Electronic Medical Records:  
Selection and Contract Negotiations

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Electronic Medical Records are being implemented at physician practices across the country. There are success stories throughout the medical community of practices that have implemented an Electronic Medical Record (EMR), become paperless, realized financial benefits, reduced staff, and increased their charting compliance. Conversely, there are many physician practices who have not been able to bring their EMR live, who have invested large amounts of monies to see expensive hardware sitting in a room, attempted to use the EMR software only to find it doesn’t support their practice patterns, run into obstacles with hardware and software support, and eventually given up on having an EMR.

What makes one practice successful with their EMR and the next similar practice unsuccessful? What are realistic expectations of an EMR? What are the true costs of the EMR? What are the realistic benefits that can be achieved by each different EMR system? What changes must a physician practice make internally in support of a successful EMR implementation? These are questions that need to be answered by all practices considering an EMR system, and those who are in the process of installing an EMR.

Electronic Medical Records selection and contract negotiations are two phases that are underestimated in their long term effects on the success of the project. The amount of knowledge and effort it takes to arrive at a successful selection of a software package and then complete contract negotiations in a way that minimizes surprises during implementation is often not realized at the outset.

This paper will address major components of the selection and contract negotiations phases as well as give some background into the current state of EMR systems and the vendor types in the market. Software development life cycle, vendor viability, implementation options, implementation success and failure definition, cost analysis, hardware and software support and maintenance will be discussed in varying degrees of detail. It is the belief of the authors that a successful EMR implementation is within the grasp of all physician practices under the right circumstances and at the right time.
State of Electronic Medical Records

Product Development Life Cycle
Software is developed over a period of time by programmers or software engineers. All software of all types has been determined to go through a product development life cycle. This cycle tracks the development of software from design through peak functionality. The phases are as follows:
- Design
- Coding
- Testing
- QA/Maintenance
  - Design
  - Coding
  - Testing

Developing software from initial design through QA/maintenance at peak functionality usually takes about 5 years. That means that software that has been in existence for 2 years has 3 years to go before reaching peak functionality. After that, a company must continually upgrade their system software including operating system, hardware platforms, and databases as well as programming languages used. Eventually, however, due to the ever-changing nature of technology, the software will become out of date and require reengineering from base. At that time of re-design the clock starts ticking again and the product life cycle begins all over again at the first phase.

Vendor Viability
We have all read about the dot.com disasters. The fallout from these same disasters has been hitting the EMR vendor segment of the information systems industry. And they will continue. Many new companies enter the market and many companies exit the market every year. Companies fail or are acquired by other companies regularly. If they fail, they frequently fail for business reasons such as lack of capital to sustain them for the time it takes to establish a market foothold. Some products get acquired. The acquisition is usually for one of two reasons; the software is good and is close enough to full functionality that it is financially more beneficial to acquire the company than start development from scratch; or the company has a strong customer base and a cash flow stream that is lucrative and attractive. If the vendor is acquired for the first reason, customers will find there is little impact on their service or product viability. If the vendor is acquired for its customer base, the current product of the acquired vendor often begins to fall behind in service and enhancements – and usually becomes unsupported shortly after the first year. This forces current customers to make the decision to either repurchase software from the new vendor or go back into the market to search for yet another solution.

So how do we pick a good vendor that will be around for many years? How do we select software that won’t be phased out in a year or two or three? Picking a vendor with solid functional base for physician practices is the first step. You must also review the company financials, evaluate sales and marketing efforts, evaluate the EMR market trends in the area, and complete a comparative analysis on EMR systems. Select the best software in the market
and your chances of having that software supported even if the company is purchased in the future are very good.

Vendor Types
For the purposes of this paper, we are going to discuss two high level types of EMR vendors. These two types are **generic** EMR vendors and **niche** EMR vendors. **Generic** vendors are those whose software will support all types of practices from family practice and pediatrics to specialists of all types. Many generic vendors market to the larger physician practices; others market to smaller physician practices; and still others market to all sizes of practice. These vendors usually offer a prescription-writing module with allergy checking, problem list tracking, interfaces or integration with a practice management system, procedure coding, note taking, screen building, and reporting functionality. **Niche** vendors are EMR vendors that cater to a particular specialty such as cardiology, allergy, gastroenterology and ophthalmology. They usually offer that same basic functionality but have less flexibility in note taking area or in the screen building area. They might or might not offer interfaces or integration with practice management systems.

EMR systems may or may not be web-enabled. Web-enabled means the software functionality is available via Internet browsers. If they are web-enabled, vendors may or may not offer to run their software on an ASP model. ASP means Application Service Provider. The ASP model offers clinics the ability to setup an EMR with the vendor managing the hardware and software at a remote site. The practice connects to their EMR through an Internet connection.

Selection Process
A medical group must select an EMR that closely fits its practice needs. An EMR touches many different personnel within a practice but affects the physician(s) primarily. Others affected are the administrative personnel including registration and billing, nurses and other clinical personnel and the technical support team. All of these areas must be represented during phases of the selection process. Each has their set of priorities and concerns about an EMR and how it will affect their job or practice. At the end of the process physicians are the most affected and must be willing to devote adequate time throughout the selection and implementation process to ensure a successful selection and implementation.

The areas affected by an EMR are diverse. All must work together to choose a single system that best meets their needs and the needs of the practice overall. Often the actual selection of a system takes months or even years, causes stress in the office workplace and results in a less than satisfactory choice for one or two areas. A good selection process allows a practice to review and choose an EMR system in a streamlined manner, defines practice needs, includes all the different practice areas affected, and educates all the selection group members in what software can and can’t do. A good selection process also highlights process changes that will have to occur during implementation and minimizes unknowns that might occur during implementation.
Cost Analysis
Nothing is more frustrating than to expect to pay a certain amount for a product, then half way through the installation of the system learn you need to pay much more than expected to complete the implementation. To determine the full costs of an EMR, you must know all the steps involved, from installing a network, workstations and servers to training your employees, to external support costs and third party software expenses. Here’s what often happens. Initially, the practices receive a quote from the vendor, which outlines the major costs associated with the installation of their EMR system from their point of view. They will tailor the quote to the size of the practice, number of workstations, number of users, etc.; however, they usually don’t include any costs not being paid directly to them in the transaction. Understanding these and other technical components required for a successful implementation is essential in determining total actual costs. The categories of costs that need to be analyzed include hardware, network, EMR software, third party software, training, installation, software configuration costs, hardware/network installation costs, maintenance costs, and process change costs.

Contract Negotiations
Many practices are skilled at negotiating personnel contracts, lab contracts, and supply contracts. Software contracts have many different nuances and require a skilled person to successfully complete a software contract that protects the practices and ensures the costs are fair and no hidden costs arise in the future.

How Can CISCON Help?
CISCON’s experienced team of consultants specializes in the selection and implementation of ambulatory and hospital based clinical and financial systems can assist in this complex, challenging and often costly process. Their services:
- Guide practices through a proven selection process
- Shorten timeframes for selection
- Bring practices together to a common conclusion on EMR system best for them
- Define the practices’ needs that are driving the selection process
- Educate the selection group on EMRs
- Review and negotiate cost conscious contracts to protect practice
- Define all costs associated with an EMR, internal and external
- Assist with process reengineering definition
- Define skill set needs to implement and manage an EMR

Summary
The challenge of selecting and implementing a new EMR or practice management system can be risky and costly. The healthcare industry has become more and more complex; and so has the software that supports it. Physicians and their staffs have their hands full managing in this environment. By engaging the assistance of experienced professionals who specialize in this area can significantly reduce the risk, save the practice unnecessary costs and enhance the overall success of the project.