Development of Personal Learning Projects: EMR Planning, Selection and Implementation

Introduction

Electronic medical record (EMR) planning, selection and implementation is a major health information technology (IT) project that can serve as the stimulus for or as a resource to the development of a personal learning project (PLP). This planning guide has been developed to help you create one or more PLPs by leveraging your participation in planning, selection and implementation of an EMR.

About Personal Learning Projects

Self-learning occurs as you engage in learning activities where you are responsible for:

- Identifying a need, goal or objective relevant to an aspect of your professional practice (including clinical, teaching, research or administrative practice).
- Choosing how you want to learn.
- Identifying the conclusion or outcome.

PLPs are self-planned learning activities developed to answer a question, issue or problem you have identified. Although the majority of the questions, issues or problems you develop are relevant to your role as a medical expert, PLPs can also address questions relevant to any CanMEDS role. However, evidence suggests that many questions are either not pursued (go unanswered)\(^1\) or are not formulated well\(^2\), making them difficult to answer.

The question or questions you identify help you create a learning plan that involves selecting relevant sources of information to assist you in reaching a conclusion. Common sources of information include scientific literature (for example, systematic reviews), practice guidelines, talking to experts or colleagues and participating in group learning activities. During EMR implementation, reports or documents that may inform a PLP include the assessments and reports you have prepared to help you with vendor selection and implementation.

The final part of the PLP is reflecting on what you learned or the changes you anticipate making and recording the process and conclusions in MAINPORT.

During EMR planning, selection and implementation, the lead physician may choose to consult experts in health IT change management, transition, privacy and implementation. The physician, as lead or as a clinic stakeholder, is involved in all or various stages of the process. Learning can be documented by process stage.


Disclaimer: The information in this fact sheet is provided for education and guidance only and is not intended to replace expert advice. Physicians are responsible for making informed decisions to meet their medical-legal obligations.
Before EMR Planning, Selection or Implementation

Step 1: Question development

Identify your stage of involvement and one or two questions you are working to answer. Example questions are provided by stage in Appendix A.

Question 1:

Question 2:

Step 2: Develop a Learning Plan

The learning plan could include activities such as:
- Reading reports made available to you by consultants
- Reading pre-circulated material
- Accessing other relevant resources

Learning During EMR Planning, Selection or Implementation

The formal (meetings with consultants, reviewing your reports, clinic meetings) and informal (collegial discussions) activities are resources you can leverage to answer your question(s). Use the space below to record ideas or evidence that contributes to your learning during the activity.

After EMR Planning, Selection or Implementation

Step 3: Define the Learning Outcomes

Reflect what you have done and determine if:
- You have learned enough to answer the question(s).
- You need to modify your learning plan and continue learning by exploring additional resources.

The conclusions or outcomes you reach for your practice can include:
• Confirming your current knowledge, skills or practice.
• Expanding your knowledge, skills, competencies or attitudes.
• Changing some aspect of your practice.
• Enhancing your performance or improving practice outcomes.

Documenting What You Learned

Step 4: Document your PLP in MAINPORT

Document the question(s) you pursued and the outcomes you reached in MAINPORT. When accessing MAINPORT using a computer or hand-held device, the documentation templates provide you with two options:

- Document as you learn—enter some information, save as incomplete and add to or revise what you have documented in the future.
- Enter information in all mandatory fields once the PLP is complete and submit for credit.

In MAINPORT, the template to document each PLP is found in Section 2: Planned Learning. There are several mandatory and optional fields for each PLP.

| MAINPORT Mandatory Fields | The question or issue you defined  
The learning outcome or conclusion you reached  
The date the project was completed  
The total time (in hours) you spent learning |
| MAINPORT Optional Fields | The resource(s) you used to learn  
Link the PLP to individual CanMEDS Role |

Record Time Learning

Include the total time (using 15-minute increments) you spent identifying and developing the question(s), accessing and appraising resources, determining learning outcomes and recording the PLP in MAINPORT. Enter the total time and MAINPORT will do the calculations for you.

Example:

- Developing a question and creating a learning plan – 15 minutes
- Reading pre-circulated material – 2 hours
- Attending the group learning session relevant to your question – 2 hours
- Reflecting on and identifying the conclusion for your practice – 2 hours
- Recording the PLP in MAINPORT – 15 minutes

Total Time = 4.75 hours which equates to 9.5 credits

Some Practical Suggestions

1. Record questions as you practice:

   Although raising and answering questions is a natural learning strategy for physicians, the majority of questions in a physician’s practice are not pursued. Recording questions
as they occur helps you create a learning plan that addresses those issues most relevant to your practice. You can record the questions you have raised but do not have the time to pursue immediately in the MAINPORT “Holding Area.”

2. Each clinical question you develop is a reflection of a specific need you have defined. It is helpful to consider:

   **Question content:** Is your question intended to focus on: etiology, pathophysiology, clinical features, diagnosis, treatment or management options, prevention or prognosis?

   **Question Domains:** Have you described the population, the intervention or exposure, the comparison that should be considered or the outcome of interest?

3. The sources of evidence you select will depend in part on the urgency of the need to apply the evidence. For immediate application (for example, at the point of care), consider accessing summarized sources of evidence and/or seeking the advice of colleagues.

   *For more information on PLPs please contact the Royal College Services Centre at: 1-800-461-95989 or contact the CPD Educator in your province.*
Appendix A

EMR Planning, Selection and Implementation Questions by Stage

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<tr>
<th>Stage</th>
<th>Example Practice Question</th>
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| Value Proposition            | What value can an EMR bring to:  
  - My approach to patient care?  
  - Improving my efficiency both in and outside the clinic in providing patient care?  
  - Practice associates?  
  - Clinic staff? |
| Readiness Assessment         | How can it be determined if clinic members are ready to adopt an EMR?  
  - What key areas of clinic operation and patient care are impacted by the transition to an EMR and has my clinic addressed each area appropriately?  
  - Does my clinic have the required expertise and buy-in of key clinic personnel to proceed?  
  - How can we ensure that all practice physicians and staff are aware of the plans to transition to an EMR?  
  - What is our clinic team’s computer comfort/literacy level?  
  - What change management needs to take place?  
  - Has our clinic site been reviewed for technical readiness? |
| Self-Assessment of EMR Goals | How can an EMR improve clinic processes for:  
  - Patient care?  
  - Clinic population health management?  
  - Clinic operations management?  
  - Which key EMR functionality needs to be adopted to increase the benefit of an EMR solution in my practice? |
| Business Process Requirements Review | How can key functional areas be identified which are unique to clinic operations and areas of potential change in clinic processes due to the implementation of an EMR?  
Examples of more specific questions:  
  - Are there unique rules for attaching patients to providers in our clinic?  
  - Are there unique processes for validation of patient registration information?  
  - Are there special requirements for managing staff or physician scheduling?  
  - Are there unique scheduling processes for recalls, internal alerts and wait list?  
  - What unique clinic processes are in place for referrals and/or consults?  
  - Are unique templates, requisitions and forms required?  
  - What special charting needs are required to assess and treat our patients?  
  - Does the clinic use medical devices which are or which it intends to integrate with the EMR?  
  - Does the clinic use medical devices which are or intended to be integrated with the EMR? |
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|                            | • Does the clinic need to generate patient handouts or provide medical illustration tools in the exam room?  
• Which forms in our clinic require auto-population?  
• Which clinic processes are unique for ordering, receiving and tasking assignments related to investigations?  
• Does the clinic have unique order sets that are essential to our practice?  
• Which clinic processes are unique for medications management?  
• Which non-conforming prescriptions are frequently used (for example, compounds, orthotics, physiotherapy)?  
• Do we require special graphing requirements (for example, specific medication versus an investigation result)?  
• Are there unique ways the clinic uses Netcare and the Pharmaceutical Information Network (PIN)?  
• Does the clinic require unique care planning tools, forms or templates?  
• How do we identify, evaluate and monitor patient populations in our clinic?  
• Does the clinic require specific reports for practice management or research purposes? |
| Custodian Assessment       | What are my custodial responsibilities related to the creation, retention and security of patient records?  
How can a review of how data is managed in the current records system inform me of the data management options in transferring to a new EMR?  
• Which data and in what form needs to be retained from my current records?  
• What data needs to migrate into a future EMR?  
• How can the clinic plan for data migration?  
• How is the migrated data validated?  
• What are the reporting (data mining) needs from my future EMR with respect to my current data? |
| EMR Vendor Selection       | Which EMR can best meet the needs of my practice?  
• How can vendor presentations or demonstrations help to select the EMR?  
  o Can a requirements checklist help our clinic evaluate the EMR?  
  o Can a scorecard help our clinic evaluate the demonstrations?  
• How can peer or colleague interactions support our clinic in selecting an EMR?  
• How can I ensure that we have done our due diligence in contracting with my selected EMR vendor? |
| EMR Implementation         | How can a structured training plan assist in ensuring that all clinic team members are prepared with the EMR basics to conduct a clinic day at go-live?  
• How can our clinic plan for ongoing advancement with the EMR post go-live so that all clinic team members can perform their role in contributing to patient care? |
### Example Practice Question

How can data in our EMR be managed to standardize our processes so that we can create reports for:

- Access Improvement Measurement reporting?
- Practice management reporting?
- Clinical research?

As a result of participating in a privacy impact assessment (PIA) and/or a provincial Organization Readiness Assessment (pORA), how can privacy and security risks be identified or minimized in our clinic?

- Due to the implementation of our clinic's EMR, which administrative, technical and physical safeguards are required to ensure the protection of patient's health information?
- How can these policies and procedures be administered so that all clinic team members play a role in protecting patient health information?