EMR Implementation Planning Guide

A Ten-Step Guide to Planning for Successful Implementation of an Electronic Medical Record (EMR) System
Contents

Purpose of this guide .............................................................. 3
Step 1: Establishing the project team ........................................... 4
Step 2: Project activities and phases .......................................... 5
Step 3: Planning for change ..................................................... 9
Step 4: Communication planning .............................................. 10
Step 5: Data migration and data retention from legacy systems .... 11
Step 6: Training ....................................................................... 12
Step 7: Identifying EMR reporting requirements ....................... 13
Step 8: Executing and validating deployment ............................ 14
Step 9: Executive approval to go live ....................................... 15
Step 10: Post-Go Live activities and support ............................. 16

For questions or comments, please contact:

AOHC EMR Project
Association of Ontario Health Centres
emr@aohc.org
Purpose of this guide

The *EMR Implementation Planning Guide* is a ten-step framework to help you understand activities necessary for successful implementation of the new Electronic Medical Record (EMR) system at your health centre. It’s designed to provide opportunities for advance planning and resource allocation, and timelines for deployment activities.

EMR implementation will be a collaborative effort involving teams from your centre, the EMR vendor, and AOHC staff working on the EMR project. Depending on the size of your centre and resource availability, the number of project team members will vary. At a minimum, however, all executive directors or a designated senior manager will need to review the *Guide* to understand funding and resource commitments and assign staff to the EMR project as appropriate.

When and how to use the *Guide*

Intended as a step-by-step planning tool, the *Guide* provides valuable information to help you make decisions regarding the timing of the EMR Go Live date, and resource commitments necessary for successful adoption of the new EMR. Regardless of when your centre is scheduled for EMR implementation, this document will help you start thinking about what’s needed for smooth implementation. As the system is deployed across the sector, the *Guide* will be updated with lessons learned to ensure information remains current.

On-site implementation

This guide is a pre-implementation planning tool. Once your EMR Go Live date has been confirmed, a comprehensive EMR implementation approach will be available to support project teams in system implementation at your centre. Encompassing processes, guides, tools and activities, the EMR implementation approach will support EMR adoption and use, and help determine your centre’s needs at a detailed level, including budget and resource requirements.
Step 1: Establishing the project team

Key Points

- While the AOHC and the EMR vendor will play key roles and act in partnership with the centre, each centre is responsible for its own EMR implementation project.
- Centres will be required to assign a dedicated project manager, who will be responsible for project deliverables and keeping the project on track.

The centre's project team

The centre's project team is pivotal to the overall success of EMR system implementation. Although the full project team may be assigned later in the project lifecycle, the executive sponsor and project manager should be assigned prior to the start of the project.

<table>
<thead>
<tr>
<th>ROLE</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE PROJECT SPONSOR</td>
<td>Accountable for the overall success of the project, the executive sponsor assigns the project manager. Prosci, an internationally-recognized change management firm, has identified active and visible executive sponsorship as the most important factor in project success. Together, the executive sponsor and project manager identify members of the centre's project team. They lead change and manage resistance to change.</td>
</tr>
<tr>
<td>PROJECT MANAGER</td>
<td>Typically a senior manager experienced in leading multi-faceted implementation teams, the project manager makes EMR implementation decisions on behalf of the centre, and is responsible for day-to-day management of EMR implementation for the duration of the project.</td>
</tr>
</tbody>
</table>
| PROJECT TEAM             | The project team works on all aspects of EMR implementation with a focus on the following:  
- Budget/agreement management  
- Business change  
- Information technology management  
- Privacy and security  
- Communications  
- Data migration  
- Training  
- Reporting  
Depending on resource availability and EMR implementation complexity, one person may fulfill multiple roles. The key consideration is the time and effort each role requires to ensure overall project success. It's important to include clinical representation on the project team. |
Step 2: Project activities and phases

Key Point

- This guide is a pre-implementation planning tool. Once your EMR Go Live date is confirmed, a comprehensive EMR implementation approach will be available to support system implementation at your centre. Encompassing processes, tools and activities, the approach will be updated regularly to leverage lessons learned from earlier EMR system implementation at other centres.

Project Phases

<table>
<thead>
<tr>
<th>ENGAGEMENT</th>
<th>ASSESSMENT</th>
<th>PREPARATION &amp; PLANNING</th>
<th>DEPLOYMENT</th>
<th>GO LIVE WEEKEND</th>
<th>POST-IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Initial project planning discussions with centre</td>
<td>- Detailed needs analysis to assess centre’s business and technical readiness</td>
<td>- Project planning</td>
<td>- Pre-production environments allocated</td>
<td>- Data conversion, validation</td>
<td>- Data validation by end users</td>
</tr>
<tr>
<td>- AOHC/centre preliminary meeting to kick off project</td>
<td></td>
<td>- Project Scope of Work, Funding Agreement, budget preparation</td>
<td>- Data migration trial runs to create a clean extract file</td>
<td>- Final readiness checklist completion</td>
<td>- Addressing issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Business process redesign preparation</td>
<td>- Business process redesign</td>
<td>- Go/No-Go Live meeting</td>
<td>- End user support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Data migration preparation</td>
<td></td>
<td></td>
<td>- Peer leader group support</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Transition to adoption/operations phase</td>
</tr>
</tbody>
</table>

1 Peer leaders are health centre staff who will champion the use of the EMR to sector colleagues through best practices and lessons learned. Peer leaders will likely be drawn from centres that adopted the EMR system early in the sector-wide implementation schedule.
Engagement Meeting

Designed to kick off the project, the engagement meeting brings together senior centre executive and project team members and the AOHC EMR Project Team, who will work in partnership to implement the EMR system. The centre’s executive sponsor should assign a project manager prior to the meeting. Meeting activities include reviewing project milestones, resource assignment, roles and responsibilities, and establishing a high-level approach to project communications and issues management. The funding agreement and budget templates will also be reviewed at this session.

<table>
<thead>
<tr>
<th>ACTIVITY START</th>
<th>Four months prior to your EMR Go Live date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>Half-day session</td>
</tr>
</tbody>
</table>

Assessment Phase

The centre’s technical and business leads are assigned during this phase. Working with leads, the AOHC EMR Project Team will conduct a detailed business and technical needs analysis including network requirements of the centre. Information gathered at this stage will be used to evaluate gaps in business processes or technology, inform the EMR implementation budget and support development of the Project Scope of Work (SOW) and funding agreement between the AOHC and your centre.

<table>
<thead>
<tr>
<th>PHASE START</th>
<th>Four months prior to your EMR Go Live date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>One month approximately</td>
</tr>
</tbody>
</table>

Preparation and Planning Phase

Your centre’s full project team should be assigned prior to the start of this phase. Activities include:

- Development of the project work plan using an AOHC EMR Project template
- Review of results from the business and technical needs analysis
- Project Scope of Work (SOW) preparation by the centre and the AOHC, and signature by the centre, AOHC, and vendor
- Preparation of the EMR implementation budget
- Funding agreement preparation, and signature by centre and AOHC executive directors
- Data migration and transfer activities
- Documenting current workflows
- Enabling deployment portal access
- Ordering network services, infrastructures upgrades, equipment, etc.
**Deployment Phase**

The deployment phase involves all activities required to advance the project from planning and preparation to the day the EMR goes live at your centre. Activities in this phase include:

- Meetings to coordinate EMR implementation activities
- Vendor team engagement with centre/AOHC project teams
- Allocation of data migration, training, demonstration and pre-production environments
- Data migration trials
- Identification of additional local reporting requirements
- Preparing staff for the new EMR
- Identifying and implementing local EMR configurations (i.e., setting up authorized users, assigning role-based access, etc.)

**Go Live Weekend**

Occurring from Friday to Monday, Go Live weekend is the most critical part of EMR implementation. A time of intense activity for centre, AOHC, and vendor project teams, activities include:

- Data migration and IS/IT teams copying the database(s) and sending files to a centralized migration environment
- Data conversion using data migration tools
- Exporting data to the new EMR, and data validation
- Executive approval to go live.

For more information on this activity, see Step 8: Executing and validating deployment, and Step 9: Executive approval to go live.
Post-Implementation Phase

Even after your new EMR is up and running and in active use, there are still a series of activities to undertake, including:

- Data validation by end users
- Super user\(^2\) support of end users
- AOHC and vendor team support for a specified period
- Peer leader support
- Ongoing practices to support full EMR adoption

For more information on the Post-Implementation Phase, see Step 10: Post-Go Live support and EMR adoption.

**PHASE START**
As soon as your new EMR is live

**DURATION**
Ongoing

\(^2\) EMR users at your centre who receive additional training on the new system so they may share knowledge and assist other staff. See Step 6 - Training.
Step 3: Planning for change

The new EMR will bring significant change to your centre. To help you plan for change, the AOHC Transition Management Team will work with you to develop a strategy to support the transition of people, processes and technology.

Three key activities are required to develop a change strategy and prepare providers and staff for EMR implementation from a business process perspective:

1. **Set the strategic direction** by defining goals around the use of the new EMR to support and improve client-centered care.

2. **Map current processes** to identify the people, processes and tools currently used to provide client care. Likely led by your centre’s change manager with assistance from the AOHC Transition Management Team, this is an opportunity to identify what works well at your centre, and more importantly, what doesn’t, and to identify processes or workflows that need improvement.

3. **Define to-be processes** by re-thinking and re-designing processes to ensure a client-centered practice. This activity provides opportunities to plan organizational changes in your daily workflow based on the improved features and functionality of the new EMR. This exercise should be a centre-wide initiative with representation from all areas of care and operational support.

Change management helps organizations and individuals affected by new processes and technology understand the need for changing current behaviour, and provides practical approaches and tools to help organizations and individuals implement and adopt new skills and behaviours. To support you in these activities, the AOHC EMR Project Team will provide guides, tools and expert assistance.

**ACTIVITY START** | Four months prior to your EMR Go Live date

**DURATION** | Four months
Step 4: Communications planning

Communications planning focuses on informing and engaging staff from throughout your centre, and stakeholders, on changes that will result from implementation of the new EMR. Providing early awareness and keeping these audiences informed of project progress and the impact the new system will have on their day-to-day lives is an important part of overall project success.

A communications plan should at a minimum fulfill the following objectives:

- Provide staff with awareness and understanding of upcoming changes early on
- Inform any centre partners, such as laboratories, of EMR implementation, to give them time to make necessary process changes
- Keep users and stakeholders informed about project progress, as well as EMR adoption status
- Inform and update your board of directors and LHIN about the project and current status.

A comprehensive guide and communications planning template will be provided by the AOHC EMR Project Team once your EMR Go Live date is confirmed. Communications planning should start four months before your EMR Go Live date and continue throughout the project, up to approximately one month after your Go Live date.

<table>
<thead>
<tr>
<th>ACTIVITY START</th>
<th>Four months prior to your EMR Go Live date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>Four months</td>
</tr>
</tbody>
</table>
Step 5: Data migration and data retention from legacy systems

Data migration and retention of legacy clinical management system (CMS) data to the new EMR is the most critical activity in successful implementation of the new system. Without proper migration of existing client data, the new EMR will fail to support optimal client care. Due to data migration complexity and the variation in levels of electronic record adoption across the sector, careful and detailed planning is necessary at each centre to prepare for successful migration of legacy CMS data to the new EMR.

Data migration involves five key activities:

1. **Data preparation** of paper and electronic charts, as per instructions, guides and tools provided by AOHC EMR Project Team.

2. **Data mapping** of local data values to data fields in the new EMR.

3. **Data migration** using AOHC EMR Project Team migration tools and data mapping spreadsheets. Data migration will happen in a dedicated, centralized environment supporting pre-implementation practice runs and final migration and validation. This approach will enable project teams to benefit from iterative data migration trial runs, so data conversion errors can be corrected, and data can be validated after each trial run.

4. Planning and execution of manual entry of relevant data from **paper charts**.

5. Retention of original historical records to ensure compliance with medical/legal requirements.

Data migration support

Along with a dedicated data migration environment, an AOHC data migration coordinator, as well as guides and tools will be available to assist you with data preparation, retention and migration.

<table>
<thead>
<tr>
<th>ACTIVITY START</th>
<th>Four months prior to your EMR Go Live date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>Four months</td>
</tr>
</tbody>
</table>
Step 6: Training

All staff who will use the new EMR will require training. Specialized training will also be necessary for super users, system administrators, data management coordinators and financial staff.

The AOHC EMR Project Team will provide you with tools to help you develop a training strategy for your centre to meet your short and long-term needs. This includes identifying training roles and responsibilities and completing a training and course planning matrix.

The EMR vendor will provide onsite training for your staff. Each centre should identify at least one super user who can be trained to provide onsite expertise and who can, when required, train new staff.

A training environment for staff to practice using the new EMR will also be available. Staff will have ongoing access to online training modules to refresh knowledge, and supplement training for new staff or staff with new responsibilities.

EMR training will be supplemented by a peer leader support network. The network will enable clinical staff from other centres experienced in using the new EMR, like physicians, nurse practitioners, nurses, dietitians, social workers and clinical support staff, to act as mentors to new users. The program aims to speed adoption of the new system and assist you in achieving meaningful use of your EMR.

| ACTIVITY START | Three months prior to your EMR Go Live date |
| DURATION       | Three months                                 |

3 Basic computer skills are a prerequisite to EMR system use. Training to support basic computer literacy will not be provided as part of the AOHC EMR Project. If some of your staff lack basic computer skills, it’s important to recognize and address this gap before they receive training on the new EMR system.

4 For a definition of super user, see Step 2, Post-Implementation Phase.
Step 7: Identifying EMR reporting requirements

The new EMR will offer pre-defined reports to address core business needs. Additional reports requested on a sector-wide basis and available to all centres will be added based on an approved change request process.

If required, centre-specific local reports will be developed to address the specific reporting needs of a centre. Driven by the centre’s business change team, each centre will need to compare their reporting requirements to standard system reports to verify if additional local reports will be required.

The following activities will be required to identify local reporting requirements at your centre:

1. Identify current reporting activities across all offices.
2. Assess current reporting activities in terms of relevance and usefulness and identify new reporting requirements.
3. Prioritize and develop new, local reports.

Identifying EMR reporting requirements should start three months prior to your EMR Go Live date, and take approximately one month. Report development should begin two months prior to your Go Live date and continue after EMR implementation as an operational activity.

<table>
<thead>
<tr>
<th>ACTIVITY START</th>
<th>Three months prior to your EMR Go Live date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>Three months plus ongoing operational activity</td>
</tr>
</tbody>
</table>
Step 8: Executing and validating deployment

Key Point

- Once the new system is deployed and new data is being entered into it, there will be no way to synchronize data between the EMR system and legacy CMS databases. This means once staff start using the new system on Go Live Monday, it will not be possible to revert to the legacy clinical management system without losing all new data.
- Legacy system data will continue to be available for reference.

Leading up to EMR deployment (Go Live) on Monday morning, executing and validating deployment takes place from Friday to Sunday. The most critical part of EMR implementation, it will also be a time of intense activity for the centre, AOHC, and vendor project teams.

During this three-day period, the data migration and IS/IT teams will make copies of the database(s) and send the files to the centralized migration environment. Data migration tools will convert the data and import it to the new EMR, where the data must be carefully validated. This is the final opportunity to catch errors, and is crucial to avoiding unpleasant surprises when the system goes live on Monday morning.

Once the new EMR is up and running (but has not officially gone live), other centre staff are required to participate in the data validation process. This important step involves running and reviewing reports from the legacy CMS and the new EMR to compare and validate data. This can be a time-consuming activity requiring manual reviews of reports and client information. A data validation process document will be available in advance to help your centre plan for this activity.

<table>
<thead>
<tr>
<th>ACTIVITY START</th>
<th>Three days before your EMR Go Live date</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>Three days</td>
</tr>
</tbody>
</table>
Step 9: Executive approval to Go Live

Executive director (and the executive project sponsor, if different from the executive director) approval is required for the new EMR system to go live at your centre. Go Live status conference calls will be held throughout Go Live weekend with a final call scheduled for Sunday evening. At this meeting, the centre’s project manager will seek consensus from all parties (the centre, AOHC and EMR vendor) and prepare a recommendation for the executive director (and the executive project sponsor, if different from the executive director) on whether the system is ready to go live the following morning.

Once the executive director or executive project sponsor authorizes the new EMR to go live, the legacy clinical management system will be deactivated. Communications will be sent to all users and stakeholders ensuring they are aware that the new EMR has been deployed and is the system of record for clinical information.

<table>
<thead>
<tr>
<th>ACTIVITY START</th>
<th>Go Live weekend</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>Three days</td>
</tr>
</tbody>
</table>
Step 10: Post-Go Live activities and support

Even after your new EMR is up and running and in active use, there are still a series of activities to undertake.

These typically include data validation by end users, such as clinicians conducting spot checks of client records to ensure they are correct. The centre’s super users should be available to support users as they grow accustomed to the new system.

Support staff from both the AOHC and vendor project teams will be available for a specified period to address post Go-Live issues and augment standard supports that will be in place for the EMR. An EMR resource schedule listing super users and AOHC and vendor project team resources will be provided.

Peer leaders from centres already using the new EMR will also be available onsite or remotely to answer questions and provide additional support.

Prior to your Go Live date you will be provided with information, processes and contacts to address any issues or questions regarding the transition and ongoing use of the new EMR system.

<table>
<thead>
<tr>
<th>ACTIVITY START</th>
<th>As soon as your new EMR is live</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>