Vendor Analysis and Evaluation Methods

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TABLE OF CONTENTS

1   POLITICAL ENVIRONMENT

As part of the RFP submissions vendors were required to disclose any third party affiliations that may pose as a conflict of interest. The committee has reviewed both proposals submitted by the vendors and has found all relationships between the vendor and other organizations to be appropriate. Each member of the committee has strived to be as objective as possible during the proposal deliberation process making sure not to be influenced by personal interest or their own political agendas.

2   CHANGE MANAGEMENT PLAN

Changes to the project scope must be entered into the project management web tool and tracked as a change request. Change requests can be initiated by any member of the project team but may only be submitted by the IT Manager. Once a change request is entered into the system, an email, attached with supporting documentation, will be sent to the Practice Administrator for initial review. After initial analysis and approval, the request will then be forwarded on to the Practice President for final approval. For those project changes that significantly alter the RFP, such as changes to the technical and functional requirements, the deadline for RFP submission will be extended an additional 14 days to allow newly "qualified" vendors to submit a proposal.

3   ANALYSIS OF VENDOR RESPONSES TO RFP

3.1   Vendor One

Vendor 1 is the XYZ Information Technology Company division focused on the document management (DMS) and content management systems market. As a division of a large, well-known Corporation, Vendor 1 is quite financially stable and secure, has access to the extensive information technology resources of its parent company, and likely will be around to support its products into the indefinite future.

This vendor has extensive experience in the document management field and has an excellent reputation for providing solid, reliable, if sometimes unspectacular solutions to its customer's business needs. This company maintains its own data centers running Microsoft Windows Server 2008 and Oracle Database 11g, and right from inception has taken a special interest in providing document management services over the Internet using a service-oriented architecture (SOA). They have a flexible, powerful API and experience building interfaces to their clients' legacy software. The company has worked with other clients in the medical field and understands the importance of data privacy and security.

Their innovative high-speed Internet communications technology is already HIPAA compliant, and they offer audit trailing and highly granular tools for setting user permissions and access levels. They can mirror client data on two servers at different locations to increase security and availability, and their server backup program is among the best in the industry. Their products interface very well with Microsoft Office and Microsoft Outlook, and they are experienced with supporting collaborative document

creation with version and edit tracking. The DMS group can call on colleagues from other divisions of XYZ Corporation to supply the high-speed scanner, OCR capabilities and metadata functionalities. They have experience with importing large numbers of paper documents, with custom indexing functionalities, and with the document locking and archiving that will be necessary when storing documents that represent part of a legal medical record. They have a standard service level agreement and are comfortable with maintaining 99.9% uptime, although this may be associated with extra cost. They do not require self-renewing contracts, and they have standard protocols for data export if necessary at the completion of an agreement.

The staff members proposed to carry out the project implementation and training appear very well-qualified. The many positive factors associated with Vendor 1's proposal do come at a price. The implementation costs, per user per month charges, and total projected costs for the first year are all about 25% higher than the budget proposed by Vendor 2.

3.2 Vendor Two

Vendor 2 is a medium-sized company whose business is devoted exclusively to document and content management. Although they lack the size and long history of XYZ Corporation, they have been in business in this field for 15 years, and their financial report does not indicate any significant impending difficulties. They have a generally good reputation, and are especially known for developing novel and innovative solutions to meet their clients' business needs. They subcontract for their data hosting facilities, and their data center partner is well known and reliable in this area.

Although their backup procedures are robust and multiply redundant, client data is not completely mirrored on independent servers. They do make a good case that they can maintain 99.5% uptime. They have a good API, and at least two of their developers appear well-qualified to construct the necessary interface to the EMR. They have some experience with scanning technology, but they propose to subcontract for the scanner hardware, OCR system, and installation. They have a reasonable level of experience with data privacy safeguards, and their systems are HIPAA compliant.

Their interfaces with Microsoft Office and Outlook function very well, as do their tools for collaborative editing, version and document controls, and audit trailing. Their novel proprietary algorithms for database indexing and searching are the best in the industry and should result in faster document location and display which could potentially improve workflow. As noted above, their overall solution is about 25% less expensive than that of Vendor 1.

4 VENDOR EVALUATION METHODS AND CRITERIA

4.1 Methods

Each project team member will read the proposals in detail and assign each section a numeric score representing how well it meets the requirements of the corresponding RFP section. The scores will be entered into Evaluation Score Sheets (See Appendix A) to provide the raw data used to rank the vendors in order of overall quality of their proposals. Every reasonable effort will be made to identify and focus on measurable criteria, but CPG recognizes that many evaluation criteria are not amenable to completely objective scoring. The project management team will discuss this and achieve consensus guidance on how members should approach requirements that are more subjective and inherently difficult to measure. The project team members' scores for each section will be averaged and entered into a final evaluation matrix (see Appendix B) which can be used to rank the vendors based on the quality of their responses to the requirements and perceived ability to successfully accomplish the project. The vendors' pricing proposals will be entered into a final pricing matrix (see Appendix C) to allow rapid assessment of the financial factors that bear on the decision.

4.2 Criteria

Criteria will be evaluated in six major areas. The first is vendor characteristics, focusing on financial stability, quality of management, experience and reputation, and legal and regulatory challenges. In short, is the vendor a company CPG wants as a long-term partner? Second is rating the vendor's capabilities to develop the customizations necessary for the project such as the document conversion and import system and the interface to the EMR. Do they have the experience and staff capabilities to get the job done? Third is

evaluation of the vendor's proposals for managing the project, successfully accomplishing

implementation and training on time and on budget, and providing support for the system.

Fourth is a detailed assessment of how well the vendor's proposals will fulfill all the

individual technical requirements listed in the RFP. The fifth area involves rating the

vendors' proposals to deal with data privacy, security, and integrity and to meet regulatory

requirements. The sixth and final area involves the vendors' proposals for service level

agreements, contract terms, warranties, and other administrative issues. The final

evaluation matrix also contains a score reflecting input from the references supplied by the

vendor. The detailed list of criteria can be reviewed in Appendix A.

5   BUDGET ESTIMATES

Item	Vendor 1	Notes	Vendor 2	Notes
Hardware	5,000		7,000	
Purchased/Licensed software	NA		30,000	one time fee
Per user charge	50000	web-based; 50 users x $1000 ea	NA	
Development/Interfaces	5000		6500	
Implementation	4000		3000	
Training/Documentation	700		850	
Maintenance	1200		3200	
Support	2200		4100	
Total Cost (1 year)	**68100**		**54650**	

6   ROLE OF CONSTITUENCIES

6.1   Preliminary Evaluation

CPG received eight replies to its RFP. For preliminary evaluation, the Practice

Administrator and IT Manager did a rapid reading of all the proposals and found one that

was grossly noncompliant with the administrative and structural requirements of the RFP

and two which did not adequately address mandatory technical requirements. These were

eliminated from further consideration in order to decrease the total workload of the

evaluation team and improve the speed and efficiency of the evaluation process. Next the

Practice Administrator, IT Manager, Physician Informaticist, Practice President, and

Medical Records Manager did a somewhat more thorough but still not in-depth analysis of

the five remaining proposals, looking at the quality of the technical solutions and project

management plans, qualifications of the personnel proposed for the project, and overall

strength, reputation, and experience of the vendors. This process identified three additional

proposals in which the vendors did not appear to adequately understand or address the

basic issues and problems presented in the RFP or where the technical solutions were

borderline noncompliant or otherwise suboptimal. These were also eliminated from consideration.

6.2   Final Evaluation

The remaining two proposals, strong and thorough in all areas, both came from vendors with the skills and stability to potentially make a good long-term partner for CPG, but with a different spectrum of strengths and weaknesses. These proposals were read in depth by all members of project management team and scored and analyzed as described in Section 4. The final evaluation matrix was discussed at length at a meeting of the entire project management team. The Practice President and Physician Informaticist played a major role in the decision, basing their recommendation on the usability of the proposed DMS, the impact on clinician workflow, the likely acceptability of the system to the entire medical staff, and the ability to interface with and support better functioning of the EMR. The IT manager and IT staff played just as strong a role, basing their recommendation on the technical quality, reliability, and supportability of the proposed solutions and their evaluation of the vendors' ability to create the necessary interfaces. The Medical Records Manager and Business Office Manager played a slightly less strong but still important role, basing their recommendations on the system's ability to convert large volumes of paper documents to digital form, support existing practice computer applications, and fully support the transformation into a paperless office. The final major role was played by the Practice Administrator and Practice Attorney, who based their recommendations on the business strength, proposed budget, and fairness of the contracting terms proposed by the vendors. Interestingly, the clinical, business, and information technology constituencies all reached similar conclusions and achieving a consensus decision was straightforward.

7   VENDOR SIZE

CPG has a need to implement a DMS system that will fully integrate with the current EMR system and office applications. To accomplish this mission critical task, CPG will need to partner with a company that is a dominant player in the DMS marketplace, will be around for the long term, and will provide a product that is listed in the top 5 by most industry experts. Price issues will be addressed in another section.

8   ACCEPTANCE TESTING

As part of CPG's focus on Total Quality Management/Quality Control (TQM/QC), the ability to perform acceptance testing will be an integral part of the DMS vendor selection process. The IT Manager and the IT Staff will dedicate sufficient time to thoroughly test a sample of converted data prior to selecting a vendor. Acceptance testing will also need to be part of the contract with the vendor to allow for a complete test to ensure that the legacy data reconciles with the converted data prior to CPG's DMS system "going live". A minimum of 2 rounds of acceptance testing will be required prior to the system "going live". The amount of time allotted for the entire acceptance testing phase will be no less than 2 weeks and no greater than 1 month.

The testing will include, but not be limited to:

- Ensuring data was converted in accordance with the mapping rules defined in CPG's data mapping document.

- Ensuring all required fields are in the new DMS including any that may have been overlooked during the data mapping process.

- Ensuring that the correct number of records from the sample data was created in the new DMS.

- Checking to determine if further data cleansing is required prior to the final conversion.

- Confirming that data imported into the DMS displays properly in the EMR as well as the DMS native User Interface.

- Confirming that paper documents can be scanned, converted to editable text, and imported into the DMS.

Any inconsistencies or problems found will be summarized by the IT Manager in a standardized format and the information will be distributed to the vendor and the DMS Committee for analysis. After determining the issues that are going to be corrected, the vendor will revise the conversion program to rectify those issues. At the completion of the acceptance testing process, the IT Manager will sign off on the results. The Practice President will have the final review and sign off prior to final version of the DMS which will be used for the "go live" data conversion into CPG's DMS in accordance with CPG's installation/implementation schedule.

9   BEST VENDOR

CPG will be selecting vendor one, XYZ Corporation, for implementation of a document management system with our organization. Vendor 1, although not in the DMS business as long as Vendor 2, has implemented at world re-knowned hospitals and research institutions consisting of thousands of employees. Their largest implementation so far consisted of 40,000 employees at the NIH. They have an office in almost every major city

in the U.S. thus they do not have the need to subcontract with any vendor for support. In the RFP, when asked to specify one name of a negotiating official, they provided the name of their contracting official unlike Vendor 2 who provided multiple names which can make negotiations unorganized and difficult. The company has not been the subject of an investigation or litigation, along with outstanding references, leading CPG to believe that their customers are satisfied with the product and support they provide. Previous years' fiscal revenue set Vendor 1 and 2 apart, as XYZ corporation netted $30M while vendor 2 brought in $6.5M again showing the success and growth of the vendor. The vendor is up on the latest technology including the use of web-based portals to access medical documents which will allow us to further advance technologically as we are looking to offer patient portals, so that they can access their medical information, in the near future and may stay with the same company since their product(s) are easily integrated.

10 COST ASSESSMENT

The vendor we selected was not the least costly. Our decision was justified by the vendor's overall quality and stability and especially by their commitment to have the system functional 99.9% of the time. We calculated that the risk of being down more than 0.1% of the time could impose a greater financial burden on the organization and have a negative impact on patient safety due to inaccessibility of medical records.

11 REASONS FOR REJECTION

Our other main concern with Vendor 2 was their dependency on third party support i.e. subcontracting for their data hosting facilities, scanner hardware, OCR system, and installation. Relying on a third party poses a risk to our organization in regards to issue

resolution and response time. Also, since the data is not completely mirrored on

independent servers this decreases how fast the system can be brought up in the event of a

system down as in the case with server hardware failure.

12 APPENDICES

12.1 APPENDIX A – Evaluation Score Sheet

Appendix A: Evaluation Score Sheet

Vendor Name:_____

Sheet 1: Vendor Characteristics (RFP Section 7.1)

Criterion Number	Description	Point Value	Points Awarded	Notes
1	Financial stability	200		
2	Management quality	200		
3	Government or regulatory challenges	100		
4	Legal or customer challenges	100		
5	Experience with projects this size	100		
6	Subcontractor or data hosting issues	100		
7	Overall reputation in the field	200		
Total		1000		

Sheet 2: Consulting and Development (RFP Section 7.3.2)

Criterion Number	Description	Point Value	Points Awarded	Notes
1	Develop scanning and OCR System	250		
2	Develop interface to EMR	350		
3	Develop interface to office applications	100		
4	Develop/Provide custom indexing methodology	100		
5	Qualifications of developers	200		
Total		1000		

Sheet 3: Project Management (RFP Section 7.4)

Criterion Number	Description	Point Value	Points Awarded	Notes
1	Personnel qualifications	100		
2	Scanner/OCR installation and testing	50		
3	EMR interface installation and testing	100		
4	Training materials	50		
5	General user training program	50		
6	IT staff training and mentoring program	100		
7	Documentation	50		
8	Follow-up training first 90 days	50		
9	Project management methodology	100		
10	Ability to meet schedule	50		
11	CPG resources required	50		
12	Support procedures and availability	250		
Total		1000		

Sheet 4: Technical Requirements (RFP Section 7.5)

Criterion Number	Description	Point Value	Points Awarded	Notes
1	Database Application Software	10		
2	Database server OS	10		
3	Data center hardware/structure	80		
4	Data center management/maintenance	100		
5	Technology relation with database provider	10		
6	Availability/quality of API	60		
7	GUI and form builder	10		
8	Integration with Microsoft Office	40		
9	Integration with Microsoft Outlook and Explorer	40		
10	WebDAV interfaced	20		
11	Collaboration Management	40		
12	Text/image editing	20		
13	Granular user access controls	80		
14	Document check-in/out	40		
15	Document locking	40		
16	Multiple simultaneous users	40		
17	Document versioning	40		
18	Automatic version control	20		
19	Version and edit tracking	20		
20	Version promotion and rollback	20		
21	Audit trailing	100		
22	Document archiving and retention	100		
23	Automatic data format conversion	20		
24	OCR	100		
25	Full text document indexing	80		
26	Custom index templates	100		
27	Indexing necessary for capture	40		
28	Manual and automatic metadata tagging	100		
29	Barcode reading	40		
30	Electronic signature capture	40		
31	Full text search	100		
32	Boolean and muti-condition queries	100		
33	Save frequent searches	40		
34	Search by content, metadata, or version	80		
35	Access and retrieval by Internet	100		

36	Printing compliant to ISO standards	40		
37	Electronic file shredding	20		
38	Digital watermarking	20		
39	Email archiving	20		
40	Fax management	20		
Total		2000		

Sheet 5: Data Privacy, Security, and Integrity Requirements (RFP Sections 7.6 and 7.7)

Criterion Number	Description	Point Value	Points Awarded	Notes
1	Data encryption	100		
2	Multifactor user authentication	100		
3	Secure data transport via Internet	100		
4	HIPAA compliance	200		
5	ISO 27000 Series compliance	100		
6	Malware/Hacking defenses	100		
7	Data breach notification policy	100		
	Data backup and recovery	200		
Total		1000		

Sheet 6: Service Level, Contracting, and Terms (RFP Section 7.8-7.10)

Criterion Number	Description	Point Value	Points Awarded	Notes
1	Acceptable uptime procedures and service levels offered	200		
2	Industry standard uptime calculation metrics	100		
3	Industry standard service level warranties and remedies	200		
4	Accepts non self renewing contracts	50		
5	Acceptance period procedures	100		
6	No fault termination for non performance	100		
7	Data export and transition services	200		
8	Industry standard terms and conditions	50		
Total		1000		

Sheet 7: References (RFP Section 7.2)

Reference Number	Source	Point Value	Points Awarded	Notes
1	Company 1	333		
2	Company 2	333		
3	Company 3	334		
Total		1000		

Sheet 8: Pricing Structure (RFP Section 7.3)

Criterion Number	Item	Bid Price	Notes
1	Hardware		
2	Purchased/Licensed software		
3	Monthly per user charge		
4	Development/Interfaces		
5	Implementation		
6	Training/Documentation		
7	Maintenance		
8	Support		
9	Total Cost (1 year)		
10	3 year maintenance/support		
11	5 year maintenance/support		
12	Bulk import/conversion charges		
Total			

12.2 APPENDIX B – Final Evaluation Matrix

Appendix B: Final Evaluation Matrix

Appendix C Sheet Number	Requirement	Point Value	Vendor 1	Vendor 2	Vendor 3
1	Vendor Characteristics	1000			
2	Consulting and Development	1000			
3	Project Management	1000			
4	Technical Requirements	2000			
5	Data Privacy Security, and Integrity	1000			
6	Service Level, Contracting, and Terms	1000			
7	References	1000			
	Total	8000			
	Vendor Ranking				

12.3 APPENDIX C – Vendor Pricing Matrix

Appendix C: Vendor Pricing Matrix

	Hardware	PurchasedSoftware	Monthly Per User Charges	Development & Interfaces	Implementation	Training & Documentation	Maintenance	Support	1 Year Total Cost	3 Year Maintenance Support	5 Year Maintenance Support	Total
Vendor 1												
Vendor 2												
Total												
Difference V1												
Difference V2												
Lower Vendor												

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