Request for Proposals for

CBH Cloud Data Platform Project

issued by

Community Behavioral Health

Date of Issue: September 14, 2021

Proposals must be received no later than 2:00 p.m., Philadelphia, PA, local time, on September 29, 2021

All questions related to this RFP should be submitted via email to Hans Leach at hans.leach@phila.gov

EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER: WOMEN, MINORITY INDIVIDUALS, AND PEOPLE WITH DISABILITIES ARE ENCOURAGED TO RESPOND
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1. Introduction and Guide to this RFP

Overview of RFP Requirements

Community Behavioral Health (CBH), a Behavioral Health Managed Care Organization (BH-MCO) for the Pennsylvania HealthChoices Program, is seeking a vendor to complete the design, build, test, validation, and implementation of an ideal data ecosystem in the new CBH Cloud environment that will enable CBH to meet current and future data needs to support reporting, CBH Data Warehouse, data analytics, BI dashboards, integrations with external partners and internal systems, including the CBH Provider Portal, as well as other planned and future data initiatives.

CBH is a 501(c)(3) organization under contract to the City of Philadelphia, through the Department of Behavioral Health and Intellectual disAbility Services (DBHIDS), to administer the behavioral health Medicaid program for Philadelphia. CBH contracts with providers to deliver behavioral health treatment to members and interfaces with external partners (State and other third-party vendors - Claims, Eligibility, Clinical System, other).

CBH has traditionally been an ‘on-premises’ IT organization for its data, operational processing, and systems/applications. This is now changing. CBH has embarked on creation of a new cloud environment and is in the final stages of building this foundational architecture with best practices and tools.

CBH recognizes that to meet the data and technology demands for the ever-evolving business, clinical, compliance, State, third party partners, and provider needs, moving to a cloud-based architecture with a robust Cloud Data Platform is essential to become a more responsive and nimble organization and to empower CBH employees with the tools needed to access and use data independent of IT resources.

This document serves to describe the project for which we are requesting bids. Applicants responding to this RFP should be leaders in the field of Cloud Technology with expertise in the design, build, validation, and implementation of complex cloud data platforms/ecosystems and analytics and reporting solutions. See Section 3.4 for a complete list of requisite experience.

Guide to this RFP

This document conveys our vision for the creating this Cloud Data Platform. We have included a background section about our organization and information about core requirements. To support applicants in developing a response to this RFP, questions can be submitted to Hans Leach (hans.leach@phila.gov). You will be required to complete a Non-Disclosure Agreement (NDA) prior to receiving access to any detailed CBH information.

Please read all sections so that your response is comprehensive.
2. Project Baseline Assumptions and Scope

2.1. CBH Cloud Foundational Architecture and Tools

As mentioned in the Introduction above, CBH has embarked on creation of a new cloud architecture platform and is in the final stages of building this foundational architecture with best practices and the following components:

- Microsoft Azure Cloud Computing Platform
- Snowflake Cloud Data Platform
- Matillion ETL
- `dbt` (data build tool) ETL
- Oracle Golden Gate Change Data Capture (CDC) for Informix and Snowflake
- Fivetran CDC solution for SQL databases

2.2. CBH Development and Implementation Methodology

CBH is building our new cloud data platform in parallel with our existing production business Intelligence dashboards and reporting, CBH Data Warehouse, and data analytics. This will enable CBH to build, test, validate, operationalize, and transition without negative impact to existing CBH operational, reporting, and analytic processes.

2.3. Baseline Foundation Components Expected To be In Place:

The starting point for the applicant who is awarded this contract should be a solid foundational architecture with the following already in place:

- Best Practice Azure Blob Storage Management recommendations implemented and operationalized with proper security configurations at all levels of containers and folders.

- Best Practice Security/Access/Permissions schemes in place at the correct access levels in place Snowflake and Matillion for DEV/QA/Prod environments.

- Operationalized processes for getting key sources into Azure Blob storage and loaded into Snowflake Data Lake as follows:
  - Critical Operational data files from External Sources (State/Vendor Eligibility Files as an example) within defined framework of CBH Enterprise SFTP system.
  - CDC replication for the CBH Informix Legacy database with Oracle Golden Gate (Big Data).
  - CDC replication for the CBH third-party clinical system (SQL database) using Fivetran with the ability to expand to include SQL databases as they are identified.

- Code control/GIT repo set-up with established code version control procedures in place and documented.
2.4. RFP Engagement Scope will include:

- Working directly with CBH Data and System Subject Matter Experts (SMEs), Data Warehouse and Informatics/Analytics staff, and other identified SMEs to gain a comprehensive understanding of the CBH systems and data environment sufficient to drive the design, build, test, validate, and implementation of a Snowflake cloud data platform representing an ideal data model that will support CBH data uses including, but not limited to:

  - CBH Data Warehouse and related databases and data marts
  - Data Analytics comprising descriptive, diagnostic, prescriptive and prospective analytic modeling
  - Decentralized Business Intelligence (BI) Dashboards and Reporting (current state is Power BI; future state is likely Tableau)
  - CBH Provider Portal
  - PA State Health Information Exchange (HIE) with HSX
  - Population Health Software

- Work with CBH stakeholders to create and implement the necessary data classifications, access levels, sources of truth, privacy and security rules, and all other required aspects of a Data Ecosystem within the Data Governance Framework, including alignment with CBH Disaster Recovery and Business Continuity Strategies and Plans.

- Recommend and implement a framework, method, or approach for building Snowflake data bases/warehouses.

  Proposals must include details about the applicant’s recommended data warehouse methodology (straight Kimball Warehouse, Data Vault, etc.) and provide a comprehensive rationale for preferred methodology.

- Drive design sessions with CBH SMEs to arrive at an ideal cloud data platform model within the applicant’s recommended data warehouse methodology for CBH data domains as follows:

  - CBH Enterprise Data
    - State Eligibility / CBH Members & related
    - State Provider Data / CBH Provider Contracts & related
    - CBH Authorizations and Discharges and related
    - Provider Claims / Encounters & related
    - Other CBH Clinical Data
    - Reference Data
    - Data model to include data from CBH QuickBase Applications which primarily capture data from CBH providers
• External Data
  • Data model to include support for Provider Data from the CBH Provider Portal
  • Data model to include support for member-level data from HSX (Health Information Exchange/HIE initiative required by State of Pennsylvania)
  • Data model to include support for Population Health software

  o Documentation of data model to include model diagrams, and artifacts for source/target data mapping and ETL/ELT rules to represent the transformation of CBH raw operational and enterprise data (data lake) into the final ideal Snowflake cloud data platform.

  o Build, test, validate, and implement the Snowflake cloud data platform.

  o Work with CBH Data Warehouse team to re-engineer existing CBH data warehouse and related databases and data marts into Snowflake.

  o Implement executive dashboard/reporting processes with selected tools.

  o Re-engineer existing internal reports and dashboards (from SSRS and Power BI Dashboards to new cloud data platform sources and build Dashboards/Reports using selected tool(s) to enable an integrated and decentralized reporting model with appropriate security/permissions.

  o Facilitate the decommissioning of existing on-prem Data Warehouses, SSRS reporting, and Power BI as part of a coordinated rollout of the new Snowflake cloud data platform.

  o Provide coordinated training for the CBH IT department which should include hands-on training and engagement with the project in addition to structured training on tools and methods.

  o Warranty Period Support

2.5. HIPAA and Data Privacy

CBH and all of its contracted entities with whom we share CBH member protected health information (PHI) need to maintain the HIPAA and Data Privacy practices as found here.
3. Scope of Work

3.1. Project Management

We expect that the response will include details about the strategy the Applicant will use to set goals and produce regular reports on the progress of the project. We expect that the Applicant will designate one individual as a Project Manager and/or primary point of contact throughout the project and will work closely with an Internal CBH IT Project Manager to coordinate and manage all activities.

3.2. Target Timeline and Milestones

Applicants are expected to provide detailed estimates and timeframes for the below Milestones:

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Time Estimates and Time Frames</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Snowflake Cloud Data Platform within recommended data warehouse</td>
<td>Vendor supplied</td>
</tr>
<tr>
<td>methodology to support identified CBH data needs within an established</td>
<td></td>
</tr>
<tr>
<td>Framework, Method/Approach for building Snowflake warehouses to support</td>
<td></td>
</tr>
<tr>
<td>the identified CBH data needs</td>
<td></td>
</tr>
<tr>
<td>Build, test, validate, and implement cloud data platform</td>
<td>Vendor supplied</td>
</tr>
<tr>
<td>Re-engineer existing CBH Data Warehouse and related databases and data</td>
<td>Vendor supplied</td>
</tr>
<tr>
<td>marts into Snowflake</td>
<td></td>
</tr>
<tr>
<td>Implement Centralized Executive BI/Reporting (possibly Tableau)</td>
<td>Vendor supplied</td>
</tr>
<tr>
<td>from new cloud data platform sources</td>
<td></td>
</tr>
<tr>
<td>Implement Centralized Reporting and BI software (possibly Tableau);</td>
<td>Vendor supplied</td>
</tr>
<tr>
<td>re-engineer, test, validate, and implement existing SSRS/Power BI</td>
<td></td>
</tr>
<tr>
<td>Dashboards and Analytics processes to new cloud data platform sources</td>
<td></td>
</tr>
<tr>
<td>and BI/Reporting platform</td>
<td></td>
</tr>
<tr>
<td>Implement solutions for agreed-upon use cases to support Provider Portal,</td>
<td>Vendor supplied</td>
</tr>
<tr>
<td>HIE data (from HSX), and Population Health. These are yet to be clearly</td>
<td></td>
</tr>
<tr>
<td>defined and prioritized</td>
<td></td>
</tr>
<tr>
<td>Coordinate rollout of new reporting platform / tools to CBH and</td>
<td>Vendor supplied</td>
</tr>
<tr>
<td>facilitate the decommissioning of existing on-premises processes</td>
<td></td>
</tr>
<tr>
<td>Warranty Period Support</td>
<td>Vendor supplied</td>
</tr>
</tbody>
</table>

3.3. Testing and Quality Assurance

We expect that the response will include a comprehensive testing and Quality Assurance (QA) strategy and plan performed and executed by the applicant using applicant staff.

3.4. Understanding the Scope of Work and Requisite Experience

Responses will be evaluated on demonstrated comprehension of the “Scope of Work,” including the following (not in order of importance):
a) Demonstrated expertise in all aspects of Cloud technology with demonstrated expertise in Azure, Snowflake, and Matillion, and CDC technologies
b) Demonstrated expertise in recommended best practice methodology for implementing Snowflake data warehouses
c) Expertise in Data Solutions Architecture and Data Analytics Solutions
d) Realistic and detailed budgets with milestones
e) Willingness to agree to payments based on milestones
f) Significant familiarity with state and federal privacy and security standards
g) Experience working with Managed Care Organizations (MCOs) and/or other insurance payors
h) Experience using modern technology as best practice
i) Experience with secure Software Development Life Cycle (SDLC), including, but not limited to, coding standard for security and performance

Please see Section 4.2.2, “Project Understanding and Proposed Scope of Work,” and Section 4.3.2, “Scoring by Review Committee,” for additional information relating to this section.

4. Proposal Format, Content, and Submission Requirements; Selection Process

4.1. Required Proposal Format

4.1.1. Proposal Cover Sheet

The cover sheet (see Attachment A) should be completed with the Applicant’s information and included as the first page of the proposal.

4.1.2. Table of Contents

A table of contents should be included as the second page of the proposal, with each section of the proposal included and with a page number for the first page of each section.

4.1.3. Format Requirements

Proposals must be prepared simply and economically, providing a straightforward, concise description of the Applicant’s ability to meet the requirements of the RFP. Each proposal must provide all the information detailed in this RFP using the format described below. The narrative portion of the proposal must be presented in print size of 12, using Times New Roman font, single spaced on 8.5” by 11” sheets of paper with minimum margins of 1”. For each section where it is required, the Applicant must fully answer all the listed questions in the outline form in which they are presented in the RFP. Answers to each question must be numbered/lettered and correspond to the numbered/lettered questions in this RFP. Failure to number and letter the questions or to respond to all questions may result in the proposal being considered non-responsive. Each attachment, appendix, or addendum must reference the corresponding section or subsection number.
4.2. Proposal Content

The proposal should follow the format below. Information should be complete and demonstrate that the consultant can perform the required work in a professional manner.

4.2.1. Applicant Profile/Statement of Qualification/Relevant Experience

Provide company contact information, including how long you have been in business and the specific services you provide. Please provide a brief narrative description of the purpose, corporate status (profit or non-profit), and organizational structure of the company. Organizational charts may be used to support appropriate aspects of this narrative and may be included as an attachment to your proposal. Identify and briefly describe related work completed in the last three years. Describe only work related to the proposed effort and include any examples of similar work in governmental, non-profit, or human-services-related organizations. Include evidence of satisfactory and timely completion of similar work performed for past projects.

4.2.2. Project Understanding and Proposed Scope of Work

Prepare a brief introduction, including a general demonstration of understanding of the scope and complexity of the required work. Provide a description of how the proposed services will be provided, including how the work will be developed, shared, and mutually agreed upon with CBH. Please include a description of each item identified in the scope of work section (see Section 2.4. and Section 3, above) and describe creative solutions and alternative approaches where feasible.

4.2.3. Personnel

Identify key personnel who will be assigned to this project. Detail their experience in work related to the proposed assignment. Specify the Project Manager and/or individual who will serve as a contact person. Provide resumes and job descriptions for all individuals proposed to participate in the project. Provide copies of certifications of any individual whose job description requires a certification. In this section, also state the intention, if that is the case, to utilize subcontractors to perform any of the work for this project. For each subcontractor, provide the name and address of the subcontractor, a description of the work the subcontractor will provide, and whether the subcontractor is a minority-, woman- or disabled-owned business.

4.2.4. References
Please include at least three references, with contact information, from organizations that have used your organization’s services in the past three years and have been customers for a minimum of 12 months.

4.2.5. Project Plan and Timeline

Provide a description of the project plan and timeline for the portal solution being sought through this RFP. This project plan and timeline should include the post-implementation period.

4.2.6. Cost Proposal

Please provide a cost proposal based upon your best understanding of the scope of the project and the services to be delivered. This cost proposal should include the total estimated cost for this project, itemized by the expected project milestones outlined in your proposal or in another comprehensive manner. This cost proposal should also include the provision of a detailed list of charges for services, including post-implementation system maintenance. The list of services should include, but not be limited to:

   a. Hourly personnel rates for all staff assigned to this project, including post-implementation staff (e.g., database administrators).
   b. Fees for subcontractors
   c. Reimbursable rates for expenses such as printing, copies, etc.
   d. Other miscellaneous costs and fees
   e. Warranty and post warranty support

Final rates will be determined in negotiations with the qualified Applicant after the proposal submissions have been reviewed and contract negotiations have begun. Although CBH may begin contract negotiations based on the submitted proposal, CBH reserves the right to have discussions with those Applicant(s) falling within a competitive range and to request revised pricing offers from them and to make an award or conduct negotiations thereafter.

4.2.7. Operational Documentation and Requirements

Please make sure to include completed and signed (where applicable) attachments with your submission:

   • Attachment A: CBH Administrative RFP Response Cover Sheet
   • Attachment B: City of Philadelphia Tax and Regulatory Status and Clearance Statement
   • Attachment C: City of Philadelphia Disclosure Forms (forms attached separately as a PDF)
   • Attachment D: City of Philadelphia Disclosure of Litigation Form
   • Attachment E: Acknowledgement of CBH Administrative Procurement Terms/Conditions
   • Attachment F: Attestation that Applicant Meets Minimum Technical Requirements

Additionally, in this section, please include the following information, either within the section itself or by reference to an attachment to your proposal:
• Tax Identification Number
• Letter attesting that all required federal, state, and local taxes (including payroll taxes) for the past 12 months have been paid
• In the case of for-profit organizations, group, or individual practices, disclosure of any person or entity holding any shared ownership or controlling interest of 5% or more of the company
• MBE/WBE/DSBE Status (for-profit Applicants)
• Submission Process and Procurement Schedule

The anticipated procurement schedule is as follows:

<table>
<thead>
<tr>
<th>RFP Event</th>
<th>Deadline Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFP Issued</td>
<td>September 14, 2021</td>
</tr>
<tr>
<td>Deadline to Submit Questions</td>
<td>September 17, 2021</td>
</tr>
<tr>
<td>Answers to Questions on Website</td>
<td>September 20, 2021</td>
</tr>
<tr>
<td>Application Submission Deadline</td>
<td>September 29, 2021 @ 2:00 p.m.</td>
</tr>
<tr>
<td>Applicants Identified for Contract Negotiations</td>
<td>October 1, 2021</td>
</tr>
</tbody>
</table>

CBH reserves the right to modify the schedule as circumstances warrant.

*Please note that due to office closures surrounding the COVID-19 public health emergency, only electronic submissions will be accepted for this RFP as described below.*

This RFP is issued on September 14, 2021. In order to be considered for selection, all applications must be delivered to hans.leach@phila.gov no later than 2:00 p.m. on September 29, 2021. Submission requirements:

• Subject lines should say “CBH Cloud Data Platform Project.” Applications submitted by any means other than email will not be accepted.
• Applicants must submit an electronic version of the application prepared as a PDF document; this submission will be considered the original, including all documents outlined in section 4.2.7.
• Applications submitted after the deadline date and time will be returned unread.
• The individual Applicant or an official of the submitting agency, authorized to bind the agency to all provisions noted in the application, must sign the cover sheet of the application (see Attachment A).

### 4.3. Selection Process
An application review committee will review all responses to this RFP. Based on the criteria detailed below, the committee will make recommendations concerning the submissions that are best able to meet the goals of the RFP.

Submissions will be reviewed based upon the merits of the written response to the RFP as well as meeting all qualifications for technical competency through presentations and/or demonstrations to CBH.

Specific scoring criteria upon which the review will be based include the following.

4.3.1. Threshold Requirements

Threshold requirements provide a baseline for all proposals, which means they provide basic information that all Applicants must meet. Failure to meet all of these requirements may disqualify an Applicant from consideration through this RFP. Threshold requirements include timely submission of a complete application with all sections outlined in Section 2.4 “Engagement Scope Will Include” and Section 3 “Scope of Work,” and in Section 4, “Proposal Format, Content, and Submission Requirements; Selection Process” completed.

Threshold requirements include having the requisite experience and qualifications to implement the program and being a vendor in good standing with the City and CBH.

Applicants responding to this RFP must include an attestation (Attachment F) as outline in the Section 4.2.7 and will not be considered unless all qualifications are met.

Threshold requirements also include consideration of the Applicant’s financial status, including any potential delinquencies to the City and CBH. Proposals may be rejected if, in CBH’s judgment, the Applicant has failed to provide all information required by this RFP; has been delinquent or unfaithful in the performance of any contract with CBH or others; is delinquent, and has not made arrangements satisfactory to CBH with respect to the payment of City taxes or taxes collected by the City, or other indebtedness owed to the City or other taxing authorities; is not in compliance with regulatory codes applicable to Applicant; is financially or technically incapable; or is otherwise not a responsible Applicant.

As part of the Threshold Review, CBH will check each Applicant against all required Commonwealth and Federal exclusion lists to ensure that the Applicant or its principals are not excluded from receiving federal funds.

4.3.2. Scoring by Review Committee

Applicants that do not meet all the threshold requirements will have their proposals disqualified. Scoring will be based on both the written proposal and demonstrated technical competencies/demonstrations. For Applicants meeting the threshold requirements, the scoring criteria upon which the review will be based are as follows:
• Demonstrated understanding of the project as indicated by a description of each item in the scope of work section
• Appropriateness of proposed project approach, project plan, timeline and resource estimates, architectural design, and post-implementation strategy
• Demonstrated qualifications and relevant experience
• As stated in the cost proposal section, likelihood that the proposal will provide the best value compared to other submitted proposals

4.3.3. Questions Relating to the RFP

Written requests for access to the CBH Data Systems documents must be submitted to Hans Leach at hans.leach@phila.gov, and will be e-mailed to the applicant after the completion of a non-disclosure agreement (NDA). All questions concerning this RFP must also be submitted in writing via email to Hans Leach at hans.leach@phila.gov by September 17, 2021. CBH will respond to questions it considers appropriate to the RFP and of interest to all Applicants, but reserves the right, in its discretion, not to respond to any question. Responses will be posted on the CBH website by September 20, 2021. Responses posted on this website become part of the RFP upon posting. CBH reserves the right, in its discretion, to revise responses to questions after posting by posting a modified response. No oral response to any Applicant question by any CBH employee or agent shall be binding on CBH or in any way considered to be a commitment by CBH.

Contact regarding this RFP with CBH or related staff other than the individual named above is not permitted, and failure to comply with this restriction could result in disqualification.