Family Health Centers, Inc.

Request for Proposal (RFP)

for

Digital Radiology Picture Archiving and Communications System (PACS)

Date Issued: 12/02/2015

Date Due: 12/16/2015
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I. Introduction

Family Health Centers, Inc. (FHC) is an independent, not-for-profit (501C3), Federally Qualified Community Health Center located in Louisville, Kentucky. FHC has been in business for over 35 years and operates seven clinical sites in the Louisville/Jefferson County metropolitan area. FHC currently employs in excess of 375 full and part time employees and operates on a 32 million dollar annual budget that includes federal, local, and state public funding sources.

FHC is committed to ensuring that goods and services are purchased in an effective and efficient manner that provides, to the maximum extent practicable, open and free competition, and in compliance with the provisions of applicable federal, state and local statutes and executive orders. FHC has established and maintains appropriate procedures addressing the procurement of goods and services to accomplish this objective.

In accordance with standards set by the federal government, grant recipients and vendors receiving grant funds must comply with these applicable federal standards and regulations:

- Equal Employment Opportunity, as amended (E.O. 11246)
- Davis Bacon Act, as amended (40 U.S.C. 276a to a-7)
- Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333)
- Rights to Inventions Made Under a Contract or Agreement (37 CFR Part 401)
- Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.)
- Debarment and Suspension (E. O. 12549 and 12689)

FHC is currently soliciting “Requests for Proposal (RFP) for a Digital Radiology Picture Archiving and Communications System (PACS)”. This project parameters include replacing or upgrading FHC’s current AGFA PACS system with a new system, utilizing a more current industry standard platform. The new system must be capable of replicating all current FHC radiology department workflows and be expandable to meet future needs.

To support this project FHC will purchase the PACS System and related digital imaging and archival software, installation, and professional services necessary to implement a fully functional integrated system. FHC is soliciting bids from factory authorized dealers of these products who have a well-established support program in the Louisville/Jefferson County market and are able to meet the minimum requirements defined in this document.

Vendors responding to this RFP will be responsible for the timely acquisition and delivery of all related software, professional services, installation services and training detailed in this document. In addition, respondents must have the necessary expertise and staff required to provide a turnkey implementation of this project.
Vendors are also required to submit firm timetables for delivery, implementation, and training denoted in the RFP response in the form of a “Project Scope and Design Document” detailed in (section II-A). In addition, a line item list detailing all software, professional services, installation, training, and travel expenses must be provided with the RFP response. This list should also detail any related shipping and/or delivery charges.

The selected vendor will be responsible for providing the following:

- Project related software and accessories. Feature requirements and system capabilities as defined in (section IV).
- Installation, configuration, and post installation certification of equipment as defined in (section V).
- Warranty support as defined in (section V).
- Extended warranty and maintenance support of purchased equipment and software as defined in (section V).
- Technical training as defined in (section V).
- Timely delivery and implementation of the specified equipment as defined in (section V & VI).
- Upgrades to the systems as necessary.
II. RFP Instructions

A. Completing the RFP

Provide a complete description of the equipment and services included in your bid response as well as a project scope and estimated timeline. A separate equipment list of vendor supplied hardware and software is required. Any non-vendor supplied equipment and/or services required to complete the project are to be specifically noted. All proposed software, hardware, and professional services must be listed in the bid. The bid response must also include a complete “Project Scope and Design Document” explaining the proposed implementation and specific details and timelines of the project.

No verbal agreements will be considered during the bid process. The quality of the response to the RFP will be viewed as an example of the vendor’s capabilities.

Only current production software and hardware will be considered. Software or hardware under development, in planning, or at beta test will not be considered. Discontinued or outdated software and hardware, demos, refurbished, and/or used equipment will only be considered if it is clearly denoted in the RFP response and has been mutually agreed upon by FHC and the vendor; otherwise this equipment will not be considered for the bid process and use of such will result in disqualification of the submitted bid. If the software revision or model is replaced or updated between the bid process and equipment delivery, an equivalent updated or upgraded model can be submitted for approval with supporting manufacturer data. Vendors can also include additional information about future developments or plans under separate attachment if applicable.

FHC expects this to be a “TURN KEY” project, meaning that all items and services required to complete the project are to be included in the bid, or specifically noted if not. FHC’s expectation is that upon project completion, all hardware, software, and professional services required to implement the Family Health Centers Digital Radiology Picture Archiving and Communications System will have been provided. FHC also expects that this equipment will meet or exceed the bid specifications. It is the prospective vendors’ responsibility to ensure that all equipment, labor, and necessary engineering time are included in the submitted bid to cover the stated project scope. If you require any clarification, provide the questions via email or fax to Larry Owen (section II-H).

Quoted prices and discounts are to be guaranteed for at least 90 days from the bid close date.
B. Format, Due Date

**BIDS:** Hardcopy bids for the Family Health Centers, “**Digital Radiology Picture Archiving and Communications System Project**” will be received in the office of Family Health Center-Portland, Room 419 at 2215 Portland Avenue until 2:00 P.M., E.D.T., Wednesday December 16th 2015. Electronic bids may also be submitted via email to lowen@fhclouisville.org. No late bids will be accepted and the bid opening is public.

All submitted bids will be considered the property of FHC. All proposals should include copies of product descriptions for the proposed equipment.

Name one person to be the coordinator for your RFP response, this individual will be the point of contact for any necessary clarification.

- **Contact Name:**
- **Company:**
- **Title:**
- **Address:**
- **Phone:**
- **Fax:**
- **Email:**

C. Contract

The bid should include a contract for all proposed equipment and services. If the vendor does not wish to submit an actual contract with the bid, due to alternatives proposed and pending choices from those alternatives, a sample contract should be submitted with the bid.

D. Confidentiality

Information submitted will be used by FHC for the sole purpose of evaluating vendor responses. However, since FHC's receives public funds the bids are subject to open records requests. Because of these provisions, contents of the bid can be viewed by government entities or other bidders upon the opening date and all bids will be tabulated during the public bid opening.
E. Selection Process

Several factors will influence FHC’s decision in selecting the vendor and the product line they represent. In addition to cost considerations, proposals will be evaluated on the basis of the following factors:

1. Functionality of proposed solution and ability to meet the project’s specific needs
2. Availability of optional components and capabilities
3. System growth and expansion
4. Product quality, reliability, and warranty plan
5. Ease of configuration and administration
6. A credible commitment by the vendor/manufacturer to the product and the ongoing enhancement of future capabilities and service
7. Vendor qualifications including:
   a. Overall experience and reputation in the industry
   b. Experience with the proposed solution
   c. Service and support resources, including overall skill level of technical personnel
   d. Verifiable quality of services provided by vendor to area customers

In addition, vendors submitting a bid must be recognized as a current Authorized Dealer of the equipment and/or software quoted, and has proven regional service and support systems in place prior to submitting the bid.

F. Disclaimer

Please note that FHC will select the vendor based upon the best overall solution and value and is not obligated to select the lowest priced bidder; this RFP does not commit FHC to any specific course of action. In addition, FHC reserves the right to purchase either selected components, or to not select any vendor or purchase any goods and services resulting from this RFP.

G. Conflict of Interest

No public official, Family Health Centers board member, or Family Health Centers employee, shall participate in any decision related to the award of this contract, which affects their personal interests or has any pecuniary interest, directly or indirectly, in this contract or the proceeds thereof.
H. RFP Related Questions

Submit any RFP related questions to:

Larry Owen - Director of Information Systems
Family Health Centers
2215 Portland Avenue
Louisville, Kentucky  40212

Phone: 502-772-8114
Fax: 502-772-3489
Email: Lowen@fhclouisville.org
III. Vendor Background

A. Company Information

Provide a brief description of the company including:

1. Identify the company name, physical address, city, state, zip code, telephone, fax number, and website.

2. Provide a brief company history.

3. Provide a brief profile of your company and business division:
   a. Current size of company
   b. Company location(s)
   c. Length of time in business

4. Length of time providing the software solutions and services requested in the RFP:
   a. When was the first PACS System installed by your company?
   b. When was the first PACS - Practice Management/EMR integration performed by your company? Explain.

5. Qualifications of the company to respond to the RFP, generally and including:
   a. Provide the number and type of PACS solutions you have implemented.
   b. How many employees are dedicated to the support and implementation of the proposed PACS System?
   c. How many employees are dedicated to the development of the proposed PACS System?

6. For the systems that you are proposing, please answer the following based on total number of sales in the three years:
   a. Percentage that are currently implementing.
   b. Percentage which have finished implementation.
   c. Percentage delayed or canceled implementation and reason for same.
   d. How many NEW customers acquired and installed the proposed PACS System within the last year?
7. Has your organization, its owners, managers, employees and/or contractors been excluded from participation in Medicare, Medicaid, State Child Health Insurance Program or other health care programs? Provide an explanation for the exclusion.

8. Legal Actions:
   a. Have any customers filed legal action claiming breach of contract or otherwise seeking remedies through such action? Provide brief description.
   b. Is your company involved now in any litigation with a customer or other entity? Provide a brief description.

9. Financial Stability:
   a. Provide an annual report if responding vendor is listed on the stock market; basic financial report if your organization does not produce an annual report.
   b. Please provide an up to date financial profile of your company including Dunn & Bradstreet information on separate corporate letterhead.

10. How are customer requests for enhancements and customizations handled?
    a. Are software updates and full version upgrades included in the maintenance agreement?
    b. What types of requests are included with the maintenance agreement?
    c. What types of requests are chargeable? (please describe any associated charges)
    d. Describe the recent history of system enhancements.
    e. Describe new features released within the past year.

11. Describe the company’s policy regarding the source code.

12. If your company relies on contractual agreements with outside service organizations to provide support for the PACS products defined in your RFP response, please explain the nature of the agreement and give name(s) and contact information for the service provider(s).

B. References

Provide a minimum of five (5) references of your customers that have purchased products and services similar to that being proposed in the RFP. Include contact names, telephone numbers, and physical addresses.
IV. System Requirements & Specifications

A. Background and General Project Requirements

As stated in (section I), FHC is in the process of replacing or upgrading its current Agfa PACS system with a new system utilizing a more current industry standard platform. To support this project FHC will purchase related PACS software, professional services, installation, and training necessary to implement a fully functional unified system. Please refer to tables IV-B through IV-D for detailed software specifications.

B. Current & Proposed Radiology Equipment Configuration and Workflows

1. Current Radiology Equipment Configuration

Currently FHC performs approximately 4000 radiology studies per year using its existing PACS system and radiology environment. Radiology and PACS related systems include:

- Universal APX 525 X-Ray generator and arm
- PACS system (AGFA Impax 6.4)
- PACS interface server (AGFA Impax 6.4)
- CR (KONICA NANO P Class REGIUS Model 110)
- PacsSCAN film digitizing software
- Film Digitizer (Vidar DiagnosticPro Advantage)
- Desktop document scanners (Fuji Fi-6110)
- PACS Workstations (Dell Optiplex, no diagnostic quality readers)

2. Overview - Current Radiology Workflow

Upon patient check-in at the front office, demographics are captured and/or updated on the Greenway Intergy practice management system (PM) and are pushed to the AGFA PACS utilizing an HL7 ADT interface. The updates are unidirectional and the master database is retained on the Intergy system.

During the patient medical visit a radiology order is created and retained in the EHR, a paper copy of the order is printed and given to the patient. The patient is responsible for bringing the order with them to the radiology visit.

When a patient presents to radiology, a modality worklist entry is generated by creating a patient appointment in the Intergy practice management scheduling system utilizing a specific radiology schedule and x-ray appointment types. Upon completing the appointment the Intergy PM system transmits worklist data to the AGFA PACS interface server via an HL7 interface. The worklist is then transmitted by the PACS interface server to the Konica-Minolta CR where the information is used to create a PACS study.
X-Ray images are produced using a Universal APX 525 X-Ray generator and are captured on a Konica-Minolta CR slide plate. New images are uploaded into the CR from the slide plates and are stored and transmitted to the AGFA PACS via a DICOM interface. The images are paired to an existing patient account and a new study is created in the PACS system.

PACS studies includes a copy of the printed radiology order, the order is scanned into the PACS system via a Fuji desktop scanner and PacsSCAN software interface. Once the order, images, and worklist order information are verified the order is marked as complete the PACS transmits the study to an outside radiologist via a VPN tunnel for reading.

Results of preliminary and completed radiology studies are received via secured email and printed to a printer located in the Radiology department. Results are scanned into the PACS study via the Fuji desktop scanner and PacsSCAN software interface. Results are also scanned into the Intergy EHR imaging system and a task is sent to the ordering providers for review and signoff. PACS study DICOM images are available for viewing by FHC providers either from an AGFA web based client or the Intergy EHR via built in DICOM viewer.

Prior film studies are scanned into the AGFA PACS system in a similar method to the CR process. An appointment is made in the Intergy PM system by a specific prior study appointment type which creates a specific modality worklist entry which is processed by a PacsSCAN workstation client. The workstation utilizes the modality worklist and a Vidar DiagnosticPro Advantage film digitizer to capture and catalog the prior film studies into DICOM images. Captured DICOM images are transmitted to the AGFA PACS interface server where they are transferred to the PACS archive and transmitted with new studies.

3. Proposed Radiology Equipment Configuration

Upon project completion FHC expects to integrate the newly acquired or upgraded PACS system with the current radiology equipment and workflows. Current equipment to be re-utilized:

- Universal APX 525 X-Ray generator and arm
- CR (KONICA NANO P Class REGIUS Model 110)
- PacsSCAN film digitizing software
- Film Digitizer (Vidar DiagnosticPro Advantage)
- Desktop document scanners (Fuji Fi-6110)
- PACS Workstations (Dell Optiplex, no diagnostic quality readers)

The new PACS system will be supported by Microsoft Server 2012R2 server(s) residing in an existing VMWare VSphere Enterprise Plus 5.5 virtual environment. The virtual environment currently contains consists of six Dell PowerEdge sever VM hosts and four Dell EqualLogic SANS. The current virtual environment is maintained by the FHC Information Systems (IS) department and has ample capacity and performance to support the proposed PACS processes.
FHC will be responsible for procuring all Microsoft Server and SQL licensing, as well as building the virtual server(s) to meet the potential vendor’s specifications. FHC also accepts responsibility to replace or upgrade the PACS workstations to meet vendor specifications.

4. Overview – Proposed Radiology Workflow

Upon project completion FHC expects to utilize the newly acquired PACS to serve as an updated direct replacement for the existing AGFA Impax 6.4 PACS system. FHC also expects to continue to utilize all current workflows defined in section (IV-B-2), and to continue to capture and store images from the existing Universal APX 525 X-Ray machine, Konica NANO P+ Digital CR, Vidar film scanner, and associated software and supporting systems.

The proposed PACS system will continue to provide a centralized method of archival, retrieval, and transmission of the digital images and must maintain the interfaces and communication systems defined in section (IV-B-2). In addition the new PACS system must have the capability to convert and maintain all prior studies from the legacy PACS system (approximately five years) while maintaining all historical patient account and PACS study data. The conversion must be included in the response as a dedicated line item.

In addition the new PACS system must have the capacity to expand and support future FHC radiology services. This capacity should be clearly denoted in the response as well as any related future licensing, modules, setup, and costs.
C. PACS System Minimum Specifications Chart

Minimum PACS design specifications include but are not limited to:

- Local Client Server Architecture
- Standard ODBC database design (Microsoft SQL, Oracle, etc.)
- VMware virtualization supported
- Capability to import existing PACS data, including DICOM images, demographics, and account information.
- Capability to replicate HL7 ADT, DICOM, and scheduling based modality worklist interfaces to FHC’s Greenway Intergy EHR/PM
- Supports current FHC PACS workflows
  - Transmission of DICOM images to an outside agency for reading
  - Import of scanned study results.
- Supports current FHC modality devices
  - Konica Minolta CR
  - Vidar Scanner

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<tr>
<th>PACS Server Software</th>
<th>General</th>
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<tr>
<td></td>
<td>PACS System capable of study volume of 7500+ studies per year</td>
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<td><strong>Supports</strong></td>
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<td>Disaster recovery archive Interface</td>
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<td>DICOM Modality Worklist Interface</td>
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<tr>
<td>DICOM Query/Retrieve</td>
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<td>DICOM Push</td>
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<td>DICOM Pull</td>
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<td>DICOM Print</td>
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<td>CD/DVD Creation</td>
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<td>Uni-Directional HL-7 Interface</td>
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<td>Paper Document Management Capability</td>
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<td>Multiple Modality Integration including CR/DR/Ultrasound</td>
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<td>Film Digitizer Integration</td>
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<td>EMR API Integration</td>
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<td>ODBC Compliant Secure Database</td>
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<td>JPEG 2000 Lossless Compression</td>
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<td>JPEG 2000 Lossy Compression</td>
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<td>Integrating the Healthcare Enterprise (IHE)</td>
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<td><strong>Integration</strong></td>
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<td>HL7 Brokerless Integration</td>
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<td>DICOM Modality Worklist</td>
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<td>Study Validation</td>
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<td>RIS, HIS, &amp; EMR Integration Supported</td>
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<td>Active Directory and/or LDAP integration</td>
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<td><strong>PACS System Features</strong></td>
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<tr>
<td>DICOM Storage SCP to allow images from CR, DR, CT, MR, US, NM and any other DICOM modality to be received and stored automatically</td>
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<td>Embedded DICOM file compressor - Allows images to be stored as DICOM uncompressed or lossless JPG to maximize storage space</td>
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<tr>
<td>Automatically Routing – Ability to automatically send images to another destination</td>
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<td>Scalability - Multiple images can be received from multiple modalities</td>
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<td>Viewing Software - Concurrent Connections</td>
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<tr>
<td>Full function (non-diagnostic) PACS Workstation license</td>
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D. PACS Minimum Specifications and Functional Requirements

- Microsoft Windows Server 2012R2 (or higher) compliant operating system
- Microsoft SQL 2012 (or higher) database or full ODBC compliant substitute
- Microsoft Active Directory and/or LDAP Integration
- Full function PACS Workstation license; including but not limited to Diagnostic Quality Viewer/Quality Control/Worklist and Routing Control: qty. 3
- Web or thin client licenses for clinician ordering/viewing of images: qty. 20
- Must be scalable based on number of exams
- Fully DICOM Compliant
- Fully HL7 Compliant
- Fully Integrated Worklist Server
- Fully Integrated Routing Server
- Provides “Modality Worklist”
- Provides Demographic and Worklist interfaces to existing “Greenway Intergy 9.30 Practice Management System”
- Provides full integration with Greenway Intergy 9.30 EHR, DICOM viewing, radiology orders, image and report viewing, etc…
- Provides Open API for disparate clinical application integration
- Provides Radiology Film Scanning interface to DICOM
- Provides Document Scanning to DICOM
- Provides automated backup of all data to DVD, NAS, or SAN
- Provides Image Import from CD/DVD, DICOM and Non-DICOM formats
- Provides Image Routing with simultaneous inputs and outputs
- Provides flexible Image Transmission to one or multiple destinations based upon customer defined workflow requirements
- Provides customer controlled DICOM Field remapping
- Provides capability to burn images to a CD or DVD for patient referrals
- Accepts plug and play storage upgrades
- Supports rules driven image forwarding
- Supports HIPAA compliant encryption
- Allows the user to split and merge studies, series by body part, or delete images
- Automatically sends notification or images via email
- Capability to allow temporary access to a study via email with secure pin and web link
- Support for Virtualization (VMware VSphere 5.5 or higher)
- Support for Wide Area Network
- Vendors to provide 24/7, 365 emergency support
- Vendors to guarantee a maximum response time of 4 hours for critical issues

Specifications listed above are suggested minimums only. Please provide a full list of specifications, and features in your response. If the minimum specifications are not met in the response, explain why and what alternate solution is being proposed.
E. Customer Supplied Hardware & Software Options

1. Existing Server Hardware

FHC has elected to provide the required server components independent of the PACS contract. The PACS servers will be installed in a VMWare VSphere virtual environment be supported by a substantial Dell Server and EqualLogic SANS infrastructure. The servers will be installed and configured by FHC IS personnel utilizing Microsoft licensing procured by FHC independently. The servers will be built to vendor supplied hardware and software configurations. If a compatibility issue exists or customer provided virtualization is not supported by the vendor, it must be specifically stated in the RFP response. An addendum detailing the required changes and/or costs must also be listed. FHC will work collaboratively with the selected vendor to ensure that minimum specifications for the components are met or exceeded.

2. Existing Workstation Hardware Support

FHC has elected to provide the required workstations independent of the PACS contract. The PACS workstations are already in operation in the radiology department and will be upgraded and/or replaced by FHC IS personnel as required. The workstations will meet vendor supplied hardware and software minimum specifications and configuration. If a compatibility issue exists or customer provided workstations are not supported by the vendor, it must be specifically stated in the RFP response. An addendum detailing the required changes and/or costs must also be listed. FHC will work collaboratively with the selected vendor to ensure that minimum specifications for the components are met or exceeded.

3. Microsoft Server and Database Software

FHC has elected to provide the Microsoft Server and Microsoft SQL database software required to implement the PACS system, independent of the contract. Since FHC participates in Microsoft’s charity pricing program and has the ability to purchase these items at a greatly reduced cost; allowing FHC to supply these components may directly affect a vendor’s ability to provide a competitive price.

The prospective vendor should list all necessary Microsoft server and/or database software requirements separately in the RFP and clearly denote which components are and are not included in the RFP response. If the vendor elects to provide the server and database components as part of the contract, or uses an alternate server or database architecture this must also be clearly denoted in the RFP response. FHC will work collaboratively with the selected vendor to ensure that all minimum specifications for software components are met or exceeded.
4. **Existing Virtual Environment Support**

FHC has an established VMware virtual environment; if applicable FHC desires to leverage the substantial infrastructure already in place. Any compatibility or support issues regarding FHC’s existing “VMware VSphere 5.5 Enterprise Plus” environment should be outlined in the proposal. If loading any or all of the proposed system on a VMware platform is a supported option these processes should be specifically identified in the RFP response.

5. **Existing SANS Environment Support**

FHC has an established SANS environment; when applicable FHC desires to leverage the substantial infrastructure already in place. Any compatibility or support issues regarding FHC’s existing SANS (Dell EqualLogic PS6100 iSCSI SANS) should be outlined in the proposal. If loading EqualLogic6100 iSCSI SANS platform is a supported option these processes should be specifically identified in the RFP response.

6. **Existing CR Support**

FHC has purchased from a previous contract, a Konica Minolta Nano P+ CR unit. This will be used to provide the radiology image capture and digital interface to the proposed PACS system. All applicable interfacing, worklist integration, or other professional services required to integrate this unit must be included in the RFP response.

7. **Existing Film Digitizer Support**

FHC has purchased from a previous contract, a Vidar DiagnosticPro Advantage Film Digitizer, General Radiography Acquisition Software, and DICOM Modality Worklist Module. This system will be used to scan existing film images into the proposed PACS system. All applicable interfacing, worklist integration, or other professional services required to integrate this unit must be included in the RFP response.
F. Interface Capabilities

FHC currently utilizes the Greenway Intergy EHR and Practice Management (PM) system to interface to the AGFA Impax PACS. The Intergy system is the master patient demographic database and is used to generate and send orders and modality worklists to the PACS. The proposed PACS defined in this RFP, must demonstrate the ability to integrate seamlessly with the Intergy system.

As detailed in section (IV-B-2) FHC has multiple interfaces established to the existing AGFA PACS system and these interfaces must be replicated to maintain workflow. Below are examples of existing interfaces, please note the in the RFP response if and how the proposed PACS system will replicate these processes.

1. Current Interfaces

   • HL7 ADT - When patient demographics are captured and/or updated on the Greenway Intergy practice management system (PM) they are pushed to the PACS utilizing an HL7 ADT interface. The updates are unidirectional and the master database is retained on the Intergy system. How will the proposed PACS replicate this process?

   • Scanned Orders - Radiology orders are created and retained in the EHR, a paper copy of the order is printed and given to the patient. PACS studies includes a copy of the printed radiology order, the order is scanned into the PACS system via a desktop scanner and a PacsSCAN software interface. How will the proposed PACS replicate this process?

   • Modality Worklists - Modality worklist entries are generated by creating a patient appointment in the practice management scheduling system utilizing a specific radiology schedule and x-ray appointment types. Upon completing the appointment the PM system transmits modality worklist data to the PACS interface server via an HL7 message. The worklist information is then transmitted to by the PACS interface server to the CR where the information is used to create a modality worklist and PACS study. How will the proposed PACS replicate this process?

   • CR Interface - X-Ray images are produced using a Universal APX 525 X-Ray generator and are captured on a Konica-Minolta CR slide plate. New images are uploaded into the CR from the slide plates and are stored and transmitted to the PACS via a DICOM interface. The images are paired to an existing patient account and a new study is created in the PACS system. How will the proposed PACS replicate this process?

   • DICOM Transmission - Once the order, images, and worklist order information are verified the order is marked as complete and the PACS system automatically transmits the study to an outside radiologist via a VPN tunnel for reading. How will the proposed PACS replicate this process?
• Faxed Results - Preliminary and completed studies are received via fax and are
scanned into the PACS study via a desktop scanner and PacsSCAN software
interface. How will the proposed PACS replicate this process?

• EMR DICOM Interface and PACS Web viewer - PACS study DICOM images are
available for viewing by FHC providers either from a PACS web based client or
the Intergy EHR via built in DICOM viewer. How will the proposed PACS
replicate this process?

• Film Digitizer Interface - Prior film studies are scanned into the PACS system in a
similar method to the CR process. An appointment is made in the PM system by
a specific prior study appointment type which creates a specific modality worklist
entry which is processed by a workstation client. The workstation utilizes the
modality worklist and a film digitizer to capture and catalog the prior film studies
into DICOM images. Captured DICOM images are transmitted to the PACS
interface server where they are transferred to the PACS archive and transmitted
with new studies. How will the proposed PACS replicate this process?

2. EMR Interface

Define how the proposed PACS solution will interface and/or integrate with a
DICOM compatible EMR system. The PACS/CR solution must also support
Modality Work Lists (MWL) generated by the EMR system. Give specific
eamples and provide references of fully integrated systems that utilize the PACS
solution included in your RFP response. Costs associated with this interface must
be clearly defined in the RFP response.

3. Practice Management System Interface

Define how FHC’s existing Intergy PM System will integrate with the proposed
PACS solution. Provide a detailed plan of how and where the Modality Worklist
will be generated and the steps to accomplish this process. Give specific
eamples and provide references of integrated systems using the PACS solution
specified in the RFP response. Costs associated with this interface must also be
clearly defined in the RFP response.

4. Document Scanning

Define how the proposed Digital Radiology solution will integrate with FHC’s
existing system of paper orders. Currently radiology orders are generated by the
clinic through the EHR, printed, and given to the patient to present in radiology.
The proposed solution must provide an efficient method to integrate these
records into the PACS digital records for a centralized method or retrieval and
archival. Costs associated with this interface must be clearly defined in the RFP
response.
5. **Image Scanning**

Define how the proposed Digital Radiology solution will integrate with FHC's film digitizer and related software. Some older prior study images were captured on radiology film and archived on site. The proposed solution must provide an efficient method to integrate these films into the PACS system; thereby providing a centralized method of retrieval, archival, and an efficient mechanism to provide prior study images to offsite radiologists. Costs associated with this interface must be clearly defined in the RFP response.

6. **Reception of X-ray Results**

Define how the proposed Digital Radiology solution will integrate with FHC's existing system of secured emailed results received from an offsite radiology group. Currently FHC receives results via secured email and then prints the reports to a printer located in the Radiology Department. These results are scanned to the PACS system and attached to the appropriate study. Hard copies of the results are forward to the Health Information Management department to be scanned and archived in the patient's electronic health record. A task is generated to the ordering providers for review and sign-off. The proposed solution must provide an efficient method to integrate these records into the PACS digital records for a centralized method or retrieval and archival. Costs associated with this interface must be clearly defined in the RFP response.

G. **Electronic Transmission and Reception of Radiology Data**

1. **Transmission**

Define how the proposed Digital Radiology solution will be configured to transmit DICOM standard radiology images and data (including scanned orders and films) to an offsite radiology group for reading and interpretation. The transmission method must be integrated seamlessly with FHC's radiology workflow and existing VPN connectivity to provide effective communications with the contracted radiologist's remote PACS system. Costs associated with this interface must be clearly defined in the RFP response.

2. **Reception**

Define how the proposed Digital Radiology solution will be configured to receive results from an offsite radiology group either via secure email or direct interface. These results must be printed for charting and distribution, and be archived within the FHC PACS and EHR systems. The proposed reception method must be integrated seamlessly with FHC's radiology department's workflow and existing telecommunications connectivity to provide effective communications with the contracted radiologist's office. Costs associated with this interface must be clearly defined in the RFP response.
H. Qualifications & Equivalencies

Specifications listed above are defined as minimum required, and must be met before submitting an RFP response. Referenced specifications can be met with equivalent standards where applicable or exceeded without authorization by FHC. If equipment is to be provided that doesn’t meet the standards, an equivalency where applicable, must be agreed upon by FHC and the vendor prior to the RFP submission.

Failure to meet the required minimums or propose alternate equipment without prior approval by FHC will result in the disqualification of the bid. If a vendor chooses to submit a bid proposing equipment that exceeds the bid specifications either as a primary or optional bid, clearly denote the differences in the submitted bid.

In addition, only authorized dealers of the data center equipment being quoted will be permitted to participate in the RFP process. Wholesalers or liquidators who are not factory authorized or who do not have the required support channels will have their bids disqualified.
V. Installation, Professional Services, & Support

A. Installation & Professional Services

1. Project Scope and Responsibilities

   a. FHC responsibilities:
      
      i. FHC assumes responsibility for providing the necessary power, local area network ports, WAN and VPN connectivity, CAT 5/6 cabling, and in house technical support as required to complete the project.
      
      ii. FHC assumes responsibility for providing all virtual servers, workstations, Microsoft Server and SQL software licensing, and initial setup of these devices.

   b. Vendor responsibilities:
      
      i. Vendors responding to the RFP will provide all PACS software, licensing, support contracts, and professional services required to meet the specifications listed in section IV.
      
      ii. The vendor will provide all technical and administrative aspects required to plan, configure, and integrate the proposed “Digital Radiology System” as defined in section IV.
      
      iii. The vendor will provide technical training to the FHC Radiology and IT staff for the configuration, implementation, and ongoing support of the proposed “Digital Radiology System”.
      
      iv. Failure to adhere to these directives will result in the disqualification of the bid.

2. Professional Services

   a. Responding vendors must have the available technical expertise, either directly employed or contracted, to plan, configure and implement the proposed “Digital Radiology System”. These services must be included in the RFP response and be clearly denoted. Examples of the required professional services are:
      
      i. Technical support and guidance to the FHC staff for the “Digital Radiology System” design and best practices.
      
      ii. System configuration and implementation.
      
      iii. Technical support for integration with the existing and RFP defined HIT Systems.
      
      iv. Technical training for the FHC Radiology and IT staff for the “Digital Radiology System”.

This list of proposed professional services should be used as a reference to formulate an RFP response. Additional professional services may be required to complete this project. It is the prospective bidder’s responsibility to account for and provide additional services as required to complete the project as defined.
3. Implementation & Training Schedule

   a. A proposed delivery and installation schedule must be included in the “Project Scope and Design Document”. It is the prospective vendor’s responsibility to ensure the timely acquisition, delivery, and installation of the proposed equipment. It is also incumbent that potential vendors be prepared to facilitate a timely project completion. FHC has strict timelines and milestones established in the Grant guidelines that must be met.

B. Warranty Maintenance & Post Warranty Support

Provide a complete description of the manufacturer and/or vendor supplied warranty and support included in the RFP response (section V-C-1). If no warranty or supplemental support is documented in the response then “no warranty” is assumed by FHC for the vendor’s response.

If warranty or support services are to be provided by an entity other than the equipment manufacturer or the RFP respondent, list the organization and its affiliation to the respondent. If optional or upgraded warranty and support programs exist for the equipment listed in the RFP response then the vendor should list the information as an optional cost or in an addendum.

C. Warranty & Support Questions

Please answer these warranty and support questions as applicable:

1. Does the purchase price include system support for the first year (12 full months)?
2. Explain in detail the support contract, and length of the contract.
3. What post warranty service arrangements does your company offer, provide detail?
4. What are your standard service hours?
5. Please describe the ways in which customers can submit service requests?
6. Are technical support calls answered by system technicians/engineers?
7. Are all support calls handled by personnel located in the United States or Canada?
8. What kind of response time can be expected when calling in for technical support?
9. Are support issues utilized in the creation of future releases?
10. How and when are known software problems (e.g. bugs, errors) resolved?
11. Can support personnel dial-in and address issues remotely?
12. Does your company offer on-site support?
13. Where is your local support dispatched from?

14. How many “factory authorized” engineers/support personnel are located within the local area?

15. If hardware is supplied, do you stock adequate parts to meet your service agreement commitments? (explain)

16. Will your company assume primary responsibility for all aspects of software implementation and validation of customer supplied hardware and operating systems?

17. Will your company assume primary responsibility for the PACS software if our facility provides the hardware or virtual environment?

18. How does your company handle urgent calls?

19. How are support calls triaged, logged, and assigned?

20. Please describe the escalation process your company uses.

21. Break down support costs as follows:
   - Per call basis (emergency support calls without Maintenance Agreement)
   - Per call basis (changes and/or technical assistance without Maintenance Agreement)
   - Annual Maintenance Agreement (quote should be for the year(s) immediately following expiration of the specified support contract)
   - Additional fees for support after hours, holidays, and week-end
   - Optional maintenance plans

22. Explain in detail how additional options added to the basic system will increase maintenance costs.

23. Are future software updates a part of regular software maintenance fees? If not, please explain.

24. What are your response times during and after the warranty period?

25. Support Calls — What are your response times for a:
   - Critical failure (define a critical failure)
   - Minor failure (define a minor failure)

26. Explain in detail your support capabilities for a:
   - Critical failure (as defined above)
   - Minor failure (as defined above)

27. How often do you distribute updates and/or do upgrades to the system?

28. How are updates distributed?

29. Is ongoing training provided for updates to the system? Please describe this training.

30. Please discuss items which may be included within your annual maintenance agreement.
D. Technical Training

Provide a detailed training plan, number of hours required, and cost to bring FHC’s Radiology and IT staff up to speed on the proposed digital solution. In addition, provide optional factory authorized training classes or software as required.
VI. Pricing & Terms

A. Equipment & Delivery
(As stated in section I)

Vendors responding to the bid process will be responsible for the timely acquisition and delivery of all hardware, software, and accessories listed in this document. Please provide a complete description of the equipment and services included in your bid response as well as an estimated timeline for delivery as defined in the RFP details.

A separate equipment list of vendor supplied equipment and software is also required. Any non-vendor supplied equipment and/or services required to complete the project must be specifically noted. All proposed equipment, software, and services must be included in writing with the bid.

B. Pricing

When submitting the RFP response, include a detailed line item description including a unit price and any applicable shipping and/or delivery charges. Any proposed professional services should also be itemized and priced separately. No verbal agreements will be considered during the bid process. The quality of the response to the RFP will be viewed as an example of the vendor’s capabilities. Quoted prices and discounts are to be guaranteed for at least 90 days from the bid close date.

C. Terms

The payment terms must be clearly stated in the bid specifications. Payment terms should be structured using a milestone based payment schedule. The schedule should start with contract signing, following a logical progression of system delivery and installation, then conclude with the final system acceptance.
D. Default

1. Family Health Centers may, subject to the provisions of (section VI-D-3) below, by written notice of default to the contractor, terminate the whole, or any part, of this contract in any of the following circumstances:
   
   a. If the contractor fails to make delivery of the supplies or to perform the services within the time specified.
   
   b. If the contractor fails to perform any of the other provisions of the contract, or so fails to make progress as to endanger performance of this contract in accordance with its terms, or in either of these two circumstances does not cure such failure within a period of 30 days after receipt of notice from the department specifying such failure.

2. In the event FHC terminates this contract in whole or in part as provided in (section VI-D-1), FHC may procure, upon such terms and in such manner that are deemed appropriate by FHC, supplies or services similar to those terminated. In this circumstance the contractor shall be liable to FHC for any excess costs for such similar supplies or services, subject to the provisions of (section VI-D-3).

3. The contractor shall not be liable for any excess of costs if acceptable evidence has been submitted to FHC that failure to perform the contract was not due to negligence of the contractor.