

JERRY E. POWERS Chief Probation Officer

# COUNTY OF LOS ANGELES PROBATION DEPARTMENT

9150 EAST IMPERIAL HIGHWAY -- DOWNEY, CALIFORNIA 90242 (562) 940-2501



July 31, 2012

The Honorable Board of Supervisors County of Los Angeles 383 Kenneth Hahn Hall of Administration 500 West Temple Street Los Angeles, California 90012

# ADOPTED

BOARD OF SUPERVISORS COUNTY OF LOS ANGELES

42 July 31, 2012

achi a. Hamae SACHLA, HAMAL EXECUTIVE OFFICER

Dear Supervisors:

#### APPROVAL OF AMENDMENT NUMBER THREE TO COUNTY AGREEMENT 77285 WITH CERNER CORPORATION FOR THE PROBATION ELECTRONIC MEDICAL RECORDS SYSTEM

## (ALL SUPERVISORIAL DISTRICTS) (3 VOTES)

# CIO RECOMMENDATION: APPROVE (X) APPROVE WITH MODIFICATION ( ) DISAPPROVE ( )

#### **SUBJECT**

This is a request for approval of Amendment Number Three to County Agreement 77285 with the Cerner Corporation to: (a) provide 500 additional limited access user licenses for the Probation Electronic Medical Records System, provide a second point of demarcation, obtain vendor-created training data, remove and add medical device interfaces, remove Web-Based Trainings, and amend certain provisions of the body of the Agreement; and (b) delegate additional authority to the Chief Probation Officer to execute future Amendments to the Agreement.

#### IT IS RECOMMENDED THAT YOUR BOARD:

1. Approve and instruct the Chairman of the Board to sign the attached Amendment Number Three (Attachment I) to the (Cerner) Agreement (as amended, Agreement) with Cerner Corporation to provide 500 additional limited access user licenses for the Probation Electronic Medical Records System (PEMRS), provide a second point of demarcation, obtain vendor-created training data, remove and add medical device interfaces, remove Web-Based Trainings, and provide additional delegated authority to the Chief Probation Officer to execute future amendments to the Agreement.

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2. Delegate authority to the Chief Probation Officer, or designee, to execute amendments to the Agreement to add additional software as an additional phase of PEMRS or to purchase additional licenses to PEMRS, in each case, using other professional services pool dollars available under the Agreement.

#### PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the first recommended action is to support the following modifications and/or enhancements to PEMRS:

• Provide 500 Additional Limited Access User Licenses – Probation Department's (Probation) operations staff's interaction with and use of PEMRS is greater than originally anticipated. The proposed Amendment will purchase limited access user licenses to be utilized to transfer existing, and add new, Probation users who do not need to employ medication administration functionality. Doing so will allow the 800 licenses currently deployed to be dedicated to full clinical, mental health and Probation medication administration use. These license designations are required for compliance with system use.

• Provide a Second Point of Demarcation for Hosting –There is currently one communications point of demarcation linking Cerner in Kansas City, MO (where PEMRS is hosted) to Probation Headquarters in Downey to allow County users to access PEMRS. If the Downey site is down, there is no alternative communications path. The proposed Amendment will add a second point of demarcation at the Internal Services Department facility in Los Angeles: allowing system availability in case of a data communications issue at Downey.

• Obtain Vendor-Created Training Data - As part of the PEMRS project implementation, it was determined that Cerner needed to provide additional services to support the creation of patient data in the training domain in preparation for PEMRS implementation. The provision of this data is also critical to ongoing training support for PEMRS. The proposed Amendment will engage Cerner to provide such additional services.

• Remove and Add Medical Device Interfaces – There are two medical device interfaces initially identified by project personnel that are no longer utilized by Juvenile Court Health Services (JCHS), and an additional medical device interface purchased to support JCHS needs to be added to the first phase of PEMRS. The proposed Amendment will move the two unneeded medical device interfaces to additional phases of PEMRS and will engage Cerner to provide the additional medical device interface.

• Remove Web Based Trainings (WBTs) – Prior to PEMRS implementation, standard WBTs were purchased to support JCHS Lab and Pharmacy users whose roles have limited variability. These WBTs have not been employed and their removal will realize monthly cost-savings for maintenance. The proposed Amendment will move the WBTs to additional phases of PEMRS.

• Additional Delegated Authority – The Agreement currently provides the Chief Probation Officer, or designee, with delegated authority to enter into change notices and amendments to the Agreement using other professional services pool dollars. The proposed Amendment will extend the delegated authority to allow the Chief Probation Officer, or designee, to use other professional services pool dollars to add additional software as an additional phase of PEMRS or to purchase additional licenses to PEMRS.

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#### **Implementation of Strategic Plan Goals**

The proposed Amendment supports the County's Strategic Plan Goal No. 1 (Operational Effectiveness), Goal No. 2 (Children, Family, and Adult Well-Being), and Goal No. 4 (Health and Mental Health). PEMRS improves efficiency and productivity by consolidating information sources and making information uniformly available to authorized personnel, thereby reducing risk of error in a cost-effective manner. Continued support of PEMRS will enable the Probation, Health, and Mental Health Departments to continue to provide improved levels of health and mental health care, thereby improving the well-being of the minors and their families, as well as enhance the technological support for collaboration of health, mental health, and corrections professionals involved in the care of detained minors.

#### FISCAL IMPACT/FINANCING

Funding for the following identified provisions of the proposed Amendment No. 3 was allocated in the Agreement when originally approved by your Board on June 1, 2010; there is no additional cost to the County of Los Angeles. Specifically, the funding is provided in the other professional services pool dollars allocated to the Agreement, which has a total of \$527,594 currently available for use. The reallocation of other professional services pool dollars for all work under the proposed Amendment No. 3 is as follows:

• Provide 500 Additional Limited Access User Licenses – The total cost is \$194,956 and includes maintenance over the remaining term of the Agreement.

- Provide a Second Point of Demarcation The total cost is \$750.
- Obtain Vendor-Created Training Data The total cost is \$13,350.

• Remove and Add Medical Device Interfaces – The total cost savings for the removal of two medical device interfaces is \$40,242 and includes maintenance savings over the remaining term of the Agreement. The total cost for the addition of a medical device interface is \$6,693 and includes maintenance over the remaining term of the Agreement.

• Remove Web-Based Trainings (WBTs) – The total cost savings is \$105,807 and includes maintenance savings over the remaining term of the Agreement.

After the reallocation, the remaining other professional services pool dollars will be \$457,894.

#### FACTS AND PROVISIONS/LEGAL REQUIREMENTS

County Counsel has reviewed the proposed Amendment and approved it as to form. In addition, in accordance with your Board's policy, outside counsel (Hanson Bridgett LLP) assisted in the review and negotiation of the proposed Amendment.

The County's Chief Information Officer has reviewed the proposed Amendment and recommends approval as indicated on the attached CIO Analysis (Attachment II).

#### **CONTRACTING PROCESS**

Cerner was initially selected by the County to provide a Jail Hospital Information System (JHIS) for the Sheriff's Department based on a competitive procurement process. The resulting Agreement 71710 was approved by your Board on August 11, 1998, and was subsequently amended in 2003, 2006, 2008, 2010, 2011, and 2012.

Cerner was selected by the County to provide PEMRS, and the resulting County Agreement 77285 was approved by your Board on June 1, 2010. The Agreement 77285 has been amended two times using delegated authority granted to the Chief Probation Officer, or designee, prior to the date of this Board Letter: (1) Amendment Number One effective as of January 27, 2011; and (2) Amendment Number Two effective as of October 24, 2011. The proposed Amendment is pursuant to County Agreement 77285.

#### **IMPACT ON CURRENT SERVICES (OR PROJECTS)**

The proposed Amendment will support the ongoing restructure to the delivery of health, mental health, and correctional services to permit more effective transfer of information to the providers where and when it is needed. It will enable Probation to continue implementation of the long-range objective of improved case management by increasing the number of users, and facilitating required modifications and enhancements. Probation believes the proposed Amendment No. 3 will also improve productivity and reduce costs.

Respectfully submitted,

JERRY E. POWERS Chief Probation Officer

Reviewed By: sanchog

RICHARD SANCHEZ Chief Information Officer

JEP:TH:DS:ar

Enclosures

c: Executive Office/Clerk of the Board County Counsel Chief Executive Office This Amendment Number Three (Amendment No. 3) effective as of <u>July</u> <u>31</u>, 20<u>12</u> (Amendment No. 3 Effective Date), is entered into by and between the County of Los Angeles (COUNTY) and Cerner Corporation (CONTRACTOR) based on the following:

WHEREAS COUNTY and CONTRACTOR have entered into that certain Agreement Number 77285, dated June 1, 2010 (together with all Exhibits and Attachments thereto, hereinafter, as amended prior to the date hereof, the "Agreement"), for the Probation Electronic Medical Records System (as further defined in the Agreement, "PEMRS"), for the benefit of the COUNTY and its Probation, Health Services and Mental Health Departments;

WHEREAS COUNTY and CONTRACTOR have been developing, installing and implementing PEMRS along with necessary Tailoring pursuant to the terms and conditions of the Agreement;

WHEREAS COUNTY and CONTRACTOR desire to amend the Agreement (a) to add additional licenses to PEMRS that provide for limited access to PEMRS, and (b) to make certain other changes as described in this Amendment No. 3; and

WHEREAS this Amendment No. 3 is entered into in accordance with the applicable provisions of Paragraph 6 of the Agreement.

NOW THEREFORE, in consideration of the forgoing recitals and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, COUNTY and CONTRACTOR agree to the following:

- <u>Definitions; Paragraph References</u>: Capitalized terms used herein without definition (including, without limitation, in the recitals hereto), have the meanings given to such terms in the Agreement, as amended by this Amendment No. 3. Unless otherwise noted, Paragraph references in this Amendment No. 3 shall refer to the body of the Agreement.
- 2. Amendments to Body of the Agreement: As of the Amendment No. 3 Effective Date, the body of the Agreement is amended as follows:
  - Paragraph 1.3 (Definitions) is amended to add a definition of "Full Access User" in the proper alphabetical as follows, with all subsequent subparagraphs of Paragraph 1.3 renumbered accordingly:

"Full Access User

As used herein, the term "Full Access User" shall mean any person or entity authorized by the Probation Department to full access or use of the System and every System Component."

b. Paragraph 1.3 (Definitions) is amended to add a definition of "Limited Access User" in the proper alphabetical as follows, with all subsequent subparagraphs of Paragraph 1.3 renumbered accordingly:

#### "Limited Access User

As used herein, the term "Limited Access User" shall mean any person or entity authorized by the Probation Department to access or use the System or a System Component in a limited capacity for clerical and administrative tasks only. Specifically, the roles defined in the system for the Limited Access User shall be as follows:

(a) PROBMC;

- (b) PROBCLER;
- (c) PROBSPVSR; and
- (d) PROBSPRNT."
- c. Paragraph 1.3 (Definitions) is amended to amend and restate the definition of "User" in its entirety as follows:

"<u>User</u>

As used herein, the term "User" shall mean each Full Access User and each Limited Access User, as applicable to each System Component."

d. Paragraph 6 (Change Notices and Amendments) is amended to amend and restate Subparagraph 6.3 in its entirety as follows:

- 6.3 Except as expressly provided in the remainder of this Subparagraph 6.3 and/or in Subparagraphs 6.2, 6.4, and/or 6.5, for any change which affects the scope of work, term of this Agreement, payments, or any term or condition included in this Agreement, a negotiated Amendment to this Agreement shall be prepared and executed by COUNTY's Board of Supervisors and an authorized officer of CONTRACTOR. Notwithstanding the foregoing, the Chief Probation Officer may execute Amendments on behalf of COUNTY under this Subparagraph 6.3 which do any of the following:
  - A. Implement extensions of the term of this Agreement provided for under Paragraph 5 (Term) and/or cost of living adjustments under Paragraph 70 (Cost of Living Adjustment); provided that COUNTY Counsel approves any such Amendment as to form;
  - B. Subject to the other provisions of this Paragraph 6, update the attachments to Exhibit A (Statement of Work) during implementation as is necessary to accurately reflect the as-built System; provided that (i) any such Amendment shall not affect any other provision of this Agreement and (ii) COUNTY Counsel approves any such Amendment as to form;
  - C. Exercise the option to have CONTRACTOR provide an Optional Phase System and make necessary amendments to this Agreement in connection therewith; provided that (i) any such Amendment uses then-available OPS Pool Dollars, (ii) pricing of all software included in any such Amendment is at or below the applicable pricing set forth on Attachment B (Schedule of PEMRS Software) to Exhibit A (Statement of Work), if any, (iii) pricing of all services included in any such Amendment is at or below the applicable pricing set forth on Attachment F (Other

Professional Services Fee Schedule) to Exhibit A (Statement of Work), if any, and (iv) COUNTY Counsel approves any such Amendment as to form and COUNTY's Chief Information Officer provides prior approval of any such Amendment;

- D. Move one or more Optional Phase Systems to the Phase 1 System as contemplated by Subparagraph 9.1.A; provided that (i) any such Amendment uses then-available OPS Pool Dollars, (ii) pricing of all software included in any such Amendment is at or below the applicable pricing set forth on Attachment B (Schedule of PEMRS Software) to Exhibit A (Statement of Work), if any, (iii) pricing of all services included in any such Amendment is at or below the applicable pricing set forth on Attachment F (Other Professional Services Fee Schedule) to Exhibit A (Statement of Work), if any, and (iv) COUNTY Counsel approves any such Amendment as to form and COUNTY's Chief Information Officer provides prior approval of any such Amendment;
- E. Move (i) one or more Application Software modules or Interfaces then-included in the Phase 1 System to an Optional Phase System and (ii) all amounts then-allocated on Exhibit B (Schedule of Payments) to such Application Software modules or Interfaces to OPS Pool Dollars; provided that COUNTY Counsel approves any such Amendment as to form and COUNTY's Chief Information Officer provides prior approval of any such Amendment;
- F. Add additional software as an Optional Phase System and make necessary amendments to this Agreement in connection therewith; provided that (i) any such Amendment uses then-available OPS Pool Dollars, (ii) pricing of all services included in any such Amendment is at or below the applicable

pricing set forth on Attachment F (Other Professional Services Fee Schedule) to Exhibit A (Statement of Work), if any, and (iii) COUNTY Counsel approves any such Amendment as to form and COUNTY's Chief Information Officer provides prior approval of any such Amendment;

- G. Purchase additional licenses to any System Software; provided that (i) any such Amendment uses then-available OPS Pool Dollars, (ii) pricing of all services included in any such Amendment is at or below the applicable pricing set forth on Attachment F (Other Professional Services Fee Schedule) to Exhibit A (Statement of Work), if any, and (iii) COUNTY Counsel approves any such Amendment as to form and COUNTY's Chief Information Officer provides prior approval of any such Amendment;
- H. Engage CONTRACTOR to provide work under Subparagraph 7.5 (Other Professional Services) which requires any amendment of any term or condition of this Agreement; provided that (i) any such Amendment uses then-available OPS Pool Dollars, (ii) pricing of all services at or below the applicable pricing set forth on Attachment F (Other Professional Services Fee Schedule) to Exhibit A (Statement of Work), if any, and (iii) COUNTY Counsel approves any such Amendment as to form and COUNTY's Chief Information Officer provides prior approval of any such Amendment; and/or
- Approve of an assignment or delegation under Paragraph 12 (Assignment and Delegation); provided that prior written approval of any such Amendment by COUNTY Counsel has been obtained.

- 3. <u>Amendments to the Exhibits and Attachments</u>: As of the Amendment No. 3 Effective Date:
  - a. Exhibit A (Statement of Work) to the Agreement is amended and restated in its entirety with Exhibit A (Statement of Work) attached to this Amendment No. 3 and incorporated by reference;
  - b. The body of Attachment B (Schedule of PEMRS Software) to Exhibit A (Statement of Work) of the Agreement is amended and restated in its entirety with Attachment B (Schedule of PEMRS Software) attached to this Amendment No. 3 and incorporated by reference. The Third Party Software pass-through provisions originally attached to Attachment B (Schedule of PEMRS Software) remain unchanged;
  - c. The body of Attachment C (Related Contractor Software Product Descriptions) to Exhibit A (Statement of Work) to the Agreement is amended and restated in its entirety with Attachment C (Related Contractor Software Product Descriptions) attached to this Amendment No. 3 and incorporated by reference;
  - d. Attachment D (PEMRS Interfaces) to Exhibit A (Statement of Work) to the Agreement is amended and restated in its entirety with Attachment D (PEMRS Interfaces) attached to this Amendment No. 3 and incorporated by reference;
  - e. Exhibit B (Schedule of Payments) to the Agreement is amended and restated in its entirety with Exhibit B (Schedule of Payments) attached to this Amendment No. 3 and incorporated by reference;
  - f. Exhibit D (Service Level Agreement), together with all Schedules thereto, to the Agreement is amended and restated in its entirety with Exhibit D (Service Level Agreement), together with all Schedules thereto, attached to this Amendment No. 3 and incorporated by reference;
  - g. Exhibit K (County's Administration) to the Agreement is amended and restated in its entirety with Exhibit K (County's Administration) attached to this Amendment No. 3 and incorporated by reference; and

- h. Exhibit L (Contractor's Administration) to the Agreement is amended and restated in its entirety with Exhibit L (Contractor's Administration) attached to this Amendment No. 3 and incorporated by reference.
- 4. <u>System Design Reports</u>: The System Design Report for Additional Professional Services dated April 10, 2012, is attached to this Amendment No. 3 and incorporated by reference. CONTRACTOR agrees to fully perform and provide all work described in the aforementioned System Design Report in exchange for COUNTY's payment in accordance with the Agreement of the applicable payments set forth on Exhibit B (Schedule of Payments), as amended by this Amendment No. 3.
- 5. <u>Authorization Warranty</u>: COUNTY and CONTRACTOR hereby represent and warrant that the person executing this Amendment No. 3 on behalf of such party is an authorized agent of such party having actual authority to bind such party to each and every term, condition, and obligation of this Amendment No. 3 and that all requirements of such party have been fulfilled to provide such person actual authority.
- 6. <u>No Other Amendments</u>: Except as expressly set forth in this Amendment No. 3, all other terms and conditions of the Agreement shall remain the same and in full force and effect.
- 7. <u>Governing Law</u>: This Amendment No. 3 shall be governed by and construed in accordance with the laws of the State of California applicable to agreements made and to be performed within that State.

\* \* \*

#### Los Angeles County Probation – PEMRS

Amendment No. 3 Page 8

IN WITNESS WHEREOF, the Board of Supervisors has caused this Amendment No. 3 to be subscribed by its Chairman and seal of said Board to be hereto affixed and attested to by its Executive Officer, and CONTRACTOR has caused this Amendment to be executed on its behalf by its duly authorized officer, effective as of the day and year first above written.

COUNTY OF LOS ANGELES

By: Chairman, Board of Supervisors

CONTRACTOR

CERNER CORPORATION

By: Name:

Title:

APPROVAL AS TO FORM:

John F. Krattli, County Counsel

ATTEST:

Sachi Hamai.

Executive Officer/Clerk Board of Supervisors

Deputy

By:

Amanda M.L. Drukker Senior Deputy County Counsel

HOA.880993.4

I hereby certify that pursuant to Section 25103 of the Government Codo delivery of this document has been made. N

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SACHIA. HAMAI Executive Officer Clerk of the Board of Supervisors

herman Deputy

BOARD OF SUPERVISORS COUNTY OF LOS ANGELES

42

JUL 3 1 2012: .

EXECUTIVE OFFICER

#### EXHIBIT A

#### STATEMENT OF WORK

## PROBATION ELECTRONIC MEDICAL RECORDS SYSTEM (PEMRS)

RESTATED UNDER AMENDMENT NO.3 July 2012

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#### **ATTACHMENTS to Exhibit A (Statement of Work)**

- ATTACHMENT A PEMRS FUNCTIONAL, TECHNICAL AND OPERATIONAL REQUIREMENTS
- ATTACHMENT B SCHEDULE OF PEMRS SOFTWARE
- ATTACHMENT C RELATED CONTRACTOR SOFTWARE PRODUCT DESCRIPTION
- ATTACHMENT D PEMRS INTERFACES
- ATTACHMENT E PEMRS TRAINING
- ATTACHMENT F OTHER PROFESSIONAL SERVICES FEE SCHEDULE
- ATTACHMENT G [RESERVED]
- ATTACHMENT H COUNTY FACILITIES
- ATTACHMENT I SPECIFIED JHIS APPLICATION SOFTWARE

#### INTRODUCTION: SCOPE OF WORK

This Exhibit A (together with all Attachments hereto, "Statement of Work") is attached to, and defines the scope of work to be performed under, that certain Agreement dated June 1, 2010 (together with all Exhibits and Attachments, the "Agreement"), by and between County of Los Angeles (COUNTY) and Cerner Corporation (CONTRACTOR) for a Probation Electronic Medical Record System (as further defined in the body of the Agreement, "PEMRS" or "System") for COUNTY's Probation Department (Probation) and health care providers serving minors residing in its halls and camps.

Capitalized terms used in this Statement of Work without definition have the meanings given to such terms in the body of the Agreement.

As used herein, the following capitalized terms shall have the following meanings:

"Application Server" shall mean the hardware on which PEMRS Application Software modules are running.

"Concurrent Logon" shall mean a User session accessing the System by any means of access. "Peak Concurrent Logons" shall mean the highest number of Concurrent Logons measured on any day throughout each month.

"Database Server" shall mean the hardware on which the PEMRS database resides and the Oracle software is running.

"Domain" shall mean a specific computing environment for PEMRS, including, without limitation, hardware such as the Application Servers, Database Servers and other servers, storage devices, and networks, software operating on said hardware, and a function or purpose for which they are used. "Domain" refers to the Production Domain and all Non-Production Domains.

"Production Domain" shall mean the Domain containing actual patient, provider, and services data and used for the purpose of providing patient care.

"Non-Production Domains" shall consist of the Build Domain, the Certification Domain, the Temporary or Mock Domain, and the Training Domain.

"Build Domain" shall mean the Domain containing a reference-data-only copy of the Production Domain used primarily for implementing, certifying and testing significant changes prior to applying the changes to the Production Domain. The Build Domain is created at the beginning of a major implementation project such as creation of the System or adding a new Application Software module, and is deleted upon COUNTY acceptance of the implementation project.

"Certification Domain" shall mean the Domain containing a reference-data-only copy of the Production Domain used primarily for certifying and testing changes prior to applying changes to the Production Domain. The Certification Domain shall be refreshed from a copy of the Production Domain after an Upgrade. The Certification Domain is used for User training when a separate Training Domain is not available.

"Temporary Domain" and "Mock Domain" shall mean the Domain containing a full copy (reference and activity data) of the Production Domain used for testing Upgrades before applying such Upgrades to the Production Domain. The Temporary

Domain is sized to accommodate the number of Testing Users and will be deleted upon COUNTY acceptance of the Upgrade.

"Training Domain" shall mean the Domain containing a reference-data-only copy of the appropriate source Domain (e.g., Build Domain) for purposes of training Users in support of a new implementation or Upgrade.

"Prototype" and "Prototyping" shall mean the process of developing a sample build of the Phase 1 System Application Software modules or the Optional Phase Application Software modules to validate the approved Conceptual Design Document (Deliverable 3.3).

"Tailor", "Tailoring" or "Tailored" shall mean the tailoring of the Baseline Software necessary for the System to operate in accordance with the Specifications and the Agreement. "Tailoring" shall include, without limitation, using Bedrock, Cerner Command Language (CCL), and/or other tools and techniques provided by CONTRACTOR to tailor the Baseline Software. It is understood and agreed that Tailoring other than as described in this Statement of Work with respect to the Phase 1 System requires a Change Notice or an Amendment under Paragraph 6 (Change Notices and Amendments) of the body of the Agreement.

The scope of work incorporates all of the Tasks, Deliverables, and services necessary for the COUNTY to receive the benefits of the Probation Electronic Medical Records System in accordance with the Specifications and the provisions of the Agreement. CONTRACTOR shall provide the Cerner Millennium Software Applications listed below, together with associated content and training (referred to in the Agreement as "Application Software"), and shall setup the Remote Hosting, Upgrades Implementation , and Application Management Services. CONTRACTOR shall setup, configure, install, Tailor, and prepare for use all components of each Domain. CONTRACTOR shall design, configure, integrate, install, Tailor and test Application Software modules in the Phase 1 System and each Optional Phase System as indicated below.

- A) Phase 1 System Application Software Modules
  - 1. PowerChart (Clinical Data Repository, PowerOrders, PowerNote)
  - 2. CareNet (Electronic Medication Administration Record (eMAR), Clinical Documentation, PowerPlan, and PowerForms)
  - 3. CapStone (Registration Management, Scheduling Management)
  - 4. PathNet (General Laboratory, Microbiology)
  - 5. PharmNet (Inpatient Pharmacy and Departmental Clinical Supply Chain for Pharmacy)
  - 6. RadNet (Radiology Management)
  - 7. ProFile (Health Information Management (HIM))
  - 8. Open Engine (MDIs Licensed Software and Open Port Licensed Software)
  - 9. Cerner ProVision Document Imaging (CPDI)
  - 10. Computerized Physician Order Entry (CPOE)
  - 11. Discern Expert
  - 12. Discern Explorer
  - 13. CareAware Multi-Media Foundation Digital Objects
  - 14. Krames Patient Education Content

- 15. Knowledge Content Solution for Ambulatory (including Cerner Knowledge Tool (Cerner KM) and Multum/Medisource)
- 16. CMT/CPT (Codes & Medical Terminologies)
- 17. Web Based Training
- 18. All Interfaces as defined in Attachment D (PEMRS Interfaces) to this Statement of Work as Phase 1 System Interfaces
- B) Optional Phase Systems Application Software Modules
  - 1. Telemedicine
  - 2. 724Access Solution
  - 3. Enterprise Master Person Index (EMPI)
  - 4. PowerInsight
  - 5. PharmNet (Outpatient Pharmacy)
  - 6. CareAdmin
  - 7. Radiology Dictation
  - 8. eSignature (Patient Electronic Signature)
  - 9. Cerner Picture Archiving and Communication System (PACS)
  - 10. Financials
  - 11. Millennium LDAP Authentication with Pass-through
  - 12. Each Interface as defined in Attachment D (PEMRS Interfaces) to this Statement of Work as an Optional Phase System Interface.

Phase 1 System Application Software modules shall be implemented under TASK 6 of this Statement of Work. As elected by COUNTY in accordance with the Agreement, each Optional Phase System shall be implemented under TASK 7 of this Statement of Work except that, if elected by COUNTY in accordance with the Agreement, the 724Access Optional Phase System shall be implemented under TASK 8 of this SOW.

As soon as possible following the Effective Date, CONTRACTOR shall configure and setup the initial infrastructure required for work to begin on PEMRS. These tasks include but are not limited to the following: ordering equipment, receiving equipment, setting up equipment, installing certain software, and testing and validating the installed components. CONTRACTOR shall deliver and install all tools and software to be used by COUNTY during PEMRS design, configuration, development, build, test, implementation, and use, including but not limited to Bedrock, MethodM, and access to the Lights-on network, Open House, Windows Terminal Server Toolkit, and reference and model databases.

CONTRACTOR shall confirm Exhibit G (PEMRS Assessment) and its attachments as specified in Subtask 1.2 of this Statement of Work. CONTRACTOR shall provide a Conceptual Design Document as specified in Subtask 3.3 of this Statement of Work. CONTRACTOR shall provide all the Baseline Software and related services to accomplish all of the requirements set forth in this Statement of Work. CONTRACTOR shall perform all Tasks and Subtasks, and provide all Deliverables as described herein.

Also defined herein are those Tasks and Subtasks that involve participation of both CONTRACTOR and COUNTY. COUNTY will provide logistical support and infrastructure for CONTRACTOR and COUNTY work and events required by this Statement of

Work when scheduled to take place in Los Angeles County. COUNTY also will provide a team of twenty (20) participants to support the Tailoring and software build processes scheduled to take place in Los Angeles County or at CONTRACTOR's premises in Kansas City, MO. Unless otherwise specified as an obligation of COUNTY, CONTRACTOR shall perform all Tasks and Subtasks and provide all Deliverables as defined herein. COUNTY expects CONTRACTOR to perform each and every Task and Subtask in this Statement of Work, and deliver each and every Deliverable. The order of the Deliverables and the relevant responsibilities of CONTRACTOR and COUNTY in performing the work, as well as the integration of these contractual Tasks and Deliverables with CONTRACTOR's MethodM, shall be fully specified in Deliverable 1.3 (Project Control Document).

CONTRACTOR shall deliver all Documentation and other Deliverables to COUNTY in accordance with Subparagraph 4.6 (Delivery of Work) of the body of the Agreement. CONTRACTOR shall use the following software for delivery of all Documentation Deliverables:

- 1. MethodM for project management and control.
- 2. MethodM Online for web based collaboration and reporting.
- 3. Microsoft Office for word processing, spreadsheets and other documents.
- 4. Microsoft Visio for diagrams and schemas.
- 5. Microsoft Project for Project Management, Work Plans and Schedule Reporting.
- 6. Windows media player for delivery of video content.
- 7. Adobe Acrobat for System Documentation that CONTRACTOR considers unalterable by COUNTY.

CONTRACTOR's Project Manager and COUNTY's Project Manager will collaborate to choose from available versions of such software from time to time, including conversions if necessary to provide for compatible distributions within COUNTY's and/or CONTRACTOR's organizations.

CONTRACTOR shall develop and maintain a secure MethodM Online site on Cerner.com as the repository of Documentation and related Deliverables. The MethodM Online site shall provide a section for final and accepted documents that may not be altered or removed. The MethodM Online site shall also provide sections that are accessible to authorized COUNTY and CONTRACTOR staff for the purpose of collaborating on Deliverable correction and revision, and of exchanging relevant information. The PEMRS MethodM Online site shall be distinct and separated from sites maintained by the CONTRACTOR for other clients, including but not limited to other COUNTY departments.

CONTRACTOR shall provide Documentation Deliverables to COUNTY via posting on the project MethodM Online site and noticed to the COUNTY's Project Director and COUNTY's Project Manager by email. CONTRACTOR shall provide training materials electronically using a standard method such as Webinar or Web or electronic delivery.

CONTRACTOR shall conduct weekly status reporting and project management meetings with COUNTY's project staff in accordance with schedules and agendas established collaboratively by COUNTY's Project Manager and CONTRACTOR's Project Manager. These meetings shall be conducted in a communications format agreed upon by COUNTY's and CONTRACTOR's Project Managers and shall be documented in a manner suitable for inclusion by reference in the Deliverable 2.2 (Project Status Reports).

#### TASK 1: PROJECT PLANNING

CONTRACTOR shall prepare, organize, and present the Project Preparation Session in accordance with the MethodM process. CONTRACTOR shall confirm and modify as necessary the contents of Exhibit G (PEMRS Assessment) and its attachments. CONTRACTOR shall develop a Project Control Document (hereafter "PCD") that shall include, without limitation, a detailed work plan, work breakdown structure, milestone chart, Gantt chart, communication plan, the CONTRACTOR's project organization and staffing. CONTRACTOR shall develop and maintain a critical path analysis for the project. COUNTY will provide logistical support and infrastructure for work and events required by this TASK 1 when conducted in Los Angeles County.

#### Subtask 1.1: Conduct MethodM Project Preparation Session

CONTRACTOR shall conduct a project briefing for COUNTY department executives who represent the leadership of the PEMRS stakeholders. CONTRACTOR shall assess COUNTY's project team computer skills and project readiness. CONTRACTOR shall introduce CONTRACTOR's project team, and demonstrate the tools to be used during the execution of work defined in this Statement of Work. CONTRACTOR shall provide opportunities to COUNTY for hands-on experience with the tools to be used. CONTRACTOR shall introduce MethodM and outline the events within the methodology. CONTRACTOR shall Tailor and deliver data collection materials including the Preliminary Design Assessment (PDA) for COUNTY use and train COUNTY's staff in reguirements development using the materials. As required according to the assessment of COUNTY's project staff readiness conducted during this Subtask, CONTRACTOR shall conduct PC Basics, Project Management Workshop, Project Team Workshop and Solution/Tools Introduction and other training (as specified in Attachment E (PEMRS Training) to this Statement of Work). COUNTY's project team will participate in this session as provided for in MethodM, including validation and development of COUNTY's project governance and COUNTY goals and expectations for the project. CONTRACTOR shall provide for and COUNTY will participate in the completion of Tailored PDAs as required by MethodM.

#### Deliverable 1.1 Project Preparation Session

CONTRACTOR shall conduct the executive project briefing and the project preparation session described in Subtask 1.1. CONTRACTOR shall assemble completed and Tailored PDAs and identify any outstanding PDA items to be resolved or addressed under Subtask 2.1.

#### Subtask 1.2: Confirm and Update PEMRS Assessment

CONTRACTOR shall confirm the PEMRS assessment initially conducted under Change Order # 128 to the JHIS Agreement, incorporated by reference into the Agreement as Exhibit G (PEMRS Assessment) and its attachments as of the Effective Date. This Subtask shall document any and all updates of this PEMRS assessment findings and conclusions based on new information or factual errors discovered since COUNTY approval of the applicable Deliverables under Change Request #128, and revisions of CONTRACTOR's recommendations for Specified Hardware and Operating Software, including but not limited to the recommended PEMRS Domain strategy, the diversity study necessary for Wide Area Network (WAN) design, and the technical and System Software architecture to the extent necessary to enable CONTRACTOR to provide the Remote Hosting Services in accordance with the Specifications and the Agreement. As part of this Subtask, CONTRACTOR shall also confirm impact points identified in this PEMRS assessment that address System capabilities to be provided by COUNTY that may affect the timely and successful implementation of PEMRS, including without limitation any issues associated with COUNTY's hardware and software to be used to connect with and use PEMRS (i.e., the Specified Hardware and Specified Operating Software), such as without limitation desktop devices (e.g., workstations, laptops, etc.), LAN/WAN, available bandwidth, and the help desk, whether supplied by COUNTY, CONTRACTOR or a third party. CONTRACTOR shall document any similar impact points that were not identified in the PEMRS assessment Documentation previously delivered to COUNTY by CONTRACTOR. CONTRACTOR shall specify recommended corrective action to be taken by COUNTY (which recommendations shall be subject to the provisions of Subparagraph 10.1.D of the body of the Agreement).

#### Deliverable 1.2: Confirmed and Updated PEMRS Assessment

The PEMRS assessment as confirmed and updated during this Subtask 1.2 shall document the readiness of the COUNTY to participate in the design and implementation of PEMRS and to provide COUNTY-side technology and staffing required to use CONTRACTOR's Remote Hosting Services. As part of this Deliverable, CONTRACTOR shall identify impact points and technology issues uncovered as part of the assessment and recommend corrective action to COUNTY. This Deliverable shall consist of a complete and confirmed list of Specified Hardware and Specified Operating Software recommended by CONTRACTOR as necessary for PEMRS to be implemented and to operate in accordance with the Specifications and otherwise with the Agreement under the Remote Hosting Services. Upon approval by COUNTY in accordance with Subparagraph 2.4 of the body of the Agreement, this Deliverable shall automatically supplement Exhibit G (PEMRS Assessment) and its attachments as an additional attachment thereto.

#### Subtask 1.3: Prepare Project Control Document (PCD)

CONTRACTOR shall review, document, clarify and refine all project goals and the assignment of goals to project resources. CONTRACTOR shall present such goals to the Inter-Agency PEMRS Project Leadership Team (hereafter "PLT") formed by the COUNTY pursuant to the Memorandum of Understanding described in the Recitals. This process shall ensure that all involved parties have clearly understood and agreed upon all project goals and COUNTY responsibilities for governance and participation in

the project effort. In collaboration with the PLT, CONTRACTOR shall develop a PCD that addresses, without limitation, the following:

- 1. The shared vision for CONTRACTOR / COUNTY relationship and the strategic goals of the implementation effort.
- 2. The project scope, phasing, and objectives.
- 3. The expected roles and responsibilities of CONTRACTOR and COUNTY project organizations and a communication strategy for sharing the context and vision of the project to the project team members at large.
- 4. The composition of the project team and how the project team shall communicate with and collaborate with components of project governance consisting of the PLT and various workgroups.
- 5. The composition of expected COUNTY's support resources and their interaction with CONTRACTOR's support resources.
- 6. The schedule of events to be held both at COUNTY Facilities and at CONTRACTOR's facilities in Kansas City, MO, for the purposes of joint design, Tailoring, development, and build of PEMRS, all Prototypes, and expectations for COUNTY participation in those events.
- 7. The project organization and the roles and responsibilities of the project team members.
- 8. The Application Software module build strategy.
- 9. The technology strategy, including Domains and hosting strategy.
- 10. The project communication plan.
- 11. The training strategy for COUNTY's staff, trainers and Users, based on COUNTY's requirements and CONTRACTOR's project and training approach.
- 12. The security strategy and requirements, including physical, administrative and technical elements and the divisions of security roles and responsibilities between CONTRACTOR and COUNTY.
- 13. The detailed project plan including, without limitation, start and end dates for all Tasks and Subtasks specified in this Statement of Work, the work breakdown structure, Task dependencies, and assignments by Task and Subtask within the MethodM framework, and Remote Hosting Services milestones.
- 14. The testing strategy for all levels of testing.

CONTRACTOR shall develop this PCD consistent with this Statement of Work. CONTRACTOR shall specifically address each Task and Subtask to be performed, the order in which CONTRACTOR shall perform the Tasks and Subtasks and the order in which CONTRACTOR shall produce the Deliverables specified in this Statement of Work in accordance with the Agreement within the MethodM framework. For each Task and Subtask, CONTRACTOR shall define and describe in detail the recommended involvement of COUNTY's staff that is necessary for successful completion of such Task or Subtask. CONTRACTOR shall formally present the PCD to the PLT.

#### Deliverable 1.3: Project Control Document (PCD)

The Project Control Document shall document the components listed in Items 1 – 14 of Subtask 1.3 described above together with any other items identified for inclusion by agreement of COUNTY's Project Director and CONTRACTOR's Project Director. Upon

approval by COUNTY in accordance with Subparagraph 2.4 of the body of the Agreement, the Project Control Document shall automatically supplement Exhibit C (Project Schedule).

#### Subtask 1.4: Prepare Remote Hosting Services Project Plan and Complete First Quarter Remote Hosting Services

CONTRACTOR shall prepare the Remote Hosting Services Project Plan. The plan shall include all elements of work that comprise best practices service and system planning for sourcing Cerner Technology Center services for application hosting of Cerner Millennium systems. CONTRACTOR shall certify that the plan is complete and that all tasks and activities required for timely preparation of the Domains required for PEMRS operation and management have been identified and scheduled.

CONTRACTOR shall perform and complete all tasks specified for the first Quarter in the Remote Hosting Services Project Plan. These include, for example, network design, ordering primary circuit and network hardware, hardware capacity planning, ordering hardware for the Back-end and Front-end System.

CONTRACTOR shall certify that the Remote Hosting Services Project Plan is up to date and that all tasks and activities required for timely preparation of the Domains required for PEMRS operation and management have been completed as scheduled in the plan for the first Quarter, that the project is on schedule and that all CONTRACTOR-hosted Domains will be ready for use when needed.

# Deliverable 1.4: CONTRACTOR Delivery and Certification of Remote Hosting Services Plan and First Quarter Remote Hosting Services

CONTRACTOR shall deliver the Remote Hosting Services Plan and CONTRACTOR certification as described in Subtask 1.4. Upon approval by COUNTY in accordance with Subparagraph 2.4 of the body of the Agreement, the approved Remote Hosting Services Plan shall automatically supplement Exhibit C (Project Schedule).

#### TASK 2: PROJECT MANAGEMENT

With participation and support by COUNTY, CONTRACTOR shall provide project management as required to fulfill the PCD and the MethodM plans. In this TASK, CONTRACTOR shall prepare, organize, and present the project kickoff event in accordance with the MethodM process. CONTRACTOR shall provide for, initiate and continue to deliver monthly Project Status Reports. COUNTY will provide logistical support and infrastructure for work and events required by this TASK 2 when conducted in Los Angeles County.

#### Subtask 2.1: Conduct MethodM Project Kickoff Event

With participation by COUNTY as provided in the PCD, CONTRACTOR shall conduct the MethodM project kickoff, consisting of the kickoff presentation, the current state analysis, and the scope review. CONTRACTOR shall present the outstanding Preliminary Design Assessment (PDA) items and a plan for completion. CONTRACTOR shall conduct and document COUNTY workflows and conduct onsite walkthrough of the Phase 1 System Application Software modules. CONTRACTOR shall document concerns using a scope review template and process. CONTRACTOR shall present data

collection materials and requirements as applicable. CONTRACTOR shall review and conduct current state workflow analysis and document issues relevant to the Phase 1 System Application Software modules. During this event, CONTRACTOR shall complete the Tailored Onsite Workflow Assessments (OWAs) for the Phase 1 System.

#### Deliverable 2.1: MethodM Project Kickoff Event

CONTRACTOR shall conduct the kickoff event described in Subtask 2.1. CONTRACTOR shall assemble the completed OWAs and present the results to COUNTY along with the outstanding PDA items and plan for completion thereof.

#### Subtask 2.2: Perform Project Administration

CONTRACTOR shall manage project activities and its resources and track project status. This Subtask shall include, without limitation, reporting the results of MethodM events with COUNTY participants as designated in the PCD, and managing and tracking all progress and issues against the PCD. It shall also include, without limitation, the management of project and software change control processes. CONTRACTOR shall report project status on a regular basis. CONTRACTOR shall include, without limitation, updates to the PCD in the project status reporting. CONTRACTOR shall participate in regular project status meetings, including, without limitation, meetings of PLT and its various workgroups that shall take place no less frequently than monthly.

CONTRACTOR shall manage the communication process which shall include, without limitation, monthly project status reports. These monthly project status reports shall include, as a minimum, identification and comparison of the project plan to the project status, including without limitation any updates in the critical path or projected delivery schedules.

As part of project management, CONTRACTOR shall ensure that COUNTY realizes the maximum benefit from the System provided by CONTRACTOR through a proactive and independent review of the project's progress and quality. Through this on-going quality assurance process, CONTRACTOR shall assess COUNTY's satisfaction and report any project risks or problems identified as part of the quality assurance process, as well as when relevant risk mitigation, risk emergence, and recommended COUNTY and CONTRACTOR risk mitigation actions. The project status reports prepared by CONTRACTOR shall be used to document the results of this ongoing quality assurance process.

CONTRACTOR shall update the applicable sections of the PCD monthly as part of the project status reports (Deliverable 2.2 Project Status Reports).

#### Deliverable 2.2: Project Status Reports

CONTRACTOR shall prepare and present to the PLT a project status report to report project progress, plans, and outstanding issues, no less frequently than monthly.

The project status report shall include, without limitation, the following:

- 1. Project Progress and Plans, with actual status of schedule and budget
- 2. Updates to the PCD and critical path analysis
- 3. Issue Tracking and Change Control Process
- 4. Project Schedule

- 5. Readiness Assessments
- 6. Project risks identified through the quality assurance process.

#### TASK 3: CLINICAL AND BUSINESS PROCESS DESIGN

Under this Task, CONTRACTOR shall produce the PEMRS conceptual design. Through this process, CONTRACTOR shall identify all Tailoring of the Phase 1 System Application Software modules that will be necessary to ensure that the System will operate in accordance with the Specifications and the Agreement. During this process, CONTRACTOR and COUNTY will review the contents of the documents incorporated by reference as Exhibit G (PEMRS Assessment) and its attachments and Exhibit H (PEMRS Project Plan, Version 4, dated September 2009) of the Agreement, the outstanding PDA items, and this Statement of Work.

CONTRACTOR shall analyze these sources, augment and clarify their contents where necessary, and map the requirements to the Phase 1 Application Software modules capabilities. Based upon a review of current COUNTY clinical and business processes using CONTRACTOR's Tailored Onsite Workflow Assessment (OWA) tools and techniques, and working with COUNTY participants as documented in the PCD, CONTRACTOR shall identify opportunities for improved quality, effectiveness, or efficiency available to COUNTY from modifying such clinical and business processes during implementation of the Phase 1 Application Software modules. When possible, CONTRACTOR shall identify and recommend such changes of clinical and business processes which, if implemented, would enable more efficient and effective implementation of Phase 1 Application Software modules with minimal changes consistent with CONTRACTOR's design standards. CONTRACTOR shall also identify components and design elements or Tailoring of JHIS that can be applied to PEMRS with minimum effort. CONTRACTOR shall incorporate these clinical and business processes improvements in the Conceptual Design Document (Deliverable 3.3).

CONTRACTOR with COUNTY participation and support as provided in the introductory section to this Statement of Work, shall integrate this Task with the MethodM kickoff, system review, and design review events.

#### Subtask 3.1: Conduct Clinical and Business Process Analysis Training

CONTRACTOR shall conduct training in clinical and business process improvements and design consulting for assigned system analysts and subject matter experts of JCHS, JJMH, and Probation. The training shall consist of how to use CONTRACTOR's Tailored Bedrock and MethodM implementation and project management tools to analyze and develop such clinical and business process improvements. The training shall consist of in particular how implementation of the Phase 1 Application Software modules help to effect such improvements. Specific classes and descriptions of such classes are identified in Attachment E (PEMRS Training) of this Statement of Work.

#### Deliverable 3.1: Trained COUNTY Staff

CONTRACTOR shall deliver training classes and Documentation consistent with the classes described in Attachment E (PEMRS Training) of this Statement of Work and shall certify in writing that all training as described in Subtask 3.1 has been successfully

completed by assigned system analysts and subject matter experts of JCHS, JJMH, and Probation.

#### Subtask 3.2: Perform Clinical and Business Process Analysis

CONTRACTOR shall document the clinical and business process analysis. The processes shall consist of those affecting both clinical and business processes of JCHS and JJMH and related business processes of Probation. CONTRACTOR shall conduct design review sessions to document fully the current clinical and business processes and process improvement opportunities. Trained COUNTY staff will participate in this Subtask in accordance with the PCD.

Without limiting any of CONTRACTOR's obligations as set forth in the Agreement, including, without limitation, in Paragraph 21 (Compliance with Applicable Law) of the body of the Agreement, COUNTY's Project Director and COUNTY's Project Manager, on the one hand, and CONTRACTOR's Project Director and CONTRACTOR's Project Manager, on the other hand, will use reasonable efforts to advise one another of special Los Angeles County, California State, or United States regulatory requirements of which such individuals are aware that apply in the correctional health care environment as such regulatory requirements may impact clinical or business process details. Such regulatory considerations shall include, without limitation, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as well as all rules and regulations promulgated thereunder, the Patient Safety and Quality Improvement Act of 2005, Titles 15 and 24 of the California Code of Regulations, applicable published standards of the National Commission on Correctional Health Care (NCCHC), and standards developed in connection with electronic health record certification and system security by the Office of the National Coordinator on Health Information Technology (ONCHIT), the Commission for Certification of Health Information Technology (CCHIT), the Drug Enforcement Agency (DEA), the Centers for Medicare & Medicaid Services (CMS), the National Institute of Standards and Technology (NIST), and/or the State of California Health and Human Services Agency.

#### **Deliverable 3.2: Clinical and Business Processes Analysis**

The clinical and business processes analysis shall clearly define future clinical and business processes expected to result from PEMRS implementation. CONTRACTOR shall prepare workflow diagrams. CONTRACTOR shall document problems and opportunities for clinical and business process changes. CONTRACTOR shall document new clinical and business processes based upon the analysis performed in Subtask 3.2 (Perform Clinical and Business Process Analysis). CONTRACTOR shall document the interactions of JCHS and JJMH clinical and business processes with Probation when such interactions are relevant to PEMRS design. CONTRACTOR shall document the impact of regulatory considerations when such considerations are relevant to PEMRS design.

#### Subtask 3.3: Develop Conceptual Design Document

CONTRACTOR shall define and document in workflow diagrams clinical and business process details depicting the expected processes following implementation of the System. CONTRACTOR shall incorporate in the Conceptual Design Document clinical and

business process changes included in the approved Deliverable 3.2 (Clinical and Business Process Analysis) including interactions among the participating agencies and the impact of regulatory considerations. Where Interfaces are relevant to such interactions CONTRACTOR shall identify the Interface and explain how it affects the interactions.

CONTRACTOR shall document, in a data model and associated data Documentation, data requirements associated with the new clinical and business processes and their relationship to existing JCHS, JJMH, and Probation paper forms or processes. The data model shall include, without limitation, all entities, attributes, the relationships between entities, and the Interfaces where applicable. Trained COUNTY staff will participate in this Subtask in accordance with the PCD.

With CONTRACTOR's expert review, guidance and assistance, COUNTY will determine whether to move CareNet: PowerPlan and/or other Optional Phase Systems from the Optional Phase to the Phase 1 System. CONTRACTOR shall update Exhibit G (PEMRS Assessment) and its attachments (as confirmed and updated under Deliverable 1.2 (Confirmed and Updated PEMRS Assessment) as necessary based on the clinical and business process analysis and on COUNTY's determination of which Optional Phase Systems shall be included in the Phase 1 System. Upon approval by COUNTY in accordance with Subparagraph 2.4 of the body of the Agreement, such necessary updates shall automatically be attached to and supplement Exhibit G (PEMRS Assessment) and its attachments as an additional attachment thereto.

CONTRACTOR shall identify in the Conceptual Design Document Tailoring of the Baseline Software and Third Party Software required to meet the Specifications.

In addition to clinical and business process detail the Conceptual Design Document shall include, without limitation, a definition of COUNTY needs identified during the clinical and business process analysis such as clinical data entry devices, printers and other peripheral devices, environmental considerations in care delivery areas, human resource considerations, and regulatory considerations including but not limited to privacy and security requirements. The Conceptual Design Document shall include, without limitation, Tailoring resulting from the requirements, standards, and features listed in Attachment A of this Statement of Work. The Conceptual Design Document shall document COUNTY's determination to move any Optional Phase System to the Phase 1 System and the reasons why such determination is necessary for the System to operate in accordance with the Specifications and the Agreement.

CONTRACTOR shall review with COUNTY the conceptual design resulting from Subtask 3.3 including the new clinical and business processes and an evaluation of their feasibility. Based upon the review, CONTRACTOR shall prepare a Conceptual Design Document. This document shall provide the basis for implementation of new clinical and business processes and any necessary Tailoring of the Baseline Software and Third Party Software necessary for the System to operate in accordance with the Specifications and the Agreement.

#### Deliverable 3.3: Conceptual Design Document

Deliverable 3.3 provides the primary PEMRS conceptual design. It shall document all of the findings of Subtasks 3.2 and 3.3 including, without limitation, the following components:

- 1. Future state clinical and business process workflow diagrams as they apply to JCHS, JJMH, and Probation.
- 2. Data model and associated data Documentation for the future state clinical and business processes.
- 3. Interfaces as relevant to the clinical and business processes and their interactions.
- 4. Updates to Exhibit G (PEMRS Assessment) and its attachments necessitated by the conceptual design.
- 5. COUNTY's determination of whether CareNet: PowerPlan and other Optional Phase Systems shall be moved to the Phase 1 System.
- 6. Personnel needs and human resources strategy.
- 7. Privacy and security strategies.
- 8. Future state clinical and business processes implementation plan.
- 9. How the design fulfills the Specifications.

Following COUNTY approval of Deliverable 3.3 in accordance with Subparagraph 2.4 of the body of the Agreement, no further Optional Phase Systems shall be moved to the Phase 1 System.

# TASK 4: INSTALLATION, CONFIGURATION TEST, AND CERTIFICATION OF THE PEMRS BUILD DOMAIN

This Task encompasses the activities associated with the preparation of the initial PEMRS Build Domain at the CTC including initial required LAN and WAN communications infrastructure. CONTRACTOR shall install, configure, and test hardware and operating software for the Build Domain and related services required for the CONTRACTOR, with COUNTY participation in accordance with the PCD, to create PEMRS in accordance with the Specifications and the Agreement and as further provided in this Statement of Work.

#### Subtask 4.1: Install, Test and Certify the Build Domain

CONTRACTOR shall prepare, install and test, in accordance with Subparagraph 9.2 (CONTRACTOR Tests) of the body of the Agreement, all hardware, operating system and database software, storage, network infrastructure, and other third party software for the Build Domain required for the System Software and Interfaces to perform in accordance with the Specifications and the Agreement.

CONTRACTOR shall initiate the Remote Hosting Services for PEMRS. This consists of identifying and deploying the initial project implementation team, preparing hardware and operating software specifications for configuring the System in the Cerner Technology Center, and other tasks known to CONTRACTOR as required to prepare for hosting PEMRS and ensuring that it will operate in accordance with the Specifications and otherwise with the Agreement.

CONTRACTOR shall prepare a Hardware and Operating Software Installation Report and Certification that the hardware and operating software for the Build Domain has been configured and tested in accordance with Specifications and the Agreement.

#### Deliverable 4.1: CONTRACTOR Tested and Certified Build Domain

CONTRACTOR shall certify in writing that the hardware and operating software for the Build Domain is operating properly. CONTRACTOR shall prepare and deliver to COUNTY the Hardware and Operating Software Installation Certification for the Build Domain. CONTRACTOR initiated the Remote Hosting Services for PEMRS.

# Subtask 4.2: Deliver, Prepare, Configure, Test and Certify CONTRACTOR-owned hardware and operating software at COUNTY Facilities required for the System Software to perform in accordance with the Specifications and the Agreement

CONTRACTOR shall deliver, prepare, configure, and test CONTRACTOR-owned hardware and operating software to be installed at COUNTY Facilities when required for the System Software to perform in accordance with the Specifications and the Agreement. CONTRACTOR shall deliver, test and certify said hardware and operating software in those areas designated by COUNTY. CONTRACTOR shall document COUNTY operations and procedures as needed for COUNTY installation and housing of said hardware and operating software. COUNTY will designate a single point of demarcation for the CONTRACTOR's hardware and operating software in COUNTY facilities.

COUNTY will provide a temperature controlled environment and uninterrupted power supply for CONTRACTOR-owned and provided hardware and operating software such as network equipment, wide area network termination devices, and remote report distribution servers. COUNTY will provide appropriate housing for said hardware and operating software, as well as rack space as required. COUNTY will install CONTRACTORsupplied hardware and operating software in accordance with instructions supplied by CONTRACTOR.

#### Deliverable 4.2: CONTRACTOR Delivered, Prepared, Configured, Tested and Certified CONTRACTOR-owned Hardware and Operating Software at COUNTY Facilities required for the System Software to perform in accordance with the Specifications and the Agreement

CONTRACTOR shall certify in writing that CONTRACTOR-owned hardware and operating software for the Remote Hosting Services required at COUNTY Facilities has been configured and tested for the Build Domain and is operating in accordance with the Specifications and the Agreement.

#### Subtask 4.3: Install, Test and Certify PEMRS Networking Equipment and Communications Infrastructure

CONTRACTOR shall provide, configure, test and certify all CONTRACTOR network infrastructure. Said infrastructure shall consist of all CTC network equipment, software, and console systems, local area network (LAN) and wide area network (WAN) circuits required for the System Software and Interfaces to perform in accordance with the Specifications and the Agreement.

COUNTY will provide LAN/WAN network capabilities within, between and among COUNTY Facilities in accordance with the Specified Hardware and Operating Software recommended in Exhibit G (PEMRS Assessment) and its attachments.

# Deliverable 4.3: CONTRACTOR Installed, Tested and Certified PEMRS Networking Equipment and Communications Infrastructure

CONTRACTOR shall certify in writing that CONTRACTOR specified networking equipment and communications infrastructure has been installed and tested and is operating in accordance with the Specifications and the Agreement.

#### Subtask 4.4: Install, Test and Certify Phase 1 System Application Software Modules

CONTRACTOR shall deliver, install, configure and test the Phase 1 System Application Software modules in the Build Domain, consistent with the PCD, for Tailoring and test. The installation and configuration shall include, without limitation, the following:

- 1. The Phase 1 System Application Software modules
- 2. Optional Phase Systems elected by COUNTY to be moved from Optional Phase to the Phase 1 System as documented in Deliverable 3.3 (Conceptual Design).
- 3. Reference database provided by CONTRACTOR.
- 4. Required content such as, but not limited to, Multum, CMT, CPT, and Krames.
- 5. Other software or tools provided by CONTRACTOR (e.g., MethodM, Bedrock, Lights-on).

CONTRACTOR shall at this time deliver and transfer any and all Licenses for the System Software if not already transferred to COUNTY.

Following successful System Software installation and testing, CONTRACTOR shall deliver a written System Software Installation Report and Certification to COUNTY containing the following:

- 1. A listing of all of the software that has been installed, as well as product description, version number, and license number(s) with corresponding reference to Attachment B (Schedule of PEMRS Software) of this Statement of Work.
- 2. Software reference and operating manuals and all other Documentation pertaining to the Phase 1 Application Software modules.
- 3. Problem reporting and escalation procedures.
- 4. Certification that the System Software has been installed properly for development and test and is operating as designed.

#### Deliverable 4.4: CONTRACTOR Installed, Tested and Certified Phase 1 System Application Software Modules

CONTRACTOR shall certify in writing that the Phase 1 System Application Software modules have been installed and tested and are operating in accordance with the Specifications and the Agreement.

#### Subtask 4.5: Second Quarter Remote Hosting Services

CONTRACTOR shall perform and complete all tasks specified for the Second Quarter in the approved Remote Hosting Services Project Plan. These include, for example, installing, testing and tuning routers and other equipment for the primary circuit, ordering the diversity study and equipment for the secondary circuit, configuring PEMRS hardware, implementing the Build Domain in permanent equipment.

CONTRACTOR shall certify that the approved Remote Hosting Services Project Plan is up to date and that all tasks and activities required for timely preparation of the Domains required for PEMRS operation and management have been completed as scheduled in the plan, that the project is on schedule and that all CONTRACTOR-hosted Domains will be ready for use when needed.

# Deliverable 4.5: CONTRACTOR Certification of Second Quarter Remote Hosting Services

CONTRACTOR shall deliver the certification as described in Subtask 4.5.

# TASK 5: INTERFACE DESIGN

TASKS 5 and 9 of this Statement of Work describe the subtasks and Deliverables necessary to design and build PEMRS Interfaces required by COUNTY. Attachment D lists the Phase 1 System Interfaces and in each Optional Phase System Interface. Interfaces consist of the medical devices Interfaces and external systems Interfaces identified in Attachment D (PEMRS Interfaces) to this Statement of Work and further described in Deliverable 3.3 (Conceptual Design Document) of this Statement of Work. TASK 5 describes the work and Deliverables required to design such required Interfaces. TASK 9 describes the work and Deliverables required to build such required Interfaces.

The term "Interfaces" is defined in the body of this Agreement. In accordance with that definition, the work of designing and building each Interface means designing and building a software mechanism. The purpose of the software mechanism is to transfer data between the Phase 1 Application Software modules or Optional Phase System and a COUNTY device or system. For purposes of this TASK 5 and TASK 9 of this Statement of Work, the term "transaction" shall refer to the transfer of data in an Interface. Therefore, an Interface is defined as three components: (1) the Phase 1 Application Software modules or Optional Phase System, (2) a COUNTY device or system, and (3) a transaction.

During the design and build of such required Interfaces, COUNTY will provide a team of interface and COUNTY device or system specialists to support CONTRACTOR in the design and build of each Interface. The COUNTY team will incorporate the COUNTY device or system vendor as necessary. For each Interface, COUNTY (using said assigned team) will provide:

- Description of the objectives of including each COUNTY device/system with which an Interface is required, together with its expected functions (including as necessary confirmation or correction of the contents of Deliverable 3.3 (Conceptual Design Document));
- Description of the purpose of each transaction in such Interface and the functions of such transaction in the System including expectations for the operating per-

formance of each transaction (including as necessary confirmation or correction of the contents of Deliverable 3.3 (Conceptual Design Document)),

- Descriptions of the COUNTY device/system of the Interface in accordance with CONTRACTOR written requests for information required in order to design and build such Interface (including as necessary confirmation or correction of the contents of Deliverable 3.3 (Conceptual Design Document)).
- An interface engine if necessary to manage the COUNTY's side of each transaction together with documentation and descriptions of how COUNTY expects it to interact with CONTRACTOR provided Interfaces.

With such support by COUNTY, in this TASK 5, CONTRACTOR shall define, review, document and deliver the Interface Specifications for both medical devices Interfaces and external systems Interfaces required to exchange data with the System. (The work and Deliverables required for building Interfaces are described in TASK 9 below.)

CONTRACTOR shall design each Interface as specified in Subtasks 5.1 and 5.2 of this TASK 5. Without limitation, CONTRACTOR shall specify each transaction in its entirety with respect to the System, including the details of each transaction and how it is produced or received by the System and the COUNTY's device and/or system.

For each Interface, CONTRACTOR, with COUNTY participation as provided in the introductory paragraph of this Task, shall design the Interface for both the System and the COUNTY device/system. For each transaction of each Interface, the design shall include:

- Identification of an established standard for such transaction, such as HL7, ASTM, X12, or other ANSI or Standards Development Organization (SDO) published standard designed to perform the functions of the Interface as defined by the COUNTY;
- Specification of any CONTRACTOR divergences from such standard as published;
- Specification of what data are required from the COUNTY system(s) to fulfill the data requirements of the transaction;
- Specification of the transport mechanism required for the transaction;
- Specification of any and all details of System and COUNTY device/system operations required in order for the Interface to function in accordance with the Specifications and this Agreement.

### Subtask 5.1: Define Medical Devices Interfaces (MDIs) Specifications

With COUNTY participation as described in the introductory paragraphs of this Task 5, CONTRACTOR shall define and document the design of each medical device Interface required for the Phase 1 System and each Optional Phase System. Specific activities associated with this Subtask include, without limitation, the following:

1. Review and document Specifications for each MDI.

- a. Confirm that each COUNTY device defined in Attachment D (PEMRS Interfaces) of this Statement of Work is a device that CONTRACTOR supports in its standard MDI catalog, as documented in Exhibit G (PEMRS Assessment) and its attachments;
- b. Define and specify the transactions required for the MDI;
- c. Define any divergences from the CONTRACTOR's or published standard transactions that the COUNTY device will require, and how such divergences shall be managed.
- 2. Specify all required communications hardware and software for each MDI.
- 3. Document a strategy to minimize or prevent Interface failure or performance degradation, standard procedures to mitigate the risk of Interface failure, and corrective action in case it occurs.

# Deliverable 5.1: Medical Devices Interfaces (MDIs) Specifications

CONTRACTOR shall deliver Documentation of the Specifications of all MDIs per the results of Subtask 5.1.

### Subtask 5.2: Define External Systems Interfaces Specifications

With COUNTY participation as described in the introductory paragraphs of this Task 5, CONTRACTOR shall define and document the design of each external system Interface and the transactions required to support the COUNTY's required functions for such Interface. Specific activities include, without limitation, the following for each Interface:

- 1. Confirm the required functionality of each transaction to be supported by the Interface between PEMRS and the external system in accordance with this Task and the contents of Deliverable 3.3 (Conceptual Design Document). This consists of both sides of the Interface and all transactions to be supported in the Interface. When applicable, this also identifies the standard of an applicable designated Standard Development Organization (SDO) and the specific standards or transactions to be used in the Interface, as well as, where applicable, Tailoring of standard transactions where required by divergence from the published standard in the System or in the County external system.
- 2. Confirm the external systems Interfaces development schedule as documented in the PCD.
- 3. Identify and specify the transport mechanisms for the transactions.
- 4. Identify and specify any and all details of the data to be exchanged in such transaction and the direction of the exchange, whether inbound or outbound, in a manner that is sufficient for CONTRACTOR to build the transaction with support by COUNTY (using their respective interface engines and assigned staff).
- 5. Describe how COUNTY's clinical and business processes, policies and procedures will be affected by such Interface.
- 6. Document a strategy to minimize or prevent Interface failure or performance degradation, standard procedures to mitigate the risk of Interface failure and corrective action in case it occurs.

### **Deliverable 5.2: External Systems Interfaces Specifications**

CONTRACTOR shall identify, validate and document each external system Interface designed in Subtask 5.2.

#### TASK 6: PHASE 1 SYSTEM APPLICATION SOFTWARE DEVELOPMENT

CONTRACTOR shall design, build and implement the Phase 1 System in this Task with the input and participation of COUNTY in accordance with the MethodM processes and the PCD. The Phase 1 System Application Software modules and Interfaces consist of:

- 1. PowerChart (Clinical Data Repository, PowerOrders, PowerNote)
- 2. CareNet (Electronic Medication Administration Record (eMAR), Clinical Documentation, PowerPlan, and PowerForms)
- 3. CapStone (Registration Management, Scheduling Management)
- 4. PathNet (General Laboratory, Microbiology)
- 5. PharmNet (Inpatient Pharmacy and Departmental Clinical Supply Chain for Pharmacy)
- 6. RadNet (Radiology Management)
- 7. ProFile (Health Information Management (HIM))
- 8. Open Engine (MDIs Licensed Software and Open Port Licensed Software)
- 9. Cerner ProVision Document Imaging (CPDI)
- 10. Computerized Physician Order Entry (CPOE)
- 11. Discern Expert
- 12. Discern Explorer
- 13. CareAware Multi-Media Foundation Digital Objects
- 14. Krames Patient Education Content
- 15. Knowledge Content Solution for Ambulatory (including Cerner Knowledge Tool (Cerner KM) and Multum/Medisource)
- 16. CMT/CPT (Codes & Medical Terminologies)
- 17. Web Based Training
- 18. All Interfaces identified on Attachment D (PEMRS Interfaces) to this Statement of Work as Phase 1 System Interfaces.

#### Subtask 6.1: Develop and Install each Phase 1 System Application Software Module

For each Phase 1 System Application Software module, CONTRACTOR shall perform Subtasks 6.1.1, 6.1.2, and 6.1.3. CONTRACTOR shall design, build and test, all as described in this Statement of Work, with the input and participation of COUNTY in accordance with the MethodM processes and the PCD, such Application Software module consistent with the Specifications and the Agreement, the approved Deliverable 3.3 (Conceptual Design Document), and the approved Deliverables 5.1 (Medical Devices Interfaces (MDIs) Specifications) and 5.2 (External Systems Interfaces Specifications). CONTRACTOR shall design, test, integrate, and implement each Phase 1 System Application Software module in the order of or in combinations approved in the Conceptual Design Document (Deliverable 3.3) and in accordance with the PCD (Deliverable 1.3). When applicable, CONTRACTOR shall Tailor each Phase 1 System Application Software module as necessary for the System to perform in accordance with the Specifica-

tions and the Agreement. When applicable, CONTRACTOR shall incorporate content, subscriptions, and ancillary content in the design and build of each Phase 1 System Application Software module. CONTRACTOR shall test such Application Software module consistent with Paragraph 9 (Acceptance of System by COUNTY) of the body of the Agreement and this Statement of Work. CONTRACTOR shall organize, schedule, manage, and conduct joint COUNTY and CONTRACTOR events defined in the PCD (Deliverable 1.3) and required to complete the design, build, test, and implementation of each Phase 1 System Application Software module in accordance with the MethodM processes accepted in the PCD (Deliverable 1.3). CONTRACTOR shall report on the results of such events and recommend any changes to COUNTY processes that are necessary to improve the Tailoring processes consistent with the Specifications and the Agreement.

#### Subtask 6.1.1: Design each Phase 1 System Application Software Module

For each Phase 1 System Application Software module, CONTRACTOR shall design and document such Application Software module based upon the Specifications, with the input and participation of COUNTY in accordance with the MethodM processes and the PCD. CONTRACTOR shall Tailor such Application Software module in accordance with the Specifications. CONTRACTOR shall incorporate in the design of such Application Software module required Interfaces as defined in TASK 5 (Interface Design) and consistent with the Conceptual Design Document (Deliverable 3.3). This Subtask includes, but is not limited to, the design of core data elements and tables, reference tables, edit criteria, required Interfaces, System Test plans and scripts, modification of clinical and business processes, and all other entities associated with the design for this Application Software module and/or its Interfaces.

For each Phase 1 System Application Software module, CONTRACTOR shall document the design, database, and Tailoring decisions using standardized System Documentation tools as specified in this Statement of Work or according to CONTRACTOR Documentation standards approved in writing by the COUNTY Project Director. CONTRACTOR shall Tailor and present to Users as a Prototype the database, business rules, screens, and reports of such Application Software module, and shall incorporate User feedback from the Prototype sessions in the design. CONTRACTOR and COUNTY shall mutually arrange and schedule design review sessions approved in the PCD in accordance with the MethodM event process or designated in writing by COUNTY's Project Director.

CONTRACTOR shall identify and document the impact of the design on COUNTY's current clinical and business processes and the expected modifications of such clinical and business processes under Phase 1 System operation, including without limitation interactions among clinical processes and correctional processes as identified in the Conceptual Design Document (Deliverable 3.3) and in Exhibit G (PEMRS Assessment) and its attachments. CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully designed such Application Software module and Interfaces relevant to such Application Software module.

CONTRACTOR shall conduct training in process demonstration, and database table Tailoring as relevant to PEMRS-specific User-defined database specifications based on

Deliverable 3.3 (Conceptual Design) and the results of the MethodM PDA and OWA processes. Specific classes and descriptions of such classes are identified in Attachment E (PEMRS Training) to this Statement of Work.

# Deliverable 6.1.1: Design Documentation for each Phase 1 System Application Software Module

CONTRACTOR shall deliver to COUNTY all design Documentation for each Phase 1 System Application Software module. CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully completed the design Documentation and that it is consistent with the approved Deliverable 3.3 (Conceptual Design Document) and Deliverables 5.1 (Medical Devices Interfaces (MDIs) Specifications) and 5.2 (External System Interfaces Specifications) and meets the Specifications. CONTRACTOR shall deliver training classes and training materials consistent with the classes described in Attachment E (PEMRS Training) to this Statement of Work and certify in writing that all training as described in Subtask 6.1.1 (Design each Phase 1 System Application Software Module) has been successfully completed.

#### <u>Subtask 6.1.2: Build and Unit Test each Phase 1 System Application Software</u> <u>Module</u>

CONTRACTOR shall build, validate and demonstrate to COUNTY each Phase 1 System Application Software module based upon the final design resulting from the Prototype process performed during Subtask 6.1.1 (Design each Phase 1 System Application Software Module) and documented in Deliverable 6.1.1 (Design Documentation for each Phase 1 System Application Software Module).

CONTRACTOR shall conduct training for COUNTY participants in System validation. Specific classes and descriptions of such classes are identified in Attachment E (PEMRS Training) of the Statement of Work.

For each as-built Phase 1 System Application Software module, CONTRACTOR shall develop test plans and scripts for such Tailored Application Software module. With CONTRACTOR's expert review, guidance and assistance, COUNTY will review, suggest any necessary revisions and validate the test plans and scripts, in each case, as they relate to COUNTY-specific Tailoring. CONTRACTOR, with COUNTY's reasonable assistance as requested, shall modify the test scripts as required and shall thoroughly test such Application Software module as part of this process, including, without limitation, Unit Testing of applicable Interfaces, but without integration of other Application Software modules. Following CONTRACTOR testing, COUNTY will execute the test scripts in accordance with the MethodM processes, with CONTRACTOR's expert review, assistance and guidance. The results of all testing shall be documented in accordance with the MethodM processes.

CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully built and that CONTRACTOR and COUNTY have successfully tested each Phase 1 System Application Software module in accordance with the Specifications and the design approved in Deliverable 6.1.1 (Design Documentation for each Phase 1 System Application Software Module) for such Application Software module.

# Deliverable 6.1.2: Built and Unit Tested Each Phase 1 System Application Software Module

CONTRACTOR shall demonstrate each Phase 1 System Application Software module to COUNTY. CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully built such module completely and accurately based upon the Documentation generated in Deliverable 6.1.1 (Design Documentation for each Phase 1 System Application Software Module) and CONTRACTOR and COUNTY have successfully tested such Application Software module as described in Subtask 6.1.2. The results of all Tests shall be documented in accordance with the MethodM processes.

#### Subtask 6.1.3: System Test each Phase 1 System Application Software Module

For each as-built Phase 1 System Application Software module, CONTRACTOR shall develop System Test plans and scripts for such Tailored Application Software module. With CONTRACTOR's expert review, guidance and assistance, COUNTY will review, suggest any necessary revisions and validate the test plans and scripts, in each case, as they relate to COUNTY-specific Tailoring. CONTRACTOR, with COUNTY's reasonable assistance as requested, shall modify the test scripts as required and shall thoroughly System Test each Phase 1 System Application Software module to ensure that all components of this module function as designed. The System Test shall ensure that all software code, data structures, departmental workflows, policies and procedures and other Tailoring specific to such Application Software module operate in a manner consistent with the design of this module. Following CONTRACTOR testing, COUNTY will execute the test scripts in accordance with MethodM, with CONTRACTOR's expert review, assistance and guidance. The results of all System Testing shall be documented in accordance with the MethodM processes.

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully System Tested such Application Software module and that it functions in accordance with the Specifications and the Agreement.

# Deliverable 6.1.3: System Tested Each Phase 1 System Application Software Module

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully System Tested all components of each Phase 1 System Application Software module, that CONTRACTOR has corrected all identified Deficiencies and that such Application Software module functions in accordance with the Specifications and the Agreement. CONTRACTOR shall deliver Documentation of such Application Software module as designed, built and tested.

### Subtask 6.1.4: Third Quarter Remote Hosting Services

CONTRACTOR shall continue to perform tasks identified for the third Quarter in the approved Remote Hosting Services Project Plan, such as installation and testing of Application Software creating and installing the Training Domain, and completion of network installation and configuration.

CONTRACTOR shall certify in writing that the approved Remote Hosting Services Project Plan is up to date and that tasks identified as necessary to prepare for Remote

Hosting Services have been conducted and are completed in accordance with the approved Remote Hosting Services Project Plan for the third Quarter and that preparation of the System Domains is on schedule.

# Deliverable 6.1.4: CONTRACTOR Certification of Third Quarter Remote Hosting Services

CONTRACTOR shall deliver the certification as described in Subtask 6.1.4.

#### Subtask 6.2: Plan and Perform Integration Tests for the Phase 1 System

#### Subtask 6.2.1: Plan Integration Tests for the Phase 1 System

For the as-built Phase 1 System, CONTRACTOR shall review and revise as needed the Integration Testing strategy documented in the PCD (Deliverable 1.3). CONTRACTOR shall develop a test plan consisting of test scripts and scenarios that take into account departmental workflows, policies and procedures and other Tailoring and that shall be used in the conduct of the Integration Tests under Subtask 6.2.2. With CONTRACTOR's expert review, guidance and assistance, COUNTY will review, suggest any necessary revisions and validate the test plans and scripts, in each case, as they relate to COUNTY-specific Tailoring. CONTRACTOR, with COUNTY's reasonable assistance as requested, shall modify the test scripts as required and scripts shall generally consist of all defined input and expected output results for each function based on the Specifications. The test plan shall encompass all testing across and between Phase 1 System Application Software modules required to ensure that the System operates in an integrated fashion and integrates with pass through information from and to the Interface systems.

### Deliverable 6.2.1: Integration Test Plans and Test Scripts for the Phase 1 System

CONTRACTOR shall deliver an update to the Integration Testing strategy documented in the Project Control Document. CONTRACTOR shall also deliver a test plan consisting of test scripts and scenarios that shall be used in the conduct of the Integration Tests under Subtask 6.2.2. The test plan shall be developed and validated as described under Subtask 6.2.1.

### Subtask 6.2.2: Perform Integration Tests for the Phase 1 System

CONTRACTOR shall conduct Integration Testing for the as-built Phase 1 System. Following CONTRACTOR testing, COUNTY will execute the test scripts in accordance with MethodM, with CONTRACTOR's expert review, assistance and guidance. CONTRACTOR shall successfully perform all required corrective action to ensure the successful operation and interoperability of all Phase 1 System Application Software modules and all Interfaces. The results of all Integration Testing shall be documented in accordance with the MethodM processes. CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully conducted all Integration Testing for the Phase 1 System and that CONTRACTOR has successfully performed all required corrective action.

### Deliverable 6.2.2: Successful Integration Test Results for the Phase 1 System

CONTRACTOR shall successfully perform all required corrective action to ensure the successful operation and interoperability of all Phase 1 System Application Software modules. The results of all Integration Testing shall be documented in accordance with the MethodM processes. CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully completed Integration Testing for the Phase 1 System and that CONTRACTOR has successfully completed all required corrective action.

### Subtask 6.2.3: Fourth Quarter Remote Hosting Services

CONTRACTOR shall perform and complete all tasks specified for the fourth Quarter in the approved Remote Hosting Services Project Plan. These include, for example, conducting the System Management Workshop, network and back-end failover testing, and continued installation of network patches and available security patches.

CONTRACTOR shall certify in writing that the approved Remote Hosting Services Project Plan is up to date and that all tasks and activities required for timely preparation of the Domains required for PEMRS operation and management have been completed as scheduled in the plan for the fourth Quarter, that the project is on schedule and that all CONTRACTOR-hosted Domains will be ready for use when needed.

# Deliverable 6.2.3: CONTRACTOR Certification of Fourth Quarter Remote Hosting Services

CONTRACTOR shall deliver the certification as described in Subtask 6.2.3.

### Subtask 6.3: Prepare for Phase 1 System Cutover and Conversion

### Subtask 6.3.1: Develop System Cutover and Conversion Plan for the Phase 1 System

CONTRACTOR shall develop a System Cutover and Conversion Plan for the Phase 1 System that identifies the steps required to load existing automated and manual data and to perform other activities required as part of the System cutover and conversion process, including without limitation conversion to new or modified clinical and business processes, policies and procedures, as well as conversion of the current charts of minors detained in the halls and camps. The plan shall include, without limitation the unique conversion requirements of each Phase 1 System Application Software module, including without limitation, conversion of automated and manual data required for production conversion and transfer to the Production Domain of successfully tested all Phase 1 System Application Software modules and Interfaces, confirmation of successful User Acceptance Testing, and transition to CONTRACTOR's Remote Hosting Services, System Maintenance and Support, and Application Management Services (AMS) as provided in Exhibit D (Service Level Agreement) for the Phase 1 System.

CONTRACTOR shall define the timing of conversion programs and shall provide an orientation to COUNTY's conversion support staff. CONTRACTOR shall document in the plan the cutover support required by CONTRACTOR and COUNTY during the transition from current manual clinical and business processes to Production Use of the Phase 1 System.

CONTRACTOR shall also define in the plan a mechanism to verify the plan by conducting, with COUNTY participation in accordance with the PCD and otherwise the Agree-

ment, desk exercises, plan reviews, walk-throughs, checklist confirmations (peripheral device readiness, network equipment readiness, COUNTY technical staffing provisioning and training, site visits, COUNTY circuit stressors and bandwidth confirmation, data transfer and conversion, chart imports, staff movement and redeployment, communication plans, contingency plans, emergency response, CTC operations and intra and inter-CTC failover), and any other plan review that can prudently be exercised in advance to minimize the risk of conversion failure.

#### Deliverable 6.3.1: System Cutover and Conversion Plan for the Phase 1 System

CONTRACTOR shall deliver the System Cutover and Conversion Plan for the Phase 1 System that identifies the steps required to perform the System cutover and conversion process and how the COUNTY and CONTRACTOR resources will be deployed during the cutover. CONTRACTOR shall incorporate in the Deliverable all of the results of Subtask 6.3.1.

# <u>Subtask 6.3.2: Prepare for System Cutover and Conversion for the Phase 1 System</u>

CONTRACTOR, with COUNTY participation in accordance with the PCD, shall verify the System Cutover and Conversion Plan as provided in Subtask 6.3.1 (Develop System Cutover and Conversion Plan for the Phase 1 System) to ensure CONTRACTOR and COUNTY readiness for actual System cutover required for transition to Production Use of all Phase 1 System Application Software modules in the Production Domain.

CONTRACTOR and COUNTY shall each identify required plan corrections and all actions required to perform the plan during the conversion and cutover process. CONTRACTOR shall successfully correct the plan, inventory all necessary COUNTY and CONTRACTOR corrective actions, and obtain the written approval of COUNTY's Project Director, which may be granted or withheld in his sole discretion.

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully performed all necessary corrective actions to perform the plan required by Deliverable 6.3.1 (System Cutover and Conversion Plan for the Phase 1 System) and that all Phase 1 System Application Software modules are ready for System cutover and conversion.

### Deliverable 6.3.2: Verified System Cutover and Conversion Plan for the Phase 1 System

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY, as well as the Phase 1 System, are ready for cutover and conversion.

### Subtask 6.3.3: Fifth Quarter Remote Hosting Services

CONTRACTOR shall perform and complete all tasks specified for the fifth Quarter in the approved Remote Hosting Services Project Plan. These include, for example, conducting the creation of the Certification Domain, final code certification, testing and final configuration of the Training Domain, continued installation of network patches and available security patches, completion of the pre-conversion audit, and Production Domain lockdown.

CONTRACTOR shall certify in writing that the approved Remote Hosting Services Project Plan is up to date and that all tasks and activities required for timely preparation of the Domains required for PEMRS operation and management have been completed as scheduled in the plan for the fifth Quarter, that the project is on schedule and that all CONTRACTOR-hosted Domains are ready for use as planned.

# Deliverable 6.3.3: CONTRACTOR Certification of Fifth Quarter Remote Hosting Services

CONTRACTOR shall deliver the certification as described in Subtask 6.3.3.

### Subtask 6.4: Develop and Deliver User Training for the Phase 1 System

Consistent with the provisions of Exhibit D (Service Level Agreement) CONTRACTOR shall create and provision a Training Domain for COUNTY User Training.

### <u>Subtask 6.4.1: Develop Training Classes and Training Materials for the Phase 1</u> <u>System</u>

CONTRACTOR shall review and confirm the User Training Strategy developed as part of the PCD. CONTRACTOR shall develop Learning Plan and Solution Training Guides for the as-built Phase 1 System and workflows. The Learning Plan and Solution Training Guides shall provide COUNTY trainers with a comprehensive presentation of the functionality and use of the Phase 1 System within clinical and business operations of Probation, JCHS, and JJMH. The Solution Training Guides shall provide COUNTY trainers with techniques for delivering the training to Users. The Learning Plan shall define training approach, tools, and, where applicable, facility requirements. CONTRACTOR shall additionally provide examples of end user training with respect to all or any portion of the modules included in the Phase 1 System that COUNTY trainers may re-use or modify in creating User training manuals and guides, or, alternatively, named references to clients from whom COUNTY may request such examples. CONTRACTOR shall consult with COUNTY trainers as needed throughout COUNTY's development of User training manuals and guides. CONTRACTOR shall produce and Tailor any web based training modules, as defined in Schedule II of Exhibit D (Service Level Agreement), that are relevant to the operation and use of the Phase 1 System in the PEMRS operational environment consistent with the PCD and the Conceptual Design Document.

# Deliverable 6.4.1: Documented Training Classes and Training Materials for the Phase 1 System

CONTRACTOR shall deliver training materials for the Phase 1 System that consist of the results of Subtask 6.4.1.

### Subtask 6.4.2: Train the COUNTY Trainers for the Phase 1 System

CONTRACTOR shall deliver training classes and training materials to COUNTY system analysts and subject matter experts, as designated by COUNTY's Project Director, for the as-built Phase 1 System, including each Phase 1 System Application Software module and Interface. CONTRACTOR shall present the training classes and materials in a minimum of one (1) training session per Phase 1 System Application Software

module, adequate in duration to cover all functionality and expected clinical and business process changes. CONTRACTOR shall conduct all training live in the Training Domain. The training materials and classes shall give COUNTY trainers sufficient instruction in the use of the Phase 1 System and each Phase 1 System Application Software module in the Probation, JCHS, and JJMH operating environment in order to prepare them to train Users in the use of the Phase 1 System as Tailored to meet the Specifications and support the expected clinical and business processes. CONTRACTOR shall deliver training classes and training materials consistent with Attachment E (PEMRS Training) of this Statement of Work.

### Deliverable 6.4.2: Trained COUNTY Trainers for the Phase 1 System

CONTRACTOR shall deliver the training sessions and materials as described in Subtask 6.4.1 (Develop Training Classes and Training Materials for the Phase 1 System), Subtask 6.4.2 (Train COUNTY Trainers for the Phase 1 System), and Subtask 6.4.3 (Provide Supplemental Onsite Training Services) and shall certify in writing that all such training has been successful.

# Subtask 6.4.3: Provide Supplemental Onsite Training Services

CONTRACTOR shall provide supplemental onsite training services to maximize the competency of COUNTY trainers for the purpose of supporting the PEMRS end user training as specified in Subtasks 6.4.1 (Develop Training Classes and Training Materials for the Phase 1 System) and 6.4.2 (Train the COUNTY Trainers for the Phase 1 System) as well as provide specific end user training to certain COUNTY physicians.

- a. In addition to the training of COUNTY trainers specified in Subtasks 6.4.1 and 6.4.2, CONTRACTOR shall provide supplemental training services for all COUNTY trainers supporting the PEMRS end users in accordance with the PCD and in the Learning Plan approved in Subtask 6.4.1. These supplemental training services are further described in the Additional Work Request, dated June 16, 2011, issued by COUNTY to CONTRACTOR, and the System Design Report for Additional Learning Services, dated June 24, 2011, issued by CONTRACTOR to COUNTY. As part of the supplemental training services, CONTRACTOR shall provide an instructional session for each role and two additional practice sessions. The first practice session shall consist of CONTRACTOR delivering the instructor-led classes for end users with COUNTY trainers in attendance to observe and learn the techniques. The second practice session shall consist of CONTRACTOR instructors in attendance to provide suggestions for improvement.
- b. Also in addition to the training of COUNTY trainers specified in Subtasks 6.4.1 and 6.4.2, CONTRACTOR shall provide supplemental training services to provide all end user CPOE Physician training necessary to train JCHS and JJMH

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physicians in accordance with the PCD and in the Learning Plan approved in Subtask 6.4.1, using small group sessions (five or six physicians employed by JCHS and JJMH). These sessions are further described in the Additional Work Request, dated June 16, 2011, issued by COUNTY to CONTRACTOR, and the System Design Report for Additional Learning Services, dated June 24, 2011, issued by CONTRACTOR to COUNTY. These sessions shall provide sufficient instruction in the JCHS, and JJMH operating environment in order to prepare the JCHS and JJMH physicians to use the CPOE Physician as Tailored to meet the Specifications and support the expected clinical and business processes. In the event that a physician is unable to attend any of the CONTRACTOR-led scheduled training sessions, COUNTY physicians will be responsible for training the physician during the make-up sessions.

# Deliverable 6.4.3: Completed Supplemental Training Services for the Phase 1 System

CONTRACTOR shall deliver the supplemental training services and materials as described in Subtask 6.4.1 (Develop Training Classes and Training Materials for the Phase 1 System), Subtask 6.4.2 (Train COUNTY Trainers for the Phase 1 System), and Subtask 6.4.3 (Provide Supplemental Onsite Training Services) and shall certify in writing that all such supplemental training services have been successful.

#### Subtask 6.4.4: Create Training Data for the Phase 1 System

CONTRACTOR shall:

- 1. Assist COUNTY in entering patient data in the Training Domain.
- 2. Create scripts to assist in electronically loading certain patient data.
- 3. Run refresh scripts in the Training Domain in order to refresh the Training Domain after training classes.

### Deliverable 6.4.4: Completed Creation of Training Data for the Phase 1 System

CONTRACTOR shall complete the creation of training data as described in Subtask 6.4.4 (Create Training Data for the Phase 1 System) and shall certify in writing that all such work has been successfully performed.

#### Subtask 6.5: Prepare Reference Documentation for the Phase 1 System

CONTRACTOR shall prepare reference Documentation for the as-built Phase 1 System consisting of all as-built Phase 1 System Application Software modules and Interfaces. Such Documentation shall, without limitation, provide COUNTY with a comprehensive reference source of System functionality and data definitions in the form of CONTRACTOR's Change Management Artifact Templates (CMATs) approved by COUNTY, Cerner Millennium Support Guides, design decision matrices, CCL Reports, Discern Reports, and as otherwise provided in MethodM Online. In the event that no CMAT exists that accurately reflects the as-built, Tailored System, CONTRACTOR's

Project Director and COUNTY's Project Director will collaborate to define reference Documentation for the as-built System that is acceptable to COUNTY. CONTRACTOR shall provide electronic links or access from the Phase 1 System and each Phase 1 System Application Software module or Interface to online help and shall assist COUNTY in the use of these resources.

#### Deliverable 6.5: Reference Documentation for the Phase 1 System

CONTRACTOR shall provide access to COUNTY to comprehensive reference Documentation as described in Subtask 6.5. CONTRACTOR shall deliver reference Documentation in the formats and using the methods defined in the Agreement and in the introductory section to this Statement of Work, according to the provisions of Subparagraph 4.6 of the body of the Agreement. CONTRACTOR shall deliver electronic links or access to online help and Documentation from the Phase 1 System as well as each Phase 1 System Application Software module and Interface.

#### Subtask 6.6: Conduct User Acceptance Testing of the Phase 1 System

Following successful performance of all CONTRACTOR testing of the Phase 1 System as described in this Statement of Work, CONTRACTOR shall actively support COUNTY in the conduct of User Acceptance Testing of the Phase 1 System as described in Subparagraph 9.3 (User Acceptance Tests) of the body of the Agreement, including without limitation providing all consultation and assistance requested by COUNTY.

Consistent with the provisions of Exhibit D (Service Level Agreement) CONTRACTOR shall create and provision a Certification Domain for User Acceptance Testing of such Optional Phase System.

COUNTY will perform User Acceptance Testing of the Phase 1 System as described in Subparagraph 9.3 (User Acceptance Tests) of the body of the Agreement based upon Integration Test scripts approved by COUNTY as part of Deliverable 6.2.1, as well as additional test scripts prepared by COUNTY in its sole discretion. COUNTY will conduct User Acceptance Testing of the Phase 1 System as installed, tested, built, and certified by CONTRACTOR under TASK 11 for the Production Domain. Scripts shall generally consist of all defined input and expected output results for each function and Interface transaction based on the Specifications.

COUNTY will document test results consisting of all Deficiencies discovered during testing. COUNTY will identify, track, and report Deficiencies detected during User Acceptance Testing in discrepancy reports.

CONTRACTOR shall correct all Deficiencies in the Phase 1 System identified by COUNTY and as otherwise set forth in Subparagraph 9.4 (Failed Testing) of the body of the Agreement. In addition to taking corrective action, CONTRACTOR shall provide required support to COUNTY acceptance testers in the operation of the Phase 1 System. Following corrective action by CONTRACTOR, COUNTY will continue testing the System in the Production Domain in the same state until the Phase 1 System has been successfully User Acceptance Tested and is ready for transition to Production Use, as determined in accordance with Subparagraph 2.4 (Approval of Work) and Subparagraph 9.4 (Failed Testing) of the body of the Agreement.

#### Deliverable 6.6: Successfully Conducted User Acceptance Testing of the Phase 1 System

COUNTY will conduct, with active support from CONTRACTOR, User Acceptance Tests of the Phase 1 System. CONTRACTOR's support to COUNTY in the conduct of User Acceptance Testing shall include, without limitation, providing test scripts used in Integration Testing, successfully performing all required corrective action to resolve Deficiencies in the Phase 1 System identified by COUNTY in discrepancy reports prepared during testing, and assisting COUNTY acceptance testers in the operation of the Phase 1 System, each Phase 1 System Application Software module, Interfaces, and clinical and business processes.

# Subtask 6.7: Implement the Phase 1 System for Production Use at all COUNTY Facilities

CONTRACTOR shall implement the Phase 1 System for Production Use at all COUNTY Facilities. CONTRACTOR shall make the Phase 1 System fully operational and in Production Use at all COUNTY Facilities. CONTRACTOR shall provide as-needed support for COUNTY conversion to Production Use at all COUNTY Facilities, as well as two CONTRACTOR staff resources assigned to cutover support at each COUNTY Facility and adequate support staffing at the CTC for the two-week cutover period or as specified in the PCD, and adequate support staffing at the CTC.

#### Deliverable 6.7: Production Use of the Phase 1 System at all COUNTY Facilities

CONTRACTOR shall deliver the fully operational Phase 1 System in Production Use at all COUNTY Facilities.

# Subtask 6.8: Conduct Post-Implementation System Review for the Phase 1 System

Following implementation of Production Use of the Phase 1 System at all COUNTY Facilities, CONTRACTOR shall collect and evaluate operational results to assess the success and shortcomings of the System implementation efforts. CONTRACTOR shall submit the Post-Implementation Review Report to the COUNTY Project Director to give COUNTY feedback on the implementation process of the Phase 1 System. This report shall evaluate the Phase 1 System cutover, conversion, and implementation process and shall provide feedback on the following: (a) User and organizational satisfaction; (b) identification of necessary process workflow enhancement concerns/potential; (c) CONTRACTOR recommended workflow practice effectiveness and adoption; (d) System performance concerns; and (e) short and long term planning goals.

### Deliverable 6.8: Post-Implementation Review Report for the Phase 1 System

CONTRACTOR shall deliver a Post-Implementation Review Report that contains the results of the work performed in Subtask 6.8.

# Subtask 6.9: Maintain Production Use of Phase 1 System for Thirty (30) Consecutive Days with No Deficiencies at all COUNTY Facilities

The Phase 1 System shall be maintained in Production Use at all COUNTY Facilities with no material Deficiencies, as set forth in Subparagraph 9.1 (General) of the body of the Agreement, for thirty (30) consecutive days subsequent to COUNTY's written ap-

proval of Deliverable 6.7 (Production Use of Phase 1 System at all COUNTY Facilities) and as specified in Exhibit D (Service Level Agreement).

# Deliverable 6.9: Production Use of Phase 1 System for Thirty (30) Consecutive Days with No Deficiencies at all COUNTY Facilities

The Phase 1 System shall operate in Production Use at all COUNTY Facilities with no material Deficiencies, as set forth in Subparagraph 9.1 (General) of the body of the Agreement, for thirty (30) consecutive days subsequent to COUNTY's written approval of Deliverable 6.7 (Production Use of Phase 1 System at all COUNTY Facilities).

# TASK 7: OPTIONAL PHASE SYSTEM APPLICATION SOFTWARE DEVELOPMENT

Upon full execution of an Amendment under Subparagraph 6.3 of the body of the Agreement with respect to an Optional Phase System, CONTRACTOR shall construct and implement such Optional Phase System in this Task.

Each Optional Phase System shall include at least one of the following Application Software modules and Interfaces:

- 1. Telemedicine
- 2. 724Access Solution (Optional Phase System, but detailed task described in TASK 8)
- 3. Enterprise Master Person Index (EMPI)
- 4. PowerInsight
- 5. PharmNet (Outpatient Pharmacy)
- 6. CareAdmin
- 7. Radiology Dictation
- 8. eSignature (Patient Electronic Signature)
- 9. Cerner Picture Archiving and Communication System (PACS)
- 10. Financials
- 11. Millennium LDAP Authentication with Pass-through
- 12.
- 13. Each Interface as defined in Attachment D (PEMRS Interfaces) to this Statement of Work as an Optional Phase System Interface

CONTRACTOR shall design and build each Application Software module included in each Optional Phase System consistent with the Specifications and the Agreement. CONTRACTOR shall test such Application Software modules included in each Optional Phase System as described in this Statement of Work.

#### Subtask 7.0: Update the PCD, Exhibit G (PEMRS Assessment) and its attachments, the Onsite Workflow Assessment (OWA), the Conceptual Design Document, the Specifications, and Exhibit D (Service Level Agreement), Specified Hardware and Operating Software, and Interfaces, for each Optional Phase System

Prior to the implementation of each Optional Phase System, COUNTY will provide the objectives, additional features and functional requirements and expectations for the Optional Phase System. CONTRACTOR shall update the PCD, Exhibit G (PEMRS Assessment) and its attachments, Onsite Workflow Assessment (OWA), Conceptual De-

sign Document, the Specifications, Exhibit D (Service Level Agreement)), Specified Hardware and Operating Software, and Interfaces for the Optional Phase System. To the extent feasible, as approved by the COUNTY's Project Director and the CONTRACTOR's Project Director, CONTRACTOR shall incorporate findings, conclusions and recommendations from Deliverable 6.8 (Post-Implementation Review Report for the Phase 1 System), in said updates. COUNTY will review and update the Specifications as needed to support the Optional Phase System. COUNTY will assemble or reassemble as appropriate a team of subject matter experts, technology support staff, project management staff, and super-Users to work with CONTRACTOR during the implementation of each Optional Phase.

# Subtask 7.0.1: Revise and Update the PCD to Incorporate each Optional Phase System

For each Optional Phase System, CONTRACTOR shall review, document, clarify and refine all project goals and the assignment of goals to project resources for such Optional Phase System. CONTRACTOR shall present such goals to the PLT. This process shall ensure that all involved parties have clearly understood and agreed upon all goals of the Optional Phase System and COUNTY responsibilities for governance and participation in the Optional Phase System. CONTRACTOR shall update the PCD to address, without limitation, the following:

- 1. The shared vision for CONTRACTOR / COUNTY relationship and the strategic goals of the Optional Phase System.
- 2. The Optional Phase System scope, phasing, and objectives.
- 3. The expected roles and responsibilities of CONTRACTOR and COUNTY project organizations and a communication strategy for sharing the context and vision of the Optional Phase System to the team members.
- 4. The composition of the Optional Phase System project team and how the project team shall communicate with and collaborate with components of project governance consisting of the PLT and various workgroups.
- 5. The composition of expected COUNTY's support resources and their interaction with CONTRACTOR's support resources.
- 6. The schedule of events to be held both at COUNTY Facilities and at CONTRACTOR's facilities for the purposes of joint design, Tailoring, development, and build of PEMRS, all Prototypes, and expectations for COUNTY participation in those events.
- 7. The Optional Phase System project organization and the roles and responsibilities of the project team members.
- 8. The Optional Phase System Specified Hardware and Operating Software
- The Optional Phase System hosting strategy, including COUNTY's election of whether to apply CONTRACTOR's Remote Hosting Services to the Optional Phase System.
- 10. The Optional Phase System design/build strategy.
- 11. The Optional Phase System technology strategy.
- 12. The Optional Phase System project communication plan.

- 13. The Optional Phase System training strategy for COUNTY's staff, trainers and Users, based on COUNTY's requirements and CONTRACTOR's Optional Phase System and training approach.
- 14. The Optional Phase System security strategy and requirements, including physical, administrative and technical elements and the divisions of security roles and responsibilities between CONTRACTOR and COUNTY.
- 15. The detailed Optional Phase System project plan including, without limitation, start and end dates for all Tasks and Subtasks, work breakdown structure, Tasks dependencies, and assignments by Tasks and Subtasks within the MethodM framework.
- 16. The Optional Phase System testing strategy for all levels of testing.

CONTRACTOR shall with respect to the Optional Phase System specifically address each Optional Phase System Task and Subtask to be performed, the order in which CONTRACTOR shall perform the Tasks and Subtasks and the order in which CONTRACTOR shall produce the Deliverables specified in this Statement of Work in accordance with the Agreement within the MethodM framework. For each Task and Subtask CONTRACTOR shall define and describe in detail the recommended involvement of COUNTY's staff that is necessary for successful completion of such Task or Subtask. .CONTRACTOR shall formally present the updated PCD to the PLT.

# Deliverable 7.0.1: Revised and Updated Project Control Document (PCD) for each Optional Phase System

The updated PCD shall document, without limitation, the components listed in Subtask 7.0.1 as updated for each Optional Phase System described above.

#### <u>Subtask 7.0.2: Update Exhibit G (PEMRS Assessment) and its attachments, the</u> <u>Onsite Workflow Assessment (OWA), the Conceptual Design Document, the</u> <u>Specifications, Exhibit D (Service Level Agreement), and the Specified Hardware</u> <u>and Operating Software, for each Optional Phase System</u>

For each Optional Phase System, CONTRACTOR shall review and update the contents of Deliverable 1.2 (Confirmed and Updated PEMRS Assessment). This Subtask shall determine what changes are needed to the PEMRS Domains and Application and Third Party Software architecture in order to support the Optional Phase System. As part of this Subtask, CONTRACTOR shall identify impact points that may affect the timely and successful implementation of this Optional Phase System, including, but not limited to, any issues associated with COUNTY devices, LAN/WAN, available bandwidth, operations management, technology hosting services, COUNTY staffing and operations, and the help desk, whether supplied by COUNTY, CONTRACTOR, or a third party. CONTRACTOR shall also specify recommended corrective action to be taken by COUNTY (which recommendations shall be subject to the provisions of Subparagraph 10.1.D of the body of the Agreement).

CONTRACTOR shall review and update the PEMRS Conceptual Design Document (Deliverable 3.3) to include each Optional Phase System. Through this process, CONTRACTOR shall identify all Tailoring of such Optional Phase System that will be necessary to meet Specifications. This process shall provide review of the Agreement

and the Phase 1 System together with this Statement of Work, the Onsite Workflow Assessment (OWA), and other resources applicable to CONTRACTOR's understanding of the Specifications for the Optional Phase System. CONTRACTOR shall analyze these sources, augment and clarify their contents where necessary, and map the requirements to the Optional Phase System capabilities. Based upon a review of then current COUNTY clinical and business processes as practiced with the Phase 1 System, and working with COUNTY participants as documented in the PCD, CONTRACTOR shall identify opportunities for improved quality, effectiveness, or efficiency available to COUNTY from modifying such clinical and business processes and/or procedures during implementation of the Optional Phase System. When possible, CONTRACTOR shall identify and recommend such changes of clinical and business processes which, if implemented, would enable more efficient and effective implementation of the Optional Phase Systems with minimal Tailoring consistent with CONTRACTOR's design standards such as, but not limited to, START Content. CONTRACTOR shall also identify components and design elements or Tailoring of JHIS that can be applied to the Optional Phase System with minimum effort. CONTRACTOR shall incorporate these clinical and business processes and procedures improvements in the Conceptual Design Document.

CONTRACTOR shall review and update as needed for each Optional Phase System, the Remote Hosting Services Technical Specifications (as defined in Attachment A of this Statement of Work and further described in Exhibit D (Service Level Agreement)).

CONTRACTOR shall update the training program and deliver training classes and Documentation as needed for each Optional Phase System consistent with the classes described in Attachment E (PEMRS Training) of this Statement of Work.

Without limiting any of CONTRACTOR's obligations as set forth in the Agreement, including, without limitation, in Paragraph 21 (Compliance with Applicable Law) of the body of the Agreement, COUNTY's Project Director and COUNTY's Project Manager, on the one hand, and CONTRACTOR's Project Director and CONTRACTOR's Project Manager, on the other hand, will use reasonable efforts to advise one another of special Los Angeles County, California State, or United States regulatory requirements of which such individuals are aware that apply in the correctional health care environment as such regulatory requirements may impact clinical or business process details for each Optional Phase System. Such regulatory considerations shall include, without limitation, the Health Insurance Portability and Accountability Act of 1996 (HIPAA), as well as all rules and regulations promulgated thereunder. Titles 15 and 24 of the California Code of Regulations, applicable published standards of the National Commission on Correctional Health Care (NCCHC), and standards developed in connection with electronic health record certification and system security by the Office of the National Coordinator on Health Information Technology (ONCHIT), the Commission for Certification of Health Information Technology (CCHIT), the Drug Enforcement Agency (DEA), the Centers for Medicare & Medicaid Services (CMS), the National Institute of Standards and Technology (NIST), and/or the State of California Health and Human Services Agency.

CONTRACTOR shall define and document in workflow diagrams clinical and business process details depicting the expected processes following implementation of each Optional Phase System. CONTRACTOR shall incorporate in the Conceptual Design Doc-

ument clinical and business process changes, interactions among the participating agencies and the impact of regulatory considerations. Where Interfaces are relevant to such interactions CONTRACTOR shall identify the Interface and explain how it affects the interactions in the Optional Phase System.

CONTRACTOR shall review with COUNTY the Conceptual Design Document resulting from Subtask 7.0.2 as well as the new clinical and business processes and an evaluation of their feasibility. Based upon the review, CONTRACTOR shall prepare updates to the Conceptual Design Document delivered under Deliverable 3.3. This document shall provide the basis for implementation of new clinical and business processes and any necessary Tailoring of each Optional Phase System to meet the Specifications.

# Deliverable 7.0.2: Updated Exhibit G (PEMRS Assessment) and its attachments, the Onsite Workflow Assessment (OWA), Specifications, Exhibit D (Service Level Agreement), Specified Hardware and Operating Software, and Conceptual Design Document for each Optional Phase System

These updated documents provide the design of each Optional Phase System. For each Optional Phase System, they shall document all of the findings of Subtask 7.0.1 and 7.0.2 including, without limitation, the following components:

- 1. Future state clinical and business process workflow diagrams as they apply to JCHS, JJMH and Probation for such Optional Phase System.
- 2. Data model and associated data Documentation for the future state clinical and business processes for such Optional Phase System.
- 3. Interfaces as relevant to the clinical and business processes and their interactions for such Optional Phase System.
- 4. Updates to Exhibit G (PEMRS Assessment) and its attachments necessitated by the conceptual design for such Optional Phase System.
- 5. Updates to Exhibit D (Service Level Agreement) as it relates to the Maintenance and Support, Remote Hosting, Upgrade Implementation, and application Management Services where applicable to such Optional Phase System.
- 6. Personnel needs and human resources strategy for such Optional Phase System.
- 7. Privacy and security strategy for such Optional Phase System.
- 8. Future state clinical and business processes Implementation Plan for such Optional Phase System.
- 9. How the design fulfills the Specifications for such Optional Phase System.

Upon approval by COUNTY in accordance with Subparagraph 2.4 of the body of the Agreement, updates to Exhibit G (PEMRS Assessment) and its attachments shall automatically attach to and supplement Exhibit G (PEMRS Assessment) and its attachments as an additional attachment thereto. The updated Exhibit D (Service Level Agreement) shall automatically attach to and supplement Exhibit D (Service Level Agreement).

### Subtask 7.0.3: Update Interface Design for each Optional Phase System

For each Optional Phase System, CONTRACTOR shall review, define, and document the Interface requirements for both medical devices Interfaces and external systems In-

terfaces required to exchange data with such Optional Phase System as identified in the updated Conceptual Design Document delivered in Subtask 7.0.2 of this Statement of Work. CONTRACTOR shall document Specifications in adequate detail to construct and implement both sides of each external systems Interface and each required external system Interface transaction. CONTRACTOR shall include design Specifications for the external system side of the transaction whether inbound or outbound in sufficient detail for such Interfaces to be built, tested, and implemented by COUNTY. The work under this Subtask will be conducted with COUNTY participation as described in the introductory paragraphs of TASK 5.

### Deliverable 7.0.3: Updated Interface Design for each Optional Phase System

For each Optional Phase System, CONTRACTOR shall prepare and deliver the updated Interface design as described in Subtask 7.0.3.

#### Subtask 7.1: Develop and Install each Optional Phase System

For each Optional Phase System, CONTRACTOR shall perform Subtasks 7.1.1, 7.1.2, and 7.1.3. CONTRACTOR shall design, build, and test, all as described in this Statement of Work and in accordance with the MethodM processes, with COUNTY participation as indicated in Deliverable 7.0.1 (Revised and Updated PCD for each Optional Phase System) such Optional Phase System consistent with the Specifications and the Agreement, the approved Deliverable 7.0.2 (Updated Exhibit G (PEMRS Assessment) and its attachments, the Onsite Workflow Assessment (OWA), Specifications, Exhibit D (Service Level Agreement), Specified Hardware and Operating Software, and Conceptual Design Document for each Optional Phase System), and Deliverable 7.0.3 (Updated Interface Design for each Optional Phase System). CONTRACTOR shall design, test, integrate, and implement each Optional Phase System in the order of or in combinations approved in the updated Conceptual Design Document (Deliverable 7.0.2) and in accordance with the updated PCD (Deliverable 7.0.1). When applicable, CONTRACTOR shall Tailor each Optional Phase System as necessary for the System to perform in accordance with the Specifications and the Agreement. When applicable, CONTRACTOR shall incorporate content, subscriptions, or ancillary content in the design and build of each Optional Phase System. CONTRACTOR shall test each Optional Phase System consistent with Paragraph 9 (Acceptance of System by COUNTY) of the body of the Agreement and this Statement of Work. CONTRACTOR shall organize, schedule, manage and conduct joint COUNTY and CONTRACTOR events defined in the PCD and required to complete the design, build, test and implementation of each Optional Phase System in accordance with the MethodM processes accepted in the updated PCD (Deliverable 7.0.1). CONTRACTOR shall report on the results of such events and recommend any changes to COUNTY processes that are necessary to improve the Tailoring processes consistent with the Specifications and the Agreement.

### Subtask 7.1.1: Design each Optional Phase System

For each Optional Phase System, CONTRACTOR shall design, and document such Optional Phase System based upon the Specifications, with the input and participation of COUNTY in accordance with the MethodM processes and the updated PCD. CONTRACTOR shall Tailor such Optional Phase System in accordance with the Specifications. CONTRACTOR shall incorporate in the design of such Optional Phase Sys-

tem required Interfaces as defined in Subtask 7.0.3 and consistent with the updated Conceptual Design Document. This Subtask includes, but is not limited to, the design of core data elements and tables, reference tables, edit criteria, required Interfaces, System Test plans and scripts, modification of clinical and business processes, and all other entities associated with the design for this Optional Phase System and/or its Interfaces.

For each Optional Phase System, CONTRACTOR shall document the design, database, and Tailoring decisions using standardized System Documentation tools as specified in this Statement of Work or according to CONTRACTOR Documentation standards approved in writing by the COUNTY Project Director. CONTRACTOR shall Tailor and present to Users as a Prototype the database, business rules, screens, and reports of such Optional Phase System, and shall incorporate User feedback from the Prototype sessions in the design. CONTRACTOR and COUNTY shall mutually arrange and schedule design review sessions approved in the updated PCD in accordance with the MethodM event process or designated in writing by COUNTY Project Director.

CONTRACTOR shall identify and document the impact of the design on COUNTY's current clinical and business processes and the expected modifications of such clinical and business processes under Optional Phase System operation, including without limitation interactions among clinical processes and correctional processes as identified in the Conceptual Design Document and in Exhibit G (PEMRS Assessment) and its attachments. CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully designed the Optional Phase System and Interfaces relevant to such Optional Phase System.

CONTRACTOR shall conduct training in process demonstration and database table Tailoring as relevant to PEMRS-specific user-defined database specifications based on Deliverable 7.0.2 (Updated Conceptual Design Document and the results of the updated OWA. Specific classes and descriptions of such classes are identified in Attachment E (PEMRS Training) to this Statement of Work.

### Deliverable 7.1.1: Design Documentation for each Optional Phase System

CONTRACTOR shall deliver to COUNTY all design Documentation for each Optional Phase System. CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully completed the design Documentation and that it is consistent with the approved Deliverables 7.0.2 and 7.0.3 and meets the Specifications. CONTRACTOR shall deliver training classes and training materials consistent with the classes described in Attachment E (PEMRS Training) to this Statement of Work and certify in writing that all training as described in Subtask 7.1.1 (Design each Optional Phase System) has been successfully completed.

### Subtask 7.1.2: Build and Unit Test each Optional Phase System

For each Optional Phase System, CONTRACTOR shall build, validate and demonstrate to COUNTY such Optional Phase System based upon the final design resulting from the Prototype process concluded and documented in Deliverable 7.1.1 (Design Documentation for each Optional Phase System).

CONTRACTOR shall conduct training for COUNTY participants in System validation. Specific classes and descriptions of such classes are identified in Attachment E (PEMRS Training) of the Statement of Work.

For each as built Optional Phase System, CONTRACTOR shall develop test plans and scripts for such Tailored Application Software module. With CONTRACTOR's expert review, guidance and assistance, COUNTY will review, suggest any necessary revisions and validate the test plans and scripts, in each case, as they relate to COUNTY-specific Tailoring. CONTRACTOR, with COUNTY's reasonable assistance as requested, shall modify the test scripts as required and shall thoroughly test such Optional Phase System as part of this process, including, without limitation, Unit Testing of applicable Interfaces, but without integration with the Phase 1 System or other Optional Phase Systems. CONTRACTOR shall incorporate in the construction of this Optional Phase System required Interfaces as defined in Task 9 (Interface Construction and Testing) and in Deliverable 7.0.3 (Updated Interface Design for each Optional Phase System in accordance with the MethodM processes, with CONTRACTOR's expert review, assistance, and guidance. The results of all testing shall be documented in accordance with the MethodM processes.

CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully built and that CONTRACTOR and COUNTY have successfully tested such Optional Phase System in accordance with the Specifications and the design approved in Deliverable 7.1.1 (Design Documentation for each Optional Phase System) for such Optional Phase System.

### Deliverable 7.1.2: Built and Unit Tested each Optional Phase System

CONTRACTOR shall demonstrate each Optional Phase System to COUNTY. CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully built such Optional Phase System completely and accurately based upon the Documentation in Deliverable 7.1.1 (Design Documentation for each Optional Phase System) and that CONTRACTOR and COUNTY have successfully tested such Optional Phase System as described in Subtask 7.1.2. The results of tests shall be documented in accordance with the MethodM processes.

### Subtask 7.1.3: System Test each Optional Phase System

For each as-built Optional Phase System, CONTRACTOR shall develop System Test plans and scripts for such Tailored Application Software module. With CONTRACTOR's expert review, guidance and assistance, COUNTY will review, suggest any necessary revisions and validate the test plans and scripts, in each case, as they relate to COUNTY-specific Tailoring. CONTRACTOR, with COUNTY's reasonable assistance as requested, shall modify the test scripts as required and shall thoroughly System Test each Optional Phase System to ensure that all components of this System function as designed. The System Test shall ensure that all software code, data structures, departmental workflows, policies and procedures, and other Tailoring specific to such Optional System, operate in a manner consistent with the design. Following CONTRACTOR testing, COUNTY will execute the test scripts in accordance with MethodM, with

CONTRACTOR's expert review, assistance, and guidance. The results of all System Testing shall be documented in accordance with the MethodM processes.

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully System Tested such Optional Phase System and that it functions in accordance with the Specifications and the Agreement.

#### Deliverable 7.1.3: System Tested each Optional Phase System

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully System Tested all components of each Optional Phase System that CONTRACTOR has corrected all identified Deficiencies and that such Optional Phase System functions in accordance with the Specifications and the Agreement. CONTRACTOR shall deliver Documentation of such Optional Phase System as designed, built and tested.

#### Subtask 7.2: Plan and Perform Integration Tests for each Optional Phase System

### Subtask 7.2.1: Plan Integration Tests for each Optional Phase System

For each as-built Optional Phase System, all other then-implemented Optional Phase Systems, and the Phase 1 System, CONTRACTOR shall review and revise as needed the Integration Testing strategy documented in the updated PCD. CONTRACTOR shall develop a test plan consisting of test scripts and scenarios that take into account departmental workflows, policies and procedures and other Tailoring and that shall be used in the conduct of the Integration Tests under Subtask 7.2.2. With CONTRACTOR's expert review, guidance and assistance, COUNTY will review, suggest any necessary revisions and validate the test plans and scripts, in each case, as they relate to COUNTY-specific Tailoring. CONTRACTOR, with COUNTY's reasonable assistance as requested, shall modify the test scripts as required and scripts shall generally consist of all defined input and expected output results for each function based on the Specifications. The test plan shall encompass all testing across and between such Optional Phase System, all other then-implemented Optional Phase Systems, and the Phase 1 System, required to ensure that the System operates in an integrated fashion and integrates with pass-through information from and to the Interface systems.

# Deliverable 7.2.1: Integration Test Plans and Test Scripts for each Optional Phase System

CONTRACTOR shall deliver an update to the Integration Testing strategy documented in the Project Control Document. CONTRACTOR shall also deliver a test plan consisting of test scripts and scenarios that shall be used in the conduct of the Integration Tests under Subtask 7.2.2. The test plan shall be developed and validated as described under Subtask 7.2.1.

### Subtask 7.2.2: Perform Integration Tests for each Optional Phase System

CONTRACTOR shall conduct Integration Testing for each as-built Optional Phase System. Following CONTRACTOR testing, COUNTY will execute the test scripts in accordance with MethodM, with CONTRACTOR's expert review, assistance, and guidance. CONTRACTOR shall successfully perform all required corrective action to ensure the

successful operation and interoperability of such Optional Phase System, all other thenimplemented Optional Phase Systems, and the Phase 1 System and all Interfaces. The results of all Integration Testing shall be documented in accordance with the MethodM processes. CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully conducted all Integration Testing for each Optional Phase System and that CONTRACTOR has successfully completed all required corrective action.

# Deliverable 7.2.2: Successful Integration Test Results for each Optional Phase System

CONTRACTOR shall successfully perform all required corrective action to ensure the successful operation and interoperability of each Optional Phase System, all other thenimplemented Optional Phase Systems, and the Phase 1 System. The results of all Integration Testing shall be documented in accordance with the MethodM processes. CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully completed Integration Testing for each Optional Phase System and that CONTRACTOR has successfully completed all required corrective action.

### Subtask 7.3: Prepare for Optional Phase System Cutover and Conversion

#### <u>Subtask 7.3.1: Develop System Cutover and Conversion Plan for each Optional</u> <u>Phase System</u>

CONTRACTOR shall develop a System Cutover and Conversion Plan for each Optional Phase System that identifies the steps required to load existing automated and manual data and to perform other activities required as part of the System cutover and conversion process, including without limitation conversion to new or modified clinical and business processes, policies and procedures as well as conversion of any chart components that remained manual following implementation of the Phase 1 System. The plan shall include, without limitation the unique conversion requirements of each Optional Phase System, including without limitation, conversion of automated and manual data required for production conversion and transfer to Production Domain of successful User Acceptance Testing, and transition, when applicable to such Optional Phase, to CONTRACTOR's Remote Hosting Services, System Maintenance and Support, and Application Management Services as provided in Exhibit D (Service Level Agreement) for such Optional Phase System.

Where necessary and as specified in the updated Conceptual Design Document for such Optional Phase, the Plan shall include additionally required actions to provide for local COUNTY hosting and related support services for such Optional Phase.

CONTRACTOR shall define the timing of conversion programs and shall provide an orientation to COUNTY's conversion support staff. CONTRACTOR shall document in the plan the cutover support required by CONTRACTOR and COUNTY during the transition from current manual or automated clinical and business processes to Production Use of the System.

CONTRACTOR shall also define in the plan a mechanism to verify the plan by conducting, with participation and support by COUNTY as provided in the updated PCD and otherwise in the Agreement, desk exercises, plan reviews, walkthroughs, checklist con-

firmations (peripheral device readiness, network equipment readiness, COUNTY technical staffing, provisioning and training, site visits, COUNTY circuit stressors and bandwidth confirmation, data transfer and conversion, chart imports, staff movement and redeployment, communication plans, contingency plans, emergency response, CTC operations, and intra- and inter-CTC failover), and any other plan review that can prudently be exercised in advance to minimize the risk of conversion failure.

# Deliverable 7.3.1: System Cutover and Conversion Plan for each Optional Phase System

CONTRACTOR shall deliver the System Cutover and Conversion Plan for each Optional Phase System that identifies the steps required to perform the System cutover and conversion process and how the COUNTY and CONTRACTOR resources will be deployed during the cutover. CONTRACTOR shall incorporate in the Deliverable all of the results of Subtask 7.3.1.

#### <u>Subtask 7.3.2: Prepare for System Cutover and Conversion of each Optional</u> <u>Phase System</u>

CONTRACTOR, with COUNTY participation in accordance with the updated PCD, shall verify the System Cutover and Conversion Plan as provided in Subtask 7.3.1 (Develop System Cutover and Conversion Plan for each Optional Phase System) to ensure CONTRACTOR and COUNTY readiness for actual System cutover required for transition to Production Use of each Optional Phase System in the Production Domain.

CONTRACTOR and COUNTY shall each identify required plan corrections and all actions required to perform the plan during the conversion and cutover process. CONTRACTOR shall successfully correct the plan, inventory all necessary COUNTY and CONTRACTOR corrective action, and obtain the written approval of COUNTY's Project Director, which may be granted or withheld in his sole discretion.

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully performed all necessary corrective actions to perform the plan required by Deliverable 7.3.1 (System Cutover and Conversion Plan for each Optional Phase System) and that such Optional Phase System is ready for the System cutover and conversion.

# Deliverable 7.3.2: Verified System Cutover and Conversion Plan for each Optional Phase System

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY, as well as the Optional Phase System, are ready for cutover and conversion.

### Subtask 7.4: Develop and Deliver User Training for each Optional Phase System

For Optional Phase Systems for which COUNTY has elected Remote Hosting Services, CONTRACTOR shall create and provision a Training Domain for COUNTY User training consistent with the provisions of Exhibit D (Service Level Agreement).

# Subtask 7.4.1: Develop Training Classes and Training Materials for each Optional Phase System

For each Optional Phase System, CONTRACTOR shall review and confirm the User Training Strategy developed as part of the updated PCD. CONTRACTOR shall develop

Learning Plan and Solution Training Guides for the as-built Optional Phase System, and workflows. The Learning Plan and Solution Training Guides shall provide COUNTY trainers with a comprehensive presentation of the functionality and use of the Optional Phase System within clinical and business operations of Probation, JCHS, and JJMH. The Solution Training Guides shall provide COUNTY trainers with techniques for delivering the training to Users. The Learning Plan shall define training approach, tools, and, where applicable, facility requirements. CONTRACTOR shall additionally provide examples of end user training with respect to all or any portion of the modules included in the Optional Phase System that COUNTY trainers may re-use or modify in creating User training manuals and guides, or, alternatively, named references to clients from whom COUNTY may request such examples. CONTRACTOR shall consult with COUNTY trainers as needed throughout COUNTY's development of User training manuals and guides. CONTRACTOR shall produce and Tailor available web based training modules that are relevant to the operation and use of such Optional Phase System in the PEMRS operational environment consistent with the updated PCD and the updated Conceptual Design Document.

# Deliverable 7.4.1: Documented Training Classes and Training Materials for each Optional Phase System

CONTRACTOR shall deliver training materials for each Optional Phase System that consist of the results of Subtask 7.4.1.

# Subtask 7.4.2: Train the COUNTY Trainers for each Optional Phase System

CONTRACTOR shall deliver training classes and training materials to COUNTY system analysts and subject matter experts, as designated by COUNTY's Project Director, for each as-built Optional Phase System and Interfaces. CONTRACTOR shall present the training classes and materials in a minimum of one (1) training session per Optional Phase System, adequate in duration to cover all functionality and expected clinical and business process changes. CONTRACTOR shall conduct training in a manner designated by COUNTY's Project Director and documented in Deliverable 7.4.1. The training materials and classes shall give COUNTY trainers sufficient instruction in the use of each as-built Optional Phase System in the Probation, JCHS, and JJMH operating environment in order to prepare them to train Users in the use of each Optional Phase System as Tailored to meet the Specifications and support the expected clinical and business processes. CONTRACTOR shall deliver training classes and training materials consistent with Attachment E (PEMRS Training) of this Statement of Work.

### Deliverable 7.4.2: Trained COUNTY Trainers for each Optional Phase System

CONTRACTOR shall deliver the training sessions and materials as described in Subtasks 7.4.1 (Develop Training Classes and Training Materials for each Optional Phase System) and 7.4.2 (Train the COUNTY Trainers for each Optional Phase System) and shall certify in writing that all such training has been successful.

#### Subtask 7.5: Prepare Reference Documentation for each Optional Phase System

CONTRACTOR shall prepare reference Documentation for each as-built Optional Phase System consisting of all as-built Optional Phase System Components and Interfaces. Such Documentation shall, without limitation, provide COUNTY with a compre-

hensive reference source of as-built System functionality and data definitions, in the form of Tailored Cerner Millennium Support Guides, design decision matrices, CCL Reports, Discern Reports, and as otherwise provided in MethodM Online. CONTRACTOR shall provide electronic links or access from each Optional Phase System and Interface to online help and shall assist COUNTY in the use of these resources.

#### Deliverable 7.5: Reference Documentation for each Optional Phase System

CONTRACTOR shall provide access to COUNTY to comprehensive reference Documentation of each Optional Phase System, and Interfaces as described in Subtask 7.5. CONTRACTOR shall deliver reference Documentation in the formats and using the methods defined in the Agreement and in the introductory section to this Statement of Work, according to the provisions of Subparagraph 4.6 of the body of the Agreement. CONTRACTOR shall deliver electronic links or access to online help and Documentation from the Optional Phase System as well as each Optional Phase System Application Software module and Interface.

#### Subtask 7.6: Conduct User Acceptance Testing of each Optional Phase System

Following successful performance of all CONTRACTOR testing of each Optional Phase System as described in this Statement of Work, CONTRACTOR shall actively support COUNTY in the conduct of User Acceptance Testing of such Optional Phase System as described in Subparagraph 9.3 (User Acceptance Tests) of the body of the Agreement, including without limitation providing all consultation and assistance requested by COUNTY.

Consistent with the provisions of Exhibit D (Service Level Agreement) CONTRACTOR shall create and provision a Certification Domain for User Acceptance Testing of such Optional Phase System.

COUNTY will perform User Acceptance Testing of each Optional Phase System as described in Subparagraph 9.3 (User Acceptance Tests) of the body of the Agreement based upon Integration Test scripts approved by COUNTY as part of Deliverable 7.2.1 as well as additional test scripts prepared by COUNTY in its sole discretion. COUNTY will conduct User Acceptance Testing of each Optional Phase System as installed, built, tested, and certified by CONTRACTOR under TASK 11 for the Production Domain, whether such Optional Phase System uses the Remote Hosting Services or is hosted at COUNTY Facilities. Scripts shall generally consist of all defined input and expected output results for each function and Interface transaction based on the Specifications.

COUNTY will document test results consisting of all Deficiencies discovered during testing. COUNTY will identify, track, and report Deficiencies detected during User Acceptance Testing in Discrepancy Reports.

CONTRACTOR shall correct all Deficiencies in each Optional Phase System identified by COUNTY and as otherwise set forth in Subparagraph 9.4 (Failed Testing) of the body of the Agreement. In addition to taking required corrective action, CONTRACTOR shall provide required support to COUNTY acceptance testers in the operation of each Optional Phase System. Following corrective action by CONTRACTOR, COUNTY will continue testing the System in the Certification Domain in the same state until each Optional Phase System has been successfully User Acceptance Tested and is ready for

transition to Production Use as determined in accordance with Subparagraph 2.4 (Approval of Work) and Subparagraph 9.4 (Failed Testing) of the body of the Agreement.

# Deliverable 7.6: Successfully Conducted User Acceptance Testing of each Optional Phase System

COUNTY will conduct, with active support from CONTRACTOR, User Acceptance Tests of each Optional Phase System. CONTRACTOR's support to COUNTY in the conduct of User Acceptance Testing shall include, without limitation, providing test scripts used in Integration Testing, successfully performing all corrective action to resolve Deficiencies in such Optional Phase System identified by COUNTY in Discrepancy Reports prepared during testing, and assisting COUNTY acceptance testers in the operation of such Optional Phase System, Interfaces, and clinical and business processes.

# Subtask 7.7: Implement each Optional Phase System for Production Use at all COUNTY Facilities

CONTRACTOR shall implement each Optional Phase System for Production Use at all COUNTY Facilities. CONTRACTOR shall make each Optional Phase System fully operational and in Production Use at all COUNTY Facilities. CONTRACTOR shall provide as-needed support for COUNTY conversion to Production Use at all COUNTY Facilities, including without limitation CONTRACTOR staff resources assigned to cutover support at each COUNTY Facility for the two-week cutover period as specified in the updated PCD, and adequate support staffing at the CTC for each Optional Phase System using the Remote Hosting Services or at COUNTY Facilities for each Optional Phase System hosted at COUNTY Facilities.

# Deliverable 7.7: Production Use of each Optional Phase System at all COUNTY Facilities

CONTRACTOR shall deliver the fully operational Optional Phase System in Production Use at all COUNTY Facilities.

# Subtask 7.8: Conduct Post-Implementation Review for each Optional Phase System

Following implementation of Production Use of each Optional Phase System at all COUNTY Facilities, CONTRACTOR shall collect and evaluate operational results to assess the success and shortcomings of the System implementation efforts. CONTRACTOR shall submit the Post-Implementation Review Report to the COUNTY Project Director to give COUNTY feedback on the implementation process of such Optional Phase System. This report shall evaluate the Optional Phase System cutover, conversion, and implementation process and shall provide feedback on the following: (a) User and organizational satisfaction; (b) identification of necessary process workflow enhancement concerns/potential; (c) CONTRACTOR recommended workflow practice effectiveness and adoption; (d) System performance concerns; and (e) short and long term planning goals.

# Deliverable 7.8: Post-Implementation Review Report for each Optional Phase System

CONTRACTOR shall deliver a Post-Implementation Review Report that contains the results of the work performed in Subtask 7.8 (Conduct Post-Implementation Review for each Optional Phase System).

# Subtask 7.9: Maintain Production Use of each Optional Phase System for Thirty (30) Consecutive Days with No Deficiencies at all COUNTY Facilities

Each Optional Phase System, together with all other then-implemented Optional Phase Systems and the Phase 1 System, shall be maintained in Production Use at all COUNTY Facilities with no material Deficiencies, as set forth in Subparagraph 9.1 (General) of the body of the Agreement, for thirty (30) consecutive days subsequent to COUNTY's written approval of Deliverable 7.7 (Production Use of each Optional Phase System at all COUNTY Facilities) and as specified in Exhibit D (Service Level Agreement).

#### Deliverable 7.9: Production Use of each Optional Phase System for Thirty (30) Consecutive Days with No Deficiencies at all COUNTY Facilities

For each Optional Phase System, such Optional Phase System together with all other then-implemented Optional Phase Systems and the Phase 1 System, shall operate in Production Use at all COUNTY Facilities with no material Deficiencies, as set forth in Subparagraph 9.1 (General) of the body of the Agreement, for thirty (30) consecutive days subsequent to COUNTY's written approval of Deliverable 7.7 (Production Use of each Optional Phase System at all COUNTY Facilities).

#### TASK 8: DESIGN AND IMPLEMENTATION OF THE 724ACCESS SYSTEM

This Task encompasses the activities associated with the preparation, configuration, and implementation of the 724Access capability for PEMRS, supplied by CONTRACTOR and linked to the hosting operations at the CTC.

CONTRACTOR shall plan and deliver the 724Access system. CONTRACTOR and COUNTY shall collaborate on design and implementation of the 724Access function for the Phase 1 System and each Optional Phase System.

724Access is an Optional Phase System and requires an Amendment under Subparagraph 6.3 of the body of the Agreement prior to implementation thereof.

# Subtask 8.1: Document COUNTY's Technical Configuration for Use of 724Access Application Software Module

CONTRACTOR shall prepare a configuration and installation Specification that identifies the technical configuration required for COUNTY use of the 724Access for the Phase 1 System and if necessary, shall update such Specifications for each Optional Phase System. This Subtask includes, without limitation, the following activities:

- 1. Document the 724Access hardware and software for COUNTY execution(s) if not already provided as part of Exhibit G (PEMRS Assessment) and its attachments or Conceptual Design Document (Deliverable 3.3 of this SOW).
- 2. Document pre-installation planning for COUNTY use of 724Access at all COUNTY Facilities.
- 3. Document recommended COUNTY site preparation and equipment requirements.

- 4. Document connectivity requirements for integration of 724Access into the COUNTY's network as applicable.
- 5. Conduct a technical walk-through of COUNTY Facilities selected by the COUNTY's Project Director at his sole discretion, and provide written certification that COUNTY is prepared to Use the 724Access Application Software module in accordance with Specification at all COUNTY facilities.

COUNTY will collaborate with CONTRACTOR on this Subtask and will provide all necessary information, requested by CONTRACTOR, to support development of the CONTRACTOR's Specification for 724Access.

COUNTY will provide the Specified Hardware and Operating Software (as provided for in this Subtask 8.1) for the COUNTY's Use of the 724Access Application Software.

# Deliverable 8.1: Documented Technical Configuration and Plan for the COUNTY Use of the 724Access Application Software Module

CONTRACTOR shall document the CONTRACTOR's and COUNTY's technical environment required for 724Access as applicable for the then-current System at all COUNTY Facilities.

# Subtask 8.2: Install, Test and Certify CONTRACTOR-owned Hardware and Software for the 724Access Application Software modules

Unless already provided for in TASK 4 or TASK 11 of this SOW, CONTRACTOR shall acquire, install, test and re-test, in accordance with Subparagraph 9.2 (CONTRACTOR Tests) of the body of the Agreement, all hardware and software required for the 724Access Application Software module to operate. CONTRACTOR shall certify to COUNTY that the 724Access Application Software module is installed and operating in accordance with the Specifications documented as set forth in Deliverable 8.1.

CONTRACTOR shall certify that the hardware and software for the 724Access environment has been configured and tested in accordance with Specifications. This Report shall consist of the following:

- 1. A listing of the CONTRACTOR owned hardware and software for the 724Access Application Software module that has been installed including, without limitation, equipment type, model number, serial number, location, name, version number, and license number.
- 2. Certification that all COUNTY owned Specified Hardware and Operating Software for 724Access is operating properly in accordance with the Specifications.
- 3. Problem reporting and escalation procedures.

#### Deliverable 8.2 Certification of Hardware and Software for the 724Access Application Software Module

CONTRACTOR shall certify in writing that the 724Access COUNTY owned Specified Hardware and Operating Software and CONTRACTOR owned hardware and software is operating in accordance with the Specifications.

### Subtask 8.3: Training in 724Access Application Software Module

CONTRACTOR shall conduct training for COUNTY technical staff in the configuration of the 724Access Application Software module and in any necessary local support activities.

### Deliverable 8.3 Trained COUNTY Technical Staff

CONTRACTOR shall deliver training classes and training materials and certify in writing that all training as described in Subtask 8.3 has been successful.

#### Subtask 8.4: Preparation of System for 724Access Implementation

CONTRACTOR shall prepare the then-current System for 724Access implementation during Downtime periods when COUNTY has specified its required use.

- 1. CONTRACTOR shall create 724Access initiation scripts.
- 2. COUNTY will provide rack space as needed for CONTRACTOR owned equipment
- 3. COUNTY and CONTRACTOR will conduct functional testing to ensure that the 724Access Application Software module functions as specified.

### Deliverable 8.4: System Prepared for 724Access Implementation

Successful performance of Subtask 8.4 by CONTRACTOR, including, as applicable, performance of any required testing and delivery and installation of 724Access initiation scripts.

#### Subtask 8.5: 724Access Testing and Validation

CONTRACTOR shall develop test plans and scripts for the as-built 724Access System. With CONTRACTOR's expert review, guidance and assistance, COUNTY will review, suggest any necessary revisions and validate the test plans and scripts, in each case, as they relate to COUNTY-specific Tailoring. CONTRACTOR, with COUNTY's reasonable assistance as requested, shall modify the test scripts as required and shall thoroughly test the 724Access System to ensure that the 724access Application Software module and all Components function as designed. The test shall ensure that 724Access is initiated and available as specified for both planned and unplanned Downtime consistent with PEMRS workflows and in accordance with the Conceptual Design. Following CONTRACTOR testing, COUNTY will execute the test scripts in accordance with the MethodM processes, with CONTRACTOR's expert review, assistance, and guidance. The results of all testing shall be documented in accordance with the MethodM processes.

CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully tested the 724Access System.

#### Deliverable 8.5: Successful Test and Validation of the 724Access Environment

The results of all testing shall be documented in accordance with the MethodM processes. CONTRACTOR shall certify, in writing, that CONTRACTOR and COUNTY have successfully tested the 724Access System.

### Subtask 8.6: 724Access Production Setup

CONTRACTOR shall perform all work necessary to move 724Access capability to Production Use.

#### Deliverable 8.6: Operational 724Access for the Production Domain

CONTRACTOR shall document the readiness of the Production Domain for 724Access in both Scheduled and Unscheduled Downtime events (as defined in Exhibit D).

### TASK 9: INTERFACE CONSTRUCTION AND TESTING

During this TASK 9, CONTRACTOR shall develop, build, test and implement the Interfaces designed in Subtasks 5.1 and 5.2. During the conduct of TASK 9, COUNTY will participate and support CONTRACTOR's work as provided in the introductory paragraph to TASK 5 above.

#### Subtask 9.1: Install and Test Medical Devices Interfaces (MDIs)

As part of the Phase 1 System and each Optional Phase System construction, CONTRACTOR shall load and configure the software, system reference tables, and physical adaptors (if any) for all MDIs designed in the approved Deliverable 5.1 (Medical Devices Interfaces (MDIs) Specifications). As part of this Subtask, CONTRACTOR shall test the MDIs. COUNTY will validate that the Interface delivers the expected functionality. CONTRACTOR shall certify, in writing, that CONTRACTOR has fully installed and successfully tested all MDIs and that all MDIs function in a manner consistent with the design Specifications documented in Medical Devices Interfaces (MDIs) Specifications (Deliverable 5.1)

### Deliverable 9.1: Installed and Tested Medical Devices Interfaces (MDIs)

CONTRACTOR shall deliver installed and tested all Phase 1 System MDIs and each Optional Phase System MDI. CONTRACTOR shall certify, in writing, that CONTRACTOR has fully installed and successfully tested all MDIs and that all MDIs function in accordance with the Specifications and the Agreement.

#### Subtask 9.2: Build and Test External Systems Interfaces

For the Phase 1 System and each Optional Phase System, CONTRACTOR shall build, test and demonstrate to COUNTY the external systems Interfaces based upon the external systems Interface Specifications documented in External Systems Interfaces Specifications (Deliverable 5.2).

### Subtask 9.2.1: Build and Test PEMRS Side of External Systems Interfaces

CONTRACTOR shall build, validate and demonstrate to COUNTY the PEMRS side of external systems Interfaces using the Open Engine software provided by CONTRACTOR in accordance with the approved Deliverable 5.2 (External Systems Interfaces Specifications).

#### Deliverable 9.2.1: Built and Tested PEMRS Side of External Systems Interfaces

For the Phase 1 System and each Optional Phase System, CONTRACTOR shall deliver the built and tested PEMRS side of external systems Interfaces as specified in the Task 5 Interface Design (Deliverables 5.2) together with relevant as-built Documenta-

tion of such Interfaces. CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully tested the PEMRS side of all external systems Interfaces and that all external systems Interfaces function in a manner consistent with the design Specifications documented in External Systems Interfaces Specifications (Deliverable 5.2).

### <u>Subtask 9.2.2: Collaborate with COUNTY to Build and Test External Systems Side</u> of External Systems Interfaces

CONTRACTOR shall collaborate with COUNTY and other COUNTY vendors as required to build and test the external system side of each external system Interface according to the Specifications approved in Deliverable 5.2 (External Systems Interfaces Specifications) using interface engine software provided by COUNTY. CONTRACTOR shall test the external system side of each external system Interface and shall describe in writing COUNTY the changes that are needed for the Interface to meet the Specifications and the Agreement. COUNTY will continue, or will cause the other applicable COUNTY vendors to continue, to modify the Interface structures and code until the CONTRACTOR's tests are successful.

### Deliverable 9.2.2: Built and Tested External Side of External Systems Interfaces

For the Phase 1 System and each Optional Phase System, CONTRACTOR shall certify, in writing, that the external side of each external system Interface has been tested and that they function as designed and documented in External Systems Interfaces Specifications (Deliverable 5.2).

### Subtask 9.2.3: Build and Test External System Interfaces

In this Subtask, CONTRACTOR shall install and test both sides of the external system Interfaces as built for the Phase 1 System and each Optional Phase System. CONTRACTOR shall accomplish final testing and installation in conjunction with the Application Software modules in the Phase 1 System and in each Optional Phase System. CONTRACTOR shall test backup procedures and CONTRACTOR shall finalize Documentation of each external system Interface. CONTRACTOR shall certify, in writing, that CONTRACTOR has successfully built and successfully tested each external system Interface as built in collaboration with COUNTY and/or applicable other vendors and that each external system Interface functions in a manner consistent with the Specifications documented in External Systems Interfaces Specifications (Deliverable 5.2) and the Agreement.

### Deliverable 9.2.3: Built and Tested External Systems Interfaces

For the Phase 1 System and each Optional Phase System, CONTRACTOR shall certify, in writing, that each external system Interface has been tested and its functionality validated by COUNTY, and that each external system Interface functions in a manner consistent with the design Specifications documented in External Systems Interfaces Specifications (Deliverable 5.2), and the Agreement. CONTRACTOR shall deliver asbuilt Documentation of each external system Interface for which Specification were documented in Deliverable 5.2 (External Systems Interfaces Specifications)

### TASK 10: SYSTEM OPERATIONS PLAN

#### Subtask 10.1: Prepare System Operations Plan

CONTRACTOR shall develop a written PEMRS System Operations Plan for the System consisting of provision of the Remote Hosting Services, as well as procedures for scheduling for Scheduled Downtime (as defined in Exhibit D) and requesting the COUNTY's Project Director approval therefor. CONTRACTOR shall develop this plan consistent with Attachment A of this Statement of Work and Exhibit D (Service Level Agreement) of the Agreement. This planning shall define, without limitation, the following:

- 1. Users' service expectations.
- 2. System support plan.
- 3. System Availability plan, including Scheduled Downtime Plan.
- 4. Revision management plan.
- 5. Change control plan.
- 6. System backup/restore plan.
- 7. System security plan.
- 8. System performance monitoring plan.
- 9. Recommend COUNTY's organizational and employee development plan with respect to PEMRS operation.

#### Deliverable 10.1: System Operations Plan

This Documentation defines the System operations plan and approach to support Production Use of the System by CONTRACTOR and COUNTY resulting from Subtask 10.1.

### Subtask 10.2: Prepare Business Continuity Plan

CONTRACTOR shall develop a written PEMRS Business Continuity Plan for the System consisting of provision of the Remote Hosting Services. This plan shall define, without limitation, the following:

- 1. Facility Management (Operation and management of CONTRACTOR's high availability Tier 4 physical facilities in Kansas City, MO).
- 2. Network Management (Operation and management of CONTRACTOR's Local Area and Wide Area Networks (LAN/WAN)) up to and including the single point of demarcation at COUNTY Facilities.
- 3. System Management (Operation and management of the data processing systems and equipment required for System operation).
- 4. Database Management (Administration of the data base management system).
- 5. Interface Management (Monitoring and managing medical device and external systems Interfaces).
- 6. The Support Personnel (Roles and Responsibilities).
- 7. System Maintenance, Monitoring, Backup and Restore Procedures.
- 8. Guidelines and procedures for Awareness, Communication, Training, Exercising, and Auditing.

#### Deliverable 10.2: Business Continuity Plan

The Business Continuity Plan shall document the results of the work performed in Subtask 10.2.

#### Subtask 10.3: Prepare Application Management Services (AMS) Operational Plan

CONTRACTOR shall develop a written PEMRS Application Management Services Operational Plan. This plan shall define, without limitation, the following:

- 1. Service Package Management
- 2. Configuration/Setup Description
- 3. Monitoring Tasks
- 4. Maintenance Activities
- 5. Advanced Tier Support
- 6. Operations Management
- 7. Report Management
- 8. Content Management
- 9. Application Monitoring
- 10. Problem Management
- 11. User Account Management

#### Deliverable 10.3: Application Management Services Operational Plan

The Application Management Services Operational Plan shall document the results of the work performed in Subtask 10.3.

#### Subtask 10.4: Set up and Configure Application Management Services (AMS)

CONTRACTOR shall set up and implement all systems, tools, devices and procedures required to deliver Application Management Services (AMS) in accordance with the provisions of Section IV of Exhibit D (Service Level Agreement) of this Agreement. In connection with this Subtask, CONTRACTOR shall perform the following tasks and any other tasks established as necessary collaboratively by the COUNTY's Project Director and the CONTRACTOR's Project Director.

- Develop and implement the initial processes and setup the tools required for AMS including but not limited to the tools and processes identified in Exhibit D (Service Level Agreement).
- 2. Document standard operating procedure and service request backlog management processes.
- 3. Setup and install tools in CTCs needed to support CONTRACTOR's monitoring and maintenance of the System.
- 4. Produce and deliver a playbook that describes and documents, without limitation:
  - a. The operations monitoring tasks that CONTRACTOR shall perform
  - b. Processes for notification and tracking of issues

- c. Corrective and preventive activities required to maintain and continue to maintain the System in operation in accordance with the Specifications and this Agreement.
- 5. Review and modify as needed the maintenance and monitoring tools installed and delivered in accordance with TASK 1 of this Statement of Work, including, but not limited to Bedrock, Lights on, and Olympus.
- 6. Assign and deploy staffing necessary to carry out CONTRACTOR's obligations in connection with Application Management Services as specified in the applicable provisions of Exhibit D (Service Level Agreement) of the Agreement and otherwise in accordance with the Agreement.

#### Deliverable 10.4: Set up and Configured Application Management Services

CONTRACTOR shall certify to COUNTY in writing that the specified Application Management Services have been initialized and implemented.

#### Subtask 10.5: Set up and Configure P2Sentinel Security Services

CONTRACTOR shall configure and setup the initial infrastructure required for the P2Sentinel Security Services including all activities necessary to ensure that the P2Sentinel Security Services will be ready and operate in accordance with the Specifications and otherwise the Agreement as of the initiation of work on Subtask 6.7 (Implement the Phase 1 System for Production Use at all COUNTY Facilities).

#### Deliverable 10.5: Set up and Configured P2Sentinel Security Services

CONTRACTOR shall certify to COUNTY in writing that the specified P2Sentinel Security Services have been initialized and implemented.

#### TASK 11: TEST AND CERTIFICATION OF PRODUCTION DOMAIN

This Task consists of the planning, Documentation, test, and certification of the Production Domain to be installed and operated by CONTRACTOR for the Phase 1 System and each Optional Phase System as needed in order for the System to operate in accordance with the Specifications and the Agreement.

CONTRACTOR shall procure, install, configure, and maintain the Production Domain necessary for the operation of the then-current System and Interfaces in accordance with the Specifications and the Agreement. CONTRACTOR shall test and certify in writing that the installation is correct and sufficient for operation of PEMRS.

#### Subtask 11.1: Configure the Production Domain

CONTRACTOR shall install and configure the PEMRS Production Domain not previously installed as part of TASK 4 (Installation, Configuration, Test and Certification of the PEMRS Build Domain). The activities to be performed by CONTRACTOR as parts of this Subtask include, without limitation, the following:

1. Develop network connectivity requirements for connection to and integration into the COUNTY's data network and other network components.

- 2. Perform pre-installation planning for PEMRS at CTC and as needed at all COUNTY Facilities.
- 3. Plan all required COUNTY operational procedures.
- 4. Plan and implement transition from the Non-Production Domains to the Production Domain.
- 5. Install the following tools in the Production Domain for system management and monitoring: 724 Reorg, DB Toolkit, High Availability Scripts and Cerner Knowledge Module.

#### **Deliverable 11.1: Technical Configuration of the Production Domain**

CONTRACTOR shall deliver the plan for installation, configuration, and testing of the Production Domain, and for transitioning to Production Use.

#### Subtask 11.2: Test and Certify Production Domain

CONTRACTOR shall test and certify the Production Domain in accordance with Subparagraph 9.2 (CONTRACTOR Tests) of the body of the Agreement.

#### Deliverable 11.2: CONTRACTOR Tested and Certified Production Domain

CONTRACTOR shall prepare a Production Domain Installation Report and Certification including, without limitation, the following:

- 1. Certification that CONTRACTOR has successfully installed and configured the Production Domain and that the Production Domain is operating properly.
- 2. Certification that the network connectivity with COUNTY facilities and equipment is operating properly for Production Use of the System.
- 3. Problem reporting and escalation procedures.

CONTRACTOR shall prepare and deliver to COUNTY the Production Domain Installation Report and Certificate.

#### TASK 12: [RESERVED]

#### TASK 13: OPERATIONAL READINESS TESTING

#### Subtask 13.1: Develop Operational Readiness Test Plan

CONTRACTOR shall prepare an Operational Readiness Test Plan for the Remote Hosting Services and the Application Management Services, for all Domains for the Phase 1 System and each Optional Phase System. The Operational Readiness Test Plan shall include, without limitation, documentation of objectives, approach, and schedule. The Operational Readiness Tests shall include, without limitation, tests of the operations support strategy, Domain strategy, Availability strategy, fail over procedures, revision management strategy, change control strategy, security strategy, performance monitoring strategy, organizational and staffing strategy, backup/restore strategy, Specified Hardware and Operating Software, and COUNTY readiness for the Phase 1 System or, as the case may be, each Optional Phase System.

#### Deliverable 13.1: Operational Readiness Test Plan

CONTRACTOR shall document and deliver the Operational Readiness Test Plan.

#### Subtask 13.2: Conduct Operational Readiness Tests

CONTRACTOR shall conduct the Operational Readiness Tests prior to User Acceptance Testing for the Phase 1 System and each Optional Phase System. CONTRACTOR shall document and analyze results of the tests. CONTRACTOR shall conduct re-testing to confirm that CONTRACTOR has successfully modified the System and the Production Domain as needed to correct all Operational Readiness Test failures. CONTRACTOR shall certify, in writing, that all Operational Readiness Tests have been successfully performed, that CONTRACTOR has successfully performed all required corrective action, that CONTRACTOR has successfully modified the System and Production Domain, and that the System is ready for Production Use.

CONTRACTOR shall document and analyze results of CONTRACTOR execution of the Operational Test Plan for the Phase 1 System and each Optional Phase System. Based upon these results, CONTRACTOR shall conduct re-testing to confirm that CONTRACTOR has successfully modified the System and the System operations environment as related to all Operational Readiness Test failures.

#### Deliverable 13.2: Documentation of Operational Readiness Tests Results and Certification for the Phase 1 System and for each Optional Phase System

CONTRACTOR shall certify, in writing, that all Operational Readiness Tests have been successfully performed, that CONTRACTOR has successfully performed all corrective action, that CONTRACTOR has successfully modified the System and System operations environment, and that the System is ready for Production Use.

#### TASK 14: CHANGE MANAGEMENT PLAN

#### Subtask 14.1: Develop Change Management Plan

CONTRACTOR and COUNTY will prepare and implement a change management plan for continuous improvement of the Phase 1 System and each Optional Phase System. The change management plan shall include, without limitation, the following and may be augmented or further refined as specified in Section V of Exhibit D (Service Level Agreement) of this Agreement as agreed in writing by the COUNTY's Project Director and the CONTRACTOR's Project Director.

- 1. Change management objectives.
- 2. Change recommendations based on gap analysis.
- 3. Stakeholder participation strategies in proposing and prioritizing changes.
- 4. Success factors and measures of success.
- 5. Risk factors and risk mitigation actions.
- 6. Communication plan and communication channels.

#### Deliverable 14.1: Change Management Plan

CONTRACTOR shall document the change management plan.

## TASK 15: CUSTOM PROGRAMMING MODIFICATIONS AND ADDITIONAL INTERFACES

CONTRACTOR shall provide Custom Programming Modifications and Additional Interfaces with respect to which a Change Notice or an Amendment has been entered into under Paragraph 6 (Change Notices and Amendments) of the body of the Agreement and in accordance with the procedures set forth in Subparagraph 7.5 (Other Professional Services) of the body of the Agreement. The Change Notice or Amendment shall include the Tasks and Deliverables with respect to the specific Custom Programming Modification or Additional Interface, which at a minimum shall include the applicable of the following:

#### Subtask 15.1: Prepare System Design Reports for Custom Programming Modifications and Additional Interfaces

CONTRACTOR shall analyze COUNTY requirements in detail and shall prepare a System Design Report (SDR) for each Custom Programming Modification and Additional Interface. If no project schedule is provided in the applicable Change Notice or Amendment, then within ten (10) working days of receipt of the approved SDR from COUNTY, CONTRACTOR shall provide a delivery date for the SDR, and such delivery date shall occur no later than sixty (60) days following CONTRACTOR's receipt of COUNTY's approved SDR, unless otherwise agreed to in writing by CONTRACTOR's Project Director and COUNTY's Project Director. The SDR shall take into account all then implemented Application Software modules, Third Party Software modules, Optional Phase Systems, Interfaces and previously approved SDRs. Each SDR shall include, without limitation, the following and any other items mutually agreed upon by COUNTY's Project Director and CONTRACTOR's Project Director:

- A. Design Specifications, which must address and be consistent with COUNTY approved requirements for the Custom Programming Modification or Additional Interface;
- B. Database impact;
- C. User interface impact and impact on clinical and business processes;
- D. Report impact;
- E. Documentation impact;
- F. Training impact;
- G. Network impact;
- H. Special considerations, such as impact on current and future processing Response Time and Availability (as defined under Exhibit D);
- I. Estimated time for completion (subject to change depending on COUN-TY's response date and CONTRACTOR's workload);
- J. Estimated time to complete any Interfaces; and
- K. Estimated time for any automated conversion programs to complete.

Review and approval of each SDR shall be in accordance with Subparagraph 2.4 of the body of the Agreement. If no project schedule is specified in the Change Notice or Amendment, Within ten (10) working days of COUNTY's written approval of the SDR, COUNTY's Project Director shall notify CONTRACTOR whether to begin development and implementation of the Custom Programming Modification or Additional Interface,

unless such period is extended as agreed in writing by CONTRACTOR's Project Director and COUNTY's Project Director.

Any changes or revisions to COUNTY-approved SDRs shall be mutually agreed to in writing by CONTRACTOR's Project Director and COUNTY's Project Director. The approved SDR, as well as any agreed changes and revisions, shall be the basis for CON-TRACTOR's development of the Custom Programming Modification or Additional Interface.

# Deliverable 15.1: System Design Reports for Custom Programming Modifications and Additional Interfaces

CONTRACTOR shall document the System design for each Custom Programming Modification or Additional Interfaces in a System Design Report.

# Subtask 15.2: Build and Test Custom Programming Modifications and Additional Interfaces

CONTRACTOR shall build and test each Custom Programming Modification and Additional Interface in accordance with the applicable COUNTY-approved System Design Report and the applicable Change Notice or Amendment. Testing shall include, without limitation, Unit, System, and Integration Testing in a manner comparable to the test procedures for the Application Software modules as described in TASKS 6 and 7 of this Statement of Work and in Subparagraph 9.2 of the Agreement. CONTRACTOR shall certify in writing that CONTRACTOR has successfully built each Custom Programming Modification and Additional Interface completely and accurately based upon the COUNTY approved SDR, has successfully tested the Custom Programming Modification and Additional Interfaces, has successfully corrected all identified Deficiencies and that the Custom Programming Modification or Additional Interface, as the case may be, functions as designed, and that the Custom Programming Modification or Additional Interface, as the case may be, is ready for User Acceptance Testing. COUNTY, in its sole discretion, may conduct User Acceptance Testing for each Custom Programming Modification and Additional Interface prior to Production Use.

#### Deliverable 15.2: Built and Tested Custom Programming Modifications and Additional Interfaces

CONTRACTOR shall certify in writing that CONTRACTOR has successfully built each Custom Programming Modification and Additional Interface based upon the COUNTY approved SDR, has successfully tested such Custom Programming Modification and Additional Interface, has successfully corrected all identified Deficiencies, that the Custom Programming Modification or Additional Interface as the case may be functions as designed, and that such Custom Programming Modification or Additional Interface, as the case may be, is ready for User Acceptance Testing. COUNTY, in its sole discretion, may conduct User Acceptance Testing for each Custom Programming Modification and Additional Interface prior to Production Use.

#### Subtask 15.3: Install and Document Custom Programming Modifications and Additional Interfaces

CONTRACTOR shall install each Custom Programming Modification and Additional Interface for Production Use. CONTRACTOR shall provide updates to the Documentation applicable to each Custom Programming Modification or Additional Interface and shall also provide written instructions and demonstration on the use of each Custom Programming Modification and Additional Interface. For each Custom Programming Modification and Additional Interface that CONTRACTOR determines and COUNTY agrees impacts training, CONTRACTOR shall provide a training plan for written approval by COUNTY's Project Director in his sole discretion, updated inserts for the System training materials, and hands-on training classes for designated COUNTY staff.

#### Deliverable 15.3: Production Use of Custom Programming Modifications and Additional Interfaces

CONTRACTOR shall install each Custom Programming Modification and Additional Interfaces for Production Use. CONTRACTOR shall Deliver: (1) all object code and related Licenses and Documentation for the Custom Programming Modification, Additional Interface and any other impacted Application Software, (2) all Documentation and procedures necessary to train Users and maintain the System, including, but not limited to, all Interfaces to any interfacing systems, and (3) all data files and their record layouts for all Interfaces to any interfacing systems.

## **ATTACHMENT B**

# SCHEDULE OF PEMRS SOFTWARE

### RESTATED UNDER AMENDMENT NO. 3 July 2012

#### Attachment B Schedule of PEMRS Software

Capitalized terms used in this Attachment B without definition have the meaning given to such terms in the body of the Agreement and if not defined therein, in the body of this Exhibit A (Statement of Work).

#### I. SYSTEM SOFTWARE

User Licenses Cost <sup>1</sup>	Scope of Use Limit	Solution Code	Phase 1 System Application Software Modules	ltem
f ∋tontoo∃	800 Full 500 Limited Access Users	l tnəmrlɔsttA əə2	PowerChart (Clinical Data Repository, PowerOrders, PowerNote)	.1
f ∋tontoo∃	Access Users Access Users	l tnəmrtəsttA əə2	CareNet: (Electronic Medication Administration Record (e-MAR), Clinical Documentation, PowerPlan, PowerForms)	2.
f ətontooF	800 Full Access Users Access Users Access Users	l tnəmdəsttA əə2	Capstone: (Registration Management, Scheduling Management)	ώ
f ətontoo∃	800 Full Access Users	l tnəmdəsttA əə2	PathNet (General Laboratory, Microbiology)	<del>ל</del> .
f ∋tontoo∃	800 Full Access Users	l tnəmdɔsttA əə2	PharmNet (Inpatient Pharmacy and Departmental Clinical Supply Chain for Pharmacy)	.G
f ∋tontoo∃	800 Full Access Users	L tnemdasttA ee2	RadNet (Radiology Management)	.9

<sup>&</sup>lt;sup>1</sup> License costs for the Specified JHIS Application Software (see Attachment I to this Exhibit A for list of JHIS Application Software) were paid under the JHIS Agreement. No additional license fees are required unless COUNTY exceeds the Scope of Use Limits.

under Third Bundle Pricing of	of images added per year and as defined in B.(1)(1) of			
Included in	60 Gigabytes	ØC-1000	Cerner ProVision Document Imaging (CPDI)	.6
		Interface/One-way Workflow IF-29636 - Reference Lab Interface/Two-way Workflow IF – 29275 - Billing Outgoing (Batch) (Batch) MD-BY04 - Siemens Diagnostics Clinitek Status (Uni-dir)		
Application Software		IF-29035 - Appointment Notifications Incoming (Discrete Data Elements) (Discrete Data Elements) Dutgoing IF-29245 - Appointment Notifications Outgoing IF-29635 - Reference Lab		
See Total Phase 1 System	e/u	IF-29010 - ADT/Demographics Incoming	MDIs Licensed Software and Open Port Licensed Software	.d8
F ootnote 1	e/u	See Attachment I	anipn∃ naqO	.68
F ootnote 1	800 Full Access Users	L tnemdosttA ee2	ProFile (HIM) fromation Management (MIH)	.Γ
User Licenses Cost <sup>1</sup>	Scope of Use Limit	SOUTRACTOR Solution Code	Phase 1 System Application Software Modules	Item

t99'9\$			Fotal Phase 1 System Application Software	
F estontoo F	800 Full Access Users	MM-22260	CareAware Multi-Media Foundation – Digital Objects	13 <sup>.</sup>
F estontoo-T	800 Full Access Users	XX-26140	Discern Explorer	12.
Footnote 1	800 Full Access Users	XX-26105	Discern Expert	! I
Footnote 1	800 Full Access Users	I tnəmdəsttA əəS	Computerized Physician Order Entry (CPOE)	.01
Party Software Below	Schedule I in Exhibit D			
User Licenses Cost <sup>1</sup>	Scope of Use JimiL	9boO noitulo& SOLDAATNOO	Phase 1 System Application Software Modules	ltem

Scope of Use Limit <sup>1</sup> Production Domain	KS-22091 - Cerner CMT	Subscription-Based Phase 1 Application Software Modules CMT/CPT Code	ا <b>tem</b> .
20 Users prior to Production Use	KS-22092 - CPT Codes		
100 Users per year after Production Use			
1 COUNTY Facility prior to Production Use 13 COUNTY Facilities after Production Use	KS-22203 Krames – HealthSheets Outpatient Clinic/Surgery Center	Krames Patient Education	5.

30 Users	KS-26810 – Knowledge Solutions for Ambulatory: Pkg	Knowledge Solutions for Ambulatory: Pkg	4
Scope of Use Limit	CONTRACTOR Solution Code	Subscription-Based Phase 1 Application Software Modules	mətl

8336'046		Total Phase 1 Third Party Software	
	licenses		
	Logons and utilizes batch capture for 12 remote full station		
	imaging for 100 Concurrent		
	CPDI includes document		
	D.		
	B.(1)(f) of Schedule I in Exhibit	(CPDI)	
83336'046	per year and as defined in per year and as defined in	CPDI Bundle for Cerner ProVision Document Imaging	۰ <b>۱</b>
User Licenses Cost		Phase 1 Third Party Software	ltem
	Scope of Use Limit		m

Included in Remote Hosting Services		2.
Included in Remote Hosting Services	Failover Scripts	٦.
User Licenses Cost	Phase 1 Content (Remote Hosting)	Item

	(	Authentication)		
		(Simplified User		
Footnote 2	Limited to PEMRS	CTP-SEC-LDAP-PASS	Approximation LDAP Authentication with Pass-through	.11
	Users			
Footnote 1	800 Full Access	See Attachment I	Slainancial	.01
		Workstation		
		MM-22720 - Cerner Provision		
		Veb		
		MM-22273 - Cerner Provision		
	Users	(Modality Worklist)	System (PACS)	
Footnote 2	800 Full Access	MM-22271 - Worklist Manager	Cerner Picture Archiving and Communication	.6
	Domain	ESIG-CAPT-MI		
Footnote 2	1 Production	-MTO noituloS enution CTM-	eSignature (Patient Electronic Signature)	.8
		Dictation		
		RA-Z2254 - Integrated Digital		
	2 devices	Integration Software)		
	Domain;	(Integrated Digital Dictation		
Footnote 2	1 Production	RA-22252 - RadNet RIS	Radiology Dictation	.7
	Users	Medication Administration		
Footnote 2	800 Full Access	PH-22780 - Point of Care	nimbAərsO	.9
	Users			
Footnote 1	800 Full Access	See Attachment I	PharmNet (Outpatient Pharmacy)	·9
	Users		_	
Footnote 1	800 Full Access	See Attachment I	PowerInsight	<del>ל</del>
	Users			
Footnote 2	800 Full Access	CP-20746	Enterprise Master Patient Index (EMPI)	3.
	Domain			
Footnote 2	1 Production	724Access Solution	724Access Solution	5.
	Users			
Footnote 2	800 Full Access	IC-20393 iNet Virtual	enicibemeleT	٦.
Cost <sup>2</sup>	timid	əpoƏ	səinboM	mətl
User Licenses	Scope of Use	CONTRACTOR Solution	Optional Phase Systems Application Software	~~~~,1

<sup>&</sup>lt;sup>2</sup> Optional Phase Systems will require mutual agreement on scope and pricing prior to Amendment execution under Paragraph 6 of the body of the Agreement.

TT				1
		00000		
		Interface		
		IE – 29665 - PC Encoder		
		Device Interface		
		IF – 29655 - Bidirectional		
		IF – 29650 - Unidirectional Device Interface		
		Outbound Denoiteritieritieritieritieri		
		IF 29562 Purchase Order		
		Acknowledgement		
		IF-29522 - Purchase Order		
		software:		
		Items part of JHIS licensed		
		Lifescan Surestrep POC		
		MD-TC03 - Telcor J&J		
		Act 2/Act 5 Diff (Bi-dir)		
		MD-BC20 - Beckman Coulter		
		bnuodiuO		
		Packaging Interface		
		IF-29801 - Parata Medication		
		Interface		
		Outgoing IF-29970 - Pyxis Medstation		
software)		IF-29330 - Clinical Documents		
bezneoil ZIHL		Management Incoming		
Footnote 1 (part of		Medical Document		
software)		IF-29083 - Clinical Documents		
of JHIS licensed		software:	Attachment D (PEMRS Intertaces)	
Footnote 2 (not part	e/u	Items not part of JHIS licensed	Optional Phase System Interfaces identified in	12.
Cost <sup>2</sup>	timiJ	əpoƏ	səluboM	mətl
User Licenses	Scope of Use	CONTRACTOR Solution	Optional Phase Systems Application Software	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Software Modules     Cvu 00078       Pathnet Microbiology WBT     Cvu 00078       Cerner Learning Studio     Cvu 00078       Management Subscription WBT     Cvu 00078	AN	CVU 00078	Pathnet Microbiology WBT	n məil
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User Licenses Cost <sup>3</sup>	Scope of Use Limit	Optional Phase System Third Party Software	lten	
Footnote 3	1 Production Domain	Golden Gate License for 724Access	1.	l

See Attached: Third Party Software pass-through provisions.

<sup>&</sup>lt;sup>3</sup> Optional Phase System Third Party Software will require mutual agreement on scope and pricing prior to Amendment execution under Paragraph 6 of the body of the Agreement.

#### ATTACHMENT C

#### RELATED CONTRACTOR SOFTWARE PRODUCT DESCRIPTION

RESTATED UNDER AMENDMENT NO. 3 July 2012 Los Angeles County Probation – PEMRS Attachment C – Related Contractor Software Product Description

#### **RELATED CONTRACTOR SOFTWARE PRODUCT DESCRIPTION**

The following CONTRACTOR licensed software solution descriptions are attached:

Phase 1 System Application Software Modules	CONTRACTOR Solution Code	Software Product Name
PowerChart (Clinical Data Repository, PowerOrders, PowerNote)	<ul><li>PS-20576</li><li>PV-20230</li></ul>	<ul><li>PowerOrders</li><li>Clinical Office with PowerNote</li></ul>
CareNet: (Electronic Medication Administration Record (e-MAR), Clinical Documentation, PowerPlan, PowerForms)	<ul> <li>PS-22719</li> <li>PS-22732</li> <li>CA-20344</li> </ul>	<ul> <li>Care Documentation</li> <li>electronic Medication Administration Record (MAR)</li> <li>PowerPlan</li> </ul>
CapStone: (Registration, Scheduling Management)	<ul><li>CP-20735</li><li>CP-20740</li></ul>	<ul> <li>Registration Management</li> <li>Patient Tracking</li> <li>Scheduling Management</li> </ul>
PathNet (General Laboratory, Microbiology)	<ul> <li>PA-20070</li> <li>PA-20075</li> <li>PA-20080</li> <li>PA-22214</li> </ul>	<ul> <li>General Laboratory</li> <li>Microbiology</li> <li>Anatomic Pathology</li> <li>CAP SNOMED III</li> </ul>
PharmNet (Inpatient Pharmacy and Departmental Clinical Supply Chain for Pharmacy)	<ul> <li>PH-20160</li> <li>PH-25201</li> <li>KS-22004</li> </ul>	<ul> <li>Inpatient Pharmacy</li> <li>Departmental Clinical Supply Chain for Pharmacy</li> <li>MediSource Foundation</li> </ul>
RadNet (Radiology Management) ProFile (Health Information Management (HIM))	RA-20135 MR-20400	Radiology Management ProFile
<ul> <li>Open Engine and</li> <li>MDIs Licensed Software and Open Port Licensed Software</li> </ul>	<ul> <li>OE-20850</li> <li>OE-22850</li> <li>OE-22870</li> <li>IF-29010</li> <li>IF-29035</li> <li>IF-29050</li> <li>IF-29220</li> <li>IF-29245</li> </ul>	<ul> <li>Open Engine</li> <li>TCP/IP Communication Services</li> <li>Asynchronous Communication Services</li> <li>ADT/Demographics Incoming</li> <li>Appointment Notifications Incoming</li> <li>Results Incoming (Discrete Data</li> </ul>

Restated Under Amendment No. 3

Los Angeles County Probation – PEMRS Attachment C – Related Contractor Software Product Description

Phase 1 System Application Software Modules	CONTRACTOR Solution Code	Software Product Name
	<ul> <li>IF-29635</li> <li>IF-29636</li> <li>IF-29275</li> <li>MD-BY04</li> </ul>	<ul> <li>Elements)</li> <li>ADT/Demographics Outgoing</li> <li>Appointment Notifications Outgoing</li> <li>Reference Lab Interface/One-way Workflow</li> <li>Reference Lab Interface/Two-way Workflow</li> <li>Billing Outgoing (Batch)</li> <li>Siemens Diagnostics Clinitek Status (Uni-dir)</li> </ul>
Cerner ProVision Document Imaging (CPDI)	QC-1000	Cerner ProVision Document Imaging (CPDI)
Computerized Physician Order Entry (CPOE)	PS-20576	PowerOrders
Discern Expert	XX-26105	Discern Expert
Discern Explorer	XX-26140	Discern Explorer
CareAware Multi-Media Foundation - Digital Objects	MM-22260	CareAware MultiMedia Digital Objects.
Krames Patient Education Content	KS-22203	Krames HealthSheets - Outpatient Clinic-Surgery Center
Knowledge Solutions for Ambulatory	KS-26810	Knowledge Solutions for Ambulatory
CMT/CPT Codes	<ul><li>KS-22091</li><li>KS-22092</li></ul>	<ul> <li>Cerner Controlled Medical Terminology</li> <li>CPT4 Codes</li> </ul>
	•	•
Method M	MT-00001-MEM	MethodM

Los Angeles County Probation – PEMRS Attachment C – Related Contractor Software Product Description

Optional Phase Systems Application Software Module	Solution Code	Software Product Name
Web Based Training	<ul> <li>CVU 00078</li> <li>CVU-00044</li> <li>CVU-00079</li> <li>CVU-00080</li> <li>CVU-00076</li> <li>CVU-00077</li> <li>CVU-02061</li> </ul>	<ul> <li>Microbiology Subscription WBT</li> <li>PathNet Laboratory Management Subscription WBT</li> <li>PathNet Specimen Management Subscription WBT</li> <li>PharmNet Subscription WBT</li> <li>PathNet Common Services WBT</li> <li>PathNet General Laboratory Subscription WBT</li> <li>Cerner Learning Studio</li> </ul>
Telemedicine	IC-20393	INET Virtual
724 Access Solution	724 Access Solution	724 Access Solution
Enterprise Master Patient Index (EMPI)	CP-20746	Enterprise Master Patient Index (EMPI)
PowerInsight	PI-20616	PowerInsight Enterprise Data Warehouse
PharmNet (Outpatient)	PH-20170	Outpatient Pharmacy
CareAdmin	PH-22780	Point of Care Medication Administration
Radiology Dictation	<ul><li>RA-22252</li><li>RA-22254</li></ul>	<ul> <li>RadNet RIS (Integrated Digital Dictation Integration Software)</li> <li>Integrated Digital Dictation</li> </ul>
eSignature (Patient Electronic Signature)	eSignature Solution CTM-ESIG- CAPT-MI	eSignature Solution
Cerner Picture Archiving and Communication System (PACS)	<ul> <li>MM-22271 Worklist Manager (Modality Worklist)</li> <li>MM-22273 Cerner Provision Web</li> <li>MM-22720 Cerner Provision Workstation</li> </ul>	Cerner PACS solution
Optional Phase System Interfaces identified in Attachment D (PEMRS Interfaces)	Items not part of JHIS licensed software: IF-29083 IF-29330 IF-29970 IF-29801 MD-BC20 MD-TC03 The following are part of JHIS licensed software, but will be	<ul> <li>Items not part of JHIS licensed software:</li> <li>Clinical Documents Medical Document Management Incoming</li> <li>Clinical Documents Outgoing Pyxis Medstation Interface</li> <li>Parata Medication Packaging Interface Outbound</li> <li>Beckman Coulter Act 2/Act 5 Diff (Bi-dir)</li> </ul>

Los Angeles County Probation – PEMRS Attachment C – Related Contractor Software Product Description

	implemented as Optional Phase: • IF-29522 • IF-29562 • IF-29650 • IF-29655 • IF-29665	<ul> <li>Telcor J&amp;J Lifescan Surestrep POC</li> <li>The following are part of JHIS</li> <li>licensed software, but will be implemented as Optional Phase:</li> <li>Purchase Order Acknowledgement</li> <li>Purchase Order Outbound</li> <li>Unidirectional Device Interface</li> <li>Bidirectional Device Interface</li> <li>PC Encoder Interface</li> </ul>
Financials	P0-20200	Materials Management
Millennium LDAP Authentication with Pass-through	CPT-SEC-LDAP-PASS (Simplified User Authentication)	Millennium LDAP Authentication with Pass-through

The solutions set forth in this Agreement may be defined by a Solution Description. Where applicable, such descriptions are referenced by solution to a Solution Description code on the applicable attachment and can also be viewed at <a href="http://www.cerner.com/clientresources/solutiondescriptionlookup">http://www.cerner.com/clientresources/solutiondescriptionlookup</a>.

See Attached: Solution Descriptions

## ATTACHMENT D

## **PEMRS INTERFACES**

## RESTATED UNDER AMENDMENT NO. 3 July 2012

#### ATTACHMENT D PEMRS INTERFACES

Capitalized terms used in this Attachment D without definition have the meaning given to such terms in the body of the Agreement and if not defined therein, in the body of this Exhibit A (Statement of Work).

- 1. Interfaces consist of two categories:
  - (1) Medical Devices Interfaces (MDIs)
  - (2) External systems Interfaces
- 2. MDIs

MDIs consist of the capture and storage of patient, quality control, and standard test result data from the following medical devices:

(1) Siemens Diagnostics Clinitek Status automated instruments (for Urinalysis)

The following MDI interfaces are in an Optional Phase:

- (2) Beckman Coulter Act 2/Act 5 Diff automated instruments (for CBC)
- (3) Telcor J & J Lifescan SureStep POCT automated instruments (for blood glucose)
- 3. External Systems Interfaces

An external system Interface is characterized by three attributes. The first attribute is the pair of systems exchanging data. The second attribute is the specific transaction that defines the data to be exchanged and the format of the exchange. The third attribute is the nature of the data exchange timing requirement which may be either real time (asynchronous) or batch (e.g., SFTP or EDI).

(1) Phase 1 System Interfaces

The following external systems Interfaces shall be provided by CONTRACTOR as part of Phase 1, and are referred to as "Phase 1 Interfaces":

- A. COUNTY's Probation Case Management System (PCMS),
- B. COUNTY's Sunquest System,
- C. LabCorp or replacement system defined by County, and

- D. COUNTY's Misys/Sunquest System
- (2) Optional Phase Interfaces

The following external systems Interfaces are referred to as "Optional Phase Interfaces." For each Optional Phase Interface, CONTRACTOR shall not provide such Optional Phase Interface unless and until Amendment has been entered into in accordance with Subparagraph 6.3 of the body of the Agreement with respect to such Optional Phase Interface:

- A. COUNTY's Psychotropic Medication Authorization (PMA) online application,
- B. COUNTY's Mental Health Integrated System (IS),
- C. COUNTY's QuadraMed System,
- D. COUNTY's Jail Hospital Information System (JHIS),

COUNTY's PYXIS System,

- E. COUNTY's Emergency Department Information System (EDIS), and
- F. COUNTY's Parata Medication Packaging System

The Phase 1 Interfaces shall be designed by CONTRACTOR as part of External Systems Interface Specifications (Deliverable 5.2) and developed and delivered to COUNTY by CONTRACTOR as part of Built and Tested External Systems Interfaces (Deliverable 9.2.3) of this Statement of Work (Exhibit A).

External systems Interfaces consist of two categories:

- (1) External systems Interfaces which are proprietary to COUNTY, consisting of COUNTY's Probation Case Management System (PCMS), COUNTY's Mental Health Integrated System (IS), COUNTY's Psychotropic Medication Authorization (PMA) process, including the PMA Online Application, COUNTY's Jail Hospital Information System (JHIS), and other Interfaces designated as proprietary to COUNTY in the Conceptual Design Document (Deliverable 3.3) and/or External Systems Interface Specifications (Deliverable 5.2) under Exhibit A (Statement of Work).
- (2) External systems Interfaces which are not proprietary to COUNTY, consisting of COUNTY's Sunquest System, LabCorp or replacement system defined by County, COUNTY's Misys System, COUNTY's QuadraMed System, COUNTY's Emergency Department Information System (EDIS), and other Interfaces designated as not proprietary to COUNTY in the Conceptual Design

Document (Deliverable 3.3) and/or External Systems Interface Specifications (Deliverable 5.2) of Exhibit A (Statement of Work).

External systems Interfaces include the transfer of data between PEMRS and other software systems, both within and external to COUNTY. Schedule I (External System Interfaces) of this Attachment D of Exhibit A (Statement of Work) specifies each Interface by the first two of the three defining attributes, the corresponding external system(s) and the specific transaction. The third attribute, including updates to the first two attributes, will be specified based upon System design as defined in the Conceptual Design Document (Deliverable 3.3) or External Systems Interface Specifications (Deliverable 5.2) for such external system Interface. Some Interface transactions will be performed on-line in near real time and other Interfaces will be performed on a batch basis.

Regardless of what interface engine is identified by the COUNTY as its preferred engine, in accordance with standards established in writing by the COUNTY's Project Director, the CONTRACTOR's Open Engine (OE) software will be used to enable external systems Interfaces to and from PEMRS. Industry standard interfaces including those of Health Level 7 (HL7), American Society for Testing and Materials (ASTM), American National Standards Institute Accredited Standards Committee X-12 (ANSI ASC X-12), and other Standards Development Organizations (SDOs) designated from time to time by the Federal Department of Health and Human Services, or generally accepted in the Healthcare Information Technology Industry, shall be used where applicable.

Phase 1 System Interfaces:

- (1) <u>COUNTY's Probation Case Management System (PCMS)</u> Interfaces with COUNTY's Probation Case Management System (PCMS) are required to track minors' admission, registration, demographics, moves and transfers, location, classification, scheduling, discharge, release and other data. This Interface shall be bi-directional and near real time as defined in the Conceptual Design Document (Deliverable 3.3) and/or External Systems Interface Specifications (Deliverable 5.2) for such Interface.
- (2) <u>COUNTY's Sunquest System</u> –Interfaces for laboratory orders processing and results reporting are required with COUNTY's Sunquest System that routinely process Probation minors' tests. These Interfaces shall be bi-directional and near real time as defined in the Conceptual Design Document (Deliverable 3.3) or External Systems Interface Specifications (Deliverable 5.2) for such Interface.

- (3) <u>LabCorp or replacement system defined by County</u> Interfaces for laboratory orders processing and results reporting are required with the LabCorp or replacement system defined by County that routinely process Probation minors' tests. These Interfaces shall be bi-directional and near real time as defined in the Conceptual Design Document (Deliverable 3.3) or External Systems Interface Specifications (Deliverable 5.2) for such Interface.
- (4) <u>COUNTY's Misys/Sunquest System</u>—Interfaces for laboratory orders processing and results reporting are required with COUNTY's Misys System that routinely process Probation minors' tests. During the design of this Interface, the parties will determine whether the Interface shall be bi-directional and whether the Interface shall be in real time or batch file transfer mode.

Optional Phase Interfaces:

- (1) <u>COUNTY's Psychotropic Medication Authorization (PMA)</u> Interfaces with COUNTY's Department of Mental Health electronic PMA are required to track psychoactive drug prescription orders and the authorization by the Court or the parent. During the design of this Interface, the parties will determine whether the Interface shall be bi-directional and whether the Interface shall be in real time or batch file transfer mode.
- (2) <u>COUNTY's QuadraMed System</u> Interfaces to the COUNTY's QuadraMed System are required to track and transfer health care data for minors who are provided care by COUNTY's Department of Health Services or COUNTY hospitals and network of services. During the design of this Interface, the parties will determine whether the Interface shall be bi-directional and whether the Interface shall be in real time or batch file transfer mode.
- (3) <u>COUNTY's Jail Hospital Information System (JHIS) Interfaces</u> with COUNTY's Sheriff Department JHIS are required to transfer minor's medical records to JHIS from PEMRS as minors transfer to the jail when they become adults or are assigned by the Court. During the design of this Interface, the parties will determine whether the Interface shall be bi-directional and whether the Interface shall be in real time or batch file transfer mode.

<u>COUNTY's PYXIS System</u> – Interface to the COUNTY's PYXIS med station is required to track unit dose. During the design of this Interface, the parties will determine whether the Interface shall be bi-directional and whether the Interface shall be in real time or batch file transfer mode.

- (4) <u>COUNTY's Emergency Department Information System (EDIS)</u> Interfaces to the COUNTY's Wellsoft EDIS are required to track and transfer health care data for minors who are provided care by COUNTY's Department of Health Services of COUNTY hospitals' emergency rooms. During the design of this Interface, the parties will determine whether the Interface shall be bi-directional and whether the Interface shall be in real time or batch file transfer mode.
- (5) <u>COUNTY's Parata Medication Packaging System</u> Interface for COUNTY's JCHS Pharmacy packaging operations. This interface is unidirectional from PEMRS to Parata and operates as defined in the Conceptual Design Document (Deliverable 3.3) or External Systems Interface Specifications (Deliverable 5.2) for such Interface.
- (6) <u>COUNTY's Integrated System (IS)</u> Interfaces with COUNTY's Department of Mental Health Integrated System (IS) are required to track minors' mental health demographics and treatment data and to ensure that COUNTY can meet its mental health treatment reporting obligations to the State of California. This Interface may be bi-directional as defined in the Conceptual Design Document (Deliverable 3.3) and/or External Systems Interface Specifications (Deliverable 5.2) for such Interface. This Interface may be real time or batch file transfer as defined in the Conceptual Design Document (Deliverable 3.3) and/or External Systems Interface Specifications (Deliverable 5.2) for such Interface.
- (7) COUNTY's Cardinal Pharmaceutical Wholesaler Interfaces either directly to Cardinal Health or to the GHX supply chain management system. Purchase Order Outbound (ANSI X.12 EDI 850) provides the ability to transmit purchase orders outbound from the PEMRS Pharmacy Clinically Driven Supply Chain solution. Purchase Order Acknowledgment Inbound (ANSI X.12 EDI 855) provides for the ability to accept purchase order acknowledgments inbound and to have real-time access to price discrepancies and other relative purchase order data from the Cardinal Pharmaceutical Wholesaler.

#### Schedule I: External System Interfaces

#### Phase 1 System Interfaces

Outbound from	Inbound to	Partner	Transaction/Function
PCMS	PEMRS	Probation	ADT/Registration/Movement/Sch/Results
PEMRS	COUNTY's Sunquest laboratory system	DHS	Reference Lab Interface
Sunquest laboratory system	PEMRS	DHS	Reference Lab Interface
PEMRS	LabCorp or replacement system defined by County	LAC-USC	Reference Lab Interface
LabCorp or replacement system defined by County	PEMRS	LAC-USC	Reference Lab Interface
Misys/Sunquest	PEMRS	DHS	Reference Lab Interface
PEMRS	MiSys/Sunquest	DHS	Reference Lab Interface

#### Optional Phase Interfaces

Outbound from	Inbound to	Partner	Transaction/Function
PMA	PEMRS	DMH	Psychotropic Medication Authorization
PEMRS	PMA	DMH/Probation	Psychotropic Medication order
QuadraMed	PEMRS	DHS	Services and procedures
PEMRS	JHIS	LASD	ADT, EMR
EDIS	PEMRS	DHS	ADT
PEMRS	EDIS	DHS	ADT
PEMRS	Unknown	LAC-USC	ORM/Radiology Orders
Unknown	PEMRS	LAC-USC	ORM/Radiology Results
PEMRS	PCMS	Probation	Diet
PEMRS	PCMS	Probation	Medication
PEMRS	Integrated System <sup>1</sup> (IS)	DMH	Services and procedures Billing Outbound
PEMRS	Parata Pharmacy System	DHS	Medication Order
PEMRS	Cardinal Health or GHX	DHS	Purchase Orders
Cardinal Health or GHX	PEMRS	DHS	Purchase Order Acknowledgments
PEMRS	Pyxis	DHS	Orders, Formulary updates
Pyxis	PEMRS	DHS	Dispensed transactions

<sup>1</sup> When DMH implements IBHIS, this will be upgraded to interface with that system.

## EXHIBIT B

## SCHEDULE OF PAYMENTS

## RESTATED UNDER AMENDMENT NO. 3 July 2012

#### **EXHIBIT B**

#### SCHEDULE OF PAYMENTS

Capitalized terms used in this Exhibit B without definition have the meaning given to such terms in the body of the Agreement and if not defined therein, in the body of Exhibit A (Statement of Work).

Payment	Holdbac	ənotsəli	osting Services M	Remote H		Phase 1 System Deliverable	
Upon Approved 9⊃iovnl	k fnuomf	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
						Project Preparation Session	۱.۱
						Confirmed and Updated PEMRS Assessment	۲.۲
009'9८\$	007'8\$				000Ԡ8\$	Project Control Document PCD)	1.3 (Key)
\$241,500		\$241,500	CONTRACTOR Delivery and Certification of Services Plan and First Quarter Remote Hosting Services	4.1			
						MethodM Project Kickoff Event	2.1

Payment	Holdbac	ənoteəli	losting Services M	Remote H		Phase 1 System Deliverable	
Upon Approved Invoice	لا nuomA	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
						Project Status Reports	5.2
						Trained COUNTY Staff	1.5
						Clinical and Business Processes Analysis	3.2
488,241\$	928'91\$				09 <b>Ľ</b> 891\$	Conceptual Design Document	3.3 (Key)
000'09E\$	000'0 <del>7</del> \$	000'00†\$	CONTRACTOR Tested and Certified Build Domain	4.1			
						CONTRACTOR Delivered, Prepared, Configured, Tested and Certified CONTRACTOR- owned Hardware and for the System Software at the Specifications and the Agreement Agreement CONTRACTOR Installed, Tested and Certified PEMRS Networking Equipment and Networking Equipment and Communications	4.3

Payment	SedbloH	ənoteəli	A services M	Remote H		Phase 1 System Deliverable	
Upon Approved Invoice	لا tnuomA	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
-						Infrastructure	
488,241\$	978,818				09 <b>८</b> '85 <b>१</b> \$	CONTRACTOR Installed, Tested and Certified Phase Software Modules	4.4 (Key)
\$24J'200		009'I <b>⊅</b> Z\$	CONTRACTOR Certification of Second Quarter Remote Hosting Services	G.4			
06£'01\$	t21,18				775,112	Medical Devices Interfaces (MDIs) Specifications	5.1
999'09 <b>\$</b>	147,88				907'29\$	External Systems Interfaces Specifications	5.2
016,288\$	101,86\$				110,186\$	Design Documentation for each Phase 1 System Application Software Module	(Key) 1.1.8
£81,233≵	929'62\$				692'982\$	Built and Unit Tested Each Phase 1 System Application Software Module	2.1.3
997,1448	190'67\$				909'067\$	System Tested Each Phase 1 System Application Software	£.1.3

Payment	SedbloH	ənoteəli	osting Services M	Remote H		Phase 1 System Deliverable	
Upon Approved 9Diovnl	لا Amount	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
						əluboM	
\$241'200		\$541'200	CONTRACTOR Certification of Third Quarter, Remote Hosting Services	₽.1.ð			
						Integration Test Plans and Test Scripts for the Phase 1 System	۶.2.۹
\$27,0 <u>5</u> 28	\$54'252				\$542'523	System Successful Integration Test System	6.2.2 (Key)
\$241'200		\$541'200	CONTRACTOR Certification of Fourth Quarter Remote Hosting Services	6.2.3			
						System Cutover and Conversion Plan for the Phase 1 System	6.3.1
						Verified System Cutover and Conversion Plan for the Phase 1 System	2.5.3

000'07\$						Production Use of the Phase 1 System at all	(YeX) 7.8
488'24L\$	978,818				09 <b>८</b> '851\$	Successfully Conducted User Acceptance Testing of the Phase 1 System	(Y9X)
						Reference Documentation for the Phase 1 System	6.5
\$10,S1 <b>\$</b>	\$J <sup>3</sup> 332				°350	Completed Creation of Training Data for the Phase 1 System	Þ.4.ð
006'681\$	001,12\$				000'112\$	Completed Supplemental Training for the Phase 1 System	£.4.3
						Trained COUNTY Trainers for the Phase 1 System	6.4.2
						Documented Training Classes and Training Materials for the Phase 1 System	۶.4.1
\$24J'200		\$541'200	CONTRACTOR Certification of Fifth Quarter Remote Hosting Services	6.3.3			
Approved Sporoce Sporoce	لا tnuomA	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
Payment Payment	Holdbac	ənotsəli	A səsivəS gnitso	Remote H		Phase 1 System Deliverable	

Payment	Holdbac	ənoteəlih	osting Services <b>/</b>	Н ətoməЯ		Phase 1 System Deliverable	
Upon Approved Invoice	لا tnuomA	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
						COUNTY Facilities (Sum of Holdback Amounts for Remote Hosting Service Initiation Fee)	
						Post-Implementation Review Report for the Phase 1 System	8.9
997'122\$						Production Use of the Phase 1 System for Thirty (30) Consecutive Days with No Deficiencies at all Holdback Amounts for Phase 1 System Deliverables)	(YeX) 6.9
						Revised and Updated Project Control Document (PCD) for each Optional Phase System <sup>1</sup>	۲.0.۲ (Key)
						Updated Exhibit G (PEMRS Assessment) and its attachments, the Onsite	۲.0.۲ (Key)

<sup>&</sup>lt;sup>1</sup> Work performed under Paragraph 6 of the body of the Agreement.

	Phase System Results for each Optional Phase System						
۲.2.7	Phase System Test Scripts for each Optional Phase System						
£.1.7	System Tested each Optional Phase System						
2.1.7	Built and Unit Tested each Optional Phase System						
	Design Documentation for each Optional Phase System						
۲.0.٦	Updated Interface Design for each Optional Phase System						
	Workflow Assessment (OWA), Specifications, Exhibit D (Service Level Agreement), Specified Software, and Operating Software, and Conceptual Design Document for each						
Deliverable Number	Deliverable Description	Deliverable Fixed Price	Deliverable Number	Description	Milestone Fixed Price	لا tnuomA	Approved Povoice
	Phase 1 System Deliverable		Remote H	losting Services I	ənotesli	Holdbac	Payment Payment

Payment Upon Approved Invoice	Holdbac k fnuomf	Remote Hosting Services Milestone			Phase 1 System Deliverable		
		Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
						System Cutover and Conversion Plan for each Optional Phase System	1.6.7
						Verified System Cutover and Conversion Plan for each Optional Phase System	2.5.7
						Documented Training Classes and Training Materials for each Optional Phase System	r.4.7
						Trained COUNTY Trainers for each Optional Phase System	2.4.7
						Reference Documentation for each Optional Phase System	۶.۲
						Successfully Conducted User Acceptance Testing of Each Optional Phase System	(χ <del>9</del> Χ)
						Production Use of each Optional Phase System at all COUNTY Facilities	Γ.Γ
						Post-Implementation Review Report for each Optional Phase System	8.7

						Operational 724Access for	(YeX) 8.8
						Successful Test and Validation of the 724Access Environment	G.8
						System Prepared for 724Access Implementation	4.8
						Trained COUNTY Technical Staff	8.3
						Certification of Hardware and Software for the 724Access Application Software Module	2.8
						Documented Technical Configuration and Plan for the COUNTY Use of the 724Access Application Software Module <sup>2</sup>	٢.8
						Production Use of each Optional Phase System for Days with No Deficiencies at all COUNTY Facilities	(қәу) е.۲
Approved 900000	لا Amount	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
Payment Payment	SedbloH	Remote Hosting Services Milestone			Phase 1 System Deliverable		

<sup>2</sup> Work performed under Task 8 (Design and Implementation of the 724 Access System) will require the application of an Amendment under Paragraph 6 of the body of the Agreement.

\$142,884	978,318				09 <b>2</b> '891\$	CONTRACTOR Tested and	11.2 (Key)
						Technical Configuration of the Production Domain	1.11
						Set up and Configured P2Sentinel Security Services	3.01 B.01
007'98\$	009'6\$				000'96\$	Set up and Configured Application Management Services	٥١.4
						Application Management Services Operational Plan	٤.01
						Business Continuity Plan	10.2
						System Operations Plan	1.01
891,521\$	289'E1\$				\$ <b>436</b> ,853	Built and Tested External Systems Interfaces	5.2.9
						Built and Tested External Side of External Systems Interfaces	2.2.9
						Built and Tested PEMRS Side of External System Interface	9.2.1
¢72'9\$	<b>†</b> 69\$				866'9\$	Installed and Tested Medical Device Interfaces (MDIs)	۶.1
						the Production Domain	
Approved Invoice	لا Amount	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
Payment Payment	SedbloH	<b>anoteali</b> N	ating Services I	Remote Ho		Phase 1 System Deliverable	

Payment Dporoved Approved Invoice	SedbloH	DedbloH	DedbloH	Эвдыон	SedbloH	SedbloH	Holdbac	-	Holdbac	Holdbac	Holdbac	-	ənoteəli	Phase 1 System Deliverable Remote Hosting Services Milestone					
	لا tnuomA	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number												
						Certified Production Domain													
						RESERVED	12.1												
						ВЕЗЕВЛЕD	12.2												
						Plan Operational Readiness Test	13.1												
						Documentation of Operational Readiness Tests Results and System and for each Optional Phase System	13.2												
						Change Management Plan	14.1												
						System Design Reports for Custom Programming Modifications and Additional Interfaces <sup>3</sup>	1.21												
						Built and Tested Custom Programming Modifications and Additional Interfaces	15.2												
						Production Use of Custom Programming Modifications	15.3												

<sup>&</sup>lt;sup>3</sup> Work performed under Task 15 (Custom Programming Modifications and/or Additional Interfaces) will require the application of a Change Notice or an Amendment under Paragraph 6 of the body of the Agreement.

Payment Upon Approved Invoice	лопарас К fnuomA	JedbloH	Holdbac	JedbloH			Remote Ho	Phase 1 System Deliverable		
		Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number			
						and Additional Interfaces				
\$e'325'126		009'209'1\$			699'714'6\$	Sum of Deliverables				
					\$J`252`843	Aggregate System <sup>4</sup> sees Fees				
					612'896'2\$	Aggregate Remote Hosting Services Fees <sup>4</sup>				
					820'109\$	Aggregate Upgrades Implementation Services Fees <sup>4</sup>				
					678,404,52	Aggregate Application Management Services Fees <sup>4</sup>				
					\$22J <sup>,</sup> 486	Aggregate P2Sentinel Security Services Fees <sup>4</sup>				
					092'96\$	Amendment 3 Payment for System Design Report dated April 10, 2012				
					768'Z97\$	OPS Pool Dollars				
					000'927\$	Implementation Pool Dollars				

<sup>&</sup>lt;sup>4</sup> Aggregate for Initial Term. See Paragraph 8.0 (Invoices and Payments) of the body of the Agreement and Exhibit D (Service Level Agreement) for payment terms.

					804,600,71\$	Contract Sum	
Approved Invoice	эвdbloH A fnuomA	Milestone Fixed Price	Description	Deliverable Number	Deliverable Fixed Price	Deliverable Description	Deliverable Number
րջու թցչաent		Remote Hosting Services Milestone		Phase 1 System Deliverable			



### System Design Report (SDR) for additional Professional Services

Cerner ID 1-2D6LPL5

April 10, 2012

Arsalan Rahmanian Los Angeles County Probation Department 3965 S. Vermont Avenue Los Angeles, CA 90037

As part of the Los Angeles County Probation Department (COUNTY) PEMRS project implementation, it is has been determined that Cerner (CONTRACTOR) will provide additional professional Services. This System Design Report (SDR) will reflect the modifications and additions to **PEMRS Contract # 77285 Amendment 3.** This SDR will detail the proposed delivery of Amendment 3:

- Definition of Project Scope and Deliverables
- Estimated Work Effort
- Completion Criteria

#### **DEFINITION OF PROJECT SCOPE AND DELIVERABLES**

- I. Objectives
  - A. Add a second point of demarcation to the County-side WAN to improve the safety and security of the connectivity of PEMRS to the Kansas City CDC. COUNTY is responsible for ensuring that the necessary connectivity between the two points of demarcation is addressed.
  - B. Add 500 Limited Access Users to the System's scope of use limitation.
- II. Work
  - A. The SDR shall contain a schedule for completion and delivery of all related tasks, including those tasks specified in the Agreement and those specified in the SDR.
  - B. The SDR shall contain specifications for COUNTY responsibilities associated with delivery of the work that are not otherwise specified in the Agreement.



#### **Project Management Services**

- 1. CONTRACTOR will work with COUNTY to manage project schedule, methodm deliverables and resources.
- 2. Provides CONTRACTOR best learning practices to improve adoption as needed throughout the project.

#### **GENERAL**

CONTRACTOR will provide professional services in accordance with the COUNTY PEMRS Contract number 77285

#### FIXED FEE COST ADDITION VIA AMENDMENT 3 to PEMRS PROJECT 77285

#### Based on the agreed upon project scope defined in this document, the cost for this project is as follows:

Professional Services and/or one-time setup costs:

Additional 500 Limited Access Users	\$95,000
Second point of Demarcation	\$750
Total:	\$95,750

#### **COMPLETION CRITERIA**

This project will be considered complete upon COUNTY approval of the work and deliverables in accordance with the provision of the PEMRS Agreement # 77285.

Provided the terms of this Scope are acceptable, please sign and date as indicated below. Fax this SDR to Jodi Drury at 816 571-0289.

# IMPORTANT: CONTRACTOR will not schedule Learning Services Consultants for the Additional Training Services until a signed SDR is received.



Los Angeles County Probation Department

Ву:\_\_\_\_\_

(printed or typed)

Title:\_\_\_\_\_

Accepted and Approved Date:\_\_\_\_\_

CC: Len Giuffre Cerner Corporation Vice President and General Manager

Nancy Baldin Cerner Corporation Sr. Operations Leader Government Contracts

## EXHIBIT D

## SERVICE LEVEL AGREEMENT

RESTATED UNDER AMENDMENT NO. 3 July 2012

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## EXHIBIT D

### SERVICE LEVEL AGREEMENT

#### SOFTWARE MAINTENANCE, REMOTE HOSTING SERVICES, UPGRADES IMPLEMENTATION SERVICES, AND APPLICATION MANAGEMENT SERVICES

This Exhibit D (together with all Schedules hereto, "Service Level Agreement" or "SLA") is attached to, and defines the services levels to be provided under, that certain Agreement dated June 1, 2010 (together with all Exhibits and Attachments, the "Agreement"), by and between County of Los Angeles (COUNTY) and Cerner Corporation (CONTRACTOR) for a Probation Electronic Medical Records System (PEMRS) for COUNTY's Probation Department (Probation) and health care providers serving minors residing in its halls and camps.

Capitalized terms used in this SLA without definition have the meanings given to such terms in the body of the Agreement and if not defined therein, in the body of Exhibit A (Statement of Work) of the Agreement. As used herein, the following terms have the following meanings:

"1<sup>st</sup> Level Help Desk" shall have the meaning set forth in Section VI.A.(2)(d) of this SLA.

"2<sup>nd</sup> Level Help Desk Services" shall have the meaning set forth in Section IV.A.(5) of this SLA.

"Approved Change Management Plan" shall have the meaning set forth in Section V.A.(1)(b) of this SLA.

"Approved Upgrade Plan" shall have the meaning set forth in Section III.A.(1)(h) of this SLA.

"Availability," "Availability Warranty" shall have the meaning set forth in Schedule I (Service Level Commitments) to this SLA.

"Back-end System" shall have the meaning as set forth in Section II.C.(3) of this SLA.

"Build Domain" shall have the meaning set forth in Exhibit A of the Agreement.

"Certification Domain" shall have the meaning set forth in Exhibit A of the Agreement.

"Change Management Plan" shall mean Deliverable 14.1 of the Statement of Work (Exhibit A) of the Agreement.

"Corrective Maintenance" shall have the meaning set forth in Section I.A.(1) of this SLA.

"COUNTY Representative" shall have the meaning as defined in the introductory of this SLA.

"Domain" shall have the meaning set forth in Exhibit A of the Agreement.

"Front-end System" shall have the meaning as set forth in Section II.C.(4) of this SLA.

"LAN" shall mean Local Area Network.

"Major System Change" shall mean a backend upgrade, operating system upgrade, Upgrade, SAN upgrade, or Oracle®<sup>1</sup> database upgrade.

"Mock Upgrade" shall mean the process of creating, when necessary, and managing the domain(s) and performing a mock test resulting from the installation of an Upgrade.

"P2Sentinel Security Services" shall have the meaning set forth in Section II.C.(2)(i) of this SLA.

"PLT" shall mean Project Leadership Team.

"Production Domain" shall have the meaning set forth in Exhibit A of the Agreement.

"Report Management" shall have the meaning as set forth in Section IV.A.(4) of this SLA.

"Response Time" shall mean the elapsed time for a User's execution of a transaction which has an associated Response Time Management System standard when using the Production Domain, rounded up to the nearest second.

"Response Time Management System" or "RTMS" shall mean the Response Time measurement tool installed by CONTRACTOR and enabled on the Production Domain.

"Response Time Warranty" shall have the meaning set forth in Schedule I (Service Level Commitments) to this SLA.

"RRD" shall mean remote report distribution.

"Scheduled Downtime" shall mean the aggregate total duration in minutes of scheduled or planned System Downtime set forth in the System Operations Plan approved by COUNTY as Deliverable 10.1 of Exhibit A (Statement of Work) or as otherwise

<sup>&</sup>lt;sup>1</sup> Oracle is a registered trademark of Oracle Corporation and/or its affiliates.

mutually agreed by the COUNTY's Project Director and CONTRACTOR. With respect to any quarter and excluding COUNTY-requested Scheduled Downtime, if Scheduled Downtime in such quarter exceeds the limits set forth in Attachment A (PEMRS Functional, Technical and Operational Requirements) to Exhibit A (Statement of Work), then such excess shall be considered Unscheduled Downtime.

"Security Incident" shall have the meaning set forth in Exhibit J (CONTRACTOR'S Obligations As a "Business Associate" Under Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH)) of the Agreement.

"Service Package" (sometimes "Patch") shall mean an Update supplied as a fix or enhancement of a specific hosted System Component.

"Severity Level" shall have the meaning set forth in Schedule I (Service Level Commitments) to this SLA.

"System Software Support" shall have the meaning set forth in Section I.A.(1) of this SLA.

"System Stabilization Period" shall mean the seventy-two (72) hour period following each of i) first Production Use of the Phase 1 System or any Optional Phase System and ii) implementation of a Major System Change.

"System Availability" shall have the meaning set forth in Schedule I (Service Level Commitments) of this SLA.

"Temporary Domain" shall have the meaning set forth in Exhibit A of the Agreement.

"Update" shall have the meaning set forth in Section I.A.(6) of this SLA.

"Upgrade" shall have the meaning set forth in Section I.A.(6) of this SLA.

"Unscheduled Downtime" shall mean all Downtime occurring in the Production Domain other than Scheduled Downtime. Unscheduled Downtime includes, but is not limited to, Downtime resulting from a problem that has not been resolved as is required by this SLA.

"WAN" shall mean Wide Area Network.

CONTRACTOR shall provide the following "Services" in respect of the System and described in more detail in the remaining provisions of this SLA:

- SYSTEM MAINTENANCE (SECTION I),
- REMOTE HOSTING SERVICES (SECTION II),
- UPGRADES IMPLEMENTATION SERVICES (SECTION III), AND

• APPLICATION MANAGEMENT SERVICES (AMS) (SECTION IV)

In general, these Services provide all maintenance, support, hosting, Upgrade implementation and application management services required for the Phase 1 System and each applicable Optional Phase System to operate (and to be operated by all Users at all COUNTY Facilities) in accordance with the Specifications and otherwise with the Agreement. Without limiting the foregoing, the Services include maintenance of the Phase 1 System's and each applicable Optional Phase System's compliance with the Response Time and Availability Warranties as provided in this SLA.

Additionally without limiting the foregoing, CONTRACTOR shall provide, manage, monitor, control, and report on System security in accordance with the Specifications as provided in Section II (Security Requirements) of Attachment A (PEMRS Functional, Technical, and Operational Requirements) of Exhibit A (Statement of Work) of the Agreement. In addition to the reporting requirements set forth in Exhibit J (CONTRACTOR'S Obligations As a "Business Associate" Under Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH)) to the Agreement, CONTRACTOR shall promptly report to COUNTY's Project Manager by email or telephone all County-related Security Incidents, but in no event later than two (2) hours following CONTRACTOR knowledge of the Security Incident, with subsequent notification in writing to follow shortly thereafter in accordance with the timeframes set forth in Exhibit J (CONTRACTOR'S Obligations As a "Business Associate" Under Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH)).

In addition, on a monthly basis, CONTRACTOR shall summarize any non-County related Security Incidents of which CONTRACTOR has knowledge that have occurred during the period and their remediation at a high level with COUNTY Project Manager using telephone or email communications, as determined by CONTRACTOR in its sole discretion. These high level summaries shall include the nature of the incident(s), steps taken to remediate the associated threat(s) or vulnerability(ies), and any residual risk(s). The summaries shall not include any information that could reveal the customer(s) affected directly by the incident.

Paragraph 6 (Change Notices and Amendments) of the body of the Agreement provides the overall change management procedures for the Agreement. Without limiting said provisions, CONTRACTOR shall manage changes relative to this SLA as specified in Section V below and the Change Management Plan accepted by the COUNTY as Deliverable 14.1 (Change Management Plan) of Exhibit A (Statement of Work) of the Agreement. COUNTY and CONTRACTOR acknowledge that both shall participate in regular change control meetings and that the approved Change Management Plan will control all System change processes, including workflows and parameter or other changes that impact System performance. Also defined herein are services that involve active participation of COUNTY. Unless otherwise specified herein as a COUNTY obligation, CONTRACTOR shall perform all Services as defined herein.

CONTRACTOR shall deliver all Upgrades and Updates, all Documentation and all other Deliverables required under this SLA to COUNTY in accordance with Subparagraph 4.6 (Delivery of Work) of the body of the Agreement. Further, as of the Effective Date, no hardware or other equipment is being purchased from CONTRACTOR by COUNTY pursuant to this Service Level Agreement or under other professional services or otherwise.

With respect to all Services defined herein, COUNTY will identify three alternates (in addition to COUNTY's Project Manager) to serve as COUNTY's support contacts (hereafter referred to as the "COUNTY Representatives"). Only COUNTY's Representatives shall be authorized to request Services defined herein (when in accordance with this SLA, the Services require an explicit COUNTY request to initiate their delivery) on behalf of COUNTY. COUNTY may change its Representative(s) by written notice to CONTRACTOR.

In addition to the four COUNTY Representatives identified in the paragraph immediately above, COUNTY will identify a Security Representative to provide COUNTY security services and information including but not limited to identity management, User provisioning, role definitions, group management, and other security services required of COUNTY in respect to CONTRACTOR's provision of the Remote Hosting Services (as defined below) and, if applicable, the proper operation of CONTRACTOR's Millennium LDAP Authentication with Pass-through Application Software module.

In respect to the Services specified in this Service Level Agreement, CONTRACTOR's Project Director shall designate the single point of contact for all communications, including, without limitation, the methods, telephone numbers, email and other addresses to be used by COUNTY to communicate with CONTRACTOR's staff providing such Services.

This Service Level Agreement also contains attached Schedules II-V which specify the fees that COUNTY will pay to CONTRACTOR in consideration of the Services defined herein. These fees specify the monthly and, if applicable, one-time and/or annual fees payable by COUNTY in accordance with this SLA and otherwise with the Agreement for CONTRACTOR's provision of the Services defined herein. These fees also specify those amounts, specified in Schedule III herein, that COUNTY will pay to CONTRACTOR in the event that COUNTY exceeds the Response Time and Availability Warranty assumptions specified in Schedule I to this SLA.

### I. <u>SYSTEM MAINTENANCE</u>

Without limiting the introductory portions of this SLA or otherwise the provisions of the Agreement, CONTRACTOR shall provide the following System maintenance services:

#### A. <u>SUPPORT SERVICES</u>

- (1) CONTRACTOR shall: (a) correct the failure of the System Software to operate in accordance with Specifications and otherwise with this Agreement (such correction of the System Software is hereafter referred to as "Corrective Maintenance") and (b) provide Upgrades and Updates of the System Software as defined in Section I.A(6) below. Hereafter, Corrective Maintenance, Upgrades and Updates are collectively referred to as "System Software Support". Corrective Maintenance shall be either of a critical support nature or of a routine support nature. For purposes of System Software Support, Interfaces shall be deemed part of Application Software and shall receive the same System Software Support services.
- (2) CONTRACTOR shall assist COUNTY with problem (a.k.a. Deficiency) determination and resolution. Problem determination describes, without limitation, the activities associated with engaging in a service request, checking background and change management information, reviewing service activity, assessing issues, trouble shooting, and developing a problem statement. The problem statement is used to determine the category of service required to further investigate the problem, develop a resolution, communicate the resolution, execute the resolution, and confirm the results. Problem determination and resolution activities may be initiated by COUNTY via telephone or email to CONTRACTOR's designated single point of communication or by posting to the designated area of Cerner.com.

CONTRACTOR shall provide a web based designated area in Cerner.com where COUNTY can submit, review, update, or request closure for a service request from CONTRACTOR, as well as determine when a service request is assigned, owner of the service request, and the time the service request is assigned. CONTRACTOR will provide reports of service requests, upon request from COUNTY and shall also make such reports available to COUNTY on the designated area. Such reports shall include, at a minimum, the complete history of each service request from submittal by COUNTY to resolution and including all updates.

CONTRACTOR's investigation of every problem shall continue as needed, with a goal of restoring performance of the applicable System Component in accordance with the Specifications and otherwise with the Agreement, in accordance with the timeframes set forth in Table 1 of Schedule I (Service Level Commitments) to this SLA, based upon the Severity Level. If it is determined in accordance with Section I.A(8) below that a problem is caused by an item listed in Section I.A(8), then except as expressly provided in this SLA, CONTRACTOR shall not be obligated to provide Corrective Maintenance to remedy such problem. COUNTY may request that CONTRACTOR provide further Corrective Maintenance in respect of such problem as other professional services pursuant to Subparagraph 7.5 (Other Professional Services) of the body of this Agreement. Notwithstanding the foregoing, CONTRACTOR shall, at no further cost to the COUNTY, consult and collaborate with COUNTY staff and any provider of the Specified Hardware, Specified Operating Software and/or any interfacing external COUNTY system in connection with such problem.

(3) CONTRACTOR shall furnish and perform critical support services twenty-four (24) hours per day, seven (7) days per week, every day of each year for support of the System Software. Critical problems are those categorized as Severity Levels 1 and 2 as defined in Table 1 of Schedule I (Service Level Commitments) to this SLA.

CONTRACTOR shall meet the service levels commitments with respect to resolving critical problems, as identified on Table 1 of Schedule I (Service Level Commitments) to this SLA, for ninety-five percent (95%) of COUNTY's service requests identified by COUNTY as Severity Level 1 or 2. Less than five percent (5%) of requests may require longer resolution times. In the event that the assigned resolution times are not met by CONTRACTOR, CONTRACTOR shall immediately submit to COUNTY a written action plan and status report and shall take other actions as set forth in Section A (System Software Support Service Level Commitments) of Schedule I (Service Level Commitments) to this SLA. Each plan is subject to the written approval of COUNTY Project Director. If CONTRACTOR does not resolve the problem within the time set forth in said approved action plan, then the period immediately following the submittal of the Severity Level 1 or 2 service request through the date of resolution of the problem shall automatically constitute Unscheduled Downtime and credits shall apply as provided in Schedule I.

(4) Routine support services are non-critical. CONTRACTOR shall provide routine support services during the hours specified in Deliverable 10.1 (System Operations Plan) of Exhibit A (Statement of Work) of the Agreement and onsite support as needed. Non-critical problems are those categorized as Severity Levels 3 and 4 as defined in Table 1 of Schedule I (Service Level Commitments) to this SLA. CONTRACTOR shall meet the service level commitments with respect to resolving non-critical problems, as identified on Table 1 of Schedule I (Service Level Commitments) to this SLA, for ninetyfive percent (95%) of COUNTY's service requests identified by COUNTY as Severity Level 3 or 4 problems. Less than five percent (5%) of requests may require longer resolution times. In the event that the assigned resolution time standards are not met by CONTRACTOR, CONTRACTOR shall immediately submit to COUNTY a written action plan and report and take such other actions as set forth in Section A (System Software Support Service Level Commitments) of Schedule I (Service Level Commitments) to this SLA. Each plan is subject to the written approval of COUNTY Project Director. If CONTRACTOR does not resolve the service request within the time set forth in said approved action plan, except in the case where the reason for CONTRACTOR inability to so resolve is attributable to necessary modification of Baseline Software code (subject to COUNTY's ability to reassign a severity level to such service request as described in Schedule I), then the period immediately following the submittal of the Severity Level 3 or 4 service request through the date of resolution of the problem shall automatically constitute Unscheduled Downtime and credits shall apply as provided in Schedule I.

- (5) Corrective Maintenance shall be performed as follows:
  - (a) For Severity Levels 1 or 2, COUNTY may request Corrective Maintenance by CONTRACTOR's designated telephone number or posting to the designated area in Cerner.com.
  - (b) For Severity Levels 3 or 4, County may request Corrective Maintenance by posting to the designated area in Cerner.com.
  - (c) As part of Corrective Maintenance, COUNTY will provide CONTRACTOR with information and assistance reasonably requested by CONTRACTOR as necessary to detect, simulate and correct the failure of the System to operate in accordance with the Specifications and the Agreement.
  - (d) CONTRACTOR shall provide COUNTY with revised and installed System Components and avoidance procedures to correct program errors when such procedures are within COUNTY's capability to control or perform.
  - (e) At CONTRACTOR's option and expense, CONTRACTOR may perform Corrective Maintenance at COUNTY Facility (ies).

- (f) CONTRACTOR shall provide Corrective Maintenance for the then current and three (3) most recent prior Upgraded versions of the System Software for the term of the Agreement. With respect to Specified Hardware and Specified Operating Software Compatibility problems, CONTRACTOR's obligations to provide Corrective Maintenance shall be subject to Subparagraph 10.1.D.4 of the body of the Agreement.
- (6) Except as expressly set forth in this Section I.A(6), "Upgrades" shall mean major releases and/or versions of the System Software made available to CONTRACTOR's other customers pursuant to support arrangements similar to the support arrangements provided to COUNTY, regardless of whether such other customers use Remote Hosting Services. "Updates" shall mean updates, corrections, service packs/packages, modifications and/or new releases and versions of the System Software other than Upgrades, in each case, made available to CONTRACTOR's other customers pursuant to support arrangements similar to the support arrangements provided to COUNTY, regardless of whether such other customers use Remote Hosting Services. "Upgrades" and "Updates" also include but are not limited to the following:
  - (a) California (State) adopts or amends laws or issues regulations which are deemed necessary by the State governing body, and when COUNTY notifies CONTRACTOR of such in writing or which CONTRACTOR otherwise learns of, including, but not limited to, changes to Title 15 or Title 24 of the California Code of Regulations and/or the Welfare and Institutions Code.
  - (b) Federal agencies adopt regulations which are deemed necessary by and/or through Federal agencies (examples include but are not limited to, the Federal regulations issued by Internal Revenue Service (IRS), Drug Enforcement Administration (DEA), Centers for Medicare and Medicaid Services (CMS), Federal Drug Administration (FDA), and/or the Office of the National Coordinator for Health Information Technology (ONCHIT)).
  - (c) Standards Development Organizations (SDOs) publish changes of standards used in the System for general use which CONTRACTOR adopts and implements for its customers. Such SDOs include the Certification Commission for Health Information Technology (CCHIT) and the National Commission for Correctional Health Care (NCCHC), Health Level 7 (HL7), and/or ANSI X.12;

provided that the item giving rise to such Updates or Upgrades impacts at least one of CONTRACTOR's customers (excluding other Los Angeles County departments) pursuant to support arrangements similar to the support arrangements provided to COUNTY, regardless of whether such other customers use Remote Hosting Services.

Solely with respect to Third Party Software, COUNTY acknowledges that CONTRACTOR's ability to provide Updates and Upgrades are limited to those Updates and Upgrades that CONTRACTOR is authorized to distribute. Such acknowledgement in no way limits CONTRACTOR's other obligations under the Agreement with respect to such Third Party Software, including but not limited to CONTRACTOR's warranty obligations under Subparagraph 10.1 of the body of the Agreement and CONTRACTOR's obligations under this SLA to provide Corrective Maintenance.

- (7) At no additional cost to COUNTY other than the applicable fees identified in Schedules IV and V of this SLA, CONTRACTOR shall install, configure, Tailor, integrate and convert such number of Upgrades and Updates as further specified in Section III (Upgrades Implementation Services) and/or Section IV (Application Management Services) of this Service Level Agreement.
- (8) CONTRACTOR is not required to perform Corrective Maintenance with respect to System failures to the extent directly caused by:
  - (a) COUNTY use of the System inconsistent with the terms of the Agreement, including usage levels that exceed limits specified in Attachment A (PEMRS Functional, Technical and Operational Requirements) and/or Attachment B (Schedule of PEMRS Software) of Exhibit A (Statement of Work) and/or the Response Time and Availability Warranty assumptions set forth in Schedule I (Service Level Commitments) of this SLA, as initially determined by COUNTY but subject to Paragraph 46 (Dispute Resolution Procedure) of the body of this Agreement.
  - (b) Use of User or network devices and/or software, or connection methods and/or changes of COUNTY WAN/LAN connectivity not approved by CONTRACTOR in writing before such Use, or malware or any malicious act that affects the System and is introduced by COUNTY, as initially determined by COUNTY but subject to Paragraph 46 (Dispute Resolution Procedure) of the body of this Agreement. The parties understand and agree that Specified Hardware and Operating Software have already been approved by CONTRACTOR.

- (c) Specified Hardware or Operating Software failures (other than Compatibility issues and Deficiencies of Specified Hardware or Operating Software caused by System Software), but solely to the extent the System Software or performance Deficiency is caused by or results directly from a failure of Specified Hardware or Operating Software, as determined by CONTRACTOR, to COUNTY's Project Director's reasonable satisfaction.
- (d) Failure of COUNTY to authorize CONTRACTOR to implement an update or upgrade of the Front-End System or Back-End System recommended by CONTRACTOR subject to the provisions of the approved Deliverable 14.1 (Change Management Plan), provided such change does not modify Specified Hardware and Operating Software and that CONTRACTOR assures that the change enables the System to operate in accordance with the Specifications and otherwise the Agreement.
- (e) Failure of external COUNTY systems (other than Compatibility issues and Deficiencies of external COUNTY systems caused by System Software), that operate within an Interface provided by the System operating in the Production Domain, including changes of the interfaced external COUNTY system not approved by CONTRACTOR that affect the Interface or fail to comply with the Interface Specifications provided by CONTRACTOR and approved by COUNTY as Deliverable 5.2 (External Systems Interfaces Specifications) of Exhibit A (Statement of Work) of the Agreement, as initially determined by COUNTY but subject to Paragraph 46 (Dispute Resolution Procedure) of the body of this Agreement.
- (f) Documented introduction by COUNTY of a System change that adversely affects System performance and was not introduced in accordance with the Change Management Plan approved as Deliverable 14.1 (Change Management Plan) of Exhibit A (Statement of Work), as initially determined by COUNTY but subject to Paragraph 46 (Dispute Resolution Procedure) of the body of this Agreement.
- (9) CONTRACTOR shall provide Upgrades and Updates to the System Software pursuant to the terms of this SLA, provided COUNTY is paying maintenance and support fees in accordance with the Agreement. CONTRACTOR will not be responsible for the installation or "retrofitting" of those Upgrades and Updates to Application Software modules which contain modifications which CONTRACTOR has previously identified to COUNTY's Project Di-

rector in writing and in advance of making such modification, as incompatible with Baseline Software, unless COUNTY elects to request and CONTRACTOR agrees to provide such service as other professional services pursuant to Subparagraph 7.5 (Other Professional Services) of the body of this Agreement.

(10) Without limiting Subparagraph I.A(5)(f) above, in the event CONTRACTOR intends to discontinue System Software Support of any Application Software module, CONTRACTOR shall provide COUNTY with a minimum of two (2) years prior written notice and shall continue System Software Support during such period.

#### B. <u>SYSTEM SOFTWARE SUPPORT TERM AND FEES</u>

(1) For the Phase 1 System, CONTRACTOR shall provide and COUNTY shall receive System Software Support commencing upon COUNTY's written approval of Deliverable 6.7 (Production Use of the Phase 1 System at all COUNTY Facilities) of Exhibit A (Statement of Work) of the Agreement, and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of the Agreement.

For each Optional Phase System, CONTRACTOR shall provide and COUNTY shall receive System Software Support commencing upon COUNTY's written approval of Deliverable 7.7 (Production Use of each Optional Phase System at all COUNTY Facilities) of Exhibit A (Statement of Work) of the Agreement, and continuing for the Term of the Agreement, unless otherwise terminated in accordance with the provisions of the Agreement.

(2) For the Phase 1 System, System Maintenance Support fees shall commence upon approval of Deliverable 6.7 (Production Use of the Phase 1 System at all COUNTY Facilities) and shall be payable monthly or, if applicable, annually in advance, unless otherwise provided herein. The amount of the System Maintenance Support fees shall be in accordance with Schedule II (System Maintenance Fees) to this SLA.

For each Optional Phase System, System Maintenance Support fees shall commence upon approval of Deliverable 7.7 (Production Use of each Optional Phase System at all COUNTY Facilities) and shall be payable monthly or, if applicable, annually in advance, unless otherwise provided herein. The amount of the System Maintenance Support fees shall be in accordance with Schedule II (System Maintenance Fees) of this SLA.

#### II. <u>REMOTE HOSTING SERVICES</u>

Without limiting the introductory paragraphs of this SLA or otherwise the provisions of the Agreement, CONTRACTOR shall provide the following five (5) services as "Remote Hosting Services," as necessary to operate PEMRS 24 hours per day, 7 days per week, every day of each year in accordance with the Specifications, including but not limited to the Remote Hosting Specifications described in Section III (Remote Hosting Services) of Attachment A (PEMRS Functional, Technical, and Operational Requirements) of Exhibit A (Statement of Work), and otherwise with the Agreement, in accordance with the Response Time and Availability Warranties set forth on Schedule I (Service Level Commitments) to this SLA.

- 1 Facility Management (operation and management of CONTRACTOR's high availability Tier 4 physical facilities in Kansas City, MO identified below).
- 2 Network Management (operation and management of CONTRACTOR's Local Area and Wide Area Networks (LAN/WAN))
- 3 System Management (operation and management of the data processing systems and equipment required for System operation)
- 4 Database Management (administration of the data base management system required for System operation)
- 5 Interface Management (monitoring and managing medical devices and external systems Interfaces)

CONTRACTOR shall host PEMRS at its high availability, Tier 4 Cerner Technology Centers ("CTC") located at:

777 NW Blue Parkway	3200 N Rockcreek
Lee's Summit MO.	Kansas City, MO 64117

With respect to each Optional Phase System, COUNTY will elect whether to implement Remote Hosting Services for such Optional Phase System. Recognizing that certain Optional Phase Systems are not amenable to remote hosting (e.g., PACS), CONTRACTOR shall host all Optional Phase Systems per COUNTY election in the sole discretion of the COUNTY's Project Director.

### A. FACILITY MANAGEMENT

CONTRACTOR shall provide and manage the facilities necessary to operate PEMRS in accordance with the Specifications and otherwise with this Agreement. CONTRACTOR's provision and management of the facilities shall include, but not be limited to, the following:

(1) CTC Environment

CONTRACTOR shall provide the CTC identified above to host the computing and network environment. CONTRACTOR shall provide the CTC equipment, operating software, and other software, regardless by whom produced or supplied, required to operate PEMRS in accordance with the Specifications and otherwise with the Agreement.

CONTRACTOR shall manage, monitor and control each CTC and shall provide all Domains in accordance with the Domain strategy documented in the Conceptual Design Document (Deliverable 3.3) of the Statement of Work (Exhibit A) and recommended in the Exhibit G (PEMRS Assessment) of the Agreement and its attachments.

(2) CTC Management and Monitoring

CONTRACTOR shall operate and maintain each CTC, in accordance with Tier 4 standards. CONTRACTOR shall manage, monitor, control and activate each CTC, including but not limited to such CTC physical structure and environment, power supplies and generators, chiller systems (pressure, temperature, alarm, standby), electrical rooms (moisture, Uninterrupted Power Supply (UPS)), computer room air-conditioning units (air conditioning, power, moisture, humidity and temperature), Auto Transfer Switches, and UPS/generator system as incoming power dictates.

(3) CTC Physical Security

CONTRACTOR shall provide physical security in each CTC as specified in "Security Requirements" (Section II) of Attachment A (PEMRS Functional, Technical and Operational Requirements) of Exhibit A (Statement of Work) of the Agreement. CONTRACTOR shall monitor security events and promptly report to COUNTY's Project Manager by email or telephone all County-related Security Incidents, but in no event later than two (2) hours following CONTRACTOR knowledge of the Security Incident, with subsequent notification in writing to follow shortly thereafter in accordance with the timeframes set forth in Exhibit J (CONTRACTOR'S Obligations As a "Business Associate" Under Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH)). In addition, on a monthly basis, CONTRACTOR shall summarize any non-County related Security Incidents of which CONTRACTOR has knowledge that have occurred during the period and their remediation at a high level with COUNTY Project Manager using telephone or email communications, as determined by CONTRACTOR in its sole

discretion. These high level summaries shall include the nature of the incident(s), steps taken to remediate the associated threat(s) or vulnerability(ies), and any residual risk(s). The summaries shall not include any information that could reveal the customer(s) affected directly by the incident.

(4) Disaster Recovery

In the event of a disaster affecting any CTC providing services to COUNTY under this Agreement, CONTRACTOR shall invoke an alternate data center and shall recover the Production Domain as first priority, followed by non-Production Domains in accordance with COUNTY assigned priorities.

CONTRACTOR, with participation and support by COUNTY as needed, shall mobilize an emergency response team. The system backups will be used to recover the System in the Production Domain in such alternate data center. CONTRACTOR shall test the restored environment and notify COUNTY to begin its testing and validation process for System acceptance and return to the Users.

## B. <u>NETWORK MANAGEMENT</u>

CONTRACTOR shall provide, support, monitor, manage, and control the communications between the CTC and the COUNTY necessary to operation PEMRS in accordance with the Specifications and otherwise with the Agreement. This shall include, but not be limited to, the following:

(1) CTC Network Operation

CONTRACTOR shall provide, support, monitor and maintain highavailability (99.9%) networks designed to remain fully operational in the event of any single equipment failure, such as, but not limited to, routers, switches, load balancers, redundant power circuits, power distribution, and firewalls in each CTC. CONTRACTOR shall provide, operate, monitor, manage and control all network equipment, operating software, all software and console systems at the CTCs necessary to host the System and support the servers and databases required for the System to operate in accordance with the Specifications and otherwise with the Agreement.

CONTRACTOR shall:

 Install, manage, configure, support, and maintain WAN circuits and WAN equipment in the CTC as required for PEMRS to operate in accordance with the Specifications and otherwise with the Agreement;

- (b) Monitor Response Times of the Phase 1 System and each applicable Optional Phase System, including round trip latency, as required for PEMRS to operate in accordance with the Specifications and otherwise with the Agreement.
- (2) CONTRACTOR-provided WAN communications.

CONTRACTOR shall provide, monitor, manage, support, and control the WAN communications network infrastructures and operations required to operate PEMRS in accordance with the Specifications and otherwise with the Agreement, including primary and secondary communications circuits between the CTCs and dual points of demarcation at COUNTY Facilities, which shall be readily and commercially available via public carrier, defined and provided by COUNTY as recommended in Exhibit G (PEMRS Assessment) of the Agreement and its attachments, and as specified in Deliverable 3.3 (Conceptual Design) of Exhibit A (Statement of Work) of the Agreement.

- (a) Provide and provision WAN circuits in a manner that maximizes existing physical circuit diversity consistent with the best practice for obtaining physical circuit diversity, provide circuits that are sized for the Phase 1 System and each applicable Optional Phase System in accordance with industry best practices for appropriate bandwidth, quality of service and responsiveness and the Specifications and provision and manage all circuits in conjunction with CONTRACTOR's communications carriers (this process does not guarantee physical diversity; but rather provides the best practice for obtaining physical diversity);
- (b) Provide all communications equipment necessary to terminate these WAN circuits and provide secure connection at COUNTY's dual points of demarcation and provide ongoing monitoring, management, and support including but not limited to routers, switches, firewalls, out-of-band-management consoles and power reboot switches as well as channel service unit (CSU) and data service unit (DSU) circuit termination equipment;
- (c) Provide monitoring systems, device management and polling systems necessary to manage and control the network, monitor and control CONTRACTOR-provided network routers, including utilization, memory, exception reporting, syslog,

configuration management and access control list (ACL) hits/denies;

(d) Monitor and control CONTRACTOR-provided WAN links ups/downs, error thresholds, bandwidth, and committed information rate packet flow/loss, and monitor and control COUNTY gateway ups/downs, routers, switches, and power supplies.

## C. <u>SYSTEM MANAGEMENT</u>

CONTRACTOR shall provide and manage secure computing systems necessary to operate PEMRS as provided in the System Operations Plan (Deliverable 10.1) of Exhibit A (Statement of Work) of this Agreement and in accordance with the Specifications and otherwise with the Agreement. CONTRACTOR's System Management shall include, but not be limited to the following.

(1) System Management

- (a) Provide, configure, support, manage, monitor and control all components of the System, required to continue and maintain System Response Time and Availability levels as provided in this SLA.
- (b) Use appropriate management methods, resources, and tools needed to meet or exceed System Response Time and Availability Specifications as provided in this SLA, including, but not limited to, System capacity analysis and planning, use of appropriate software necessary to monitor the System, best practice internal change management processes and procedures for systems management, and the System Software Support and problem management processes, procedures and escalation guidelines in accordance with the provisions of this Service Level Agreement, including but not limited to Schedule I (Service Level Commitments).
- (c) Monitor System performance and tune System components to ensure System Response Time and Availability levels as provided in this SLA.
- (d) Monitor, manage, and control the computing systems to report and alert on compromised System health, security, Availability and/or capacity, and act to prevent and/or correct Deficiencies, by taking such actions as rebooting Systems on a recurring

schedule to optimize Domain performance, performing System level daylight savings time management, applying operating software service packs to the System and/or infrastructure as required to maintain System health, security, Availability, performance, and capacity, including but not limited to executing any special instructions necessary for such service packs.

- (e) Provide external access via Internet to Citrix servers in the CTC for occasional access by COUNTY Users authorized for such use by the COUNTY's Project Director, and provide access instructions and passwords for said external Users.
- (2) Security Management

CONTRACTOR shall provide and manage the System to ensure security in accordance with the Specifications and this Agreement.

- (a) Promptly report to COUNTY's Project Manager by email or telephone all County-related Security Incidents, but in no event later than two (2) hours following CONTRACTOR knowledge of the Security Incident, with subsequent notification in writing to follow shortly thereafter in accordance with the timeframes set forth in Exhibit J (CONTRACTOR'S Obligations As a "Business Associate" Under Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Health Information Technology for Economic and Clinical Health Act (HITECH)). In addition, on a monthly basis, CONTRACTOR shall summarize any non-County related Security Incidents of which CONTRACTOR has knowledge that have occurred during the period and their remediation at a high level with COUNTY Project Manager using telephone or email communications, as determined by CONTRACTOR in its sole discretion. These high level summaries shall include the nature of the incident(s), steps taken to remediate the associated threat(s) or vulnerability(ies), and any residual risk(s). The summaries shall not include any information that could reveal the customer(s) affected directly by the incident.
- (b) Provide security software and equipment security controls, provide and maintain updated Virus detection and correction, provide logical security using lockdown procedures post

Production Use, provide URL access to COUNTY approved Internet sites, implement and monitor network intrusion detection systems throughout the CTCs' networks, monitor and report System security errors, exceptions and attempted violations to COUNTY as dictated by standard procedures and as provided by periodic reporting schedules established by the COUNTY's Project Director in collaboration with CONTRACTOR's Project Director.

- (c) Secure backup media with check-in and check-out procedures, store COUNTY's backup media in a manner that will protect the confidentiality of the data stored on them and ensure that such data remain COUNTY's property including provision of secure environment(s) for on-site and off-site backup storage.
- (d) Appoint a corporate IT Security Manager and other security personnel as mutually agreed by the COUNTY's Project Director and CONTRACTOR's Project Director to monitor and enforce security procedures and resolve exception report issues.
- (e) Provide four Primary Domain Controllers (PDCs) in CTCs to facilitate integration of the COUNTY provided integrated PEMRS Active Directory and, if applicable, Millennium LDAP Authentication Pass-through Application Software module.
- (f) Provide, implement, and support the COUNTY domain controllers located in the CTC.
- (g) Provide anti-virus protection, service management, and service monitoring agents on domain controllers located in the CTC.
- (h) Provide a secured environment for the COUNTY's Primary Domain Controllers operating in CTC.
- Install, provide, monitor and manage the enterprise level audit logging, tracking, and reporting services enabled by CONTRACTOR'S P2Sentinel Security Services to support COUNTY's requirements as specified in Attachment A (PEMRS Functional, Technical, and Operational Requirements) of Exhibit A (SOW) of this Agreement (as further described in this Subparagraph II.C(2)(i), "P2Sentinel Security Services").

- Provide the hardware, software and maintenance needed to ensure that the P2Sentinel Security Services operate in accordance with the Specifications and otherwise the Agreement;
- (ii) Provide and manage off-site backup of the P2Sentinel Security Services data;
- Provide connectivity and network services as necessary for the COUNTY to utilize the P2Sentinel Security Services;
- (iv) Work with COUNTY to implement an appropriate selection of audited transactions;
- (v) Work with COUNTY to define and configure the reports to be delivered regularly together with custom and *ad-hoc* reporting capabilities; and
- Advise COUNTY as appropriate on advisable monitoring and action procedures regarding P2Sentinel tracking and reports.
- (3) Back-End System Management

CONTRACTOR shall provide, install, manage, maintain, support and control all hardware, operating software, including operating system and database software, and resources needed to access the System and execute the System Software, in order for the Phase 1 System and each Optional Phase System elected by the COUNTY for which remote hosting services apply to operate in the CTCs in accordance with the Specifications and otherwise with the Agreement (herein, sometimes the "Back-end System").

- (a) Provide Back-end System computing including CPUs, memory and data storage.
- (b) Acquire, provide, install, manage and maintain operating software and related licenses for the Back-end System required to operate the required Domains(s), including, but not limited to, payment of ongoing maintenance and support fees required for such operating software and related licenses.
- (4) Front-End System Management

CONTRACTOR shall provide, install, manage, maintain, support and control required front-end software such as without limitation Microsoft and Citrix Software, necessary to facilitate COUNTY and User access to the Domains and printing services in accordance with the Specifications and otherwise with the Agreement (herein, sometimes the "Front-end System").

CONTRACTOR shall:

- (a) Manage, maintain, control and operate the Front-end System equipment, and any and all front-end software, computing systems and associated infrastructure as required for the Phase 1 System and each Optional Phase System elected by the COUNTY for which remote hosting services apply to operate in accordance with the Specifications, in accordance with manufacturer-recommended and supported practices.
- (b) Provide, manage, control and operate processes and resources needed to monitor the Front-end System and to report, alert on, and correct compromised system health, security, capacity, and Availability.
- (c) Provide, manage, control and operate Front-end System servers required to facilitate printing excluding COUNTYowned print servers required for local printing on COUNTY site.
- (d) Provide, support, manage, maintain and control the Microsoft terminal server database operations and security.
- (e) Provide and ship to COUNTY the CONTRACTOR-provided COUNTY site equipment necessary to provide the Remote Hosting Services, and manage such equipment remotely from the CTCs.
- (f) Provide COUNTY with a list of validated devices including but not limited to printers and scanners suitable for local use with PEMRS.
- (g) Acquire, manage, maintain, and control storage for all the Domains as necessary for the System to operate in accordance with the Specifications and otherwise with the Agreement.

### D. DATABASE MANAGEMENT

CONTRACTOR shall provide, administer, support, maintain, manage and control the System database and database management software as

necessary to operate PEMRS 24 hours per day, 7 days per week, and every day of each year in accordance with the Specifications and otherwise with the Agreement at the Response Time and Availability levels provided in this SLA. CONTRACTOR shall implement and maintain database access, Response Time and Availability in a consistent and efficient manner across all system Domains. Such CONTRACTOR's database management services shall include, but not be limited to the following.

(1) Database Installation and Upgrade

CONTRACTOR shall:

- (a) Acquire, install, operate, maintain, support, and upgrade Database Management Systems software.
- (b) Provide appropriate database management methodologies, resources and tools to manage, troubleshoot, back up and recover the database in all Domain(s).
- (2) Database Performance Management and Monitoring

- (a) Monitor and report on database security, performance and capacity.
- (b) Provide, manage, and control database storage required to operate and maintain PEMRS.
- (c) Maintain offsite backup of the System and COUNTY data. Such backup shall operate and perform in a manner comparable to CTC with respect to both System and COUNTY data.
- (d) Monitor alert logs, monitor and control number of extents remaining, free space, free space deficits, file and table space, instance status, lock conflicts, space available in table space, status of listeners, and performance characteristics such as SGA and I/O.
- (e) Reorg /defragment database objects/table space as necessary to maintain performance.
- (f) Monitor and control purge job activity to ensure purges are completing successfully.
- (3) Database Backup, Restore, and Recovery

CONTRACTOR shall:

- (a) Define, maintain, document and enforce backup requirements as needed.
- (b) Define and enforce System-wide recovery and backup requirements, perform System backups as specified in CONTRACTOR's standard backup procedure, provide tape rotation, verify backup logs, coordinate offsite storage functions, including logging, tracking, labeling, ordering, receiving and sending tapes, replacing tapes and disks in storage required in accordance with the prescribed schedule to ensure System performance, availability and reliability, and restoring System data as required.
- (c) Schedule and test routine recovery procedures.

### E. INTERFACE MANAGEMENT

CONTRACTOR shall provide and manage Interfaces necessary to operate PEMRS 24 hours per day, 7 days per week, every day of each year in accordance with the Specifications and otherwise with the Agreement. CONTRACTOR shall implement and maintain Interface management services and support in a consistent and efficient manner across all Domains. All external system Interfaces and medical devices Interfaces (MDIs) shall connect via COUNTY-provided LAN/WAN into the CONTRACTOR provided and provisioned WAN circuit(s) via the dual points of demarcation.

(1) Interface Monitoring

CONTRACTOR shall:

Monitor CONTRACTOR inbound cycle times over-threshold alarms, external system Interfaces connectivity, and CONTRACTOR outbound Interface queue counts and over-threshold alarms.

(2) Interface Management

CONTRACTOR shall:

- (a) Notify COUNTY of Interface issues that affect service.
- (b) Work with COUNTY to identify and correct Interface operational or performance problems in accordance with Section IV, "Application Management Services (AMS)" of this SLA.

#### F. <u>REMOTE HOSTING SERVICES TERM AND FEES</u>

(1) For the Phase 1 System, CONTRACTOR shall provide and COUNTY shall receive Remote Hosting Services commencing upon the Effective Date, and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of the Agreement.

For each Optional Phase System where COUNTY determines that Remote Hosting Services apply and elects to implement an Optional Phase System, CONTRACTOR shall provide and COUNTY shall receive Remote Hosting Services commencing upon execution of the applicable Change Notice or Amendment under Paragraph 6 (Change Notices and Amendments) of the Agreement and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of the Agreement.

- (2) Payments for Remote Hosting Services for the Phase 1 System from the Effective Date until COUNTY's written approval of Deliverable 6.7 (Production Use of the Phase 1 System at all COUNTY Facilities) of Exhibit A (Statement of Work) of the Agreement shall be in accordance with Exhibit B (Schedule of Payments). Monthly Remote Hosting Services fees for the Phase 1 System shall commence on the COUNTY's written approval of Deliverable 6.7 (Production Use of the Phase 1 System at all COUNTY Facilities) of Exhibit A (Statement of Work) of the Agreement and shall be payable monthly in advance, unless otherwise provided herein. The amount of the monthly Remote Hosting Services fees shall be in accordance with Schedule III (Remote Hosting Services and P2Sentinel Security Services Fees) to this SLA.
- (3) For each Optional Phase System where COUNTY determines that Remote Hosting Services apply and COUNTY elects to implement such Optional Phase System, payments for Remote Hosting Services from execution of the applicable Change Notice or Amendment until COUNTY's written approval of Deliverable 7.7 (Production Use of the Optional Phase System at all COUNTY Facilities) of Exhibit A (Statement of Work) of the Agreement shall be in accordance with the applicable Change Notice or Amendment. Monthly Remote Hosting Services fees shall commence on COUNTY's written approval of Deliverable 7.7 (Production Use of the Optional Phase System at all COUNTY Facilities) of Exhibit A (Statement of Work) of the Agreement, and shall be payable monthly in advance, unless otherwise provided herein. The amount of the monthly Remote Hosting Services fees shall be in accordance with Schedule III (Remote Hosting Services and P2Sentinel Security Services Fees) to this SLA.
- G. <u>P2SENTINEL SECURITY SERVICES TERM AND FEES</u>

(1) For the Phase 1 System, CONTRACTOR shall provide and COUNTY shall receive P2Sentinel Security Services commencing upon the COUNTY's acceptance of Deliverable 6.2.2 (Successful Integration Test Results for the Phase 1 System), and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of the Agreement.

For each Optional Phase System where COUNTY determines that P2Sentinel Security Services apply and elects to implement an Optional Phase System, CONTRACTOR shall provide and COUNTY shall receive P2Sentinel Security Services commencing upon execution of the applicable Change Notice or Amendment under Paragraph 6 (Change Notices and Amendments) of the Agreement and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of the Agreement.

(2) Payments for P2Sentinel Security Services for the Phase 1 System from the Effective Date until COUNTY's written approval of Deliverable 6.6 (Successfully Conducted User Acceptance Testing of the Phase 1 System) of Exhibit A (Statement of Work) of the Agreement shall be in accordance with Exhibit B (Schedule of Payments). Monthly P2Sentinel Security Services fees for the Phase 1 System shall commence on the COUNTY's written approval of Deliverable 6.6 (Successfully Conducted User Acceptance Testing of the Phase 1 System) of Exhibit A (Statement of Work) of the Agreement and shall be payable monthly in advance, unless otherwise provided herein. The amount of the monthly P2Sentinel Security Services fees shall be in accordance with Schedule III (Remote Hosting Services and P2Sentinel Security Services Fees) to this SLA.

For each Optional Phase System where COUNTY determines that P2Sentinel Security Services apply and COUNTY elects to implement such Optional Phase System, payments for P2Sentinel Security Services from execution of the applicable Change Notice or Amendment until COUNTY's written approval of Deliverable 7.6 (Successfully Conducted User Acceptance Testing of each Optional Phase System) of Exhibit A (Statement of Work) of the Agreement shall be in accordance with the applicable Change Notice or Amendment. Monthly P2Sentinel Security Services fees shall commence on COUNTY's written approval of Deliverable 7.6 (Successfully Conducted User Acceptance Testing of each Optional Phase System) of Exhibit A (Statement of Work) of the Agreement, and shall be payable monthly in advance, unless otherwise provided herein. The amount of the monthly P2Sentinel Security Services fees shall be in accordance with Schedule III (Remote Hosting Services and P2Sentinel Security Services Fees) to this SLA.

#### III. UPGRADES IMPLEMENTATION SERVICES

Without limiting the introductory portions of this SLA or otherwise the provisions of the Agreement, CONTRACTOR shall provide all professional services and Remote Hosting Services infrastructure necessary to complete up to three (3) Upgrades of the System during the term of the Agreement when the COUNTY elects, as directed by the COUNTY's Project Director in his sole judgment, to implement such Upgrade of the Phase 1 System and/or each Optional Phase System, provided by CONTRACTOR consistent with Sections I.A(6), ("Upgrades Implementation Services"). CONTRACTOR shall upgrade the System to the most recent generally available code level in accordance with the Specifications, the Specifications described in Section III (Remote Hosting Services) of Attachment A (PEMRS Functional, Technical, and Operational Requirements) of Exhibit A (Statement of Work) and otherwise with the Agreement. Upgrades Implementation Services includes, without limitation, acquisition, creation, implementation and support of the necessary Domains at the CTC, installation, configuration and Tailoring of each Application Software module, and all reports associated with such module, and recommended changes, if any, to the Specified Hardware and Operating Software. Upon implementation of each Upgrade as provided in this Section III of this SLA, the resulting System shall automatically be subject to all provisions of this Agreement, including but not limited to the provisions of each Section of this SLA. (Professional services necessary to implement updates are described below, in Section IV (Application Management Services.)

### A. UPGRADE SERVICES

(1) UPGRADE IMPLEMENTATION SERVICES PROJECT PLANNING AND MANAGEMENT

CONTRACTOR shall provide Upgrade project planning and management services in writing to ensure that the Upgraded System operates in accordance with the Specifications and otherwise with the Agreement.

CONTRACTOR shall:

(a) Update and maintain the Specifications (including but not limited to System functionality and Tailoring of the System Software, relevant Remote Hosting Services Specifications such as but not limited to capacity of Production and non-Production Domains (in particular Mock Upgrade and Certification Domains), and requirements for Specified Hardware and Specified Operating Software), Project Plan, Domain strategy, Project Control Document ("PCD"), Communications Plan, Cutover Plan, and Conceptual Design Document for the Phase 1 System and each Optional Phase System.

- (b) Update the documents incorporated by reference as Exhibit G (PEMRS Assessment) of this Agreement and its attachments as needed to ensure that the Upgraded System will perform in accordance with the Specifications and otherwise with the Agreement and deliver the modifications in writing, which shall automatically be incorporated in Exhibit G (PEMRS Assessment) of this Agreement as an additional attachment thereto.
- (c) Determine and document initial package requirements, including but not limited to the data base build requirements and the identification and resolution of potential issues with Tailoring of the System, implementation of user-defined components, and issues with installed code.
- (d) Document the testing plan in accordance with Subparagraph 9.2 (CONTRACTOR Testing) of the Agreement. CONTRACTOR shall coordinate testing as provided in the updated PCD and Conceptual Design Document, including, but not limited to, definition of testing requirements, identification of appropriate testers, and engagement of appropriate resources to complete the build and testing.
- (e) Identify, document and mitigate Upgrade project risks and identify and secure project resources.
- (f) Ensure that CONTRACTOR provided Tailoring, previously implemented Upgrades and Updates, Cerner Command Language (CCL) scripts and custom reports, are identified, modified, and repackaged as necessary to ensure that the Upgraded System will operate in accordance with the Specifications and the Agreement.
- (g) Ensure that appropriate CONTRACTOR resources are scheduled for Upgrade and post Upgrade support.
- (h) Obtain COUNTY approval for the updated PCD, Conceptual Design Document, Exhibit G (PEMRS Assessment) of this Agreement and its attachments, Risk Mitigation Plan, Test Plan, Communications Plan, and Cutover Plan (the "Approved Upgrade Plan").
- (2) UPGRADE PROJECT IMPLEMENTATION SERVICES

CONTRACTOR shall implement the Upgrade of the System in accordance with the Approved Upgrade Plan developed and approved by COUNTY as defined in Section III.A(1) (Upgrade Implementation Services Project Planning And Management) of this SLA.

CONTRACTOR shall:

- (a) Acquire, install, implement, configure and enable the Domain(s) and then-current related resources such as the Lights On network®, MethodM®, Bedrock®, and software necessary to complete, test, and validate the Upgrades to be implemented in accordance with the provisions of the Agreement.
- (b) Ensure that no updates to the System are implemented affecting the Production Domain during the Upgrade project.
- (c) Perform non-passive build steps, and application security merges for all Domains.
- (d) Configure Interfaces for Non-Production Domains in accordance with the Domain strategy and Approved Upgrade Plan.
- (e) Validate Non-Production Domains that will be Upgraded in order to ensure that such Domains are true copies of the Production Domain prior to performing Upgrade activities.
- (f) Upgrade Non-Production Domains per Domain strategy and the Approved Upgrade Plan, including but not limited to loading Front-end System code warehouse and configuring the Multum, remote report distribution ("RRD"), and charting servers.
- (g) Upgrade Front-End System devices in the Production Domain (including but not limited to Multum, charting, RRD).
- (h) Upgrade the Production Domain in accordance with the Approved Upgrade Plan.
- Perform CONTRACTOR tests in accordance with the provisions of Subparagraph 9.2 of the Agreement (CONTRACTOR Testing) and the Approved Upgrade Plan.
- (j) Refresh COUNTY's Certification Domain in accordance with the Approved Upgrade Plan.

- (k) Manage Upgrade project issues list and work with COUNTY to achieve issue resolution until code moved to Production Use.
- Provide training updates to COUNTY trainers related to the Upgraded System in a manner similar to Subtask 6.4.2 of Exhibit A (Statement of Work).
- (m) Provide mentoring, knowledge transfer, and resources to COUNTY in a manner similar to Subtask 3.1 of Exhibit A (Statement of Work).

# B. <u>UPGRADES IMPLEMENTATION SERVICES TERM AND FEES</u>

(1) For the Phase 1 System, CONTRACTOR shall provide and COUNTY shall receive Upgrade Implementation Services commencing upon COUNTY's written approval of Deliverable 6.7 (Production Use of the Phase 1 System at all COUNTY Facilities) of Exhibit A (Statement of Work), and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of this Agreement.

For each Optional Phase System, CONTRACTOR shall provide and COUNTY shall receive Upgrade Implementation Services commencing upon COUNTY's written approval of Deliverable 7.7 (Production Use of Each Optional Phase System at all COUNTY Facilities) of Exhibit A (Statement of Work), and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of the Agreement.

(2) For the Phase 1 System, monthly Upgrade Implementation Services fees shall commence upon COUNTY's written approval of Deliverable 6.7 (Production Use of the Phase 1 System at all COUNTY Facilities) of Exhibit A (Statement of Work) and shall be payable monthly in advance, unless otherwise provided herein. The amount of the monthly Upgrade Implementation Services fees shall be in accordance with the Schedule IV (Upgrades Implementation Services) to this SLA.

For each Optional Phase System, monthly Upgrade Implementation Services fees shall commence upon COUNTY's written approval of Deliverable 7.7 (Production Use of Each Optional Phase System at all COUNTY Facilities) of Exhibit A (Statement of Work) and shall be payable monthly in advance, unless otherwise provided herein. The amount of the monthly Upgrade Implementation Services fees for each Optional Phase System shall be in accordance with Schedule IV (Upgrades Implementation Services) to this SLA.

# IV. APPLICATION MANAGEMENT SERVICES (AMS)

Without limiting the introductory portions of this SLA or otherwise the provisions of the Agreement, CONTRACTOR shall further support the System by providing Application Management Services ("AMS") as defined in this Section of this Service Level Agreement in order to ensure that the System operates in accordance with the Specifications and otherwise with the Agreement. CONTRACTOR shall provide as part of AMS, professional services that enable the COUNTY to continue in operation and to use the System at its highest levels of functionality and efficiency, without requiring COUNTY to initiate a service request, or to hire third parties and/or assign COUNTY staff to perform routine System performance tuning, content management activities and additional or modified Tailoring, and/or reports requested by Users.

CONTRACTOR shall provide the following as AMS:

- 1. User Account Management (maintenance and monitoring of the User database)
- 2. System Operations Monitoring (monitor and report on System performance and on published CONTRACTOR notifications and alerts)
- 3. System Content Management (continuous Updates of content including, but not limited to, codes and code sets, rules, and decision support and service packages)
- 4. Monitoring and support of Cerner Command Language (CCL) reports in addition to standard reports supplied with the System
- 5. 2<sup>nd</sup> Level Help Desk Services for preventive and troubleshooting activities that cannot be resolved locally by COUNTY's 1<sup>st</sup> Level Help Desk as defined in this SLA.

The services provided by CONTRACTOR as part of AMS supplement, but do not replace or substitute for, those services provided for in Section I (System Maintenance) of this SLA. CONTRACTOR shall provide these AMS on a full time basis, 24 hours per day, 7 days per week, every day of each year during the term of this Agreement. CONTRACTOR shall fully staff these AMS and shall provide and manage these services in addition to and in collaboration with CONTRACTOR's delivery of System Software Support as specified in Section I of this SLA, Remote Hosting Services as specified in Section II and Upgrade Implementation Services as specified in Section III.

# A. <u>APPLICATION MANAGEMENT SERVICES</u>

CONTRACTOR shall provide professional services required to ensure that the Phase 1 System and each Optional Phase System is available for Users.

(1) USER ACCOUNT MANAGEMENT

CONTRACTOR shall:

- (a) Provide and maintain User database for System Softwarespecific security such as authorizations, application access, task access, print authorization, positions, and role setup.
- (b) Maintain individual User accounts upon COUNTY notification of (a) new, modified, and/or terminated User account(s).

# (2) SYSTEM OPERATIONS MONITORING

CONTRACTOR shall:

- (a) In connection with support of PEMRS, ensure that COUNTY receives all announcements, alerts, trouble messages, and resolution recommendations from any component of CONTRACTOR's operations, such as but not limited to flashes, illuminations, and distributions published by CONTRACTOR for its customers, together with CONTRACTOR's recommendations for COUNTY and/or CONTRACTOR action.
- (b) Monitor the System operating in the Production Domain and correct operations when warranted to ensure Response Time and Availability in accordance with this SLA.
- (c) On a scheduled periodic basis, monitor and report on orphaned/incorrect/incomplete journal transactions and advise COUNTY of appropriate means of preventing the occurrence and persistence of such orphaned/incorrect/incomplete transactions, including Corrective Maintenance as provided in Section I of this SLA and/or such additional Tailoring or modification of System as may be required.
- (d) Monitor System notifications (i.e., flashes, advisories, application and system guides, knowledge base articles, etc.) and take necessary action as indicated to ensure the System continues to operate in accordance with the Specifications and otherwise with the Agreement, as approved in writing by the COUNTY's Project Director.
- (e) Maintain remote report distribution settings, develop workflow documentation, build and maintain reference databases, perform event code/event set changes as required, monitor and correct errors with Interfaces, chart servers, operations jobs, RRD, and printing.
- (f) Document operations jobs performance and completion timings and create operations profiles to inventory and baseline transaction volumes.

- (g) Notify COUNTY help desk of issues found that affect service that are within COUNTY control to correct or prevent.
- (h) Take appropriate corrective and/or preventive action when notified by CONTRACTOR or COUNTY of anomalies found in the review of posting and error logs and/or System inbound/outbound Interface queue counts.
- Ensure that active Interfaces are operational and monitor and cycle inbound Interfaces as required to establish connections and start transactions, and maintain CTC side of external system and medical device Interfaces.
- (j) Take appropriate corrective and/or preventive action when notified by CONTRACTOR, COUNTY, or System of anomalies in monitored chart queue status, chart volume trends, and errors in chart servers, configurations, and/or formats.
- (k) Monitor charting and RRD for successful completion, document and map RRD queues, verify chart status, monitor print queue for successful completion, restart print queue upon failed print jobs, re-submit unsuccessful charts, and retransmit failed RRD requests.
- (I) Inventory, document, and review operations jobs for efficient use of System resources, and take appropriate corrective and/or preventive action when CONTRACTOR, COUNTY, or System reports anomalies or non-completion of monitored operations, and restart jobs when required.

# (3) SYSTEM CONTENT MANAGEMENT

CONTRACTOR shall provide continuous Updates of System content including but not limited to each of Multum/Medisource, ICD-9 (as well as ICD 10 when implemented), CPT-4, code content included in Service Packages, when the publishers of such packages or content issue Updates and COUNTY, in the sole discretion of the COUNTY's Project Director, elects to install them as provided in Section III of Attachment A (PEMRS Functional, Technical, And Operational Requirements) of Exhibit A (Statement of Work).

With respect to such COUNTY election, CONTRACTOR shall:

(a) Maintain standard content updates in accordance with the COUNTY elections.

- (b) Install and test subscription updates, service packages and fixes and assure the integrity of the resulting data, perform Front-end System special instructions for service package loads, and perform service package certification guidelines as needed.
- (c) Design and conduct CONTRACTOR tests as described in Subparagraph 9.2 (CONTRACTOR Tests) of the body of the Agreement, of the Tailored System as needed to ensure the integrity of the System and its continued operation in accordance with the Specifications and otherwise with the Agreement.

# (4) REPORT MANAGEMENT

CONTRACTOR shall provide continuous management and support of reports that are operating in the Production Domain as of Final System Acceptance for the Phase 1 System and/or each Optional Phase System, to ensure that the System continues to operate in accordance with the Specifications and otherwise with the Agreement ("Report Management"). In the context of this Section IV.A(4), the following kinds of reports are included:

- Reports supplied by the System without Tailoring or development using CCL;
- Tailored standard reports and reports other than those supplied by the standard System without Tailoring or development of CCL; and
- Reports developed using Discern Expert and Discern Explorer Reports, rules, and/or alerts.

In respect to such continuous management and support, CONTRACTOR shall:

- (a) Create and maintain the inventory of all reports that are used in the Phase 1 System and each Optional Phase System and maintain such reports.
- (b) Tailor such reports and/or rules to address changes requested by COUNTY.
- (c) Tailor and test such reports and rules and/or alerts to address changes required for content updates, and troubleshoot reports operating in the Production Domain as required by COUNTY or as required by Updates.
- (5) 2<sup>nd</sup> LEVEL HELP DESK SERVICES

CONTRACTOR shall provide a fully staffed and comprehensive Help Desk Services for any requests that are determined by the COUNTY's Project Director, in his sole judgment, to be outside the scope of issues that can be resolved by COUNTY's help desk ("2<sup>nd</sup> Level Help Desk Services"). In respect to the 2<sup>nd</sup> Level Help Desk Services, CONTRACTOR shall:

- (a) Answer questions regarding System usage.
- (b) Recommend short-term and long-term problem prevention and resolution practices and procedures to COUNTY for practices and procedures within COUNTY's control.
- (c) Troubleshoot and resolve external system and medical device Interface errors on the CONTRACTOR-side of Interfaces.
- (d) Manage COUNTY requests and report periodically on status to COUNTY and COUNTY's PLT.
- (6) OPERATIONS MANAGEMENT

CONTRACTOR shall

- (a) Add/remove operations jobs.
- (b) Set purge jobs and schedule jobs to run, set up and review purges and operations jobs, and monitor purge jobs to ensure purges are completing successfully.

#### B. <u>APPLICATION MANAGEMENT SERVICES TERM AND FEES</u>

(1) For the Phase 1 System, CONTRACTOR shall provide and COUNTY shall receive AMS commencing upon COUNTY's written approval of Deliverable 10.4 (Set up and Configured Application Management Services) of Exhibit A (Statement of Work), and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of this Agreement.

For each Optional Phase System, CONTRACTOR shall provide and COUNTY shall receive AMS commencing upon COUNTY's written approval of Deliverable 7.7 (Production Use of each Optional Phase System at all COUNTY Facilities) of Exhibit A (Statement of Work), and continuing for the term of the Agreement, unless otherwise terminated in accordance with the provisions of the Agreement.

(2) For the Phase 1 System, monthly AMS fees shall commence upon COUNTY's written approval of Deliverable 6.7 (Production Use of the Phase 1 System at all COUNTY Facilities) of Exhibit A (Statement of Work) and shall be payable monthly in advance, unless otherwise provided herein. The amount of the monthly AMS fees shall be in accordance with Schedule V (Application Management Services (AMS) Fees) to this SLA.

For each Optional Phase System, monthly AMS fees shall commence upon COUNTY's written approval of Deliverable 7.7 (Production Use of each Optional Phase System at all COUNTY Facilities) of Exhibit A (Statement of Work) and shall be payable monthly in advance, unless otherwise provided herein. The amount of the monthly AMS fees shall be in accordance Schedule V (Application Management Services (AMS) Fees) to this SLA.

#### V. <u>CHANGE MANAGEMENT</u>

This SLA specifies the details of CONTRACTOR services to be provided in connection with System Support Services, Remote Hosting Services, Upgrades Implementation Services, and Application Management Services. In providing these Services, taken as a whole, CONTRACTOR shall provide all System functions and services necessary for COUNTY and Users to receive the benefits of the System and its continued Use with minimal assigned COUNTY or third party staffing. CONTRACTOR shall manage and deliver these services consistently over time in addition to and in collaboration with each service so that COUNTY receives the benefit of all Services specified herein to enable the System to operate and continue to operate in accordance with the Specifications and the provisions of the Agreement.

CONTRACTOR shall manage change with respect to such Services in accordance with the provisions of Paragraph 6 (Change Notices and Amendments) of the Agreement. Without limiting said provisions, CONTRACTOR shall further manage changes relative to this SLA as specified in the approved Deliverable 14.1 (Change Management Plan) of the Statement of Work (Exhibit A) of the Agreement and this Section V of this Service Level Agreement.

Also described herein are certain roles and responsibilities of COUNTY with respect to change management, such as appropriate notice of change requirements to CONTRACTOR. Unless explicitly assigned to COUNTY, all roles and responsibilities with specified in this Service Level Agreement, including, without limitation, change management roles and responsibilities, shall be the responsibility of CONTRACTOR.

# A. <u>CHANGE MANAGEMENT PROCESS</u>

- (1) Change Management Procedure and Control
  - (a) CONTRACTOR shall provide a copy of CONTRACTOR's standard change management procedure to COUNTY. This

change management procedure shall, without limitation, integrate and provide for all CONTRACTOR's change management as it affects the following Services specified in this Service Level Agreement: System Maintenance (Section I), Remote Hosting Services (Section II), Upgrades Implementation Services (Section III), and Application Management Services (Section IV) taken together and as a whole.

- (b) CONTRACTOR's Project Director and COUNTY's Project Director will collaborate on determining a final format and procedure for change management that is based on and extends as necessary on Deliverable 14.1 (Change Management Plan) and i) ensures that changes occur in a controlled environment so that all parties understand the potential impact of an impending change, ii) identifies potentially affected Systems and processes prior to implementation of the change(s), iii) provides for appropriate CONTRACTOR testing and COUNTY validation, and iv) is implemented to ensure that System operates and continues to operate in accordance with the Specifications and the Agreement. CONTRACTOR shall document such process and submit them for COUNTY review and approval of COUNTY's Project Director. Once approved, this Document shall be the "Approved Change Management Plan".
- (c) CONTRACTOR shall ensure that all changes that affect Production Domains have been approved in writing by COUNTY's Project Director before implementation, which approval shall not be unreasonably withheld. COUNTY agrees to provide reasonable and appropriate maintenance windows and to participate in the testing of all changes as reasonably required.
- (d) CONTRACTOR shall provide and maintain an automated change management system for the centralized reporting and tracking of changes as authorized by the COUNTY's Project Director.
- (e) CONTRACTOR shall conduct scheduled change management meetings.
- (f) CONTRACTOR shall perform post-mortem reviews on problems that affect service level standards, as well as root cause analysis if possible.

- (g) CONTRACTOR shall notify COUNTY's help desk of issues that affect service and may be within the scope of COUNTY's ability to prevent or resolve.
- (h) CONTRACTOR shall provide and maintain a method for proper escalation of problems within CONTRACTOR's management.
- (i) CONTRACTOR shall log all incidents and problems in accordance with documented processes.
- (j) CONTRACTOR shall ensure proper notification and escalation in accordance with CONTRACTOR's standard operating procedures as approved by COUNTY's Project Director.
- (2) Certification Domain
  - (a) CONTRACTOR shall provide, equip, configure and maintain a Certification Domain in accordance with the Domain Strategy defined in the approved Conceptual Design Document (Deliverable 3.3 of Exhibit A) and as recommended in the Exhibit G (PEMRS Assessment) and its attachments.
  - (b) CONTRACTOR shall maintain, provision and monitor the Certification Domain as needed for Upgrades, Updates and/or ongoing System testing so that said Certification Domain is continuously available to CONTRACTOR and COUNTY for use in validation and testing as necessary to operate the System in accordance with the Specifications and otherwise with the Agreement.
- (3) Change Management

CONTRACTOR shall manage change and the change management process as provided in this section and in the Approved Change Management Plan.

- (a) CONTRACTOR shall lead and attend change management meetings.
- (b) CONTRACTOR shall provide, communicate, and maintain risk management analysis.
- (c) CONTRACTOR shall test and COUNTY will validate all System changes in accordance with the provisions of Approved Change Management Plan prior to moving them to Production Use.

(d) CONTRACTOR shall test Upgrades and Updates in order to assure the integrity of the resulting data and continued operation of the System in accordance with the Specifications and otherwise with the Agreement.

## VI. COUNTY ROLES AND RESPONSIBILITIES

COUNTY recognizes that CONTRACTOR provides services defined in this SLA based on the assumption that COUNTY will participate actively and discharge its responsibilities as defined in this Section. COUNTY will provide governance and staffing, certain facilities and equipment, and certain services required, and subject to Exhibit G (PEMRS Assessment) and its attachments to enable the System to operate in accordance with Specifications and the Agreement.

#### A. <u>GOVERNANCE AND STAFFING</u>

(1) Governance

- (a) Continue to provide and maintain the Inter-Agency Project Leadership Team (PLT)
- (b) Provide and manage internal COUNTY communications with all COUNTY agencies and officials
- (c) Provide decision-making and decision support when necessary to direct certain COUNTY options, such as the election to implement an Optional Phase System, how to host System Components, Upgrade project planning and approval, prioritization of System changes, and/or purchase of other professional services as provided in Subparagraph 7.5 of the Agreement.
- (d) Collaborate with CONTRACTOR to ensure orderly and controlled change processes that ensure the change process operates as provided in Paragraph 6 (Change Notices and Amendments) of the body of the Agreement, the approved Deliverable 14.1 (Change Management Plan) of the Statement of Work (Exhibit A) of the Agreement and this Section V of this Service Level Agreement.
- (e) Collaborate with CONTRACTOR to establish a compliance review function of the PLT, in the event that either COUNTY or CONTRACTOR, as the case may be, determines that a compliance review is necessary under the applicable of clause (i) or (ii) below. Subject to PLT governance and process

- (i) Should CONTRACTOR have knowledge to believe that COUNTY is not in compliance with any applicable Federal. State or local law, rule or regulation as it relates to COUNTY's use of the System in the Production Domain, and CONTRACTOR reasonably believes that such non-compliance poses a significant legal or financial risk to CONTRACTOR, then CONTRACTOR shall provide written notification to COUNTY detailing the specific area of noncompliance and proposing an agenda for review of such area of non-compliance. At a mutually agreed upon time and pursuant to a mutually agreed upon agenda, COUNTY agrees to review with CONTRACTOR at no additional cost to COUNTY, the specific area of non-compliance. Should the parties jointly determine that COUNTY is not in compliance with any applicable Federal, State or local law, rule or regulation, CONTRACTOR and COUNTY agree to work together to develop a mutually agreed upon remediation plan, including a timeframe for completion thereof. Development of the remediation plan shall be at no additional cost to COUNTY. If a remediation plan has not been completed within the applicable timeframe, then the parties will discuss the risk and/or impact to CONTRACTOR and COUNTY in continuing the Remote Hosting Services relationship.
- (ii) In addition, if either party determines that CONTRACTOR is not in compliance with any applicable Federal, State or local law, rule or regulation as it relates to Remote Hosting Services, that (a) is particular to this Agreement, and (b) was either enacted or modified after the Effective Date, and CONTRACTOR reasonably determines that the cost for CONTRACTOR to achieve compliance with such applicable law, rule or regulation will result in CONTRACTOR incurring additional costs in an excess of ten (10%) of CONTRACTOR's costs for providing Remote Hosting Services as of the date of the determination (such costs being documented to COUNTY's satisfaction), then CONTRACTOR shall submit a proposal to COUNTY identifying commercially reasonable options for CONTRACTOR to continue to provide the Remote Hosting Services, which may include (i) any resulting changes to the Remote Hosting Services fees, or (ii) any resulting changes in

the service level commitments described in this Exhibit D. Any changes to the Agreement required as a result of the parties agreeing to implement one of the proposed options shall be in accordance with Paragraph 6 of the body of the Agreement. If the parties are unable to reach agreement within one hundred and eighty (180) days of CONTRACTOR's submission of the options, CONTRACTOR and COUNTY will discuss the risk and/or impact to CONTRACTOR and COUNTY in continuing the Remote Hosting Services relationship notwithstanding CONTRACTOR's noncompliance.

- (iii) Following all of the steps set forth in the applicable of clause (i) or (ii) above, including but not limited to the risk and/or impact discussions, if the parties agree that it is not feasible to continue with the Remote Hosting Services relationship, then CONTRACTOR shall work with COUNTY to identify an alternative hosting solution for COUNTY. CONTRACTOR and COUNTY will work together to develop a migration plan and CONTRACTOR shall provide COUNTY with a quote for any additional work required beyond the Remote Hosting Services, which may include the following: (a) any equipment and third party software necessary; (b) any associated maintenance services; and (c) professional services necessary for such transition. COUNTY reserves the right to acquire any foregoing from a vendor other than CONTRACTOR. CONTRACTOR and COUNTY will also execute a mutually-agreeable Amendment to this Agreement to accommodate the change in operation of the System Software, which Amendment shall be executed in accordance with Paragraph 6 of the body of the Agreement. When the transition is complete and all CONTRACTOR-provided on-site equipment returned. COUNTY will no longer be obligated to pay the Remote Hosting Services fees for the transitioned System Software, and such services will be terminated; however, CONTRACTOR will continue to provide System Software support so long as COUNTY continues to pay the associated System Software support fees in accordance with this Agreement.
- (f) Attend meetings as appointed by the COUNTY's Project Manager.

(2) Staffing

COUNTY will:

- (a) Provide three full time contact staff in addition to the Project Manager. Their principal role will be to act as representatives in communication of service requests and issues to CONTRACTOR and as COUNTY liaison for all CONTRACTOR services. The duties of these positions are: reviewing and approving CONTRACTOR's project plans, scheduling Upgrade events, testing, monitoring COUNTY equipment and services, and providing CONTRACTOR with necessary information regarding COUNTY equipment and configurations.
- (b) Provide a fifth staff person (in addition to the four identified in (a)) to act as a security specialist. The duties of this position are: definition of roles and groups, establishing User profiles, and notifying CONTRACTOR of User profile and/or role changes, new accounts, and major expected environmental changes.
- (c) Provide, supervise and provision super Users to support System Software. The duties of these Users are: requesting and prioritizing changes such as modifications to Custom Command Language (CCL) reports, changes of rules and alert triggers, and providing the description of the requirements and mock-up of the expected changes, and validation of changes before requesting COUNTY's Project Director's authorization to move them to the Production Domain.
- (d) Provide an internal COUNTY help desk that will serve as the first point of contact for Users and also communicate planned outages and other status events to Users ("1<sup>st</sup> Level Help Desk").

# B. FACILITIES AND EQUIPMENT

(1) Facilities

- (a) Provide the addresses of the dual points of demarcation to CONTRACTOR upon request.
- (b) Provide space and a temperature controlled environment and rack space for CONTRACTOR provided equipment (such as wide area network equipment, replication and

imaging servers, and other necessary equipment) installed at COUNTY Facilities.

- (c) Notify CONTRACTOR of any issues or concerns associated with connections such as equipment to COUNTY network.
- (d) Provide dual uninterrupted power supply, separate power circuits, and connectivity, adequate power, cooling and physical security for such CONTRACTOR provided equipment.
- (2) Equipment

COUNTY will:

- (a) Provide and manage Specified Hardware and Operating Software, including:
  - Provide and manage COUNTY's LAN and WAN connectivity to Users and all devices necessary to connect Users to the System, on COUNTY's side of the dual points of demarcation.
  - Provide out-of-band management access to CONTRACTOR in the form of a dedicated analog line and a Plain Old Telephone Service (POTS) line for out of band management.
  - (iii) Provide and manage COUNTY systems, software and connectivity that are not part of PEMRS (e.g.: Microsoft Word, Excel® spreadsheet software, Access<sup>™</sup> database software, and Microsoft client access licenses (CALs) for COUNTY's devices, and others used to display or analyze data at the user desktop).
  - (iv) Provide peripheral technologies certified by CONTRACTOR or selected in consultation with CONTRACTOR's Project Director and approved by COUNTY's Project Director.
  - (v) Manage, maintain and control COUNTY's peripheral devices and device configurations.
- (b) Provide, install and maintain Specified Hardware or Operating Software in the event of an Upgrade in accordance with the Approved Upgrade Plan.
- C. <u>SERVICES</u>
  - (1) Notification and Information to CONTRACTOR

- (a) Provide not less than 6 months notice to CONTRACTOR of material changes to COUNTY growth impacting the scope of use and Response Time/Availability assumptions set forth in Schedule 1 (Service Level Commitments) to this SLA (e.g., order volumes, number of Concurrent Users, Interface transactions).
- (b) Notify CONTRACTOR of COUNTY planned events that will affect the System such as outages.
- (c) Provide operator guides and support contact information for COUNTY provided equipment and software.
- (d) Provide local network and host information including the addresses of the dual points of demarcation, exchange ID, and local adapter addresses.
- (e) Provide CONTRACTOR with virtual access to peripherals and Interfaces as needed to support System.
- (f) Provide CONTRACTOR with a permanent local administrator account and password on COUNTY's PDCs located in the CTC, and permit CONTRACTOR's agents to be installed and run on the COUNTY's PDCs.
- (g) Set purge and retention criteria based on COUNTY's clinical requirements, and schedule purge jobs for CONTRACTOR to run in.
- (h) Provide the content information for the Microsoft Terminal Server Database.
- (i) Notify CONTRACTOR when cycling Interfaces and/or when Interfaces fail to operate in accordance with Specifications.
- (j) Grant physical access and assistance in accordance with the Agreement as needed to CONTRACTOR and provide asneeded occasional support for CONTRACTOR's equipment installed at COUNTY Facilities.
- (k) Consult with CONTRACTOR in connection with any planned changes affecting the System such as potential Compatibility issues and/or performance implications.
- When notifying CONTRACTOR of problems distinguish between network and System Software problems to the extent feasible given information about the System available to COUNTY's technical staff.
- (2) Configuration of Specified Hardware and Operating Software

- (a) Operate, maintain, manage and control PEMRS front end technology owned by COUNTY.
- (b) Define, setup, and verify printers for Non-Production Domains.
- (c) Define and manage printer routings.
- (d) Configure COUNTY side of Interfaces, medical devices, PACS (if implemented as part of an Optional Phase System), and local devices such as printers and scanners when relevant to the System.
- (e) Purchase and install any third party enhancements to COUNTY equipment or network connected to System whether or not available in the public domain, to comply with State and Federal regulatory requirements.
- (3) Testing

COUNTY will:

- (a) Ensure that COUNTY introduces no changes to Specified Hardware and Operating Software affecting the Production Domain during an Upgrade project.
- (b) Test and validate COUNTY side of Interfaces
- (c) Perform User Acceptance Tests of Upgrades, with appropriate CONTRACTOR guidance, in a manner similar to Subtasks 6.6 and 7.6 of the Statement of Work.
- (d) Authorize changes that affect the Production Domain, and validate all changes to the Phase 1 System and/or each Optional Phase System prior to authorizing CONTRACTOR to move them to Production, including without limitation Upgrades and Updates.
- (4) Monitoring and Control

- (a) Provide CONTRACTOR with notice, within three days of occurrence of a problem being reported, with a general description of the problem.
- (b) Schedule maintenance windows in collaboration with CONTRACTOR's Remote Hosting Services.
- (c) Backup Specified Hardware and Operating Software and verify restored environments controlled by COUNTY.
- (d) Analyze and tune Tailored components or Custom Reports provided by COUNTY.

- (e) Monitor Interfaces and Interface connectivity and cycle as necessary.
- (f) Review posting and error logs and take appropriate action.
- (g) Identify and resolve COUNTY's LAN and WAN problems (confirmed by the COUNTY's Project Director in consultation with CONTRACTOR's Project Director to be solely within control of COUNTY).
- (h) Monitor charting, remote report distribution, and printing services that rely solely on COUNTY equipment and correct or resubmit failed jobs.
- (i) Escalate issues and problems within COUNTY.
- (5) Training

COUNTY will:

- (a) Plan training programs as needed for Upgrades, identify resources, arrange for CONTRACTOR support including Train the Trainers, and communicate the program to Users.
- (b) Conduct User training.

# VII. COUNTY FACILITIES

COUNTY Facilities for which the Service Level Agreement, including System Maintenance (Section I), Remote Hosting Services (Section II), Upgrades Implementation Services (Section III), and Application Management Services (Section IV) taken singly and together as a whole shall be provided by CONTRACTOR are those listed in Attachment H (COUNTY Facilities) to Exhibit A (Statement of Work) of this Agreement.

# VIII. OPTION TO TERMINATE SERVICE LEVEL AGREEMENT

In addition to any other termination provisions stated in the body of this Agreement, COUNTY may, at its sole option, elect to terminate all or any part of the Services included in this Service Level Agreement, including:

- System Maintenance (Section I),
- Remote Hosting Services (Section II),
- Upgrades Implementation Services (Section III), and
- Application Management Services (AMS) (Section IV).
- A. COUNTY shall provide at least ninety (90) days written notice to CONTRACTOR of such election prior to the effective date of termination under this Section VIII. In the event of such a termination,

CONTRACTOR shall be entitled to seek payment for Deliverables completed by CONTRACTOR and approved by COUNTY in accordance with this Agreement prior to the effective date of such termination, as is provided under Subparagraph 32.3 with respect to COUNTY's termination for convenience.

Β. If, in accordance with this Agreement COUNTY desires to transition the System Software to its own facility at the end of term of this Agreement or upon termination of Remote Hosting Services, COUNTY will notify CONTRACTOR in writing of such intent to transition concurrently with its notice of termination of the Remove Hosting Services. Upon such notice, CONTRACTOR and COUNTY will work together to develop a migration plan and CONTRACTOR shall provide COUNTY with a guote for any additional work required beyond the Remote Hosting Services, which may include the following: (a) any equipment and third party software necessary; (b) any associated maintenance services; and (c) professional services necessary for such transition. COUNTY reserves the right to acquire any foregoing from a vendor other than CONTRACTOR. CONTRACTOR and COUNTY will also execute a mutually-agreeable Amendment to this Agreement to accommodate the change in operation of the System Software, which Amendment shall be executed in accordance with Paragraph 6 of the body of the Agreement. CONTRACTOR will not be required to begin any of the foregoing obligations relating to the transition unless or until COUNTY is current in paying any amounts payable hereunder in accordance with this Agreement as of the date CONTRACTOR receives COUNTY's notice of transition. When the transition is complete and all CONTRACTOR-provided on-site equipment returned, COUNTY will no longer be obligated to pay the Remote Hosting Services fees for the transitioned System Software, and such services will be terminated; however, CONTRACTOR will continue to provide System Software support so long as COUNTY continues to pay the associated System Software support fees in accordance with this Agreement.

# <u>SCHEDULE I</u>

# SERVICE LEVEL COMMITMENTS

In addition to CONTRACTOR's other obligations under this SLA and otherwise in the Agreement, this Schedule I further specifies the service level commitments for the following:

- A SYSTEM SOFTWARE SUPPORT SERVICE LEVEL COMMITMENTS
- B RESPONSE TIME AND AVAILABILITY SERVICE LEVEL COMMITMENTS
  - (1) Response Time and Availability Service Level Assumptions
  - (2) Response Time Service Level Commitments
  - (3) Availability Service Level Commitments
- C REMEDIES AND CREDITS
- A. SYSTEM SOFTWARE SUPPORT SERVICE LEVEL COMMITMENTS

A COUNTY Representative will assign one of the Severity Levels described in Table 1 immediately below to each COUNTY service request. In Table 1, "Criterion" describes the condition leading to COUNTY's service request to CONTRACTOR. "Resolution Time" shall mean the duration of the period from the time of COUNTY submittal of said service request to the implementation of a validated solution and/or acceptable work around approved by COUNTY's Project Director, less the time during resolution requiring action by the COUNTY. With respect to any service request, COUNTY shall have the right to reassign a Severity Level based upon the situation underlying such service request.

In the event that the duration of CONTRACTOR resolution time exceeds the standards set forth in Table 1 (Service Request Resolution Duration Standards) below, COUNTY will notify CONTRACTOR's Project Director of the inadequate response time and the CONTRACTOR's Project Director shall correct it. In the event that the duration of CONTRACTOR resolution time exceed the standards set forth in Table 1, CONTRACTOR shall immediately submit to COUNTY a written action plan and status report which shall i) describe the original problem encountered in the service request, ii) explain why CONTRACTOR was not able to correct the problem within the specified resolution time standard, iii) propose corrective action and a revised plan for resolution. CONTRACTOR shall be available for discussion with COUNTY regarding possible workarounds and any other issues of concern via telephone, email, chat forum, or Cerner.com.

#### Table 1: Service Request Resolution Duration Standards

<u>Severity</u> Level	Criterion	<u>Resolution Time</u> <u>Standard</u>

#### Immediate

1

2

All COUNTY Facilities lose System Availability or functionality, or critical data are missing or incorrect, or patient care and safety are impacted, and no workaround is known to COUNTY that both COUNTY and CONTRACTOR have agreed to implement.

#### High

One or more COUNTY Facilities experience loss of System Component Availability or System Response Time is degraded. System processing is severely impacted and no acceptable workaround is known to COUNTY. Patient care is impacted and patient safety will be impacted if the situation is permitted to continue, and no workaround is known to COUNTY that both COUNTY and CONTRACTOR have agreed to implement.

# Moderate

Loss of some System Component functionality or procedural use with no immediate impact on patient care or safety or an acceptable workaround is known to COUNTY, and can be or has been implemented by Users. The loss of functionality may impact patient care if the situation is permitted to continue. Issues that would have been considered Severity Levels 1 or 2 that have a workaround as described in the criterion for Severity Levels 1 and 2 above will be reassigned as a Severity Level 3.

3

<u>Severity</u> Level	<u>Criterion</u>	<u>Resolution Time</u> <u>Standard</u>
Level		Standard

#### Minor

All questions related to implemented fea-

4 tures, questions of a complex nature, and Within 6 business days other service requests that do not affect patient care or safety.

# B. RESPONSE TIME AND AVAILABILITY SERVICE LEVEL COMMITMENTS

(1) <u>Response Time and Availability Service Level Commitment Assumptions</u>

The Response Time and Availability Warranties set forth on this Schedule I are subject to the assumptions contained in this Section B(1). CONTRACTOR asserts and COUNTY agrees that CONTRACTOR shall size the Production Domain (as defined in Exhibit A (Statement of Work)) based on the data set forth below as provided by COUNTY.

Should these specified assumptions be exceeded during any Response Time or Availability measurement period, CONTRACTOR shall notify COUNTY of the changes and COUNTY will pay additional fees as described in Schedule III of this SLA in accordance with the Agreement. Should COUNTY determine that the assumptions will be permanently exceeded, COUNTY will so notify CONTRACTOR and CONTRACTOR shall recommend remediation steps that will restore Response Time and Availability in accordance with the provisions of Paragraph 6 (Change Notices and Amendments) of the Agreement.

- (a) The Response Time and Availability Warranties are subject to Section I.A(8) of the body of this SLA.
- (b) COUNTY will maintain 350 Peak Concurrent Logons (as defined in Exhibit A) or less.
- (c) COUNTY will receive Remote Hosting Services on the Phase 1 System and any Optional Phase System as specified in Exhibit A (Statement of Work).
- (d) COUNTY will require Domains as specified in Attachment A (PEMRS Functional, Technical, and Operational Requirements) of Exhibit A (Statement of Work).
- (e) COUNTY's use of Open Engine is limited only to PEMRS.
- (f) COUNTY's use of CPDI will not exceed the following assumptions:

- (60) Gigabytes of images added per year
- CONTRACTOR's CAMM server based solution
- Batch capture (assumes all COUNTY Facilities share same set of batch services)
- (3) Database servers (located at CTC) (2 production (clustered) and 1 test )
- (2) ACIS Servers (located at CTC) (1 production and 1 test)
- (4) Ascent Capture Server (located at a COUNTY Facility) (3 production and 1 test)
- (2) <u>Response Time Warranty</u>
  - (a) During all periods within each month when the System is operating in Steady State in the Production Domain, and so long as COUNTY is paying the applicable Remote Hosting Services and Application Management Services fees in accordance with the Agreement, CONTRACTOR warrants that the Response Times for 90% of all executed transactions, which have a corresponding RTMS timer, shall not exceed two (2) seconds ("Response Time Warranty"). The Response Time Warranty shall be subject to the assumptions stated in B.(1) of this Schedule I.

If CONTRACTOR fails to meet the Response Time Warranty for a given month, then a "Performance Issue" will be deemed to exist.

With respect to any Performance Issue, COUNTY reserves the right to categorize the Severity Level of such Performance Issue as described in Section A of this Schedule I. In all such cases, CONTRACTOR shall remedy such failures within the applicable timeframe set forth in this Schedule I for such Severity Level. If CONTRACTOR does not resolve the problem within the time set forth in said approved action plan, then the period of such failure to meet the Response Time Warranty shall automatically constitute Unscheduled Downtime, measured from the time the COUNTY Project Director assigned a Severity Level to said failure and the time of resolution, and credits shall apply as provided in Section I.C(1) of this Schedule I (Service Level Commitments).

(b) Response Time Measurement

- (i) Response Time performance shall be measured by CONTRACTOR's Response Time Management System enabled on the COUNTY's Production Domain.
- (ii) CONTRACTOR shall be responsible for the enablement and operations of the Response Time Management System.
- (iii) The Response Time Management System shall collect measurements continuously and shall write those transactions to enable continuous monitoring and reporting sufficient for COUNTY to determine compliance with the Response Time Warranty.
- (c) Response Time Reporting and Analysis
  - Standard monthly Response Time performance reports shall be available through CONTRACTOR's self-service Lights On Network dashboard reporting system which is accessible to COUNTY via www.cerner.com.
  - (ii) CONTRACTOR shall provide COUNTY access to CONTRACTOR's self-service Lights On Network dashboard reporting system for COUNTY to have access to monthly response time reports
  - (iii) CONTRACTOR shall train COUNTY's Project Director, or designee on how to access monthly response time reports.
  - (iv) COUNTY will work with CONTRACTOR on establishing and reporting issues.
- (3) <u>Availability Service Level Commitment</u>
  - (a) Formula and Monitoring

"System Availability" shall mean the percentage of time the System or any System Component is Available during a specific month and shall be calculated as follows, expressed as a percentage:

- Twenty-four (24) hours <u>multiplied by</u> sixty (60) minutes <u>multiplied</u> by the number of days in the applicable month (A) <u>minus</u> the total number of minutes of Unscheduled Downtime during the month (B) <u>divided by</u>
- Twenty-four (24) hours <u>multiplied by</u> sixty (60) minutes <u>multiplied</u> <u>by</u> the number of days in the applicable month.

"Available" shall mean that the System and each System Component is available and operational in accordance with the Specifications and otherwise with this Agreement. CONTRACTOR shall monitor and report System Availability. In addition, CONTRACTOR shall monitor and evaluate CONTRACTOR's logs of COUNTY service requests that show a resolution relating to System Availability. For purposes of tracking Unscheduled Downtime duration, the Unscheduled Downtime will begin at the earlier of (a) appearance of a System Availability issue on CONTRACTOR's monitoring tools and (b) COUNTY's report of such System Availability issue to CONTRACTOR in accordance with this SLA. Unscheduled Downtime ends at the point in time when Users have the ability to access and use the System in accordance with the Specifications and otherwise with this Agreement.

# (b) Availability Warranty

During all periods within each month when the System is operating in Steady State in the Production Domain, and so long as COUNTY is paying the applicable Service Level Agreement fees in accordance with the Agreement CONTRACTOR represents and warrants that the System and each System Component shall be Available 99.9% of the time, during each month ("Availability Warranty"). The Availability Warranty shall be subject to the assumptions listed above in Section B(1) of this Schedule I.

# (c) <u>Availability Corrective Action</u>

A period of Unscheduled Downtime shall be corrected in accordance with the provisions of this SLA. For the period of Unscheduled Downtime, credits shall begin to accrue in accordance with Section C(1) of this Schedule I. Unscheduled Downtime shall commence as provided by this Schedule I (Service Level Commitments) of this SLA and shall end when the COUNTY's Project Director provides CONTRACTOR with a written determination that the Unscheduled Downtime has been corrected to COUNTY's Project Director's satisfaction.

#### C. CREDITS AND OTHER REMEDIES

This Section C (Credits and Other Remedies) of this Schedule I sets forth the credits and other remedies that shall apply in the event that CONTRACTOR fails meet the service level commitments of this Schedule I or otherwise in the SLA or Agreement.

# (1) <u>Credits</u>

Credits shall accrue as specified in this Section C(1) of this Schedule I of the SLA.

Credits shall not accrue for Scheduled Downtime or for any Deficiency resulting from any of the conditions listed in Subparagraph I.A.(8) of this SLA.

COUNTY will not unreasonably delay performance of Corrective Maintenance recommended by CONTRACTOR for any System Components for which CONTRACTOR is providing Application Management Services or Remote Hosting Services as provided in this SLA.

For the Phase 1 System and for each Optional Phase System Component for which this Service Level Agreement applies, during the term of the Agreement, COUNTY shall be entitled to credits in the amounts specified in Table 2 "Downtime Credits" below. Credits shall apply i) in the event that any System Component fails to meet the Availability Warranty, measured and reported as specified in Subparagraph B.(3) of this Schedule I of this SLA above, ii) in the event that a period of Unscheduled Downtime has commenced because of failure of System to meet the Response Time Warranty as specified in Subparagraph B.(2) of this Schedule I of this SLA above, or iii) as provided in Sections I.A.(3) and/or I.A.(4) of this SLA.

#### Table 2: Downtime Credits

Percentage of Time System Is Available	Credit
Less than 99.9% but greater than or equal to 99.0%	7% of Monthly AMS and Remote Host- ing fees
Less than 99.0% but greater than or equal to 98.0%	14% of Monthly AMS and Remote Host- ing fees
Less than 98.0% but greater than or equal to 95.0%	20% of Monthly AMS and Remote Host- ing fees
Less than 95.0% but greater than or equal 90.0%	50% of Monthly AMS and Remote Host- ing fees
Less than 90%	100% of Monthly AMS and Remote Hosting fees

(2) Other Remedies

#### a. CONTRACTOR's Infrastructure Improvement

Without limiting the foregoing, CONTRACTOR, acting reasonably, shall determine (subject to Paragraph 46 (Dispute Resolution Procedures) of the Agreement), whether changes to the Production Domain, such as additional hardware, increased LAN/WAN connectivity capacity, infrastructure configuration changes and/or infrastructure tuning changes, will re-

solve the Deficiency. Consistent with such determination, CONTRACTOR shall provide such changes to the Production Domain at no additional cost to COUNTY.

#### b. <u>Termination</u>

In the event that System Availability falls below 98.0% for any three (3) consecutive months, regardless of credit accruals, then COUNTY may exercise its rights under the Agreement to terminate for CONTRACTOR's default or otherwise under the Agreement.

#### (3) Remedies Exclusive

UNLESS AND UNTIL COUNTY TERMINATES THIS AGREEMENT FOR DEFAULT IN ACCORDANCE WITH THE TERMS OF THIS AGREEMENT, COUNTY'S RIGHTS UNDER THIS SCHEDULE I, TOGETHER WITH THE OTHER RIGHTS EXPRESSLY PROVIDED FOR IN THIS AGREEMENT, SHALL CONSTITUTE COUNTY'S SOLE AND EXCLUSIVE REMEDY TO ENFORCE CONTRACTOR'S OBLIGATIONS UNDER THIS EXHIBIT D (SERVICE LEVEL AGREEMENTS).

# SYSTEM MAINTENANCE FEES

			γldinoM				
Prod + 60 Months through End of Initial Term	through Ronths Prod + 48	sdinoM	Prod + 24 Months Prod +36 Prod +36	Prod + 12 Months fhrough Prod +24 Months	Production Use ("Prod") Through 12 Months	Phase 1 Seftware Modules دوئرware Modules	mətl
		ŀ	etontoo7			PowerChart (Clinical Data Reposi- tory, PowerOrders, PowerNote) – Full Access Users <sup>1</sup>	L
£8,1835	287,1 <b>8</b>	067,1\$	629'1\$	0E9,1\$	£83,1\$	PowerChart (Clinical Data Reposi- tory, PowerOrders, PowerNote) – Limited Access Users <sup>2</sup>	2
		ŀ	Footnote	CareNet (Electronic Medication PowerPlan, Clinical Documenta- tion and PowerForms)	3		
		٢	9tontoo7	Capstone (Registration Manage- ment and Scheduling Manage- ment)	4		
\$182	621\$	7174	891\$	t91\$	¢126	PathNet (General Laboratory, Mi- crobiology) – Medical Devices In-	ç

<sup>&</sup>lt;sup>1</sup> Provided that the scope of use limits for JHIS Application Software as set forth in Attachment B (PEMRS Software) to Exhibit A (Statement of Work) have not been exceeded and payment of support fees is current for these items under the JHIS Agreement in accordance with the terms of the JHIS Agreement, no additional System Software Support fees will be assessed for the JHIS Application Software.

<sup>&</sup>lt;sup>2</sup> CONTRACTOR and COUNTY mutually agree that the Limited Access Users maintenance fees for PowerChart (Clinical Data Repository, PowerOrders, PowerNote) will be paid over the 58 months of the Initial Term of the Agreement that is remaining as of the Amendment No. 3 Effective Date. Payments will commence the first month following the Amendment No. 3 Effective Date and continue thereafter in accordance with Section 1.B.(2) of this Exhibit D.

862'2\$	\$3,202	60L,E\$	810,52	\$5,929	\$78,545	Subtotal Phase 1 System Raintenance Support Fees		
<del>7</del> 86\$	996\$	826\$	L06\$	<b>⊅</b> ∠8\$	678\$	CareAware Multi-Media Foundation – Digital Objects	13	
Discern Explorer								
		٢	Footnote			Discem Expert	11	
		L	etontoo-T	-		Computerized Physician Order En- try (CPOE)	01	
992'I\$	₽02'I\$	₽\$9'I\$	909' <b>l</b> \$	652,1\$	\$19'L\$	Interfaces	6	
ProFile (Health Information Man- agement (HIM))								
		٢	Footnote			RadNet (Radiology Management)	L	
		ŀ	Pootoo			PharmNet (Inpatient Pharmacy and Departmental Clinical Supply Chain for Pharmacy)	9	
						terfaces (Siemens Diagnostics Clinitek – 2 Channels) <sup>3</sup>		
Phase 1ProductionProductionProductionProd + 64MonthsMont								
			Monthly					

<sup>&</sup>lt;sup>3</sup> CONTRACTOR and COUNTY mutually agree that the maintenance fees for PathNet (General Laboratory, Microbiology) – Medical Device Interfaces (Siemens Diagnostics Clinitek for the remaining 58 months will be payable as indicated in this Amendment No. 3 Schedule II Systems Maintenance fees and commence the first month following the Amendment No. 3 Effective Date and continue thereafter in accordance with Section 1.B.(2) of this Exhibit D.

Fees above for Production Use through the end of the Initial Term include a 3% annual increase. If the term of the Agreement is extended beyond the Initial Term in accordance with Paragraph 5 of the Agreement, the Application Software module support can be renewed at the last monthly rate charged plus a 3% annual increase.

211,8\$	ZII;8\$	ZII;8\$	ZII;8\$	ZII;8\$	ZIL'S\$	Subtotal Phase 1 System Third Party Maintenance Support FeesError! Bookmark not de- fined.	
211,22	Z11,2≵	Z11,2≵	Z11,8\$	ZII;8\$	Z11,88	Cerner ProVision Document Imag- ing (CPDI)	L
Prod + 60 Months through End of End Term	through 84 + and Prod + 48	Prod + 36 Months through Prod +48 84	Prod + 24 Prod +36 Prod +36 Prod +36	Prod + 12 Months fhrough Prod +24 Months	Production Use ("Prod") Through 12 Months	ףhase ל Third Party Software Modules	məîl
	1	/	(IdinoM				

If the term of the Agreement is extended beyond the Initial Term in accordance with Paragraph 5 of the Agreement, the Third Party Software module will require a quote to determine renewal fees.

<b>†6</b> 9'9\$	\$0 <del>1</del> ,68	\$¢'542	<b>₽£0</b> '9\$	658,2\$	889'5\$	Krames Patient Education Con- tent (not to exceed 13 COUNTY Facilities)	L
Prod + 60 Months through End of Initial Term	through Months Prod + 48	Prod + 36 Prod +48 Prough Prod +48 Prod +36	Prod + 24 through Prod +36 Prod +36	Prod + 12 Months through Prod +24 Months	Production Use ("Prod") Through 12 Months	Phase 1 Subscription Based ealuboM entware Modules	mətl
		A N	ldtnoM				

			ίμ <del>ι</del> ποΜ				
Prod + 60 Months through End of Initial Term	Prod + 48 Months fhrough Prod +60 RinoM	Prod + 36 Months Prod +48 Prod +48	Prod + 24 Months Prod +36 Prod +36	Prod + 12 Months through Prod +24 Months	Production Use ("Prod") Through 12 Months	Phase 1 Subscription Based Application Software Modules	mətl
969\$	929\$	929\$	LE9\$	819\$	009\$	Knowledge Content Solutions for Ambulatory (including Cerner Knowledge Tool (Cerner KM) and Multum/Medisource)	5
0\$	0\$	0\$	0\$	082,88	\$8,280	Web Based Training – (120 Custom Simulations⁴)	3
0\$	0\$	0\$	0\$	\$9 <sup>,</sup> 624	\$6,624	Classroom Curriculum Devel- opment (8, 4-hour classes) <sup>5</sup>	4
674,12	207 <sup>°</sup> ۱\$	99E'I\$	9ZE'I\$	\$82,1\$	\$J`520	CMT	9
70I\$	<b>⊅0</b> ↓\$	<b>⊅0</b> ↓\$	<b>⊅0</b> 1\$	<b>⊅0</b> 1\$	<b>†</b> 0 <b>1</b> \$	CPT (Codes and Medical Termi- nology) (not-to-exceed 100 Users)	9
97 <b>2</b> '01\$	914,012	911,01\$	<b>\$</b> 9,824	\$24,446	\$54 <sup>,</sup> 170	Subtotal Subscription-Based Phase 1 System <sup>4 and 5</sup>	

Fees above for Production Use through the end of the Initial Term include a 3% annual increase. If the term of the Agreement is extended beyond the Initial Term in accordance with Paragraph 5 of the Agreement, the subscription based Application Software module support can be renewed at the last monthly rate charged plus a 3% annual increase.

<sup>&</sup>lt;sup>4</sup> Custom Web Based Training has been mutually agreed upon to pay the one-time fee monthly payable in advance by County for 20 months following COUNTY acceptance of Deliverable 6.7 (Production Use of the Phase 1 System at all COUNTY Facilities).

<sup>&</sup>lt;sup>5</sup> Classroom Curriculum Development has been mutually agreed upon to pay the one-time fee monthly payable in advance by County for 20 months following COUNTY ac-

ceptance of Deliverable 6.7(Production Use of the Phase 1 System at all COUNTY Facilities).

	•	Monthly			
Prod + 60 Months End of End of Term Term	A+ 36 Prod + 48 Dugh through bugh through brod +60 A+48 Prod +60 brths Months	Prod +36 Prod through thro	-ilqqA mətzv2 əzard IanoitqO cation Software Modules	mətl	
		8 etontoo7		<sup>6</sup> anioibemeleT	L
		F ootnote 7		<sup>7</sup> noituloS sesocA4ST	2
		8 ətontoo7		Enterprise Master Patient Index (EMPI) <sup>6</sup>	3
		F ootnote 1	PowerInsight <sup>1</sup>	4	
		f ətontoo∃		PharmNet (Outpatient Pharma- cy) <sup>1</sup>	G
		8 etontoo7		<sup>ə</sup> nimbAəısƏ	9
		8 etontoo7		Radiology Dictation <sup>6</sup>	L
		8 etontoo		eSignature (Patient Electronic Signature) <sup>6</sup>	8
		8 etontoo7	Cerner Picture Archiving and Communications System (PACS) <sup>6</sup>	6	

<sup>&</sup>lt;sup>6</sup> Optional Phase Systems will require mutual agreement on scope and pricing prior to Amendment execution under Paragraph 6 of the body of the Agreement.

09 + bor Anonths fhrough End of Initial	through 84 + Months Prod + 48	Prod + 36 Months	Monthly Prod +36 Prod +36 Prod + 24 Prod + 24	Prod + 12 Months through Prod +24 Months	Production Use ("Prod") Through 12 Months	-ilqqA mətsvS əssA9 IsnoitqO cation Software Modules	mətl
Term	1	l	Footnote	Financials	01		
		9	Footnote	Millennium LDAP Authentication Pass-through	11		
		9	Footnote			Parata Medication Packaging Interface Outbound	12

		9	PootooA			Web Based Training – (Stand- ard PathNet, PharmNet, and Learning Studio)	L
Prod + 60 Months through End of Initial Term	Prod + 48 Months Prod +60 Strough Prod +60 Prod +60	through Months	Prod + 24 through Prod +36 Months	Prod + 12 Months through Prod +24 Months	Production Use ("Prod") Through 12 Months	optional Phase Subscription Based Application Software Modules	mətl
			ίμthoM				

Fees above for Production Use through the end of the Initial Term include a 3% annual increase. If the term of the Agreement is extended beyond the Initial Term in accordance with Paragraph 5 of the Agreement, the Optional Phase System Application Software module support can be renewed at the last monthly rate charged plus a 3% annual increase.

# **SCHEDULE III**

# REMOTE HOSTING SERVICES AND P2SENTINEL SECURITY SERVICES FEES

Remote Hosting Services Fees and P2Sentinel Security Services Fees for Phase 1 System

101'26\$	£72,46 <b>\$</b>	229'16\$	r98,88 <b>\$</b>	£72,88\$	092'88\$	Total Remote Hosting Services and P2Senintel Security Ser- vices Fees	
677,88	699'E\$	299'2\$	<b>83</b> ⁺₹26	23,358	\$3,260	P2Sentinel Security Services <sup>9</sup>	
225,522	£09'06 <b>\$</b>	996 <sup>°</sup> 78\$	\$82 <sup>,</sup> 405	316, <u>5</u> 8\$	\$80'200	Section II.B Remote Hosting Ser- vices (Recurring Fees) <sup>8</sup>	
Prod + 60 Months through End of Initial Term	through Months	sdinoM	Prod + 24 fhrough fhrough Prod +36 Months	Prod + 12 Months through Prod +24 Months	Production Use ("Prod") Through 12 Months	r əsaq Mətey	mətl
<u>.</u>		/	(IdinoM				

Fees above for Production Use through the end of the Initial Term include a 3% annual increase. If the term of the Agreement is extended beyond the Initial Term in accordance with Paragraph 5 of the Agreement, the Remote Hosting Services and P2Sentinel Security Services can be renewed at the last monthly rate charged plus a 3% annual increase.

Scope of use expansion for Remote Hosting Services or PSSentinel Security Services may be subject to additional fees. CONTRACTOR will provide quote(s) for scope of use expansion pricing when necessary and the Agreement will be updated accordingly in accordance with Paragraph 6 of the Agreement.

<sup>&</sup>lt;sup>8</sup> For Remote Hosting Services fees prior to Production Use see Exhibit B (Schedule of Payments).

<sup>&</sup>lt;sup>9</sup> CONTRACTOR shall invoice COUNTY for P2Sentinel Security Services fees at the rate of \$3,260 per month for a total amount not to exceed the amount identified as the Aggregate P2Sentinel Security Services Fees on Exhibit B of this Agreement (72 months) for such service. Fees will be payable for such services upon COUNTY acceptance of Deliverable 6.6 (Successfully Conducted User Acceptance Testing of the Phase 1 System). CONTRACTOR shall invoice COUNTY as provided in Subparagraph II.G(2) of this Service Level Agreement.

# **SCHEDULE IV**

# UPGRADES IMPLEMENTATION SERVICES FEES

lsitinl Term \$7,834	909,78 8d1noM 903,78	Prod +48 85,385 85,385	St170 800€ 800€ 800€ 800€ 800€ 800€ 800€ 80	Proa +24 86,961 86,961	857,88 8dînoM	Upgrades Implementation Services	
through	through Months	through Months	Prod + 24 through	through Months	Production Use ("Prod") Through 12	r əssr Mətev	mətl
ΛίμτοΜ							

# **SCHEDULE V**

# RPPLICATION MANAGEMENT SERVICES (AMS) FEES

260'28\$	910,95\$	296'78\$	6 <del>7</del> 6'82\$	096'7£\$	\$35,000	Application Management Ser- vices <sup>10</sup>	
through frough Fnd of	Prod + 48 Months Prod +60 Prod +60 Prod +80	through Months	Prod + 24 through Prod +36 Months	Prod + 12 Months Prod +24 Months	Production Use ("Prod") Through 12 Months	r əssrq mətey2	mətl
λίληπο							

Fees for Production Use through the end of the Initial Term above include a 3% annual increase. If the term of the Agreement is extended beyond the Initial Term in accordance with Paragraph 5 of the Agreement, the Application Software module support can be renewed at the last monthly rate charged plus a 3% annual increase.

Scope of use expansion for Application Management Services may be subject to additional fees. CONTRACTOR will provide quotes for scope of use expansion pricing when necessary and the Agreement will be updated accordingly in accordance with Paragraph 6 of the Agreement.

<sup>&</sup>lt;sup>10</sup> CONTRACTOR shall invoice COUNTY for Application Management Service (AMS) fees at the rate of \$32,000 per month for a total amount not to exceed the Aggregate sum as specified in Exhibit B of this Agreement (70 months) for such service. Fees shall be payable for such services provided one month prior to COUNTY acceptance of Deliverable 6.7 (Production Use of the Phase I System at all County Facilities). CONTRACTOR shall invoice COUNTY as provided in Paragraph IV.B(2) of this Service Level Agreement.

# EXHIBIT K

# **COUNTY'S ADMINISTRATION**

# CONTRACT NO. \_\_\_\_\_

## **COUNTY'S PROJECT DIRECTOR:**

DeWitt Roberts Los Angeles County Probation Department 9150 E. Imperial Highway Downey, CA 90242 Phone: (562) 940-2516 Fax: (562) 803-1855 E-mail: DeWitt.Roberts@probation.lacounty.gov

#### **COUNTY'S PROJECT MANAGER:**

Arsalan Rahmanian Los Angeles County Probation Department 3965 S. Vermont Avenue Los Angeles, CA 90037 Phone: (323) 730-4511 Fax: (323) 730-5128 E-mail: Arsalan.Rahmanian@probation.lacounty.gov

# COUNTY'S CONTRACT MANAGER:

Tasha Howard Director Los Angeles County Probation Department 9150 East Imperial Highway, Room C-29 Downey, CA 90242 Phone: (562) 940-2728 Fax: (562) 658-2302 E-mail: Latasha.Howard@probation.lacounty.gov

#### COUNTY'S CONTRACT ANALYST:

Oscar Rivas Program Analyst Los Angeles County Probation Department 9150 East Imperial Highway, Room C-29 Downey, CA 90242 Phone: (562) 940-2646 Fax: (562) 658-4771 E-mail: Oscar.Rivas@probation.lacounty.gov

#### COUNTY'S CONTRACT MONITOR:

Sandra Torres Supervising Program Analyst, Contract Monitoring Unit Los Angeles County Probation Department 7639 South Painter Avenue Whittier, CA 90602 Phone: (562) 907-3004 Fax: (562) 464-2831 E-mail: Sandra.Torres@probation.lacounty.gov

# ADDRESS FOR NOTICES:

Jerry Powers Chief Probation Officer Los Angeles County Probation Department 9150 E. Imperial Highway Downey, CA 90242 Facsimile: (562) 803-0519 E-mail: Jerry.Powers@probation.lacounty.gov

With a copy to:

COUNTY's Project Director as indicated above.

# EXHIBIT L

## **CONTRACTOR'S ADMINISTRATION**

CONTRACT NO: \_\_\_\_\_

# CONTRACTOR'S PROJECT DIRECTOR:

Len Giuffre Cerner Corporation 2800 Rockcreek Parkway Kansas City, MO 64117 Phone: 816-206-4099 Fax: 816-571-3808 E-mail: Igiuffre@cerner.com

# CONTRACTOR'S PROJECT MANAGER:

John Segale Cerner Corporation 2800 Rockcreek Parkway Kansas City, MO 64117 Office Phone: 816-201-0317

Mobile Phone: 816 315-3806 Fax: 816-571-0340 E-mail: john.segale@cerner.com

# CONTRACTOR'S ACCOUNT MANAGER/QUALITY CONTROL MANAGER:

Jodi Drury Cerner Corporation 2800 Rockcreek Parkway Kansas City, MO 64117 Phone: 816-885-3367 Fax: 816-571-0239 E-mail: jdrury@cerner.com

# CONTRACTOR'S AUTHORIZED OFFICIAL(S):

#### CHANGE NOTICE OR AMENDMENT:

Name: Marc Naughton Title: Executive Vice President and Chief Financial Officer Cerner Corporation 2800 Rockcreek Parkway Kansas City, MO 64117 Phone: (816) 221-1024 Fax: (816) 474-1742

#### ADDRESS FOR NOTICES:

Title: Attn: President

Address: Cerner Corporation 2800 Rockcreek Parkway Kansas City, MO 64117

	Office of the CIO	NUMBER:	DATE:				
RICHARD SANCHEZ	<b>CIO Analysis</b>	CA 12-16	7/3/2012				
SUBJECT:		", .l	I				
Approval of An	Approval of Amendment Number Three to County Agreement 77285						
with Cerner Co	rporation for the Probati	on Electronic Me	edical Records				
System							
		<u> </u>					
RECOMMENDATION:	□ Approve with Modific	ation $\Box$	Dicapprovo				
Approve			Disapprove				
CONTRACT TYPE:							
New Contract		Sole Source					
Amendment to C	ontract #: 77285	Other: Describe co	ntract type.				
CONTRACT COMPONENTS:							
🖾 Software	🗆 Hardware						
☑ Telecommunications ☑ Professional Services							
SUMMARY:							
Department Executi	ve Sponsor: Jerry Powers, Chief Pro	obation Officer					
Description: The Amendment provides enhancements to the recently implemented Probation Electronic Medical Records Systems (PEMRS). It includes: 1) 500 additional limited use software licenses for Probation staff to access PEMRS; 2) a second telecommunications access point to increase system availability; and 3) revisions to vendor training and changes to medical device interfaces.							
Contract Amount: \$69,700 Funding Source: Department Budget							
Legislative or Regulatory Mandate     Subvened/Grant Funded:							
Strategic and       PROJECT GOALS AND OBJECTIVES:         Business Analysis       PEMRS began live operations in September 2011. It automates the medical and mental health records of detained minors in Probation Department halls and camps, per the County's Agreement with the US Department of Justice.							

The proposed Amendment will provide improvements to PEMRS based on experience with the production system, including enabling more Probation users to access the system, greater system availability in case of disruption to telecommunication links, modifications to training services, and updates to the PEMRS interfaces with medical devices.

**BUSINESS DRIVERS:** 

PROJECT ORGANIZATION:

	A multi-department governance structure was established to provide project oversight and detailed project management. A full-time project manager and project management team works with project team members, including physicians, mental health clinicians, Probation Officers, County IT staff, and Cerner Corporation (Cerner) project personnel. An Operations Committee and Change Control Committee meet monthly.
	PERFORMANCE METRICS: The items included in this Amendment will be implemented. The expected implementation schedule is a maximum of 6 months.
	STRATEGIC AND BUSINESS ALIGNMENT: PEMRS is strategically important to the Probation Department and the County. The system is consistent with the County's Enterprise Standards and Directions.
	PROJECT APPROACH: PEMRS is a Commercial Off-the-Shelf (COTS) electronic medical records system from Cerner. This Amendment addresses a planned first phase of enhancements following initial implementation in September 2011.
	ALTERNATIVES ANALYZED: The PEMRS Operations and Change Control groups identified and prioritized various potential system enhancements. The Amendment addresses the highest priority requirements consistent with available pool dollars.
Technical Analysis	ANALYSIS OF PROPOSED IT SOLUTION: This Amendment involves minor enhancements that are consistent with the PEMRS COTS solution.

BUDGET:			
Contract costs			
One-time costs:			
Hardware	\$		
Software	\$ 55,600		
Services	\$ 14,100		
Ongoing annual costs:			
Hardware	\$		
Software	\$ Included in one-time costs		
Services	\$		
Sub-total Contract Costs:	<b>\$</b> 69,700		
Other County costs:			
One-time costs:			
Hardware	\$		
Software	\$		
Services (ISD)	\$ \$ \$ \$		
County staff (existing)	\$		
County staff (net new)			
Sub-total one-time County costs:	\$		
Ongoing annual costs:			
Hardware	\$		
Software	\$ \$ \$ \$ \$ \$		
Services (ISD)	\$		
Services (Contractor)	\$		
County staff (existing)	\$		
County staff (net new)			
Sub-total ongoing County costs:	\$		
Total one-time costs:	<b>\$</b> 69,700		
Total ongoing annual costs:	\$ Included in one-time costs		
Notes:			
The one-time cost reflects additions	s and deletions of deliverables		
Agreement.			
Software licenses & maintenance	\$ 194,956		
Software licenses & maintenance Telecommunications	\$ 194,956 750		
Telecommunications	750 13,350		
Telecommunications Training data	750 13,350		
Telecommunications Training data Net addition and deletion of Medical	750 13,350		

in the

Risk Analysis	RISK MITIGATION:				
	1. System capacity to support 500 additional users: PEMRS is hosted by Cerner. The application management agreement calls for Cerner to provide sufficient system resources to meet the additional system load created by the 500 new users.				
	2. Single point of communications demarcation: The second communication point of demarcation will provide redundancy in case of a disruption of the primary communications link to the Cerner hosting site.				
	The Chief Information Security Officer (C Amendment and did not identify any IT security	•			
CIO Approval	PREPARED BY:				
	John Arnstein, Sr. Associate CIO	<u> フー 1 フー                               </u>			
	APPROVED: Kinland Sanchy	7-18-12			
	Richard Sanchez, County CIO	Date			

Please contact the Office of the CIO (213.253.5600 or info@cio.lacounty.gov) for questions concerning this CIO Analysis. This document is also available online at <u>http://ciointranet.lacounty.gov/</u>