



# Planning the Perfect Electronic Health Record Systems Implementation

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When we hear Electronic Health Record, we think of the digital equivalent of the old paper jacket, but what is called an Electronic Health Record (EHR) or Electronic Medical Record (EMR) system can be only part of the information that would have been included. Your EHR / EMR will need to connect to other systems to provide complete information. Consider the types of information you have and need to keep, what other facilities you need to send to or receive from, and the capabilities of the equipment and systems you currently have. Interfaces will be vital in communicating between them.

### Determine the Scope

Even with a single location and only a few pieces of equipment and systems, planning helps the implementation go smoother. The more systems, facilities, and locations are involved, the more complex the implementation becomes. That makes planning a CRITICAL step. The interaction between systems within your facility and between your organization and others depends on key information pieces and communication standards. The interaction and communication between you and your vendors will help keep the implementation on track.

Is this only going to be one office/facility? Or do you have multiple locations? Do you get outside orders from other facilities, organizations, or referring physicians? Do you need to send results, diagnostic reports, images to another location? Will you be storing a copy of the data as well, or just acquiring it and passing it to another facility who will be responsible for storing it? The scope of the implementation will affect your costs. You can often work on different aspects of the implementation in phases to help spread those costs out. Just be aware that until it's complete, you don't get the full benefit of improved workflow.

Document how your current workflow operates. How do you put in orders, results, and reports? How do you get the orders for the day to the imaging and lab equipment? How do physicians and staff view those items? How do you handle outside orders vs. your in-house orders? How do you determine your staff scheduling? Patient scheduling? Do you copy exams to CD? Print results to send /fax to other offices? It is often useful to involve people from different departments to help document this step and how it should work.

Now document how you would like to have it work in an ideal world. What would you love to have automatically happen? Where would you like to have information or images available to you? On what kind of device – phone, tablet, laptop, smart TV? Knowing how you want it to work will help in determining what needs to be changed or added and defining the scope of the project.

### Define Your Needs

Technology advances at a fairly quick pace. As it advances, the price of yesterday's 'new' products goes down. So your dream ideal may have elements that don't exist or are too expensive today, but could be more available in the near future. Your work determining the scope to cover gives the starting point for definition of your needs. Now that you have the list of needs, you can prioritize them. You'll also want to check a few key items to avoid some common issues.

### Avoid Gottchas

All the systems involved in an EHR or EMR implementation use identifying numbers and specific pieces of information to determine whether records are for a particular patient or are related to a particular exam. Patient ID, Name, Date of Birth, Exam ID / Study ID / Test ID or Code (also sometimes listed as the Accession # or Visit #), are some of the examples. You will want to make sure the different systems / facilities that will be connected are not using the same numbers for different patients or exams. For example, Jane Smith at Facility A has a Patient ID of 1234 and Bob Jones at Facility B has a Patient ID of 1234. If Facility A and Facility B are now going to be sharing patients and the same system, you want to avoid records for these two patients potentially being mixed up (system checks on more than just the

Patient ID when matching records is always a good idea). You could also run into the situation where Jane Smith has been seen at both Facility A where her Patient ID is 1234 and Facility B where her Patient ID is 9876. In this case, searching only on Patient ID would find part of the records, but not the others. If adding a new system, make sure the numbers you start at for new patients, exams, etc. won't 'run into' the existing numbers to avoid mismatches.

Determine how you will handle Orders that are from outside facilities. Can your EHR/EMR handle orders from 'foreign' (outside) facilities? Will the other facility send you the order via HL7? Exams or Tests that are performed that don't match an existing order within your EHR/EMR will end up in a reconciliation area and have to be handled separately. Will you be able to send to your Billing system appropriately?

Check that your equipment can query for a work list of orders to be done. This saves someone printing off a list and carrying it to the equipment, typing in all the ID numbers (some of which are 15 characters long), and helps avoid typos that would cause the results (images or test results) not to match the order. You can save time and effort with this one simple query. Keep in mind that your equipment vendor may charge to configure the work list query – enabling it or changing which system is queried for the work list.

The better your different systems can communicate and match records correctly, the more efficient your workflow becomes. You save time, reduce opportunity for errors, and can reduce patient wait times.

### **Decide Timeframe / Estimate Cost**

These two items will undoubtedly affect each other and may go back and forth initially while you are working toward an accepted project proposal. You will need to provide an estimated timeframe when you would like to have the EHR/EMR in place. Your vendors will provide proposals for cost based on the project scope and timeline estimates. Vendor schedules or the time needed to implement the system may need to be adjusted. It may turn out that the ideal full implementation won't fit in your budget all at once. In that case, your vendors can work with you on finance options, or phase the implementation so that parts of it are done and billed separately.

### **Get it in Writing**

Your final proposal from the vendor(s) should include a Scope of Work or similar documentation of what work is to be done and who is responsible for different tasks. Any change requests should be documented so both sides have a written reminder of what was requested and promised.

### **Progress Status**

The vendor should schedule with you regular status reports or meetings with you and any other vendors involved. This helps ensure that everyone is on the same page, that you're aware of how the project is progressing, and offers you an opportunity to clarify any areas that you have questions about while you have the most appropriate technical personnel available. Frequency can diminish as you finish up the project. You should also expect a follow up shortly after you finish the implementation to verify that everything is going as expected.

These simple guidelines should help you through the planning and implementation process with minimal stress.