The Medical Practice Software Buyer's Guide
A Practical Guide for Physicians and Medical Practice Office Managers

Provided by:

STI Computer Services Inc.

Computerized Practice Management Buyers' Guide

STI offers this guide as a service to help you make an informed decision when purchasing your Practice Management (PMS) or Electronic Medical Record (EMR) System. We believe that the more you know about the choices available to you, the more likely you will be to select the *ChartMaker® Medical Suite* for your practice.

Although there is a great deal of variation among the different types of software out there today, there are really only two main components of medical office software systems: Practice Management Systems (PMS) and Electronic Medical/Health Records (EMR). Both components of an up-to-date medical software solution should address three very simple goals:

1. Increased Efficiency
2. Increased Productivity
3. Decreased Cost

Many practices put too much emphasis on the cost of the system as the sole buying criteria. A medical system is a complex combination of computer equipment, software, training, software updates, telephone support, and hardware maintenance. The following sections will illustrate that cost is just the tip of the iceberg. However, when you do compare costs, compare all of the costs, not just the initial purchase price.

Common Sense vs. Nonsense

"It is unwise to pay too much, but it's worse to pay too little.

When you pay too much, you lose a little money — that is all. When you pay too little, you sometimes lose everything, because the thing you bought was incapable of doing the thing it was bought to do.

The common law of business balance prohibits paying a little and getting a lot — it can't be done.

If you deal with the lowest bidder, it is well to add something for the risk you run, and if you do that you will have enough to pay for something better."

John Ruskin (1819 – 1900)

Increased Efficiency

One major goal of office automation is to reduce the tedious, time-consuming work that is below the optimum work level of your staff. For instance, time spent by office personnel looking for a lost file is time taken away from patient care.

The computer should help you and your staff work at your highest, most creative level. In every industry there remain tasks that are nothing more than time consuming tedium. And sadly, this means that there are people that are paid to punch in day in and day out to complete these tedious tasks. The modern medical practice is no different. But as advances are made in medical software technology, these tasks are slowly but surely being phased out. An up-to-date software system can reduce or eliminate tasks like calling insurance companies to check eligibility or manually finding and re-filing paper charts.

Increased Productivity

The ability to do more work in less time is a primary goal of office automation. A corollary to that, and in some ways a more important one than productivity, is the goal of elevating the *level of work* of your medical office staff.

Everyone divides their workday between work of different levels. For instance, some part of your day is devoted to high level work, such as decision-making, analysis, patient interaction, development of new resources, etc. Conversely, some part of your day is low-level work, such as time wasted looking for lost charts or missing information, doing repetitive tasks, clearing up mistakes, etc. Finally, some work lies at any one of various middle levels.

The objective of improved work in office automation is to have the computer reduce the amount of low-level work *each employee* must perform in a day. It is important to recognize that this theory applies to the receptionist or billing secretary as well as to the physicians and office manager. Your employees will work better and with greater work satisfaction

when they spend the majority of their work hours at their highest level of work. And, of course, the practice benefits because overall better, more creative work is done.

Without these monotonous tasks, staff members will be able to devote their time and creative energies towards much more productive goals. Software solutions can help enhance these goals too. Office staff members will perhaps be able spend their time chasing down unpaid debts or running detailed financial reports, thus gaining more control over office billing practices. Similarly, with up-to-date software, doctors will be able to create more comprehensive chart content in less time than it takes to handwrite, type or dictate a note.

Decrease Cost

Finally, an up-to-date medical software system should help decrease the cost of running your practice. Whether it is completely eliminating transcription costs, or decreasing something as simple as money spent printing encounter forms, a current software system should reduce the amount of money needed to run your practice.

Two Components to an Up-to-Date Medical Practice Software System

When you consider computerizing your medical practice there are two equally important components that you need to consider. There is a clinical side and a business side to your practice.

You need both to run an efficient medical practice. Each piece is equally important if you want to run a profitable medical practice. Obviously you became a physician to practice medicine not to run a business, but without revenue from your medical practice, you can't continue in private practice. So when you investigate medical software you need to carefully evaluate both aspects. Since the clinical side is usually of more interest to a physician, naturally more attention may be paid to that aspect. However, you need to have your office staff involved to investigate the billing function as well.
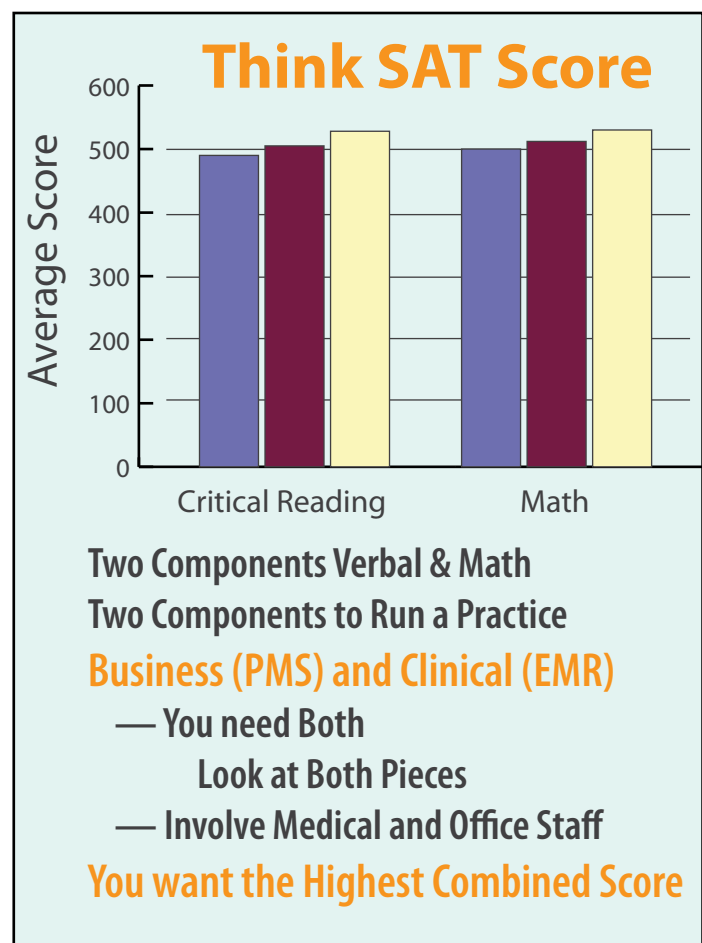
A good analogy is the SAT score. If you want to go to a good college you need to have a high SAT score. Traditionally the SAT score was made up of two parts – math and verbal. If you had a high score in math, but a low score in the verbal side, most likely you would not get into the college of your choice. The colleges are looking for students with the highest combined score.

When you select a practice software system, you should look for the vendor with the highest combined score in business (billing applications) and clinical (EMR) applications.

Don't make the mistake of concentrating your effort on only one side of the equation, or it's very possible that you will be investigating software again in the future.

When you investigate practice software, many vendors may excel on the EMR side or the billing side during a demonstration. However, the very nature of the software industry is that recently designed software is typically not as robust as more mature software. Software gets better as more people use it and request enhancements to make it better.

Because the EMR component is newer, some practices that have purchased very good EMR software from newer, primarily EMR vendors complain of poor billing components. Some practices have had to replace the software because the billing component was not adequate. STI first introduced our billing software in 1979 and our EMR software in 1995 so we have had the time to properly develop both components.

Think SAT Score

Two Components Verbal & Math
Two Components to Run a Practice
Business (PMS) and Clinical (EMR)
— You need Both
Look at Both Pieces
— Involve Medical and Office Staff
You want the Highest Combined Score

Benefits Of An Up-to-Date Practice Management Software

Practice Management Software is the financial component of medical software systems. Practice Management contains the nuts and bolts of the business side of any medical practice. The functions of Practice Management software can vary by brand of software, but a complete program that addresses all of your practice requirements should have most if not all of the following functions.

Electronic Claims Submission

Electronic Claims Submission is vitally important in accomplishing the three goals listed above. If you are not already submitting your claims electronically, you could be losing a lot of money without realizing it. The Center for Medicare and Medicaid Services (CMS) reports that claims submitted electronically experience 21% fewer rejections than those submitted on paper.(1)

Five Reasons to Bill Electronically

1. Less likely to be rejected
2. Notification of accepted (clean) and rejected claims
3. Faster payment
4. Better tracking of claims
5. Automatic posting and checking contracted fees

Furthermore, if you submit your claims electronically, you will typically be notified within 24-48 hours if a claim has been accepted or rejected.

That way, if there is a problem, it can often be addressed within the same day so little time is lost between submission and payment. Also, with electronic submission, you will get paid almost 2 weeks faster. By law, Medicare must pay claims submitted electronically within 14 days, whereas the average pay period for a paper claim is 26 days. (1) And let's not forget the most basic of expenses: labor and postage. With paper claims, you not only have to pay for the paper and ink needed to print the claim, you also have to pay for the stamps and envelopes to get them to the insurance company and the time to sort and stuff envelopes. It may not seem like a lot, but each paper claim costs $1.00- $1.50 to send. (2)

Electronic Transmission of Insurance

"The Health Care Financing Administration now called the Center for Medicare and Medicaid Services (CMS) has reported that it rejects 26% of the claims it receives. While that number is astonishing, more astonishing is the fact that 40% of those rejected claims are never resubmitted. These rejections and lost claims confirm that there are significant billing problems in many provider organizations. Using Medicare's statistics, the lost revenue per physician is about 10%. On a per physician basis, this ranges from approximately $25,000 to over $50,000 per year." (1)

Electronic billing provides practice benefits to avoid the type of results shown in the above CMS study.

First, electronically submitted claims are not manually keypunched or reviewed and therefore less likely to be rejected. Studies show that practices that bill electronically experience 21% fewer rejections(2).

Second, typically within 24-48 hours, you will be electronically notified that the submitted claims have been accepted or rejected. If rejected, they can be quickly corrected and resubmitted the same day.

Third, electronically submitted claims are typically paid faster. "By law, Medicare must pay an electronic claim in 14 days. The same paper claim wouldn't be paid until day 26." (2)

Fourth, electronically submitted claims can be automatically tracked with the proper software. If a claim is not paid within the agreed time frame, a report can be generated, the carrier contacted and the charge reviewed before automatically resubmitting the claim.

Fifth, after you are paid, your contracted fees can be checked to ensure that you are being paid correctly, and then the computer will automatically bill your secondary carrier or patient. In some cases, Medicare payments can also be posted automatically.

In-House or Outsource Billing?

A successful billing process starts with the right practice management and electronic billing software. Once you've chosen your computer technology, the next step is to decide whether to assign the billing function to your own office staff or outsource it to a professional medical billing service.

The billing process relies on getting the correct patient and insurance information into the system. Errors in data entry result in rejections, and it's possible that a claim can be electronically submitted but immediately denied without ever entering the payer's system for processing. Often, staff in the physician's office forget or don't have time to retrieve the next-day reports that will tell you if your claims were accepted. A rejection on this vital report means that your claim was not in fact submitted. If your staff doesn't catch the error in time, the claim may be rejected for timely filing with no appeal possible.

A professional billing service can insure that charges entered by you or your office staff are done correctly and completely, or even enter the charges for you. They will submit your claims, retrieve the next-day reports, and resubmit any necessary corrections. They will record payments and follow up on denials, rejections, and low payments.

Skilled staff at a billing service can review your aging reports for slow pays, uncover unpaid claims that have been purged by the insurance companies, and send bills to secondary payers. Patient bills can be submitted for you, and if you choose, your patients can call the billing service with questions instead of interrupting your busy staff.

The advantage of using an outside billing service is that you reduce internal labor costs and a professional billing service most likely will have more experience dealing with the insurance carriers than your own staff since this is all that they do. That frees your staff to provide better patient service and not sit on the phone talking to insurance carriers.

Since billing services only get paid a percentage of your collections, they need to work your accounts to get paid. For example if a billing service receives 7% of collections, this means for every dollar that they collect, you receive $0.93 and they receive $0.07. To evaluate a billing service you need to determine your internal cost of collections and compare that to the cost to outsource billing plus any additional collections that an experienced billing service can provide. If they can collect an additional $10,000/month you receive an additional $9,300 and your staff is available to do more important work on patient care.

STI has independent billing services companies that have been trained to work with the ChartMaker software. These companies can provide you an option of either an ASP or client-server version of ChartMaker. With an ASP model, your data resides at the billing service location and they are responsible for software, back-up and server costs. With a client-server version the ChartMaker software is installed in your location and you control the billing information and the billing service comes into your system.

The combination of the ChartMaker PMS and EMR system with a professional billing service to verify the accuracy of billing information and to follow-up on claims can provide any practice an advantage. With the ChartMaker EMR a physician can enter charge and diagnostic information directly from the patient chart. That information can be accessed and processed by a professional billing service for processing.

ChartMaker software, in the hands of a trained billing service, may save you time and improve your cash flow. A professional billing service becomes your back office, providing knowledgeable employees who are focused on getting you paid. You may realize lower costs, reduced errors, and increased revenues when you use one of our billing services.

With ChartMaker you have a choice of either doing your own in-house billing, or working with one of our independent billing service companies to process your claims. It's up to you.

Financial Reporting Functions

Financial reporting functions work hand in hand with your offices' ability to bill electronically. What good is it that you can find out about your claim status within 24 hours if you are not able to view that information in a report? An up-to-date software program will give you the ability to run reports to get a full picture of what is going on with the money in your practice.

According to the same CMS report mentioned above, 26% of all claims are initially rejected. As astonishing as that number is, even more astonishing is that 40% of those rejected claims are never resubmitted.[1] This results in an average of about 10% income loss for the physician. Why do you think anyone would let rejected claims go without resubmitting them?

Most rejected claims are not resubmitted because they simply go unnoticed. With proper reporting functions, this should never again be the case.

Similarly, proper reporting functions should allow you not only to realize when you have not been paid for a claim, but also when you have not been paid enough for a claim. Sometimes offices will be paid a few dollars less than their contracted amount. Again, it does not seem like you are losing that much, a couple dollars here and there. But if you are getting underpaid a few dollars on 20% of the 500 claims you send each month, this can translate to several hundred dollars a month! In a year's time, you will have effectively given thousands of dollars back to the insurance companies for work that has been done by you.

Again, this problem is easily addressed with the proper reporting functions in a Practice Management system. And reports do not only have to address insurance companies, (consider how much more effective it would be to renegotiate contracts with reports like these in your arsenal!).

Reports can also discern which provider is bringing in the most money at each location, or which procedure is the most lucrative and which ones are not worth doing. The possibilities are limitless.

CMS reports that the average physician doesn't collect between $25,000 and $50,000 per year due to poor billing procedures.

The Paper Chase

The system you choose should be able to bill commercial carriers as well as Medicare. If your current practice computer is only electronically billing Medicare claims you may be losing revenue as well. Electronic billing to commercial insurance companies is as important as electronically billing Medicare since the 40% estimate of not rebilling rejected claims probably applies to commercial claims as well.

As importantly, many practices face an additional labor cost in tracking hardcopy commercial claims. With hardcopy claims there is no way of knowing if the commercial carrier received your claim or its status without a telephone call for follow-up. The billing staff in most practices complain about the delay in payment from commercial carriers and the amount of time spent on insurance follow-up and requests from carriers for resubmittal of hardcopy claims.

It is no wonder that many busy practices don't collect 40% of rejected claims, with the continuing cycle of mailing hardcopy claims, waiting for payment, telephone follow-up, requests for resubmittal of hardcopy claims, waiting again, another telephone follow-up, etc.

"If you submit claims electronically you have an electronic audit trail that shows when a payer received every claim you sent out." (3) With the appropriate software, you will receive a confirmation and status typically within 24 to 48 hours. If the claim was rejected it can be corrected immediately and resubmitted the same day. Accepted claims should not require a follow-up call and should be paid quickly.

If your practice is not currently electronically billing every possible insurance carrier, your costs can be far greater than the cost to purchase a new Practice Management System.

The above CMS example claims that many providers are losing between $25,000 and $50,000 per year. This is in addition to a *New Jersey Medicine* article showing a fixed-cost of about $300 per month as well as lost interest of between $100 and $300 per month for hardcopy billing. (4)

Enhanced Billing Features

If you are using an out of date system, perhaps the most exciting new features will lay in wait for you within the realm of billing functionality. The latest systems are much more robust and easier to use than their older counterparts.

For example, in the ChartMaker's® Practice Manager module, you have the ability to "scrub" the claims before they are sent out. Whether on a claim by claim basis or on a batch at the end of the day, you can run a test that will generate a report detailing which claims will be denied and why. From there you can go back and fix the problems listed and with one click send out all of your claims with confidence that if the claims are rejected, it shouldn't be due to a billing error.

Another enhanced billing feature is automatic payment posting. Most offices employ someone to look over insurance EOMB's, to manually match the payments to the procedures and then enter this information into the computer on a case by case basis. This is a time consuming and often inaccurate process that can result in more lost revenue to the practice.

Electronically submitted claims can receive electronic remittance advice from carriers to automate and streamline the EOMB posting process to reduce labor cost, save time and reduce errors. An up-to-date system can automatically post payments once they receive the electronic remittance advice.

Would a Computer Help You Provide Better Health Care?

Primary care physicians who use computers to tickle their memories are twice as likely as other doctors to administer flu vaccine to high-risk patients, a new study suggests. The three-year study involves patients who were over 65 or had chronic lung disease, asthma, diabetes mellitus, congestive heart failure, or severe renal or hepatic failure. Patients whose doctors received computerized reminders had a 10 - 30% lower rate of hospitalization, ER visits and tests for respiratory ailments during the winter.

Medical Economics May 10, 1993

Patient Recall

Many offices already utilize a system of reminding their patients when its time to return for an important test or procedure. An up-to-date practice management system can both enhance and streamline these systems. With technologies like mail merge and automated phone reminder systems, computers can effectively remind patients that its time for them to call to schedule an appointment. And if just two more patients per week schedule an appointment, for some, the revenue generated from those appointments can make a substantial difference in the monthly income.

Eligibility Checking

Oftentimes, even the most responsible patients can have a lapse in insurance coverage without realizing it. And usually, this means that their doctor will not get paid for a very long time, if at all. Most offices will call to check on the insurance eligibility of their patients the day before they are seen. No one likes to sit on the phone with insurance companies, including medical office staff. This process is often time consuming and incredibly tedious.

Lately, insurance companies have utilized the internet to speed up this process, but only slightly. Staff members are still required to enter every digit of each patient's group number, ID number, doctor's NPI number etc. As a result, this task can very frequently go overlooked. And that can spell trouble very quickly for an office's income. An up-to-date Practice Management system can gather all of the necessary numbers and data, transmit them to the insurance company's website and respond with a list of eligible and ineligible patients. In some cases, it can even retrieve information about referrals and authorizations.

THE BEST COMPUTER SYSTEM ADDRESSES THESE TYPICAL PRACTICE CONCERNS

Too much time spent on patient bills and insurance forms
Lost time searching for patient information
Pressure to file insurance electronically
Payment delays and tired of typing redundant information
Incorrect patient charges, or lost charges
Not sure if all charges have been billed
Complexity of insurance and government regulations
Lost patient billing information, or patient records
Failure to consistently bill secondary insurance
Fear of patient abandonment charges
No time for collections resulting in high bad debt balances
Office turnover, increasing office administration costs, and poor employee morale from long hours
Feel out-of-control on the business side of the practice
Each provider not properly compensated
No centralized control — one place to find all information

Benefits Of An Up-to-Date Electronic Health/Medical Record Software

Electronic health/medical records are the latest buzz in the medical software world. (NOTE: in this guide we will use the terms EMR and EHR interchangeably.) And it seems that even more information is available on all of the varied and different features available to doctors. But, in choosing an EMR, the same three goals listed above apply.

An EMR must be able to increase efficiency, increase productivity and decrease the overall cost of running your practice. If it is unable to meet these three goals, it does not matter how many bells and whistles it comes with, it won't be a practical tool in managing your medical practice. There are features and benefits to look for, though, when researching EMR software.

Elimination of Paper

Many people underestimate the benefit of ridding their office of the constant paper chase. Often, practices will employ someone whose sole responsibility is finding and re-filing the charts that are used during the day. An EMR completely eliminates the need for this function and immediately reduces costs. This will eliminate the chance of a HIPPA violation, in which a paper chart could be accidentally left in a public place. Plus, no more lost charts. Even the most fastidious of re-filers has been known to misplace a chart from time to time. And every office can relate to the scenario of having a patient sitting in the waiting room with his or her chart nowhere to be found. With an EMR, you should not need to deal with a missing chart again.

An EMR can drastically decrease the amount of time it takes to document chart notes and can increase the quality of the content in some cases. Even if you continue to dictate your notes, using the latest voice recognition software, you will be saving hundreds or even thousands of dollars each year by eliminating the need to pay a transcription service. And you should notice little or no change in your workflow all while taking advantage of the benefits of electronically formatted notes.

If lack of time is the problem, usually the first thing to go is the documentation of normal findings. In most cases, the deletion of normal findings is the main contributing factor to under-coding. Although most doctors will evaluate patients and determine these normal findings, they only have time to document the problems that the patient was being seen for, thus drastically reducing the evaluation and management content in their notes.

Another function of eliminating the paper is reducing the costs associated with it. On average, during the life of each chart the practice spends $15/chart on paper, stickers, binders etc.

The cost of these items individually does not seem like very much, but the average physician maintains over 3,000 charts. So, the cost of maintaining 3000 charts is about $45,000 over the life of your practice.

Similarly, charts do not just take up your money; they take up your space. Due to legal requirements, many offices keep charts for seven years after discharging patients (longer for pediatricians). If your office is paying for off-site storage for paper charts, its a better reason to acquire an EMR.

Pros and Cons of Integrating vs. Interfacing the EMR and PMS

The Interface (Bridge) Dilemma

In today's medical software marketplace most medical practices want a completely integrated Practice Management System and Electronic Medical Record software from one vendor. However occasionally a practice would like to integrate (called an electronic bridge) two distinct software products from two separate vendors for their practice. Although in some cases a practice has no other option then to bridge two products, it is typically less expensive if you can avoid this project. Before undertaking such an effort it is important to understand the complexities in creating and maintaining an electronic bridge.

Bridge Between a new EMR and Your Old Billing System

Some vendors suggest that you interface (bridge) their new EMR with your old practice management software. The argument they present is that because their EMR software is HL7 compliant and that your billing software is also HL7 compliant, that both products can be easily interfaced. Nothing can be further from the truth. The HL7 standard is a compatibility index. This means that both products are capable of being interfaced but it does not mean that the interface will take effect automatically. A good medical analogy is a blood transfusion. If one patient has A+ blood and a second patient is also A+ they may be compatible for a blood transfusion. It does not mean that the transfusion happens automatically, and the blood automatically flows from one patient to another. Someone needs to provide the technology, knowledge, and labor for a successful transfusion.

Integrated or Interfaced?

When upgrading your office software system, it is easier to purchase an integrated system (one with both a PMS and EMR from the same vendor) rather than interface a PMS and EMR from two different vendors.

Interfaces are expensive and add undue stress to maintaining a properly functioning system. An interface requires the continuous cooperation from both companies involved. If one company chooses to upgrade their product, it will be your responsibility to get (and probably pay for) the upgrade of the interface. If you must interface your products, have them sharing only critical information.

STI has experience in interfacing the ChartMaker Medical Suite with other software products and vendors. We've interfaced with medical laboratory companies, medical device manufacturer's, other practice management and EMR vendors, hospitals and specific software vendors that provide unique services that STI feels can be better supported by another vendors.

The fact of the matter is that a product interface (also called a bridge) has several issues that must be considered:

- Interfaces requires the cooperation of both vendors to be successful
- Interfaces always requires more programming effort than was originally estimated
- Interfaces are expensive
- Most importantly, interfaces are not a "one-time programming function" but must be maintained over the life of both products. Whenever one product creates a new update or release, often times that will create a programming requirement for the interface and it must be communicated and reprogrammed or the interface could become "broken". Most programmers will tell you that the rule of thumb is that it costs three times as much to maintain a program than to create it. With interfaces this cost could even be higher since we are dealing with two companies not just one.
- Interfaces of EMR and PMS systems are even more complicated because often what is desired is not just a patient demographics interface, but an interface of patients, referral sources, charges, and appointments which are basically every major file within the software system.

Conclusion: Integrate, Don't Interface

After decades of development and negotiation, the shipping industry was ultimately able to agree upon a standardized cargo container. The healthcare industry is going through a similar phase that may take just as long involving XML, HL7 and CORBA initiatives. However, today there are no vendors offering a standardized container to "pre-package" all of their data so that one vendor's PMS can seamlessly share data with another vendor's EMR. Although the vendors may publish the specifications, still, a significant and ongoing custom programming effort is required to interface these critical applications. Relying on a fragile, custom interface only complicates the daily usage, reliability, and performance of the two most important computer applications in a physician's office. To experience the greatest benefit and the least frustration, implement an integrated PMS/EMR. (24)

On-Line Chart Access

More importantly, the best part of having charts in an electronic format rather than paper is that you can view an electronic chart from anywhere that you have an Internet connection.

You can refill prescriptions from home or finish up chart notes from the hospital. Gone are the days of staying late in your office finishing up a stack of charts. Now you can go home on time, have dinner and if required access your charts from home when you need to finish a note or make a telephone entry.
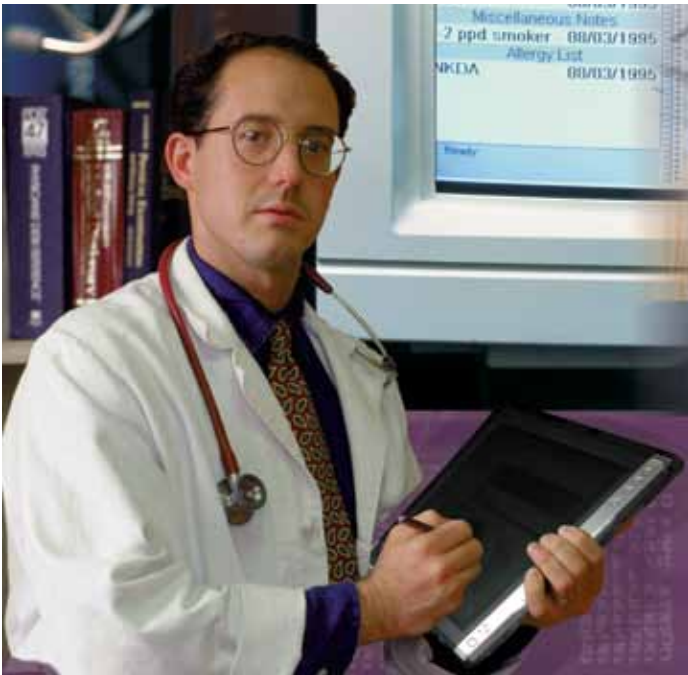
Streamlined Chart Entry

Many physicians work after the office is closed to write or dictate their chart notes. An up-to-date EMR system can help eliminate the need to do this. If you are hand writing or dictating your chart notes, an EMR can save you time and money.

Even doctors who are used to dictating their notes will save time. The latest voice recognition software can be integrated into your system and make the transition from paper to computer almost seamless. The only difference you should notice is the amount of money you save each month that would otherwise go to pay a transcriptionist and the elimination of the wait to receive your transcribed notes.

The Five Functions of an EMR

1. Storage — The first function of an EMR is to store patient information within the computer. Each patient visit or interaction, and other related documents or correspondence that relate to that particular patient is stored and accessed by the computer in a manner similar to storage in a medical chart rack.

2. Organization — An EMR organizes basic patient medical information into useful groupings for follow-up and decision-making. For example, the EMR can provide lists for all patient medications or provide lists of patients on certain medications. Telephone messages and recall lists can be maintained.

3. Presentation — The EMR has also been called a structured medical record, because all the information is shown in a standard, structured format to the user. For example, with the ChartMaker® EMR System, the patient's face sheet is always present on the left of the electronic medical chart with all current problems, medications, allergies, and recalls.

4. Virtual Data Base — Although all of your medical information physically resides in one, secure, computer server in your office, the information in your EMR can be accessed by authorized users at different locations. You have the ability to access patient information remotely. An added benefit is the elimination of lost or misplaced paper charts.

5. Medical Data Input — The fifth function of an EMR is to assist in the input of patient information into the record. ChartMaker® provides you with various methods to add your medical information into the EMR including:
1. Typing directly into the EMR
2. Dictation and transcription
3. Scanning
4. Voice recognition
5. Template based data checklists (9)

E&M Guidelines

Many physicians are concerned that they are under-coding or under-documenting their patient notes due to a lack of time when seeing patients. Not properly documenting normal findings is often the main contributing factor of under documentation because of time constraints. Usually the work is done but the physician does not document the normal findings.

An up-to-date, EMR can also more accurately help you to determine the proper E&M level by counting the number of items documented in your note as you complete an electronic patient template for an examination. With an EMR, you can quickly document normal findings with the click of a button. And in some systems, like ChartMaker® Clinical, the E&M items can even be tracked in the background of your EMR to make your life easy if you are ever audited.

Electronic Laboratory Results

Electronic Lab submission and retrieval can go a long way toward saving time and increasing efficiency in your office. Many offices still employ a staff member whose responsibility is to retrieve the paper lab results from the fax machine and sort laboratory results alphabetically, find the corresponding charts, match them up and place them on the doctor's desk to await review.

An efficient turn around time for this process is approximately a day and a half from fax receipt to doctor review. With an EMR the lab results can be sent directly to the doctor and in the case of ChartMaker® EMR, the lab can be linked directly to the patients chart so that it can be filed with one click after review.

E&M Guidelines

ChartMaker® includes generic E&M templates including an automatic, numeric tracking system to help you better determine the proper E&M code for each examination that you document. Medical histories, ROS, examination and other medical data are counted by the E&M template to help your medical staff conform with E&M guidelines.

The Evaluation and Management (E&M) documentation requirements are designed to set specific ground rules for both physicians and auditors when medical charts are examined for compliance. For the practical physician it's important not to have your chart documentation put your practice in jeopardy of being fined.

Besides the need for medical necessity and providing the required patient service, you need a more detailed level of documentation to support a 99213 code than is needed to support a code of 99212. So if you provide the patient the level of service, but do not properly document the service in the patient's medical chart, you do not qualify for payment. In fact, you may be in jeopardy of a fine for fraud or abuse due to a lack of sufficient documentation. The old adage rings true, "if you didn't write it down, you didn't do it."

An electronic medical record system, like ChartMaker®, can make your job easier. That's because most of the E&M documentation criteria involves tracking the number of criteria (quantification) performed in an examination to determine a numerical score for each category that determines the level of care supported by your documentation. E&M templates include an automatic, numeric tracking system to help you better determine the proper code for each examination.

Many consultants are recommending that a prudent strategy for their clients includes the implementation of an Electronic Medical Record (EMR) System to reduce their E&M documentation liability.

Some consultants even feel that a non-computerized practice has little chance to conform to the higher-level E&M documentation requirements. (11, 12, 18)

HIPAA and Patient Confidentiality

Confidentiality of patient information becomes a bigger concern with the implementation of HIPAA. Besides fraud and abuse provisions, HIPAA also has strict rules on maintaining the confidentiality of patient medical information. Now the release of patient information includes the possibility of large monetary fines and even criminal charges that include the possibility of jail time. The Electronic Medical Record can help your practice to maintain secure guidelines needed to enforce HIPAA's confidentiality provisions. The EMR should include an integrated patient record password security system to maintain the privacy of your patient records.

Electronic Prescriptions (eScripts)

There has been increased interest in recent years in the advantages of Electronic Prescribing (eScripts) . The Centers for Medicaid and Medicare Services (CMS) has advocated the universal adoption of this technology for several reasons. First, electronic prescribing can significantly reduce the number of duplicated prescriptions by allowing the prescribing physicians access to an entire list of medications within a pharmacy database.

Second, the utilization of software to aid in the process of eScripts is believed to contribute to the reduction of the number of negative drug-to-drug interactions as well as drug-to-allergy interactions. In the United States last year alone there were over 14 million adverse drug events (ADEs), 2.6 million of those resulted in the death of the patient. Electronic prescribing could drastically reduce this number of events. (23)

Integrated vs. Free Standalone eScript Offers

Although receiving FREE eScript software may initially sound pretty attractive, it is always a good idea to identify the "catch" in the offer. FREE for how long seems to be the most obvious question? The more subtle question is why is it FREE? Once you realize that eScripts software is the first step to the EMR, the answer becomes more apparent.

If your FREE software is hosted at the vendor site on their file server (called an ASP model for Application Service Provider) as opposed to on-site on your server (called Client-Server) you may have no choice but to purchase the EMR from the ASP vendor or lose the eScript content (your medication data in an electronic format) if you choose another EMR.

So a FREE eScript software plus an expensive EMR may cost you more than a moderately priced EMR with integrated eScripts.

There are several advantages of integration of eScripts into an EMR as opposed to FREE standalone eScript software. In a recent White Paper on e-Prescribing from Covisint (23) the author points out that stand alone eScript technology is disruptive to the physician in that it is not fully integrated with the rest of the practice software causing workflow changes to accommodate duplicate patient data entry, as well as using a second system to view and prescribe.

We would add that the physician is also building valuable patient content (medication history, allergies, etc) into a system that is not integrated with the rest of his patient information when using a standalone eScript system.

In fact this data may reside thousands of miles away on another server and begs the critical question -- How do I retrieve my patient medication and allergy history and import it into my EHR when I am ready to implement this technology and at what cost? The answer may be that "you can't", so check before you choose that "FREE" offer.

Since ePrescriptions are a required feature of all CCHIT 2008 or later certified EMR, a better solution than a "FREE" standalone ePrescription program is to purchase an entry level EMR program with eScript capabilities that many vendors call "EMR Lite". Many EMR vendors realize that physicians may not want to purchase all of the capabilities of an EMR initially and provide low-cost versions of their software with limited capabilities that at least can provide you a growth path to a complete EMR when you are ready rather than committing to an ASP ePrescription product that may require you to walk away from your medication data at a later time.

For example STI provides a low-cost (under $5,000) EMR product called ChartMaker® Entry Point, that can provide your practice not only in-house ePrescription capabilities, but also the ability to receive electronic lab results, maintain a patient face sheet with medication lists, problem lists, and allergies for each of your patients, enter procedures with G-codes, query your medication and problem lists to find patients taking certain medications or with certain problems and medications. More importantly, it includes document management capability to allow you to begin scanning your patient notes into the EMR. So instead of an ePrescription only product that maintains your medication on a distant server that you may need to walk away from in a year or two, you have the foundation of a complete EMR in your office with no data loss if you choose to implement the complete EMR with template, voice or pen-based patient note entry at a later date. A much better option!

For a more thorough discussion on the differences between an ASP and client-server system, see the related article on page 20.

Third, electronic prescribing allows pharmacies to become more efficient by demystifying the enigma that is doctor's handwriting, thereby reducing the number of calls made to doctor's offices for clarification.

Fourth, Electronic Prescribing allows doctors to receive refill requests directly into their EMR. This allows the doctor to view the patient chart and make accurate medication decisions from anywhere at any time of day.

Besides the patient safety considerations, the widespread adoption of eScripts could offer vast savings to the healthcare industry. "Savings could vary between $27 billion (CITL 2003) and $60 billion annually due to appropriate medication use and diminished ADE's" (23) eScripts are so important that the CMS provides a financial incentive to send your prescriptions electronically.

Automated Billing Entry

Finally an EMR can automate the billing process even further. In many offices, patients are handed an encounter form or super-bill to carry to the front to check out. If that patient were to just keep walking past the front desk and out the door, many of those same offices would not even realize that a charge was missing. An EMR like ChartMaker® can

send charges directly from the clinical side to the Practice Management side using an electronic charge slip in the EMR template.

When the doctor finishes the note diagnosis, procedures and modifiers can be transmitted from the EMR to the billing system with the click of a button. No more lost charges and a reduction in clerical costs as well as possible transcription errors. Since the billing staff no longer has to manually enter each diagnosis/procedure code, they can spend their time doing more productive work.

EMR Certification

Certain standards have been put in place to certify that an EMR software program meets the highest qualifications. One such certification program is called CCHIT (Certification Commission for Healthcare Information Technology). This seal of approval is currently the highest level of certification an EMR program can achieve.

CCHIT is designed with the intent to protect doctors from buying software that is not able to complete all of the basic functions necessary to keep appropriate patient records. The government is also utilizing these standards to increase the interoperability between Electronic Health Records, so that in the end a patient will have a comprehensive community wide health record, rather than discrete medical records held in separate locations. In theory this should allow physicians to make more informed medical decisions.

Many software vendors do not have CCHIT certification or are not up-to-date with the most recent certification. CCHIT certification becomes more complex and difficult to achieve each year and the year in which the software was certified is included with the CCHIT logo. Software with a later CCHIT certification date is better than software with an earlier date. With a trend moving toward an increase in governmental funding for CCHIT certified EMR software, it would be unwise to purchase an EMR system that does not hold the most recent CCHIT certification.

ChartMaker 3.05
CCHIT CERTIFIED 08
Ambulatory EHR
+ Cardiovascular Medicine
+ Child Health

Voice Recognition

Voice recognition is often the easiest function to learn, especially if a physician currently dictates notes. This presents an opportunity for a physician to use this as a starting point when implementing electronic charting while gaining immediate benefits. It is for this reason

we like to describe the voice recognition feature as "The Gateway to the EMR." Physicians begin using additional modules in the EMR as their comfort level with the software increases opening the door to greater efficiency and quality of patient care.

Physician Commitment is the Key

The deciding factor between success and failure of any EMR is the physician. An EMR forces physicians to change the way they document patient visits. If the physician wants to make the EMR "work", it will.

The physician needs to be involved in the implementation of the EMR to be successful. Time needs to be set aside to learn to use the product and templates to meet documentation requirements. Closing the office during training helps to methodically move the practice from paper to electronic records, but in the end the determining factor is the physician's determination to change old habits, and to make it work.

Help Minimize Malpractice Liability and Insurance Premiums

An EMR can provide more complete and detailed patient medical chart documentation to help reduce your malpractice liability caused by incomplete or illegible documentation. A June 1996 article in *Health Data Management Magazine* (15) stated "Physicians who use computer based patient records software are likely have a lower risk of losing a malpractice lawsuit than those who rely on paper records."

The article continues to say, "By their very nature, computerized patient records prompt physicians to ask pertinent questions that will help them make a diagnosis and rule out other possibilities." A template process provides this prompting function by including items to review during the patient examination.

The article makes several important points about malpractice litigation, " In court the doctor has two things going for or against his or her case: the testimony of an expert witness and the medical record ... Anybody who's been to court and seen a scrawled, illegible handwritten medical record blown up on a big piece of poster board certainly can appreciate the defensibility of accurate, concise computerized medical records."

In a related *Medical Economics* article, called Why Defensible Malpractice Cases Have To Be Settled (16), the author states, "I'm amazed at the poor documentation I see from physicians with outstanding reputations, and how many doctors won't take documentation seriously enough to be specific. …

Implementing an Electronical Medical Record (EMR) In Your Practiice

Implementing an EMR software system can be a challenge for any medical practice. Most physicians that commit to computerizing their practices' medical records envision themselves using a paperless system and accessing all patient data on computer workstations throughout the office. All patient charts are kept on the computer and the computer prepares all required medical documentation like prescriptions, laboratory orders, patient handouts, and correspondence to other physicians. Everything happens with the click of a computer button and at almost hyper speed. This is the goal but it does not happen overnight. There are a lot of necessary steps required to transition your practice from a paper-based environment to a paperless one. With proper planning and a good implementation plan, the chances of implementation success are vastly improved.

Presented below are a number of keys to success pertaining to EMR implementation along with some suggestions for practical implementation:

- **'Fail to plan = plan to fail'.** A planning phase is critical to implementation success. This phase should precede the start of training on the EMR software and should include discussion pertaining to the training schedule, workflow design/redesign, practice goals/objectives, etc. Physicians, office management, nursing staff, and any other individuals who will be intimately involved with the implementation of the EMR should be present for this part of the process. This not only serves to prepare everyone in the practice for the transition to an EMR based way of medicine, it keeps them feeling involved in the entire process. If your practice contains multiple departments, representatives from each of those departments should be involved in this phase.

- **Commitment.** The importance of this cannot be overstated. As with most things, one gets out of it what they put into it. Without significant effort directed at planning the training, learning the software, practicing with the software, and assessing/redesigning workflow, the chances of successful implementation are greatly reduced. In addition to participating in the formal EMR training, it's critical that the office staff practice learning the functionality of the software. Often more learning occurs with hands-on experience.

- **Training.** Time devoted specifically to formal training is truly one of the most crucial factors when it comes to successful implementation of an EMR. Medical staff and office personnel should have time throughout their day specifically devoted to training only, especially in the early stages. Training time should be separate from the office personnel's typical work duties. Learning robust EMR software programs requires dedicated, uninterrupted time for most individuals.

- **Assess and redesign your workflow.** Office workflow will change with an EMR. The goal of this 'workflow redesign' is greater efficiency. Processes which tend to be handled differently with an EMR include messages and prescription refills, the review and tracking of lab/test results, coding office visits, placing and knowing where patients are in your office, and the daily task of merging paper documents into the 'electronic chart' as opposed to the paper chart. The change in workflow will redefine the job responsibilities of some office personnel and lead to greater efficiency within the practice.

- **Establish an EMR leader/'super-user'.** This individual is typically a physician or an office manager who possesses some level of authority and computer literacy. Implementation failure is imminent if leadership is lacking in the office. The leader should be someone who is intimately involved in the daily workings of the office and someone who can facilitate the forward progress of the EMR. The 'super-user' is someone who learns every aspect of the EMR allowing them to serve as an 'in-house' go-to person for other staff members who may have questions or who are struggling with learning the software. The 'super user' can serve as a very valuable resource to those office staff who may be struggling with the EMR.

- **Have a plan for entering existing patient data.** At least some portion of the paper chart content needs to be merged into the electronic chart. This is typically performed by a nurse or medical assistant and involves the task of entering patient data such as medications, allergies, diagnoses, past medical history, immunizations, etc. and should be done weeks prior to a 'go-live' date with the EMR. This can be a time consuming task initially but serves as a time saver once patients begin to be seen without the paper chart. Document scanning will also play a part in migrating existing patient information into the electronic chart. Typically it's most efficient to scan only recent data (a couple of months to 2 years) from existing charts.

- **Set a 'Go-live' date.** This is the date that you will begin seeing patients using the electronic chart. This date should be soon after initial formal training has occurred so everything is fresh in the minds of the office staff. It is wise to adjust your patient schedule accordingly. Attempting to go-live on a day with a full patient load is typically not the best way to start off. Even after a period of formal training and practice, it will take some time to develop proficiency and speed with the EMR. Reducing the number of patients you see during the initial 'go-live' period or adding additional time to patient visits will create less stress for everyone, prevent discouragement, and provide a greater chance of success.

- **Don't give up!** For those practices encountering difficulty with implementing an EMR, a slower, more phased-type approach may be the direction to go. EMR's, for the most part, consist of various modules. These modules typically include document management, electronic prescribing, templates, voice recognition, messaging and lab interfaces. Modules can be implemented all at once or can be implemented in phases over a longer period of time. If you feel your practice may have undertaken too much at once, take a step back, re-evaluate your practices goals and implementation plan, and take a close look at simply implementing only one or two modules of the EMR. Achieving success with one portion of an EMR will build confidence and allow for an easier transition to more complex functions of the software.

Lack of recollection is the largest single cause of out-of-court settlements of defensible cases." With an EMR detailed medical notes are maintained and chronologically organized for quick review. The author continues to state, "office or hospital notes are so skimpy or illegible as to be of almost no value." Some insurance companies now offer reduced premiums on malpractice insurance to physicians who use computerized patient records, especially if the system includes the ability to send prescriptions electronically.

Specific Functions of a Modern System
Electronic Medical Records
   Electronic Claims Submission
Patient Scheduling
Patient Recall and Follow-up
Eligibility Checking
   Chart Summary
   ePrescriptions
Referral Letter Preparation
Marketing Trends & Patient Analysis
Mailing Labels for Focused Marketing
Managed Care Analysis and Referrals
Capitation Tracking
RVU Analysis
Auto Posting of the EOMB
On-Line Interface to Local Insurance Plans
On-Line Medical Laboratory Interfaces
Insurance Card Scanning
Internet Access for Claim Checking or Referrals

EMR Incentive Programs

There are many financial incentives to help your practice acquire eScript or Electronic Medical Record software. Let's discuss five current Federal programs designed to assist your acquisition of Electronic Health/Medical Record software.

HITECH 2009 Stimulus, CMS will reimburse up to $40-$60 thousand dollars for the purchase and implementation of Electronic Medical Records. (This must be a "Certified" solution, which falls under HHS, AHRQ, and CCHIT) Payments Start in 2011

ePrescribing & PQRI, CMS will reimburse up to 2-4%. You MUST generate G Codes to bill CMS, and you MUST use a certified solution. (Reimbursement Starts Now)

Tax Code 179. Allows for Capital Expenditures, Including Software to be expensed in the purchase year.

Stark Safe Harbor Donation
2006-2012 Section 101 2003 MMA,
Section 1128(b)(3)(3)
www.hhs.gov/healthit/certification/stark/

CMS Donation Program

The Centers for Medicare & Medicaid Services (CMS) has required its quality improvement organizations in every state to help a limited number of small practices choose and acquire EMRs. Also, as part of a five-year demonstration project, CMS is signing up 1,200 small and medium sized primary-care practices that will receive subsidies for acquiring EMRs and using them to improve quality. Organization such as the Maryland/DC Physician EMR Demonstration Collaborative (Collaborative) was formed to assist the Centers for Medicare & Medicaid Services (CMS) in implementing this project that will encourage small to medium sized primary care physician practices to use electronic health records (EMRs) to improve the quality of patient care.

This project promotes EMR adoption through outreach, education, and recruitment of small to medium sized primary care physician practices in an effort to revolutionize the way health care information is managed, producing better health outcomes and greater patient satisfaction.

Medicare 2% ePrescription Incentive

Section 132 of the Medicare Improvements for Patients and Providers Act (MIPPA) of 2008 (H.R. 6331) authorizes the Centers for Medicare & Medicaid Services (CMS) to pay a bonus to physicians for successful electronic prescribing beginning in 2009. To qualify physicians must have or acquire a qualified electronic prescribing system and, the services provided that can be linked to an e-prescribing measure must make up at least 10% of your Medicare charges for the year. In addition, you must report the appropriate G-Codes for at least 50% of the cases in which they apply.

If you qualify you could receive a 2% bonus on all 2009 Medicare pay. The bonuses will be paid in 2010. Bonuses continue for 5 years but the percentage decreases each year that you wait. Finally if you do not acquire and use a qualified eScript program eventually you will be subject to a Medicare penalty.

For more information: see the Clinician's Guide to Electronic Prescribing produced in collaboration between CMS, the American Medical Association and other organizations, also is available online (www.ehealthinitiative.org/erx/clinicians.mspx).

EMR Physician Recovery Act Incentive

On Feb. 17, 2009, President Obama signed the American Recovery and Reinvestment Act of 2009, a critical measure to stimulate the economy. Among other provisions, the new law provides major opportunities for the Department of Health and Human Services (DHHS), its partner agencies, and the States to improve the nation's health care through health information technology (HIT) by promoting the

meaningful use of electronic health records (EMR) via incentives. Qualifying physicians can receive up to $44,000 over a five-year period to defray the cost of using an EMR software system in their office based medical practice.

The qualification criteria for incentives (i.e. meeting specified HIT standards, policies, implementation specifications, timeframes, and certification requirements) are still in development, and will be defined through regulation and additional guidance materials. However, CMS generally expects that under Medicare, "meaningful EMR users" would demonstrate each of the following: meaningful use of a certified EMR, the electronic exchange of health information to improve the quality of health care, and reporting on clinical quality and other measures using certified EMR technology.

Medicaid programs will determine their own requirements in line with the Medicaid-related provisions of the Recovery Act. Funds will be distributed through Medicare and Medicaid incentive payments. CMS intends to publish a proposed rule in late 2009 to propose a definition of meaningful use of certified Electronic Health Records (EMR) technology and establish criteria for the incentives programs. For a copy of the full bill, go to http://www.hhs.gov/recovery/overview/index.html

Relaxation of Anti Kickback Rules

Thanks to a recent decision by the U.S. Department of Health and Human Services (HHS), physicians will be allowed to accept donations of electronic prescribing software, electronic health records software, and training services from hospitals, medical laboratories, health plans and other entities involved with providing Medicare services under expanded safe harbors to the anti-kickback statute.

This, quality experts say, will lead to enhanced quality and patient safety across the health care continuum as interoperability between electronic medical records (EMRs) in physicians' offices and hospitals increases. The key issues are that he software must be CCHIT certified within 12 months of your acquiring a license, the provider can not restrict the interoperability (ability of the EMR to talk with other EMR or other medical entities) and the donation cannot exceed 85% of the EMR software cost, and you must pay ay least 15% of the cost yourself.

STI has hospital and medical laboratory partners that are currently willing to help provide funds for EMR adoption. If you would like to determine if you qualify contact STI at 800-487-9135 extension 1159.

An article in *Nation's Business* stated, *"Although the year is almost over, there is still time for small business owners to implement tax strategies to reduce their federal tax liability. If you're in the market for new business equipment, buy it before the end of the year."*


Section 179 Income Tax Credit

Section 179 of the Federal Tax law was recently revised to allow up to $125,000 of eligible software and computer equipment to be deducted the year it is purchased and put into service. If you act quickly you can take a substantial tax deduction this year!

The *Nation's Business* article continues to say, *"In addition, it is not necessary to spend $30,000 in cash for new equipment. The purchase can be financed over a number of months if cash flow is tight."*

That means based upon your tax bracket, Uncle Sam could help defray the cost of your ChartMaker® and computer purchase. For example, if you're in the 33% personal tax bracket, a $15,000 computer system purchase could reduce your tax liability by as much as $4,950. There are some limitations on the amount of equipment you can deduct each year, so check with your accountant.
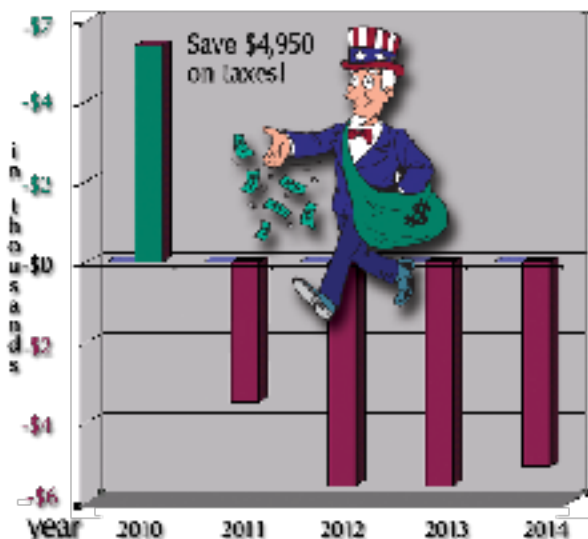
STI and Interoperability of Electronic Medical Records

One of the goals of the new Healthcare Initiative Program from the federal government is for ambulatory medical providers to have the ability to share medical information electronically with other medical entities (medical centers, hospitals, Regional Health Information Organizations, and medical laboratories for example) to provide better patient care and to reduce costs. Interoperability refers to this ability of diverse healthcare information systems to work together. STI is dedicated to this effort and our goal is to help connect the 3,000 medical practices that use STI software products to share information.

The United States is building a point-of-care health information system similar to the network of electronic banking. As an example, if you can access your money from any ATM in the world, why can't you access a patient's medication history in a similar fashion? Through health care information exchange and interoperability, physicians and other medical providers (with a need-to-know) will have access to a longitudinal medical record. "Interoperability is a fundamental requirement for the health care system to derive the societal benefits promised by the adoption of electronic medical records (EMRs)"(25).

This interoperability standard is so important that the federal government has made exceptions to the Anti-Kickback rules for EMR donations to physicians from medical centers, health plans and medical laboratories to in some cases help you pay for an EMR. They cannot pay the whole cost of an EMR but in some cases they can pay up to 85% of the software cost of an EMR. Interoperability is so important that any organization that restricts the sharing of information is not eligible to participate in this program. If anyone tells you that you can only use one EMR to access information you may want to refer them to the Federal Register (42CFR Part 411 August 8, 2006). Here are some of the organizations that STI is currently working with to ensure the interoperability of our software.

Main Line Health System

STI is one of a handful of EMR vendors working with this Pennsylvania system that includes three acute care hospitals with 845 licensed beds, a physical rehab hospital, a research institute, and home care.

Champlain Valley Physician's Hospital

CVPH has now included STI as one of only three vendors that they will assist when a physician is purchasing EMR software. ChartMaker will allow a practice to capture selected NCQA quality measures and provide that information to the hospital. Some of these offices may also be participating in the Adirondack Medical Home Pilot Project that will start in May-June.

Regional Health Information Organizations (RHIOs) are key to the US National Health Information Network (NHIN). The Office for the National Coordinator has contracted with the National Alliance for Health Information Technology to lead workgroups of national experts in defining key terms including RHIO and to solicit public comments.

AtlantiCare Health System

AtlantiCare is a Southeastern NJ regional integrated delivery network. InfoShare, AtlantiCare's IT Company, provides information sharing between medical providers and their healthcare consumers through its web-based electronic Health Information Exchange (HIE). The Web enables physicians and other healthcare providers to access their patients' consolidated clinical information at the hospital, office and home 24 hours a day. AtlantiCare's HIE will be part of the emerging NJ Regional Health Information Organization (RHIO) and National Health Information Network (NHIN). AtlantiCare will provide grant funding to certain eligible physicians of up to 85% of the ChartMaker EMR software and implementation cost.

Delaware Health Information Network (DHIN)

STI is one of four certified vendors with this state wide RHIO in Delaware. DHIN is a communication system that is available to healthcare providers throughout Delaware. Through a combination of the latest in technology and well-designed security practices, this system makes it possible for physicians, hospitals and labs to deliver and access critical health information to ensure better healthcare for patients.

New York State E-Health Collaborative (NYeC)

STI is one of a handful of EMR vendors involved in working with NYeC (pronounced "nice") on a set of policy and technical requirements (sometimes referred to as Version 1.0) for the RHIOs and CHITAs participating in the HEAL NY Phase 5 Health IT grants program.

Rochester RHIO

STI is an approved vendor working with the Rochester RHIO and the Monroe County Medical Society to get doctors connected to their community. The RHIO connects area doctors, laboratories, eleven area hospitals, ambulance companies, radiology providers, and payers.

Medical Laboratories

STI also has the ability to share information and in many cases receive medical results from laboratories like LabCorp, Enzo, Quest, CLM and others directly into your ChartMaker EMR.

Issues Other Than the Software

Besides the features and functions in the software itself, there are other issues to consider when purchasing Medical Software

Support

One of the first and most important aspects to consider when purchasing new software is the level of software support that will be included with the new system.

How Practices Select Computer Systems - Criteria	
First time:	Second Time:
1. Price (56%)	1. Support (56%)
2. Easy Implementation	2. Vendor
3. Easy to Use	3. Equipment
4. Software Fit	4. Growth
5. Function	5. Software Fit
6. Equipment	6. Documentation
7. Growth	7. Function
8. Support	8. Easy Implementation
9. Documentation	9. Easy to Use
10. Vendor	10. Price
Source: IBM Study	

Support is so important because it does not matter how eloquently written a piece of software is, it's important to know how well a company can assist you when you need them.

Every vendor claims to have great support. Who wouldn't since it is easy to claim and more difficult to dispute. Ask specific questions like, "How long is your average call back time for support calls?" and "Is your support team at your main location or is it outsourced to some other company or country?".

Don't forget to call references.. Ask them how well they were supported when they had issues. Ask if they are happy with the level of support they are getting and ask them if they know of anyone else that is using the system that you can call.

Besides customer references, many vendors in the medical industry can tell you about a software company's reputation, especially CPA's or pharmaceutical and medical laboratory representatives. They are in a lot of medical offices and often hear the medical staff complaining about the vendor reputation. We know of some companies that are so notorious for bad support that it seems that the only person who doesn't know is the physician who is buying their software.

How to Select A Practice Management System

In an *American Medical News* magazine article, Neil Baum, M.D., a urologist and speaker on physician marketing issues, offers the following criteria to indicate your current computer should be updated:

"The first evidence of outdated hardware and software is when your office staff complains that the system is so slow they cannot keep up with the patient flow."

"Another sign is that reports are taking hours to do instead of minutes." Many old fashioned UNIX and MUMPS based systems use only one computer processor and dumb terminals instead of a modern computer networked system. Reports run on dumb terminals substantially slow system response times.

"If your system is not capable of submitting electronic claims to a particular carrier, or if it isn't capable of tracking managed care withholds and payments, you may want to find one that can."

"You might consider a new system when your existing system cannot handle a critical function such as reimbursement reports from a specific provider, a managed care plan, an insurance carrier, or a procedure." Many old systems have not kept up with the changes in healthcare. For example ChartMaker® Practice Manager has a new Managed Care Module included in the basic package that lets you track capitation plans, run insurance based reimbursement comparison reports, track RVU analysis, encounter analysis, and displays patient co-pay at the time of the visit. Most of these functions were not required in a system several years ago. Can your current system provide these functions without an additional charge?

"You should consider a new system if the support for your existing system becomes painfully inadequate, unresponsive, or given to providing incorrect answers."

Many medical practices are changing computer systems in an attempt to remain competitive in today's evolving medical climate. In the past, computers were only used for insurance and patient billing. In today's competitive medical environment there is a greater need for timely medical information to keep your practice competitive. If your current computer system hasn't kept up with the required changes, you've probably outgrown it. A backward computer system could be affecting your practice's bottom line.

Medical consultants are also available to help you to investigate software vendors and should know about negative reputations of bad vendors. Two words of caution on selecting a consultant. First, if you are not directly paying a consultant for their advice, they are technically working for someone else and not for you. Free consultants are worse than no consultants since you don't really understand their motives.

Secondly, some consultants tend to select the same vendor's continuously. It's important when interviewing a consultant to get references from them as well. Ask them to give you the names of their last 5 medical practices that they helped to purchase software. Check with the practices, if all five purchased the same software, you maybe dealing with a stealth salesperson, rather than a real medical consulting firm.

Does the software company stop supporting any software system after a certain time period? Some companies do. If you are using an outdated system of theirs, they may approach you with the option to upgrade your system to the newer version (at a substantial expense), or face discontinued support for the old system.

Support, Support, Support

"The most important element of a system, the thing you buy more than anything else is support," says Neil Bauman, executive vice president of Computer Talk Associates, Inc. According to Mr. Bauman, experienced buyers value support over all other considerations. He cites statistics that show that while first-time buyers of computer systems report that price was their main consideration, 56% of second-time buyers report that customer and technical support was their number one buying criterion.

The constant changes in third-party requirements make software support and upgrades ever more important. Mr. Bauman recommends that physicians choose a vendor that provides software upgrades to keep up with third-party requirements as well as ongoing training for both current staff and new employees.

Vendor Stability

In difficult economic times, it is more important than ever to have confidence in your vendor. Investigate a company's financial stability before buying software. Consider how long they have been in business. Young upstarts generally have a smaller client base to fund their on-going software development and support efforts, making them more susceptible to extinction.

Also, consider how many times a company has changed ownership in the past. Typically software firms are purchased not for their software but for their customer base. The cost of the acquisition is recouped by forcing the old vendor's customers to purchase new medical software. This is called 'sunsetting' old software. Usually you have five (5) years to transition to the company's new software offering.

If your software vendor's management team sells out to another vendor, you may be forced to change software systems to that of the new vendor. One major medical software company on the market today has changed hands six different times in the past 15 years. The main concern with this company is that every time management cashes in and sells the company, the level of software support denigrates.

What is the management philosophy on selling the company? This may be hard to determine by asking the obvious question -- "are you planning to sell your company?" Past history is more telling. A company with the same management team for a long period of time and that has never sold out, may be more in line with the stable vendor that your are searching for. If the software company you are considering has been sold in the past, it could happen again.

Similarly, support tends to be significantly better when you deal with the company that originally created the software. You can imagine how much better an understanding of the software that the support staff will have if they can actually speak to the programmers that wrote the program.

Implementation and Training

There are two basic options when it comes to training. On-site or over the web training. Some vendors offer training DVD's or pre-recorded computer programs, but companies that provide live training have much higher success rates. On-site is best for several reasons. Anything that needs to be done manually, from scanning charts to inserting back up disks, is taught more efficiently in person. On-site trainers are also better able to understand the workflow in an office environment and provide more efficient and personal solutions.

Another benefit to on-site implementation and training is that your staff will not be responsible for installing any of the software themselves. This ensures that the whole system will work properly from day one.

However, on-site training can become expensive, so many offices opt for combination of on-site and web training (usually an interactive connection using web meeting software). In any event try to purchase as much on-site training as you can afford.

Vendor Hosted Model (ASP)

One of the choices that physicians have when selecting software for their practice is the decision between installing a client/server based model (computer server and software installed in your office location) and a vendor hosted model (computer server and software installed in a location other than your office) also known as an ASP model.

ASP stands for application service provider. Although the ASP model appears to be new way to use medical practice software, it is actually a very old model that used to be called a service bureau model in the 1970s. In the early days of expensive computers many companies could not afford to purchase their own mainframe and instead decided to share computer time with other companies in an effort to reduce costs. Companies like Shared Medical Systems pioneered this concept to hospitals and created a technique for hospitals to share technology on a time-sharing basis. The low cost personal computer destroyed this business model in the 1990's, but now it seems to be back.

The ASP model is actually a throw back to an old technique where people share technology with the Internet allowing for connectivity.

Client Server vs. ASP Model

If you have done any shopping for medical software, you have probably already encountered these terms, or you will. STI offers both of these options to our customers, so we are indifferent to the option that you choose. We are more concerned that you understand the pros and cons of both options. Plus with STI you can change from one model to the other if you desire..

Client Server - A client server model is basically one where your medical practice has the server in your office. A server is a computer with a large amount of memory. This is the machine onto which the software is loaded, and all of the patient information is kept.

ASP - ASP stands for Application Service Provider. An ASP model is when a separate company (not your office) has the software loaded on a server at another location and your medical office accesses (dials into via Internet connection or leased telephone line) remotely.

In reality this is basically a rent versus purchase decision. The ASP decision is a rental decision and the client/server decision is a purchase or lease/purchase decision. However, like any decision there are pros and cons that should be considered. STI can provide either option to you. Most of our clients have chosen to lease/purchase their system in the client/server environment, but we also have clients using an ASP model as well.

Client/Server Option

Because this is a purchase decision, in the long run, the costs are less. You need to pay for software but this cost can be lease/purchased to make the monthly cost similar to an ASP monthly cost. Once the lease is paid your main cost is for software updates.

1. The server is in your location and in your control.
2. You need to purchase a file server, although this is not as expensive as many ASP only vendors make it out to be.
3. Your patient information is secure in your location and not accessible to anyone without a security password.
4. You can access your information from a secure VPN connection or from any computer on the Internet with monthly subscription software.
5. You maintain the data and provide for data backup.
6. Access to your data is faster and there is no need to worry about loss Internet connection
7. If you terminate the relationship with your vendor you own the software and it is accessible to you.
8. Safety in that if a catastrophic event occurs such as the vendor going out of business quickly you have access to the data and software.

Benefits and Costs

In many cases, with the ASP model your practice is not responsible for paying for maintenance or support for the software. Another benefit of the ASP is that you do not have to worry about purchasing a new server if the other server gets old or breaks.

So what's the real difference? As is so often the case, cost is a major difference between these two options. The cost difference is best described as a rent vs. own paradigm. With an ASP model, you have fewer up front costs, a little lower monthly cost and lower upkeep costs. But the charges that you do incur will go on for as long as you are in practice (plus up to seven years to maintain charts).

With a client server model, it is more like buying a home. You are the one that is responsible for keeping up with maintenance, but you will generally be able to pay off the purchase in a few years and only have to pay for upkeep.

Some practices are attracted to renting as a way to keep overall costs down, but remember, with medial EMR software the only way to stop paying rent is to eventually buy the software. So you must contemplate how much money you are willing to invest in the short-term before purchasing or always pay rent.

Another aspect to consider when determining whether to select an ASP or Client Server is the accessibility of your data if the hosting company goes out of existence. Will you be able to retrieve all of your patient information (billing, medical charts, etc) in this instance?

ASP Hosting Option

Because this is a rental decision you may pay a smaller initial monthly fee, although over the long run you will pay more for the system because you never actually own it. You do not need to pay for software or software updates although this cost is actually covered in the rental fee.

- The server is not at your location and not in your control.
- You do not need to purchase a file server, however you do need to purchase computer equipment for local use.
- Security of patient information may be a concern. Your patient information is not in your location and accessible on the Internet although most vendors provide encryption. You need to have a contractual arrangement with the vendor to protect and return your data if necessary.
- You can access your information from any computer on the Internet.
- You are not responsible for making daily backups.
- Access to your data is slower, and you may experience interruptions in information access and to your workflow due to Internet connectivity issues.
- If you terminate the relationship with the vendor you do not have access or ownership of the software. You need to get contractual issues in place to define who owns the data. Data in machine readable format may be useless without the software that acts as a viewer. Can you use read the data that is returned to you or do you need to buy the software to view or read it?

- Danger in that if a catastrophic event occurs such as the vendor going out of business quickly you have access to the data and software.
- Ability to access your EMR or billing system from anywhere at anytime with an ASP model.
- Cost of ASP system is lower in the beginning, but payments continue indefinitely (again, think about leasing a new car every 3 years) so over time the cost is generally higher than a Client/Server system that you own.
- Hardware requirements are fewer with an ASP system - a web-browser and a decent workstation is pretty much all that you need to get up and running.
- Many ASP vendors provide an out-sourced billing and collection option to augment your office staff further reducing your labor costs.

The Real Question

Furthermore, many people like the ASP model because they believe that since they are just "renting" the software, they can leave any time they want. And this is a valid point. But again, you must know up-front what processes are involved in retrieving any patient information from the hosting company.

Will they be able to convert your data into a readable format that you can use with another EMR software system? Will they be willing to translate this information into the language used by the next software system you choose to use? Will they sell you their application ("reader") software if you choose to leave? What is the cost of these options? Find out before you sign the agreement.

Remember data (information) in machine readable form is useless without the software that can translate it into people readable form. What good is a Microsoft Word document without Microsoft Word or another program that can translate a Word document?

Will the hosting company send you only disks that no other software program is capable of deciphering, or reams of paper when you leave? How you disengage from an ASP solution is the critical question since you need a "reader" to translate the data. You are required to maintain medical records for seven years that you can read. What is the cost of the "reader software" if you choose to leave an ASP vendor?

Phased Training Over Time

It is important that your software company not try to train you on everything in one sitting. To begin with, if you choose a system that is capable of doing all of the functions discussed above, that is a great deal of information for you and your staff to learn. And unless you have savant level concentration, very few of us can actually absorb that much information at once.

Secondly, very rarely are you able to foresee what questions you will have once you start using the software. Basically, you don't know what it is that you don't know, and you won't even know what questions to ask until you use the software for a while. It's best if the trainer initially teaches basic concepts and returns for a second or even a third visit to answer questions and teach more advanced topics. Web training is valuable for refresher training on previously taught topics. Your retention rate is much higher using a phased method of training.

An Inadequate Computer System Can Harm Your Practice's Financial Health

How important is a good computer system to your practice's financial health? An article in the March 10, 1997 issue of *Medical Economics* describes a New Jersey based, 200 physician practice that failed. What were some of the main reasons cited by the consulting firm for the practice's failure? "They point to a lack of data, ...and the plan's refusal to address crucial issues, including what they viewed as an inadequate computer system."

Source: Why a 200-Physician Group Died; Medical Economics

Software Upgrades

As we all know, after years of transitioning from Beta to VHS to DVD to BlueRay technology, or from rotary phone, to touch tone dialing to cell phone to blue tooth headset, technology changes very quickly. The same is true for your new medical software. So, you need to know how your chosen software company deals with updates. Most companies will update features or functions yearly. In the case of CCHIT certified EMR's changes are required to keep up with the current standards.

Keep in mind that even the greatest medical software will most likely be obsolete in no more than 5 years without software updates. The question is: will you get those updates, and if so, at what cost? Are they considered upgrades, enhancements or new versions of the software and how will your vendor charge you for them? Does the vendor always upgrade the current software or do they make you purchase a totally new version to get the most up-to-date software?

What happens if they stop supporting your software version, what are your conversion options?

Ongoing costs for interfaces, electronic claims, or eScripts

Get a quote for any ongoing costs for interfaces that you require for your software. Most companies charge an initial set up fee for lab or equipment interfaces, but will also charge a monthly or yearly fee for the upkeep for that. Many will also charge you a monthly rate to do things like e-prescribe. Most vendors charge for a claims clearinghouse either on a per claim or per physician basis. This number should be calculated and added to the cost of the system.

Customization and Growth Potential

Every practice is different. Even practices within the same specialty can vary greatly in the way their workflows within their office and how they create chart notes. So it is essential that any EMR software is modifiable to fit your specific needs. Customization is also a variable concept. In some cases, you may just want to change the wording in the sentences that pop up in your chart note, whereas in other cases you may want to change the whole layout of a note, or create completely new and unique templates.

How does the vendor account for these changes. In fact is the software customizable, or can you only use the templates provided by the EMR vendor? Can you make the changes or do you need to have the vendor make these changes for you and at what cost?

The software should adapt to the way you practice, not the other way around. Similarly, find out the costs for growing the system along with your practice. If you add a physician or nurse practitioner, what is the extra cost? If you decide to start adding other services to your practice, are there additional costs for uploading new templates, etc?

Lessons Learned

The EMR is not some mystical product. It's important to remember that an EMR is a software product just like your current billing system. Don't forget lessons learned in selecting billing software. The same criteria that you used in the past to select a billing software vendor should be also be applied to your EMR vendor. In selecting EMR software and in fact any software the most important element is the viability of the vendor providing the software and their commitment to keeping the product up-to-date.

"Focus on the long-term effectiveness of your computer system as opposed to short-term savings." (20)
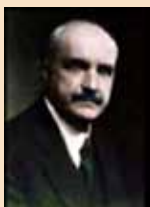
Software cost, awards, reputation, updates, support, training and CCHIT certification are all important. But most software improves over time if the vendor is diligent. The small-business administration claims that five years is the critical period for most businesses to maintain viability. If your software vendor leaves the marketplace for any reason and is not available to make updates to your software, your EMR will eventually become unusable and your complete investment could be lost. The decision you are making is more about the viability and future of the vendor than the bells and whistles in the software product itself.

Hardware

Does the vendor offer hardware equipment and installation or are you on your own to provide and install equipment? Make sure these prices are competitive. But, it's generally a good idea to adhere to the vendor's suggested hardware configuration. If prices are similar it's always better to buy your hardware from the software vendor to reduce the chances of software claims of incompatibility or finger pointing between vendors.

"It's more important to secure ongoing support than a bargain on software and hardware. Support includes training, "patches" to fix software glitches, periodic software upgrades that offer new or improved features and as-needed advice and troubleshooting… a deluxe help desk lets you call an 800 number as often as you need… also periodic training for new hires." (20)

Finally the Cost

When choosing a new software system for your practice, be cautious about choosing based only on price. You can get a fully functional system that meets your needs for a reasonable price, but heed the words of famed social critic John Ruskin as you look over proposals:

Also, don't just consider the software cost alone. Be aware of all of the different costs you will incur when buying a system and have them all available to make an educated comparison between vendors.

The main costs that you should consider are:

- Purchase or Licensing Price - you can usually either buy a system outright or pay to use it for a contracted amount of time. Typically purchasing the system (or leasing with a buyout option) will be cheaper in the long run.
- Ongoing support/maintenance costs - how much does support cost? Is it a yearly fee or do you have to pay every time you have a question? Is there a time at the beginning when support is included? If someone has to come on-site to fix a problem will you have to pay extra for that?
- Training - What is the cost of training? Do you need to pay travel expenses or are they included in the training cost? Some companies charge you for the training and then also have you pay for the airfare to get the trainer there and a per diem rate while they are on-site. Can you purchase more training later if, for example, you hire new staff.

Why Buy Hardware from STI? Can't I get it cheaper?

One of the questions we are often asked is why would a customer want to purchase computer equipment from STI instead of shopping on their own looking for the cheapest possible price. You can find deals everywhere; such as shopping the internet or Big Box stores. Everyone has seen home computers and white box PC's (clones) listed on the internet and Sunday newspaper circulars at extremely low prices, why not save a few dollars and buy cheap?

The answer is simple and it's the same one you've heard many times but it remains true (probably more so). Because you truly do get what you pay for! We are fully aware that you may find cheaper equipment out there, especially "white-box" or "clones". STI does the required research, buys in quantity, and runs monthly promotions to give our customers the best prices possible on the best possible equipment.

Since STI has been building networks for over 25 years, (which is about as long as PC networks have been in existence) we have learned that putting quality products on your network is the least expensive way for a business to operate. When analyzing the true cost of computer equipment, there is a principle called TCO (Total Cost of Ownership) which takes into account that the purchase price is usually a poor indicator of the overall cost of that equipment. You must take into account many other expenses you'll incur from malfunctioning or low quality equipment such as;

1. **Lost productivity**. Usually an employee cannot perform their job without their PC. How much does it cost to have an employee standing around unable to work (especially a physician)?
2. **Disruption to your practice**. Busy offices are dependent on their networks to see patients, send billing, do follow-ups, etc…this is costly in patient satisfaction and dollars.
3. **Corruption of data**. How valuable is your data? It is the most expensive item in your office and it is the one component that cannot be replaced! Cheap low quality hardware can cause many unpredictable problems that you may spend countless hours trying to pin down to troubleshoot, worse yet, possibly lose valuable data.

So let me give you some good advice when deciding what to purchase and from where.

When you purchase a new PC, server, printer, backup device, etc... from STI you can be sure it is a high quality, top-tier, business class equipment. We sell only brand name manufacturers such as HP, Dell, Toshiba, Samsung, etc…manufacturers that are top-in-their-class for engineering that particular component. You can be sure that the parts and engineering that go into that component are of the highest quality and tested to work together without conflicts. Even more valuable is 6 full months of an STI Technical Maintenance contract included with new equipment purchased from STI.

Many people have asked…"but my bargain PC came with a warranty so why should I care about STI's warranty"?

Good question and here's why the STI warranty is a far better value. Some warranties sound better than they actually are. Here is an example of a warranty from a highly regarded vendor.

If you purchase a PC directly from Dell and the hard drive fails in a month, Dell's warranty says they will come to your location and replace the failed components free of charge.   Sounds great, right?

Let's go through how it actually works.   You call the 800 number and wait for an available representative. You must then troubleshoot the problem with their level 1 support. After they've tried everything, they will schedule to send a technician to replace the part (unless they escalate you to Level 2).

Great, you have a new hard drive but now what?? If you think about it you'll realize that replacing a bad hard drive WILL NOT get you back up and running. You still need the operating system installed and re-configured. Then the network needs to be set back up on the workstation and most importantly your application software needs to be re-installed and reconfigured for your network. Other network components such as printers, scanners, backups, etc, also need to be re-configured.

Most likely, the hardware manufacturer is not going to do that work. That means you are still going to be down until STI comes out and puts that PC back into proper working production order.

All that and more is included on every piece of equipment bought through STI and covered by our standard Technical Maintenance Contract. (Technical Maintenance Contract customers are not charged for the call and usually given higher priority than non-maintenance customers because they have already paid for the service up front). STI has very experienced technicians that know our applications and the networks they run on so well they are your best chance of getting back to the business of being medical offices, not wasting time and money being computer troubleshooters with various "computer specialists"!

To sum up, there are so many cost benefits to running a computerized Practice Management or EMR package that no modern office would even consider going back to doing things manually, but in order to reap those benefits your network needs to be up and running. When you do have a problem (I did say WHEN not IF), if you've purchased your equipment from STI, you can have confidence knowing that you have purchased high quality equipment. You have STI's Technical Support Department right behind you to fix your network quickly and get you back up and running with a minimum of disruption and expense.

Additional Suggestions

Year Business Founded — The vendor is as important as the software. Select a vendor who will be available. Many reports show that most new businesses fail before the 5 year mark.

Company Size— The size of the software vendor often determines their ability to be a competitive, long-term player in the market. A small company with few medical installations has a difficult time. To a large company you are just another source of revenue.

Medical Focus— You want a company with established medical product knowledge, besides business experience. You want to be sure the company has staying power in the medical field; after all, you are going to rely on your vendor to update your software and to make your practice more efficient, so they'd better understand your business as well.

Operating System — The operating system is the engine that makes the computer run. Microsoft Windows® is the most popular operating system available today with well over 90% of the market. More software is available for Windows than all other systems combined, so you can add other inexpensive, programs like word processing, or other medical applications.

Published Prices— Some companies make a big secret out of their prices, because they have a different deal for every doctor they sell. The more you pay, the bigger the commission. Ask to see a typed, signed proposal so you know you're paying a fair price for your system.

Functions You Like — As you see product demonstrations, keep a list of the functions you need. As you see new vendors, ask them to demonstrate those features for availability and ease of use. If there is a new feature you need, check back with the vendors that you saw earlier.

Don't Assume, Communicate — If any vendor tells you they have some feature or function in their software that no other medical vendor provides, check back with the vendors that you saw earlier.

OTHER REASONS TO CHANGE

Here are a few other reasons to change systems heard from medical offices who converted to the ChartMaker® Medical Suite:

Buy a new version every so many years. — Some vendors will sell you a software system and charge you for software updates every year, and then tell you that the version of the software that you purchased and are paying to maintain is now old and no longer supported. Their solution is that you pay them a discounted price of $15,000 to purchase their new version of the software. Some discount! $15,000 is more than the cost of a new version of ChartMaker. We have customers with support agreements who've used our products since 1979. If you visit their office you will see the same up-to-date version as the customer we installed yesterday.

No staying power — The computer software business is easy to enter. All you need is a programmer and a first customer. Supporting medical customers over time is an entirely different issue and much harder to maintain. The problem is that the medical business constantly changes. Last year's programs don't always work with today's insurance regulations. We've replaced systems from software companies where the programmer is also the salesman. If he's on a sales call he can't answer your support calls. After a while, it's too much aggravation and he decides to do something else. Meanwhile, you're left with a system with no support.

Sold the company — Recently some old medical (usually UNIX based) vendors have sold their software and customers to another medical software vendor. The new company buys the practices to convert them to their software. The rationale is that the practices have no choice and are forced to convert to the new system.

Outrageous support cost — Some medical practices pay over $7,000 per year for support. In some cases the support cost is more than the cost for a new system. It's fine if you think your current vendor's support is worth that much money, but some system's with the highest support costs seem to offer the slowest response times.

Sell your patient information — Some vendors have added a clause in their license agreements that they have the right to sell your patient data to other medical companies. The AMA has reservations about this policy and so do we. Always read your vendor's license agreement before you sign it. You'll be surprised what you'll find in some of them. And remember, no matter what a salesperson tells you, the license agreement is the legal contract between both parties and supersedes all sales promises.

We've heard them all before:

"They lied to us and told us they had a Windows system."
"After we installed it, they charged us for everything."
"We can't get support when we need it."
"Call backs take hours and sometimes days."
"They just don't return our calls."
"We know more than the support people."
"There's a new support person every month."
"The answer is always, we'll get back to you."
"That function is coming in our next release."
And my personal favorite,
"Sure Windows is 90% of the software market, but UNIX is better."

Microsoft Windows Applications

Operating Systems Determine Software Options

The operating system is the engine that makes the computer run. There are many different operating systems available today. Choosing an operating system has a major impact on all future software options available to you.

Video Tape (VHS) or DVD

A good analogy to the computer operating system issue is your tv recording format. Whether you choose a DVD or VHS tape machine determines which movies you can rent in the future. Like the DVD video format, Microsoft Windows is the most popular operating system available today with over 90% of the total operating system market. More software is available for this operating system than all others combined, so you can easily add other inexpensive programs like Microsoft Word, Windows® Internet Explorer®, Quicken®, PDR, or other medical applications like Dragon Naturally Speaking® Medical Suite voice recognition software. Look for mainstream products to protect your computer investment.

The Standard Operating System for Medicine

Microsoft Windows® has become the "Standard Operating System" for medical applications. For example, *Medical Economics* provides The Physician's Desk Reference System only with the Microsoft Windows® Operating System. The AMA has many Microsoft Windows® based packages available in their catalog. Most hospitals today offer a Microsoft Windows® interface to hospital data to physicians. Why limit your future options with a non Microsoft Windows® based package?

Unix – Not A Safe Bet

Is your vendor trying to sell you an old, repackaged Unix system again? It's not a good idea. In an article in *Information Week*, Justin Page a system's integrator for the New York Daily News said, "…if you're placing your bets on Unix as the solution, you may have bought your company a massive re-engineering project two to five years down the road. Unix was never meant by its creators to be a business operating system – it is cryptic and proprietary. Desktop operating systems have become intuitive and object-oriented. Unix is confusing and proprietary and you'll only have to get rid of it in a couple of years."

Don't Get Tied-up

More importantly, because of it's commercial success, most software companies write programs under Microsoft Windows®, which ultimately assures its long-term viability. Unpopular operating systems will ultimately lose support and stagnate, leaving you without program support to update your practice management software. Packages using proprietary operating systems like UNIX, LINUX, XENIX, AIX, MUMPS, etc. are popular with software vendors because they tie the customer to the vendor due to operating system complexity and high cost. You cannot go outside the supplier for inexpensive software since proprietary hardware and software programs like UNIX are incompatible with the Microsoft Windows® operating system.

The Big Lie

Many vendors who sell proprietary UNIX, LINUX or MUMPS systems know how important Microsoft Windows® has become and tell you their systems are "Windows-based" or that they use Microsoft Windows® "on the desktop" so you can still run Windows software with their system. This may be true but you should understand how this works. Only computers can run Microsoft Windows® software. If your vendor uses all dumb terminals on their system, only the stations with PCs can run Windows software.

Today many UNIX vendors substitute computers for the dumb terminals on their system so you can access Windows software "on the desktop" while still running UNIX or MUMPS on the main medical system server. However the problem with this technique is that Microsoft Windows® software like Quicken®, Microsoft Word® and most EMRs are incompatible with UNIX or MUMPS systems, so you can not share patient information between your UNIX or MUMPS medical system and your Microsoft Windows® financial, clinical, and word processing software. What is really important is not only what operating system the desktop workstation uses, but what operating system your medical software accesses on the server. Why not save the hassle and purchase a real Microsoft Windows® system?

Trendy New Operating Systems

Many old UNIX vendors now use trendy operating systems like LINUX. Several years ago Java was the hot new operating system that programmers claimed would replace Microsoft Windows®. Vendors that converted their software to Java are now forced to convert again (probably to LINUX) because the Java system really never hit commercial viability. Most new trendy operating systems are based upon UNIX, and nothing more than the UNIX community trying to reestablish their operating system dominance. Remember your goal is to run a successful medical office, not to be on the "bleeding edge" of technology.

Work From Home

You can use your Windows System from your home Microsoft Windows® Computer System with Windows Remote Access Software and an internet connection.

Stable, Experienced Vendor

It's no secret that a lot of the old time medical software vendors have merged their operations and no longer exist. With their demise, medical practices have been left with expensive software systems that are no longer supported and need to find a new software vendor. This is an expensive proposition if you already purchased a medical system, and something that you want to avoid in the future.

Knowledge is Power

There is a lot to reflect on when you are in the market for new software. But if you know the questions to ask; the features and functions that you need; and work within your budget you will most likely find the right vendor to meet your needs. More tools have been provided later in the document to help you organize this information.

Microsoft
CERTIFIED
Partner

Bibliography

(1) CMS Continues to "Re-Engineer" Medicare, BDO Seidman, LLP, Healthcare Advisory Services newsletter. March 2000.

(2) Speed Up Payments With Electronic Transmissions, by Kristie Perry Dolan, Medical Economics Magazine, October 27, 1997, pgs 59-60.

(3) Managing Managed Care, Get Plans To Pay In Full, On Time, Medical Economics Magazine, June 7, 1999, pg 87.

(4) Electronic Claims, The "Bottom Line" Answer, by Marilyn Gard, MBA. New Jersey Medicine. December 1999, pgs 39-40.

(5) 98 CMS Regulations: Let The Documentation Begin, by Don Rucker, M.D., Health Management Technology Magazine; February 1998; Page 98.

(6) Rethinking the CPR: Is Perfect the Enemy of the Good? by Francine R. Gaillour, M.D., MBA, Health Management Technology Magazine; May, 1999; Page 22-25.

(7) Lite Bytes, Buying Components Allows Practices to Take Small Steps Towards Full EMRs, by C. Peter Waegemann, Modern Physician Magazine; July 2001; Page 25-28.

(8) Instant Patient Records - And All You Have To Do Is Talk, by Ken Terry, Medical Economics Magazine, October 11, 1999, Page 101

(9) Medical Voice Recognition Software and the Electronic Medical Record, by Joseph M. Cerra; Delaware Medical Journal Vol. 73 No 5 May 2001, pgs 197-207.

(10) Don't Let This Revolution Leave You Behind, by Robert Lowes, Medical Economics Magazine, April 26, 1999, Page 40

(11) Electronic Medical Records Make Sense - At Last, by Ken Terry, Medical Economics Magazine, May 24, 1999, Page 134

(12) The Feds Take Aim At Fraud And Abuse, by Wayne J. Guglielmo; Medical Economics; August 10, 1998; Pages 166-17895.

(13) HIPAA's Impact, by David Hellerstein, M.D., Health Management Technology; April 1999; Pages 10-15.

(14) Lyle L. Berkowitz, M.D. Healthcare Informatics Magazine, October 1997 Page 76

(15) Malpractice Insurers Endorse Electronic Records as a Way to Reduce Risk, by Margaret Ann Cross; Health Data Management Magazine; June 1996; Page 67.

(16) Why Defensible Malpractice Cases Have To Be Settled, by James Lewis Griffith, J.D.; Medical Economics; July 10, 1995; Page 153.

(17) How Your Charts Could Jeopardize Your License, by M.P. Demos, M.D., J.D.; Medical Economics; December 12, 1994; Page 95.

(18) Why Billing Low Can Bring You Down, by Pamela L. Moore Physicians Practice Digest, April 2001 Page 17.

(19) Practice Management Systems, Here's What To Look For, Medical Economics Magazine, by Ken Terry, February 2003, Page TCP3- TCP11

(20) Medical Software Leaders, Experts Examine Top Programs For Office Management, by David Glabman, M.D. Physicians & Computers Magazine July/August 1998 Pgs 20-26

(21) Why That Computer "Bargain" May Be Anything But, Medical Economics Magazine, by Robert Lowes, November 22, 1999, Pages 63- 71

(22) Integrating vs. Interfacing Electronic Medical Records by Greg Geisler. Tangible Solutions

(23) E-Prescribing Adoption through an "on Demand" Environment; Covisint White Paper

(24) Integrating vs. Interfacing Electronic Medical Records, by Greg Geisler, Director Health Care Division Tangible Solutions Company, Inc.

(25) Interoperability: The Key To The Future Health Care System Interoperability will bind together a wide network of real-time, life-critical data that not only transform but become health care. By David J. Brailer

Practice Management and Electronic Medical Records
— Why You Need Both

Most practices have discovered that *practice management software* is essential to their medical office. Besides tracking receivables, the advent of electronic billing and electronic remittance put the office that attempts to do all of these things on paper hopelessly behind.

Evaluation and Management (E&M) guidelines and the need to comply with new regulations in the course of a medical exam should cause an office to seriously rethink their use of a paper patient chart. Just as electronic billing has brought payment receipt from several months to two or three weeks so does an electronic patient chart bear no comparison to its paper predecessor.

Why is it so needed? Let's examine a few of the reasons why:

<u>Increased Numbers of Patients</u> – With physician reimbursements down, the average medical office now needs to see more patients. The practitioner has less time with each one, but needs to document more details about the visit than before.

<u>Missing Charts or Lost Lab or Test Results</u> – It has been estimated that in 30% of patient encounters, the chart or other vital information has been misplaced.[1] And 11% of the time, tests have to be repeated because the results are lost or misfiled.[2]

<u>E&M Guidelines</u> – Gone are the days when the doctor can simply log in the chart "all normal". The amount of written information that justifies billing at a higher visit level is increasing.

<u>Improperly Billed Services</u> - Many physicians are so busy handling their patients' care that they take little time to investigate why their collections are poor and their write-offs are so high.

Now, let's look at what could be – how a medical office can do more with less and increase efficiency and profitability: practice management and electronic patient charting working together.

STI Computer Services makes medical offices more efficient. The *ChartMaker® Medical Suite* contains practice management and electronic medical record software. The ChartMaker modules are integrated and provide a cutting edge solution for medical practices.

<u>Efficiently Handling Higher Patient Volumes</u>- The patient calls the medical office that uses the *ChartMaker Medical Suite* and an appointment is scheduled. The software is designed to identify problems BEFORE they occur. So, the operator can be warned about several things at the time the appointment is scheduled: the patient's balance, any bad debts, the status of the patient's referral or if a new one is needed, if the patient is in a post-operative no-bill period. Special needs or comments are logged into the system.

When the patient arrives at the office to be seen, they are quickly entered in the *ChartMaker* system because all information gathered at the time the appointment was scheduled immediately appears on the patient registration screen.

<u>The Chart is Never "Lost" or "Misfiled"</u>- When the medical assistant or nurse looks at *ChartMaker* EMR, this new patient, added to *Practice Manager* by the reception staff, appears on the screen. <u>There is no need for duplicated work.</u>

<u>Appropriate Follow-Up to Tests or Labs</u>- *ChartMaker* then warns the medical staff member about all pertinent information in regard to this patient by giving a quick summary. It lists all diagnoses the patient has ever had (which were told to the system), the listing of current diagnoses and the dates when they occurred, all medications that have ever been logged into the system for this patient, and the current medications being taken. It also has a listing of all notes, allergies found in the past, and all services given that will need follow-up in the future.

<u>Reminders to Address Each E&M Requirement</u>- *ChartMaker* understands that different practitioners have different preferences and different ways of performing a patient exam. So, it offers many different ways an exam can be logged into the system.

Voice Dictation/Scanning - Probably the quickest way to start with electronic patient charting is to use either scanning of a patient paper chart or for the provider to dictate the exam. *ChartMaker* can store scans and also comes with voice recognition software which understands medical terminology and "learns" from the voice of the speaker. It is very accurate and only grows in its efficiency. This even works with doctors who have an "accent". *ChartMaker* turns words into text on the computer in that patient's record.

Templates - Another option available to the provider is the use of templates. The way in which the provider chooses to do the exam can be programmed into *ChartMaker* so an entire system can be shown as normal with one click. Or exceptions can be shown with a click as well. These "clicks" immediately display as regular English text. This text can later be automatically turned into a letter for the referring physician with little to no additional work.

The template also serves as a reminder to the provider of what questions need to be asked. *ChartMaker* even comes with a visual graph to show, during the course of the exam, what you have asked and what still needs to be asked or done in order to meet the requirements to bill the visit, for example, at a level 3, 4 or 5.

<u>Avoid Improperly Billed Services</u>- *ChartMaker* allows the provider to specify the proper procedure and diagnosis codes needed for billing. These codes are automatically and seamlessly passed to *Practice Manager* and just "appear" for the billing person. Since the biller is not "typing" in this information, there is no miscommunication and the claim can be billed as the provider chooses.

However, if an office chooses, the software can give the experienced biller the option to correct anything which the provider may have overlooked or anything which needs revision. Getting the billing right the first time will increase the collections for the practice and make it more profitable instead of wasting time going back trying to "fix" previously billed claims.

<u>Automatic Payment Posting</u> (Remittance) *ChartMaker* also offers the ability to post some Explanation of Benefits (EOBs) directly to the patient accounts electronically. With this ability, the proper allowed, paid, and write-off amounts are automatically added. And, for insurances that still do not provide electronic remittance files, *ChartMaker's* "Profile" system remembers the payments previously received from that insurance for that procedure and fills in the pertinent data on the screen for you saving hours and days of work.

<u>Phased Approach to Computerizing Your Patient Charts</u>- STI designed *ChartMaker* for a "phased implementation" – start using a feature when you are ready. *ChartMaker* helps you transition. Together they will:

1. Reduce redundant work
2. Stop many problems before they occur
3. Help locate and use patient charts
4. Will warn of all pertinent medical events: diagnoses, medications, test and lab results, allergies, etc.

So, the value of a quality practice management software working in coordination with a powerful electronic medical records software is clear. Are you ready to become more efficient, more profitable, and more compliant?

[1] – *Magnis, Ellen. Information Technology Tools for the Medical Practice, published by Medical Group Management Association, 2000*

[2] - *Magnis, Ellen. Information Technology Tools for the Medical Practice, published by Medical Group Management Association, 2000*

By: Geoffrey A. Barnes, Mr. Barnes has over 20 years experience helping medical practices to improve efficiency through the use of technology.

Nine Ways Not to Select a System

1. Looking at Costs, Not Benefits

A system should save your practice money, not cost you. If your vendor salespeople can't explain how their system will save you money, don't buy it. A good sign that the salesman doesn't understand benefits is an attempt to offer you a deal on the price. That's like saying, "I don't know why you want this, but if you buy mine I'll charge you less". Cost is a secondary consideration. Buy the system that saves you the most, not the one that costs the least.

2. Making a Fast Decision to Get a Good Deal

Don't be pushed into making a fast decision with deals that end on Friday, or are good for this month only. The old saying is "Decide in Haste, Repent at Leisure". Deals are offered by companies that are afraid of their competition. There must be a reason they're concerned. You better find out before you buy, afterwards is too late.

3. Not Checking the Vendors Reputation

The vendor should have at least 5 years of experience and at least 500 installations of their software. Check references correctly. Ask for more references and only speak with practices that have at least 2 years of experience with that vendor. What do local pharmaceutical, insurance, or laboratory salespeople know about them? They've been in a lot more offices than you. Get a second opinion from a second source. Talk to as many references as you can.

4. Putting Too Much Emphasis on the Demonstration

A lot of people buy the system that looks best in the demonstration. What you see is only the tip of the iceberg. Demonstrations should start with a discussion of your needs, and focus on how the system will be set up for you by the trainers. Some people buy the system that they see last, not because it is better, but because they learned about their needs in earlier demonstrations, that's why most vendors prefer to come in late in the demonstration cycle. Invite the best vendors back for a second demonstration and you will learn a lot more.

5. Looking Only at the Initial Cost of Purchase

There are two kinds of costs in a system. Cost to purchase and on-going costs. Most practices make the mistake of only looking at the initial system cost. The right way to look at costs is over a five year period. Ongoing costs are more important since they are with you as long as you own the system. Find out what the support costs are and what they include. Do you ever have to repurchase a new version of the system, or maintain a support contract to use the software (called 'right to use')?
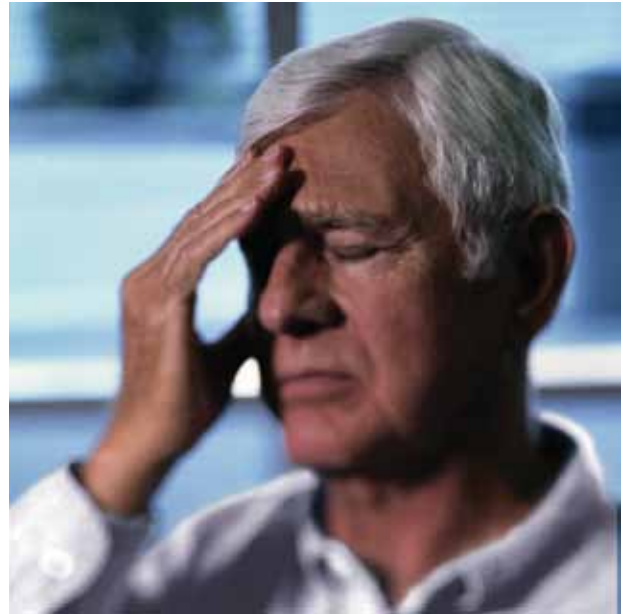
6. Answers Can't Always Be Yes

Don't be fooled by promises. See it, or don't believe it. If you get the line "that's coming in our next release", write it into the agreement.

7. Don't Communicate Your Concerns

As you get down to the final decision you need to communicate with the salespeople about your concerns and let the vendor respond. Return phone calls.

8. Ignoring Support Reputation

A vendor relationship for support is what you are really buying. If you hear a vendor has a good system, but bad support, forget it. The #1 reason people replace systems is because of bad software support. Check references and assume that the references the vendor gives you will always be good. Find out for yourself.

9. Bonus Reason: Not Getting it in Writing

Make sure you get all promises and features in your signed, written proposal. If you are unsure of anything, put it in writing. A reputable vendor will not be offended and it will document your understandings. If something is misunderstood, a written explanation offers an opportunity to clarify the issue prior to installation. It's unfortunate, but some salespeople know what you want to hear and will give you that answer, even if they can't provide the feature. Get promises in writing attached to the license agreement.

NINE GOOD REASONS TO CHOOSE STI COMPUTER SERVICES

1. All the Software Pieces

We are the software authors and provide, install, train, and support our integrated products. ChartMaker® Practice Manager is our Practice Management System currently installed in over 2,000 medical practices. ChartMaker Entry Point or Clinical are Electronic Medical Record (EMR) systems that integrate with the ChartMaker Practice Manager and Scheduler. Because we designed our applications as integrated modules, you can purchase only the functions you need today, but feel secure that you can add necessary functions as your needs grow. Since we are the software authors, we can provide custom software changes and updates to our integrated applications to keep your medical system up-to-date and to protect your software investment.

2. Microsoft Windows Applications

Have you seen demonstrations where salespeople tell you that their product is "Windows-like", Windows-based", or "our version of Windows"? As soon as the salesman shows you the medical program you know something does not look right with their software. Don't be fooled by fake Windows systems. The ChartMaker modules are real Microsoft Windows®, client/server applications designed to work in a Microsoft Windows environment. They are designed from the ground up to use all of the power and features of the Microsoft 32-bit Windows® operating system, and SQL database technology.

3. Great System Support

Change is the only sure thing in the medical industry, and insurance changes often dictate practice management software changes. Every time Medicare or another insurance company changes their insurance format, your software must be updated to reflect this change. Your vendor must be available to adapt your software, or it will quickly become obsolete and unusable, and your entire investment is lost.

4. Stable, Experienced Vendor

It's no secret that a lot of the old time medical software vendors have merged their operations and no longer exist. With their demise, medical practices have been left with expensive software systems that are no longer supported. At STI we sold and installed our first Practice Management system in 1979, and that practice is still with us using it today. Now that's stability in a vendor.

5. HIPAA Compliance

ChartMaker complies with all HIPAA regulations currently in effect. STI will meet these requirements on a timely basis with software updates included with your annual software support fee.

6. All Training in Your Office

STI provides installation assistance and training at your office location *for no additional charge*. Up to 20 hours of personal training are provided free with the basic ChartMaker system. Additional software modules like Appointment Scheduling or ChartMaker EMR include more on-site training.

7. Medicare Platinum Level Vendor

STI is one of only a few Medicare Platinum Vendors, the highest level of electronic compatibility with the Medicare Program. We install all of the available Medicare electronic programs, such as electronic billing, reconciliation, and automatic posting of the Medicare EOMB at no additional charge.

8. Affordable Medical Software

It's our goal to provide you the most powerful medical practice management system available today at the most economical price possible. We constantly monitor our competitors' products to ensure we provide all necessary product features. Many practices justify the cost of an STI system based upon two savings – STI does not charge a per claim fee to send electronic claims and the annual savings between your current support cost and STI's lower annual support cost.

9. Over 3,000 Medical Practice Users

STI has more local, satisfied practices than any other medical computer vendor. We are a local company dedicated exclusively to the medical market. Our people understand your business and local insurance regulations. When you choose a system it won't help you if all of a vendor's reference installations are in another state where insurance regulations are different. STI has installed over 2,000 medical practices since 1979. Local installations ensure that you can speak with someone you know and trust who uses an STI software system.

ChartMaker Clinical 3.2

CCHIT CERTIFIED 08

Ambulatory EHR
+ Cardiovascular Medicine
+ Child Health

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