RFO 6100012707: Annual Contract for Electronic Medical Records System

Request for Offer

Prepared for: City of San Antonio, Texas

Prepared by: CDP, Inc.
1408 S. Joliet Road
Romeoville, IL 60446
Telephone: (800) 888-6035
Fax: (630) 783-8841
www.cdpehs.com

Contact Person: Mike Peth, Director of Sales and Marketing
mike.peth@cdpehs.com

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007 - SIGNATURE PAGE

By submitting an offer, whether electronically or by paper, Offeror represents that:

(s)he is authorized to bind Offeror to fully comply with the terms and conditions of City's Request for Offer for the prices stated therein;

(s)he has read the entire document, including the final version issued by City, and agreed to the terms therein;

Offeror is in good standing with the Texas State Comptroller's Office; and

to the best of his/her knowledge, all information is true and correct.

If submitting your offer by paper, complete the following and sign on the signature line below. Failure to sign and submit this Signature Page will result in rejection of your offer.

Offeror Information Please Print or Type	
Vendor ID No.	V30004830
Signer's Name	Mike Peth
Name of Business	Custom Data Processing, Inc.
Street Address	1408 Joliet Road
City, State, Zip Code	Romeoville, IL 60446
Email Address	mike.peth@cdpehs.com
Telephone No.	(800)888-6035
Fax No.	(630)783-8841
City's Solicitation No.	RFO 6100012707

Signature of Person Authorized to Sign Offer

Attachment A: Pricing Schedule

Each of the attachments listed below is an essential part of this contract, which governs the rights and duties of the parties, incorporated herein by reference, and shall be interpreted in the order of priority as appears below, with this document taking priority over all attachments:
Attachment A – Price Schedule
Attachment B – Business Associate Agreement
Attachment C – Sole Source Documentation
Attachment D – Statement of Work

Attachment A—Pricing Schedule appears on the following page in the format in which it was provided.

009 - ATTACHMENTS
ATTACHMENT A – PRICE SCHEDULE

ITEM	DESCRIPTION	HOURS	PRICE (HOURLY RATE X HOURS)
SAIRS Data Optimization / Enhancement			
1A.	Immunization Import Tool	400	$42,000.00
1B.	IMMTRAC Send Tool	360	$37,800.00
1C.	Immunization Import EHR Enhancements	440	$46,200.00
1D	Data Optimization	200	$21,000.00
Monthly Recurring Fees			
ITEM	**DESCRIPTION**	**Frequency (reviewed annually)**	**Price Per User**
2.	**Prescriber ezEMRx Perpetual License**	**8**	$125.00
3.	Clinician **ezEMRx Perpetual License**	100	$100.00
4.	Non-Clinician **ezEMRx Perpetual License**	42	$20.00
5.	Non-Clinician **ezEMRx Perpetual License**	14	$0
6.	Collaborator **ezEMRx Perpetual License**	7	$45.00
7.	iPad **Mobility App Clinician Perpetual License.** In addition to Clinician ezEMRx Perpetual License above.	8	$15.00
8.	Revenue Cycle Management Services Percentage	Monthly	9% of paid claim revenue
Hourly Fees			
9.	Blended Hourly Rates	Hourly	$125 per
	Total SAIRS Data Optimization / Enhancement		$147,000.00

- *License fees and RCM fees set forth here are based off previously agreed terms.*

Attachment B: HIPAA Business Associate Agreement

Each of the attachments listed below is an essential part of this contract, which governs the rights and duties of the parties, incorporated herein by reference, and shall be interpreted in the order of priority as appears below, with this document taking priority over all attachments:
Attachment A – Price Schedule
Attachment B – Business Associate Agreement
Attachment C – Sole Source Documentation
Attachment D – Statement of Work

Per an email from Kristen McAvoy, sent March 17, 2020, an updated Business Associate Agreement must be provided. The updated agreement appears on the following pages.

WITNESSETH:

HIPAA BUSINESS ASSOCIATE AGREEMENT

This HIPAA Business Associate Agreement is entered into by and between the City of San Antonio ("Covered Entity"), and Custom Data Processing, Inc. (CDP, Inc.) a Business Associate ("BA").

WHEREAS, the City of San Antonio and BA have entered into a Services Contract ("Service Contract"), executed on _____, whereby BA provides an electronic medical records system to the Covered Entity; and

WHEREAS, Covered Entity and BA may need to use, disclose and/or make available certain information pursuant to the terms of the Service Contract, some of which may constitute Protected Health Information ("PHI"); and

WHEREAS, Covered Entity and BA intend to protect the privacy and provide for the security of PHI disclosed to each other pursuant to the Service Contract in compliance with the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191 ("HIPAA") and regulations promulgated thereunder by the U.S. Department of Health and Human Services (the "HIPAA Regulations"), Health Information Technology for Economic and Clinical Health Act ("HITECH Act") and other applicable laws; and

WHEREAS, the purpose of this Agreement is to satisfy certain standards and requirements of HIPAA and the HIPAA Regulations, including, but not limited to, Title 45, Section 164.504(e) of the Code of Federal Regulations ("C.F.R."), as the same may be amended from time to time;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

A. Definitions. For the purposes of this Agreement, the following terms have the meanings ascribed to them:

(1) "Disclosure" with respect to PHI, shall mean the release, transfer, provision of access to or divulging in any other manner of PHI outside the entity holding the PHI.

(2) "Health Information" is defined in 45 C.F.R. 160.103 as any information, including genetic information, whether oral or recorded in any form or medium that: (1) is created or received by a health care provider, health plan, public health authority, employer, life insurer, school or university, or health care clearinghouse; and (2) relates to the past, present, or future physical or mental health or condition of an individual; the provision of health care to an individual; or the past, present, or future payment for the provision of health care to an individual.

(3) "Individual" shall have the same meaning as the term "Individual" in 45 C.F.R. 160.103 and shall include a person who qualifies as a personal representative in accordance with 45 C.F.R. 164.502(g).

(4) "Individually Identifiable Health Information" is defined in 45 C.F.R. 160.103 as information that is a subset of health information, including demographic information

collected from an individual, and: (1) is created or received by a health care provider, health plan, employer, or health care clearinghouse; and (2) relates to the past, present, or future physical or mental health or condition of an individual; the provision of health care to an individual; or the past, present, or future payment for the provision of health care to an individual; and (i) identifies the individual; or (ii) with respect to which there is a reasonable basis to believe the information can be used to identify the individual.

(5) "Parties" shall mean Covered Entity and BA. "Business Associate" shall generally have the same meaning as the term "business associate" at 45 CFR 160.103. "Covered Entity" shall generally have the same meaning as the term "covered entity" at 45 CFR 160.103.

(6) "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 C.F.R. part 160 and Part 164, subparts A and E.

(7) "Security Rule" shall mean the HIPAA regulation that is codified at 45 C.F.R. Part 164.

(8) "Protected Health Information" or "PHI" shall have the same meaning as the term "protected health information" in 45 C.F.R. 160.103, limited to the information created or received by BA from or on behalf of Covered Entity. PHI includes "Electronic Protected Health Information" or "EPHI" and shall have the meaning given to such term under the HIPAA Rule, including but not limited to 45 CFR Parts 160, 162, 164, and under HITECH.

(9) "Required By Law" shall have the same meaning as the term "required by law" in 45 CFR § 164.103.

(10) "Secretary" shall mean the Secretary of the Department of Health and Human Services or his designee.

(11) "PHI Breach" shall mean an acquisition, access, use, or disclosure of PHI in a manner not permitted by the Privacy Rules and such action compromises the security or privacy of the PHI.

(12) The Health Information Technology for Economic and Clinical Health ("HITECH") Act shall mean Division A, Title XII of the American Recovery and Reinvestment Act of 2009 (Pub. L. 111-5).

B. BA Obligations and Activities. BA agrees that it shall:

(1) Not use or disclose the PHI other than as permitted or required by this Agreement or as Required by Law;

(2) Establish and maintain appropriate administrative, physical, and technical safeguards that reasonably and appropriately protect, consistent with the services provided under this Agreement, the confidentiality, integrity, and availability of the electronic protected health information that it creates, receives, maintains, or transmits on behalf of covered entity;

(3) Mitigate, to the extent practicable, any harmful effect that is known to BA of a use or disclosure of PHI by BA in violation of the requirements of this Agreement;

(4) Report to Covered Entity any use or disclosure of PHI of which BA is aware or becomes aware that is not provided for or allowed by this Agreement as well as any security incident that BA becomes of aware of;

(5) Ensure that a business associate agreement is in place with any of its agents or subcontractors with which BA does business and to whom it provides PHI received from, created or received by BA on behalf of Covered Entity are aware of and agree to the same restrictions and conditions that apply through this Agreement to BA with respect to such information, and further agree to implement reasonable and appropriate administrative, physical and technical safeguards that render such PHI unusable, unreadable and indecipherable to individuals unauthorized to acquire or otherwise have access to such PHI;

(6) Provide access, at the request of Covered Entity, and in a reasonable time and manner as agreed by the Parties, to PHI in a Designated Record Set to Covered Entity or, as directed by Covered Entity, to an Individual in order to meet the requirements 45 C.F.R. §164.524;

(7) Make any amendment(s) to PHI in a Designated Record Set that the Covered Entity directs or agrees to pursuant to 45 C.F.R. 164.526 at the request of the Covered Entity or an Individual, and in a reasonable time and manner agreed to by the Parties;

(8) Make available to the Covered Entity or to the Secretary of the U.S. Department of Health and Human Services all internal practices, books and records, including policies and procedures and PHI, relating to the use and disclosure of PHI received from, or created or received by the BA on behalf of the Covered Entity, for purposes of the Secretary of the U.S. Department of Health and Human Services in determining Covered Entity's compliance with the Privacy Rule;

(9) Document such disclosures of PHI, and information related to such disclosures, as would be required for Covered Entity to respond to a request from an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. 164.528;

(10) Provide Covered Entity or an Individual, in a reasonable time and manner as agreed to by the Parties, information collected in accordance with Section B(9) of this Agreement, to permit Covered Entity to respond to a request by an Individual for an accounting of disclosures of PHI in accordance with 45 C.F.R. 164.528;

(11) Will immediately, and in no event later than three days from discovery, notify Covered Entity of any breach of PHI, including ePHI, and will coordinate with Covered Entity to identify, record, investigate, and report to an affected individual and US Department of Health and Human Services, as required, any covered PHI breach. Breach notification to Covered Entity must include: names of individuals with contact information for those who were or may have been impacted by the HIPAA Breach; a brief description of the circumstances of the HIPAA Breach, including the date of the breach and date of discovery; a description of the types of unsecured PHI involved in the breach; a brief description of what the BA has done or is doing to investigate the breach and mitigate harm. BA will appoint a breach liaison and provide contact information to

provide information and answer questions Covered Entity may have concerning the breach;

(12) Comply with all HIPAA Security Rule requirements;

(13) Comply with the provisions of HIPAA Privacy Rule for any obligation Covered Entity delegates to BA;

(14) Under no circumstances may BA sell PHI in such a way as to violate Texas Health and Safety Code, Chapter 181.153, effective September 1, 2012, nor shall BA use PHI for marketing purposes in such a manner as to violate Texas Health and Safety Code Section 181.152, or attempt to re-identify any information in violation of Texas Health and Safety Code Section 181.151, regardless of whether such action is on behalf of or permitted by the Covered Entity.

C. Permitted Uses and Disclosures by BA

(1) Except as otherwise limited in this Agreement, BA may use or disclose PHI to perform functions, activities, or services for, or on behalf of, Covered Entity as specified in the Service Contract, provided that such use or disclosure would not violate the Privacy Rule if done by Covered Entity.

(2) Except as otherwise limited in this Agreement, BA may disclose PHI for the proper management and administration of the BA, provided that disclosures are Required By Law, or BA obtains reasonable assurances from the person to whom the information is disclosed that it will remain confidential and used or further disclosed only as Required By Law or for the purpose for which it was disclosed to the person, and the person notifies the BA of any instances of which it is aware in which the confidentiality of the information has been breached.

(3) Except as otherwise limited in this Agreement, BA may use PHI to provide Data Aggregation Services to Covered Entity as permitted by 45 C.F.R. 164.504(e)(2)(i)(B).

(4) BA may use PHI to report violations of law to appropriate Federal and State authorities, consistent with 45 C.F.R. 502(j)(1).

D. Obligations of Covered Entity. Covered Entity shall inform BA of its privacy practices and restrictions as follows. Covered Entity shall:

(1) notify BA of any limitations in its notice of privacy practices in accordance with 45 C.F.R. 164.520, to the extent that such limitation may affect BA's use or disclosure of PHI;

(2) notify BA of any changes in, or revocation of, permission by any Individual to use or disclose PHI, to the extent that such changes may affect BA's use or disclosure of PHI;

(3) notify BA of any restriction to the use or disclosure of PHI that Covered Entity has agreed to in accordance with 45 C.F.R. 164.522 to the extent that such changes may affect BA's use or disclosure of PHI.

(4) coordinate with BA regarding any PHI breach and make timely notification to affected individuals within 60 days of discovery.

E. Permissible Requests by Covered Entity.

Covered Entity shall not request BA to use or disclose PHI in any manner that would not be permissible under the Privacy Rule if done by Covered Entity, except that the Business Associate may use or disclose PHI for data aggregation or management and administrative activities of the BA.

F. Term and Termination.

(1) The term of this Agreement shall commence on the date on which it is fully executed or Service Contract start date of, whichever is later. This Agreement shall terminate when all PHI encompassed by this Agreement is destroyed or returned to Covered Entity or, if it is infeasible to return or destroy the PHI, protections are extended to such information in accordance with the termination provisions in this Section.

(2) Termination for Cause. Upon Covered Entity's knowledge of a material breach by BA, Covered Entity shall either (a) provide an opportunity for BA to cure the breach in accordance with the terms of the Service Contract or, if the BA does not cure the breach or end the violation within the time for cure specified in the Service Contract, end the violation and terminate this Agreement and the Contract; or (b) immediately terminate this Agreement and the Service Contract if BA has breached a material term of this Agreement and cure is not possible. If neither termination nor cure is feasible, Covered Entity shall report the violation to the Secretary of the U.S. Department of Health and Human Services.

(3) Effect of Termination.

(a) Except as provided below in paragraph (b) of this Section F(3), upon termination of this Agreement for any reason, BA shall return or destroy all PHI received from the Covered Entity, or created or received by BA on behalf of Covered Entity. This provision shall apply to PHI that is in the possession of BA or its subcontractors or agents. BA shall not retain any copies of PHI.

(b) In the event that BA determines that returning or destroying PHI is infeasible, BA shall provide to Covered Entity written notification of the condition that makes the return or destruction of PHI infeasible. Upon BA's conveyance of such written notification, BA shall extend the protections of this Agreement to such PHI and limit further uses and disclosures of such PHI to those purposes that make its return or destruction infeasible, for so long as BA maintains such PHI.

(4) Notwithstanding any other provision under this Agreement, the Parties agree that the Service Contract may be terminated by either Party without penalty should the other Party violate a material obligation under this Agreement.

G. Amendment to Comply with Law. The Parties agree to take written action as is necessary to amend this Agreement to comply with any Privacy Rules and HIPAA legal requirements for Covered Entity without the need for additional council action.

H. Survival. The respective rights and obligations of the BA under Sections B, C (2) and (4), and F(3) shall survive the termination of this Agreement.

I. Interpretation. Any ambiguity in this Agreement shall be interpreted to permit Covered Entity to comply with the Privacy Rule.

J. Regulatory References. A reference in this Agreement to a section in the Privacy Rule means the section as in effect or amended.

K. No Third Party Beneficiaries. Nothing express or implied in this Agreement is intended to confer, nor shall anything herein confer upon any person other than Covered Entity, BA, and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

L. ***INDEMNIFICATION. BA WILL INDEMNIFY, DEFEND AND HOLD COVERED ENTITY AND ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, SUCCESSORS AND ASSIGNS HARMLESS, FROM AND AGAINST ANY AND ALL LOSSES, LIABILITIES, DAMAGES, COSTS AND EXPENSES ARISING OUT OF OR RELATED TO ANY THIRD-PARTY CLAIM BASED UPON ANY BREACH OF THIS AGREEMENT BY BA IN ACCORDANCE WITH THE INDEMNITY PROVISIONS IN THE SERVICE AGREEMENTS, WHICH ARE HEREBY INCORPORATED BY REFERENCE FOR ALL PURPOSES.***

M. **Reimbursement.** BA will reimburse Covered Entity for reasonable costs incurred responding to a PHI breach by BA or any of BA's subcontractors.

N. **Waiver.** No provision of this Agreement or any breach thereof shall be deemed waived unless such waiver is in writing and signed by the party claimed to have waived such provision or breach. No waiver of a breach shall constitute a waiver of or excuse any different or subsequent breach.

O. **Assignment.** Neither party may assign (whether by operation or law or otherwise) any of its rights or delegate or subcontract any of its obligations under this Agreement without the prior written consent of the other party. Notwithstanding the foregoing, Covered Entity shall have the right to assign its rights and obligations hereunder to any entity that is an affiliate or successor of Covered Entity, without the prior approval of Business Associate.

P. **Entire Agreement.** This Agreement constitutes the complete agreement between Business Associate and Covered Entity relating to the matters specified in this Agreement, and supersedes all prior representations or agreements, whether oral or written, with respect to such matters. In the event of any conflict between the terms of this Agreement and the terms of the Service Contracts or any such later agreement(s), the terms of this Agreement shall control unless the terms of such Service Contract comply with the Privacy Standards and the

Security Standards. No oral modification or waiver of any of the provisions of this Agreement shall be binding on either party. This Agreement is for the benefit of, and shall be binding upon the parties, their affiliates and respective successors and assigns. No third party shall be considered a third-party beneficiary under this Agreement, nor shall any third party have any rights as a result of this Agreement.

Q. **Governing Law.** This Agreement shall be governed by and interpreted in accordance with the laws of the State of Texas.

EXECUTED to be effective _____, by the **City of San Antonio,** signing by and through its program manager.

COVERED ENTITY
By City of San Antonio

By: _____

Print Name:
Print Title:

BUSINESS ASSOCIATE:

By: _____

Print Name: Mike Peth
Print Title: Director, Sales and Marketing
March 17, 2020

APPROVED AS TO FORM:

_____
Assistant City Attorney

Attachment C: Sole Source Documentation

Each of the attachments listed below is an essential part of this contract, which governs the rights and duties of the parties, incorporated herein by reference, and shall be interpreted in the order of priority as appears below, with this document taking priority over all attachments:
Attachment A – Price Schedule
Attachment B – Business Associate Agreement
Attachment C – Sole Source Documentation
Attachment D – Statement of Work

SOLE SOURCE DOCUMENTATION
ATTACHMENT C:
Vendor must provide a written statement describing the proprietary nature of the good or service and well as a statement that no other like good or service is available. This statement shall be submitted, along with the offer, on company letterhead and be signed by an authorized representative of the company.

A letter describing the proprietary nature of the ezEMRx solution appears on the following page.

March 19, 2020

Kristen McAvoy
Procurement Specialist III
P.O. Box 839966
San Antonio, TX 78283-3966
Email: kristen.mcavoy@sanantonio.gov

RE: Request for Offer (RFO) No.: 6100012707: Annual Contract for Electronic Medical Records System

Ms. McAvoy,

This letter serves to notify you that CDP, Inc. is the sole provider of the electronic health record system—ezEMRx and revenue cycle management (RCM) solution—currently implemented within the City of San Antonio (COSA). Due to the proprietary nature of the ezEMRx and RCM solutions COSA has in place, CDP is the only firm that is able to support and maintain the systems.

As public health has changed to meet community needs, CDP has also evolved, developing unique and specialized approaches that are now proprietary to meet our client's technological challenges.

The ezEMRx solution currently processes patient, clinic, and billing information, required integrations including IMMTRACK, as well as meets the reporting needs of COSA. It is the only electronic health medical system used by the department.

Starting with the RFP award in June 2018, CDP has worked diligently with the COSA staff developing and modifying ezEMRx to meet the city's needs to comply with federal, state, and local administrative mandates.

Over the past 15 months of live operation, CDP has continually supported, maintained, and modified the solution.

CDP believes the transitional costs to re-create its existing system would be prohibitive. Other costs COSA would incur by selecting another vendor including the loss of staff productivity during training and gaining proficiency; as well as the staff hours required to plan, implement, troubleshoot, and train staff on a new system.

Sincerely,

Michael Peth
Director, Sales and Marketing

Attachment D: Statement of Work

Each of the attachments listed below is an essential part of this contract, which governs the rights and duties of the parties, incorporated herein by reference, and shall be interpreted in the order of priority as appears below, with this document taking priority over all attachments:
Attachment A – Price Schedule
Attachment B – Business Associate Agreement
Attachment C – Sole Source Documentation
Attachment D – Statement of Work

Although the Statement of Work has not changed, in the interest of contract completeness, the SOW has been provided on the following pages.

Statement of Work

SAIRS Data Conversion & Migration

November 15, 2019

SAIRS Data Conversion & Migration

SOW Sign-off

Approval of the SOW indicates an understanding of the purpose and content described in this deliverable. By signing this deliverable, the signee agrees work should be initiated on this project and necessary resources will be committed as described herein.

Approver Name / Title	Role	Signature	Date
Kevin Goodwin ITSD, Deputy Director	ITSD Sponsor		
Dr. Anita Kurian SAMHD, Assistant Director	Project Sponsor		
Julie Sandoval Public Health Administrator - Operations	Business Lead		
Megan Miller Program Manager; Immunizations	Business SME		
Mike Peth CDP, Inc. Director, Sales and Marketing	Project Director (CDP, Inc.)	Michael Peth	11.18.2019
Michelle Manuel CDP, Inc. Product Manager	Project Lead (CDP, Inc.)	Michelle Manuel	11.18.2019

1 Table of Contents

1 Project Background

The San Antonio Immunization Repository System (SAIRS) is a confidential, population-based, database that contains a record of immunization doses administered by participating providers to persons residing within the San Antonio and Bexar County Area. Information accessed through SAIRS is confidential and for authorized users. This system requires decommissioning because it has been replaced by an Electronic Health Records system that was implemented in February 2019. The ezEMRx application will be the new system of record for immunizations in the areas covered by the Metropolitan Health District.

A requirement of the original EHR Replacement project was for the SAIRS database records to be matched with the original Netsmart records in order to maintain and preserve records for Metro Health patients. The two databases (ezEMRx and SAIRS) must be merged in order to satisfy this requirement, and this project meets the criteria for advancing this requirement. The project team must identify how to import the SAIRS records into ezEMRx and thus populate the immunization section with records from SAIRS.

2 Project Objectives

Metro Health has an organizational goal of creating a central repository of public health information. The choice of the ezEMRx system indicates a desire to create a system of record that can contain comprehensive health information for each citizen of the city of San Antonio. When a patient visits one of the participating programs, their immunization history from the legacy SAIRS application should be available to any clinical provider working for the department. This, in turn, supports the organization's goal of serving an at-risk population while providing for the overall health and wellbeing of the City of San Antonio.

The objective of this project is a conversion and migration of SAIRS datasets, dating back several decades, into ezEMRx. The converted and migrated SAIRS datasets with information from IMMTRAC is to merge within ezEMRx for a complete patient immunization record. Lastly, the complete patient immunization record must communicate from ezEMRx into IMMTRAC.

ITSD can no longer support the application and it will be out of compliance by FY 2020. The benefit to Metro Health and ITSD for extracting the patient immunization information found in the database is that it retires a technology platform that can no longer be serviced. It also preserves an untold amount of work acquiring and entering patient information. In some cases, it houses information dating back several decades.

The SAIRS database is running on an outdated platform and requires decommissioning. There is a risk of being out of compliance with State and Federal standards (HIPAA and Meaningful Use) for maintaining patient electronic health records information.

3 Project Scope

The scope of this project is a complete and successful import of all SAIRS data into ezEMRx. This will involve the development of tool by CDP to facilitate data exchanges between the SQL database and ezEMRx, the development of a tool by CDP to send data to IMMTRAC, and ezEMRx side performance changes by CDP to adapt to registry level data storage.

Approximate vaccinations to be imported: 23 million records.

The following exclusions will apply:

1. Any patients who are not active patients within Bexar County will be excluded.
2. Patient demographic records and associated vaccines that falls into any of the following are excluded:
   - Patients who have only flu prior to 1/1/2018.
   - Any patients who have only TB skin test.
   - Any patient record with birth date before 1940 (Patients older than 78 years of age).
   - Patients with no vaccine record.
3. All adults whose consent was signed > 10 years following end of calendar year will be excluded.

   Inclusion
   Persons under the age of 18 need to follow the retention requirements for maintaining records (21st birthday or 10 years following the end of the calendar year in which consent form was signed whichever is later) need to be included.

   Examples – PID's 26033, 443399 and 2258544

3.1 In Scope

The scope of this engagement includes all activities required to support the deliverables and activities including:

The following are part of this implementation:

- ☐ SAIRS assessment 8-16-19
  - Option A
- ☐ Data Conversion
- ☐ Data Migration
- ☐ Project Management
- ☐ Quality Management
- ☐ Technical Support
- ☐ End User Acceptance

3.1.1 Professional Services

CDP, Inc. will provide Project management activities for the entire project from initiation to close.

1. Immunization Import Tool
2. IMMTRAC Send Tool
3. Data Optimization

3.1.2 Software Development

The following tasks will be completed as a part of the Implementation ef

1. Immunization Import Tool
2. IMMTRAC Send Tool

3.1.3 Testing

CDP to perform System testing and provide system test completion certificate to move into UAT.

COSA to perform:

1. User Acceptance Testing

Testing is further defined in Section 8.

3.1.4 Data Transfers, Imports, Migration, Conversion and Mapping

CDP, Inc. to perform:

1. Data Conversion between SAIRS data and ezEMRx
2. Data Optimization
3. Data Imports/Migration into ezEMRx
4. Data transmission into IMMTRAC

3.1.5 Go live technical support and Warranty

CDP, Inc. to provide 90 days of post go live technical support and warranty.

Assessment and SOW discrepancies, CDP, Inc. and the City of San Antonio (COSA) will reconcile the requirements to the actual application or system. Should it be determined that a discrepancy, or discrepancies, exist between the SOW and the Assessment, COSA will retain the privilege of determining which solution best meets the requirements. Any work associated with this decision would thereby be considered 'in scope' of the project.

3.2 Out of Scope

Anything not included in Option A of the SAIRS Data Assessment 8-16-19, and the SOW is considered out of scope. This may change based on future meetings if additional functionality/requirements are identified. Any future changes or additional functionality not represented in Option A of the SAIRS Data Assessment 8-16-19, and the SOW will result in a Change Request (CR) with potential additional costs.

1. Exclusions resulting from the migration due to invalid data or exclusion rules are considered out of scope
2. IMMTRAC errors reported due to patient Opt. IN/OUT and its resolutions is considered out of scope.

4 Assumptions and Constraints

To identify and estimate the required tasks and timing for the project, certain assumptions and constraints were made and are listed below. If an assumption is invalidated at a later date, the activities and estimates will be adjusted accordingly:

4.1 Assumptions

1. CDP assumes the City is using ezEMRx software.
2. CDP assumes the City will have the proper resources using the ezEMRx software.
3. CDP assumes all requirements and functionality were accurately portrayed in the exclusion rules listed in this document.
4. CDP assumes all costs and work have been identified in this SOW. Any additional cost or work required for this migration will be identified and requested through a Change Request process.
5. CDP assumes the City will provide staff appropriately trained on the ezEMRx software during the outlined in the Migration timeline.
6. The City of San Antonio will be responsible for the scheduling of meeting rooms, facilities, and requisite equipment.
7. The City of San Antonio will assign a primary contact and point of authorization.

8. The City performs data validation acceptance Testing / User Acceptance Testing (UAT) during the timeframe outlined in the Migration schedule.

4.2 Constraints

1. Expertise in legacy data environment might be limited due to lack of or outdated documentation.
2. Data requirements and definitions might require clarification by subject matter experts.

5 Project Deliverables and Milestones

5.1 Deliverable Ownership

The following table identifies the roles and responsibilities associated with documentation and delivery of required deliverables services. The table attempts to define the lead role, but it is expected that both CDP, Inc. and the COSA will work collaboratively to develop the documentation. An "L" Lead (develop core document), "R" Review, "S" Support, or "A" Approve is placed in the column under the party that will be responsible for performing the task.

	Deliverables	Vendor	City
1.	Project Kick-off meeting	L	R, S, A
2.	Data Migration Plan	L	R, A
3.	Project Management Plan – Project Characteristics	L	S
4.	Project Management Plan –Directory of CDP, Inc. team contact points	L	A
5.	Data Conversion Mapping Files	L	R, A
6.	Weekly Progress Report – Meeting Minutes	L	R
7.	Project Management Plan – Project Schedule	L	S
8.	Project Management Plan – Management Plan	L	S
9.	Project Management Plan – Risk Management Plan	L	S
10.	Weekly Progress Report – Risk and Issues Logs	L	S
11.	User Acceptance Testing Plans and Schedule	S	L
12.	User Acceptance Test Completion Certificate	S	L
13.	User Acceptance Testing Use Cases	S	L
14.	Project Management Plan – Work Breakdown Structure	L	S
15.	Project Acceptance and Closure	L	A
16.	Project Management Plan – Dependency Network Diagram	L	A
17.	Project Management Plan – Project Organization	L	A
18.	Documentation of test results defect and issue logs	L	R, S, A
19.	Business Associate Agreement (Health data related projects only) ***	S	L
20.	System test completion certificate	L	R,A

5.2 Payment Milestones and Deliverables

CDP, Inc. will provide this service to the City of San Antonio on a fixed fee with deliverables-based payments. The projected cost of this project is **$147,000**. The Milestone Value is full value for each deliverable payment. The net due at each Payment Milestone is the net of Milestone Value:

The City of San Antonio will be billed on the invoice schedule below:

MSP #	Payment Description	Scheduled Date	Value	Contract %
1	Project Initiation Complete	12.16.19	$36,750	25%
5	Data Migration Preparation and Data Mapping Complete	2.12.20	$14,700	10%
12	Data Import Acceptance	09.08.20	$58,800	40%
15	Project Acceptance and Closure	9.25.20	$36,750	25%
Total			$147,000	100%

5.3 Deliverable / Milestone Acceptance Criteria

	Deliverable Acceptance Criteria Description
1	Project Kick-off meeting
5	Data Mapping Document
12	User Acceptance Testing is complete without critical or high errors
15	1. 60 days post go-live without critical or high errors 2. all deliverables received accepted

All project deliverables will be reviewed and signed-off on within ten business days of notification that the deliverable is complete.

6 Project Management

6.1 CDP, Inc. Responsibilities

The CDP, Inc. Project Manager is the City of San Antonio's (COSA) primary point of contact for this engagement. The CDP, Inc. Project Manager is accountable for ensuring resource availability, managing communications across project teams, monitoring project progress against the project timeline and ensuring that the work deliverables are appropriately developed based on the scope and requirements of the project.

The CDP, Inc. Project Manager and other key personnel shall support overall project objectives and work effectively with the COSA's Project Manager, Project Team and Stakeholders (as required) and shall function as the liaison between the COSA's Project Manager and CDP, Inc. on all matters relating to the project.

If CDP, Inc. employees are located on-site, CDP, Inc. shall provide its own hardware, computer equipment and software to fully satisfy all operational requirements of the Contract. CDP's equipment and software must be compatible with the system and software used by the COSA, including the appropriate Microsoft Office and Microsoft Project systems.

COSA, at its sole discretion, shall have the right to remove any of the CDP, Inc.'s employees or subcontractors. Upon written notifications, CDP, Inc. shall remove and replace any employee or subcontractor without affecting stated timelines, deliverables, or service levels.

CDP, Inc. shall have sole responsibility to coordinate CDP, Inc.'s work to meet project requirements and to notify COSA of all conflicts that cannot be accommodated through proper coordination of the project.

CDP, Inc. shall submit copies of each major deliverable for review and evaluation by the COSA Project Manager.

Submitted deliverables found unsuitable, rejected or returned for revision by COSA, shall be reworked by CDP, Inc. and resubmitted. Payment will not be made until submitted items are found suitable and accepted by COSA.

Contract deliverable shall be submitted for a minimum of one round of review and comments by COSA. CDP, Inc. shall be responsible for incorporating all comments and resubmitting as directed by COSA.

Unless noted otherwise, one (1) electronic copy of all deliverables shall be provided.

CDP, Inc. shall provide any applicable test plans, test cases and test scripts to COSA for review.

CDP, Inc. shall perform agreed upon tests to validate that the system meets the requirements.

CDP, Inc. shall assist COSA in user acceptance testing.

6.2 CDP, Inc.'s team:

CDP, Inc.'s team shall consist of the following:

Name	Role	Title
Michelle Manuel	Project Lead	Product Manager
Mike Peth	Project Director	Director, Sales and Marketing
Siri Kumar	IT Technical Architect	Chief Technical Officer
Balaji Venkatesh	IT Technical Lead	Product Manager

6.3 COSA Responsibilities

COSA will designate a COSA Project Manager, responsible for all CDP, Inc. coordination activities. COSA will provide a Project Manager and a Business Analyst for this project and access to technical personnel. CDP, Inc. will work with the COSA Project Manager to provide all necessary information required for satisfactory performance of their tasks. CDP, Inc. will direct all communication to and take direction from the COSA Project Manager.

Project meetings will be scheduled on a regular basis and will serve as a means of identifying emerging issues and reporting on progress. The COSA Project Manager and Project Team will be responsible for contributing to and reviewing weekly progress reports, reporting project issues and contributing to updates of the project plan and schedule.

COSA will make available the necessary technical, business, testing and training personnel to support the deployment throughout the project. COSA will be responsible for ensuring that all discovery, discussion, workshop and training sessions are attended by COSA personnel, as scheduled.

COSA if required will provide necessary access to the CDP, Inc. personnel working on this project, including remote privileges (VPN), network and systems access. CDP, Inc. agrees to follow any applicable COSA policies and/or guidelines for appropriate use of COSA infrastructure (Ex: internet, network, etc.)

COSA will provide the following in support of CDP, Inc.'s system implementation:

1. Access to IT staff to support the implementation
2. Access to business staff for configuration testing
3. Timely approval of technical design
4. Review and approval of system tests
5. Assistance in scheduling staff for testing and training
6. Access to Workspace if required

COSA will schedule and perform User-Acceptance Testing (UAT).

6.4 COSA Team:

COSA team shall consist of the following:

Name	Role	Title
Dr. Anita Kurian	Project Sponsor (SAMHD)	Assistant Director SAMHD
Kevin Goodwin	Project Sponsor (ITSD)	Deputy Director ITSD; CTO
Julie Sandoval	Business Lead	Public Health Administrator Operations
Megan Miller	Business SME	Program Manager; Immunizations
Beata Cable	IT Technical Lead	IT Solutions Analyst
Jerry Powell	Business Analyst	Business Analyst
Jonathan Becker	Project Lead	IT Project Manager

6.5 Project Status Reporting Meeting

The CDP, Inc. and COSA project managers will agree on a template in order to provide project status to the project sponsorship. Project status meetings will be held on a regular basis, as scheduled, and agreed upon. This will ensure that all project staff is up to date on the current project status, possible issues, risks, accomplishments, challenges and planned activities in the coming weeks. The Project Team attends this meeting along with various staff from both teams who are involved in that week's activities. This meeting generally lasts no longer than an hour. CDP, Inc.'s Project Manager and COSA's Project Manager are responsible to set this meeting. Meeting minutes for review and approval after each status meeting will be distributed.

Project status meetings shall be used to:

1. Discuss and review status of Action Items from previous meetings.
2. Review items of significance that could affect project progress.
3. Include topics for discussion as appropriate to the status of the project.
4. Review the project schedule for progress since the last meeting.
5. Determine where each activity is in relation to the project schedule, whether on time, ahead or behind schedule.
6. Determine how activities behind schedule will be expedited and secure commitments from parties involved.
7. Discuss whether scheduled revisions are required to ensure that current and subsequent activities will be completed within the project schedule.

6.6 Project Status Reports

CDP, Inc. will prepare and deliver a Project Status Report that will include, but is not limited to, updates to risks, issues, status of current activities and any project-related items. The Project Status Report will also include a current status of the project schedule including the percentage of work completed, a description of the progress achieved during the period, plans for the forthcoming period, problem areas and proposed solutions, delaying factors and their impacts, an explanation of corrective actions taken or proposed, and other analyses necessary to compare actual performance with planned performance.

6.7 Project Management Plan (PMP) Documentation

Within fifteen (15) calendar days after execution of the Project kickoff meeting, a project management plan (PMP) will be provided by CDP, Inc. for reviewed by the COSA project management team. The PMP will fully describe the Project, and Risk requirements for executing the work planned for each phase of the Project. It

will provide a comprehensive plan for assisting COSA to control, direct, coordinate and evaluates the work performed during each project task. Within ten (10) calendar days after receiving the Draft Project Management Plan, COSA will hold review sessions providing feedback to CDP, Inc.

At a minimum, the PMP shall include the following:

- Project Characteristics described in general terms that reflect the requirements of COSA
- Change Management Plan
- Communication Management Plan
- Risk Management Plan
- Work Breakdown Structure
- Dependency Network Diagram
- Project Schedule
- Project Organization

6.8 Communications Management

6.8.1 Approach

This Communications Management Plan sets the communications framework for this project. It will serve as a guide for communications throughout the life of the project. The CDP, Inc. and COSA Project Managers will ensure effective communications on this project. The communications requirements are documented in the Communications Matrix (Table 1). The Communications Matrix will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it and to whom to communicate.

6.8.2 Constraints

All project communication activities will occur within the project's approved budget, schedule, and resource allocations. The CDP, Inc. and COSA Project Managers are responsible for ensuring that communication activities are performed by the Project Team and without external resources which will result in exceeding the authorized budget. Communication activities should occur as detailed in the Communication Matrix.

6.8.3 Methods and Technologies

City of San Antonio's Information Technology Services Department (ITSD) maintains a SharePoint platform within the Project Management Office (PMO) and Innotas software which all projects use to provide updates, archive various reports, and conduct project communications. COSA's project manager shall always update the Share Point and Innotas software respectively to post the project data. This platform enables senior management, as well as stakeholders with compatible technology, to access project data and communications at any point in time. SharePoint and Innotas Software also provide the ability for stakeholders and project team members to collaborate on project work and communication. For any stakeholders who do not have the ability to access SharePoint and Innotas software, separate documentation will be sent via email.

What?	When?	How?	Who?
Kick Off Meeting	At project initiation	Microsoft Teams and/or face-to face	CDP, Inc. and COSA team
Team Meeting	Weekly	Microsoft Teams and/or face-to face	CDP, Inc. and COSA team
Bi-Weekly Status Report	Bi-Weekly	Microsoft Teams and/or face-to face	CDP, Inc. and COSA team
Project Meetings	As required	Microsoft Teams and/or face-to face	CDP, Inc. and COSA team

CDP, Inc. and COSA will coordinate on the required attendees for each meeting based on the topic and decisions. CDP, Inc. and COSA will work together to ensure that each meeting will include topics/agenda to be discussed and desired outcomes.

6.8.4 Escalation Process

Efficient and timely communication is the key to successful project completion. As such, it is imperative that any disputes, conflicts, or discrepancies regarding project communications are resolved in a way that is conducive to maintaining the project schedule, ensuring the correct communications are distributed, and preventing any ongoing difficulties.

In order to ensure projects, stay on schedule and issues are resolved, the Project Team will use this standard escalation model to provide a framework for escalating communication issues. The table below defines the priority levels, decision authorities, and timeframes for resolution.

Priority	Definition	Decision Authority	Timeframe for Resolution
1	**Major** impact to project or business operations. If not resolved quickly there will be a significant adverse impact to budget and/or schedule.	Project Sponsor	Within 4 hours
2	**Medium** impact to project or business operations which may result in some adverse impact to budget and/or schedule.	Project Sponsor	Within one business day
3	**Minor** impact which may cause some minor scheduling difficulties with the project but no impact to scope, schedule, or budget.	Project Manager	Within two business days
4	**Insignificant** impact to project but there may be a better solution.	Project Manager	Work continues and any recommendations are submitted via the project change control process

Table 2 – Project Escalations

6.9 Risk Management

6.9.1 Approach

The purpose of the Risk Management Plan is to establish the framework in which the Project Team will identify risks and develop strategies to mitigate or avoid those risks. The approach taken to identify risks includes a methodical process by which the Project Team identifies scores and ranks the various risks. The most likely and highest impact risks can be added to the project schedule to ensure that assigned risk owners take the necessary steps to implement the mitigation response at the appropriate time during the schedule.

6.9.2 Qualification and Prioritization

In order to determine the severity of the risks identified, a Probability and Impact factor is assigned to each risk. This process allows the COSA Project Manager to prioritize risks based upon the effect or Risk Exposure they may have on the project.

		Impact of Risk				
		1	2	3	4	5
Probability of Risk Occurring	1	1	2	3	4	5
	2	2	4	6	8	10
	3	3	6	9	12	15
	4	4	8	12	16	20
	5	5	10	15	20	25
	G	LOW Risk	The **Risk Exposure** in the matrix is determined by multiplying			
	Y	MED Risk	the **Impact of the Risk** x **Probability** that the risk will occur			
	R	HIGH Risk				

Table 3 –Risk Exposure Matrix

6.9.3 Risk Monitoring

The most likely and greatest impact risks can be added to the project plan to ensure that they are monitored during the time the project is exposed to each risk. At the appropriate time in the project schedule a Risk Owner is assigned to each risk. Each Risk Owner is responsible for tracking, providing status and managing the risk to resolution.

Risk monitoring is a continuous process throughout the life of this project. As risks approach on the project schedule the COSA Project Manager will ensure that the appropriate Risk Owner provides the necessary status updates, which include the risk status, identification of trigger conditions, and the documentation of the results of the risk response.

6.9.4 Risk Mitigation and Avoidance

As more risks are identified, they will be qualified, and the Project Team will develop avoidance and/or mitigation strategies. These risks will also be added to the Risk Log and the project plan to ensure they are monitored at the appropriate times and are responded to accordingly.

The risks for this project will be managed and controlled within the constraints of time, scope, and cost. All identified risks will be evaluated in order to determine how they affect this triple constraint. The COSA Project Manager will determine the best way to respond to each risk to ensure compliance with these constraints.

Migration risks are characteristics, circumstances, or features of the migration environment that may have an adverse effect on the migration or the quality of its deliverables. Known risks identified with this migration have been included below. A plan will be put into place to mitigate the impact of each risk to the migration.

1. Migration scope is altered and extended causing issues.
2. The City staff availability for User Acceptance Testing.

6.9.5 Risk Log

The Risk Log for this project is a log of all identified risks, their probability and impact to the project, the category they belong to, mitigation strategy, and when the risk will occur. The Risk Log also contains the mitigation strategy for each risk as well as when the risk is likely to occur.

Based on the identified risks and timeframes in the risk register, each risk can be added to the project plan. At the appropriate time in the plan—prior to when the risk is most likely to occur—the COSA Project Manager will assign a Risk Owner to ensure adherence to the agreed upon mitigation strategy. The COSA Project Manager will track status and manage the risk to resolution.

No	Project	Risk Statement	Negative Impact	Status (Open / Closed)	Probability (1-5)	Impact (1-5)	Risk Exposure	Risk Mitigation Action	Date Identified	Assigned To
1	FASTER Web	Current hardware/software configuration may not meet vendor minimum requirements for the software upgrade	If hardware/software upgrades are required, will affect schedule and budget	Open	3	5	15	Need to conduct hardware/software review to determine if upgrades are required	09/04/18	IT, BESD, SAFD
2	FASTER Web	Handheld hardware requirements not identified (scanners, tablets, phones)	If handheld hardware is required, may affect schedule and budget	Open	3	4	12	Need to identify handheld needs, cost and timeline	09/04/18	IT, BESD, SAFD
3	FASTER Web	Vendor SOW costs exceed current budget	If activities and budget cannot be reconciled, will not be able to complete required vendor activities without additional budget	Open	5	3	15	Need to review vendor SOW to determine if all activities identified are required and at the best possible price	09/04/18	PM, BESD
4	FASTER Web	Full-time System Administrator(s) not identified and assigned	If not identified, will not have key SME(s) to support the system	Open	5	5	25	Need to identify full-time System Administrator(s) ASAP	09/04/018	BESD, SAFD
5	FASTER Web	Training needs are extensive and exceed SOW costs	If minimum training requirements not met, will not be able to conduct successful Production deployment	Open	5	5	25	Will use 'train the trainer' method to complete additional training needs	09/04/18	BA, BESD, SAFD, Training Dept (?)
6	FASTER Web	Production data migration mappings not confirmed	If not confirmed, data may not be migrated as expected	Open	2	5	10	Review data mappings to confirm all required Production data will be migrated	09/04/18	BA, BESD, SAFD

Table 4 – Sample Risk Log

6.10 Scope and Change Control

6.10.1 Scope Verification

Scope Verification is the responsibility of the Project Team. The original scope for this project is defined by the Statement of Work. Scope Verification within this document refers to the management of deliverables identified as the scope of the project. The COSA Project Manager will oversee the Project Team and the progression of the project to ensure that this scope control process is followed.

As this project progresses the COSA Project Manager and Project Team will verify project deliverables against the latest, approved scope and the Acceptance Criteria for that deliverable. Once verified that a deliverable meets the scope and acceptance criteria, the Project Manager and Sponsor (or designated representative) will meet for review and formal acceptance of the deliverable. The COSA Project Manager will present the deliverable Acceptance Criteria and the Sponsor will accept the deliverable via email or document signature.

Roles and Responsibilities

The COSA Project Manager, Sponsor and Project Team will all play key roles in managing the scope of this project. The table below defines the roles and responsibilities for the scope management of this project.

Role	Responsibilities
Project Manager	• Review and Facilitate change requests. • Evaluate impact of scope change requests. • Organize and facilitate change control meetings. • Communicate outcomes of scope change requests.
Project Sponsor	• Approve or deny change requests. • Evaluate need for change requests. • Review and accept/deny project deliverables.
Project Team, Subject Matter Expert(s)	• Participate in defining change resolutions. • Evaluate the need for scope changes and communicate them to the Project Manager, as necessary. • Update project documents upon approval of all scope changes.

Table 5 – Scope Management Roles and Responsibilities

6.10.2 Scope Change Control

Proposed scope changes are initiated with a scope change request by the COSA Project Manager, Sponsor, Project Team or Key Stakeholders. The Scope Change Control process will ensure that all proposed changes are defined, reviewed and agreed upon so they can be properly implemented and communicated to all stakeholders. All changes will be analyzed and evaluated for impact on:

- Timeline, including impact to other work, deliverables, and/or milestones
- Budgets
- Resource assignments and availability
- Technical architecture, application design and/or technical requirements
- Meeting client requirements and expectations
- Risks including any additional risks added or mitigated by the proposed change

6.10.3 Definitions of Change

There are several types of changes:

- **Schedule Changes** – changes which will impact the approved project schedule. These changes usually require re-baselining the schedule, depending on the significance of the impact.
- **Budget Changes** – changes which will impact the approved project budget. These changes may require additional funding and/or releasing funding no longer required.
- **Scope Changes** – changes which will impact the project's scope and are typically the result of adding or removing requirements which were not initially planned for. These changes may also impact the budget and schedule.

COSA may request scope changes in or additions to the services being provided hereunder by completing a Change Control Approval Request Form. If CDP, Inc. deems the changes feasible, CDP, Inc. will provide a quote for any increase or decrease in the cost of or time required for performance of the Services as amended. Once parties agree to the modified scope and related fees a representative of each party will sign the Change Control Approval Request Form. The Project Manager will communicate the scope change to all project team members and stakeholders and initiate update of the relevant project documents.

If the scope change request is NOT approved, no further action is required.

6.10.4 Change Control Board

The CCB is the approval authority for all proposed scope change requests. The purpose of the CCB is to review scope change requests, impacts on the project risk, scope, cost, and schedule, and to approve or deny each change request. The CCB is comprised of the Sponsor, Project Team and Key Stakeholders.

6.10.5 CCB Roles and Responsibilities

The following are the roles and responsibilities for all change management efforts related to the project:

Role	Responsibilities
Project Sponsor	• Review and approve/deny change requests to scope, budget, schedule and/or project deliverables
Project Manager	• Receive and log all change requests received • Work directly with vendors, appropriate ITSD technical resources and client SMEs to collect information needed to estimate and complete the request • Maintain Change Request Log • Update the Change Control Board as needed
Project Team, Subject Matter Expert(s)	• Originate change requests based on project needs • Provide all applicable information and detail on change request forms • Be prepared to address questions regarding any submitted change requests • Provide feedback as necessary on impact of proposed changes • Requests from team members should be discussed with the Project Manager and/or Team Lead prior to submitting an official change request • Review change requests pending approval and provide input as needed / requested

Table 6 – Change Management Roles and Responsibilities

6.11 Work Breakdown Structure and Schedule

6.11.1 Schedule Management Approach

The CDP, Inc. Project Manager is responsible for scheduling the contract Scope of Work. CDP, Inc.'s management personnel shall actively participate in the development of the project schedule so that the intended sequences and procedures are clearly understood by CDP, Inc.'s organization. The COSA Project Manager will review and approve the final tasks that appear in the CDP, Inc. project schedule.

Project schedules are created using MS Project (or equivalent software) starting with the deliverables and milestones identified in the project's Work Breakdown Structure (WBS). Activity definition identifies the specific work packages which must be performed to complete each deliverable and milestone. Activity sequencing is used to determine the order of work packages and assign relationships between project activities. Activity duration estimating is used to calculate the number of work periods required to complete work packages. Resource estimating is used to assign resources to work packages in order to complete schedule development.

The project schedule shall identify detailed activities, scheduling, and show relationships between activities and similar milestone activities. Once a preliminary schedule has been developed, it is reviewed by the Project Team. The Project Team and resources must agree to the proposed work package assignments, durations, and schedule. Once this is achieved the COSA Project Manager will baseline the schedule.

6.11.2 Schedule Control

The project schedule is reviewed and updated as necessary on a weekly basis with actual start, actual finish, and completion percentages. The COSA Project Manager is responsible for holding weekly schedule updates/reviews, determining impacts of schedule variances, processing schedule changes and reporting schedule status in accordance with the project's communications plan.

The Project Team is responsible for participating in weekly schedule updates/reviews, communicating any changes to actual start/finish dates to the project manager and participating in schedule variance resolution activities as needed.

6.11.3 Schedule Changes and Thresholds

If a schedule change is necessary, the COSA Project Manager and Project Team will review and evaluate the change. They must determine which tasks are impacted, variance as a result of the potential change and any alternatives or variance resolution activities they may employ to see how it would affect the scope, schedule, and resources. If, after this evaluation is complete, the COSA Project Manager determines that any change will exceed the established boundary conditions, then a schedule change request must be submitted.

Submittal of a schedule change request to the project sponsor for approval is required if either of the two following conditions is true:

- The proposed change is estimated to increase the duration of an individual work package by 10% or more.
- The change is estimated to increase the duration of the overall baseline schedule or deliverable.

When agreement has been reached on the number of days to be included in an overall time extension or an extension to an intermediate milestone, the COSA Project Manager will take the Change Request to the CCB. Upon the CCB approval, the revised project schedule with the extensions will become the basis for any future approved changes.

The CDP, Inc.'s Project Manager shall incorporate activities representing the total value of approved change orders as each is approved. Change order activities shall be assigned unique activity codes such that they can be segregated in the project schedule.

6.11.4 Schedule of Tasks

WBS	Task Name	Duration
1	*Project Begins*	*0 days*
2	*Kick-Off Project*	*0 days*
3	*Project Initiation and Management*	*23 days*
3.1	*Project Management Plan*	*23 days*
3.1.1	*Develop Document*	*15 days*
3.1.2	*Submit Document for Review*	*0 days*
3.1.3	*Client Review*	*5 days*
3.1.4	*Update Document*	*2 days*
3.1.5	*Document Approval*	*1 day*
4	*MILESTONE - Project Initiation Complete*	*0 days*
5	*Project Monitoring and Control*	*217 days*
5.1	*Bi-Weekly Progress Meeting Agenda*	*213 days*
5.2	*Bi-Weekly Progress Meetings*	*214 days*
5.3	*Bi-Weekly Progress Meeting Reports*	*214 days*
5.4	*Bi-Weekly Progress Meeting Reports 15*	*1 day*
6	*Data Migration*	*188 days*
6.1	*Data Migration Preparation and Data Mapping*	*53 days*
6.1.1	*Gathering*	*0 days*
6.1.1.1	*SAIRS Data Files*	*0 days*
6.1.2	*Analysis*	*28 days*
6.1.2.1	*SAIRS Data Files*	*10 days*
6.1.2.2	*Data Mapping*	*18 days*
6.1.2.2.1	*Develop Data Mapping Document*	*10 days*

6.1.2.2.2	*Submit Draft Document for Review*	*0 days*
6.1.2.2.3	*Client Review*	*5 days*
6.1.2.2.4	*Update Document*	*2 days*
6.1.2.2.5	*Document Approval*	*1 day*
6.2	*MILESTONE - Data Migration Preparation and Data Mapping Complete*	*0 days*
6.3	*Data Migration Development*	*135 days*
6.3.1	*Development of Implementation Tool Set*	*65 days*
6.3.2	*Data import and Sanitization*	*50 days*
6.3.3	*Application regression testing with data*	*20 days*
6.4	*MILESTONE - Data Migration Development Complete*	*0 days*
7	*User Acceptance Testing*	*52 days*
7.1	*User Acceptance Testing Use Cases*	*18 days*
7.1.1	*Develop Document*	*10 days*
7.1.2	*Submit Document for Review*	*0 days*
7.1.3	*Client Review*	*5 days*
7.1.4	*Update Document*	*2 days*
7.1.5	*Document Approval*	*1 day*
7.2	*User Acceptance Testing*	*30 days*
7.2.1	*User Acceptance Testing (Functional Webinar Working Sessions)*	*1 day*
7.2.2	*Functional feedback and Migration Updates - Phase 1*	*5 days*
7.2.3	*User Acceptance Testing (Users in system 1 week)*	*5 days*
7.2.4	*Functional feedback and Migration Updates - Phase 2*	*5 days*
7.2.5	*Develop and Submit Final UAT Report*	*5 days*
7.2.6	*Client Review*	*5 days*
7.2.7	*Update Document*	*1 day*
7.2.8	*Document Approval*	*1 day*
7.3	*MILESTONE - Data Import Acceptance*	*0 days*
8	*Data Migration Final Data set in production*	*10 days*
8.1	*Load SAIRS Data in Production*	*10 days*
9	*Project Closeout*	*1 day*
9.1	*Project Acceptance and Closure*	*1 day*

7 Project Execution Approach

The objective of this project is to complete import of all SAIRS data into ezEMRx. This involves development of tool to facilitate data exchanges between the SQL database and the EHR, development of a tool to send data to IMMTRAC and application side performance changes to adapt to registry level data storage.

7.1 Phase 1

1. CDP will create mapping definitions between SAIRS and ezEMRx
2. CDP will conduct data exclusion assessment and identify consent disparities
3. CDP will development of MSSQL to ezEMRx exchange engine
4. CDP will build ezEMRx application data adaptation changes
5. CDP will conduct regression testing and optimization

7.2 Phase 2

1. CDP will develop an IMMTRAC Send Tool
2. CDP will conduct dry runs and testing

7.3 Phase 3

1. CDP will present COSA a staging sample import
2. COSA will review and upon acceptance and provide sign off of staging sample import
3. CDP will execute production import
4. Migration errors and consent irregularities to COSA
5. IMMTRAC transmission execution
6. IMMTRAC errors to COSA
7. Error dispositions

8 Testing

A well-defined risk-based testing approach is a mandatory part of any COSA project. At a minimum the following testing levels will be performed as a part of this project.

8.1 System Testing

CDP will perform system testing and provide system test completion certificate to COSA

8.2 User Acceptance Testing

City of San Antonio (COSA) creates and conducts User Acceptance Testing (UAT) in coordination with CDP technical support and end users. CDP shall provide testing use cases used for UAT so that COSA can review and customize these to conduct our user acceptance testing. A formal UAT shall be conducted by the City of San Antonio's business end user to determine acceptance of the system for operational use. CDP, Inc. shall support the UAT and fix any defects found during the testing. UAT completion and certification are mandatory to move the implementation into production.

Level	Owner	Objectives	Typical Key areas of Testing	Environment
Acceptance	Business End Users (Vendor, COSA ITSD, and COSA Business Users)	Demonstrate readiness for end user business deployment. UAT verifies that delivered system meets business user's requirements and system is ready for operational use in real time.	End user operational business processes, workflows and functionality and functional requirements	Test
UAT Roles and Responsibilities			Vendor	City
Develop UAT Test Plan			S	L, R, A
Test Use Cases			S	L, R, A
Test schedule			S	L, R, A
Documentation of test results			S	L, R, A
User Acceptance Test Completion Certificate			S	L, R, A

8.3 Test coverage, Defect and Resolution Logs:

CDP, Inc. shall maintain and provide the test coverage, Defect and Resolution logs.

9 Post Go-live Technical Support and Warranty

CDP, Inc. shall provide enough post go-live support after implementation to support the optimal usage of the solution. Defects in the production system are captured and must be corrected during the 90-day warranty phase. Each of these defects are reviewed through the change control process to determine the impact on the system, level of effort for change and the impact to the end users. Once the changes have been approved, each of the maintenance fixes goes through the design, development, and test phases prior to being released into production. CDP, Inc. warrants that the Software will function substantially in accordance with its Documentation. As the COSA's sole exclusive remedy for breach of this warranty, CDP, Inc. will, at its option, fix the defective Software.

10 Appendix or Attachments

10.1 SAIRS Assessment 8-16-19

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August 16, 2019

The analysis of SAIRS dataset has established multiple possibilities. The dataset primarily is of the nature that would be maintained in registry system. Furthermore, since the import is now geared towards an EHR, we have assessed the relevance of data and determined multiple options.

Approximately vaccinations to be imported: 23 million records

Option A
This involves the complete import of all SAIRS data into ezEMRx. This option involves the most effort. Requires the development of a tool to facilitate data exchanges between the SQL database and the EHR, development of a tool to send data to IMMTRAC and application side performance changes to adapt to registry level data storage.

Immunization Import Tool	400
IMMTRAC Send Tool	360
Immunization Import EHR Enhancements	440
Data Optimization	200
Total Hours	1400
Hourly rate reduced to $105	$147,000

Option B
This involves the selective import of SAIRS data into ezEMRx. The import matches active patients in the EHR and only pulls in those record updates. This effort is the most effective in sense of usability to the COSA staff. The rest of the unmatched patient immunization records are directly sent to IMMTRAC. In this case, any rejections by IMMTRAC will need to be handled by the COSA staff. This involves development of tool to facilitate data exchanges between the SQL database and the EHR, development of a tool to send data to IMMTRAC and application side performance changes to adapt to registry level data storage.

Immunization Import Tool	400
IMMTRAC Send Tool	360
Immunization Import EHR Enhancements	360
Data Optimization	160
Total Hours	1280
Hourly rate reduced to $105	$134,400

10.2

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Option C

This involves no import of SAIRS data into ezEMRx and patient updates are pulled from IMMTRAC as and when required as part of the regular EHR process. The patient immunization records are directly sent to IMMTRAC. In this case, any rejections by IMMTRAC will need to be handled by the COSA staff. This involves development of a tool to send data to IMMTRAC and HIE exchange enhancements.

IMMTRAC Send Tool	360
HIE Enhancements	360
Total Hours	720
Hourly rate reduced to $105	$75,600