OntarioMD has created the Physician EMR Planning Guide to assist physicians who are in the process of planning and implementing an EMR. The Guide provides high level advice in dealing with EMR adoption. It is to be used in conjunction with the other supports available from OntarioMD, including advice and support from Practice Advisors and Peer Leaders.

The Guide follows OntarioMD’s change management methodology and provides a good overview of the steps in that methodology. In addition, the Guide refers to various support and assessment tools that are available from OntarioMD.

If you don’t currently have a Practice Advisor or Peer Leader, please call us at 1-866-339-1233 for assistance.
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Congratulations. You and your practice have decided to adopt an electronic medical record (EMR) system. To assist you in this endeavour, OntarioMD has produced this Physician EMR Planning Guide. EMRs are an effective tool for improving patient care and efficiency within the practice setting. The success that you experience with EMR will depend on the strength of your commitment to the EMR adoption process and on proper planning throughout the entire implementation.

There are many benefits that result from moving patient records from paper to computer-based systems. These benefits accrue to patients, physicians, other health care providers and to the health care system as a whole. In addition, implementing electronic medical records will improve the clinical and business processes within your practice.

Implementing an EMR is not about technology per se. It is about how technology affects the way that physicians work and the organization and processes of the people involved. Important factors in the success of an EMR implementation include having the proper skills in place, implementing an effective planning process and inculcating a desire to improve patient care and office efficiency.

Implementing EMRs requires moving from the current state – paper records, to a future state - electronic medical records. The process of moving from the current state to the future state is called change management. This Guide shows how to apply the OntarioMD change management methodology to the implementation of an EMR system. In addition, OntarioMD provides Practice Advisors and Peer Leaders to help you through the process. Practice Advisors are OntarioMD employees who consult on practice management and technology issues. Peer Leaders are experienced physicians or clinic managers who have successfully implemented EMRs in their own practices and who are available to help others like you.

There are four parts to the OntarioMD EMR adoption process. We discuss each in turn.

1. Prepare
2. Select
3. Implement
4. Use
Prepare

OntarioMD Tools for Readiness Planning

- On-Site Readiness Assessment
- Practice Workflow Tool
- Privacy and Security Resource Guide (and on-line tutorial)
- Practice EMR Adoption Plan

Introduction

As previously stated, adopting an EMR is not just about the use of technology. Rather, it is about workflow, practice operations, revenues, expenses, and staff responsibilities.

During the first meeting with your OntarioMD Practice Advisor, you will receive an orientation to the EMR Adoption Program and to the services available to you. You will also receive an overview of the steps involved in successfully adopting an EMR and in meeting the key program and funding milestones. This orientation is an important first step in Readiness Planning. The following are some considerations in helping you get ready.

Leadership

No EMR implementation can succeed without strong, dedicated leadership to drive the change process from beginning to end. Identifying that person is the first step. In a sole practitioner environment, that person is typically the physician him or herself. In multi-physician sites, the leadership can come from a computer-savvy physician, the clinic manager or an outside IT project manager hired for the duration of the implementation.

Build Commitment

Another important success factor is having all the staff participate in the planning, training and implementation of the EMR. EMR systems change many roles and responsibilities and some staff are concerned about losing their jobs. Having the staff involved from the beginning helps reduce fear, improves communication and builds commitment.

In some large practice settings, it may also be helpful to create a working group that devotes the time needed for the planning process.
Create a Vision

A vision is a statement of what you are trying to achieve in a global sense. What do you want your practice to look like once the EMR is implemented? What do you want improve with an EMR? Patient care? Billing? Patient reminders? Medication management? All of the above? Once you have set out your vision, ensure that everyone in the practice knows what it is and understands it.

Set Goals

Goals are numeric measures that you want to achieve as a result of the EMR implementation. In setting your goals, you may wish to focus on clinical care, office efficiency, responses to external organizations and overall productivity. Specifying the goals will assist in identifying the EMR that best matches your needs. Having goals also helps create and manage the expectations of staff and patients. Later on, the goals provide you with the baseline against which to assess the success of the EMR implementation.

Points to Consider:
- Has the practice identified a Physician/Staff IT Lead to oversee the process?
-Has the practice defined an overall vision for the practice and set numeric goals to be achieved with the introduction of an EMR?
-Do you have a critical mass of support for installing and EMR?
-Have all staff been involved in the planning and discussions to date?
Prepare

Readiness Assessment – Knowing Your Current State

Before planning for the future, it is important to understand how things work in the present. OntarioMD’s On Site Readiness Assessment and Plan is a tool for reviewing your entire practice. By conducting this review, you will gain a better understanding of the state of your current operations, the problems to be resolved and the potential for improvements. The readiness assessment focuses on a number of components within the practice: knowledge readiness, technical readiness, operation readiness, functional readiness, resource readiness and internal readiness.

You may also want to look at your past experience with introducing changes to your practice. What did or did not work successfully in those situations? Those previous experiences may serve as a useful guide in formulating your approach to the EMR implementation.

If you have existing organizational or procedural problems within your practice, it is better to address and resolve them prior to the EMR installation. EMR is not meant to resolve those types of issues.

Keep in mind the importance of good communications during the readiness phase. The project lead should ensure that all staff and physicians understand what is going on and what to expect.

Peer Leaders can also help. They bring their experience from other implementations and, as such, they can provide valuable advice and guidance.

Data Conversion

Data conversion is always an important consideration in any transition from paper to electronic records. The decision as to the amount and type of information to be converted is typically based on the size of the practice, the age of the files and the preferences of the physicians and staff. Some practices chose to convert just the most recent years of data. Others consider the EMR as “Volume 2” of the patient’s chart and enter just the key information to begin the new volume.

Points to Consider:
• What information do you want to convert from the paper chart?
• Do you need to convert it all or just the most recent years?
• Who will convert the information and how will they do it?
• When will the conversion be finished?
**Workflow Analysis**

EMRs affect physician and staff workflow. Workflow covers such aspects as clinical processes, business processes and office operations. Different EMRs manage workflows differently. Some do it better than others particularly the ones that can be customized to match physician preferences. However, all EMRs are effective at reducing paper handling and streamlining processes by removing duplication and repetitive tasks.

OntarioMD’s Practice Practice Workflow Tool is a good tool for looking at the workflow within a practice. Understanding the workflow involves the whole team: physicians, nurses, office managers, and administrative staff. Inadequacies in the workflow should be corrected at this stage, before the EMR implementation. Failing to do so leads to delays, frustration and retraced steps later on. Some of the areas covered by a workflow analysis include:

1. Patient flow: Examining the roles and functions of the various people who interact with the patients at different points through their visit.
2. Point of care: Examining the various documents that record the details of the patient visit.
3. Office communications: Examining the flow of information in the office.
4. Document management: Examining the movement of paper coming into the office, going out of or around the office and into the chart.

OntarioMD’s Practice Advisors and Peer Leaders can provide individual or group workshops on these tools. They can also provide on-site support.

By completing the On-Site Readiness Assessment and the Practice Workflow Tool, you and your staff will have a good idea of the areas that must be corrected before the introduction of an EMR.

**Prepare**

**Points to Consider:**
- Has the readiness assessment looked at the computer skills of existing physicians and staff?
- Has everyone in the practice been involved in the needs analysis and workflow assessment?
- Are there workflow improvements to be made in advance of the EMR?
- Are the physicians and staff aware of the workflow changes that will occur as a result of the introduction of an EMR? Do they agree to accept them?
- Are job roles clearly defined? Are new tasks being added and some removed?
- Have concerns about job loss been dealt with?

**Privacy and Security Considerations**

The privacy and security obligations with an EMR are much the same as those for paper charts. Extra precautions, however, are needed for passwords, access to the system and security of sensitive material. OntarioMD’s Privacy and Security Resource Guide and on-line tutorial will help you review your EMR privacy and security provisions.
Developing the EMR Adoption Plan – Knowing the Future State

After the completion of the current state assessment, the next step is to create the adoption plan. Some practices find that it is helpful to divide the project plan into manageable components (Months 1-2, 3-4, 5-6, etc) with identified resources and responsibilities and measurable targets. There are a number of different software tools for creating project plans. The plan should be flexible, allowing for changes to be made based on the specific EMR software selected for the practice and for contingencies that arise along the way.

OntarioMD has created the “Practice EMR Adoption Plan” to provide physicians with a checklist of various tasks and activities that should be completed and/or considered.

As mentioned earlier, having a clearly identified and committed physician lead is essential for a successful introduction of an EMR. This lead person serves as the project manager. The responsibilities include providing the business and clinical expertise, building consensus, communications and other activities required to keep the implementation of the EMR on track.

Some practices hire an outside IT specialist on a contract basis to serve as the EMR project manager for the period of the implementation. OntarioMD has a roster of pre-qualified project managers that you can choose from. Factors influencing this decision include the size and complexity of the practice, the skill sets of the existing staff and the amount time that the existing staff has available to devote to the implementation process.
OntarioMD Tools for Selecting Your EMR

- EMR Solution Selection Guide

Introduction

After completing a workflow analysis and defining your clinical and business functions, it is time to begin the search for an EMR that meets the needs of the practice. OntarioMD has assembled a list of approved vendors. OntarioMD has tested their products and has verified that they meet specific required functional specifications. To qualify for funding, you must select one of these approved vendors.

Preparing for EMR Selection

As with any product, it is important to have a solid process for assessing the functionality of the EMR against the clinical and business requirements of the practice. Having a good understanding of these requirements and a preset process for selecting the right product will ultimately save time and money and will produce a better result in the end.

The solution is to create a set of selection criteria developed from the practice assessment and workflow analysis. OntarioMD provides an EMR Solution Selection Guide that helps physicians to compare different EMR products against a select set of functions.

Creating a Selection Team

We recommend that you create a selection team to investigate, assess and select the EMR product. The team should consist of representatives from both the clinical and non-clinical staff. In smaller offices, the selection team could be comprised of everybody in the office.

The selection team should be intimately aware of the overall EMR vision, the numeric goals and the results of the needs analysis and workflow assessment. As well, the team should possess the business judgement to decide what features are nice-to-haves versus must-haves and the consequences of those decisions.
Types of EMR Service Models

There are two types of EMR service models, the Local Solution (LS) and the Application Service Provider (ASP) model. With the Local Solution, you own and manage the computer server. The server is physically located in a secure spot in your facility with the users accessing it remotely. You are responsible for the maintenance of the server, software updates, disaster recovery and data security. With the ASP model, the server and all the software resides at the eHealth Ontario data centre. You own the data but not the server or the software. Everything that is outside of your facility is managed for you on a fee-for-service basis. eHealth Ontario looks after the servers disaster recovery, software updates, etc.

Points to Consider:
• Have you reviewed the list of approved EMR vendors?
• Have you reviewed each of the vendor web sites or marketing material as background information?
• Do you understand the difference between the Local Solution and the Application Service Provider model as they would apply to your practice?
• Do you have a structured approach to scoring and ranking EMR products?
• Have you requested assistance from your Practice Advisor and/or Peer Leader with respect to preparing for vendor discussions?

Engaging Vendors

When you have completed the preparation work, you are ready to engage with the EMR vendors. Select two or three vendors that come closest to meeting your needs and goals.

Vendor Demonstrations

Ask selected vendors to demonstrate their products. Demonstrations allow you to see the EMR products in action and to ask specific questions about how they would fulfill your practice needs. Don’t be shy! Be ready to ask the vendors as many questions as you see fit. The more information you have, the better you will be able to make an informed decision.

Your OntarioMD Practice Advisor can suggest questions to ask and ways to get the most value from the time spent on vendor demonstrations.

Visit Existing Users and Check Vendor References

You can learn a lot from the experience of other practices that have already implemented the same EMR that you are considering. Ask them what they like and what they don’t like about the product and vendor support. In addition, ask them about the terms and costs in their vendor contracts. Have them identify what they were able to negotiate and what they couldn’t. The EMR vendor and/or your OntarioMD Practice Advisor can refer you to existing users whose practices are similar to your own.
Select

**Points to Consider:**
- Have you developed a list of key functions that you want the EMR vendor to demonstrate?
- Have you sought advice from your OntarioMD representative or Peer Leader?
- Has the selection team seen a vendor demonstration of each EMR system under consideration?
- Did you ask lots of questions at the demonstrations?
- Have you narrowed down your final list to 2-3 suitable vendors?
- Have you arranged site visits and obtained vendor references?

**Negotiating the Contract**

Most vendors have a standard contract outlining the details of their product licensing arrangement. These contracts contain terms and conditions that are designed to protect the vendor. Review all standard contracts to ensure that they address issues that are important to you. Don’t be afraid to negotiate terms and conditions or to add clauses. Be guided by what you learned on the site visits.

Consider seeking advice from a lawyer, accountant and/or IT professional.

**Vendor and Physician Checklist**

The Vendor and Physician Checklist sets out in detail the many tasks to be completed in an EMR implementation. You and your vendor must agree on who is responsible for completing each task. The Vendor and Physician Checklist forms part of the EMR Agreement between you and the Vendor.

The Vendor and Physician Checklist is a requirement for obtaining the Readiness Grant and the monthly subsidies from the OntarioMD EMR funding process.

**Training Requirements**

The Vendor and Physician Checklist sets out in detail the many tasks to be completed in an EMR implementation. You and your vendor must agree on who is responsible for completing each task. The Vendor and Physician Checklist forms part of the EMR Agreement between you and the Vendor.

The Vendor and Physician Checklist is a requirement for obtaining the Readiness Grant and the monthly subsidies from the OntarioMD EMR funding process.
Determine the Costs and Create a Budget

It is of great importance to determine the total cost of your EMR implementation. In brief, there are capital costs, transition costs and ongoing costs. Some of these costs are set out below. Your accountant and Practice Advisor can help you set appropriate budget estimates for these items.

1. Capital Costs
   - Software: licenses, upgrades, etc.
   - Hardware: computers, monitors, printers, scanners, etc.
   - Facility retrofits: wiring and cabling, furniture, etc.

2. Transition Costs
   - Installation, setup and configuration
   - Training
   - Data conversion
   - Interfaces and customization

3. Ongoing Costs (three year period)
   - Application support and maintenance: enhancements, upgrades
   - Hardware replacement
   - Training of new staff

By knowing the total cost up front, you will avoid surprises later on.

The Contract

The contract that you sign with the vendor is a legally binding document. So, understand the meaning of each term and negotiate hard. As mentioned before, EMR vendors typically begin the negotiations with their standard agreement and then allow some flexibility. When all points have been settled, take the time that you need to review the final document. Don’t feel pressured to sign it right away. Check with your lawyer and Practice Advisor. The Ontario Medical Association also provides legal advice to its members.

Points to Consider:
- Did you involve a financial advisor in calculating the total cost of the EMR system?
- Did you seek advice from your Practice Advisor or a Peer Leader?
- Did you scrimp on training to keep costs down?
- Did you seek legal advice before signing the contract?
- Did you determine what computer skills are required to support the EMR as well as any other software applications that may be introduced?
OntarioMD Tools for Implementation

- Implementation Acceptance Test (IAT) Review

Introduction

Now that you have selected your EMR and vendor, you move on to the implementation. After signing the contract, there will likely be a wait of a few weeks before the start of the implementation. During this time, the vendor sets up your account, assigns and schedule resources, acquires equipment and so on. Similarly, you have work to do. You and your staff will be busy getting the practice ready for the implementation.

Managing the Workload

The vendor shoulders the primary load for the implementation, but responsibility for several tasks remains with the practice itself. These tasks always seem to take longer than anticipated. So, too, does the training. In order to free up the necessary time, many practices cut back on the number of patient visits during some or all of the implementation period. Some practices schedule the implementation to occur during seasonally slow periods of the year.

The practice will be responsible for customizing and personalizing the various data input templates to match the style of the practice. Data conversion is a big task as is the preparation of key documents.

Preparing the Premises

If your office isn’t already wired for computers, then there will be a certain amount of disruption as the installers put in the cabling. In addition, to facilitate communications with people outside the practice, you will need to set up an account with an internet service provider and create e-mail addresses for each of your staff.

You may also require some changes to your office layout and furniture to accommodate the new equipment.

Deciding on the Go-Live Strategy

Once everything has been connected and tested, it is time to Go-Live. As part of your implementation project plan, you would have made certain decisions on the go-live process. Did you decide, for example, to go paperless overnight? Alternatively, did you opt for a more staged approach, perhaps one where you continue to use the paper files for historical records but you add no new paper? Whatever your plan may be, the transition to EMR takes some time. Make sure that your goals are realistic.
Most practices have opted for a phased approach for the changeover. For example, they may start with lab tests and, then slowly add in patient education and information sheets. This type of phased approach is less risky for the practice and less stressful for the staff and physicians. Due to the “newness” of the EMR, even some formerly simple tasks may take a little longer until new work habits get ingrained. It takes time to absorb the training and to apply it to the more complex tasks. Therefore, expect some loss of productivity in the early phases of implementation. Be patient and give yourself and others time to adjust to the EMR and to the changes in workflow.

Monitoring your Progress

Soon after the implementation (e.g. within the first few days or week), take the time to assess the experience. The goal is to identify what is working well and what needs to be improved. Make a list of items that need attention, assign responsibility for resolving each item (e.g. practice staff, vendor, third party suppliers) and set the target completion date. Some practices hold formal staff meetings for that purpose. Others may simply have staff huddles in the morning before the patients arrive. Either way, good communication is critical. Keep everybody well informed. If problems arise, let the staff know. Tell them what will be done and when. If you don’t know, tell them that, too. Good communications goes a long way in setting realistic expectations and reducing frustrations.

Shortly after the Go-Live, your Practice Advisor will help you conduct an Implementation Acceptance Test (IAT) Review to verify that all tasks set out in the Vendor and Physician Checklist have been completed as planned.

A final word of wisdom - recognize and celebrate your successes. Be happy when things go right.

Points to Consider:
• Do you plan to lighten the patient load during the implementation phase?
• Are you prepared to accept some short-term loss of productivity during the implementation period?
• Are you prepared to make a list of issues that need to be resolved and create plans to resolve them?
• Do you realize the importance of good communications with the staff? Are you prepared to make the effort to do so?
• Do you intend to review your privacy and security policies and procedures?
• Celebrate your successes, and make it fun.
Introduction

When the practice has acclimatized to the new EMR routines, you can turn your attention to looking for ways to use it to improve patient care and health outcomes and to increase the productivity of your practice. However, it may take some time in order to get sufficient data into the EMR to really begin the process of reaping long term benefits. Also, ensuring that data is captured in a consistent way, and using consistent terminology or coding, is also very important.

As you begin to use the EMR more and more in your day to day encounters with patients, you may reach a “plateau” in using the functionality within the EMR. It will be important at this stage to begin to understand and to further maximize the functionality within the EMR to really drive benefits to patients and your practice. This “maturing” of the use of the EMR will assist in you in realizing the goals that you set earlier in the EMR planning process.

By regularly assessing your practice’s “maturity” level you will be able to identify areas for further quality improvements and to create action plans to address them. This is an iterative process that should be undertaken at regular intervals. OntarioMD’s EMR Progress Report is a tool for recording baseline conditions and measuring progress towards established goals. Use it to assess areas for improvement and to make realistic plans. Your Practice Advisor or Peer Leader can help you through the process.

Advanced use of the EMR allows you to realize benefits to patients as well as efficiencies in their practices. For example, EMRs can significantly assist in chronic disease management and preventive care, especially in patients with one or more chronic disease conditions. Many EMRs provide specific chronic disease templates, flow sheets, reminders and patient education materials, in order to assist in chronic disease management. Many EMRs allow you to group patients with the same chronic disease conditions in order to plan for particular “campaigns” and/or to undertake mail outs. By improving care to individuals and groups of patients this way also allows for improvements in funding revenues related to improved patient care.

Some questions to ask at this point:

- In what ways has the EMR enabled you to improve patient care?
- How has the EMR improved the efficiency and productivity of your office?
- Is information being coded in a consistent manner, using consistent terminology?
- What can be further improved?
- How can your EMR data be used to improve health outcomes in targeted patient groups?
Use

Advanced use of the EMR provides additional data management/query capabilities to predict trends and in managing and reporting from a population health perspective. This is an evolving area with EMRs and will become even more important in measuring health outcomes in the future.

**Points to Consider:**
- Do you see the potential of reaping a continuous stream of benefits as your staff becomes more comfortable with the EMR and begins to use a wider range of features?
- Do you understand that EMR benefits realization is an iterative process whereby each improvement leads to additional improvements?
- Do you intend to ask a Practice Advisor or Peer Leader to review your implementation and assess ways to make better use of your EMR?

**Conclusion**

OntarioMD created this Guide to help you plan, implement and evaluate the adoption of an EMR in your practice. By reading the Guide, you will have learned that moving to an EMR is not just a one-time event. Rather, it is an evolution, one that continues to produce benefits as time progresses. As new requirements arise within your practice so, too, will new capabilities be incorporated into upgraded versions of your EMR.

By adopting an EMR in your practice, you have made the first step on a path to better patient care, improved practice operations and the sharing of vital health care information when and where it is needed in the medical community.

Your patients and staff will thank you and congratulate you for making the move to EMR.