IT, within specified time periods, acknowledging receipt of the problem report and identifying when direct contact can be made with the CONTRACTOR-assigned support staff person.
- n) Establish policies and procedures for prioritizing and responding to COUNTY requests for support including:
 - i. Criteria for diagnosing reported problems and determining root cause(s) of the problem,
 - ii. Use of Severity Index criteria for assessing the impact of reported problems,
 - iii. Procedures determining responsibility for problem resolution,
 - iv. Defining response time for various categories of problems,
 - v. Documenting the response and subsequent actions,
 - vi. Procedures for escalating disagreements with COUNTY regarding cause of the problem and responsible party,
 - vii. Procedures for working cooperatively with COUNTY staff to promptly resolve problems,
 - viii. Tracking all problem reports.
- o) Correct any application software errors through remote or on-site service by CONTRACTOR personnel or otherwise qualified subcontractors according to the response times identified in this Agreement.
- p) Update and distribute user and operational documentation to reflect any software corrections.
- q) Ensure compliance with all HIPAA regulations.

M. SYSTEMS INTERRUPTION CONTINGENCY PROCEDURE

1. When the EHR system is implemented, CHCS will become dependent upon the EHR to be able to provide the medical services for the inmates at the jail and the minors at Juvenile Hall. This means that when the system goes down for an hour or more of time, the

medical staff will need a process for delivering the mandated services, collecting the data and ability to enter the collected data into the EHR system when it comes back up.

2. This process shall consist of a series of paper forms on which medical data is entered, time stamped and signed by the medical staff providing the service. This will not be a return to a full paper based charting system, but would rather be a temporary measure until the EHR system is back up and running.

3. When the system does come back up, these paper forms are routed to the CHCS clerical staff to enter the data into the appropriate portion of the electronic medical record. For this to work, the EHR Application will need to have the ability to enter time-delayed data with appropriate validation from the physician, nurse practitioner or medical staff providing the medical service. This will be necessary to provide an audit trail necessary for medical records.

4. The process shall be activated upon notification from COUNTY Software Support to the CHCS Staff that the network or servers were going to be down in excess of one (1) hour. When the system is back up and functional again, COUNTY Service Desk will notify CHCS Staff who will notify the medical providers and instruct them to return to using the EHR application. The paper forms will then be collected and routed to CHCS office support staff for scheduling the input of the data gathered.

5. After the data is input by the administrative staff, it must be "verified" by the medical staff member who provided the service or other authorized persons before the data is appended to the medical record. The CONTRACTOR shall provide a method for this appending and verification of time delayed data.

6. The CONTRACTOR shall provide a disaster recovery server solution where application data is replicated to an off-site facility maintained by CONTRACTOR. Connection to the off-site data center will be provided by VPN via Internet where CONTRACTOR is responsible for Internet connectivity at off-site data center and COUNTY is responsible for Internet connectivity at COUNTY facilities. CONTRACTOR will make reasonable efforts to meet or exceed COUNTY'S security requirements of off-site data storage including data encryption.

N. TRAINING REQUIREMENTS

1. Currently, there are approximately one hundred fifty seven (157) full time employees of CHCS plus an additional twenty (20) part-time and contract staff. Additionally, there is a turnover in full-time, part-time and contract staff of as high as fifty (50) percent per year. Additionally approximately 100 employees are expected to be added within the next 24 months, beginning immediately. This means that in the first year as many as two hundred (200) people may need to be trained on the EHR system. Additionally, as many as one hundred (100) people may need to be trained annually. It is anticipated that after the first year of initial training, Super Users will provide training to staff, on an as needed basis.

2. The training shall be broken down into four (4) major groups: End User, Super User, Service Desk, Administrator and Software Support - see the responsibility matrix above for training requirements for Super User, Service Desk and Software Support groups. Specifics of the End User training are as follows:

- a) End Users are the largest group in need of training. They are further broken down into more specific groups of end users based upon their job function, logon group, and access rights. The users in this group will need to be trained in the basics of using the EHR application (i.e. how to login to the application, exit the application, etc.).
- b) The functions of the application that applies to their group: For example, nurses shall learn how to enter the data into all of the functions that are part of their job as a nurse; the doctors and nurse practitioners shall learn how to operate the functions related to them and the dentists shall be taught how to enter data related to dentistry.
- c) In addition to the training requirements identified in this Agreement, it is expected that the selected CONTRACTOR shall provide training for all the functionality provided by the EHR system, including third party vendors.

O. IMPLEMENTATION TASKS

1. The following describes each of the Implementation tasks:

a) Project Management:

i. The CONTRACTOR and COUNTY shall be responsible for establishing an organization to manage and deliver the services defined in this Statement of Work. The CONTRACTOR shall provide a project organization

chart describing the project charter which will be in place for the duration of this Agreement.

ii. The CONTRACTOR shall designate a CONTRACTOR Project Manager who will have the authority to commit the CONTRACTOR resources necessary to satisfy all contractual requirements.

iii. The CONTRACTOR shall develop semi-monthly written project status reports summarizing key activities, reviewing the work plan for adherence and deviation from schedule, and identifying any issues and issue resolutions for the preceding reporting period. The semi-monthly project status reports shall be presented by the CONTRACTOR's Project Manager to the County's Project Manager at semi-monthly, at project management meetings. This report will be the basis for advising COUNTY on project progress and to identify issues with which COUNTY be aware and shall work with the CONTRACTOR to resolve.

iv. A proactive approach to risk assessment and management is essential to maximize the probability of success. The CONTRACTOR shall utilize a comprehensive methodology for ongoing project risk management which addresses such issues as technical risk, resource issues, scheduling problems, COUNTY readiness, etc. The CONTRACTOR shall define escalation procedures to address extended and unresolved problems to the County Project Manager. Notification and emergency procedures shall be established in the event of system failure. The escalation procedures shall require approval of the County Project Manager. The escalation procedures shall include, but not be limited to the following:

- 1) Conditions warranting additional resources in resolving a problem;
- 2) Time durations between escalating to next level of support;
- 3) A diagram depicting the various levels of response;
- 4) The names or titles, telephone numbers, and pager numbers of the CONTRACTOR personnel responsible for response at the various levels of support.

b) Develop Joint CONTRACTOR and COUNTY Design & Implementation Work Plan:

i. The development of a consolidated project plan which identifies all CONTRACTOR and COUNTY tasks and responsibilities. The approved project plan will be the basis for all project activities. It can be amended with COUNTY approval as needs may dictate.

ii. The CONTRACTOR shall provide, for COUNTY's approval, the project plan prior to initiating any tasks. The CONTRACTOR shall maintain an up-to-date version of the work plan using Microsoft Project or other software as approved by COUNTY. All changes to deliverable time frames, which will impact the major milestones, must be approved at least two (2) weeks prior to the milestone, in writing, by the COUNTY. All approved changes shall be reflected in the work plan and the CONTRACTOR shall highlight and explain any major changes to an earlier approved version.

iii. The CONTRACTOR shall identify all relevant assumptions which were made in the development of the project plan. All assumptions upon which the estimates have been calculated must be clearly documented, including assumptions made for development software tools, use of any third party software, COUNTY resources providing assistance, etc.

c) Conduct Joint Application Designs to Confirm Requirements:

CONTRACTOR shall lead and conduct Joint Application Design (JAD) or similar facilitated requirements and analysis design sessions with COUNTY and CHCS staff and other stakeholders which may be identified by COUNTY. The purpose of these JADs is to confine and update COUNTY's view of COUNTY functional requirements, features and capabilities, technology requirements and interface requirements, and to provide the CONTRACTOR an opportunity to perfect its understanding of COUNTY's environment and programs. The JADs shall also document high level workflow within COUNTY to identify potential changes in EHR system workflow design or in COUNTY workflow, policies and procedures.

d) Update EHR Requirements Model:

The CONTRACTOR shall document the updated EHR system, interface and other requirements. The CONTRACTOR shall document the results of its JAD sessions using a structured analysis and design methodology as approved by COUNTY IT. The

resulting document will be presented in a walkthrough and must be approved by COUNTY.

e) COUNTY Acquisition of Hardware and Software:

The CONTRACTOR shall identify all servers, workstations, operating systems, other software, database management systems, and data network lines and other hardware required to develop, test and operate the EHR. COUNTY requires separate environments for development, testing and training. The CONTRACTOR shall also identify required quantities of required hardware, software and equipment and estimate costs for these items. COUNTY will be responsible for purchasing, acquiring and installing all components other than the EHR applications software within a time period mutually agreed upon with the CONTRACTOR.

f) COUNTY Installation of Hardware and Software:

Once received, COUNTY IT will configure, install and test all ordered hardware and software at its data center. Once all hardware and software has been successfully installed, the CONTRACTOR will be notified.

g) Development, Testing & Training Environments:

The CONTRACTOR shall develop separate development, testing and training environments for the EHR development for use by the CONTRACTOR. COUNTY staff should also have access to these environments for monitoring CONTRACTOR work, validating test results, and other reasons as needed.

h) Develop Specifications Document:

The CONTRACTOR shall develop a Specifications Document which identifies the changes necessary to the CONTRACTOR's existing IRIS application code to provide any new or modified functionality. The Specifications Document shall be developed using a COUNTY approved methodology for design documentation. The Specifications Document shall identify both changes to internal program code as well as to system externals such as screens, outputs and external tables.

i) Customize & Configure Core Software:

The CONTRACTOR shall modify all core program code for COUNTY-requested enhancements and customizations and configure the core software to reflect COUNTY customizations via external tables of other methods inherent to the

CONTRACTOR's software short of changes to actual program code. This must be in conformance with the Specifications Document.

j) Develop Conversion Plan and Mappings:

The CONTRACTOR shall provide a detailed description of the methodology proposed to implement the conversion of data from the legacy CHART system, including, but not limited to, tools, procedures, schedule for the conversion implementation, and resources required. The CONTRACTOR shall then perform data analysis to develop conversion mappings and cross-references for the conversion of existing CHART data into the EHR. The documentation shall include business rules for editing and scrubbing data. COUNTY will review and approve all conversion specifications.

k) Interface Development:

The CONTRACTOR shall fully develop and test any defined interfaces between the EHR and any internal and external systems which are included in the approved system requirements document.

l) Unit Testing:

The CONTRACTOR shall perform iterative unit testing as program code is developed to ensure that the code works as required. System folders shall be maintained with source code, input data, and output data so that COUNTY can independently validate successful testing.

m) Unit Test Code Corrections:

The CONTRACTOR shall make corrections to code based on unit test results. System folders shall be maintained containing data required to validate proper program changes and successful re-test.

n) Install Application on COUNTY Hardware and Software:

The successfully unit-tested programs will be installed at COUNTY by the CONTRACTOR within a test region.

o) Integration & Regression Testing:

Successfully unit tested programs will be tested in a "string" or module to test extended "end to end" functionality. Any re-testing will be regression tested to ensure

that no additional errors have been introduced. All test program, data and results will be maintained by the CONTRACTOR for COUNTY review.

p) Integration Test Code Corrections:

The CONTRACTOR shall make corrections to program code based on the results of the Integration Testing. All test programs, data and results will be maintained by the vendor for COUNTY review.

q) Initial Data Conversion:

The CONTRACTOR shall perform the initial conversion of all required CHART data up through the date of the end of the integration test. All data, which are successfully converted and scrubbed, must be maintained in a separate dataset and loaded into the test system for network, stress and user acceptance testing. Data, which was not successfully converted, must be identified and reported for follow-up and possible correction by COUNTY, and shall be maintained in a separate dataset.

r) Network Test:

With COUNTY assistance, the CONTRACTOR shall test the integrity and responsiveness of the COUNTY network and their capacity to support the EHR. The test must include application response time testing, application feature testing, regression testing, throughput, configuration sizing, network reliability and bottleneck identification. Any network-related problems identified must be discussed and resolved in conjunction with COUNTY IT.

s) Stress Test:

The CONTRACTOR shall conduct an EHR stress test using realistic production volumes and exceptional values involving batch and on-line transactions across the LAN and WAN and for Web-based users. The CONTRACTOR shall be responsible for correcting all problems.

t) User Acceptance Testing:

The CONTRACTOR shall conduct a User Acceptance Test to ensure that COUNTY users are able to successfully use the EHR system and that all modified workflows, policies and procedures are consistent with the EHR. The CONTRACTOR shall develop test scripts and data for this test, review the results and recommend initial

system acceptance. COUNTY users will assist in the actual test and will be responsible for final approval of user acceptance test recommendations.

u) User Acceptance Test Code Corrections:

The CONTRACTOR shall make any code corrections based on the results of the User Acceptance Test.

v) System Tuning:

With the assistance of COUNTY IT, the CONTRACTOR shall tune the applications software, database and network to optimize system efficiency and response times to required response times and cycles.

EXHIBIT D
PAYMENT PROVISIONS

1. TOTAL FEES:

Period 1	
Task Name	Duration
Phase I - Project Start	30 days
Project Kickoff Meeting	2 days
Schedule weekly progress update meetings	0 days
Conduct onsite facility tours	5 days
Review development, user acceptance and production environments	30 days
Deploy Standard TechCare Installation	7 days
Provide TechCare Manual	1 day
Walkthrough of TechCare, Provide joint project management plan/schedule	2 days
Phase I Conclusion Meeting	1 day
Phase 1 Invoice Amount	\$150,000.00
Phase II - Customization and Interfaces	90 days
Interfaces - Requirements Gathering	15 days
Jail Management System	2 days
Labs	2 days
Pharmacy	2 days
Radiology Imaging	2 days
Behavioral Health	2 days
Misc.	2 days
Workflow and Form Customizations - Requirements Gathering	30 days
Intake and Receiving Process	3 days
Medication Administration	3 days
Patient Encounters - Sick Call	3 days
Patient Encounters - Chronic Care	3 days
Off-site Scheduling / Follow-up	2 days
Reports	2 days
Misc. Modules (Dental, OB et al)	2 days
Scanning/Attaching documents	2 days
Phase II Conclusion Meeting	1 day
Deliver Requirements Document for Signoff	5 days
Interfaces - Development and Test	30 days
Jail Management System	5 days
Labs	5 days
Pharmacy	5 days
Radiology Imaging	5 days
Behavioral Health	5 days
Misc.	5 days
Workflow and Form Customizations - Development and Test	15 days

Intake and Receiving Process	2 days
Medication Administration	2 days
Patient Encounters - Sick Call	2 days
Patient Encounters - Chronic Care	2 days
Off-site Scheduling / Follow-up	2 days
Reports	2 days
Misc. Modules (Dental, OB et al)	2 days
Scanning/Attaching documents	1 day
Phase II Conclusion Meeting	1 day
Deliver Application for User Acceptance, Signoff and Training	1 day
Phase II Invoice Amount	\$200,000.00
Phase III - Implementation and Formal Training	45 days
Configure production environment	5 days
Define training and education schedules	3 days
Provide Riverside specific TechCare manuals	5 days
Identify and train Riverside super user staff	10 days
Onsite role-based training 2 weeks prior to production deployment	10 days
Onsite user support 1-2 weeks after production deployment	10 days
Phase III Invoice Amount	\$150,000.00
Year 1 Total Costs	\$500,000.00
Year 2 Total Costs	\$500,000.00
Year 3 Total Costs	\$500,000.00
Year 4 Total Costs	\$500,000.00
Year 5 Total Costs	\$500,000.00
Year 6 Total Costs	\$500,000.00
Year 7 Total Costs	\$500,000.00
Year 8 Total Costs	\$500,000.00
Year 9 Total Costs	\$500,000.00
Year 10 Total Costs	\$500,000.00
Grand Total	\$5,000,000.00

2. CONTRACTOR agrees for contract years 2 through 10, the following services shall be included in the annual cost as part of the software license and maintenance and support fees as stated above.

- ✓ Unlimited User Site License
- ✓ 24/7 Online Self-help to include TechCare manuals and tutorials
- ✓ 24/7 Helpdesk support via voice, email and remote access
- ✓ 24/7 Software support
- ✓ Dedicated offsite backup to NaphCare's Disaster Recovery Facility
- ✓ Application, Database and System monitoring and performance tuning

- ✓ Updates, definitions, and application exclusions
- ✓ Compatibility with any future Jail Management Systems
- ✓ Federal/State Regulatory Compliance, Accreditation and Renewals
- ✓ Interface Maintenance and Support
- ✓ Training as requested by COUNTY
- ✓ Addition of correctional facilities within COUNTY and associated users of software

3. CONTRACTOR shall not be held responsible and payment shall not be withheld for the noncooperation, nonperformance or noncompliance of the COUNTY or third party vendors. In the event CONTRACTOR discovers noncooperation, nonperformance or noncompliance by COUNTY, CONTRACTOR shall inform COUNTY in writing and COUNTY shall have thirty (30) days from the date notification is received to cure the stated issues raised by CONTRACTOR.

4. COUNTY shall be financially responsible for all escrow fees and services from the third-party vendor Iron Mountain. A copy of the escrow agreement the parties expect to use is attached as Attachment I. The parties will work diligently to complete the escrow agreement and all other documents required by Iron Mountain after the Effective Date of this Agreement. In addition to any other terms stated in this Agreement, the parties agree the following shall be included in the escrow agreement:

- a) COUNTY and CONTRACTOR agree the occurrence of any of the following conditions will trigger a release of the source code to the COUNTY from escrow:
 - i. A trustee or receiver is appointed for CONTRACTOR or of any substantial part of CONTRACTOR's assets; or CONTRACTOR becomes bankrupt.
 - ii. CONTRACTOR ceases operations; or CONTRACTOR is materially unable to support or materially fails to support the Licensed Software.
 - iii. CONTRACTOR discontinues support and maintenance of the Licensed Software.
- b) In the event any of the above events occur and COUNTY obtains the source code, COUNTY may at no additional cost modify, correct, or enhance the Licensed Software, the source code, modifications, corrections, enhancements,

any related materials and documentation, in any manner COUNTY determines is appropriate.

- c) CONTRACTOR shall update the escrow deposit materials within 30 days of each release of a new version or update of the Licensed Software. Such updates shall be added to the existing escrow deposit. All new escrow deposits shall be listed on a schedule provided by Iron Mountain and signed by CONTRACTOR and COUNTY.

5. CONTRACTOR shall invoice COUNTY for each annual payment, beginning with Year 2 on December 1 of each contract year.

6. Payments shall not be made by COUNTY until acceptance of each milestone or system functionality related to that payment, as stated in this Exhibit D or related provisions of the Agreement, has been confirmed as accepted in writing by COUNTY's Assistant Hospital Administrator. Such acceptance shall not be unreasonably withheld.

EXHIBIT E

**RIVERSIDE COUNTY
SECURITY REQUIREMENTS
RIVERSIDE COUNTY BOARD OF SUPERVISORS POLICY**

Policy Subject: Security Policy A-58

Board Policy A-58 is incorporated into this Exhibit E.

EXHIBIT F
RIVERSIDE COUNTY
TRUSTWORTHY OFFICIAL ELECTRONIC RECORDS PRESERVATION
COUNTY OF RIVERSIDE BOARD OF SUPERVISORS POLICY
Policy Subject: TRUSTWORTHY OFFICIAL ELECTRONIC RECORDS
PRESERVATION POLICY A-68

Board Policy A-68 is incorporated into this Exhibit F.

IRON MOUNTAIN
Attachment I
Three-Party Escrow Service Agreement

Effective Date	
Deposit Account Number	
*Effective Date and Deposit Account Number to be supplied by Iron Mountain only.	

A. Introduction

This Three Party Escrow Service Agreement (the “**Agreement**”) is entered into by and between _____ (the “**Depositor**”), and by _____ (the “**Beneficiary**”) and by Iron Mountain Intellectual Property Management, Inc. (“**Iron Mountain**”). Depositor, Beneficiary, and Iron Mountain may be referred to individually as a "Party" or collectively as the "Parties" throughout this Agreement.

- a. The use of the term services in this Agreement shall refer to Iron Mountain services that facilitate the creation, management, and enforcement of software or other technology escrow accounts as described in Exhibit A attached hereto (“**Services**”). A Party shall request Services under this Agreement by selecting such Service on Exhibit A upon execution of the Agreement or by submitting a work request for certain Iron Mountain Services (“**Work Request**”) via written instruction or the online portal maintained at the website located at www.ironmountainconnect.com or other websites owned or controlled by Iron Mountain that are linked to that website (collectively the “**Iron Mountain Website**”).
- b. The Beneficiary and Depositor have, or will have, entered into a license agreement or other agreement (“**License Agreement**”) conveying intellectual property rights to the Beneficiary, and the Parties intend this Agreement to be considered as supplementary to such agreement, pursuant to Title 11 United States [Bankruptcy] Code, Section 365(n).

B. Depositor Responsibilities and Representations

- a. It shall be solely the Depositor’s responsibility to: (i) make an initial deposit of all proprietary technology and other materials covered under this Agreement “**Deposit Material**”) to Iron Mountain within thirty (30) days of the Effective Date; (ii) make any required updates to the Deposit Material during the Term (as defined below) of this Agreement; and (iii) ensure that a minimum of one (1) copy of Deposit Material is deposited with Iron Mountain at all times. At the time of each deposit or update, Depositor will provide an accurate and complete description of all Deposit Material sent to Iron Mountain using the form attached hereto as Exhibit B.

- b. Depositor represents that it lawfully possesses all Deposit Material provided to Iron Mountain under this Agreement and that any current or future Deposit Material liens or encumbrances will not prohibit, limit, or alter the rights and obligations of Iron Mountain under this Agreement. Depositor warrants that with respect to the Deposit Material, Iron Mountain's proper administration of this Agreement will not violate the rights of any third parties.
- c. Depositor represents that all Deposit Material is readable and useable in its then current form; if any portion of such Deposit Material is encrypted, the necessary decryption tools and keys to read such material are deposited contemporaneously.

C. Beneficiary Responsibilities and Representations

- a. Beneficiary acknowledges that, as between Iron Mountain and Beneficiary, Iron Mountain's obligation is to maintain the Deposit Material as delivered by the Depositor and that, other than Iron Mountain's inspection of the Deposit Material (as described in Section 4) and the performance of any of the optional verification Services listed in Exhibit A, Iron Mountain has no other obligation regarding the completeness, accuracy, or functionality of the Deposit Material.
- b. It shall be solely the Beneficiary's responsibility to monitor whether a deposit or deposit update has been accepted by Iron Mountain.

D. Iron Mountain Responsibilities and Representations

- a. Iron Mountain agrees to use commercially reasonable efforts to provide the Services requested by Authorized Person(s) (as identified in the "**Authorized Person(s)/Notices Table**" below) representing the Depositor or Beneficiary in a Work Request. Iron Mountain may reject a Work Request (in whole or in part) that does not contain all required information at any time upon notification to the Party originating the Work Request.
- b. Iron Mountain will conduct a visual inspection upon receipt of any Deposit Material and associated Exhibit B. If Iron Mountain determines that the Deposit Material does not match the description provided by Depositor represented in Exhibit B, Iron Mountain will notify Depositor of such discrepancy.
- c. Iron Mountain will provide notice to the Beneficiary of all Deposit Material that is accepted and deposited into the escrow account under this Agreement. Unless Depositor or Beneficiary submits a Work Request for "**Deposit Tracking Notification**" as described in Exhibit A, Iron Mountain shall not have any obligation to prompt the Depositor to make a deposit, nor shall it have an obligation to notify the Beneficiary of the Depositor's failure to make a deposit or deposit update. Notwithstanding the forgoing, either Depositor or Beneficiary may obtain information regarding deposits or deposit updates upon request or through the Iron Mountain Website.
- d. Iron Mountain will follow the provisions of Exhibit C attached hereto in administering the release of Deposit Material.

- e. Iron Mountain will hold and protect Deposit Material in physical or electronic vaults that are either owned or under the control of Iron Mountain, unless otherwise agreed to by the Parties.
- f. Upon receipt of written instructions by both Depositor and Beneficiary, Iron Mountain will permit the replacement or removal of previously submitted Deposit Material. The Party making such request shall be responsible for getting the other Party to approve the joint instructions. Any Deposit Material that is removed from the deposit account will be either returned to Depositor or destroyed in accordance with Depositor's written instructions.
- g. Should transport of Deposit Material be necessary for Iron Mountain to perform Services requested by Depositor or Beneficiary under this Agreement or following the termination of this Agreement, Iron Mountain will use a commercially recognized overnight carrier such as Federal Express or United Parcel Service. Iron Mountain will not be responsible for any loss or destruction of, or damage to, such Deposit Material while in the custody of the common carrier.

E. Deposit Material Verification

- a. Beneficiary may submit a verification Work Request to Iron Mountain for one or more of the Services defined in Exhibit A attached hereto and Depositor consents to Iron Mountain's performance of any level(s) of such Services. Upon request by Iron Mountain and in support of Beneficiary's request for verification Services, Depositor shall promptly complete and return the Escrow Deposit Questionnaire attached hereto as Exhibit Q and reasonably cooperate with Iron Mountain by providing reasonable access to its technical personnel whenever reasonably necessary.
- b. The Parties consent to Iron Mountain's use of a subcontractor to perform verification Services. Such subcontractor shall be bound by the same confidentiality obligations as Iron Mountain and shall not be a direct competitor to either Depositor or Beneficiary. Iron Mountain shall be responsible for the delivery of Services of any such subcontractor as if Iron Mountain had performed the Services. Depositor warrants and Beneficiary warrants that any material it supplies for verification Services is lawful, does not violate the rights of any third parties and is provided with all rights necessary for Iron Mountain to perform verification of the Deposit Material.
- c. Iron Mountain will work with a Party who submits any verification Work Request for Deposit Material covered under this Agreement to either fulfill any standard verification Services Work Request or develop a custom Statement of Work ("**SOW**"). Iron Mountain and the requesting Party will mutually agree in writing to an SOW on terms and conditions that include but are not limited to: description of Deposit Material to be tested; description of verification testing; requesting Party responsibilities; Iron Mountain responsibilities; Service Fees; invoice payment instructions; designation of the paying Party; designation of authorized SOW representatives for both the requesting Party and Iron Mountain with name and contact information; and description of any final deliverables prior to the start of any fulfillment activity. Provided that the requesting Party has identified in the verification Work Request or SOW that the Deposit Material is subject to the

regulations of the International Traffic in Arms Regulations (22 CFR 120)(hereinafter "ITAR"), Iron Mountain shall ensure that any subcontractor who is granted access to the Deposit Material for the performance of verification Services shall be a U.S. Person as defined in 8 U.S.C. 1101(a)(20) or who is a protected person as defined in 8 U.S.C. 1324b(a)(3). After the start of fulfillment activity, each SOW may only be amended or modified in writing with the mutual agreement of both Parties, in accordance with the change control procedures set forth therein. If the verification Services extend beyond those described in Exhibit A, the Depositor shall be a necessary Party to the SOW governing the Services.

F. Payment

The Party responsible for payment designated in Exhibit A ("**Paying Party**") shall pay to Iron Mountain all fees as set forth in the Work Request ("**Service Fees**"). All Service Fees are due within thirty (30) calendar days from the date of invoice in U.S. currency and are non-refundable. Iron Mountain may update Service Fees with a ninety (90) calendar day written notice to the Paying Party during the Term of this Agreement (as defined below). The Paying Party is liable for any taxes (other than Iron Mountain income taxes) related to Services purchased under this Agreement or shall present to Iron Mountain an exemption certificate acceptable to the taxing authorities. Applicable taxes shall be billed as a separate item on the invoice. Any Service Fees not collected by Iron Mountain when due shall bear interest until paid at a rate of one percent (1%) per month (12% per annum) or the maximum rate permitted by law, whichever is less. Notwithstanding the non-performance of any obligations of Depositor to deliver Deposit Material under the License Agreement or this Agreement, Iron Mountain is entitled to be paid all Service Fees that accrue during the Term of this Agreement.

G. Term and Termination

- a. The term of this Agreement is for a period of one (1) year from the Effective Date ("**Initial Term**") and will automatically renew for additional one (1) year terms ("**Renewal Term**") (collectively the "**Term**"). This Agreement shall continue in full force and effect until one of the following events occur: (i) Depositor and Beneficiary provide Iron Mountain with sixty (60) days' prior written joint notice of their intent to terminate this Agreement; (ii) Beneficiary provides Iron Mountain and Depositor with sixty (60) days' prior written notice of its intent to terminate this Agreement; (iii) the Agreement terminates under another provision of this Agreement; or (iv) any time after the Initial Term, Iron Mountain provides sixty (60) days' prior written notice to the Depositor and Beneficiary of Iron Mountain's intent to terminate this Agreement. The Effective Date and the Deposit Account Number shall be supplied by Iron Mountain only. The Effective Date supplied by Iron Mountain and specified above shall be the date Iron Mountain sets up the escrow account.
- b. Unless the express terms of this Agreement provide otherwise, upon termination of this Agreement, Iron Mountain shall return physical Deposit Material to the Depositor and erase electronically submitted Deposit Material. If reasonable attempts to return the physical Deposit Material to Depositor are unsuccessful, Iron Mountain shall destroy the Deposit Material.

- c. In the event of the nonpayment of undisputed Service Fees owed to Iron Mountain, Iron Mountain shall provide all Parties to this Agreement with written notice of Iron Mountain's intent to terminate this Agreement. Any Party to this Agreement shall have the right to make the payment to Iron Mountain to cure the default. If the past due payment is not received in full by Iron Mountain within thirty (30) calendar days of the date of such written notice, then Iron Mountain shall have the right to terminate this Agreement at any time thereafter by sending written notice to all Parties. Iron Mountain shall have no obligation to perform the Services under this Agreement (except those obligations that survive termination of this Agreement, which includes the confidentiality obligations in Section 10) so long as any undisputed Service Fees due Iron Mountain under this Agreement remain unpaid.

H. Infringement Indemnification

Anything in this Agreement to the contrary notwithstanding, Depositor at its own expense shall defend, indemnify and hold Iron Mountain fully harmless against any claim or action asserted against Iron Mountain (specifically including costs and reasonable attorneys' fees associated with any such claim or action) to the extent such claim or action is based on an assertion that Iron Mountain's proper administration of this Agreement infringes any patent, copyright, license or other proprietary right of any third party. When Iron Mountain has notice of a claim or action, it shall promptly notify Depositor in writing. Depositor may elect to control the defense of such claim or action or enter into a settlement agreement, provided that no such settlement or defense shall include any admission or implication of wrongdoing on the part of Iron Mountain without Iron Mountain's prior written consent, which consent shall not be unreasonably delayed or withheld. Iron Mountain shall have the right to employ separate counsel and participate in the defense of any claim at its own expense.

I. Warranties

IRON MOUNTAIN WARRANTS ANY AND ALL SERVICES PROVIDED HEREUNDER SHALL BE PERFORMED IN A COMMERCIALY REASONABLE MANNER CONSISTENT WITH INDUSTRY STANDARDS. EXCEPT AS SPECIFIED IN THIS SECTION, ALL CONDITIONS, REPRESENTATIONS, AND WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE, ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. AN AGGRIEVED PARTY MUST NOTIFY IRON MOUNTAIN PROMPTLY UPON LEARNING OF ANY CLAIMED BREACH OF ANY WARRANTY AND, TO THE EXTENT ALLOWED BY APPLICABLE LAW, SUCH PARTY'S REMEDY FOR BREACH OF THIS WARRANTY SHALL BE SUBJECT TO THE LIMITATION OF LIABILITY AND CONSEQUENTIAL DAMAGES WAIVER IN THIS AGREEMENT. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY AND LIMITED REMEDY SET FORTH ABOVE FAILS OF ITS ESSENTIAL PURPOSE.

J. Confidential Information

Iron Mountain shall have the obligation to implement and maintain safeguards designed to protect the confidentiality of the Deposit Material and use at least the same degree of care to safeguard the confidentiality of the Deposit Material as it uses to protect its own confidential information, but in no event less than a reasonable degree of care. Except as provided in this Agreement Iron Mountain shall not use or disclose the Deposit Material. Iron Mountain shall not disclose the terms of this Agreement to any third party other than its financial, technical, or legal advisors, or its administrative support service providers. Any such third party shall be bound by the same confidentiality obligations as Iron Mountain. If Iron Mountain receives a subpoena or any other order from a court or other judicial tribunal pertaining to the disclosure or release of the Deposit Material, Iron Mountain will promptly notify the Parties to this Agreement unless prohibited by law. After notifying the Parties, Iron Mountain may comply in good faith with such order. It shall be the responsibility of Depositor or Beneficiary to challenge any such order; provided, however, that Iron Mountain does not waive its rights to present its position with respect to any such order. Iron Mountain will cooperate with the Depositor or Beneficiary, as applicable, to support efforts to quash or limit any subpoena, at such Party's expense.

K. Limitation of Liability

EXCEPT FOR: (I) LIABILITY FOR DEATH OR BODILY INJURY; (II) PROVEN GROSS NEGLIGENCE OR WILLFUL MISCONDUCT; OR (III) THE INFRINGEMENT INDEMNIFICATION OBLIGATIONS OF SECTION 8, ALL OTHER LIABILITY RELATED TO THIS AGREEMENT, IF ANY, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, OF ANY PARTY TO THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT EQUAL TO ONE YEAR OF FEES PAID TO IRON MOUNTAIN UNDER THIS AGREEMENT. IF CLAIM OR LOSS IS MADE IN RELATION TO A SPECIFIC DEPOSIT OR DEPOSITS, SUCH LIABILITY SHALL BE LIMITED TO THE FEES RELATED SPECIFICALLY TO SUCH DEPOSITS.

L. Consequential Damages Waiver

IN NO EVENT SHALL ANY PARTY TO THIS AGREEMENT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, LOST PROFITS, ANY COSTS OR EXPENSES FOR THE PROCUREMENT OF SUBSTITUTE SERVICES (EXCLUDING SUBSTITUTE ESCROW SERVICES), OR ANY OTHER INDIRECT DAMAGES, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE EVEN IF THE POSSIBILITY THEREOF MAY BE KNOWN IN ADVANCE TO ONE OR MORE PARTIES.

M. General

- a. **Purchase Orders.** In the event that the Paying Party issues a purchase order or other instrument used to pay Service Fees to Iron Mountain, any terms and conditions set forth in the purchase order which constitute terms and conditions which are in addition to those set forth in this Agreement or which establish conflicting terms and conditions to those set forth in this Agreement are expressly rejected by Iron Mountain.
- b. **Right to Make Copies.** Iron Mountain shall have the right to make copies of all Deposit Material as reasonably necessary to perform the Services. Iron Mountain shall copy all copyright, nondisclosure, and

other proprietary notices and titles contained on Deposit Material onto any copies made by Iron Mountain. Any copying expenses incurred by Iron Mountain as a result of a Work Request to copy will be borne by the requesting Party. Iron Mountain may request Depositor's reasonable cooperation in promptly copying Deposit Material in order for Iron Mountain to perform this Agreement.

- c. Choice of Law. The validity, interpretation, and performance of this Agreement shall be construed under the laws of the Commonwealth of Massachusetts, USA, without giving effect to the principles of conflicts of laws.
- d. Authorized Person(s). Depositor and Beneficiary must each authorize and designate one person whose actions will legally bind such Party ("Authorized Person" who shall be identified in the Authorized Person(s) Notices Table of this Agreement or such Party's legal representative) and who may manage the Iron Mountain escrow account through the Iron Mountain website or written instruction. Depositor and Beneficiary warrant that they shall maintain the accuracy of the name and contact information of their respective designated Authorized Person during the Term of this Agreement by providing Iron Mountain with a written request to update its records for the Party's respective Authorized Person which includes the updated information and applicable deposit account number(s).
- e. Right to Rely on Instructions. With respect to release of Deposit Material or the destruction of Deposit Material, Iron Mountain shall rely on instructions from a Party's Authorized Person. In all other cases, Iron Mountain may act in reliance upon any instruction, instrument, or signature reasonably believed by Iron Mountain to be genuine and from an Authorized Person, officer, or other employee of a Party. Iron Mountain may assume that such representative of a Party to this Agreement who gives any written notice, request, or instruction has the authority to do so. Iron Mountain will not be required to inquire into the truth of, or evaluate the merit of, any statement or representation contained in any notice or document reasonably believed to be from such representative.
- f. Force Majeure. No Party shall be liable for any delay or failure in performance due to events outside the defaulting Party's reasonable control, including without limitation acts of God, strikes, riots, war, acts of terrorism, fire, epidemics, or delays of common carriers or other circumstances beyond its reasonable control. The obligations and rights of the excused Party shall be extended on a day-to-day basis for the time period equal to the period of the excusable delay.
- g. Notices. Iron Mountain shall have the right to rely on the last known address provided by each the Depositor and Beneficiary for its respective Authorized Person and Billing Contact as set forth in this Agreement or as subsequently provided as an update to such address. All notices regarding Exhibit C (Release of Deposit Material) shall be sent by commercial express mail or other commercially appropriate means that provide prompt delivery and require proof of delivery. All other correspondence, including but not limited to invoices and payments, may be sent electronically or by regular mail. The Parties shall have the right to rely on the last known address of the other Parties. Any correctly addressed notice to the last known address of the other Parties, that is refused, unclaimed, or undeliverable shall be deemed effective as of the first date

- that said notice was refused, unclaimed, or deemed undeliverable by electronic mail, the postal authorities, or commercial express mail.
- h. No Waiver. No waiver of any right under this Agreement by any Party shall constitute a subsequent waiver of that or any other right under this Agreement.
- i. Assignment. No assignment of this Agreement by Depositor or Beneficiary or any rights or obligations of Depositor or Beneficiary under this Agreement is permitted without the written consent of Iron Mountain, which shall not be unreasonably withheld or delayed. Iron Mountain shall have no obligation in performing this Agreement to recognize any successor or assign of Depositor or Beneficiary unless Iron Mountain receives clear, authoritative and conclusive written evidence of the change of Parties.
- j. Severability. In the event any of the terms of this Agreement become or are declared to be illegal or otherwise unenforceable by any court of competent jurisdiction, such term(s) shall be null and void and shall be deemed deleted from this Agreement. All remaining terms of this Agreement shall remain in full force and effect.
- k. Independent Contractor Relationship. Depositor and Beneficiary understand, acknowledge, and agree that Iron Mountain's relationship with Depositor and Beneficiary will be that of an independent contractor and that nothing in this Agreement is intended to or should be construed to create a partnership, joint venture, or employment relationship.
- l. Attorneys' Fees. Any costs and fees incurred by Iron Mountain in the performance of obligations imposed upon Iron Mountain solely by virtue of its role as escrow service provider including, without limitation, compliance with subpoenas, court orders, discovery requests, and disputes arising solely between Depositor and Beneficiary, including, but not limited to, disputes concerning a release of the Deposit Material shall, unless adjudged otherwise, be divided equally and paid by Depositor and Beneficiary. In any suit or proceeding between the Parties relating to this Agreement, the prevailing Party will have the right to recover from the other(s) its costs and reasonable fees and expenses of attorneys, accountants, and other professionals incurred in connection with the suit or proceeding, including costs, fees and expenses upon appeal, separately from and in addition to any other amount included in such judgment, except that in no event shall Iron Mountain be liable for any costs or fees incurred by either Depositor or Beneficiary. This provision is intended to be severable from the other provisions of this Agreement, and shall survive and not be merged into any such judgment.
- m. No Agency. No Party has the right or authority to, and shall not, assume or create any obligation of any nature whatsoever on behalf of the other Parties or bind the other Parties in any respect whatsoever.
- n. Disputes. Any dispute, difference or question arising among any of the Parties concerning the construction, meaning, effect or implementation of this Agreement or the rights or obligations of any Party will be submitted to, and settled by arbitration by a single arbitrator chosen by the corresponding Regional Office of the American Arbitration Association in accordance with the Commercial Rules of the American Arbitration

Association. The Parties shall submit briefs of no more than 10 pages and the arbitration hearing shall be limited to two (2) days maximum. Arbitration will take place in Boston, Massachusetts, USA. Any court having jurisdiction over the matter may enter judgment on the award of the arbitrator. Service of a petition to confirm the arbitration award may be made by regular mail or by commercial express mail, to the attorney for the Party or, if unrepresented, to the Party at the last known business address.

- o. Interpleader. Anything to the contrary notwithstanding, in the event of any dispute regarding the interpretation of this Agreement, or the rights and obligations with respect to the Deposit Material in escrow or the propriety of any action contemplated by Iron Mountain hereunder, then Iron Mountain may, in its sole discretion, file an interpleader or similar action in any court of competent jurisdiction to resolve any such dispute.
- p. Regulations. Depositor and Beneficiary are responsible for and warrant, to the extent of their individual actions or omissions, compliance with all applicable laws, rules and regulations, including but not limited to: customs laws; import; export and re-export laws; and government regulations of any country from or to which the Deposit Material may be delivered in accordance with the provisions of this Agreement. Depositor represents and warrants that the establishment of a deposit account containing ITAR regulated Deposit Material for the Beneficiary, and Iron Mountain's subsequent release of such Deposit Material under the terms of this Agreement will be lawful under any applicable U.S. export control regulations and laws, including ITAR. Conversely, Depositor shall refrain from establishing a deposit account containing ITAR regulated Deposit Material for the Beneficiary if the release of such Deposit Material to the Beneficiary, under the terms of this Agreement, would be in violation of any applicable U.S export control regulations and laws, including ITAR. With respect to Deposit Material containing personal information and data, Depositor agrees to (i) procure all necessary consents in relation to personal information and data; and (ii) otherwise comply with all applicable privacy and data protection laws as they relate to the subject matter of this Agreement. Iron Mountain is responsible for and warrants, to the extent of their individual actions or omissions, compliance with all applicable laws, rules and regulations to the extent that it is directly regulated by the law, rule or regulation and to the extent that it knows or has been advised that, as a result of this Agreement, its activities are subject to the law, rule or regulation. Notwithstanding anything in this Agreement to the contrary, if an applicable law or regulation exists or should be enacted which is contrary to the obligations imposed upon Iron Mountain hereunder, and results in the activities contemplated hereunder unlawful, Depositor and/or Beneficiary will notify Iron Mountain and Iron Mountain will be relieved of its obligations hereunder unless and until such time as such activity is permitted.
- q. No Third Party Rights. This Agreement is made solely for the benefit of the Parties to this Agreement and their respective permitted successors and assigns, and no other person or entity shall have or acquire any right by virtue of this Agreement unless otherwise agreed to by all the Parties hereto.

- r. Entire Agreement. The Parties agree that this Agreement, which includes all attached Exhibits and all valid Work Requests and SOWs submitted by the Parties, is the complete agreement between the Parties concerning the subject matter of this Agreement and replaces any prior or contemporaneous oral or written communications between the Parties. There are no conditions, understandings, agreements, representations, or warranties, expressed or implied, which are not specified herein. Each of the Parties warrant that the execution, delivery, and performance of this Agreement has been duly authorized and signed by a person who meets statutory or other binding approval to sign on behalf of its organization as named in this Agreement. This Agreement may be modified only by mutual written agreement of all the Parties.
- s. Counterparts. This Agreement may be executed electronically in accordance with applicable law or in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.
- t. Survival. Sections 7 (Term and Termination), 8 (Infringement Indemnification), 9 (Warranties), 10 (Confidential Information), 11 (Limitation of Liability), 12 (Consequential Damages Waiver), and 13 (General) of this Agreement shall survive termination of this Agreement or any Exhibit attached hereto.

IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the Effective Date by their authorized representatives:

DEPOSITOR		BENEFICIARY	
Signature		Signature	
Print Name		Print Name	
Title		Title	
Date		Date	

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.	
Signature	
Print Name	
Title	
Date	

Authorized Person Notices Table			
Please provide the names and contact information of the Authorized Persons under this Agreement. Please complete all information as applicable. Incomplete information may result in a delay of processing.			
DEPOSITOR (Required information)		BENEFICIARY (Required information)	
Print Name		Print Name	
Title		Title	
Email Address		Email Address	
Street Address		Street Address	
City		City	
State/Province		State/Province	
Postal/Zip Code		Postal/Zip Code	
Phone Number		Phone Number	
Fax Number		Fax Number	
Billing Contact Information Table (Required information)			
Please provide the name and contact information of the Billing Contact under this Agreement. All Invoices will be sent to this individual at the address set forth below. Incomplete information may result in a delay of processing.			
DEPOSITOR		BENEFICIARY	
<input type="checkbox"/> <i>Check if same as Authorized Person above or provide below</i>		<input type="checkbox"/> <i>Check if same as Authorized Person above or provide below</i>	
Company Name		Company Name	
Print Name		Print Name	
Title		Title	
Email Address		Email Address	
Street Address		Street Address	
City		City	
State/Province		State/Province	
Postal/Zip Code		Postal/Zip Code	
Phone Number		Phone Number	
Fax Number		Fax Number	
Purchase Order #		Purchase Order #	

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

All notices should be sent to ipmclientservices@ironmountain.com OR Iron Mountain Intellectual Property Management, Inc., Attn: Client Services, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA. Telephone: 800-875-5669. Facsimile: 770-239-9201

Exhibit A

Escrow Services Fee Schedule – Work Request

Deposit Account Number	
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Service Check box(es) to order service	Service Description - Three-Party Escrow Service Agreement All services are listed below. Check the requested service and submit a Work Request to Iron Mountain for services requested after agreement signature.	One- Time Fees	Annual Fees	Paying Party Check box to identify the Paying Party
<input checked="" type="checkbox"/> Setup Fee (Required) <input checked="" type="checkbox"/> Deposit Account Fee (Required) <input checked="" type="checkbox"/> Beneficiary Fee (Required)	<p>Iron Mountain will setup a new escrow deposit account using a standard escrow agreement.</p> <p>Iron Mountain will set up one deposit account to manage and administrate access to Deposit Material to be secured in a controlled storage environment. Iron Mountain will provide account services that include unlimited deposits, electronic vaulting, access to Iron Mountain Connect™ Escrow Management Center for secure online account management, submission of electronic Work Requests, and communication of status. Release of deposit material is also included in the annual fee. An oversize fee of \$200 USD per 1.2 cubic foot will be charged for deposits that exceed 2.4 cubic feet.</p> <p>Iron Mountain will fulfill a Work Request to add a Beneficiary to an escrow deposit account and manage account access rights. Beneficiary will have access to Iron Mountain Connect™ Escrow Management Center for secure online account management, submission of electronic Work Requests, and communication of status.</p>	<p>\$1,550</p>	<p>\$1,050</p> <p>\$800</p>	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary <input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary <input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary
<input checked="" type="checkbox"/> File List Report	<p>Iron Mountain will perform a File List Test, which includes a Deposit Material media readability analysis, a file listing, a file classification table, virus scan outputs, and confirmation of the presence or absence of a completed Exhibit Q – Deposit Questionnaire. A final report will be sent to the requesting Party regarding the Deposit Material. Deposit must be provided on CD, DVD-R, or deposited electronically.</p>	<p>\$2,500</p>	<p>N/A</p>	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Level 1 - Inventory and Analysis Test	<p>Iron Mountain will perform an Inventory and Analysis Test on the initial deposit, which includes the outputs of the File Listing test, identifying the presence/absence of build, setup and design documentation (including the presence or absence of a</p>	<p>\$5,000 or based on SOW if</p>	<p>N/A</p>	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary

	completed Exhibit Q), and identifying materials required to recreate the Depositor's application development and production environments. Output includes a report that includes compile and setup documentation, file classification tables and file listings. The report will list required software development materials, including, without limitation, required source code languages and compilers, third-party software, libraries, operating systems, and hardware, and Iron Mountain's analysis of the deposit. A final report will be sent to the requesting Party regarding the Deposit Material.	custom work required		
<input type="checkbox"/> Level 2 - Deposit Compile Test	Iron Mountain will fulfill a Statement of Work (SOW) to perform a Deposit Compile Test, which includes the outputs of the Level 1 - Inventory and Analysis Test, plus recreating the Depositor's software development environment, compiling source files and modules, linking libraries and recreating executable code, providing a pass/fail determination, and creation of comprehensive compilation documentation with a final report sent to the Paying Party regarding the Deposit Material. The requesting Party and Iron Mountain will agree on a custom SOW prior to the start of fulfillment. A completed Exhibit Q is required for execution of this test.	Based on SOW	N/A	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Level 3 - Binary Comparison	Iron Mountain will fulfill a Statement of Work (SOW) to perform one Binary Comparison Test - Binary Comparison, which includes the outputs of the Level 2 test, a comparison of the executable files built from the Deposit Compile Test to the actual executable files in use by the Beneficiary to ensure a full binary-level match, with a final report sent to the Requesting Party regarding the Deposit Material. The Paying Party and Iron Mountain will agree on a custom SOW prior to the start of fulfillment. A completed Exhibit Q is required for execution of this test.	Based on SOW	N/A	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Level 4 - Full Usability	Iron Mountain will fulfill a Statement of Work (SOW) to perform one Deposit Usability Test - Full Usability, which includes which includes the outputs of the Level 1 and Level 2 tests (if applicable). Iron Mountain will confirm that the deposited application can be setup, installed and configured and, when installed, will execute functional tests, based on pre-determined test scripts provided by the Parties, and create comprehensive setup and installation documentation. A final report will be sent to the Paying Party regarding the Deposit Material. The Paying Party and Iron Mountain will agree on a custom SOW prior to the start of fulfillment. A completed Exhibit Q is required for execution of this test.	Based on SOW	N/A	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary

<input type="checkbox"/> Deposit Tracking	At least semi-annually, Iron Mountain will send a reminder to Depositor to update Deposit Material. Thereafter, Beneficiary will be notified of last deposit.	N/A	\$450	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Dual Vaulting	Iron Mountain will fulfill a Work Request to store and manage a redundant copy of the Deposit Material in one (1) additional location. All Deposit Material (original and copy) must be provided by the Depositor.	N/A	\$500	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Remote Vaulting	Iron Mountain will fulfill a Work Request to store and manage the Deposit Material in a remote location, designated by the client, outside of Iron Mountain's primary escrow vaulting location. All Deposit Material (original and copy) must be provided by the Depositor.	N/A	\$500	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary
<input type="checkbox"/> Custom Contract Fee	Custom contracts are subject to the Custom Contract Fee, which covers the review and processing of custom or modified contracts.	\$750	N/A	<input type="checkbox"/> Depositor <input type="checkbox"/> Beneficiary

Pursuant to the Agreement, the undersigned hereby issues this Work Request for performance of the Service(s) selected above.

Paying Party – For Future Work Request Use Only	
Paying Party Name	
Signature	
Print Name	
Title	
Date	

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

All work requests should be sent to ipmclientservices@ironmountain.com OR Iron Mountain Intellectual Property Management, Inc., Attn: Client Services, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA. Telephone: 800-875-5669. Facsimile: 770-239-9201

Exhibit B

Deposit Material Description

(This document must accompany each submission of Deposit Material)

Company Name		Deposit Account Number	
Deposit Name		Deposit Version	

(Deposit Name will appear in account history reports)

Deposit Media

(Please Label All Media with the Deposit Name Provided Above)

Media Type	Quantity	Media Type	Quantity
<input type="checkbox"/> CD-ROM / DVD		<input type="checkbox"/> USB Drive	
<input type="checkbox"/> DLT Tape		<input type="checkbox"/> Documentation	
<input type="checkbox"/> DAT Tape(4mm/8mm)		<input type="checkbox"/> Hard Drive / CPU	
<input type="checkbox"/> LTO Tape		<input type="checkbox"/> Circuit Board	
<input type="checkbox"/> Other (please describe):			

	Total Size of Transmission (specify in bytes)	# of Files	# of Folders
<input type="checkbox"/> Electronic Deposit			

Deposit Encryption

(Please check either "Yes" or "No" below and complete as appropriate)

Is the media or are any of the files encrypted? Yes or No

If yes, please include any passwords and decryption tools description below. Please also deposit all necessary encryption software with this deposit. Depositor at its option may submit passwords on a separate Exhibit B.

Encryption tool name		Version	
Hardware required			
Software required			
Other required			

information	
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Deposit Certification (Please check the box below to certify and provide your contact information)

<input type="checkbox"/> I certify for Depositor that the above described Deposit Material has been transmitted electronically or sent via commercial express mail carrier to Iron Mountain at the address below.		<input type="checkbox"/> Iron Mountain has inspected and accepted the above described Deposit Material either electronically or physically. Iron Mountain will notify Depositor of any discrepancies.	
Print Name		Name	
Date		Date	
Email Address			
Telephone Number			

Note: If Depositor is physically sending Deposit Material to Iron Mountain, please label all media and mail all Deposit Material with the appropriate Exhibit B via commercial express carrier to the following address:

Iron Mountain Intellectual Property Management, Inc.
 Attn: Vault Administration
 2100 Norcross Parkway, Suite 150
 Norcross, GA 30071
 Telephone: 800-875-5669
 Facsimile: 770-239-9201

Exhibit C

Release of Deposit Material

Deposit Account Number	
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Iron Mountain will use the following procedures to process any Beneficiary Work Request to release Deposit Material. All notices under this Exhibit C shall be sent pursuant to the terms of Section 13(g) Notices.

a. Release Conditions.

Depositor and Beneficiary agree that a Work Request for the release of the Deposit Material shall be based solely on one or more of the following conditions (defined as “**Release Conditions**”):

- a. Depositor’s breach of the License Agreement or other agreement between the Depositor and Beneficiary regulating the use of the Deposit Material covered under this Agreement; or
- b. Failure of the Depositor to function as a going concern or operate in the ordinary course; or
- c. Depositor is subject to voluntary or involuntary bankruptcy.

b. Release Work Request.

A Beneficiary may submit a Work Request to Iron Mountain to release the Deposit Material covered under this Agreement. To the extent that the Deposit Material is subject to applicable U.S. export control regulations and laws, including ITAR, the Beneficiary Work Request to release the Deposit Material must include Beneficiary’s certification that such release would be compliant with the applicable U.S. export control regulations and laws, including ITAR. Iron Mountain will send a written notice of this Beneficiary Work Request within five (5) business days to the Depositor’s Authorized Person.

c. Contrary Instructions.

From the date Iron Mountain mails written notice of the Beneficiary Work Request to release Deposit Material covered under this Agreement, Depositor’s Authorized Person shall have ten (10) business days to deliver to Iron Mountain contrary instructions. Contrary instructions shall mean the written representation by Depositor that a Release Condition has not occurred or has been cured (“**Contrary Instructions**”). Contrary Instructions shall be on company letterhead and signed by a Depositor Authorized Person. Upon receipt of Contrary Instructions, Iron Mountain shall promptly send a copy to Beneficiary’s Authorized Person. Additionally, Iron Mountain shall notify both Depositor and Beneficiary Authorized Persons that there is a dispute to be resolved pursuant to the Disputes provisions of this Agreement. Iron Mountain will continue to store Deposit Material without release pending (i)

instructions from Depositor to release the Deposit Material to Beneficiary; or (ii) dispute resolution pursuant to the Disputes provisions of this Agreement; or (iii) withdrawal of Contrary Instructions from Depositor's Authorized Person or legal representative; or (iv) receipt of an order from a court of competent jurisdiction.

d. Release of Deposit Material.

If Iron Mountain does not receive timely Contrary Instructions from a Depositor Authorized Person or written instructions directly from Depositor's Authorized Person to release a copy of the Deposit Materials to the Beneficiary, Iron Mountain is authorized to release Deposit Material to the Beneficiary. Iron Mountain is entitled to receive any undisputed, unpaid Service Fees due Iron Mountain from the Parties before fulfilling the Work Request to release Deposit Material covered under this Agreement. Any Party may cure a default of payment of Service Fees.

e. Termination of Agreement Upon Release.

This Agreement will terminate upon the release of Deposit Material held by Iron Mountain.

f. Right to Use Following Release.

Beneficiary has the right under this Agreement to use the Deposit Material for the sole purpose of continuing the benefits afforded to Beneficiary by the License Agreement. Notwithstanding, the Beneficiary shall not have access to the Deposit Material unless there is a release of the Deposit Material in accordance with this Agreement. Beneficiary shall be obligated to maintain the confidentiality of the released Deposit Material.

Exhibit Q

Escrow Deposit Questionnaire

Deposit Account Number	
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Purpose of Questionnaire

In order for Iron Mountain to determine the deposit material requirements and to quote fees associated with verification Services, a completed Deposit Questionnaire is requested. It is the responsibility of the escrow depositor to complete the questionnaire.

Technical Contact Information

List the appropriate technical person(s) Iron Mountain may contact regarding this set of escrow deposit materials.

Company Name	
Print Contact Name	
Address 1	
City	
State/Province	
Postal/Zip Code	
Telephone	
Email Address	

Instructions

Complete the questionnaire in its entirety by answering every question accurately. Upon completion, return the questionnaire to the beneficiary asking for its completion, or e-mail it to your Iron Mountain Solution Sales Representative.

General Description (Required) – Please answer all questions.

What is the general function of the software (i.e. the deposit) to be placed into escrow?	
On what media will the source code be delivered?	
If the deposit is on magnetic tape media, what tape format (e.g. DAT DDS4, DLT 8000, LTO-3, etc.) will be used for the deposit?	
If the deposit is on tape, what operating system and version was used to create the tape and what tools (either native OS (e.g. tar, cpio, etc.) or commercial (e.g. Backup Exec, NetBackup, ArcServ etc.) were used to load the data; if a third party or commercial software tool was used, specify the vendor and exact version of the tool used.	
Will the deposit be in the format of a database/repository of any type of Versioning or Configuration Management Tool (e.g. Visual Source Safe, Clearcase, Perforce, etc.) or will the software in the deposit be in a clear text/native file system format? If a Versioning or CM tool will be necessary to examine any part the deposit contents, specify the Vendor and tool and exact version used.	
Is the deposit encrypted, including password protected archives, in any way? If so, what tool and version will be used to perform the encryption and will all necessary userid's, passwords or encryption keys be provided to extract the software?	
What is the total uncompressed size of the deposit in megabytes?	

Requirements for the Assembly of the Deposit (Required) – Please answer all questions.

Describe the nature of the source code in the deposit. (Does the deposit include interpreted code, compiled source, or a mixture? How do the different parts of the deposit relate to each other?) What types of source code make up the deposit (e.g. – C++, Java, etc.)	
How many build processes are there?	
How many unique build environments are required to assemble the material in the deposit into the deliverables?	
What hardware is required for each build environment to compile the software (including memory, disk space, etc.)?	
What operating systems (including versions) are used during compilation? Is the software executed on any other operating systems/version?	
How many separate deliverable components (executables, share libraries, etc.) are built?	
What compilers/linkers/other tools (brand and version) are necessary to build the application?	
What, if any, third-party libraries are used to build the software? Specify vendor, tool name and exact or minimum required version. If multiple build environments are required, specify for which environment each tool is required.	
If a database of any kind is necessary to support compilation, is a running instance of the database necessary or is a static instance consisting of the static and shared libraries and/or header files installed by the database sufficient to support compilation? If not already identified above, provide the vendor and	

version of the required database.	
How long does a complete build of the software take? How much of that time requires some form of human interaction and how much is automated?	
Does the deposit contain formal build document(s) describing the necessary steps for build system configuration and compilation?	

Requirements for the Execution of the Software Protected by the Deposit - (Required) – Please answer all questions.

What are the system hardware requirements to successfully execute the software? (memory, disk space, etc.); include any additional peripheral devices that may be necessary to support correct function of the software/system.	
What is the minimum number of machines required to completely set up the software sufficient to support functional testing? What Operating systems and version are required for each machine?	
Beyond the operating systems, what additional third party software and tools are required to execute the software and verify correct operation? Please provide vendor and versions of all third party tools or libraries required to completely configure a system suitable to support functional testing. If multiple machines are required to support testing, identify the software to be installed to each machine.	
Is a database of any kind required to support functional testing of the software? If so, provide the vendor and version required.	
If a database is required, does the deposit contain or can the depositor provide scripts and backups/imports	

necessary to create a database instance suitable to support functional testing. Note: a database containing test data is satisfactory to support functional testing so long as the data is realistic.	
Including the installation of any software tools required to support the function of the software, approximately how much time is required to setup and configure a system suitable to support functional testing?	
Approximately how much time would be required to perform a set of limited tests once a test system is configured?	
Does the deposit contain or can the depositor provide test plans, scripts or procedures to facilitate testing?	
With the exception of any database identified above, are any connections to external data sources, feeds or sinks required to support the proper functioning of the software and to support software testing?	

For additional information about Iron Mountain Technical Verification Services, please contact our Iron Mountain Solution Sales Representative.

Attachment II

HIPAA Business Associate Agreement

Addendum to Contract

Between the County of Riverside and NaphCare Inc.

This HIPAA Business Associate Agreement (the "Addendum") supplements, and is made part of the Correctional Health Electronic Health Record System Services (the "Underlying Agreement") between the County of Riverside ("County") and NaphCare Incorporated ("Contractor") and shall be effective as of the date the Underlying Agreement is approved by both Parties (the "Effective Date").

RECITALS

WHEREAS, County and Contractor entered into the Underlying Agreement pursuant to which the Contractor provides services to County, and in conjunction with the provision of such services certain protected health information ("PHI") and/or certain electronic protected health information ("ePHI") may be created by or made available to Contractor for the purposes of carrying out its obligations under the Underlying Agreement; and,

WHEREAS, the provisions of the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), Public Law 104-191 enacted August 21, 1996, and the Health Information Technology for Economic and Clinical Health Act ("HITECH") of the American Recovery and Reinvestment Act of 2009, Public Law 111-5 enacted February 17, 2009, and the laws and regulations promulgated subsequent thereto, as may be amended from time to time, are applicable to the protection of any use or disclosure of PHI and/or ePHI pursuant to the Underlying Agreement; and,

WHEREAS, County is a covered entity, as defined in the Privacy Rule; and,

WHEREAS, to the extent County discloses PHI and/or ePHI to Contractor or Contractor creates, receives, maintains, transmits, or has access to PHI and/or ePHI of County, Contractor is a business associate, as defined in the Privacy Rule; and,

WHEREAS, pursuant to 42 USC §17931 and §17934, certain provisions of the Security Rule and Privacy Rule apply to a business associate of a covered entity in the same manner that they apply to the covered entity, the additional security and privacy requirements of HITECH are applicable to business associates and must be incorporated into the business associate agreement, and a business associate is liable for civil and criminal penalties for failure to comply with these security and/or privacy provisions; and,

WHEREAS, the parties mutually agree that any use or disclosure of PHI and/or ePHI must be in compliance with the Privacy Rule, Security Rule, HIPAA, HITECH and any other applicable law; and,

WHEREAS, the parties intend to enter into this Addendum to address the requirements and obligations set forth in the Privacy Rule, Security Rule, HITECH and HIPAA as they apply to Contractor as a business associate of County, including the establishment of permitted and required uses and disclosures of PHI and/or ePHI created or received by Contractor during the course of performing functions, services and activities on behalf of County, and appropriate limitations and conditions on such uses and disclosures;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the parties agree as follows:

1. **Definitions.** Terms used, but not otherwise defined, in this Addendum shall have the same meaning as those terms in HITECH, HIPAA, Security Rule and/or Privacy Rule, as may be amended from time to time.
 - A. "Breach" when used in connection with PHI means the acquisition, access, use or disclosure of PHI in a manner not permitted under subpart E of the Privacy Rule which compromises the security or privacy of the PHI, and shall have the meaning given such term in 45 CFR §164.402.
 - (1) Except as provided below in Paragraph (2) of this definition, acquisition, access, use, or disclosure of PHI in a manner not permitted by subpart E of the Privacy Rule is presumed to be a breach unless Contractor demonstrates that there is a low probability that the PHI has been compromised based on a risk assessment of at least the following four factors:
 - (a) The nature and extent of the PHI involved, including the types of identifiers and the likelihood of re-identification;
 - (b) The unauthorized person who used the PHI or to whom the disclosure was made;
 - (c) Whether the PHI was actually acquired or viewed; and
 - (d) The extent to which the risk to the PHI has been mitigated.
 - (2) Breach excludes:

- (a) Any unintentional acquisition, access or use of PHI by a workforce member or person acting under the authority of a covered entity or business associate, if such acquisition, access or use was made in good faith and within the scope of authority and does not result in further use or disclosure in a manner not permitted under subpart E of the Privacy Rule.
- (b) Any inadvertent disclosure by a person who is authorized to access PHI at a covered entity or business associate to another person authorized to access PHI at the same covered entity, business associate, or organized health care arrangement in which County participates, and the information received as a result of such disclosure is not further used or disclosed in a manner not permitted by subpart E of the Privacy Rule.
- (c) A disclosure of PHI where a covered entity or business associate has a good faith belief that an unauthorized person to whom the disclosure was made would not reasonably have been able to retain such information.
- B. "Business associate" has the meaning given such term in 45 CFR §164.501, including but not limited to a subcontractor that creates, receives, maintains, transmits or accesses PHI on behalf of the business associate.
- C. "Data aggregation" has the meaning given such term in 45 CFR §164.501.
- D. "Designated record set" as defined in 45 CFR §164.501 means a group of records maintained by or for a covered entity that may include: the medical records and billing records about individuals maintained by or for a covered health care provider; the enrollment, payment, claims adjudication, and case or medical management record systems maintained by or for a health plan; or, used, in whole or in part, by or for the covered entity to make decisions about individuals.
- E. "Electronic protected health information" ("ePHI") as defined in 45 CFR §160.103 means protected health information transmitted by or maintained in electronic media.
- F. "Electronic health record" means an electronic record of health-related information on an individual that is created, gathered, managed, and consulted by authorized health care clinicians and staff, and shall have the meaning given such term in 42 USC §17921(5).
- G. "Health care operations" has the meaning given such term in 45 CFR §164.501.
- H. "Individual" as defined in 45 CFR §160.103 means the person who is the subject of protected health information.

- I. "Person" as defined in 45 CFR §160.103 means a natural person, trust or estate, partnership, corporation, professional association or corporation, or other entity, public or private.
- J. "Privacy Rule" means the HIPAA regulations codified at 45 CFR Parts 160 and 164, Subparts A and E.
- K. "Protected health information" ("PHI") has the meaning given such term in 45 CFR §160.103, which includes ePHI.
- L. "Required by law" has the meaning given such term in 45 CFR §164.103.
- M. "Secretary" means the Secretary of the U.S. Department of Health and Human Services ("HHS").
- N. "Security incident" as defined in 45 CFR §164.304 means the attempted or successful unauthorized access, use, disclosure, modification, or destruction of information or interference with system operations in an information system.
- O. "Security Rule" means the HIPAA Regulations codified at 45 CFR Parts 160 and 164, Subparts A and C.
- P. "Subcontractor" as defined in 45 CFR §160.103 means a person to whom a business associate delegates a function, activity, or service, other than in the capacity of a member of the workforce of such business associate.
- Q. "Unsecured protected health information" and "unsecured PHI" as defined in 45 CFR §164.402 means PHI not rendered unusable, unreadable, or indecipherable to unauthorized persons through use of a technology or methodology specified by the Secretary in the guidance issued under 42 USC §17932(h)(2).

2. Scope of Use and Disclosure by Contractor of County's PHI and/or ePHI.

- A. Except as otherwise provided in this Addendum, Contractor may use, disclose, or access PHI and/or ePHI as necessary to perform any and all obligations of Contractor under the Underlying Agreement or to perform functions, activities or services for, or on behalf of, County as specified in this Addendum, if such use or disclosure does not violate HIPAA, HITECH, the Privacy Rule and/or Security Rule.
- B. Unless otherwise limited herein, in addition to any other uses and/or disclosures permitted or authorized by this Addendum or required by law, in accordance with 45 CFR §164.504(e)(2), Contractor may:

- 1) Use PHI and/or ePHI if necessary for Contractor's proper management and administration and to carry out its legal responsibilities; and,
 - 2) Disclose PHI and/or ePHI for the purpose of Contractor's proper management and administration or to carry out its legal responsibilities, only if:
 - a) The disclosure is required by law; or,
 - b) Contractor obtains reasonable assurances, in writing, from the person to whom Contractor will disclose such PHI and/or ePHI that the person will:
 - i. Hold such PHI and/or ePHI in confidence and use or further disclose it only for the purpose for which Contractor disclosed it to the person, or as required by law; and,
 - ii. Notify Contractor of any instances of which it becomes aware in which the confidentiality of the information has been breached; and,
 - 3) Use PHI to provide data aggregation services relating to the health care operations of County pursuant to the Underlying Agreement or as requested by County; and,
 - 4) De-identify all PHI and/or ePHI of County received by Contractor under this Addendum provided that the de-identification conforms to the requirements of the Privacy Rule and/or Security Rule and does not preclude timely payment and/or claims processing and receipt.
- C. Notwithstanding the foregoing, in any instance where applicable state and/or federal laws and/or regulations are more stringent in their requirements than the provisions of HIPAA, including, but not limited to, prohibiting disclosure of mental health and/or substance abuse records, the applicable state and/or federal laws and/or regulations shall control the disclosure of records.

3. **Prohibited Uses and Disclosures.**

- A. Contractor may neither use, disclose, nor access PHI and/or ePHI in a manner not authorized by the Underlying Agreement or this Addendum without patient authorization or de-identification of the PHI and/or ePHI and as authorized in writing from County.
- B. Contractor may neither use, disclose, nor access PHI and/or ePHI it receives from County or from another business associate of County, except as permitted or required by this Addendum, or as required by law.

- C. Contractor agrees not to make any disclosure of PHI and/or ePHI that County would be prohibited from making.
- D. Contractor shall not use or disclose PHI for any purpose prohibited by the Privacy Rule, Security Rule, HIPAA and/or HITECH, including, but not limited to 42 USC §17935 and §17936. Contractor agrees:
 - 1) Not to use or disclose PHI for fundraising , unless pursuant to the Underlying Agreement and only if permitted by and in compliance with the requirements of 45 CFR §164.514(f) or 45 CFR §164.508;
 - 2) Not to use or disclose PHI for marketing, as defined in 45 CFR §164.501, unless pursuant to the Underlying Agreement and only if permitted by and in compliance with the requirements of 45 CFR §164.508(a)(3);
 - 3) Not to disclose PHI, except as otherwise required by law, to a health plan for purposes of carrying out payment or health care operations, if the individual has requested this restriction pursuant to 42 USC §17935(a) and 45 CFR §164.522, and has paid out of pocket in full for the health care item or service to which the PHI solely relates; and,
 - 4) Not to receive, directly or indirectly, remuneration in exchange for PHI, or engage in any act that would constitute a sale of PHI, as defined in 45 CFR §164.502(a)(5)(ii), unless permitted by the Underlying Agreement and in compliance with the requirements of a valid authorization under 45 CFR §164.508(a)(4). This prohibition shall not apply to payment by County to Contractor for services provided pursuant to the Underlying Agreement.

4. **Obligations of County.**

- A. County agrees to make its best efforts to notify Contractor promptly in writing of any restrictions on the use or disclosure of PHI and/or ePHI agreed to by County that may affect Contractor's ability to perform its obligations under the Underlying Agreement, or this Addendum.
- B. County agrees to make its best efforts to promptly notify Contractor in writing of any changes in, or revocation of, permission by any individual to use or disclose PHI and/or ePHI, if such changes or revocation may affect Contractor's ability to perform its obligations under the Underlying Agreement, or this Addendum.

- C. County agrees to make its best efforts to promptly notify Contractor in writing of any known limitation(s) in its notice of privacy practices to the extent that such limitation may affect Contractor's use or disclosure of PHI and/or ePHI.
 - D. County agrees not to request Contractor to use or disclose PHI and/or ePHI in any manner that would not be permissible under HITECH, HIPAA, the Privacy Rule, and/or Security Rule.
 - E. County agrees to obtain any authorizations necessary for the use or disclosure of PHI and/or ePHI, so that Contractor can perform its obligations under this Addendum and/or Underlying Agreement.
5. **Obligations of Contractor.** In connection with the use or disclosure of PHI and/or ePHI, Contractor agrees to:
- A. Use or disclose PHI only if such use or disclosure complies with each applicable requirement of 45 CFR §164.504(e). Contractor shall also comply with the additional privacy requirements that are applicable to covered entities in HITECH, as may be amended from time to time.
 - B. Not use or further disclose PHI and/or ePHI other than as permitted or required by this Addendum or as required by law. Contractor shall promptly notify County if Contractor is required by law to disclose PHI and/or ePHI.
 - C. Use appropriate safeguards and comply, where applicable, with the Security Rule with respect to ePHI, to prevent use or disclosure of PHI and/or ePHI other than as provided for by this Addendum.
 - D. Mitigate, to the extent practicable, any harmful effect that is known to Contractor of a use or disclosure of PHI and/or ePHI by Contractor in violation of this Addendum.
 - E. Report to County any use or disclosure of PHI and/or ePHI not provided for by this Addendum or otherwise in violation of HITECH, HIPAA, the Privacy Rule, and/or Security Rule of which Contractor becomes aware, including breaches of unsecured PHI as required by 45 CFR §164.410.
 - F. In accordance with 45 CFR §164.502(e)(1)(ii), require that any subcontractors that create, receive, maintain, transmit or access PHI on behalf of the Contractor agree through contract to the same restrictions and conditions that apply to Contractor with respect to such PHI and/or ePHI, including the restrictions and conditions pursuant to this Addendum.
 - G. Make available to County or the Secretary, in the time and manner designated by County or Secretary, Contractor's internal practices, books and records relating to the use, disclosure and

privacy protection of PHI received from County, or created or received by Contractor on behalf of County, for purposes of determining, investigating or auditing Contractor's and/or County's compliance with the Privacy Rule.

- H. Request, use or disclose only the minimum amount of PHI necessary to accomplish the intended purpose of the request, use or disclosure in accordance with 42 USC §17935(b) and 45 CFR §164.502(b)(1).
 - I. Comply with requirements of satisfactory assurances under 45 CFR §164.512 relating to notice or qualified protective order in response to a third party's subpoena, discovery request, or other lawful process for the disclosure of PHI, which Contractor shall promptly notify County upon Contractor's receipt of such request from a third party.
 - J. Not require an individual to provide patient authorization for use or disclosure of PHI as a condition for treatment, payment, enrollment in any health plan (including the health plan administered by County), or eligibility of benefits, unless otherwise excepted under 45 CFR §164.508(b)(4) and authorized in writing by County.
 - K. Use appropriate administrative, technical and physical safeguards to prevent inappropriate use, disclosure, or access of PHI and/or ePHI.
 - L. Obtain and maintain knowledge of applicable laws and regulations related to HIPAA and HITECH, as may be amended from time to time.
 - M. Comply with the requirements of the Privacy Rule that apply to the County to the extent Contractor is to carry out County's obligations under the Privacy Rule.
 - N. Take reasonable steps to cure or end any pattern of activity or practice of its subcontractor of which Contractor becomes aware that constitute a material breach or violation of the subcontractor's obligations under the business associate contract with Contractor, and if such steps are unsuccessful, Contractor agrees to terminate its contract with the subcontractor if feasible.
6. **Access to PHI, Amendment and Disclosure Accounting.** Contractor agrees to:
- A. **Access to PHI, including ePHI.** Provide access to PHI, including ePHI if maintained electronically, in a designated record set to County or an individual as directed by County, within five (5) days of request from County, to satisfy the requirements of 45 CFR §164.524.

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- B. **Amendment of PHI.** Make PHI available for amendment and incorporate amendments to PHI in a designated record set County directs or agrees to at the request of an individual, within fifteen (15) days of receiving a written request from County, in accordance with 45 CFR §164.526.
- C. **Accounting of disclosures of PHI and electronic health record.** Assist County to fulfill its obligations to provide accounting of disclosures of PHI under 45 CFR §164.528 and, where applicable, electronic health records under 42 USC §17935(c) if Contractor uses or maintains electronic health records. Contractor shall:
- 1) Document such disclosures of PHI and/or electronic health records, and information related to such disclosures, as would be required for County to respond to a request by an individual for an accounting of disclosures of PHI and/or electronic health record in accordance with 45 CFR §164.528.
 - 2) Within fifteen (15) days of receiving a written request from County, provide to County or any individual as directed by County information collected in accordance with this section to permit County to respond to a request by an individual for an accounting of disclosures of PHI and/or electronic health record.
 - 3) Make available for County information required by this Section 6.C for six (6) years preceding the individual's request for accounting of disclosures of PHI, and for three (3) years preceding the individual's request for accounting of disclosures of electronic health record.
7. **Security of ePHI.** In the event County discloses ePHI to Contractor or Contractor needs to create, receive, maintain, transmit or have access to County ePHI, in accordance with 42 USC §17931 and 45 CFR §164.314(a)(2)(i), and §164.306, Contractor shall:
1. Comply with the applicable requirements of the Security Rule, and implement administrative, physical, and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of ePHI that Contractor creates, receives, maintains, or transmits on behalf of County in accordance with 45 CFR §164.308, §164.310, and §164.312;
 2. Comply with each of the requirements of 45 CFR §164.316 relating to the implementation of policies, procedures and documentation requirements with respect to ePHI;
 3. Protect against any reasonably anticipated threats or hazards to the security or integrity of ePHI;

4. Protect against any reasonably anticipated uses or disclosures of ePHI that are not permitted or required under the Privacy Rule;
 5. Ensure compliance with the Security Rule by Contractor's workforce;
 6. In accordance with 45 CFR §164.308(b)(2), require that any subcontractors that create, receive, maintain, transmit, or access ePHI on behalf of Contractor agree through contract to the same restrictions and requirements contained in this Addendum and comply with the applicable requirements of the Security Rule;
 7. Report to County any security incident of which Contractor becomes aware, including breaches of unsecured PHI as required by 45 CFR §164.410; and,
 8. Comply with any additional security requirements that are applicable to covered entities in Title 42 (Public Health and Welfare) of the United States Code, as may be amended from time to time, including but not limited to HITECH.
 8. **Breach of Unsecured PHI.** In the case of breach of unsecured PHI, Contractor shall comply with the applicable provisions of 42 USC §17932 and 45 CFR Part 164, Subpart D, including but not limited to 45 CFR §164.410.
- A. **Discovery and notification.** Following the discovery of a breach of unsecured PHI, Contractor shall notify County in writing of such breach without unreasonable delay and in no case later than 60 calendar days after discovery of a breach, except as provided in 45 CFR §164.412.
- 1) **Breaches treated as discovered.** A breach is treated as discovered by Contractor as of the first day on which such breach is known to Contractor or, by exercising reasonable diligence, would have been known to Contractor, which includes any person, other than the person committing the breach, who is an employee, officer, or other agent of Contractor (determined in accordance with the federal common law of agency).
 - 2) **Content of notification.** The written notification to County relating to breach of unsecured PHI shall include, to the extent possible, the following information if known (or can be reasonably obtained) by Contractor:
 - a) The identification of each individual whose unsecured PHI has been, or is reasonably believed by Contractor to have been accessed, acquired, used or disclosed during the breach;

- b) A brief description of what happened, including the date of the breach and the date of the discovery of the breach, if known;
 - c) A description of the types of unsecured PHI involved in the breach, such as whether full name, social security number, date of birth, home address, account number, diagnosis, disability code, or other types of information were involved;
 - d) Any steps individuals should take to protect themselves from potential harm resulting from the breach;
 - e) A brief description of what Contractor is doing to investigate the breach, to mitigate harm to individuals, and to protect against any further breaches; and,
 - f) Contact procedures for individuals to ask questions or learn additional information, which shall include a toll-free telephone number, an e-mail address, web site, or postal address.
- B. **Cooperation.** With respect to any breach of unsecured PHI reported by Contractor, Contractor shall cooperate with County and shall provide County with any information requested by County to enable County to fulfill in a timely manner its own reporting and notification obligations, including but not limited to providing notice to individuals, prominent media outlets and the Secretary in accordance with 42 USC §17932 and 45 CFR §164.404, §164.406 and §164.408.
- C. **Breach log.** To the extent breach of unsecured PHI involves less than 500 individuals, Contractor shall maintain a log or other documentation of such breaches and provide such log or other documentation on an annual basis to County not later than fifteen (15) days after the end of each calendar year for submission to the Secretary.
- D. **Delay of notification authorized by law enforcement.** If Contractor delays notification of breach of unsecured PHI pursuant to a law enforcement official's statement that required notification, notice or posting would impede a criminal investigation or cause damage to national security, Contractor shall maintain documentation sufficient to demonstrate its compliance with the requirements of 45 CFR §164.412.
- E. **Payment of costs.** With respect to any breach of unsecured PHI caused solely by the Contractor's failure to comply with one or more of its obligations under this Addendum and/or the provisions of HITECH, HIPAA, the Privacy Rule or the Security Rule, Contractor agrees to pay any and all costs associated with providing all legally required notifications to individuals,

media outlets, and the Secretary. This provision shall not be construed to limit or diminish Contractor's obligations to indemnify, defend and hold harmless County under Section 9 of this Addendum.

F. **Documentation.** Pursuant to 45 CFR §164.414(b), in the event Contractor's use or disclosure of PHI and/or ePHI violates the Privacy Rule, Contractor shall maintain documentation sufficient to demonstrate that all notifications were made by Contractor as required by 45 CFR Part 164, Subpart D, or that such use or disclosure did not constitute a breach, including Contractor's completed risk assessment and investigation documentation.

G. **Additional State Reporting Requirements.** The parties agree that this Section 8.G applies only if and/or when County, in its capacity as a licensed clinic, health facility, home health agency, or hospice, is required to report unlawful or unauthorized access, use, or disclosure of medical information under the more stringent requirements of California Health & Safety Code §1280.15. For purposes of this Section 8.G, "unauthorized" has the meaning given such term in California Health & Safety Code §1280.15(j)(2).

1) Contractor agrees to assist County to fulfill its reporting obligations to affected patients and to the California Department of Public Health ("CDPH") in a timely manner under the California Health & Safety Code §1280.15.

2) Contractor agrees to report to County any unlawful or unauthorized access, use, or disclosure of patient's medical information without unreasonable delay and no later than two (2) business days after Contractor detects such incident. Contractor further agrees such report shall be made in writing, and shall include substantially the same types of information listed above in Section 8.A.2 (Content of Notification) as applicable to the unlawful or unauthorized access, use, or disclosure as defined above in this section, understanding and acknowledging that the term "breach" as used in Section 8.A.2 does not apply to California Health & Safety Code §1280.15.

9. **Hold Harmless/Indemnification.**

A. Contractor agrees to indemnify and hold harmless County, all Agencies, Districts, Special Districts and Departments of County, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents and representatives from any liability whatsoever, based or asserted upon any services of Contractor, its officers, employees, subcontractors, agents or representatives arising out of or in any way relating to this Addendum, including but not limited to

property damage, bodily injury, death, or any other element of any kind or nature whatsoever arising from the performance of Contractor, its officers, agents, employees, subcontractors, agents or representatives from this Addendum. Contractor shall defend, at its sole expense, all costs and fees, including but not limited to attorney fees, cost of investigation, defense and settlements or awards, of County, all Agencies, Districts, Special Districts and Departments of County, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents or representatives in any claim or action based upon such alleged acts or omissions.

- B. With respect to any action or claim subject to indemnification herein by Contractor, Contractor shall, at their sole cost, have the right to use counsel of their choice, subject to the approval of County, which shall not be unreasonably withheld, and shall have the right to adjust, settle, or compromise any such action or claim without the prior consent of County; provided, however, that any such adjustment, settlement or compromise in no manner whatsoever limits or circumscribes Contractor's indemnification to County as set forth herein. Contractor's obligation to defend, indemnify and hold harmless County shall be subject to County having given Contractor written notice within a reasonable period of time of the claim or of the commencement of the related action, as the case may be, and information and reasonable assistance, at Contractor's expense, for the defense or settlement thereof. Contractor's obligation hereunder shall be satisfied when Contractor has provided to County the appropriate form of dismissal relieving County from any liability for the action or claim involved.
- C. The specified insurance limits required in the Underlying Agreement of this Addendum shall in no way limit or circumscribe Contractor's obligations to indemnify and hold harmless County herein from third party claims arising from issues of this Addendum.
- D. In the event there is conflict between this clause and California Civil Code §2782, this clause shall be interpreted to comply with Civil Code §2782. Such interpretation shall not relieve the Contractor from indemnifying County to the fullest extent allowed by law.
- E. In the event there is a conflict between this indemnification clause and an indemnification clause contained in the Underlying Agreement of this Addendum, this indemnification shall only apply to the subject issues included within this Addendum.

10. **Term.** This Addendum shall commence upon the Effective Date and shall terminate when all PHI and/or ePHI provided by County to Contractor, or created or received by Contractor on behalf of County, is destroyed or returned to County, or, if it is infeasible to return or destroy PHI and/ePHI, protections are extended to such information, in accordance with section 11.B of this Addendum.
11. **Termination.**
- A. **Termination for Breach of Contract.** A breach of any provision of this Addendum by either party shall constitute a material breach of the Underlying Agreement and will provide grounds for terminating this Addendum and the Underlying Agreement with or without an opportunity to cure the breach, notwithstanding any provision in the Underlying Agreement to the contrary. Either party, upon written notice to the other party describing the breach, may take any of the following actions:
- 1) Terminate the Underlying Agreement and this Addendum, effective immediately, if the other party breaches a material provision of this Addendum.
 - 2) Provide the other party with an opportunity to cure the alleged material breach and in the event the other party fails to cure the breach to the satisfaction of the non-breaching party in a timely manner, the non-breaching party has the right to immediately terminate the Underlying Agreement and this Addendum.
 - 3) If termination of the Underlying Agreement is not feasible, the breaching party, upon the request of the non-breaching party, shall implement, at its own expense, a plan to cure the breach and report regularly on its compliance with such plan to the non-breaching party.
- B. **Effect of Termination.**
- 1) Upon termination of this Addendum, for any reason, Contractor shall return or, if agreed to in writing by County, destroy all PHI and/or ePHI received from County, or created or received by the Contractor on behalf of County, and, in the event of destruction, Contractor shall certify such destruction, in writing, to County. This provision shall apply to all PHI and/or ePHI which are in the possession of subcontractors or agents of Contractor. Contractor shall retain no copies of PHI and/or ePHI, except as provided below in paragraph (2) of this section.
 - 2) In the event that Contractor determines that returning or destroying the PHI and/or ePHI is not feasible, Contractor shall provide written notification to County of the conditions that make such return or destruction not feasible. Upon determination by Contractor that return or destruction of PHI and/or ePHI is not feasible, Contractor shall extend the protections of this Addendum to such PHI and/or ePHI and limit further uses and disclosures of such PHI and/or ePHI to those

purposes which make the return or destruction not feasible, for so long as Contractor maintains such PHI and/or ePHI.

12. **General Provisions.**

- A. **Retention Period.** Whenever Contractor is required to document or maintain documentation pursuant to the terms of this Addendum, Contractor shall retain such documentation for 6 years from the date of its creation or as otherwise prescribed by law, whichever is later.
- B. **Amendment.** The parties agree to take such action as is necessary to amend this Addendum from time to time as is necessary for County to comply with HITECH, the Privacy Rule, Security Rule, and HIPAA generally.
- C. **Survival.** The obligations of Contractor under Sections 3, 5, 6, 7, 8, 9, 11.B and 12.A of this Addendum shall survive the termination or expiration of this Addendum.
- D. **Regulatory and Statutory References.** A reference in this Addendum to a section in HITECH, HIPAA, the Privacy Rule and/or Security Rule means the section(s) as in effect or as amended.
- E. **Conflicts.** The provisions of this Addendum shall prevail over any provisions in the Underlying Agreement that conflict or appear inconsistent with any provision in this Addendum.
- F. **Interpretation of Addendum.**
 - 1) This Addendum shall be construed to be part of the Underlying Agreement as one document. The purpose is to supplement the Underlying Agreement to include the requirements of the Privacy Rule, Security Rule, HIPAA and HITECH.
 - 2) Any ambiguity between this Addendum and the Underlying Agreement shall be resolved to permit County to comply with the Privacy Rule, Security Rule, HIPAA and HITECH generally.
- G. **Notices to County.** All notifications required to be given by Contractor to County pursuant to the terms of this Addendum shall be made in writing and delivered to the County both by fax and to both of the addresses listed below by either registered or certified mail return receipt requested or guaranteed overnight mail with tracing capability, or at such other address as County may hereafter designate. All notices to County provided by Contractor pursuant to this Section shall be deemed given or made when received by County.

County HIPAA Privacy Officer: HIPAA Privacy Manager

County HIPAA Privacy Officer Address: P.O. Box 1569
Riverside, CA 92502

County HIPAA Privacy Officer Fax Number: (951) 955-HIPAA or (951) 955-4472

----- TO BE COMPLETED BY COUNTY PERSONNEL ONLY -----

County Departmental Officer: HIPAA Privacy Manager
County Departmental Officer Title: HIPAA Compliance Manager
County HIPAA Privacy Officer Address: P.O. Box 1569, Riverside, CA 92502
County HIPAA Privacy Officer Fax Number: (951) 955-HIPAA or (951) 955-4472