

Statement of Work
Remote Implementation of Participatory System Dynamics (PSD) Modeling
Pilot Data in Preparation for a Multi-Facility Trial
VA Palo Alto Health Care System

Section 1: General Information

1.1 General: This is a non-personal services contract to provide remote implementation of Participatory System Dynamics (PSD) Modeling for the VA Palo Alto Health Care System (VAPAHCS). The Government shall not exercise any supervision or control over the contract service providers performing the services herein. Such contract service providers shall be accountable solely to the Contractor who, in turn is responsible to the Government.

1.2 Background: This project supplements a larger National Institute of Health (NIH) implementation research grant. The scope of work for the VA supplement funded by the National Center for Post-Traumatic Stress Disorder (NCPTSD) is to use participatory system dynamics modeling to improve mental health care. This is a quality improvement strategy that requires data from VA health record systems to be defined, extracted and synthesized for input into a system dynamics model.

1.3 Period of Performance: One year from time of award.

1.4 Place of Performance:

Palo Alto Medical Center 3801 Miranda Ave. Palo Alto, CA 94304	Livermore Medical Center 4951 Arroyo Rd. Livermore, CA 94550	Sonora CBOC 13663 Mono Way Sonora, CA 95370
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1.5 Hour of Operation: Normal working hours are between the hours of 8:00 am to 4:30 PM Monday through Friday, except Federal Holidays.

1.6 Type of Contract: The government will award a Firm Fixed Price contract.

1.7 Invoicing: All invoices from the contractor shall be submitted electronically in accordance with VAAR Clause 852.232-72 Electronic Submission of Payment Requests.

VA's Electronic Invoice Presentment and Payment System – The FSC uses a third-party contractor, Tungsten, to transition vendors from paper to electronic invoice submission. Please go to this website: <http://www.tungsten-network.com/US/en/veterans-affairs/> to begin submitting electronic invoices, free of charge.

More information on the VA Financial Services Center is available at <http://www.fsc.va.gov/einvoice.asp>.

Vendor e-Invoice Set-Up Information:

Please contact Tungsten at the phone number or email address listed below to begin submitting your electronic invoices to the VA Financial Services Center for payment processing, free of charge. If you have question about the e-invoicing program or Tungsten, please contact the FSC at the phone number or email address listed below:

- Tungsten e-Invoice Setup Information: 1-877-489-6135
- Tungsten e-Invoice email: VA.Registration@Tungsten-Network.com
- FSC e-Invoice Contact Information: 1-877-353-9791
- FSC e-invoice email: vafscshd@va.gov

Section 2: Definitions & Acronyms

2.1 Definitions:

Contractor. A supplier or vendor awarded a contract to provide specific supplies or service to the government. The term used in this contract refers to the prime.

Subcontractor. One that enters into a contract with a prime contractor. The Government does not have privity of contract with the subcontractor.

Work Day. The number of hours per day the Contractor provides services in accordance with the contract.

Work Week. Monday through Friday, unless specified otherwise.

2.2 Acronyms:

BI	Business Intelligence
CBOC	Community Based Outpatient Clinic
CDW	Corporate Data Warehouse
CO	Contracting Officer
COR	Contracting Officer's Representative
HIPAA	Healthcare Insurance Portability and Accountability Act
IT	Information Technology
NCPTSD	National Center for Post-Traumatic Stress Disorder
NIH	National Institute of Health
OMHO	Office of Mental Health Operations
OPHSR	Office of Public Health Surveillance and Research
PERC	Program Evaluation Resource Center
PSD	Participatory System Dynamics
VA	Veterans Affairs
VAPAHCS	Veterans Affairs Palo Alto Health Care System
VSSC	Veterans Health Administration Support Service Center

Section 3: Government Furnished Property, Equipment, and Services

None

Section 4: Contractor Furnished Items and Services

The Contractor shall provide all equipment, supplies, management, supervision, personnel, and transportation except as specified herein as government-furnished, necessary to assure that all services are in accordance with the contract and all applicable laws and regulations. The contractor shall ensure all work meets performance standards specified in this Statement of Work and referenced documents.

Section 5: Specific Tasks

5.1 General

- A. The project builds from code for this purpose developed by an Independent Contractor under a previous contract. This contract will fund expansion to additional outpatient clinics in VAPAHCS including coding to work with data from the Sonora and Livermore locations.
- B. The contractor will provide new and adapted code and programming necessary to retrieve data from the VA Corporate Data Warehouse (CDW) in order to implement and evaluate the VA-funded quality improvement research project that will be conducted remotely (i.e., via V-Tel) at the Sonora and Livermore clinics.
- C. The contractor shall produce code and programming for the extraction of data from the Corporate Data Warehouse for using in system dynamics models that can evaluate plans for quality improvement in VAPAHCS outpatient mental health system.
- D. This will include development of new code, code adapted from prior work with VAPAHCS, code adapted from national programming conducted by the Program Evaluation Resource Center (PERC), of the Office of Mental Health Operations (OMHO), and code adapted from national programming conducted by the Veterans Health Administration Support Service Center (VSSC) Business Intelligence (BI).
- E. Efforts to develop and/or adapt code for this project will require consistent and timely communication with and coordination with other project support staff.
- F. The contractor will function as a primary code developer or programmer as part of a large multidisciplinary project team. The contractor will collaborate and communicate in a timely way with other project programmers and other project support staff. The contractor will be responsive to input from project staff and stakeholders in VAPAHCS outpatient mental health, or national program offices (e.g., OMHO PERC) regarding the development of coding definitions and routines for data management.

5.2 The following will be performed for the Sonora and Livermore locations.

- A. The contractor shall work with the Contracting Officer's Representative (COR) and their project team to develop and/or amend code for data extraction and synthesis from the VA CDW in system dynamics models for the Sonora clinic.
- B. Code will be produced that creates a SQL database from the CDW for the system dynamic model of the Sonora clinic. This model will have appropriate definitions for provider services and patient variables. Data will be extracted for a one-year retrospective interval and a one-year prospective interval. Variables include:
 - 1) Identifying patient provider encounters for services delivered in mental health over a given quarter
 - 2) Identifying provider workload variables that explain how providers spend their time delivering mental health services,
 - 3) Variables regarding the rate of "no show" or missed mental health appointments
 - 4) Variables for pharmacy prescriptions filled
 - 5) Variables indicating whether evidence-based psychotherapies were delivered (based on use of EBP template/health factor data in the CDW)
- C. Code will aggregate the data within the clinic to specific multidisciplinary teams or programs, e.g., telehealth delivery, behavioral health integration plan delivery. Code will be debugged and available for use by other team members. Code will be discussed at weekly meetings with project support staff and the COR.

5.3 The work for the Sonora clinic is due within 6 months after contract award. The work for the Livermore Medical Center is due within 9 months after contract award.

5.4 **Contractor Qualifications.** The contractor must include information in their quote demonstrating that they have the following qualifications:

- A. Masters or Doctoral level Computer Science Degree
- B. Experience coding in the Structured Query Language (SQL)
- C. Familiarity with the VA Corporate Data Warehouse (CDW)
- D. Expertise regarding how data is entered and defined by both frontline providers and VA national program offices.
- E. Statistical or other relevant training and education in the effective use of programming routines, database management and computer code.

- F. Experience with data management, programming and coding skills is an essential requirement.

5.5 Reporting Requirements.

- A. The Contractor shall provide to the COR and the Office of Public Health Surveillance and Research (OPHSR) Project Manager with monthly Progress Reports in electronic form in Microsoft Word and maintain a schedule in MS Project format.
- B. The Monthly Progress Reports shall describe all work completed during the reporting period and work planned for the subsequent reporting period. The report shall also identify any problems that arose and a description of how the problems were resolved. If problems have not been completely resolved, the Contractor shall provide an explanation including their plan and timeframe for resolving the issue.
- C. The Contractor shall monitor performance against the PMP and report any deviations.
- D. The Contractor shall communicate with VA accordingly so that issues that arise are transparent to both parties to prevent escalation of outstanding issues.
- E. The Contractor shall provide weekly updates at the data/model core working group meeting to the COR and the project team.

5.6 Required Training

- A. All contractor employees and subcontractor employees requiring access to VA information and VA information systems shall complete the following before being granted access to VA information and its systems:
 - 1) Sign and acknowledge (either manually or electronically) understanding of and responsibilities for compliance with the Contractor Rules of Behavior, Appendix E relating to access to VA information and information systems;
 - 2) Successfully complete the VA Cyber Security Awareness and Rules of Behavior training and annually complete required security training;
 - 3) Successfully complete the appropriate VA privacy training and annually complete required privacy training; and
 - 4) Successfully complete any additional cyber security or privacy training, as required for VA personnel with equivalent information system access.
- B. The contractor shall provide the COR a copy of the training certificates and certification of signing the Contractor Rules of Behavior for each applicable employee within 1 week of the initiation of the contract and annually thereafter, as required.
- C. Failure to complete the mandatory annual training and sign the Rules of Behavior annually, within the timeframe required, is grounds for suspension or termination of all physical or

electronic access privileges and removal from work on the contract until such time as the training and documents are complete.

Section 6: Attachments

Attachment #1 Business Associate Agreement

Attachment #2 Contractor Personnel Security Requirements

Attachment #3 VA Handbook 6500.6 "Contract Security"