



Selecting a Combined Electronic Medical Record and Practice Management Product

Practice management (PM) systems have reached major market penetration (more than 85%) over the last 25 years, so physicians have become comfortable with pervasive administrative functionality (billing, tracking and reporting) of in-house applications or outsourced financial services as a part of daily operations. The advent of clinical automation or the electronic medical record (EMR) also requires physician usage and interaction to be successful, but the adoption rate has been slow to emerge. EMR adoption has been torpid for many reasons (e.g., funding, risk aversion, fear of change, confidence), but momentum is gaining due to the alignment of financial incentives (ROI and proposed CMS reimbursement), new technologies and flexible automation workflow that parallels a physician's manual routines.

Lofty physician EMR adoption projections from the consultant community range from 70-100% within the next several years, but, these estimates do not factor in healthcare's risk adverse past or the confused definition of an Electronic Medical Record. Physician practice-based EMR (Over 500,000 non-hospital affiliated US-based physicians) adoption may be no more than 5% as opposed to the current national range of 14-28% estimated by the consultant community, so look for a more realistic 30-35% annual growth reaching 50% market adoption by 2009.

Many organizations have documented readily available reports on the benefits of an EMR [e.g., Institute for Healthcare Improvement (IHI), Institute of Medicine (IOM)] and many organizations provide roadmaps to implementing an EMR (e.g., AMIA, www.chcf.org); However, a national dialogue is missing on how to select an EMR. There are hundreds of regional vendors selling EMR applications, yet very few have the viability to withstand the enormity of national change (ICD10, HIPAA, CMS reporting) and growth projected in the next 5 years. Careful scrutiny and conscious deliberation is required to prevent an expensive clinical automation mistake and to ensure a successful EMR deployment. Eight guidelines of decision-making will increase physician adoption and the resulting practice's percentages in achieving a successful EMR and practice management outcome.

Perform Due Diligence

In 2004, 35% of physician offices made EMR vendor decisions without looking at competitive alternatives. Though fortuitous for a vendor sales representative to not face competition, comparisons ensure practices are getting the best product for its needs. Minimally, physician practices should conduct 4 due diligence processes when selecting an EMR vendor.

Do not rely on vendor demonstrations to provide the criteria for your EMR selection. Needs analysis processes are a little more time-consuming, but, risk is greatly reduced by constructing your own needs list of required features and comparing functionality to that of at least three vendor's EMR solutions.

The next process is to validate the needs list responses by inviting your final vendors for an on-site product demonstration. Some regional vendors (e.g., eClinicalWorks, ChartLogic) prefer to demonstrate product functionality by use of Web-based applications. Even though these vendors usually offer less expensive EMR alternatives, approach these players with caution because lack of local demonstrations is commonly indicative of ill-afforded distribution channels, the service level you are likely to receive and, in most cases, it raises financial viability questions. While validating the needs list also look for product flexibility outlined in the Application Functionality section below.

Time is a premium in physician practices, so approximately 25% of 2004 decisions were made without making reference calls. EMR decision makers claim that vendor viability, customer service and vendor implementation methodologies are the three most important criteria when naming an EMR vendor a finalist and the best form of discovery is the reference call. Reference calls validate the quality of vendor services and can expose weaknesses in a vendor's otherwise compelling demonstrations. Practices calling 3-5 references matching its organizational culture are more successful because discovering that an EMR vendor is at risk with its current client base will prevent a bad decision. Sales personnel will rarely provide bad references, so search for other potential vendor users to verify service satisfaction through regional trade organizations, peer groups, and trade publications.

Practice managers continually claim that doctors could

ill-afford the time to go to remote site visits; however, site visits are necessary to begin the training process, a source of understanding implementation requirements, and a means to learn successful lessons of an EMR deployment. An unsuccessful EMR deployment is far more costly than a trip's travel expenses when considering investment, resources, delayed or missed billings, or regulatory fines.

Validate Application Functionality

The on-site demonstration is critical when validating that a vendor's applications meet a practice's needs; however, it is important to review HOW needs are met. Specifically, how a vendor provides flexibility, innovation, integration and workflow to increase physician adoption are the most critical to review.

Many vendors use "templates" as a validation of flexibility, yet, building the templates requires a technical resource. Further, if the template fields are not reportable, or are not discrete elements, data extraction becomes a hard-coded exercise and inflexible. It is equally important to ensure that vendors can tailor screens (e.g., physician worklist), forms and output to your practice workflow in addition to providing easy template tools, a library of templates, and easy template field extraction tools. When analyzing workflow flexibility also include image management (e.g., scanning, user work-list, access) functionality to ensure that electronic registration, patient chart and billing documentation can be shared with all interested parties. Finally, the documentation process must be easy to use and single-screen routines are more acceptable to physicians than confusing multiple-screened, drill-down routines.

The Internet has become the pervasive medium for patient education, CMS coding, prescription management, claim submission, and provider communication, so vendors must have applications that are Web-enabled. Character-based applications or non-de facto architectures can not deploy URL usage, so will limit physician fingertip access. Web access and clinical applications are more flexible to a physician's workflow if offered on a portable tablet, PDA or remote device and only affordability and timeliness differentiates between a wireless or cradle-based access methodologies. Either way, decision makers must ensure vendors have patient portals, flexible web deployment, can help the practice build a web portal, and have innovative

solutions for physicians to access clinical information.

Finally, front-end PM patient scheduling and patient location data must be seamlessly available to the EMR and a user-involved process (e.g., run routine, message sending) should not be the means of integrating this data. Other features such as negative lab results, unsigned charts, patient flags, and E&M coding should be seamlessly integrated into the physician's work files.

Select National vs. Regional

30% of today's Physician-focused regional vendors will consolidate by 2007 (e.g., Cerner acquisition of VitalWorks) due to the increased resources and complexity required to support expanding client bases. For example, EMR vendors will need to invest \$2-3 million dollars to adopt ICD10 coding by 2007 ill-afforded by regional vendors. Even if a regional vendor could afford the continued development resources, EMR vendors conducting business in 50%, or more, of the United States attract business partners (e.g., CodeCorrect, Informix, 3M) that provide specialized services (e.g., state-specific medical necessity/LMRP coding) to continually enhance federal and state regulatory updates helping vendors to comply with local maintenance contracts. National vendors embed national and state-wide knowledge into ongoing business operations, so practices can reduce viability risk by selecting vendors conducting business in 50%, or more, of the United States.

Select Clinically-Focused vs. Practice Management Vendors

In 2004, eighty (80%) percent of EMR decisions have resulted in, or have been combined with, replacement of the practice's existing PM application by the EMR vendor. The reasons most cited by decision makers when asked why they selected a single vendor for both applications were singular support and the greater relevance of clinical data. Many vendors still focus on financial applications (e.g., MicroMD, IDX, SequelMD) and some focus on EMR (e.g., iMedica, AllScripts, Bond Technologies); however, a vendor focusing on both would provide less support headaches, and cleaner product modularity with embedded integration.

A vendor also selling acute care clinical applications employs diverse staff clinicians, not just programmers. This talent pool provides a physician practice additional clinical resources to tap increasing the likelihood of a successful EMR deployment, a clinician-friendly application, and a better quality of support. For example, A4 Health System's sells HealthMatics ED in its product portfolio in addition to its Healthmatics Ntierprise and EMR products, so internal clinician's enabled electronic chart viewing and movement from hospital ED to remote physician practices. In summary, practices can expect added value when selecting an EMR, if that vendor offers other clinically-focused products.

Select Primary vs. Specialty Care Vendors

90% of EMR applications have common functionality, so to increase the probability that a vendor understands a practice's culture and operations, decision makers should map the EMR flexibility to its workflow. Most EMR applications are developed for the most complex primary care environments (the first contact with the healthcare system), but offer flexibility to specialists through "templates". Top-tiered EMR vendors have libraries holding hundreds of templates previously built by themselves and other practices utilizing its EMR application. As previously mentioned in the Application Functionality section, Practices should not be fooled by demonstrations passing off "canned" templates as flexibility, and, instead, should challenge that the practice can easily negotiate the EMR vendor's template building tools. Many vendor building tools have been reported as complex (e.g., Nextgen) or inflexible, so practices should look for easy "template" building tools and product flexibility in the way of screen design, workflow, inquiry and reporting.

Specialty practices, many times, will feel that the popular EMR applications are too complex for its operations, however, specialty practices should assess whether a vendor's current unnecessary functions can be "turned-off" and whether they may be needed again in the near future if the practice grows. Finally, "specialty" vendors tend to be small (e.g., DigiChart) with tenuous survival resources, so, look to "primary" vendors with excellent specialty "templates", easy building tools, and flexible systems before selecting a specialty vendor based upon unique content.

Select a Unified Architecture Vendor with Singular Architecture Strategy

Multiple database platforms have evolved for the PM and EMR applications due to vendor acquisition strategies. If left to practice physicians and managers, a singular product including PM and EMR functions would have been delivered years ago, however, that was not our heritage. Instead, vendors focused on legacy PM sales while: 1.) Developing next-generation clinical applications on new-age platforms or; 2.) Acquiring the best available EMR vendors they could afford. Either way, integration efforts were needed to create a product that could co-exist in a singular practice environment, so multi-database, or "unified", strategies were deployed to interface/integrate PM and EMR financial, coding, and clinical data.

Historically, practices have tolerated different EMR/PM application look-and-feel due to a minimal impact on differing job functions, and still perceive that multiple databases reduce "down-time" risk. In 2004, smaller practices selected vendors with seamless "unified" database architectures (e.g., A4 Health Systems) over those vendors with two disparate databases interfaced to one another (e.g., Misys, GE). Even though most practices do not research database architectures when selecting an EMR, practices should analyze a

vendor's singular architecture strategy prior to making a selection and assess the long-term cost of conversion, upgrades and support if not converting to the new architecture.

It is expensive to support and integrate two separate platforms, so viable vendors have chosen a pathway to consolidate EMR and PM onto singular databases and singular platforms. Over 35% of vendors will re-architect EMR/PM applications onto a singular Microsoft-based platform (.Net) and database (SQL) by 2006. As much as this strategy benefits the vendor it will also benefit the end-user by:

- Increasing information access (Web and on-screen queries);
- Consolidating clinical and financial reporting (e.g., "outcomes") data;
- More frequent and higher quality vendor-generated enhancements;
- Simplifying training with a single common look-and-feel;
- Reducing hardware expense.

Invest in Implementation Services/Support

The most overlooked and under-budgeted EMR purchase is that of vendor services. More specifically, the reason most cited for an EMR implementation failure is too little training, so prior to selecting an EMR vendor, seriously evaluate your practice's training and total service needs and ensure the vendor-of-choice offers them.

The second most cited reason for EMR failure is inadequate resources. Few practices have adequate

resources (especially those with 10 physicians or less) for duplicate job functions required of a compressed EMR implementation, so they must invest in vendor services to be successful. Non-coincidentally, practices investing 25-50% of its EMR software acquisition cost into training and services have had a tremendous advantage in success, adoption rate and retained benefits over those practices that did not. Furthermore, practices should select an EMR vendor based upon its service emphasis, training investment, methodologies and support services to reduce the risk of EMR failure. Practices without technology resources should look to vendors with support services such as remote monitoring services (analyzes hardware health), disaster recovery services, automatic system updates, patient portal creation, on-site training, and 7/24 support lines.

Select Viability/Healthcare Heritage

The final guideline for selecting an EMR vendor is to select a vendor with a healthcare heritage and the viability to weather unforeseen storms. A healthcare heritage means that a vendor garners 100% of its revenues from healthcare, so must continually monitor the pulse of its client base to stay in business. In 2004, many practices must replace PM applications because vendors are no longer supporting, enhancing or selling its legacy product, its vendor has been acquired by a company no longer understanding healthcare practice dynamics or the vendor is a financial risk. Even though many excellent EMR products are being delivered by vendors new to this market, practices could reduce risk by looking at financial statements, longevity and historical growth of a prospective EMR vendor.

Summary: "How-to" EMR implementation instructions and sources spelling the benefits of EMR are pervasive, yet, the most important criteria of a successful EMR deployment is the selection of an EMR partner that fits a practice's culture and is viable to support and enhance its product. Since 80% of EMR decisions also include replacement of existing PM applications, decisions should assess the combined applications from a single vendor. To reduce the risk when selecting a combined EMR and PM vendor, practices should:

1. Perform a 4-process due diligence on three prospective vendors;
2. Analyze HOW a vendor responds to flexibility, innovation, integration and workflow;
3. Select vendors conducting nationwide business in, at least, 25 states;
4. Look to clinically-oriented vendors with combined PM applications;
5. Search for vendors with expertise in primary care applications;
6. Choose a vendor delivering a "unified" architecture while articulating a "singular" architecture vision and strategy;
7. Spend 25-50% of the total EMR software expense on training and services by a vendor emphasizing quality service;
8. Research financial viability.

Using these basic guidelines, practices can ensure that the right-fit vendor is selected to help reach the many benefits of the combined EMR and PM.

Analyst Note: When looking at the stable of nationwide EMR/PM vendors, one of the leading vendors strongly meeting the above criteria is Raleigh, NC-based A4 Health Systems (A4). In my opinion, A4 has a clinical orientation with a thirty year healthcare (including acute care) heritage, a stable financial balance sheet showing healthy growth, flexible applications, an integrated EMR/PM architecture (with a "singular" strategy) and best-in-class services to ensure a successful EMR strategy. Physician practices looking for a viable combined EMR/PM partner should assess A4.

This information is the property of The Allison Group and not to be used or copied without express consent.