EHR Planning and Procurement Toolkit

A Guide to First Steps in Adopting Electronic Health Records
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This EHR Planning and Procurement Toolkit consists of recommended action steps for Massachusetts health care providers to begin the planning and procurement process for the adoption of Electronic Health Records (EHRs).

- The toolkit content is organized by the four major phases of the EHR planning and procurement process.
- Each phase of the Toolkit provides an overview of basic steps, as well as links to tools and resources that will help you with each phase of the process.

Most of the materials gathered in the Toolkit have been field tested by Regional Extension Centers (RECs) providing technical assistance to physicians and hospitals implementing EHRs. We intend for these resources to be particularly beneficial for Behavioral Health (BH) and Long-Term and Post-Acute Care (LTPAC) providers. The toolkit has been developed to help Behavioral Health (BH) and Long-Term and Post-Acute Care (LTPAC) providers especially, since many of these providers tend to be small and resource constrained.
This Toolkit aggregates many field-tested materials in a convenient location, where providers can quickly access useful information about EHR planning and procurement, and learn helpful tips on navigating the EHR planning and procurement process while implementing recommended practices in EHR planning and procurement. We believe using the recommended practices will increase the likelihood of developing a mutually beneficial relationship with the software vendor and successfully implementing an EHR that will address the specific needs your organization’s setting.

Planning and procurement of EHRs is a process that requires commitment of time and resources. You want to ensure that you select the right vendor and right software product to meet the needs of your organization, including procuring certified EHR technology (“CEHRT”). The Office of the National Coordinator (ONC) Certified Health IT Product List, referred to as “CHPL” (see: http://www.healthit.gov/policy-researchers-implementers/certified-health-it-product-list-chpl), identifies those EHR systems that are CEHRT certified. The adoption of CEHRT does not guarantee interoperability; however, certification does help ensure that the EHR will provide standards-based functionality that will support interoperability.

Before moving forward, be sure to plan on spending a significant amount of time over the course of months to complete all four phases. Factors that impact the time required include: level of your organization’s preparation; time needed to write requirements; time needed by vendors to compose a response; and the time needed to negotiate contracts. These factors will vary based on the complexity of the software system needed and the size of the project.

The planning and procurement process is essential to the success of EHR implementation.
Introduction

This Toolkit provides recommendations on the best practices to procure an EHR; however, it is understood that small, resource-constrained organizations may not have the resources to be able to spend all the time to perform all of the steps in this Toolkit; however, it is recommended that every organization review all information in this Toolkit to determine the feasibility and priority of each step.

This Toolkit focuses only on actions taken to plan and procure an EHR – essential first steps for a successful EHR implementation. It is important to note that the Toolkit does not include subsequent steps, such as the implementation process and the associated tasks of system building and configuration, testing, training, and go-live activities; nor tasks associated with maintenance and support.

Each phase of the Toolkit includes a series of steps to follow, accompanied by references to resources and actionable tools that are highlighted by the orange circles throughout the Toolkit. These include collateral materials such as checklists, templates, and spreadsheets you can use and adapt to help collect information and plan for your EHR procurement.

In addition, each phase and corresponding list of steps provides hyperlinks that offer additional information and resources about the included topic area or activity.

Using the recommended practices will increase the likelihood of developing a mutually beneficial relationship.
Successful adoption of interoperable EHR technology enabled to securely exchange data with other providers and systems requires a strong level of commitment and knowledge about how to complete key steps during the pre-solicitation and planning phase. Invest the time to understand your organization’s goals, needs, and finances; what you discover will help serve as your road map for soliciting vendors and procuring an appropriate EHR system. Identify a leadership team to gather information and solicit feedback from decision-makers and potential users, perform research and analysis, and coordinate the pre-solicitation effort. Your leadership team may include individuals with the following roles:

- An executive member with the authority to make final decisions;
- A clinical champion who can facilitate clinician “buy-in”; and
- An EHR project manager with the responsibility for coordinating tasks.

Some smaller practices may not have separate individuals in each of these specific roles; however, it is critical that these functions are delegated to an individual or consultant to ensure a successful EHR procurement process.

If your organization has resource constraints, consider seeking help from trade associations, consulting organizations, and state Health IT organizations, including MeHI. It may be helpful to reach out to other health care provider organizations similar to yours that have recently completed EHR adoption and ask them to share their experiences, provide recommendations, and, if possible, share resources.

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Assess Organizational Readiness

Readiness assessment is the process of measuring how prepared an organization is for a major change. In assessing your readiness, you evaluate how your organization’s culture is likely to adapt to an electronic environment, what levels of support you can expect from leaders and front-line staff, areas where your existing operational policies and procedures will need to change, and whether your organization has technical aptitude. You also evaluate your resources for meeting these changes and consider how to obtain additional resources to support the change process. The goal is to identify barriers and address issues before beginning the process of procuring EHR technology.

Questions to ask during your readiness assessment:

- Has your organization defined the value and benefits of adopting an EHR system?
- How will interoperable EHRs help you compete in the changing regulatory environment?
- Is this the right time to adopt an EHR?
- Will your organization’s leaders support the change?
- How much computer literacy and technical infrastructure (e.g., hardware inventory, communications assessment, network installation) assistance will you and your staff need?
- Will your organization provide enough resources to successfully implement an EHR?
- Does your staff have adequate skills or have the aptitude for learning new skills?

When assessing your organization’s readiness to procure an EHR, there are key questions that need to be explored prior to starting the EHR Vendor evaluation and selection process. The Practice Assessment for EHR Selection & Implementation tool highlights common key areas among small ambulatory care practices; however, many of the concepts are applicable to various health care settings and providers.

Use this tool to help develop assessment questions and start the evaluation of your organization’s readiness to go through each of the remaining three phases of the EHR procurement process:
As noted earlier, you should also assemble your leadership team as part of the readiness assessment. The size and the members of your leadership team will be dependent on the organizational structure and the number of staff of your organization. The Creating a Leadership Team for Successful EHR Implementation tool provides a listing of key staff that are recommended to be involved in the process. Some of the types of staff may not be an exact match to your organization; however the roles and functions are likely to be the responsibility of at least some of your staff. The intent is to provide examples to help you get started and think through all of the functions that are performed at your organization on a daily basis that will be impacted by EHR implementation.

Assemble your leadership team as part of the readiness assessment.
Making a major investment in an EHR is challenging for every organization and has been one of the most significant barriers to adoption for small providers and for those not eligible for Federal EHR Incentive Programs, including most BH and LTPAC service providers. In this section, we provide guidance on financing strategies that help identify where other organizations have found funding (e.g., state or Federal grants, philanthropy) and financing options (e.g., group purchasing, bank loans). For example, if your organization is a non-profit, you may want to consider capital fundraising or working with your foundation. If your organization is for-profit, you may want to consider banking options that have highly favorable terms (i.e., low interest or longer payment terms). The level of resources required for EHR acquisition and implementation will depend on the scope of the project and on the choices the organization makes during the planning and product/vendor selection. Continue to revisit your financing decisions as you plan and implement your EHR.

The individual in your organization who is most familiar with the financial status of the organization (e.g., business manager or finance staff) is the best person to guide your organization through a financial assessment. Some considerations should include the following:

- Is your organization financially healthy? Understand your organization’s revenues and costs.
- Does your organization have the resources (capital, health care providers, and IT professionals) to help in the short and long term? Are there outside resources available?
- Does your organization have the volume of patient visits to replenish itself? Will interoperable EHRs help you increase patient volume? What are your largest referral sources?
- What factors help determine fixed expenses and patient volume?
- How will the health care reimbursement landscape change? For example, the Affordable Care Act removed limits to mental health services and created reimbursement strategies for “aging at home” programs.
- How solid is your organization’s relationship with its business banker and/or loan officer? Would your organization be able to leverage assets for a capital investment? Would your organization need some of that investment for working capital?
- Are there Federal or state health IT grants available to help you make capital investments? For example, telemedicine grants for behavioral health visits may help fund your launch into EHRs.

Use this tool to consider financing options for EHR procurement:

1 A capital investment should improve the financial performance of your organization and is expected to be productive over many years.
If you were to ask a vendor, “How much does an EHR cost?” they will generally respond with the cost of the actual software license and installation costs. However, the cost of an EHR system involves much more than just the license fees. In this section, you will learn about the cost components of a vendor’s budget in order to ensure that you capture and plan for all the costs associated with EHR acquisition. Major cost components may include:

- EHR System & License fees
- Interfaces and Health Information Exchange (HIE) costs
- Computing Hardware (e.g., server(s), hardware)
- Ancillary Devices and Equipment (e.g., printers, scanners, faxes)
- Network and Communications (e.g., network and Internet Service Provider (ISP) fees)
- Other (e.g., third-party software costs)
- Vendor Services (e.g., training and implementation and system upgrade costs)

The costs listed here are mainly for fees directly associated with acquisition of the product or assets (hard costs). The individual(s) who is most knowledgeable about your organization’s financial health status (e.g., finance staff) is likely to advise you to also add intangible or indirect (soft costs) to your budget, such as:

- Legal costs for reviewing and negotiating the contract
- Workflow assessment or efficiency studies
- Resources to develop the infrastructure to support ongoing technical assistance and responding to questions (e.g., local internal help desk, if applicable; or assigning one person to respond to questions, developing instruction guides, frequently asked questions, etc.)
- Privacy and security internal training, risk assessments, and policies updates (e.g., HIPAA practices, consent and general record security)
- Staff time configuring system (e.g., system design and build)
- Staff time spent on learning how to use the EHR product
- Super users’ time to facilitate training other staff. (Note: Super users are staff members trained to move through the EHR system quickly and can share helpful hints, tips, and techniques.) A core group of EHR super users can provide internal training to office staff and clinicians, especially to support how the EHR will be used in your organization for your specific workflow and patient population.
Create a Budget

Begin building your budget by asking three essential questions

Should we use the EHR system provided by our administrative (e.g., billing vendor, scheduling system) vendor?

- Linking the EHR and your administrative (e.g., scheduling, billing) and/or other clinical systems (e.g., MDS) vendor may reduce the cost of interfaces.
- Eliminates need to migrate demographics into a new administrative system.

Caution: The administrative system may not have the best EHR.

Budget considerations

Should we purchase a specialty-specific system or purchase a generic system with modules added for our specialty?

- Analyze the costs of the specialty-specific system against the cost of a generic system and the customizations required to meet your specialty.
- Clinicians’ time to build specialty templates may be costly. Insist on viewing templates before purchase. You may not have a choice if your practice is owned by a hospital, or if the hospital offers a system to you for a reduced fee.

Budget considerations

Should we choose a cloud-based system or a locally hosted server-based system?

Cloud-based EHR:
- Paying a monthly subscription to a web-hosted EHR is more inclusive (license fees are included, as are maintenance and technical support costs).
- Start-up costs are generally low.
- Hardware is less expensive at start-up.
- Mobile devices are secured through web applications (does require local security systems).
- Off-site data backup highly recommended.
- Upgrades and updates are automatically included in maintenance fees.
- Training usually online, not in person.
- Encryption strongly recommended.

Locally hosted EHR:
- Higher initial costs.
- You own the license.
- Server room requires temperature control.
- Additional licenses are required to access the server.
- Upfront costs are greater, and the organization will need to have or hire individuals to maintain the network and servers.
- Annual maintenance costs are typically about 20 percent of the software cost.

Super users are staff members trained to move through the EHR system quickly and can share helpful hints, tips, and techniques.
Create a Budget

Cost of server(s), network components, hardware, and Internet service provider (ISP) fees

The list below includes the out-of-pocket costs, but it is equally important to consider set-up, configuration, testing, and maintenance costs of the network and servers.

- For cloud-based EHRs, select an ISP that offers professional-grade Internet services to provide the appropriate levels of bandwidth, speed, security, reliability and support.

- For locally hosted EHRs, gather pricing on hardware, software, and human resources including:
  - Servers, server software, backup drives, and power sources;
  - Internally wired and wireless network components such as cables, jacks, routers, and wireless access points;
  - Heating and cooling costs for a server room with a temperature-controlled warning system; and
  - Desktops, laptops, or mobile devices that are sufficiently secure for your organization’s EHR configuration. Be sure your computers match your server (e.g., Dell computers don’t “talk well” with HP servers).

Vendor training costs

EHR vendors typically charge an hourly rate for on-site training at the organization or vendor site, which may or may not include travel costs. Remote training via web conferencing or online video tutorials is also available from most vendors for a lower fee. Determine the best training options for your organization and ask for estimates of training costs as you solicit proposals from EHR vendors. Reflect on the following when planning for training costs:

- Training for cloud-based systems is generally done remotely.
- Locally hosted systems may offer a combination of onsite and remote training.
- Aim to over-budget for training costs.
- Include travel expenses to send staff to training.

Implementation costs

When evaluating the costs for set-up, configuration, and maintenance of your EHR system, consider the following points:

- The EHR vendor’s implementation team should include people with clinical, technical, and administrative experience. Ask about the cost for having an experienced and skilled implementation team.
- Implementation means “installation.” Your organization is responsible for internal workflow analysis and process redesign to achieve greater efficiencies. Your EHR vendor’s job is to install the EHR system and train you how to use it.

Interface costs

The cost of exchanging data with other systems such as lab and pharmacy systems may depend on interfaces. These costs vary and are dependent on the vendor’s existing interface product offering, previous interface development work with other vendors, and software products and emergence of new products requiring customization, but remember that these costs are negotiable.
Create a Budget

For example, if the vendor already has an interface developed for a particular lab system, you may be able to negotiate a lower cost to cover any customization needed for your organization needs. Be sure to budget for possible system upgrades to accommodate new features and to meet changing regulatory guidelines.

Health Information Exchange (HIE) costs
This may include costs associated with connecting to and using the Mass HIway. Mass HIway program costs are covered through a combination of funds from the Centers for Medicare & Medicaid Services (CMS), the state government, and participant fees. Mass HIway is highly subsidized by CMS, and participant fees and state funds allow Mass HIway to meet the match requirement to access these subsidies. Participant fees can be found on the Mass HIway website.

Third-party software costs
This may include encryption, documentation management (such as MS Word), and reports generation software.

While your organization may not know the exact costs or have information on every item, the function of the budget tool is to help your organization become familiar with all of the potential costs typically associated with EHR procurement and to help identify the key areas your organization needs to explore with the vendors during the evaluation and selection phase. This tool will help your organization develop EHR financial literacy.

Use this tool to help your organization develop a budget for costs of purchasing an EHR:
Create a communication plan to keep all decision-makers and potential users of the EHR engaged in the transition to the EHR in order to manage the uncertainty of change. Your key messages and timing of those messages will vary according to the type of decision-makers and potential users of the EHR. Remember that there are a number of additional constituents that will benefit from learning about your organization's transition to an EHR, including your other vendors, patients and caregivers, and the community in which you practice. The tool will help get you get started with a sample table and communication plan in outlining the key messages, the target audience (to whom), the source of the message (from whom), and the timing and delivery mechanism for each message.

Use this tool to develop and adapt a communication plan tailored for your organization, including a communication plan that emphasizes the expanded privacy requirements for behavioral health care providers.
Develop a Data Conversion and Chart Migration Plan

One frequently asked question is, “How will we transfer the entire content from these paper charts into the EHR?” You will need to develop a plan for data conversion and/or migration of patient data from the paper charts to the EHR. This process of moving data from an existing medical record to an EHR is called “chart migration.” Chart migration is a critical EHR adoption step, as it ensures that patient data will be available in the EHR when you go live. A solid chart migration strategy decreases the risk of lost productivity and helps to avoid patient safety issues that can emerge when key patient data are not available.

Begin by asking questions, such as:

- What information should be scanned, and what needs to be entered directly into the new EHR?
- What information or data need special considerations to meet privacy and security requirements (including the unique privacy concerns of persons with psychiatric and other behavioral health diagnoses and the sharing of behavioral health records among providers)?
- How will we structure the data?
- Will the organization have a hybrid transitional approach whereby a paper-based system will be in effect for a limited period as the migration to the EHR takes place? If so, what are the privacy governances to weave into this process?

Whether your organization is completely paper based, quasi paperless (e.g., half paper/half electronic system), or already using an EHR, your organization will need to determine how to deal with the records in their current form and how to incorporate them into the new system. The Chart Migration and Scanning Checklist provides a list of key questions and a template that will help your organization prioritize your chart migration needs, and it outlines chart migration options, which may include keeping paper records and archiving, scanning paper records, and electronically archiving or scanning paper records into the EHR.

Use this tool to develop plans for data conversion and chart migration:

Chart Migration and Scanning Checklist
Conduct a Workflow Analysis and Process Redesign

As acquisition of an EHR system will impact existing workflows, your organization should assess and plan for change. Start by assessing the current, or “as-is,” state. Assign a team member to observe and collect information about existing work tasks and processes, and then consider what changes will be required.

For example, ask each person these questions:

- What patient data or information do you need?
- How does information about the patient get to you?
- What do you do with this information?
- Where do you send this information?
- How do you know if the information was received?
- What systems do my major referral sources use?

After you have completed your workflow analysis, segment tasks into three categories:

- What new work tasks/process are we going to start doing?
- What work tasks/process are we going to stop doing?
- What work tasks/process are we going to sustain?

The start/stop/sustain exercise helps to clarify the new work environment after the change and helps the team to identify important requirements for the solicitation phase. It is critical to have key staff participate in the EHR planning and procurement process.

The Workflow and Process Redesign tool provides examples of how to create workflow maps outlining the processes by which staff performs their jobs. It is likely that staff members may experience some change in their workflow and/or job function as a result of integrating the EHR into the workflow. It is critical to have key staff participate in the EHR planning and procurement process in order to determine the workflow processes that need to be modified to optimize the value of the EHR.

Use this tool to create a process map or diagram for workflow and process redesign:
PHASE II Vendor Solicitation

The Vendor Solicitation Process builds on what you learned about your organization during the Pre-solicitation phase. In this phase, you will outline your organization’s needs or “requirements” and invite vendors to explain how their software systems will meet your requirements. Most organizations use a request for proposal (RFP) to accomplish this goal. An RFP standardizes the information you receive so that you can objectively compare vendors and determine whether their systems are right for you. An RFP can be very short (e.g., 3 pages) or much longer (e.g., 10+ pages). Longer RFPs are typically used by larger organizations.

While the steps in the Vendor Solicitation process represent the best practices identified by many providers who have procured an EHR, MeHI recognizes that a small, resource-constrained organization may not have the resources to perform all steps. However, it is recommended that every organization should focus on the following components (see Step 1, Part 3) to gather the following information from at least two to three vendors:

- Vendor Profile, which describes their company, product and service offerings, and organizational stability
- Specifications, which cover the basic functions you need in an EHR system (e.g., order entry, documentation)
- Implementation Plan, which includes a basic implementation plan with estimated timeline
- Hardware and Configuration Specifications, which provide a list of hardware requirements and configuration options (client/server, SaaS, etc.)
- Cost Estimate, including detailed costs for each cost item

KEY STEPS

1. Write a request for proposal (RFP)
2. Identify EHR vendors for solicitation
3. Distribute the RFP and collect proposals from vendors
An RFP typically has several parts:

**Part 1 – Introduction and Goals**
In this section, you explain your goals and objectives of your EHR acquisition.

**Part 2 – Health Care Organization Background**
The second part briefly highlights your organization's background and history, including details such as facility size, staff workforce, services provided, technical infrastructure, and other initiatives that may impact EHR adoption. This section also identifies the specific sector (e.g., BH or LTPAC) requirements that the vendor's product must address and other relevant factors (e.g., privacy and security requirements, EHR system compatibility with major partners and referral sources, regulatory reporting requirements, and other interfaces, such as Mass HIway).

**Part 3 – Vendor Profile and RFP and Required Information**
This section provides details on how to respond to the RFP, including due date and mailing address. Request a clearly written vendor response covering information about their organization history and product details, including specifications required to install, implement and support the EHR system. The request from the vendor should include, at a minimum, the following information:

- **Vendor Profile**
  - What is the EHR vendor's company background, history, financial information, and pricing of products and services?

- **Specifications**
  - What features and functions does the system currently provide?
  - How will the system's functions and clinical capabilities provide value to your specialty and patient population?
  - What type of features are available to support patient access and consent management of shared data?

- **Implementation Plan**
  - Who will oversee the implementation and integration with other systems?
  - What is included in the implementation and what is a typical timeline for an installation for our organization type?

- **Hardware and Configuration Specifications**
  - What are the technical requirements needed to fully install the system?

- **Cost Estimate**
  - What are the immediate costs (first year) to install, configure and implement the system, and long-term costs (years two through five) for continued use and maintenance of the system?

The more detailed the questions are, the more likely the vendors can provide a complete response for your review. Having a standardized question format allows your organization to objectively evaluate the suitability of EHRs among multiple vendors.

Request a clearly written vendor response covering their history and product details.
Write a Request for Proposal

To get started in writing an RFP, leverage what you learned about your organization in Phase I–Pre-solicitation. For example, you learned:

- How you will host the software (e.g., cloud-based versus locally hosted).
- Type of patient information to be collected (e.g., patient demographics, consents, authorizations, and directives).
- EHR functions required (e.g., nursing documentation, clinical decision support, and reports).
- Interfaces required to exchange health information (e.g., with other providers, laboratories, pharmacies, patients, and government disease registries).
- What are staff training needs (e.g., basic computer skills versus EHR software functions).
- Which staff are available to support various aspects of EHR implementation (e.g., project management, software configuration, training and go-live support).
- Evaluate Federal regulations related to the CMS Conditions of Participation (CoPs) and FDA requirements when implementing the EHR, as well as Massachusetts-specific regulations. When soliciting for vendors, you will need to ask if the software system can address these specific requirements. (See Appendix A.)

Follow these steps in developing your RFP:

1. Write a clear list of specific vendor and EHR system requirements based on the above factors.
2. Be sure to refer to Federal and Massachusetts regulations and other state requirements, some of which may be specific to your setting. (See Appendix A.)

The Request for Proposal Template for Health Information Technology tool is a comprehensive guide to help organizations identify those factors in an EHR that are important to your organization. The intent of this comprehensive guide is to provide a template and starting point for prioritizing the requirements for which you want responses from selected EHR vendors. You may find that you do not need all of the specifications as outlined (e.g., Meaningful Use), or you may need to add specifications specific to your organization needs (e.g., nursing documentation, integration with MDS software). This RFP template can be modified, including adjusting the template to emphasize a limited set of high priority requirements tailored to your organization.

Use this tool to develop an RFP for your organization:

Abbreviated RFP Template Outline

For those organizations desiring an abbreviated outline for an RFP template, you can use this tool:
After writing the RFP, select your top three to four vendors by developing a screening process. Your short list will meet a set of your minimum criteria, such as:

- Type of software solution (e.g., cloud-based or locally hosted)
- Number of years vendor has been in business and maturity of software product (e.g., recommend looking at software products that have been in the market for 3 or more years)
- Integration with other systems (e.g., administrative and other clinical systems)
- Level of setting specificity (e.g., software developed for a specific setting or generic software for use in any setting)
- Other module offerings (e.g., patient portal system)
- Documentation capture processes
- Preparedness for Federal billing and coding changes
- Health Information Exchange (HIE) capabilities (compatibility with Mass HIway)
- Current relationship with vendor or knowledge of other organizations using this system

Eliminate EHR products that do not fit your requirements and only select vendors that have interoperability capabilities. Interoperable EHRs are preferred because the vendor has developed the system using industry standards for capturing data, creating data reports, sending data messages, and transporting the data to other systems. EHR interoperability allows data transfer among EHR systems between various health care providers (e.g., hospital, physician, BH, and LTPAC). Selecting a vendor that provides a certified Health IT product increases your capability of using an interoperable EHR, which allows your organization to:

- Create interactive functions to help clinicians make better care decisions and delivery quality patient service
- Send patient health information to other health care providers anywhere at anytime
- Integrate with various computing devices to increase mobility of clinician workforce for improved productivity, efficiency, and job satisfaction

Use the Certified Health IT Product List (CHPL) website to find vendors with interoperable products. Use the exact spelling when searching for the product name. If the product is not on the CHPL, it is not a certified EHR. Eliminate this product from the short list or ask the vendor to point you to its location on the CHPL website. Continue the screening process until you have selected three to four recipients.

Use this tool to find vendors with interoperable products:
Distribute the RFP and Collect Proposals from Vendors

Invite the identified vendors to respond to the RFP. As a reminder, provide specific instructions about when and where to return the responses. Also, include details about the desired format and length of the response. Having standardized responses will make it easier to compare products side-by-side. Assign one person from the organization to collect the proposals and to coordinate the evaluation team. Once all vendor responses have been collected and organized, you are now ready to move to the next phase of the process.

Standardized responses will make it easier to compare products.
In Phase III, Vendor Evaluation and Selection, your organization will assemble an evaluation team with the purpose of scoring the vendors’ RFP responses. Invite a wide range of internal stakeholders, including those who will be using the EHR product on a daily basis, to be part of the selection process. At the end of this phase, the team will select the EHR vendor and product(s).

**KEY STEPS**

1. Perform due diligence
2. Score vendor proposals
3. Conduct site visits of vendor finalists for final selection
4. Negotiate the vendor contract
Perform Due Diligence

The due diligence process ensures that your organization has a consistent and reasonable approach to vetting the EHR vendor finalists. The organization should:

- Participate in product demonstrations.
- Conduct reference checks.

**Participate in Product Demonstrations**

Arrange for product demonstrations to get a sense of how the features are used. The team should be prepared to ask questions and discuss options with the vendor representatives. Some organizations will create scenarios of existing clinical and administrative work-flows for the vendors to demonstrate. This provides an opportunity to see the system in relation to everyday organizational tasks. Ask to see how the product works for your specialty and your organizational requirements.

**Conduct Reference Checks**

After narrowing your decision to two or three vendors, conduct a background reference check. A quality vendor will provide you with the host’s site project manager, preferably in your geographic region, to help build local user support.
The following list of questions offers best practices for eliciting critical information as part of conducting reference checks.

Why did you purchase this product?
- You will want to identify how relatable the organization is to yours to see if they had the same issues or challenges they were trying to solve with the procurement of the product. Are these reasons the same as your organization’s needs?

Did you feel the vendor negotiated your contract fairly?
- You will want to identify the feasibility of negotiating with the vendor. Will the vendor negotiate?

What kind of technical support did you get when installing the system at your location?
- You will want to gain a sense of the level of support you will need or that will be required of your organization for technical aspects, including network, servers, encryption requirements, and additional software licenses.

About how much time did it take to customize the system? Who did the customization?
- You will want to identify the resources that will be required of your organization to customize the system as well as resources provided by the vendor. This is a valuable lesson learned! You want high-level support during customization and a clinician at the helm.

How did you plan out your training?
By department; Super users only; In person; Online?
- You will want to gain a sense of the level of training that will be required of your organization. This helps you plan your resources for training. Online is least expensive, but it can also net the weakest results, depending on the learning styles of your clinicians and other staff.

Was the vendor sensitive to your lost productivity concerns? How did they help you manage this?
- You will want to identify how disruptive the installation will be to workflows and patient flows, which may require temporary bed closures and/or other measures to implement the system. How will you manage a prompt return to productivity?

Were you aware of all the interfaces you needed?
- You will want to ensure you will not be surprised by needed interfaces. Estimate interface costs, preparedness, and issues management.

How does the vendor help you keep current on regulatory and compliance systems?
- You will want to gain a sense of how responsive the vendor is in providing updated product modules to help you stay in compliance with regulations and program requirements. How does the vendor manage upgrades, the timeliness of those upgrades, and when they occur?

Would you purchase this system again?
- You will want to identify lessons learned from their experience to help in your organization’s decision-making process.

If possible, limit the call to about 30 minutes. If the reference site invites you to visit, take them up on the offer!

Use this tool to help check EHR vendor references:

Reference Checking Worksheet for EHR Vendors
Score Vendor Proposals

Once proposals or information are received from the vendors, your organization will need to compare and score responses. Based on the RFP outline and the requirements you identified as most important, you can use a vendor evaluation matrix to organize and score the information you have received. Each vendor is evaluated based on a set of criteria that were defined in the RFP. Your organization should have a standard scoring method or scorecard to:

• Encourage accurate comparison of vendors against the individual RFP criteria;
• Enable criteria to be weighted since not all criteria are of equal importance; and
• Allow scores of multiple evaluators to be aggregated.

Ask your evaluation team to review the RFP responses and to use the scorecard to evaluate each vendor. After the evaluation team completes an initial evaluation, use the information in the scorecard to rank the vendors as described in the next step. Consider adding extra points if the vendor points out features you hadn’t considered in the RFP.

The Vendor Evaluation Matrix tool provided is a starting point, or a template, to help organize your organization’s requirements into a standardized format to help quickly evaluate your vendor choices. While some of the evaluation metrics may be relevant or useful, it is important that your organization spends time updating the Vendor Evaluation Matrix based on the RFP vendors responded to.

Use this tool as a template and guideline for evaluating vendor RFP information and responses:

Vendor Evaluation Matrix Tool

It’s important that your organization spends time updating the vendor evaluation matrix.
Conduct Site Visits of Vendor Finalists for Final Selection

Onsite visits are a great way to see how other colleagues and health care organizations use the vendor software product in a live patient setting. We recommend that you visit a site that is using one of the EHR products that has made the final selection list to get a feel for how the EHR product is used in other organizations. Your vendor finalists will provide a list of organizations that are willing to host a site visit. If possible, select sites that are:

- The same size and configuration of your organization;
- In your geographic area; and
- Using the exact product versions being considered.

A variety of potential users and decision-makers should be invited to the site visit. After the site visit, have a debriefing session with the team to discuss what was learned. Compare notes from the initial vendor demonstration to the notes from the site visit. Contact the vendor if you notice any discrepancies.

The Vendor Selection Site Visit Checklist and Questionnaire provides a set of common questions that can be asked during site visits.

Use this checklist for each visit:

Your organization’s key decision-makers should be able to narrow the selection to one or two EHR vendors after evaluating the RFPs and completing at least one site visit. Include the following steps in the final selection process:

- Gather the organization’s decision-makers and review the scores;
- Discuss additional considerations and gather any additional questions for the EHR vendor;
- Compare the requests you made in your RFP with vendor responses;
- Contact the vendor finalists with any questions or concerns;
- Review any additional information with the selection team;
- Select the top vendor and consider selecting a runner-up as a contingency; and
- Enter into contract negotiations and consider having legal representation.

You may want to reuse the Vendor Evaluation Matrix tool as a guideline for narrowing down the selection to one or two finalists.
Now that you have selected the preferred vendor, it is time to negotiate a contract. Vendors typically have their own contract—keep in mind that the vendor’s contract was developed by the EHR vendor’s legal team with the intent of protecting the vendor. Most terms in the vendor contract are negotiable. You may want to consider securing the services of a health law attorney with knowledge of your specialty to account for specific contract terms and conditions you may not have anticipated. The vendor contract will set expectations about the EHR vendor relationship—it is important to establish a shared understanding of the contract terms and conditions and navigate the negotiation process for mutual benefit. Development of the vendor contract involves two key activities:

- Understanding EHR Contract Terms
- Navigating the Negotiation Process

**Understanding EHR Contract Terms**

Prior to negotiating a contract, you will need to understand the common key terms and conditions utilized in standard contracts. Take the time to fully understand each element and its impact, not only on the purchase of the software product, but also on the installation, implementation, utilization, maintenance, and support of the product as well. Common terms in EHR contracts include:

- Indemnification and hold harmless clauses
- Confidentiality and non-disclosure agreements
- Warranties and disclaimers
- Limitation of liability
- Dispute resolution
- Termination and wind down
- Intellectual property disputes

The tool titled Key Contract Terms for Users to Understand provides details about each of the above terms, and offers guidance on conditions and terms to review and incorporate into your own vendor contract.
Negotiate the Vendor Contract

Navigating the Negotiation Process

Once you have selected your preferred vendor and have an understanding of the contract terms, you are now ready to begin the contract and negotiation process. You will want to cover various aspects related to EHR adoption, including:

- Payment and fee structures
- Software functionality
- Hardware and system infrastructure
- Maintenance and support
- Interfaces
- Training
- Implementation

The Contracting Guidelines and Checklist for EHR Vendor Selection tool will help ensure that your organization reviews specific contract clauses and items and incorporates them prior to contract execution.

Use this tool to structure and negotiate an EHR contract with the vendor:

NLC Contracting Guidelines and Checklist for EHR Vendor Selection

Take the time to fully understand each element and its impact.
Vendor relationship management begins during contract negotiations and continues through implementation and continued use. The contract serves as the blueprint for the vendor relationship and sets expectations for customer service. It is important to identify roles and responsibilities, beyond the terms in the contract, to establish the procedures and processes for issue resolution and managing EHR system updates, upgrades, and add-ons. The steps in this last phase are critical to ensure a successful EHR implementation and working relationship.

**KEY STEPS**

1. Designate a primary point of contact from your organization
2. Identify primary point of contact from vendor
3. Establish a process for issue documentation and resolution
4. Establish a process for management of system updates, upgrades, and add-ons

It is important to identify roles and responsibilities, beyond the terms in the contract.
Designate a primary point of contact from your organization who will manage the relationship with the vendor

Your organization should identify and designate a key point of contact to manage the vendor relationship. This person needs to have an understanding of the terms of the contract and your organization’s operations and technical capabilities in order to serve as a liaison with the vendor to help address EHR system problems. This person will be responsible for working with the vendor account manager, as well the vendor helpdesk support, to manage issues and guide testing of product updates, upgrades, and add-ons prior to “go-live.”

The team should be prepared to ask questions and discuss options with the vendor representatives.
Identify primary point of contact from the vendor who will handle account and issues

Ensure the vendor identifies a primary contact who is also familiar with the contract terms, as well as with your organization’s needs and technical infrastructure. This person will be responsible for working with the primary contact from your organization to determine the need for additional vendor products (adding on new modules); updates (fixing known bugs or product issues); or upgrades (increasing functionality). This individual should also be the contact if you encounter problems that have not been resolved by the vendor’s helpdesk support.
Establish a process for issue documentation and resolution during pre, intra, and post implementation

Your organization should ensure that there is a process for documenting and resolving issues that arise. This process needs to be in place as soon as the contract is finalized. You and your vendor’s approach to issues resolution begins when the problem is identified and then submitted to the appropriate person for problem solving. An agreed-upon process for submitting and addressing each issue should be established with your EHR vendor, including the time-frame within which the issue should be resolved, disposition milestones, and an understanding of liability and costs associated with each issue.

The Case Log is intended to help your organization maintain consistent documentation to allow for tracking of incidences that may occur before, during, and post implementation of the system. The log will help you track various topics including the three most common:

- **Problem** – is a problem encountered during use of the system that cannot be solved. It is disrupting use of the system and requires intervention by the vendor.
- **Enhancement** – is a non-urgent request typically asking the vendor to program the system with additional functionality or for the software to perform functions in a different manner.
- **Question** – is a non-urgent inquiry made to the vendor to clarify use of system, explain system functions or other questions related to the use of the vendor product.

Use this tool as a guideline for managing vendor relationships:
Establish a process for management of system updates, upgrades, and add-ons once EHR product is installed

Your software license will require your EHR vendor to regularly update or fix software bugs and provide you with upgrades as regulatory, technology, and clinical discoveries continue to emerge.

Most updates occur on a regular basis and are minor tweaks that will not affect your organization’s workflow. Upgrades are major software fixes or updates to accommodate client requests, regulatory features such as incorporating ICD-10 codes, or a way of helping you meet quality or value-based payment incentives. Add-ons are additional products or modules purchased to increase system functionality. Updates, upgrades, and add-ons can be very disruptive to your organization. However, the disruption can be greatly reduced with proper planning and an established approach to these system enhancements, including:

• Assess the benefits for the changes. Read the reason behind the update, upgrade, and add-on. If the upgrade is optional, assess if your organization stands to gain from the upgrade. Security upgrades are not optional.

• Vendor approach to demonstrating the upgrade. Ask your EHR vendor if they will have a “sandbox” where you and your organization’s end users can experience firsthand the upgraded version of your product.

• Vendor plans for the upgrade. Ask the EHR vendor about the processes typically undertaken for the upgrade including the required length of time; whether the system is generally down during the upgrade; anticipated software or hardware costs associated with the upgrade or add-on; activities of vendor during the upgrade process; testing plans; and level of training required of end users.

• Schedule a go-live date. Work with your vendor to select a time when business is slow or when the appointments/resources can be adjusted. Upgrades should not be completed while you are in clinic. Discuss with your vendor the need for additional training in order to pre-empt surprises, complaints, and frustration among your staff due to the upgrade.

The Software Management Checklist can be used to standardize your organization’s processes when dealing with updates, upgrades, and add-ons.

Use this tool to manage vendor issues management and updates, upgrades and add-ons:

Software Management Checklist
EHR planning and procurement is a complex process that requires thoughtful assessment and thorough planning. Commitment of staff resources and time is key to ensure that all phases are explored, and due diligence uncovers both anticipated and unexpected outcomes related to EHR adoption. The EHR process can be ineffective when time is not allocated and steps are skipped or shortcuts taken—and can often have serious consequences that are difficult to fix later during implementation. Negative outcomes include unexpected costs, missed project milestones and even EHR un-installation.

To increase the likelihood that your EHR planning and procurement is thorough and that the EHR implementation is a success, ensure that your organization:

1. Prioritizes the EHR planning and procurement process as part of normal staff job responsibilities;
2. Assigns responsibility to internal staff, external staff (e.g., consultants), or both who are held accountable for the process;
3. Outsources planning activities (e.g., contract review, IT assessment) when organizational time or resources are limited;
4. Contacts other colleagues, local facilities, and health care organizations that have implemented EHRs to seek insight when resources are limited;
5. Assumes EHR planning and procurement process will be a long-term continuous cycle, even after initial EHR installation, as organizational needs change and vendor products are updated.

The initial EHR implementation may be a short-term project; however, the decisions made during the planning and procurement phases will have a long-term impact in all aspects of your organization's business and clinical operations. Selecting the right vendor is important to make sure your investment dollars will lead to long-term success—not only of the EHR implementation but also for your organization's continued operations. The data collected in, and information produced from, an EHR system are considered invaluable assets. Every effort needs to be made by your organization to find a vendor that has the experience, products, and services to handle one of your organization's most prized resources.
Federal Considerations for EHR Planning

Research Federal laws (e.g., HIPAA, Privacy Act of 1974), if they apply to the organization, and the Health Information Technology for Economic and Clinical Health (HITECH) Act.

Review the Federal and State Rules of Evidence for the EHR to stand as a legal business record.

Research applicable to Food and Drug Administration regulations, including:

1. 21 CFR 11: Electronic Record and Electronic Signatures;
2. Guidance for Industry: Computerized Systems Used in Clinical Trials; and

If appropriate to the facility, review the applicable Federal regulations and conditions of participation (e.g., defining the electronic record, retention of records, electronic signatures), including:

1. Part 2–Confidentiality Of Alcohol And Drug Abuse Patient Records;
2. 42 CFR 418: Conditions of Participation for Hospices;
3. 42 CFR 482: Conditions of Participation for Hospitals;
4. 42 CFR 483: Conditions of Participation for Long-Term Care Facilities;
5. 42 CFR 484: Conditions of Participation for Home Health Agencies; and
6. 42 CFR 485: Conditions of Participation for Rehabilitation.

Massachusetts Considerations for EHR Planning

The following represents certain programs and regulations by the Commonwealth of Massachusetts that need to be addressed by health care providers practicing in the state. When soliciting for vendors, you will need to ask if their software system can address these specific requirements.

Privacy, Security, Confidentiality and Breach Notification

Massachusetts has its own set of regulations related to privacy, security, and breach notification procedures for patient health information. Massachusetts providers need to abide by 201 CMR 17.00: Standards for the Protection of Personal Information of Residents of the Commonwealth and demonstrate that they can meet the requirements for implementing a Comprehensive Written Information Security Program (WISP) by utilizing the CMR 17.00 Compliance Checklist.

MGL c.111, s.70G Genetic Information and Reports Protected as Private Information

Massachusetts requires providers to provide informed consent and collect written consent from patients prior to performing genetic testing. It also requires written consent from the patient prior to the release of the testing results. Providers will need to determine how the EHR will manage the consent process and release of protected test results.

MGL c.111, s.70F HIV Testing

Massachusetts requires health care providers to obtain written consent for the purpose of disclosure of testing results. Providers will need to determine how the EHR will manage the consent process and release of information.

MGL c.111, s.70E Patients’ Rights Law

Massachusetts requires health care providers to submit medical record inspection or copies upon request by applicant, beneficiary, or individual representing said applicant. Providers will need to determine how the EHR will support consent management and tracking of medical record inspection and copy requests.

MGL c.149, s.19A Copies of Reports of Employer-Required Physical Exams

Massachusetts requires any employer requiring a physical examination of an employee shall, upon request, furnish a copy of the medical report following the said examination. EHRs will need to support request management and tracking of physical examination reports.

Mass HIway

Massachusetts has a statewide electronic health information exchange, the Massachusetts Health Information Highway (The Mass HIway). EHRs will need to be able to support health information exchange and comply with the Department of Health and Human Services regulations.

MDPHnet Project

The Department of Public Health utilizes a disease surveillance software application that can extract and analyze data from EHR systems, to monitor and track certain health conditions. Providers need to determine if their EHR can support this connection.

MDPH Immunization Program

All Massachusetts providers are required to submit patient immunization information to the Department of Public Health. The Massachusetts Immunization Information System (MIIS) is a web-based immunization registry that electronically collects and stores information.
**Prescription Drug Monitoring Program (PDMP)**

Certain health care providers who prescribe or dispense prescription drugs are required to participate in the PDMP program. Massachusetts offers a secure website tool, the MA PMP, that collects dispensing information on Massachusetts Schedule II through V controlled substances dispensed pursuant to a prescription. Schedules II through V consist of those prescription drug products with recognized potential for abuse or dependence (e.g., narcotics, stimulants, sedatives). Providers will need to determine if their system can connect to this database.

**Massachusetts Behavioral Health Care Specific Considerations for EHR Planning**

The following represents topics that need to be addressed for Behavioral Health Care providers in the Commonwealth of Massachusetts. When soliciting vendors, you will need to ask if their software system can address these specific requirements.

**MGL c.112, s.12CC Inspection of Records by Patient or Representative**

Massachusetts enables psychotherapists to provide a summary of the medical record available to the patient. If a patient requests the entire record, notwithstanding a determination that providing said record is deemed to adversely affect the patient’s well-being, the psychotherapist shall make the entire record available to either the patient’s attorney, with the patient’s consent, or to such other psychotherapist as designated by the patient. The EHR system will need to be able to manage the consent and tracking of medical record requests with the ability to provide summary capabilities in the event the psychotherapist believes that providing the complete record would adversely impact the patient.

**Telemedicine - Chapter 224: SECTION 158. Chapter 175 of the General Laws**

Telemedicine is covered by private insurers in Massachusetts; however, it is not covered by Medicaid. It is the delivery of health care services through the use of interactive audio, video, or other electronic media for the purpose of diagnosis, consultation, or treatment. “Telemedicine” shall not include the use of audio-only telephone, facsimile machine, or e-mail. BH embraces telemedicine to provide telepsychiatry services. Providers will want to know how EHRs integrate and support telemedicine technology.

**Massachusetts Standardized Documentation Project (MSDP) certification**

Massachusetts has a voluntary certification that requires software systems to capture all the necessary data fields in the proper order and in the proper format as structured according to the standard documentation forms. MSDP-certified systems enable users to (1) comply with Federal and state standards and the requirements of funders of mental health and addiction treatment services in Massachusetts for clinical documentation, and (2) maintain proper medical necessity linkage as designed into the certifier’s standard documentation forms. Providers will need to ensure that their EHR system can comply with certification standards.

**Massachusetts Long-Term Care Specific Considerations for EHR Planning**

The following represents topics that need to be addressed for long-term care providers in the Commonwealth of Massachusetts. When soliciting for vendors, you will need to ask if their software system can address these specific requirements.

**State licensure clinical record requirements**

Massachusetts LTPAC providers need to adhere to licensure regulations set forth by the Public Health Department in the areas of documentation and specific data elements that are necessary to stay in compliance. Providers will need to ensure the EHR system can accommodate the licensure requirements.

**Improving Massachusetts Post-Acute Care Transfer (IMPACT) standards**

Massachusetts is working on an enhanced electronic Universal Transfer Form (UTF) for use during care transitions between acute providers and the post-acute care settings. This will help providers with EHRs and those without EHRs to share health information about their patients electronically. Providers will need to ensure their EHRs can support the IMPACT standards.
Administrative System  A software system that allows users to capture patient demographics, record health insurance information, schedule appointments, and perform billing tasks.

Ancillary Devices and Equipment  Supplementary accessories for computer systems such as printers, scanners, and fax machines.

Backup Drives  Devices that copy and store computer data from a primary computer or electronic device.

Bandwidth  The capacity for data transfer of an electronic communications system. The maximum data transfer rate is often expressed in kilobits per second.

Behavioral Health (BH)  Services for any mental health diagnosis, any substance abuse diagnosis, or any combination thereof. Substance abuse includes drug and alcohol abuse; and services include the detoxification and withdrawal treatment that may be required.

Capital Investment  Funds used to acquire fixed assets such as computers for an office.

Certified Electronic Health Record Technology (CEHRT)  Standards and other criteria established by the Centers for Medicare & Medicaid Services and the Office of the National Coordinator for Health Information Technology for structured data that electronic health record systems must use in order for eligible professionals to qualify for the EHR Incentive Programs.

Certified Health IT Product List (CHPL)  A comprehensive listing of Complete Electronic Health Records and Modules that have been tested and certified under the ONC HIT Certification Program, maintained by the Office of the National Coordinator for Health Information Technology.

Centers for Medicare & Medicaid Services (CMS)  An agency within the U.S. Department of Health and Human Services responsible for administration of Medicare program and that works in partnership with state governments to administer Medicaid, the State Children's Health Insurance Program, and health insurance portability standards. Other responsibilities of the agency include the administrative simplification standards from the Health Insurance Portability and Accountability Act of 1996 (HIPAA), quality standards in long-term care facilities (more commonly referred to as nursing homes) through its survey and certification process, clinical laboratory quality standards under the Clinical Laboratory Improvement Amendments, and oversight of HealthCare.gov.

Chart Migration  The movement of clinical records from one format or system to another.

Cloud-Based EHR  A type of electronic health record (EHR) software model where the organization subscribes to use the software online and payment is based on usage.

Computer Literacy  The knowledge and ability to use computers and other technology.

Conditions of Participation (CoP)  Health and safety standards developed by the Centers for Medicare & Medicaid Services that health care organizations must meet in order to begin and continue participating in the Medicare and Medicaid programs. These are the foundation for improving quality and protecting the health and safety of beneficiaries.

Configuration  The set-up of hardware and software that make up a computer system.

Data Conversion  Transformation of electronic information from one format or system to another.

EHR Incentive Programs  Federal programs administered by the Centers for Medicare & Medicaid Services in which eligible professionals and hospitals may receive financial payments for the adoption and meaningful use of EHRs after meeting specific requirements.

Electronic Health Record (EHR)  A digital version of a patient's longitudinal medical history, clinical encounters, and other data that can be shared among multiple health care organizations.

Eligible Professionals  A term used by the Centers for Medicare & Medicaid Services to describe the health care providers who meet the eligibility criteria, defined by law, in order to receive incentive payments for implementing electronic health records programs.
**Functionality** System actions or behaviors (i.e., data capture, processing, storage, report, user interface or interoperability) that are expected to support business, operational, and/or clinical activities through the use of EHR.

**Go-Live** The first day that an electronic health record system will actually be used in a production mode by at least one user.

**Health Information Exchange (HIE)** The electronic movement of health-related information among organizations according to nationally recognized standards. The goal of health information exchange is to facilitate access to and retrieval of clinical data to provide safer, timelier, efficient, effective, equitable, patient-centered care.

**Health Information Technology (Health IT)** The use of computer hardware and software to privately and securely store, retrieve, and share patient health and medical information.

**Health Information Technology for Economic and Clinical Health (HITECH) Act** A law enacted as part of the American Recovery and Reinvestment Act of 2009 and signed into law on February 17, 2009, to promote the adoption and meaningful use of health information technology.

**Health Insurance Portability and Accountability Act of 1996 (HIPAA)** A law that ensures an individual's right to keep health insurance and that establishes standards for the privacy and security of patient health information.

**Interface** A connection between one computer system to another for information exchange.

**International Classification of Disease Tenth Revision (ICD-10)** A system of coding used by health care providers to classify and code diagnoses, symptoms, and procedures; the tenth edition is expected to replace the ninth edition by October 1, 2015.

**Internet Service Provider (ISP)** A company that offers access to the Internet, usually for a monthly fee.

**Interoperability** The ability of different systems and software applications to communicate and exchange data.

**Locally Hosted EHR** A type of EHR software model by which an organization typically purchases a license to install the software on servers that are stored and maintained by the organization at the clinic or a remote location.

**Long-Term and Post-Acute Care (LTPAC)** A sector of health care that encompasses a broad range of providers, including: home- and community-based services; nursing homes; assisted living; long-term acute care hospitals; rehabilitation and post-acute care facilities; Program of All-Inclusive Care for the Elderly (PACE) programs; hospice; chronic disease and co-morbidity management; medication therapy management and senior pharmacists; wellness providers; and others. This sector focuses on coordinating of supportive services and care, restoring and maintaining health, wellness, and functional abilities, and addressing the needs and goals of each of its consumers and their families.

**Mass HIway** A secure health information exchange in the state of Massachusetts that provides infrastructure and services for care coordination.

**Meaningful Use (MU)** A term used by the U.S. Federal government to describe the use of certified EHR technology by eligible providers and hospitals that achieve a specified set of criteria defined by the Office of the National Coordinator for Health Information Technology.

**Minimum Data Set (MDS)** A standardized, primary screening and clinical assessment tool of health status that forms the foundation of the comprehensive assessment for all residents in a Medicare and/or Medicaid-certified long-term care facility. The MDS contains items that measure physical, psychological, and psychosocial functioning. The items in the MDS give a multidimensional view of the patient’s functional capacities and helps staff to identify health problems.

**Module** An EHR module refers to any service, component, or combination thereof that meets at least one certification criterion adopted by the Office of the National Coordinator for Health Information Technology.

**Office of the National Coordinator for Health Information Technology (ONC)** A staff division of the Office of the Secretary within the U.S. Department of Health and Human Services. ONC leads national health IT efforts, charged as the principal Federal entity to coordinate nationwide efforts to implement and use the most advanced health information technology and the electronic exchange of health information.

**Process Redesign** The practice of changing existing processes and workflows to support business objectives and to improve performance measures such as cycle time, cost, quality, and service.

**Patient Portal** A secure online application that allows individuals to access their health information and communicate with their health care providers.
**Regional Extension Center (REC)** An organization that has received Federal funding under the Health Information Technology for Economic and Clinical Health (HITECH) Act. A REC serves as a resource center to assist providers in EHR implementation and Health IT needs.

**Request for Proposal (RFP)** A written request to solicit bids from potential vendors for the procurement of products, solutions, and services.

**Requirements** A set of functions specified for the design, configuration, or customization of EHR system to meet operational, business and/or clinical needs.

**Server** A computer or software that performs administration or coordination functions in a network.

**Software as a Service (SaaS)** A software distribution model in which an application is hosted by a vendor and made available to users over the Internet.

**Software License** A legal contract between the vendor and purchaser of a software product that establishes the purchaser’s rights and defines guidelines for the use and distribution of the software.

**Specifications** A set of technical standards specified for the design, configuration, or customization of an EHR system to support intended behavior or actions outlined by requirements documentation.

**Technical Infrastructure** The physical hardware used to interconnect computers and users.

**Telemedicine** The remote diagnosis and treatment of patients by means of telecommunications and information technology.

**Third-Party Software** A software component developed to be distributed or sold by an entity other than the original developer or vendor.

**Wireless Access Point** A device that allows wireless devices to connect to a computer network.

**Wireless Network** A computer network that uses radio waves or microwaves to maintain communications where there is no physical wired connection between a sender and receiver.
Disclaimer
The development of the online EHR Planning and Procurement Toolkit was developed by Westat and funded through the Massachusetts eHealth Institute (MeHI) eQuality Program Work Order 15-1 and represents Version 1.0. MeHI may consider future updates to this toolkit to reflect refinements based on broad stakeholder input and the changing Federal and state regulatory and technology environment.

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