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.

**KEY STEPS**

1. Assess organizational readiness
2. Assess organizational financial resources
3. Create a budget
4. Create a communication plan
5. Develop a data conversion and chart migration plan
6. Conduct a workflow analysis and process redesign
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:

HealthInfoNet's Practice Readiness Assessment
Assess Organizational Readiness

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.

Use this tool as a guide to create a successful leadership team:

Creating a Leadership Team for Successful EHR Implementation
Assess Organizational Financial Resources

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:

Financing Resources

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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.**

Your business manager or financial officer is the best person to guide your organization through a financial assessment.
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?

Budget considerations
- 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.

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

Budget considerations
- 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.

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

Budget considerations
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:

Budget Planning and Interactive Spreadsheet
Develop a Communication Plan

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.

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:

Workflow and Process Redesign

It is critical to have key staff participate in the EHR planning and procurement process.