REQUEST FOR INFORMATION (RFI)

This document contains a Request for Information (RFI) for an interface engine solution to manage data messages between multiple health information systems for the Department of Public Health. The information obtained from this RFI will be used by the City as a basis for further discussion and the potential development of an RFP. Vendors wishing to respond to this RFI should read this document carefully and follow the guidance for responding.

Health Interface Engine Solution

Posted: 7/24/2013
Response Due: 8/30/2013 @ 5:00 PM EST
PURPOSE OF THIS REQUEST FOR INFORMATION

The Philadelphia Department of Public Health (DPH) is issuing this request for information to evaluate packaged solutions available in the marketplace for an interface engine to support the data transactions/information exchange between multiple healthcare information systems. This RFI is not a solicitation for procurement. DPH is implementing an Electronic Health Records (EHR) solution and actively pursuing fulfillment of meaningful use requirements. As such, DPH has a high priority need for interfaces and integrated connections.

CONDITIONS GOVERNING THE RFI

SEQUENCE OF EVENTS

1. Release of RFI: This RFI is being issued on July 24th, 2013.
2. RFI Questions submitted by August 7th, 2013 and answered by August 14th, 2013. All requests for clarifications or questions are to be sent by electronic mail and directed to: Attn: Jeff Ditty, EHR Technical Project Manager; Email: jeff.ditty@phila.gov
3. Response Deadline: The deadline for receipt of responses is August 30th, 2013, no later than 5:00 PM Eastern Standard Time. Responses received after the due date and time will not be considered.
4. Submission of Response: All responses must be submitted electronically to Jeff Ditty at jeff.ditty@phila.gov. All responses must be labeled, "Response to Request for Information – PDPH Interface Engine"

RESPONSE FORMAT AND ORGANIZATION

- You may submit only one (1) response.
- Responses consisting solely of marketing materials will not be considered.
- Response should include one official copy of a response with attachments in an electronic mail message sent to jeff.ditty@phila.gov
- Response attachments can be in PDF (preferred) and/or and Microsoft Office 2007 or greater formats. Completeness and clarity are desirable in all areas.
- Response must include an Executive Summary, the name and title of a contact person authorized by the organization to speak on the submitter’s behalf, and the names, titles and telephone numbers of persons to be contacted for clarification.

RFI response should be organized with the following content:

- Executive Summary – In this section please highlight:
  o What uniquely qualifies you in this space
  o What you believe are the Critical Success Factors to Project Success.
- Response to Functional Requirements; Operational and Technical Specifications
- References and/or Other Supporting Materials/Documentation
- You may attach other materials that improve the quality of your responses; however, these should be included as items in a separate appendix.
1. REQUIREMENTS AND SPECIFICATIONS

1.1 BACKGROUND INFORMATION

DPH is seeking information on a robust Interface Engine in order to facilitate the exchange of health related data between DPH’s Philadelphia Health Center EHR, the Philadelphia Public Health Laboratory Information System, several external laboratory and radiology providers, an in-house as well as external pharmacy application, the Philadelphia Prison System’s (PPS) Jail Management application and other health related applications.

DPH is currently implementing an EHR solution for Ambulatory Health Services (which includes ambulatory health clinics), the Department of Disease Control (which operates clinics and provides for disease surveillance) and PPS. DPH has immediate integration needs as it relates to EHR as well as the long term data exchange with additional partners/providers in order to promote a highly sustainable integration model in a public health setting. DPH expects to contract with a single vendor for application software that may include hosted Software as a Service (SaaS) or local installation environments. The determination whether DPH will host the system in its local environment vs. contracting for a hosted service has not yet been made. DPH welcomes partnerships among vendors.

Through the health clinics, DPH provides care to approximately 90,000 patients and performs 350,000 patient visits per year. The patients may be covered by private health insurers, Medicare, Medicaid, or have no insurance. All patients are served regardless of coverage. Additionally, DPH issues approximately 500,000 prescriptions on an annual basis. The Public Health Laboratory services about 100,000 lab requests on an annual basis. DPH also administers approximately 10,000 radiology tests, either in the clinics or at other sites.

2. Questions and Requirements

High Level Requirements

Please describe or provide a reference to the accompanying technical documentation describing how the proposed solution meets each of the following requirements. PLEASE CROSS-REFERENCE THE ITEMS BELOW TO YOUR RESPONSE.

2.1 Centralized Management

All interface connections should be centrally managed and monitored and the data should be traceable between all end points systems. This will ensure visibility and control on the data that is being transmitted between systems. Further, a centrally managed model will enable monitoring the health of the interface connections at any point in time.

2.2 Alerting

Any break-down in communication between integration points within clear user defined thresholds should trigger a variety of alerts to the appropriate support level personnel. Since clinical decisions are being made at the end point systems it is imperative that the information
present in them is current and complete. To ensure this, a proactive support model with short response needs to be put in place so that any data interruptions are reported immediately.

2.3 Scalability
The integration environments should be highly scalable and should be able to meet the current and future data exchange demands of a public health setting. With the implementation of the EMR, the patient data exchange needs between systems have increased exponentially. It is expected that the data transmission demands from future Healthcare Information Exchanges and other reporting agencies will need to be fulfilled. These requirements would be met only by a highly scalable integration environment.

2.4 Data Security
The data-exchange between systems should be conducted in a secure and encrypted manner while maintaining patient privacy at all end point systems and strictly in compliance with current and future policies and procedures defined by HIPPA/HITECH, HIMSS, and CJIS.

2.5 Separation of Environments
The Interface Monitoring Console should be accessible independent of the Interface Design environment. This will enable interface monitoring and support to be accomplished by multiple teams across sites/organizations without interrupting any interface development activity.

2.6 High Availability
In case of failure of hardware or software on the primary interface server, a backup server should take-over and interface connectivity should be restored with minimum downtime or disruption in order to pursue data transmission. The Integration environment should be “highly available”.

2.7 Short Cycle Times
The integration environment should provide the capability to quickly build, test and deploy new interfaces while being able to perform complex data transformations on the data sent from the source system. This capability would have a direct impact on keeping the integration team lean and should prove very cost-effective in the long run.

2.8 HIE Data Standards
The integration solution should be able to exchange data across entities in a Health Information Exchange using the standards as defined by DPH.

2.9 Stress Reporting
(2.9.a) The integration solution should be able to conduct a load assessment in order to evaluate the overall stress on the system (network, servers) due to interfaces.
(2.9.b) Parameters that exceed stress thresholds should result in alerts.

3. FUNCTIONAL REQUIREMENTS
Please describe or provide a reference to the accompanying technical documentation describing how the proposed solution meets each of the following requirements. PLEASE CROSS-REFERENCE THE ITEMS BELOW TO YOUR RESPONSE.
Rating Scale of your solution to the requirement
0 = Not a fit; Not applicable
1 = Could fit (requires customization; 3rd party product; future release)
2 = Can Fit (may not meet the requirement fully without customization or 3rd party product)
3 = Good fit (configuration only or additional module; no customization or 3rd party)
4 = Excellent fit; Core product, out of the box

For any rating of 3 or higher, please provide supplemental information with your response in a separate document referring to the section number and topic.

<table>
<thead>
<tr>
<th>Basic Strategic Requirements</th>
<th>Rating</th>
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<tbody>
<tr>
<td>Traceable, Highly Available - Ease of troubleshooting and pinpointing issues</td>
<td></td>
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<tr>
<td>Secure, Accurate and Timely delivery of patient data between disparate systems</td>
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<tr>
<td>Centralized Management and integration with Monitoring for connection health</td>
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<tr>
<td>Scalable and Flexible - Number of partners/connections/feeds</td>
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<tr>
<td>Performance - Acceptable transaction cycle times and file/batch sizes</td>
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<tr>
<td>Product and Community Support and reputation</td>
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<td>Framework to move from Dev to Test and production (contingency/backout)</td>
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<tr>
<td>Import Receiving and Export Sending of Endpoints with Queuing and logging</td>
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<tr>
<td>Training and Documentation Support Resources</td>
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<tr>
<th>Data and Specific Integration Requirements</th>
<th>Rating</th>
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<tbody>
<tr>
<td>HL7 Supporting Standards: HL7 2.x, HL7 3.x, XML; DDE; CCD/CDA; XDS IHE; XDM; X12; DICOM</td>
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<tr>
<td>Data Security - meets HIPAA/HITECH, CJIS, PHI/PII transaction/storage</td>
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<tr>
<td>Data (file) Storage and Management (back-up)</td>
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<tr>
<td>Can be in Virtual Environment</td>
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<tr>
<td>Archiving of data files and transactions</td>
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<tr>
<td>Standard Protocols: TCP/IP; HTTPS; sFTP/FTP; SNA; MSMQ</td>
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<tr>
<td>System Configuration Management (manipulate data, build processing logic)</td>
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<td>Conformance Checking</td>
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<tr>
<td>Interact with Databases - wizards, tools, dashboards</td>
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<th>Other Features/Functions</th>
<th>Rating</th>
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<tr>
<td>Alerting and notifications (down, new, changes, issues, failed transactions)</td>
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<tr>
<td>Integration with HIE/HIO platforms (eMPI; matching algorithms)</td>
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<td>Testing - automated testing tools; documented scripts</td>
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<td>Debugging and triage tools and reports for development</td>
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<td>Stress and load testing capabilities</td>
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<td>Separation of development vs. monitoring Environments</td>
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<td>Certification (received, given)</td>
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<tr>
<th>Monitoring, Reporting, Auditing, Documentation</th>
<th>Rating</th>
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4. OPERATIONAL AND TECHNICAL SPECIFICATIONS

4.1 System Architecture
Describe the preferred system architecture (including Service Oriented Architecture features) and alternatives supported (e.g.: physical/virtual; database; platforms; operating systems with version numbers; supporting client applications).

4.2 Partners and 3rd Party Certifications
Please list the names of any technology companies that your organization is partnered with, the nature of your relationship, and the value that each brings to your proposed solution and ultimately to DPH. List any third party certifications that have been done on the system.

4.3 Disaster Recovery / Business Continuity
Describe disaster recovery/business continuity procedures within a hosted installation environment. This may also include detailed explanation of high-availability.

4.4 Archive and Restore
Describe data archiving and restoring from archive within all applications of the software. What are the capabilities in restoring from archive? What tools/media are used for archiving data?

4.5 Data Verification
Please describe how your system performs data verification, specifically focusing on out of range data values and functionality to verify data, which is not required by CCHIT for certification.

4.6 Message Conformance Validation
Describe the capabilities of the tools in place to perform HL7 Message conformance validation.

4.7 Prioritize Interface Connections
Describe the interface engine’s ability to prioritize interface connections after recovering from a
downtime situation. Its ability to clear the message queue for ADTs prior to other interfaces

5. Security

5.1 Authentication; Accessibility; Traceability; Audit-ability (A3T)
Describe security features, including the use of encryption at either the data element level or the
database level, to prevent unauthorized access to the data. Specifically, describe:

5.2 Authentication:
Data needs to be authenticated to ensure its validity and quality. This means ensuring the
particular data is linked to the right participant, for the proper test, and linked to the proper
provider and account management. Authentication is the function or procedure which uniquely
identifies every user or client thereby achieving individual responsibility for computer, network,
or telecommunications system equipment and for the information and applications stored on any
system to which the USER has access.

Please describe your systems Authentication for transactions/communications, and storage.

5.3 Accessibility
Our systems need to ensure only the persons who have proper access see the proper data, reports,
and detail. This includes proper system user profiles are tied to groups, group permissions,
respective application/system functionality, and data views. More importantly, ensuring what
users do not have access to, is adhered to and enforced. Accessibility is the function or
procedure which uniquely identifies every USER thereby achieving personal responsibility for
computer, network, or telecommunications system equipment at his/her disposal, and for
information and programs stored on any system to which the user has access.

Please describe your systems Accessibility controls.

5.4 Traceability
Auditing authenticated access allows for traceability of a user to data throughout systems.
Traceability is the function or procedure that generates evidence or an indication of the former
presence or existence of something in order to be located or discovered by searching or
researching evidence, or finding a configuration change, or troubleshooting a problem.

Please describe your systems Traceability features.

5.5 Auditability
Access to data, reports, and functionality should be audited to see and ensure authentication
thereof was accessed by the appropriate users; and that unauthorized access was restricted and
attempts or requests thereof were recorded. Auditability is the function or procedure that
generates logs or reports through which access to, and transactions on, a given computer or
system may be traced, and by which accountability can be monitored.
Please describe your systems audit and reporting controls.

5.6 Other Security Related areas

Role Management
Define and describe your systems roles and management including groups and individual roles within the system.

Remote Access/Administration
Describe the technology used for secure remote access to the system for remote administration

6. KEY CLIENTS AND REFERENCES

1. Please provide a list of your largest clients and respective estimated volumes (active cases and transactions).
2. Please supply three or more references for clients who are using the system. The references must be specific to clinical practices, Public Health and/or Correctional Facility installations. Each reference does not have to include all types of installations. They can be exclusive of one another. Each reference must include the name of the contact person, address, email address, and telephone number.
3. If you have case studies that you would like to showcase, please submit them as separate documents to your submission.