



## Tips for Success: Defining EHR System Requirements

The purpose of this document is to help your practice think through and prioritize your needs and expectations for an EHR system, and easily recognize the best possible system when you see it.

### 1. Know What You Are Looking For Before You Begin Shopping

While it is fun to window shop at trade shows and conference vendor exhibits, these environments should be used as opportunities to “get ideas” for your practice and learn about new technology options rather than make a system choice. Perusing healthcare technology exhibit halls with vendors anxiously highlighting the many “bells and whistles” of their systems will quickly overwhelm most individuals seeking an EHR system. This approach will definitely add significantly to your fear of picking the right system from the myriad of choices.

If, however, before beginning to evaluate the system options available, you have developed a very clear idea of the most critical aspects and features needed by your practice, and have come prepared with a well defined checklist to help keep you focused on priorities, the many options before you will quickly begin to thin out as viable products for consideration, and the better solutions that address your needs will emerge from the crowd.

### 2. Clearly Establish the Goals You Expect the System to Support

What specifically is your practice hoping to gain from implementing an EHR system? Practices seek to purchase and implement EHR systems to address a number of key clinical and operational needs and goals including improved efficiency, reduced medical errors, improved patient care, increased reimbursement, etc. Individuals within the practice will undoubtedly have varying perspectives on which goals are most critical. Since these perspectives will drive each individual's EHR system preferences, it is important to establish consistency of view before moving forward with system evaluation. Facilitating open discussions and establishing consensus among all areas within the practice as to specific gains your practice plans to achieve from use of an EHR system will set the foundation for defining the specific functions and features needed to support the envisioned gains.

### 3. Plan New Workflows and Clinical Processes

Using your overall goals as a guideline, an extremely valuable exercise for the practice would be to spend adequate time envisioning how the practice could meet these goals through automation. Imagine your practice with an absence of paper charts, forms, and manual processes. Walk through the many clinical and operational tasks that make up the day-to-day activities of your practice, taking careful note of critical information, triggers, flags, etc. that are included in paper documents. The specific requirements for your new EHR system will need to address automated solutions for capturing and communicating this information.

When envisioning EHR system use and redesigning work processes, you will want to address all tasks where paper charts are currently referenced or updated. These activities and tasks commonly include:

- Routine Visits (from the point of check-in to completion of the visit)
- History and Physicals
- Urgent/Same Day Visits
- Walk-in Patients
- Emergency Patients (both within the office and at emergency rooms)
- Routine Patient Telephone Calls
- Emergency Patient Telephone Calls
- Prescription Orders
- Prescription Refills
- Laboratory Orders
- Radiology Orders
- Back Office Orders



- Referral Requests
- Documentation Requiring Physician Sign-off
- Nurse Only Visits
- Patient No Shows with Provider Follow Up
- Results Reporting and Patient Follow Up-Non Critical
- Results Reporting and Patient Follow Up-Critical
- Chronic Care Service Tracking and Recall
- Preventive Health Tracking (e.g., Mammograms, Pap Smears, etc.)
- Disease Collaborative Reporting
- Compliance Reporting

Carefully thinking through and planning how, ideally, each of these tasks would be accomplished using an EHR will help you to identify optimal organization and flow of screens, needed template content, output formats, interfaces, alerts, and external access requirements.

#### 4. Document Your EHR System’s Functional & Integration Requirements

Based on your goals for the system, specific features and functions of EHR systems will be more important to your practice than others. As examples:

If Your Practice is Focused on:	Emphasize These EHR Capabilities:
Improved Clinical and Operations Efficiency	<ul style="list-style-type: none"> <li>• Strong integration with practice management data and processes</li> <li>• Flexible electronic interfacing for outside entities</li> <li>• Efficient on-line charting features and tools</li> <li>• Custom templates &amp; flows</li> <li>• “Smart” clinician preference lists that evolve through system use</li> <li>• Flexible input methods (e.g., voice recognition, touch screen, handwriting recognition, etc.)</li> <li>• Organized clinician “in-boxes” with priorities and reminders</li> <li>• Direct integration with diagnostic &amp; other clinical equipment (e.g., electrocardiogram, pulse oximetry, etc.)</li> <li>• On-line, direct access to web-based reference data</li> <li>• Intra-office messaging</li> <li>• Bar coding/OCR/RFID integration</li> </ul>
Reduction in Medical Errors	<ul style="list-style-type: none"> <li>• Clinical rules databases with alerts</li> <li>• E-prescribing with full interaction checks and alerts</li> <li>• Dosing algorithm support</li> <li>• Order/testing integration with clinical rules, treatment history and directives</li> <li>• Direct access to medical reference data and protocols</li> </ul>
Improved Patient Care	<ul style="list-style-type: none"> <li>• Preventive and chronic care alerts/reminders</li> <li>• Clinical rules and alerts (see <i>Reduction in Medical Errors</i> above)</li> <li>• Disease registry capabilities and/or integration</li> <li>• Missing results reminders</li> <li>• Direct access to medical reference data and protocols</li> <li>• Patient correspondence reminders &amp; education materials (email, paper)</li> <li>• Population health analysis</li> </ul>



If Your Practice is Focused on:	Emphasize These EHR Capabilities:
Increased Revenue	<ul style="list-style-type: none"> <li>• Intelligent E&amp;M coding assistance based on charted care</li> <li>• Patient population service analysis to target preventive and chronic care reminders</li> <li>• Direct billing interface</li> <li>• Efficiency features (see above) that will reduce paperwork and allow more patients to be seen</li> <li>• Insurer rule integration (e.g., benefit limitations, authorization requirements, delivery networks)</li> <li>• Required functionality to meet meaningful use criteria</li> </ul>
Improved Access to Information	<ul style="list-style-type: none"> <li>• Remote access to full medical records</li> <li>• Wireless tools for greater mobility</li> <li>• On-line, direct access to web-based reference data</li> <li>• Integration with hospital and other affiliate systems</li> <li>• Full email integration</li> <li>• Scanning integration</li> </ul>
Reduced Costs	<ul style="list-style-type: none"> <li>• Full medical record support (total elimination of paper chart)</li> <li>• Simplified charting tools for elimination of transcription</li> <li>• Full integration with practice management system to avoid duplicate entry of data</li> <li>• Bar coding/OCR/RFID integration</li> </ul>
Competitive Advantage	<ul style="list-style-type: none"> <li>• Flexible integration with a wide range of external entities (e.g., hospitals, labs, pharmacies, etc.)</li> <li>• Easy data extraction and electronic submission (e.g., disease collaboratives, Medicare studies, etc.)</li> <li>• Pay for performance benchmark analysis</li> <li>• Patient data access features</li> <li>• Patient education and email communication abilities</li> <li>• Effective recall/reminder capabilities</li> </ul>

Many EHR feature checklists are available via medical association, healthcare industry, and vendor websites. These should be used to help you think through the specific capabilities you are expecting from the system.

Data integration with your practice management system and electronic interfaces with other internal systems and external vendors/organizations need to be carefully considered. These integration/interface capabilities will be mandatory to obtain efficiency gains within your practice.



## 5. Define the Technical Needs to Support the EHR System

Numerous EHR technology and device options are available on the market. Clinicians will all have varying preferences, and detailed analysis will be needed to determine which will work best for your practice needs and EHR goals. Technical requirements should include the following areas:

- Operating systems and databases (e.g., Windows, UNIX, SQL, Oracle, Sybase, etc.)
- Display and capture devices (e.g., laptops, pen tablets, PDAs, wall mounted screens, etc.)
- Charting support (e.g., voice recognition, handwriting recognition, keyboards, etc.)
- Networking (e.g., cabling, wireless, Web-based, remote access capabilities, etc.)
- Reporting tools
- Security controls

## 6. Define Your Vendor Support and Performance Expectations

Regardless of robust system functionality and state-of-the-art technical tools, an EHR system is only viable if the vendor supporting the system is equally viable and willing to provide quality support to your practice.

The current volatile vendor market makes it extremely important to ensure that your vendor has a likely long-term future. Defining your expectations for a viable vendor in terms of size (both financially and organizationally), breadth of client base, depth of experienced resources, etc., will help you narrow system options to vendors you feel comfortable will be around to support you through many years.

Also, clearly defining your expectations for implementation support, on-going customer support, system enhancements, and overall vendor and system performance will help set a standard against which potential vendors can be measured. Vendors unwilling to commit to implementation timelines and other specific support performance standards should quickly be dropped from consideration.

## 7. Set Your Priorities

After all requirements are fully defined, it is important to go back and purposefully evaluate which capabilities are most critical to your practice and which are “nice to have” or needed sometime in the future. While it is important to evaluate vendors according to your full list of requirements, you do not want to rule out a strong vendor who may not fully meet some of your lower priority needs. You also do not want to rule out a vendor who may be in the process of developing some capabilities that are not part of your initial needs, but rather a feature you plan to implement at a later date. Availability of “in development” capabilities can be fully specified and included as guaranteed deliverables in your vendor contract.

The requirements list developed from these planning and definition activities should become your standard against which all vendors and systems are carefully and consistently measured. The criteria defined can be compared to any number of unbiased published industry evaluations of EHR systems/vendors to help you narrow your evaluation efforts to only the most likely contenders for your practice.