EMRs—A Game Plan for Oncology Practices

by Dan Bedrosian, MBA

The benefits of implementing an electronic medical record (EMR) in an oncology practice have been amply documented. These include increasing practice efficiency by streamlining workflow, reducing staffing needs in the medical records area, reducing redundant work processes, and improving charge capture. Looking at the benefits alone, the decision to replace paper-based processes with computer-enabled processes seems easy. But EMR adoption is *not* a simple process. Oncology practices are currently adjusting to the many changes mandated by the Medicare reform law. Practices may be hesitant to commit the time and expense required to transition to an EMR system.

In the current healthcare environment, all oncology practices considering EMR adoption face the same basic questions:

- Is *now* the right time?
- How much will the system cost?
- How do we know what system is right for our practice?
- What steps can we take in the selection process to help ensure successful implementation?

Now or Later?

Some recent articles have suggested that practices should take a wait and see approach. Wait until the government mandates that the various systems can share information. Wait until systems become easier to use over time. Wait until the price of EMRs comes down.

Why buy now? One good reason is that putting off EMR adoption means foregoing the tangible and intangible benefits of using an EMR today. Many of these products are already easy to use, and your practice may wait a long time before the government even defines interoperability. Once interoperability standards are defined and mandated, it will be several years before vendors are required to conform. At that point, only the strongest vendors will invest to meet this mandate, and other vendors will likely exit the market. Bottom line: a market with fewer vendors is not the prescription for price reductions.

How do you know now is the right time for *your* practice to select and implement an EMR? A leading indicator is when frustration with existing paper-based processes is high. Practices with a shrinking operating margin will be attracted to the tangible benefits that an EMR may offer.

Before going any further, however, the practice must answer three questions. First, does the practice have access to sufficient capital, either cash reserves or a line of credit, in order to make the initial and ongoing investment in the system? Second, is the practice willing to commit resources to EMR selection and implementation, including the redesign of existing processes, hiring EMR support staff, system building, training, and system testing? Most important, are practice physicians willing to change in order to make improvements?

Keep in mind that the benefits of an EMR system are not automatic. The entire selection and implementation project must be managed toward realizing the benefits. Common barriers to successful implementation include physician and staff non-compliance, budget overruns, loss of momentum due to day-to-day and other urgent matters, key staff turnover, a lack of skilled trainers, inadequate staff training, and incomplete test plans. Practices that anticipate these barriers and devise strategies to surmount them increase the likelihood of achieving the desired benefits from EMR adoption.

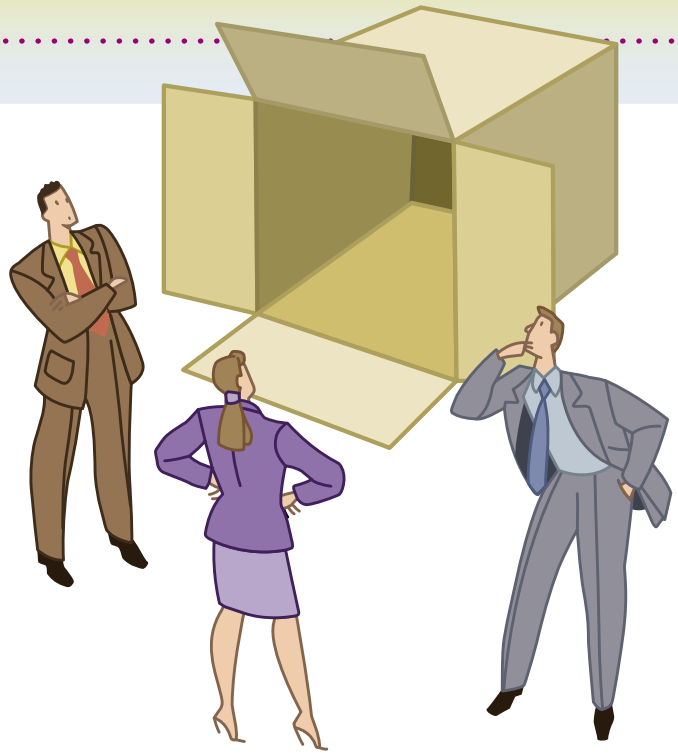
Physician and Staff Pushback

Physician resistance is quite typical and often for very good reasons. For physicians, using a workstation or handheld device is more time consuming than using pen and paper. When an EMR is implemented, the practice will need to plan for a temporary decrease in patient throughput until all users become more proficient with the system. On the plus side, however, if your practice has spent the time to redesign your business processes as a part of the planning phase, EMR implementation will result in time saved in other practice areas. For example, in staff time spent looking for misplaced patient records, looking for a lab result within the patient record, or in a reduction of redundant office tasks. Over time, as physicians, nurses, and other practice staff adapt to the new processes and the system, patient throughput will increase.

Although some have argued that the benefits of an EMR accrue mostly to payers and employers and not to physicians, the benefits realized by your practice may be great enough to justify the expense. Beyond the tangible benefits, intangible benefits exist that may be difficult to quantify. These intangibles include increased staff satisfaction from improved workflow, increased patient satisfaction that accrues from streamlined work processes, and more complete patient documentation.

Budget Blues

Practices need to be wary of under-budgeting for the new system. Vendors will quote the price of the software license, implementation fees, and possibly the server hardware. This may be only *half* of the total cost of implementing and running your practice's new EMR system. Your budget must include additional start-up expenses, such as additional workstations; additional network infrastructure to support the workstations; vendor out-of-pocket expenses during the implementation;



ILLUSTRATIONS/PICTUREQUEST

staff time for system building, testing and training; staff travel for training; and possibly consulting assistance.

Practices must also plan for ongoing expenses as well—hardware and software maintenance fees, a systems administrator, and hardware depreciation expense. You may have a part-time systems administrator now for scheduling and billing, but the addition of an EMR will mean increased responsibilities for this position. While hardware depreciation expense is a non-cash item, practices need to be aware that hardware is subject to rapid obsolescence. Four years down the road, your practice does not want to face the need for an upgrade to address chronic system slowdowns only to find that no money has been set aside to meet this contingency.

In addition to the direct costs of an EMR, practices face a variety of risks. These include risk of vendor failure (i.e., the company goes out of business), product failure (the system does not meet your requirements), and implementation failure. The first two risks are not within your control once your practice has purchased the product. However, practices following a structured selection process that includes a thorough set of due diligence tasks can mitigate these risks. Avoiding implementation failure is more fully within your control.

Resource Commitment

Once your practice has evaluated the costs and benefits, addressed the risks, and put in place measures to cover the critical success factors (see page 30), your practice must commit to the selection process. While resources will vary depending on the scope of your project and practice size, ideally resources are needed for two main work groups: the EMR Task Force and the EMR Selection Committee.

EMR Task Force. Most of the selection work is performed by this group, which will be composed of practice staff members who have the best understanding of their job task's workflow. This group defines the EMR requirements, prepares bid documents, evaluates results, attends product demonstrations, conducts reference calls, attends site visits, and makes recommendations to the EMR Selection Committee. Some staff may serve on both committees.

EMR Selection Committee. Comprised of the leaders of the practice—senior management, office managers, physicians, and nurses—this is the decision-making group. This committee provides oversight for the selection project, ensures that the project stays on track, and eliminates barriers to further progress. Using the recommendations prepared by the Task Force and the agreed-upon selection criteria, the Selection Committee will make the final decision on the vendor of choice.

Finally, the practice should identify an ***EMR Project Manager.*** This individual is the glue that holds the project together. Ideally, the project manager will have experience in coordinating the efforts of multiple parties toward a goal. The project manager works with the task force, selection committee, and vendors; schedules demonstrations, site visits and reference calls; compiles project documentation; creates status reports; develops presentations; and ensures that the project stays on schedule. This role calls for someone who will communicate with all parties on a continuous basis.

In fact, the EMR Project Manager's responsibilities may be so great that your practice may need consulting assistance for this role. Consultants experienced in the EMR market can also provide valuable research about the marketplace, allowing your practice to concentrate its efforts on only those vendors most likely to be selected.

Ready, Set...Wait!

Your organization is excited about the EMR's benefits, staff is committed to the success of the project, your budget is secured, your resources are lined up, and you're ready to go. But wait! Before project kick off, take time to prepare a set of project guidelines and communicate these to all project team members. This step helps ensure that everyone stays on the same page through the selection process. Suggested guidelines include the following:

1. **The selection process is really an elimination process.** Your practice will start with a list of likely vendors. Put them through a series of hurdles designed to distinguish the strongest candidates and eliminate the weaker vendors. Under this survival of the fittest methodology, you will identify at least two viable alternative solutions.

2. **The selection process should center on active user participation and significant user concurrence with the process, interim decisions, and the final vendor selection.**

continued on page 30

The EMR Project Timeline Game

START—The EMR Project Manager should develop, document, and publish a project timeline that outlines a structured process of activities and tasks assigned to appropriate project team members. The project timeline should set aggressive, yet achievable time frames for completing these activities. The following activities are suggested; some may be scheduled to run concurrently.

STEP 1: REDESIGN BUSINESS PROCESSES—The EMR Task Force members examine the practice's existing business processes, identify areas when time is lost, rework is created, and errors occur. On at least a high-level basis, they will rethink these processes and how they would be performed differently given online clinical information and other system functions.

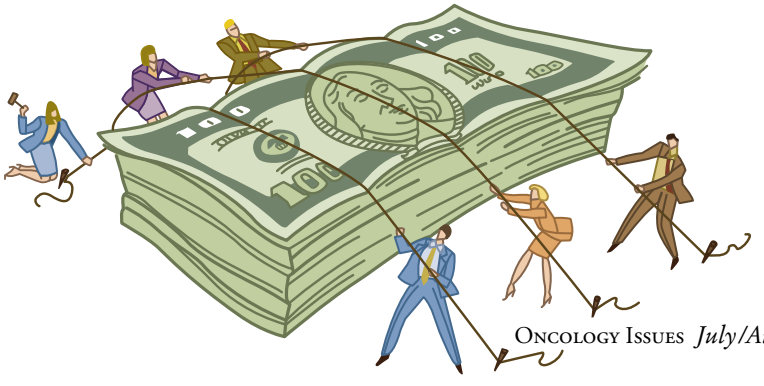
STEP 2: DEFINE FUNCTIONAL REQUIREMENTS—Based on the redesigned business processes, the EMR Task Force defines the functional requirements that will enable them to perform the daily work as described in Step 1. To ensure a meaningful vendor response (i.e., more than a simple "yes" or "no"), functional requirements should be written in an open-ended, narrative format. For example: *"Describe how your system supports online treatment plans, including plan creation, update, and documentation."*

STEP 3: DEVELOP TECHNICAL REQUIREMENTS—The EMR Task Force members responsible for system support develop technical requirements to determine what will be needed to run the system in the practice environment. This information will help determine if the practice will need to train support staff on new skill sets or if new, supporting technology will be needed to run the system.

STEP 4: IDENTIFY VENDORS—The EMR Project Manager, working with the EMR Selection Committee, identifies a short list of vendors to evaluate. Remember, the more vendors included in the process, the longer it will take to evaluate the vendors' responses. The practice should focus efforts on only those vendors that are financially viable, within the practice's budget, and that offer the desired functionality.

STEP 5: DEVELOP RFPs—The EMR Task Force develops a Request for Proposal (RFP) document. The document will include background information on the practice (activity volumes and business objectives); a solicitation of vendor background information; the functional and technical requirements; a request for client references; and a request for a sample contract that includes pricing for each of the application modules within the project scope. Before the RFP is sent to the short-listed vendors, it should be reviewed and approved by the EMR Selection Committee.

STEP 6: SCHEDULE VENDOR DEMOS—Once the RFP has been distributed to the vendors and is pending their response (a three- or four-week period), plan a demonstration agenda. This schedule can identify how much time will be needed for each vendor to demonstrate each module. Typically, this works out to a full-day of demonstrations in one room for each vendor, but your practice can tailor this step to fit your needs. Projects with a limited scope may need only a half-day for a demonstration, while larger scale projects may require multiple rooms for two days for each vendor. To keep the project on track, assume that all vendors will be selected to demonstrate and schedule them in advance. You can always cancel once you've evaluated their RFP responses.



STEP 7: CREATE DEMO SCENARIOS—In preparation for the vendor demonstration, the EMR Task Force develops real-life scenarios, drawing from situations that occur in the practice's daily work flow. This prevents the vendors from simply demonstrating to their strong points, and focuses on real-world issues important to your practice. Base these scenarios on your practice's redesigned business processes so that you can evaluate how each system allows the process to work. These scenarios should be distributed to the vendors in advance so that they can tailor the system to your needs. *Tip: Create an evaluation form for demo attendees so that they can indicate how well each vendor met their needs. Allow space for attendees to add comments on the benefits/issues displayed by each system.*

STEP 8: EVALUATE VENDOR RESPONSES—Once the RFP responses have been received and the EMR Task Force begins the evaluation process—remember your original business objectives and selection criteria. It is easy to be distracted by "special features" that appear beneficial on the surface. As you evaluate the vendors' responses, you will soon find that no perfect vendor solution exists. You will be selecting vendors that best meet your overall needs and eliminating the remaining vendors. The EMR Task Force will share the results of the evaluation with the EMR Selection Committee and recommend a short list of vendors to continue with. Notify all vendors as soon as possible once you've determined whether or not they will be invited to demonstrate.

STEP 9: NARROW VENDOR FIELD—The EMR Task Force, EMR Selection Committee, and other interested practice staff can participate in the vendor demonstrations. Once the demonstrations are concluded, the EMR Task Force will collect the evaluation forms, tabulate the results, and share the results. Their recommendations, including suggestions for which vendors to eliminate, will be shared with the EMR Selection Committee. At the end of this process, your practice should narrow the field to no more than three vendors; two vendors are typical.

STEP 10: MAKE REFERENCE CALLS—The EMR Task Force makes reference calls to their peers at the client sites identified by the remaining vendors in their RFP response. Prepare questions in advance of the calls. Document any benefits and/or issues garnered in the reference calls. Once all calls have been completed, schedule a debriefing session with the entire Task Force and share any identified benefits and/or issues. For each vendor finalist, members of the EMR Task Force should consider attending a client site visit to see the system in operation.

STEP 11: DISTRIBUTE ISSUES LIST—The EMR Task Force compiles individualized issues lists for each remaining vendor, distributes it to the appropriate vendor, and asks for a written response. The Task Force then evaluates these responses to determine which issues can be overcome and which could be showstoppers.

STEP 12: COMPARE FINALISTS—The EMR Task Force prepares a comprehensive comparison of vendor finalists based on the original selection criteria. The comparison will include pricing and strengths and weaknesses in each of the criterion areas. Results from the RFP, demonstration, reference calls, and site visit activities will be summarized. The comparison will be shared with the EMR Selection Committee along with any recommendations. These recommendations will specify actions the practice should take in the event that Vendor A is selected and another set of actions in the event that Vendor B is selected.

FINISH—The EMR Selection Committee identifies the primary vendor of choice and begins contract negotiations. It is important to have a viable alternate vendor in the event that contract negotiations with the primary vendor break down.

Once the project moves to the implementation phase, all participants must understand, accept, and take ownership of the vendor-of-choice decision. The best way to ensure buy-in is to involve staff in the process.

3. **Responsibilities of users, committees, and management should be clearly defined throughout the entire selection process to achieve a thorough and well-run process.** For example, the EMR Task Force must understand that the EMR Selection Committee will make the final decision and that the decision will be based, not on particular features, but on what is best for the practice.

4. **The vendor selection decision should be based upon key product differences and their business impact on your practice.** Selection decisions should not be based upon detailed point-scoring averages or technological trivia. While scoring vendors on a numeric scale and applying weights based on various levels of importance may be tempting, these mathematical approaches do not take into account qualitative aspects of the vendor and product and often lead to less than optimal selections. Pricing is the only area in which quantitative analysis applies.

5. **The EMR vendor's vision, strategy, and track record should be aligned with your practice's business objectives.** Explain your business objectives to the vendors and solicit feedback regarding their willingness to support these goals. If you are running a large practice, you do not want to select a vendor whose client list is comprised only of small practices.

6. **Documentation of systems requirements and open issues in a format that allows ongoing review and audit should be included in the selection process.** All information about your practice that is shared with one vendor should be shared with all vendors. You must run a fair, above-board process so that you can provide feedback to the vendors regarding your decisions.

Once your practice has selected an EMR vendor, celebrate your success. Then, get ready for phase two—implementation. While there are no guarantees, practices that follow a structured selection process, adhere to well thought-out selection criteria, and keep their business objectives foremost in mind throughout the process will eliminate many of the common pitfalls that plague EMR selection and set the stage for an implementation that will enable you to meet your practice's goals.

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CRITICAL SUCCESS FACTORS

How to Avoid Selecting the Wrong EMR Vendor

- **Define your business goals and objectives.** Identify what your practice expects from the system and set measurable goals. If you don't know what you are trying to achieve, you won't be able to manage the process so that it leads to a successful outcome.
- **Define the scope of the selection project.** State what the selection project will include. Which application modules and interfaces will be required to achieve the goals you have set? You will need this statement when you request pricing from the vendors.
- **Define the vendor/product selection criteria.** These are aspects of the vendor and product that will be evaluated throughout the selection process. Depending on your practice's unique circumstances and needs, some criteria will be given greater weight. Selection criteria categories can include vendor financial viability, alignment of the vendor with your practice, vendor support for the system, product functionality, total costs, and the future direction of the vendor and product.

- **Ensure that the *entire* organization is committed to the project.** This factor can be the most difficult to assess and achieve. The practice must be willing to devote staff, money, and time to the selection process. If staff is not committed to the selection, project activities will be delayed, staff turnover will occur, and momentum will be lost. Since vendors and their products change over time, your practice may even be forced to start the project over again to fairly evaluate the vendors and their latest system versions.

Hospital Programs Also Face Challenges in EMR Adoption

Health IT spending is starting to widen out from the larger hospitals and healthcare systems to include IT investment by community hospitals and larger physician practices, according to a recent article in *Hospital & Health Networks Magazine*.[1] For many hospital-based cancer programs IT holds the promise of the "best of times" through interfacing and integrating systems, reducing redundancy, streamlining processes, improving efficiencies and patient safety, and saving dollars. But there's a dark side. IT also has the potential to usher in "the worst of times" when implementation falters or fails. Programs do not want an IT "solution" morphing into an annoying, unending problem.

Electronic medical records (EMRs) offer "many advantages whether in the outpatient setting or in private practice—standardization, information all in one place, and theoretically more complete patient records [with the potential to] improve patient safety and compliance," said James C. Chingos, MD, CPE, associate professor and chief of hematology/oncology and associate director, clinical affairs for cancer services, at the University of Florida in Jacksonville.

"Still, while EMR is much talked about, in point of fact, very few places have it completely implemented. Most have some form of a hybrid where there is a chart that can be accessed electronically and then a computer print out." Given that many hospitals and practices are currently operating in the part-paper-based/part-electronic middle ground—both hospital cancer program administrators and private practice administrators can benefit from the EMR adoption "game plan" on page 28. In both settings, oncology providers face some of the same barriers to EMR adoption: staff resistance, the complexities of identifying and designing needed interfaces, and the challenges of finding the time and resources to meet the ongoing educational demands of training all the system users, said Chingos.

The most obvious common barrier is financial. "Can Your Practice Afford *Not* to Do EMR?" (on page 32) addresses some of the cost and return on investment issues faced by one practice. For hospital-based oncology programs, planning for the huge financial outlay EMR requires is no less daunting.

"Cost is not inconsequential," said Chingos. "With hospitals running barely at break even, the kind of commitment in terms of money is high."

For many hospital-based cancer programs, a primary issue with EMR adoption is how to integrate and interface an EMR with existing hospital systems. The fact that most cancer care is delivered in the hospital outpatient setting increases the challenges. While a hospital's goal may be to have everything standardized—the outpatient ambulatory cancer center does not fit neatly into the rest of the inpatient-oriented hospital program. Barriers include the "fact that outpatient medical records are different than inpatient medical records…and oncology is different from other physician practices…oncology practice software is different," notes Luana Lamkin,

RN, MPH, administrator with St. Luke's Mountain States Tumor Institute in Boise, Idaho. The hospital is "so skewed toward inpatient care, but the oncology program is exactly the opposite."

At Moses Cone Health System in Greensboro, N.C., EMR implementation is underway. John E. Feldmann, MD, FACP, medical director of the Moses Cone Regional Cancer Center, points out that in the hospital setting administrators and practitioners may view EMR implementation through very different lenses. "The benefits of EMR are well established and are usually clear to the administrator looking at the entire hospital operation; however, the physician often views the implementation differently," he said. "For practitioners, the benefits of an EMR are in the future," but the reality of the increased time commitment during the implementation process occurs in the here and now of a busy work day. "The implementation program must take this into account and involves a close working relationship between IT and the care providers," Feldmann said.

Despite the federal mandate that health IT move forward as soon as possible, for many hospitals and physician practices EMRs remain a work in progress. The CDC's National Center for Health Statistics reports that…EMRs are being used in nearly one-third of emergency and outpatient hospital settings. Only 17.2 percent of physician offices are using EMRs. While IT is widely used for billing (73 percent of physicians), only 8 percent report using computerized systems for ordering prescriptions electronically.[2]

Oncology Issues will focus on EMR adoption issues for hospital-based cancer programs in the November/December issue, including IT implications for cancer center budgeting and strategic planning.

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[2]Burt CW, Hing E. Use of computerized clinical support systems in medical settings: United States, 2001-03. *Advance Data From Vital and Health Statistics.* No. 353, March 15, 2005. Available online at: *www.cdc.gov/nchs/data/ad/ad353.pdf*. Accessed May 23, 2005.