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THE ABCs OF EHR
How to make electronic health records work for you and your patients.

Do you worry that the challenges of using electronic health records (EHRs) in your practice might outweigh the benefits? Use our health information technology “tool kit” to calm your fears and put your practice on a path to EHR success.

The benefits of EHRs are clear and compelling: EHR systems can improve patient care and treatment outcomes by enabling health care professionals to deliver care more efficiently and effectively.

To encourage the adoption of EHR systems, government agencies offer incentives to physicians who implement certified EHR technology and put the systems to “meaningful use.” The chapters in this section of our website will lead you step-by-step toward that goal.

A joint project of the Louisiana Academy of Family Physicians (LAFP) and the Louisiana Health Information Technology Resource Center (LHIT Resource Center), this tool kit is available to all LAFP and LHIT members courtesy of a grant from The Physicians Foundation.

In these pages you will find tools to help you assess staff readiness for an EHR system, choose a quality vendor, prepare for implementation and meet goals that will bring you bonuses. Our instruments include interactive worksheets and a calculator that will help you estimate the savings you will derive from implementing an EHR system.

The table of contents on the left side of this page will link you directly to each section and subsection of the kit. We have also developed an optional interactive spreadsheet you can use to help measure levels of preparedness and guide your progress through the tool kit.

Ready ... set ... click on Chapter 1!
Chapter 1

UNDERSTANDING ELECTRONIC HEALTH RECORDS

For both consumers and providers of health care, a big benefit of living in the digital age is that individual health records can reside in a central, online location, and appropriate users can view and update them from health facilities and professional offices almost anywhere.

Personal health records can include a wide range of vital information that’s key to understanding an individual’s health status. At a minimum, they contain such basics as contact information; family health history; a log of immunizations, medications and hospitalizations; a list of allergies; details of past or chronic illnesses; and surgeries and other medical procedures the person has undergone.

A group of key health organizations cooperated to develop uniform Continuity of Care Records — a core set of data that encompass relevant and timely facts about a patient’s condition and circumstances. Information in the records ranges from patient and provider contact details to insurance coverage and the patient’s health status.

Organizations that helped develop the core data records include the Health Information Management and Systems Society, the American Academy of Family Physicians, the American Academy of Pediatrics and the Center for the Advancement of Electronic Health Records.

Uniform, reliable data

A quality electronic system allows the sharing of this official information among appropriate members of a health care team across a secure network, even if the providers work from scattered locations. Instead of the unwieldy sharing of paper records via fax machines or other delivery, an EHR system can enable simultaneous medical consultations across geographic distances and professional specialties, ultimately speeding treatments and improving outcomes.

It is clear that maintaining a single all-encompassing electronic health record for every patient can lead to improved patient care. But creating effective, reliable EHR systems has not been that simple. Technology providers had to proceed carefully in addressing such issues as how patients are identified, security risks, privacy concerns and the challenges of migrating records from paper to digital formats.

Inserting uniformity into this process became the mission of the Certification Commission for Health Information Technology (CCHIT). Founded in 2004 as a volunteer-based nonprofit, the organization later received federal authority to certify EHR systems for use in clinical practices.

In 2009, Congress passed the American Recovery and Reinvestment Act (ARRA) that included incentives and support for EHR
conversions. As interest and support have grown, more and more physicians have put EHR technology to work.

Benefits for patients and professionals
The main benefit of switching to a certified EHR system is better medical practice functioning that leads to superior patient care. An EHR system that is approved and certified by the Office of the National Coordinator for Health Information Technology (ONC) allows for vastly improved communication and access to patient information.

Most practices already operate with some electronic functionality, whether it is e-Prescribe, scanning patients’ insurance cards or viewing lab results. Converting to a fully certified EHR system will integrate a complete patient experience from check-in to discharge and beyond. Properly implemented, the EHR process will enable:

<table>
<thead>
<tr>
<th>Better Care</th>
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<tbody>
<tr>
<td>• Point-of-care decision support that improves quality of care.</td>
</tr>
<tr>
<td>• Fewer errors in patient care. EHRs do not just save information but actually process it, meaning that a system will check for such problems such as potential drug conflicts or allergic reactions to a prescribed medication.</td>
</tr>
<tr>
<td>• Quick receipt of and access to lab and radiology reports.</td>
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<table>
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<tr>
<th>Increase Efficiency</th>
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<tr>
<td>• Paperwork reductions that allow staff to focus on patient care.</td>
</tr>
<tr>
<td>• Reduced “chart chasing” and repetitive tasks that stem from paperwork.</td>
</tr>
<tr>
<td>• Improved efficiency in handling phone calls and medication refills.</td>
</tr>
<tr>
<td>• Valuable physician incentives. Bonus payments through Medicare and Medicaid and some grant assistance are available to doctors who convert from paper to electronic records, though the incentives will not remain available indefinitely.</td>
</tr>
<tr>
<td>• Improved compliance with security and privacy regulations.</td>
</tr>
<tr>
<td>• Practices that do not implement electronic systems eventually may face penalties, such as delays in Medicare payments for not filing through EHR.</td>
</tr>
</tbody>
</table>

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<tr>
<th>More Accurate Data</th>
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<tr>
<td>• A comprehensive medical profile compiled by caregivers in participating facilities, which provides an accurate, always up-to-date patient history.</td>
</tr>
<tr>
<td>• Physician access to current patient data from any location while on-call or in a hospital.</td>
</tr>
<tr>
<td>• Current, accurate immunization updates.</td>
</tr>
</tbody>
</table>

Can you afford EHR?
Naturally, one of the biggest concerns a physician considering a conversion to EHR has is the impact on the practice’s bottom line. A properly implemented EHR system can improve efficiency to a degree that makes a practice more profitable over the long term. But no one should undertake an electronic conversion without doing a thorough cost-benefit analysis first.

Our tool kit contains a Return on Investment Calculator that you can use to make helpful estimates. Enter your cost information and other details into the calculator to gauge the savings you can expect by implementing an EHR system.
Chapter 2
Laying the Groundwork

Thoughtful planning is crucial to implementing a quality EHR system. We can help you create a solid foundation for your system by guiding you through basic steps such as setting appropriate goals, assessing skill and technology needs, and laying a path toward adoption of a system best-suited to your practice.

In the following sections, you’ll find worksheets and other tools that can guide your decision-making and help encourage your staff to become involved in the process. As you fill out the worksheets, save them and keep them handy. Then refer to them often as you move through later stages of the tool kit. To get an idea of how much time implementing EHR systems may take and the basic steps involved, take a look at our Sample Implementation Timeline.

Now, let’s get started!

Set realistic goals
Identifying reasonable, measureable goals for your EHR system is a vital step that can lead naturally to a logical plan of action. If you communicate with your patients and staff about your plans, they can help you develop a vision and strategies for using an EHR.

Increasing efficiency and expanding patient-centered care are common goals of physicians who implement EHR systems. But in addition you’ll want to consider specific areas where you’d like to see improvement through the use of an EHR. Here are some sample goals:

- Reduce patient wait time.
- Improve continuity of care.
- Reduce transcription expense.
- Make clinical charting faster and more accurate.
- Provide health education for specific conditions.
- Provide summaries upon patient departure.
- Improve patient check-in procedures.
- Enable pre-visit patient registration.
- Implement e-Prescribing and streamline prescription refills.
- Decrease pharmacy phone calls.
- Reduce potential for adverse drug interactions.
- Enable electronic appointment reminders for both patients and practitioners.
- Provide easier, quicker access to patient charts – eliminate “chart chasing.”

We suggest using our Goal-Setting Worksheet to record your goals and determine how you will measure your progress toward them. If you need help getting started, see our Sample Documented Goals.

Once you’ve identified your goals, it’s important that you refer to them often as you move through the implementation process. If you remain
focused on the goals, they will become an integral part of every step you take toward the EHR system conversion.

Assess your practice needs
By closely reviewing your new goals in light of existing resources, you will begin to get a picture of the steps you’ll need to take to prepare for EHR implementation. Three components of our tool kit will be particularly useful in doing this.

- The **Practice Demographic Assessment** can help you determine whether your practice may qualify for assistance or incentives that are available to physicians who implement EHR systems.
- Our **Practice Readiness Assessment** will help you evaluate your EHR readiness in four areas: technology, personnel, interactions with patients and practice priorities. Once you’ve answered each question in the assessment, the tool generates a report for your immediate review. This will help you see areas you need to improve. You’ll also find resource links for help in making the needed improvements.
- Our **Patient Office Visit Survey** is of the best ways to assess how well your practice is meeting patients’ needs. Use this simple survey to get simple answers to basic questions. While you’re at it, considering sharing our **Patient EHR Brochure** with them as well, to make them aware that you are planning important improvements to your records system.

Analyze work flow and processes
The transition from paper to electronic records will go more smoothly if you understand how various processes in your practice will need to change in order to implement an EHR system. Staff involvement is critical in mapping existing processes and improving on them. Your staff can help identify bottlenecks, delays and duplicated efforts.

Work flow analysis and process mapping can help you manage improvements in areas such as appointment scheduling, in-house messaging, patient documentation, managing lab results, prescription processing and billing.

Use our **Work Flow Assessment Tool** and the **Staff Self-Assessment**, for help in understanding how your practice functions from the time of patient check in to check out and follow up.

Using the worksheets will help you decide which individual actions you want to change to facilitate the conversion from paper to electronic records. Details you should consider when documenting an individual process include:

- Why each action is necessary.
- How it functions and relates to the patient.
- Who views the results.
- How data is documented in patient charts.

- Who signs or approves the action.
- How information is communicated to others, e.g. phone call, note to file.

Be sure to involve your staff in this review and seek their help in identifying ways to increase efficiency.

Enlist staff support to manage change
The prospect of changes in staff responsibilities can produce anxieties and lead to harmful resistance. Key to garnering staff support is to handle the transition so that people feel empowered. Providing positive reassurance and enabling good communication can help combat negative feelings often associated with change.

Use our **Staff Readiness Assessment** to help gauge attitudes and amenability to the work flow and process changes you anticipate.

Change-management considerations
One of the most important steps you can take to manage change successfully is to bring your staff on board with your goals. Long before you begin to implement changes, talk with them about your reasons for converting to an EHR system, including: benefits to patients; the need to keep up-to-date with changing health care administration technology; incentives that may benefit your practice; how new systems can make their work easier; and potential difficulties the practice may face by not implementing electronic records.

You will want to communicate some of these same points to your patients and help them understand that your overarching goal is improved care. Inform patients of changes and educate them on how EHR will benefit their care by distributing this helpful patient brochure about EHR.

Here are five points to consider as you build staff and patient support for your EHR goals:

- Management must completely understand and support the practice goals.
- Clear communication is crucial in explaining the purpose and benefits of the changes to staff, management and patients.
- Training is critical to the success of process and work flow changes. Staff must fully understand their new job descriptions and how to perform their new functions.
- Resistance to change is common, so management needs a plan to diffuse it and focus personnel on positive strategies. Including them in decision-making and inviting their input on changes that pertain to their positions will help.
- Ongoing monitoring of the EHR system conversion is necessary so that you can continue making changes as needed as the implementation evolves.
Commit to training and education
The goals you have set will help lead you through key steps such as determining what type of preparation your staff will need in order to use the EHR system.

Computer skills will be essential to every aspect of daily functions of your practice such as maintaining patient schedules, patient check in, retrieving charts, and email for internal communications, patient discharge and billing.

Start early in the assessment phase so the staff can be fully trained and ready for implementation. Not all of the staff will require the same level of education and training to run an efficient EHR program. Some staff members may need only basic computer skills and knowledge. Others will need an in-depth understanding of terminology or familiarity with computer network configurations.

When revising your work flow processes, it is important to include the rewriting of job descriptions and the identification of the knowledge based needed for each position. Most vendors offer staff training for the software as part of the purchase contract. Use our staff Computer Skills Assessment to help gather information and assess training needs.

As you consider your training needs, refer to our Training and Education Resources, which shows programs available in the local area.

Plan the migration from paper to electronic
A big step in implementing a certified EHR system is deciding how to move vital information from your current active paper charts into electronic records. The actual chart conversion should not occur until immediately before your new system “goes live,” but careful planning in advance can make the conversion smoother and ensure the safety and immediate availability of your new electronic charts.

The conversion process pre-populates the new electronic record with selected patient information, making adoption easier for staff. But many decisions must precede that final step.

When you convert your records, much of the patient information should migrate into the new electronic system, but other portions of the paper charts can go into an archive. The determination of which records should convert will affect your cost, the ease of implementation and how soon a practice can begin relying solely on electronic records.

Warning: Working with both paper and electronic records at the same time can be inefficient, costly and lead to data problems with patient records.

Conversion methods
Chart conversion generally is done by one of three methods: document imaging/scanning, abstracting/pre-load and data conversion.

Document imaging, or scanning, essentially makes paper images available electronically. Scanned documents may be accessed at any time from any location within the practice.

Manual pre-load of data requires someone to extract key data from the paper chart and enter it into the electronic system. Such a pre-load process results in structured, or discrete, data that makes the data available for use in clinical decision support.

The third option is data conversion — certain structured data that exist in a current electronic application are converted to the new application electronically. This process usually requires a special conversion program.
Often, the conversion is a combination of all three processes. Below is a list of advantages and disadvantages of each method.

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<thead>
<tr>
<th>Method</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scanning</td>
<td>• Electronic access to paper charts.</td>
<td>• Data within cannot be readily referenced.</td>
</tr>
<tr>
<td></td>
<td>• Save space while keeping charts in compliance with statute of limitations.</td>
<td></td>
</tr>
<tr>
<td>Manual</td>
<td>• Processed data is immediately useful for clinical decision support.</td>
<td>• Time consuming and can be costly.</td>
</tr>
<tr>
<td></td>
<td>• Allows immediate access from point of EHR go-live.</td>
<td>• Requires strong attention to detail during conversion.</td>
</tr>
<tr>
<td>Data Conversion</td>
<td>• Processes and converts to structured data.</td>
<td>• Requires special programming that can be costly.</td>
</tr>
<tr>
<td></td>
<td>• Expedite large volume of data efficiently and accurately.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Replaces paper charts with an electronic image. Data cannot be processed, only viewed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Does not support structured data such as medication lists, allergy alerts, preventative care services.</td>
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</table>
What to include
Before figuring out HOW to migrate, a practice must figure out the WHAT should go into active records and what should go to an archive. The decision generally requires a three-step evaluation:

1. Define “active” versus “inactive” patients. Most practices classify patients as inactive after 18 to 24 months without a consultation. Choose an appropriate time limit, and then designate older records for archiving.

2. For active patients, decide how far back you will reach to pull their data for migration. Most practices use data that goes back two to three years.

3. Determine critical categories of data to include in the migration. Information crucial to a patient history typically includes:
   - Current diagnoses and treatments.
   - Chronic conditions.
   - Lab test results.
   - Vital signs.
   - Current medications.
   - Past surgeries.
   - Current referrals.
   - Preventive health maintenance.
   - Significant family medical history.
   - Allergies.

Who will do it?
The determination of who will perform the chart migrations generally comes down to factors such as staff skills and availability, financial resources and office space. No matter how they convert, most practices eliminate reference to paper charts within the first two months of EHR implementation.

The following is a list of advantages and disadvantages to consider for each conversion personnel option:

<table>
<thead>
<tr>
<th>Support</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor</td>
<td>• Has experience with chart migration.</td>
<td>• Cost is not typically included in the implementation contract and will most likely need to negotiate chart migration separately.</td>
</tr>
<tr>
<td>Current Staff</td>
<td>• Staff will gain valuable knowledge and experience with the new EHR system.</td>
<td>• Places heavy work load on operational and clinical staff.</td>
</tr>
<tr>
<td></td>
<td>• Supports gradual conversion allowing staff time to acclimate to the new electronic environment.</td>
<td>• Increase in cost due to overtime requirements.</td>
</tr>
<tr>
<td>Temporary Staff</td>
<td>• Processes and converts to structured data.</td>
<td>• Document scanning requires lower skill level and data entry requires more skilled temporary staff.</td>
</tr>
<tr>
<td></td>
<td>• Expedite large volume of data efficiently and accurately.</td>
<td>**Important - conduct regular audits and dedicate a permanent staff member to quality control.</td>
</tr>
<tr>
<td></td>
<td>• Electronic conversion has a lower error rate than manual conversion.</td>
<td>• Space constraints. Need to make room for the equipment and workstation.</td>
</tr>
<tr>
<td>Outsource</td>
<td>• Companies are dependent on client references and referrals, unlike temporary staff.</td>
<td>• Verify references to avoid disaster and costly mistakes.</td>
</tr>
<tr>
<td></td>
<td>• Experienced and skilled at quality control practices.</td>
<td>• Verify data abstracting before outsourcing to avoid costly mistakes.</td>
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</table>
As you explore options for implementing an EHR system, you will become familiar with a performance measure called “meaningful use,” which is an important component in evaluating an EHR system and qualifying for federal EHR incentives. Selecting the best vendor to supply your new system will be critical to ensuring your new EHR system achieves meaningful use.

You will want to choose a system that, at a minimum, meets the standards of the Certification Commission for Health Information Technology (CCHIT). As you evaluate vendors, ask to see demonstrations of the software in operation, and talk to other physicians who are using the product.

In addition, we provide worksheets to help you narrow the selection. Be sure to refer to your list of goals and your work flow process worksheets to keep your priorities top of mind.

What are you buying?
The question may seem odd, but as you explore EHR options you will likely find wide variation in the scope of products and services vendors offer. Some may try to convince you that if they provide an electronic document management system that enables scanning and indexing paper documents and merging them with digital files, then you have an EHR system. Don’t listen.

Take the time for a thorough selection process to ensure you choose a vendor that will meet your needs. Be sure to ask about scalability – the ability of a system to expand and adapt to larger systems as technology and your needs continue to evolve.

Some EHR vendors may suggest replacing your financial/administrative system in order to integrate these functions with the EHR. Be sure to weigh the cost and benefits of such suggestions. Refer again to our EHR Return On Investment Calculator for help in evaluating your options.

EHR vendor selection
Begin your search by researching company websites, viewing demonstrations and researching the products. Before contacting a sales person, review our Vendor Evaluation Tools and use them as you talk with suppliers.

Many of the IT companies that you contact will be out-of-state firms. It will be up to you to perform due diligence in researching them. Ask if they have installed an EHR system in a clinical practice in your area; if so, request a live demonstration or an opportunity to visit with that facility.
Many vendors feature testimonials on their websites, but we recommended you request a reference list and contact the clinical practices directly. You’ll find our Vendor Reference Questions will be helpful in this.

In addition, we offer a list of four Louisiana providers that are on our preferred list. Research them as you would any other supplier. When you feel you have found several vendors who may fit the bill, ask each one to complete your Request For Proposal. It’s a detailed document that outlines everything a clinical practice may want to consider for the EHR transition.

Be sure to review the request for proposal against your list of goals and work flow and process worksheets, and modify it accordingly to ensure it reflects your needs.

When you receive the proposals back from vendors, take time for appropriate due diligence to verify their responses to your questions. This often includes some form of scoring the RFP responses on key differentiators as well as product demonstrations, potential site visits, reference calls and vendor background checks.

Here are several choices that cater to primary care:

- **eClinicalWorks** offers a comprehensive EHR and practice management solution that extends the EHR beyond practice walls to create community-wide records. With more than 50,000 providers and 225,000 medical professionals using its technology, customers include physician practices, outpatient departments of hospitals, health centers, departments of health and convenient-care clinics. The company links all features via a single database.

- **e-MDs Inc.** says its Solution Series software was developed from the perspective of a physician, and the company’s staff includes full-time physicians, physician assistants, nurses and pharmacists. The firm has ranked at the top in independent surveys. It offers a meaningful use guarantee, ongoing free training webinars and the continued development of a meaningful use tool kit.

- **Greenway** provides ambulatory and clinical research business solutions designed to streamline clinical, financial and administrative work flows. With more than 23,000 provider customers nationwide, Greenway enhances the delivery of patient care through innovative software and on-demand services that allow physician practices to function at their highest level of efficiency. The company’s award-winning PrimeSUITE is at the core of a comprehensive and interoperable infrastructure used in physician practices, IDNs, RECs, HIEs, IPAs, accountable care organizations and the patient centered medical home (PCMH).

- **SuccessEHS** is a nationally recognized vendor providing EHR and practice management solutions with integrated medical billing services.

A leader in the emerging practice management applications market, the company has built its reputation on developing personal relationships with customers by leveraging the collective knowledge and expertise of its 260 team members to ensure its customers’ success. Developed and supported entirely in-house, the SuccessEHS solution has achieved multiple certifications and has helped numerous clients qualify for incentive funds and participate in quality initiatives.

**Will you integrate e-Prescribe?**
As you consider your EHR vendor options, it’s also a good time to think about the merits of integrating e-Prescribe into your plans.

Prescription writing is the largest paper-based process within the medical industry. The e-Prescribe function helps eliminates the paper process and creates a secure and safe environment for physicians to prescribe and patients to receive medications.

Benefits of the system include:
- Legible, easy-to-read prescriptions.
- Medication records that are linked to a comprehensive health record (when integrated with an EHR system).
- Reduced phone time between pharmacy and clinical staff for verifications and refill permissions.
- Safety alerts to potential adverse drug interactions and drug-allergy reactions.
- Ability to integrate clinical messaging and notes.
E-Prescribe systems are either stand alone or integrated with the EHR, but the benefits of including e-Prescribe as part of the implementation of an EHR system are significant. Consider the following:

<table>
<thead>
<tr>
<th>Stand Alone e-Prescribe</th>
<th>e-Prescribe with EHR</th>
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<tbody>
<tr>
<td>• Potential additional charges for customization, training, maintenance and upgrades.</td>
<td>• Costs of interfaces, customization is usually part of the EHR inception.</td>
</tr>
<tr>
<td>• Collected and stored information is part of a stand-alone system and cannot be integrated.</td>
<td>• Medications are automatically linked to a comprehensive health record from other providers providing clinical care, including lab results and other prescribed medications.</td>
</tr>
<tr>
<td>• Reduces time spent on phone calls to and from pharmacies.</td>
<td>• Reduces time spent on phone calls to and from pharmacies.</td>
</tr>
<tr>
<td>• Increases patient convenience and medication compliance.</td>
<td>• Increases patient convenience and medication compliance.</td>
</tr>
<tr>
<td>• Does not store patient history.</td>
<td>• Stores patient’s history so E-Prescribe is able to send an alert for allergic reactions.</td>
</tr>
<tr>
<td>• Does not carry patient insurance information.</td>
<td>• Easy view of most affordable prescription available under patient’s insurance coverage.</td>
</tr>
<tr>
<td>• Generic alternative alerts.</td>
<td>• Generic alternative alerts.</td>
</tr>
</tbody>
</table>

**IT vendor selection**

In addition to choosing the right EHR and e-Prescribe providers, you will want to engage a qualified vendor to install, adapt and maintain your computer and network hardware and systems. Listed below are information technology companies that are experienced in providing services for clinical practices and hospitals throughout Louisiana. Their services may include networking, hardware set-up, data recovery and other services.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Phone</th>
<th>Service Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual Business Solutions</td>
<td>504-840-9800</td>
<td>Ascension, East Baton Rouge, Jefferson, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John, St. Tammany</td>
</tr>
<tr>
<td>Syscom, LLC</td>
<td>504-529-9540</td>
<td>Within 100 miles of New Orleans</td>
</tr>
<tr>
<td>Turnkey Solutions</td>
<td>225-751-4444</td>
<td>Assumption, East Feliciana, Iberia, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, Pointe Coupee, Terrebonne, St. Helena, St. Martin, St. Mary, St. Tammany, Tangipahoa, Vermillion, and West Feliciana</td>
</tr>
<tr>
<td>Kinetix Technologies</td>
<td>318-487-8200</td>
<td>Within 100 miles of Alexandria</td>
</tr>
<tr>
<td>nSpire Technologies, LLC</td>
<td>504-309-8664</td>
<td>Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St. Charles, St. Bernard, St. James, St. John and Terrebonne</td>
</tr>
<tr>
<td>Puryear IT, LLC</td>
<td>225-706-8414</td>
<td>Ascension, East Baton Rouge, East Feliciana, Iberville, Jefferson, Orleans, Plaquemines, Pointe Coupee, St. Bernard, St. Charles, St. Helena, St. John the Baptist, St. Tammany, West Baton Rouge and West Feliciana</td>
</tr>
<tr>
<td>JLH Networking</td>
<td>225-279-1630</td>
<td>Ascension, East Baton Rouge, Livingston, East Feliciana, Pointe Coupee, Iberville, Tangipahoa and West Baton Rouge</td>
</tr>
<tr>
<td>NetTech LLC</td>
<td>318-387-0001</td>
<td>Caldwell, Franklin, Jackson, Lincoln Morehouse, Ouachita, Richland and Union</td>
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IT 101

Among the decisions involved in implementing EHR are the choices of hardware. Fairly early in the process you will want to decide whether you and your staff will work primarily with desktop, laptop or tablet computers, or a combination of the three. Each has advantages and disadvantages, of course. Chances are convenience factors will play a big role in the choices you make for various staff positions, along with space considerations and cost.

The question of whether you will use a wired or wireless network is also important. If your office is not already equipped with a computer network, or if you and your staff are not experienced with such technology, you will do best to enlist the services of a good IT vendor who can guide you step-by-step through the set-up of the hardware and networking system you select.

EHR IT and Hardware Presentation
Chapter 4
Going Live

Everything you have done has come down to this: It’s nearly time for your EHR system to go live! Now is a good time to review your goals and worksheets in preparation for testing your new system and evaluating its performance.

As you gear up for the launch, prepare yourself to examine every aspect of the operation. Make sure staff members know what to expect and what sorts of start-up glitches they might encounter in the early stages. Their attention will be important not only in using the system but in monitoring it over time.

Testing ... testing ...
As you prepare for the system launch, make sure you have our Issues Log on hand. It will come in handy for noting any issues that may crop up as you go along.

Here are some tips that can help make the start-up a smooth one.

• For testing purposes, migrate to the EHR system a section of your patient database that won’t affect the rest of your clinical operation if it is tied up for a while in testing.
• Run through every aspect of the new work flow process so that you and your staff can get a feel for how it works.
• Be certain to involve all key players, such as IT staff members and clinicians.

• Troubleshoot, and designate a staff member to manage the issues log during testing.
• Resolve all problems found in testing BEFORE you proceed to full start-up.
• Re-test to verify that all items in the issues log have been fixed.

Surviving the launch
Before your new system “goes live,” be sure to have our Go-Live Checklist on hand.

As you approach your EHR system’s launch date, you’ll need to decide whether you want to phase in the operation, or go “all in” with electronic records. Determinants will include available resources, staff constraints, scope of the project, vendor support and your own personal comfort level. Consult with your vendor to make an informed decision that feels right to both of you.

If you choose to phase in the system, you can:

• Slowly transition away from paper charting by recording new information – vitals, patient histories and current problems – electronically.
• Add a training session if you feel it is needed.
• Begin implementing electronic progress notes after hours, so that the physicians can become comfortable with the process before they begin charting electronically in the presence of patients.
• Continue with new electronic phases and training until the practice is fully functioning in a certified EHR environment.

The disadvantage with the “phasing in” strategy is the limited functionality and possible duplication of efforts while everyone works on transitioning. Duplicating efforts can lead to mistakes, missing information and an increase in costs until the transition is complete.

If you decide instead to go “all in,” consider these tips:
• Schedule your go-live date on the least busy day of the week and, if possible, maintain a light schedule for a few days following the implementation.
• Inform vendors and anyone else related to your practice of the pending transition.
• Re-test all aspects of the system and fix any remaining problems before you launch the system.
• Don’t go-live alone; have a representative from the vendor on hand to resolve issues and answer questions.

A disadvantage to going all in is the possibility of errors and parts of the system not working. Trying to continue to operate while fixing problems may lead to frustration and falling back on the paper system. Testing, training and preparation are the keys to avoiding problems.
Chapter 5

Maintaining the System

You will likely breathe a sigh of relief once your EHR system is up and running as planned, but as with any such system, ongoing monitoring and maintenance are crucial. You will already have talked in detail with your vendors about security considerations, disaster recovery plans and ongoing oversight of your hardware and software.

An easy-to-understand PowerPoint Presentation is available that outlines IT processing and equipment commonly found in a clinical practice.

Refer to our Routine System Maintenance Checklist for guidance in ensuring that your information systems are well maintained.

Disaster recovery
Every clinical practice should have a practice continuity/disaster recovery plan. Disaster can come in many forms, ranging from a leaking roof or electrical fire to an extended power outage and extreme temperatures. In any of these situations, it is still critical that basic patient information remain secure and accessible.

The first step to developing a clinical practice continuity plan is to create a data backup plan with the data stored in multiple locations. Multiple locations may include a separate backup drive or disk array onsite, as well as the ability to electronically transmit to an offsite location. Ideally, the offsite location should be accessible via the Internet so that a practice can be running regardless of the condition of the physical building.

Part of planning is deciding how the data will be backed up:

- **Offsite backup.** This means having data files transmitted electronically to a data center away from the physician office. In the event of a disaster that destroys the file server and backup disk in the office, the data can be retrieved via the Internet.

- **Offsite replication.** An IT vendor creates an image of the file server applications and the data in an offsite facility. In the event of a disaster that destroys the server in the office, users can access the “image” and continue working on the application via an Internet connection.

- **Co-location hosting.** In a secure location away from the office, an exact replica of the server in the physician office replicates the data in “real time.” This requires twice the hardware expense, plus replication software. It allows users to immediately use the offsite server without an interruption in service. Generally this type of co-location is reserved to larger clinics and hospitals.

You will also need to decide:

- **How often to back up files.** Frequency should be continuous, on a specified schedule (hourly, daily, etc.), or periodic (weekly, monthly, etc.).

- **Backup method.** Media devices used to hold the stored data could be an external drive, web-based server, in-house network server, or offsite facility.
• Organization. File naming should be decided to ensure efficient retrieval.
• Recovery and restoration. This is the process for accessing data during a disaster and restoring it in original form afterward.
• Testing. Scheduled testing is important. If you don’t test to ensure that backups are working, a clinical practice is not truly prepared. A simple test involves restoring a file from the backup media (onsite and offsite) to the production server. This ensures that the data exists on the backup devices and can be retrieved.

When developing a disaster recovery plan, it is a good practice to determine the value of various applications related to day to day workflow processes. A few examples are:
• Mission-critical, defined as any data element that has immediate impact to the patient.
• Critical impacts productivity.
• Important impact usually has the ability for manual overrides.
• Deferrable is minimal impact.

A good disaster plan means that a practice can recover quickly with the least amount of harm to patients. Contact the local LHIT Resource Center for guidance on staying compliant with HIPAA guidelines and direction on best-practice recommendations.

Security Risk Analysis
Conducting an analysis of your EHR system is a core requirement for meeting the test of meaningful use. The standard also requires that you implement security updates as necessary and correct identified security deficiencies as part of a risk management process.

What, exactly, does this entail? Looking at 45 CFR 164.308(a) (1), one can see that a “covered entity” (any HIPAA-covered entity) must “implement policies and procedures to prevent, detect, contain, and correct security violations.” To begin meeting those requirements, you must conduct a security risk analysis of the certified EHR technology and of your own processes and correct any deficiencies. Click here to view and print the Risk Analysis developed by the LHIT Resource Center.

Some of the things you and/or your certified EHR technology must be doing are:
• Access control: Assigning a unique name and/or number for identifying and tracking user identity and establish controls that permit only authorized users to access electronic health information.
• Emergency access: Permitting authorized users (who are authorized for emergency situations) to access electronic health information during an emergency.
• Automatic log-off: Terminating an electronic session after a predetermined time of inactivity.

• Audit log:
  - Recording actions related to electronic health information.
  - Enabling a user to generate an audit log for a specific time period and to sort entries in the audit log.
• Integrity:
  - Creating a message digest.
  - Upon receipt of electronically exchanged health information, verifying that such information has not been altered.
  - Detecting the alteration of audit logs.
• Authentication: Verifying that a person or entity seeking access to electronic health information is the one claimed and is authorized to access such information.
• General encryption: Encrypting and decrypting electronic health information, unless the secretary determines that the use of such algorithm would pose a significant security risk for certified EHR technology.
• Encryption when exchanging electronic health information: Encrypting and decrypting electronic health information when exchanged.
• Accounting of disclosures (optional): Recording disclosures made for treatment, payment and health care operations.

Any EHR software certified as a “complete EHR” had to meet the above requirements before receiving certification, so you can rest assured that your software is compliant if it is certified. The next step is for you to evaluate your own processes, physical installation, etc.

The implementation specifications for this consist of four parts, all of which are required:
• Risk analysis: Conduct an accurate and thorough assessment of the potential risks and vulnerabilities to the confidentiality, integrity, and availability of electronic protected health information held by the covered entity. Download the LHIT Risk Analysis.
• Risk management: Implement security measures sufficient to reduce risks and vulnerabilities to a reasonable and appropriate level to comply with 164.306(a).
• Sanction policy: Apply appropriate sanctions against workforce members who fail to comply with the security policies and procedures of the covered entity.
• Information system activity review: Implement procedures to regularly review records of information system activity, such as audit logs, access reports and security incident tracking reports.

In order to help providers carry this out, the ONC has published a resource, the Small Practice Security Guide, which can be helpful. This resource lists a series of “Questions to Ask Yourself” for each of the elements — for the Risk Analysis section, for example, there are questions for each of the categories of confidentiality, integrity and availability.
Chapter 6

Incentives & Assistance

In 2004, President George W. Bush set a goal of implementing EHRs for most Americans. Under President Barack Obama, the American Recovery and Reinvestment Act of 2009 (ARRA) mandated support for the EHR initiative.

Funding for the LHIT Resource Center and Centers for Medicare and Medicaid Services (CMS) incentives arise from that law. The act named CMS to oversee the incentive payments and ensure that the defined the criteria of “meaningful use” are met.

Included in ARRA funding is $650 million to establishment of 70 Regional Extension Centers (RECs) to link clinical networks to electronically link provider and patient data and exchange communication. $560 million is allocated for state governments to develop Health Information Exchange (HIE) to allow capabilities to link public and private health care institutions.

The ONC oversees the functionality that EHRs must meet. Physicians must meet established ONC guidelines before Medicare or Medicaid releases any incentive payments.

Our tool kit offers many links to information about how to apply for the incentives and how to access services that are available to clinical practices as a result of these laws.

Louisiana Health Information Technology Resource Center

Administered by the Louisiana Health Care Quality Forum (LHCQF), the LHIT Resource Center is one of 62 regional centers around the nation designated as a source for assistance, guidance and information on best practices in the adoption and meaningful use of electronic health records.

You can see an LHIT Slideshow Presentation here.

The LHIT Resource Center supports health care clients through:

- Qualifying and registering for the incentive payments through Medicare/Medicaid.
- Project management and implementation.
- Preferred pricing on various vendor services.
- Continued support after EHR go-live.
- Gap analysis and ongoing meaningful use support.

The LHIT Resource Center is a not-for-profit organization whose mission is to lead collaborative evidence-based initiatives to improve the health of Louisiana citizens. As the REC for the state, the LHIT Resource Center has received $7.8 million in federal grant funds to support 1,042 primary care providers and 64 critical access/rural hospitals as they achieve “meaningful use” standards by April 2014. Services offered by the LHIT Resource Center are designed to
help providers adopt and meaningfully use electronic health records to maintain patients’ health information. Meaningful use refers to the fact that providers need to demonstrate that they use certified EHR technology in ways that can be measured significantly in quality and quantity.

Clients of the LHIT Resource Center will receive help in facilitating the adoption of a certified EHR system. Services offered are based on the practice’s current level of electronic health record adoption.

LHIT Resource Center services include:
- EHR vendor selection.
- Technical assistance.
- Project management.
- Practice and work flow redesign.
- Meaningful use achievement.
- Privacy/security planning.
- Education and outreach.

All Louisiana health care providers are eligible for services which are provided at reasonable fees. Providers that meet federal “priority primary care provider” qualification standards are eligible to received discounted services.

Priority primary care providers include physicians (Family Medicine, Internal Medicine, Pediatrics and Obstetrics/Gynecology) and other health care professionals (Nurse Practitioners, Physician Assistants, Certified Nurse-Midwives) with prescribing privileges in small group practices (10 or fewer providers); public and critical access hospitals; community health centers and rural health clinics; and other ambulatory settings that predominantly serve uninsured, underinsured and medically underserved populations.

As meaningful users of EHRs, health care providers may be eligible for up to $63,750 over six years through Medicaid and up to $44,000 over five years through Medicare. The LHIT Resource Center staff is available to work with providers to determine eligibility.

To enroll in the LHIT Resource Center and take advantage of the services that they have to offer with EHR adoption and achieving meaningful use, click here to view and print a LHIT contract for grant eligible professionals. For more information, please contact the LHIT Resource by phone at 225. 334.9299, toll-free at 877.676.9298 or by email at rec@lhcqf.org.

CMS incentives
The first step toward qualifying for EHR incentives is to meet CMS definition of an Eligible Professional (EP).

A physician can qualify for only one incentive, with either Medicare or Medicaid, and must choose at the time of registration, though an applicant may switch programs – once only – after the first incentive payment is initiated before 2015.

Incentive payments are based on individual physicians, not by practice. If a physician practices at multiple locations, he or she is eligible for an incentive at only one location.

See our Medicare Incentives Chart.

Eligibility and payment structures are different between the Medicare EHR and Medicaid EHR incentives, though in both cases physicians must use certified EHR software and throughout the year meet meaningful use criteria as measured by CMS. Both certified EHR software and meaningful use is discussed in further detail later in this section. Sign up for the CMS EHR listserv and stay current with incentive updates and information.
Below is a list of important information that a clinical practice will need when registering for CMS incentive payments:

- Download a PDF of the guide on how to apply for Medicare Incentive Payments.
- Download a PDF of the guide on how to apply for Medicaid Incentive Payments.
- Start the application process for CMS Incentives.
- CMS 2011 - 2013 Timeline is complete with list of dates, milestones and resources to help guide a practice to achieving those milestones.
- Utilize the CMS Attestation Meaningful Use Calculator.

Medicare eligibility/incentive pay schedule
In order to maximize incentive payments for Medicare, qualified EPs need to begin participation by 2012. A physician qualifies as an eligible professional if they are one of the following:

- Doctors of Medicine or Osteopathy.
- Doctor of Dental Surgery or Dental Medicine.
- Doctor of Podiatry.
- Doctor of Optometry.
- Chiropractor.

If 90% or more of a physician’s services are performed in a hospital inpatient or emergency room setting, then they are considered a hospital-based EP and do not qualify for incentive payments.

Medicaid eligibility/incentive pay schedule
Medicaid payments have different qualification structure and different incentive rates. All qualified EPs should begin participation no later than 2016 in order to maximize incentive benefits.

To qualify for the Medicaid EHR incentive, each EP must:

- Have a minimum of 30% Medicaid patient volume.
- Have a minimum of 20% Medicaid patient volume, and is a pediatrician.
- Must mostly practice in Federally Qualified Health Center (FQHC) or Rural Health Center (RHC) and have a minimum of 30% patient volume attributable to needy individuals.

Medicaid providers who receive the first year’s payment through Adopt, Implement, Upgrade (AIU), must prove meaningful use in subsequent years in order to qualify for additional payments. Attestations to meaningful use are completed online through the CMS website.

Meaningful use criteria
This means of measuring EHR technology is mandated in order to receive CMS incentive payments. Meaningful use has three main stages of measure:

- **Stage 1: Data Capturing and Sharing**
  Implementation scheduled for 2011 and 2012 sets a baseline for electronic data and will begin capturing and information sharing. Patients will become more involved with their health care. The baseline data will be used for future measures as the EHR moves into the second and third stages. Percentages are gathered for all patients seen during the EHR reporting period, regardless of whether or not records are kept using certified EHR technology.Outlined in this section are the core and menu set objectives that are required to meet the meaningful use criteria for Stage 1.

  Download and print out a copy of the Meaningful Use Core and Menu Set Objectives.

  Use our Meaningful Use Assessment questionnaire to help determine if your practice is meeting all of the required objectives. The assessment will provide a report outlining what areas need improvement in order to attain meaningful use. You should also refer to our LHIT Risk Analysis.

- **Stage 2: Advanced Clinical Process**
  Implementation scheduled for 2013, will use certified EHR technology for electronic exchange of health information among providers. Stage 2 will expand on information shared with patients by allowing them to view their health care records from different facilities as one record and aid them in the decision making process of their health.

  The EHR will also enter a new phase of measures that will begin to develop results from paper work process to an EHR system by compiling percentages based on patients seen during the EHR reporting period using certified EHR technology.

- **Stage 3: Improved Outcome**
  Implementation scheduled for 2015 will continue to expand on the baseline and develop future rule making.

Health Information Exchange
Health Information Exchange (HIE) refers to the electronic sharing of health-related information between authorized health care providers and organizations according to nationally recognized standards that provide for a secure and confidential network.

- **What is LaHIE?**
  LaHIE stands for the Louisiana Health Information Exchange. It is the network that will support the exchange of health information among providers and organizations in our state, according to nationally recognized standards. For more details, click here.
What are the benefits of HIE?
HIE will provide a common, secure, electronic network dedicated to the secure and efficient exchange of patient health information. Benefits may include more timely access to patient health records; improved patient safety; increased security of health records; increased consumer engagement; reduced health care costs; and the ability to more adequately measure and improve public health benchmarks.

Who manages LaHIE?
LaHIE is an initiative of the LHCQF, a 501(c) 3, private, not-for-profit organization that received a federal grant in March 2010 to implement a statewide health information exchange in Louisiana.

What are LaHIE’s vision and mission?
Vision: LaHIE will establish a framework to safely exchange patient health information for the purpose of improving patient safety, quality of care and health outcomes.

Mission: LaHIE will serve as the neutral entity for facilitating authorized sharing of health information among all stakeholders to improve the health of Louisiana’s citizens.

What are LaHIE’s first objectives?
Phase I of LaHIE will consist of core components of Meaningful use objectives that are a part of the federal grant program. These initial services will include point-to-point electronic delivery of care summaries through the National Health Information Network’s (NHIN) Direct Project, electronic laboratory results delivery and access to an e-prescribing tool.

Additionally, Phase I will allow for electronic access to public health resources such as LINKS. Finally, LaHIE will begin an Emergency Department (ED) Visit Registry to help improve the efficiencies of emergency rooms across the state.

For more information about these services, check the LaHIE Services page.

What about other HIE services?
LaHIE will continue to develop in Phases II, III and IV. To see the list of additional services that may be offered through LaHIE, check the LaHIE Services page.

What is LaHIE’s expected development timeline?
March 2010: LaHIE receives $10.6 million in HIE funding from the ONC.
February 2011: LaHIE receives ONC approval of the State Plan.
June 2011: Vendor contracted for HIE infrastructure.
October 2011: Initial exchange of health information through the HIE in pilot sites.
January 2012 and beyond: LaHIE Phase I services available for all providers, development and deployment of additional HIE services.

How can I get involved?
LaHIE provides numerous ways for involvement whether you are a health care provider, a health industry leader or a concerned consumer. If you are a provider interested in LaHIE’s services, contact Colby Lemaire at cлемaire@lhcqf.org. To learn more about how to get involved with LaHIE’s planning, development and implementation, including our workgroups, please refer to the LaHIE Get Involved page.
Chapter 7

Resources

Included in the resources section are important dates for CMS, glossary of acronyms and terms, and a quick and easy guide to the worksheets in our tool kit. See our Health Information Technology Timeline as a starting point. Our Glossary will also provide you with useful information.

Medical Home Crosswalk

Medical practices are currently dealing with an environment of overwhelming paperwork, changing security and privacy laws and struggling to reach patient-centered care benchmarks. The struggle from this dynamic environment is leading to increased frustration from physicians, staff and patients. Through EHR, meaningful use has been developed to improve the quality, safety, efficiency and reduce health disparities; working in conjunction with patient centered care to help physicians reach the quality benchmark. The goal is to bring patients back into the center of medical practices and focus on their overall experience.

Such benchmarks include:
- Sharing treatment options.
- Improving security and making it easier to stay HIPAA compliant.
- EHR work flow process will help saves time, increasing time with patients.
- EHR network allows sharing of patient information from various health facilities.
- Increased efficiency in how appointments and reminders are handled.
- Improves patient check-in processes including checking for insurance updates.
- Eliminates pulling paper charts by creating a more efficient way to pull patient information.
- Quality control in prescribing medication that may contradict existing ailments that have been diagnosed by other physicians.
- Providing patients with a “portal” to allow electronic access to their health records improves the patient’s engagement with their health care.
- Eases the follow up process for physicians and staff.

Eligible Professionals – 10 Menu Objectives
- Drug-formulary checks, PCMH
- Incorporate clinical lab test results as structured data, PCMH
- Generate lists of patients by specific conditions, PCMH
- Send reminders to patients per patient preference for preventive/ follow up care, PCMH
- Provide patients with timely electronic access to their health information, PCMH
- Use certified EHR technology to identify patient-specific education resources and provide to patient, if appropriate, PCMH
There are a few requirements for NCQA PCMH recognition that are not included in the requirements for meaningful use. These include:

| PCMH 1: Enhance Access and Continuity | A. Has written standards for patient access and patient communication**  
C. Uses the clinical data system  
B. Uses data to show it meets its standards for patient access and communication**  
E. Uses data to identify important diagnoses and conditions in practice** |
|--------------------------------------|------------------------------------------------------------------------|
| PCMH 2: Identify and Manage Patient Populations | C. Uses non-physician staff to manage patient care  
E. Uses data to identify important diagnoses and conditions in practice** |
| PCMH 3: Plan and Manage Care |  
C. Uses the clinical data system |
| PCMH 4: Provide Self-Care Support and Community Resources | A. Assesses language preference and other communication barriers |
| PCMH 5: Track and Coordinate Care | A. Tracks tests and identifies abnormal results systematically**  
A. Tracks referrals using paper-based or electronic system** |
| PCMH 6: Measure and Improve Performance | B. Survey of patients’ care experience  
E. Sets goals and takes action to improve performance |
Online Presentations
The e-Louisiana HIT tool kit offers an events calendar to keep clinical practices informed of informational webinars, luncheons and lectures that pertain to EHR. It is not always possible to attend the events, so the presentations section of the toolkit has been developed to help provide the information you may have missed.

CMS Incentive Program
CMS Electronic Health Records Incentive Program
Presented by U.S. Dept. of Health & Human Services;
Video, 40 minutes

Meaningful Use
Understanding Meaningful Use
Presented by: CMS