eHealth Initiative EHR Master Quotation Guide

Introduction

The purpose of the *eHealth Initiative Master Quotation Guide*© ("*Guide*") is to assist small- to medium-sized medical practices in comparing the costs of electronic health record (EHR) vendors. It is intended to help physicians, clinicians, practice administrators and other decision makers compare quotations and bids from vendors for EHR software, implementation and training services as well as support and maintenance.

This guide is for individuals who have already gone through an initial selection process, compared major features and functions, and are seeking to compare cost information from candidate vendors on an "apples to apples" basis. ***It is not a guide for comparing the functions and features of electronic health record applications.***

The *Guide* was developed by a multi-stakeholder group including physicians, nurses, practice administrators, EHR vendors, labs, providers, lawyers, and other key players. This document is intended to provide a non-prescriptive description of the elements required to make final vendor selections.

How the Guide is Organized

The *Guide* is organized into a number of sections based upon the elements of an EHR software quote as well as EHR implementation services, maintenance and support. Hypertext links connect text or objects to one another and allow the reader to gain more information by clicking on the mouse when the cursor is on a highlighted section of text. This allows the reader to immediately jump to a different section of the *Guide* related to the highlighted material. The Guide also contains a glossary of definitions, examples of common terms, and "red flags" or areas of concern. There is also a Frequently Asked Questions (FAQs) section that contains brief responses regarding common questions regarding the specific cost category. Also included are a bibliography and examples of master quotations.

The *Guide* sections include the following:

Master Quotation

1. **Vendor Software -** this section includes costs related to the basic and optional modules of an EHR product, licenses and alternative service provider (ASP) user fees.
2. **Interfaces -** software which allows connection and communication to labs, pharmacies and other entities.
3. **Third Party Software -** this can be software for components of the EHR provided by other companies such as patient education materials, drug interactions and general system software (e.g., database or operating system software).
4. **Conversion Services -** costs of vendor to convert existing paper or electronic data to the EHR system.
5. **Implementation Services -** vendor services such as planning or readiness assessments, EHR & interface installations, project testing and project management.
6. **Training Services -** cost of customer training components from vendor.
7. **Data Recovery Services -** vendor services to back up data offsite and recover data.
8. **Annual Support & Maintenance -** costs of the components of annual support based on varying levels of service support.
9. **Financing Alternatives -** costs of buy or lease options and terms of payment.
10. **Terms -** schedule of payments.

For each section of the Master Quotation, there are:

1. Red flags - issues of concern.

2. Frequently Asked Questions (FAQ's) - common questions and answers related to the master quotation.
3. Glossary of terms.

Service Level Agreement

Structure and component options within a standard service level agreement.

***Note:** This guide will be updated as questions arise and health information technology evolves.

We hope that you will find the *Guide* useful and encourage your questions and comments.

Vendor Name	**Product of Interest**
Vendor Representative Completing Form	**Vendor Representative Telephone Number**

Request for Quote Submitted by:

Physician Practice Name	**Practice Contact Person**
Practice Address	**Practice Telephone**
Practice Demographics: This space needs to include the basic information a vendor would need to provide a quote – e.g., numbers and FTEs of clinician providers (physicians, NPs, PAs) as well as staff.	

Vendor Software Licenses

The tables below are provided for the vendor to quote fees for licensing the basic and optional modules, including the basis upon which those fees are determined. If there are qualifications to this quote, the vendor should enter the information into the corresponding comment field.

Basic modules

Annual fee calculated per:	License Fee (1= one time cost, 2= Yearly renewal)	# Licenses	"Provider" Includes	Comments
Concurrent (Seat)				
Per provider (Named User)				
ASP				

Optional Modules

	License Fee	Comments
Scanning		
PDA		
Faxing		
ePrescribing		
eReferrals		
Other		

Specialty Modules

List all available	License Fee	Comments

Interfaces

Physician: Please mark "X" in Box A to indicate a desired interface and identify in Box B the product to which the interface should be written.

Vendor: Please enter quote for interface development in Box C and indicate by entering "yes" in Box D if you have successfully interfaced the with physician's identified system in the last 12 months If you wish to offer comment, please reference by number or symbol in Box E and offer the corresponding comment in the space below or on a separate sheet.

Interfaces Requested:	If Interface is desired, mark "X"	Desired Interface to: (vendor of service of software and software version, if known – i.e., Quest/Labcorp, name and release of practice management system) UNI – Data travels one way BI – Data travels both ways	Vendor cost (include your cost and estimate for lab cost, and annual support	Production Interface in last 12 months "YES"	Comment (Vendor -Insert comment number and add comment below table)
Communications					
Lab					
Order entry					
Results reporting					
Provider owned Lab					
Hospital Lab(s)					
Commercial Lab(s)					
Pharmacy					
SureScripts Certified (uni- or bidirectional)					
Rx eligibility (provided by?)					
Formulary information (Plan level or member level?)					
RX reference database (includes checking for drug-drug interaction, drug-allergy reaction, other?)					
PBM Connectivity (which ones?)					
Radiology					
Order entry					
Results reporting					
Reports					
Images					
Hospital					
Hospital H&P reports					
Discharge Summaries Other					
Reporting					
Payers					
Quality Assurance Org.					
CMS					
Medicaid					
Other Payor					
Secure Provider Messaging					
Secure Patient Messaging					
Pay-for-performance reporting					

Interfaces Requested:	If Interface is desired, mark "X"	Desired Interface to: (vendor of service of software and software version, if known – i.e., Quest/Labcorp, name and release of practice management system) UNI – Data travels one way BI – Data travels both ways	Vendor cost (include your cost and estimate for lab cost, and annual support	Production Inter-face in last 12 months "YES"	Comment (Vendor -Insert comment number and add comment below table)
Patient Care					
Instrument Data					
EGG/Holter/Spirometry					
Other Diag. Equipment					
Practice Mgmt.					
Transcription Systems					
Voice Recognition					
Appt. Reminder/IVR					
Electronic Claims					
Practice Mgmt System					
Billing					
Scheduling					
Quality Measurement					
Custom Interfaces					
Other (Specify)					

To physician: vendor will require additional information to evaluate reporting interfaces. Please attach name of entity to which you wish to interface and the contact person for that entity.

Comments (notes from Box E): Include basis for estimate, including whether fee is fixed fee or hourly rate. If hourly rate, provide estimate of hours required.

Third Party Software

EHR Specific

Vendor: In the spaces below, indicate whether these functions are included in the above quote. If not, identify if they are available and the additional fees to access those functions.

Option	Included in Base Price Above (Yes/No)	Available for Additional Fee (Yes/No)	Annual Cost (In addition to the Quote from Table X)	Comment Reference
Patient Education				
Drug Interaction				
Drug/allergy				
Drug/diagnosis				
ICD9 data base				
CPT4 data base				
SNOMED or SNOMED CT				
HCPCS database				
Voice recognition				
Insurance plan and/or PBM formularies				
Best Practices / National Guidelines				

Comment: Note in the space below any clarifications related to the identified option, the product's ability to support it and any additional fees that will apply.

General System

Option	Included in Base Price Above (Yes/No)	Available for Additional Fee (Yes/No)	Annual Cost (In addition to the Quote from Table X)	Comment Reference
Database				
Operating System				
Report Writers				
Other Tolls (specify)				

Comment: Note in the space below any clarifications related to the identified option, the product's ability to support it and any additional fees that will apply.

Conversion Services

Option	Cost of Option	Hourly or Fixed Fee	Comment Reference
Data Migration Options			
Structured/Non-structured			
Paper Format			
Electronic Format			

Comment: Note in the space below any clarifications related to the identified option

Implementation Services

Option	Cost of Option	Hourly or Fixed Fee	Comment Reference
Pre-implementation planning			
Readiness assessment			
Requirements			
EHR Installation			
Interface Installation			
Template customization			
Testing			
Project Management			

Comment: Note in the space below any clarifications related to the identified option

Training Services

Option	Cost of Option	Hourly or Daily	Comment Reference
Basic computer training			
Onsite/remote			
Expenses			
Staff retraining for updates			
Other training (specify			

Comment: Note in the space below any clarifications related to the identified option

Data Recovery Services

Option	Cost of Option	Hourly or Monthly	Comment Reference
Off site storage of data			
Recreation of database			

Comment: Note in the space below any clarifications related to the identified option

Annual Support & Maintenance

Option	Fees	Comment Reference
General		
Upgrades/Enhancements		
Source Code escrow		
Data schema		
Service Level Agreements		
Level 1		
Level 2		
Level 3		
Interfaces		
3rd party Pass through		
Vendor Service Level		
Third Party – EHR Specific		
Database updates		
Application updates		
Third Party – General System		
3rd party Pass through		

Comment: Note in the space below any clarifications related to the identified option.

Financing Alternatives

Finance (finance company)
Lease (leasing company)
Terms

TERMS

Payment terms should be spread out over the course of the project and implementation. There are three basic areas to be considered with upfront payment, payments during implementation and final payment upon the completion of the project.

Service Level Agreement

(Support and Maintenance proposed template)

Hours of support

M-F
24/7
Weekends
Holidays

Methods of support

Email
Phone
remote access
in-person

Severity/Priority Classification

Level 1
- EHR Down

Level 2
- Lab Interface Down

Level 3
- Patient Education DB Down

Level 4
- Customizations and/or desired new features

Response Times

Dependant on severity and service level

Problem Escalation & Triage

Dependant on severity and service level
Rules and mechanisms to elevate unresolved problems to next level
Mechanism for diagnosis/resolution of hardware vs. software problems

Customer Responsibilities & Duties

Document steps to problem
Attempt to recreate problem
Record all error messages
Report within 24hrs.

Service Level Agreement Compliance Reporting

Statistics on meeting Service Level Agreement commitments

Glossary, Red Flags, and Frequently Asked Questions (FAQ's)

Vendor Software Licenses

License cost of various modules. Typically, modules will be licensed on a concurrent or named user basis.

For example, with a concurrent license, if there are 4 providers and 8 employees, a minimum of 12 concurrent licenses would be needed. However, if the providers were halftime [meaning, they only used the system half time] (and all 4 never used the system at any one time, only 10 licenses would be needed).

If using aa named user license under the same circumstances, 12 licenses would always be needed – as licenses are not shared among different people. There can be a provision though for "active" and "inactive" providers (which means they could look at information, but not enter it in the system).

Under an ASP (monthly rental agreement), software licenses are not being purchased, but rented However, the same issues exist for determining number of ASP licenses as with a license purchase.

Red Flags or Things to Look Out For

1. Vendor doesn't specify type of license in quote
2. Functionality is not specified.
3. Not specified for what period of time license is in force

FAQ's

What is the best type of license?
Perpetual concurrent

What is the definition of provider for the license?
Depends on quote – can be physician, NP, PA or others

What is the difference between perpetual and term license?
Perpetual is a one-time license fee. Term is a renewable license fee

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Interfaces

Software programs that allow data from the EHR System to flow back and forth between external applications. These applications can either reside outside the practice, such as lab applications or can be another system within the practice, such as a billing system.

Red Flags or Things to Look Out For

1. One-way or two-way interface is not specified
2. Data format not specified (structured or non-structured)
3. Additional license costs, if any, not specified
4. Interface promised, but not available

FAQ's

Does cost cover third party updates?

Typically you would pay for third party updates, but depends on the vendor

Does every interface need some customization?
Not necessarily, but make sure the vendor demonstrates the functionality

What if the vendor says they will have the interface soon?
Ask for a development plan and timeline to verify claims

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Third Party: EHR Specific

These are applications that are essential to the basic infrastructure of the system. They are the building blocks, such as the technical platform upon which the EHR system is built (e.g.,Windows, Linux, or MacIntosh, etc.) Also what kind of database structure controls the system (e.g, SQL, Oracle, etc.).

When comparing license costs, note if there are separate general system license costs or if these are rolled into the main cost. Also, ask whether there will be additional costs when the vendor upgrades their software and it becomes necessary to install a new version of the database or operating system. Make sure your infrastructure software will support any features you wish to add later on.

Red Flags or Things to Look Out For

1. Extra cost is not specified in quote
2. Customer is responsible for learning about updates
3. The database is proprietary; not standard

FAQ's

How often should a third party database be updated?
Depends on the content. e.g. Drug interactions should have more frequency than patient education

Should updates cost extra?
Should be part of support and maintenance

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Third Party: General System

These are applications that are essential to the basic infrastructure of the system. They are the building blocks such as the technical platform the EHR system is built on such as, Windows, Linux, or MacIntosh, etc. Also what kind of database structure controls the system – SQL, Oracle, etc.

When comparing license costs note if there are separate general system license costs or if these are rolled into the main cost. Also, will there be additional costs when the vendor upgrades their software and it is necessary to install a new version of the database or operating system. Make sure your infrastructure software will support any features you wish to add later on.

Red Flags or Things to Look Out For

1. Extra cost is not specified in quote
2. Customer is responsible to be aware of updates
3. The database is not standard, but proprietary

FAQ's

What is the best technology to use as a platform?
There are various operating systems and databases. However, make sure that the technology is not proprietary

Should you always update to the latest database and operating system?
Not necessarily right away, find out if this will impact your EHR system

Who should be responsible for updating the general system software?
Typically the customer is responsible for installing general system updates

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Conversion Services

These are consulting services offered by the vendor. These services will take your original data, either in paper or electronic form, and transfer the data into the EHR system database.

Red Flags or Things to Look Out For

1. No time estimates given
2. Costs don't include any guarantees

FAQ's

How long does a conversion typically take?
Depends on complexity. Make sure that a detailed plan is presented with timelines

How do I know everything was converted correctly?
Develop a robust test plan with the vendor

Is there a chance that my information can't be converted?
If it is in electronic format, as long as you have the underlying database structure, there shouldn't be a problem

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Implementation Services

These are consulting services offered by the vendor. These services will provide planning and actual implementation of an EHR system.

It is important when comparing quoted implementation costs that physicians understand which detailed cost line items a particular vendor will be supplying. Also, make sure and take a look at their project plans.

Red Flags or Things to Look Out For

1. Vendor can't commit to a project plan with milestones
2. Only vendor can customize templates
3. Implementation is not broken into small enough tasks

FAQ's

Do I need to be involved?
Absolutely. Designate a point person who is responsible to interface with the vendor on a regular basis

How do I know the vendor is completing all the tasks?
Review the vendor's detailed project plan and have regular status meetings

Why do implementations fail?
Not enough involvement, communication, and regular status review

Who should be involved in a needs assessment?
Both the vendor and members of your staff who will use the system

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Training Services

These are consulting services offered by the vendor. They provide hands on training for all aspects of the system.

Red Flags or Things to Look Out For

1. There is no cost listed for future training
2. There is no formal training plan
3. There is no definition of what expenses will be reimbursed along with limits

FAQ's

Is it better to ask the vendor to train the whole staff or "train the trainer"?
Depends on the size of the staff

How do I know if my staff has been trained adequately?
You should develop real life scenarios and test them

How much time will training take?
It depends on many factors, but make sure the vendor gives you a training plan outlining this

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Data Recovery Services

A mechanism and process to safely store duplicate databases and recreate the data should a disaster occur.

Red Flags or Things to Look Out For

1. Back ups not made on regular schedule
2. Off site storage not as secure as it should be
3. No process documented for recovery

FAQ's

What do you look for in off site storage?

Scrutinize the security and environment of the location in which the backups are being held. Ask about the regularity of the backup process. Find out about accessibility to your data.

Should I just backup on my own?
As long as you have a safe and secure location to store backups and you will backup regularly

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Annual Support & Maintenance

Support and maintenance costs are typically 15-20 % of the software license costs. Where the actual license is normally a one- time fee, the support and maintenance costs are renewed on a yearly basis. This yearly fee basically covers two areas: 1) any upgrades or new releases; and 2) customer service and support.

It should be noted that both vendor EHR software and third party software will need support, so it is important to determine which components the support costs cover.

Also, some vendors might have more than one service level agreement representing different support options at different costs.

Red Flags or Things to Look Out For

1. No support agreement
2. No guarantees of service
3. No cap on renewal percentage increases
4. No software escrow costs offered
5. Extra costs for database schema
6. Added maintenance costs for third party products
7. No support for third party products
8. No support for previous version or release
9. Cut off of support services if payment is in dispute

FAQ's

What type of guarantees of service should I expect?
Depending on your service agreement there should be guaranteed response times and escalation processes

What recourse do I have if I do not receive adequate support?
This is negotiable. You can ask for a discount or partial refund of support fees

Can I change service level agreements?
Yes, service level agreements should follow your needs

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Financing Alternatives

A vendor should offer you the option of either leasing or financing your system.

Red Flags or Things to Look Out For

1. Vendor just passes you on and is not involved in this process

FAQ's

What happens if I lease or finance and the system is not acceptable?
You are dealing with the finance company, so you still need to honor your contract

What are the benefits of leasing or financing?
Lower start up costs

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Terms

EHR implementation typically involves a number of phases and takes time. And, things can go wrong. Therefore, the payment terms should reflect milestone based payments. This means should pay the vendor percentages of the total as major parts of the project plan are successfully completed.

Red Flags or Things to Look Out For

2. Vendor wants most of the payment up front
3. Vendor is not willing to agree to final payment when system is accepted
4. There is no policy or process for payment refund or reduction

FAQ's

How should I break up payments?
Best done by specifying major milestones in an implementation plan

Who determines when a payment milestone has been successfully reached?
Criteria should be determined and agreed to ahead of time by the vendor and yourself

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Service Level Agreement: Hours of Support

The methods that will be used for communicating and resolving issues. Typical methods are email, phone, and online chat. Ask whether remote diagnostics and/or on site visits by support analysts are available.

Red Flags or Things to Look Out For

1. "Normal business hours" are specified instead of detailed days and hours
2. No after hours support available

FAQ's

What is the standard for hours of support?
No set standard but expect something like 8-6 M-F

How do I know if I will need after hours support?
Experience using the system will dictate this

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Service Level Agreement: Methods of Support

The methods that will be used for communicating and resolving issues. Typical methods are email, phone, and online chat. Remote diagnostics can be available and, in some instances, it might be necessary to have a support analyst come on site.

Red Flags or Things to Look Out For

1. Customer needs to use email or other indirect methods before getting phone or live support.
2. Only email or online chat available

FAQ's

How do remote diagnostics work?
The vendor can take control of your system and look at problems remotely.

***What is the best method to use for problem resolution*?**
Email, phone and in-person can all help resolve problems depending on complexity and vendor resposiveness. All should be offered.

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Service Level Agreement: Severity/Priority Classification

Different types of problems have different levels of urgency and importance. The severity level of a problem is usually noted when a support ticket is opened up. Resolution guarantees are based on severity levels. For example, CPOE down would be a high severity level while a patient education database not working might be a lower level of severity.

Red Flags or Things to Look Out For

1. There is no severity level classification
2. Severity level is not tied into resolution

FAQ's

How do I determine severity levels?
Discuss this with your vendor

Can you change the level of severity?
Yes

***Why do you need different severity levels*?**
It is not reasonable to expect that every problem will be taken care of immediately

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Service Level Agreement: Response Times

Different functions of the system might warrant different response times based on severity level. There should be a schedule of response times for different types of problems, and the service level agreement should define this accountability.

Red Flags or Things to Look Out For

1. Vendor not willing to make a commitment to a resolution schedule
2. Response is dependent on how busy the vendor is

FAQ's

What happens if the vendor doesn't respond according to the Service Level Agreement?
There should be consequences such as a price reduction or cancellation of contract

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Service Level Agreement: Problem Escalation & Triage

This is the mechanism that defines how a problem migrates through the support system and the different resources that get involved along the way. If a problem can't be resolved in a certain amount of time, then it escalates until it is resolved.

Red Flags or Things to Look Out For

1. There is no escalation mechanism
2. An issue stays in the lower tiers too long before it is escalated
3. The customer needs to demand an escalation instead of the process taking over

FAQ's

What kicks off an escalation?
If a problem can be resolved by present means within a specified period of time.

What levels of escalation should there be?
Will depend on the size of the vendor's support organization

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Service Level Agreement: Customer Responsibilities and Duties

These are the steps that the customer needs to take in order to ensure that the vendor has all the information they need to resolve an issue.

Red Flags or Things to Look Out For

1. Customer doesn't document and can't recreate the problem
2. Customer waits too long to report an issue

FAQ's

How do you know if it's really an issue or a glitch?
Try to recreate it a few times

How should you report the problem?
This depends on the vendor's escalation process

What should I do if I can't recreate the problem?
Make sure the initial occurrence is reported and keep track of it. Make sure the vendor is aware

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Service Level Agreement: Compliance

A documented track record of how well the vendor is meeting it's customer support commitments.

Red Flags or Things to Look Out For

1. A vendor is not required to track it's compliance
2. There is no mechanism in place for a vendor to use its compliance program to improve support

FAQ's

What happens if statistics show that a vendor is not meeting it's obligations?
You can use this track record as criteria to kick in penalties should that be necessary

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