EHR Demonstration Scenario, Evaluation and Vendor Questions

Toolkit

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The National Learning Consortium (NLC)

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NATIONAL LEARNING CONSORTIUM

The National Learning Consortium (NLC) is a virtual and evolving body of knowledge and tools designed to support healthcare providers and health IT professionals working towards the implementation, adoption and meaningful use of certified EHR systems.

The NLC represents the collective EHR implementation experiences and knowledge gained directly from the field of ONC's outreach programs (*REC*, *Beacon*, *State HIE*) and through the *Health Information Technology Research Center (HITRC)* Communities of Practice (CoPs).

The following resource is an example of a tool used in the field today that is recommended by "boots-on-the-ground" professionals for use by others who have made the commitment to implement or upgrade to certified EHR systems.

DESCRIPTION & INSTRUCTIONS

This toolkit is intended to aid providers and health IT implementers when selecting or upgrading to a certified EHR vendor. The purpose of this toolkit is to help providers and heath IT implementers to understand the vendor capabilities through established scenarios.

To use this toolkit, provide the vendor with the patient information pre-populated and use the same information for each vendor for comparison purposes. Use the evaluation matrix in Section 3 to evaluate the vendors. Additionally, Section 4 provides a list of questions to ask the vendor during your vendor selection process.

TABLE OF CONTENTS

LIST OF EXHIBITS

1   Tips on Scheduling Vendor Demonstrations

The focus of the system selection phase for EHR implementation should be vendor demonstrations. Vendor demos provide the chance to see the look and functionality of an EHR application. The purpose of the demo is to get an overview of the application and to ask the vendor questions.

This document provides helpful hints on planning and attending EHR application demonstrations.

1. A good number of demos to request is somewhere between five and 10. Fewer than five, you probably will not see enough vendors to get a feel for the functionality that exists in the market. With more than 10, and you will probably lose track of the subtle differences among vendors. We recommend attending the demos of five to 10 vendors, and if you still don't have a good feeling about any of the products, select another group of five to 10 and repeat the process. Attending demos can be a tedious process. Pace yourself, and try not to see all of the demos in the same week.
2. When the vendor contacts you to set up the demo, be clear about which products you would like to see—EHR or EHR and practice management system.
3. The vendor will offer either an onsite demo or a WebEx demo. At this point, either onsite or WebEx demos would be appropriate.
    For an onsite demo, you'll usually need an Internet connection and a screen or some way for the vendor to present the demo. Be sure to ask the vendor what equipment is needed for the demo.
    For a WebEx demo, you'll need a telephone with speakerphone, a computer that is connected to the Internet and a screen or some way for everyone to view the demo.
4. Practices vary on which staff members are invited to the vendor demos. At a minimum, the physician champion and practice manager should attend. Ideally, the entire implementation team would be invited to attend the demo.
5. The demo should last approximately 1.5 hours for the EHR portion. Allow more time for a demo of the EHR and the practice management system together. Come prepared with a list of questions for the vendor (see the Questions for EHR Vendors section for model questions). Ask each vendor the same questions to get a feel for how the different EHRs compare.
    Also come prepared with some clinical scenarios or specific workflows for the vendor to "walk through." The scenarios will give you a chance to see the EHR in action.
    Also ask the vendor to show how certain reporting tasks would be possible. For example, how does the application report on patients with a particular disease, medication, or lab result? Also ask questions with multiple search parameters: for example, how does the application report on patients with diabetes who, within the past year, have had a HbA1C > 9.0%?
6. During the demo, try not to interrupt the vendor with questions too often. It's sometimes hard not to ask everything that comes to mind, but the vendor will need to pace the demo within the allocated time so you can view all the information. By all means ask questions, but you may want to see a particular function all the way through and then ask questions at the end.
7. After seeing all the vendor demos and narrowing your choices down to the serious contenders, request references from each of the vendors. These references will be other customers that use the EHR product and have had a good experience. Your implementation team can schedule phone call interviews with these references to get an idea of their experience.
8. After the product demos and reference phone calls, you'll be able to further narrow your list of EHR vendors. Experts say to enter contract negotiations with at least two vendors to provide the necessary leverage to get the best deal. For these remaining few vendors, request references from these vendors for practices that you can visit onsite. These may or may not be the same references called previously for telephone interviews.

2   Scenario to Provide the Vendor

Provide the information below to the vendor so that it is populated before the demonstration.

The purpose of this demonstration is to get a good idea of the workflow capabilities of your program, highlighting current meaningful use criteria, the ease of documenting and tracking PQRI quality measures. Please follow the provided scenario as closely as possible. There will be time afterwards to highlight any additional features your software has to offer.

The information below should be pre-populated for the vendor demo.

Exhibit 1 Scenario to Provide Vendor[1]

Item	Scenario
Patient	• Daisy Duck, DOB 1/4/40 • Married, mother of 3, retired • HIPAA form signed 5/1/06
Problems	• Hypertension • Diabetes Type II • Esophageal Reflux
Medications	• HTCZ 12.5 mg qid • Lopressor 100 mg bid • Prevacid 30mg hs • Metformin 500mg bid
Allergies	• Penicillin> urticara
PMH/PSH/FH/Soc.Hx.	• Diabetes • Hypertension • GERD
Other	• Three normal, spontaneous vaginal deliveries • Hospitalized once for Pneumonia in 1998 • Nonsmoker • Last Tetanus 1998 • Influenza vaccine 10/04 • Pneumovax 1999 • Mammography 1999

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[1] Information included in this scenario may appear to contain personally identifiable data; however, this data is representational only. No personally identifiable information (PII) or protected health information (PHI) is contained herein.

3 Information to be Entered During Demonstration

Do not provide this information to the vendor prior to the demonstration but have them enter it during the demonstration to see how the system handles it.

Exhibit 2 Information to be entered during Demonstration[2]

Item	Scenario
Complaint	• Follow up care to patient on diabetes, hypertension, and reflux. Patient states FBS elevated at home.
PE	• Weight - 180 Height - 5′9″ • BP 180/95, repeat 130/78 • P 89 • R 28 regular unlabored • T 97.6 F • General: no distress noted • HEENT: nasal congestion • Lungs: clear to auscultation • Abd: soft on palpation, nontender • Neuro: alert, orientated x3 • Foot exam: (visual) normal
Lab	• Accuchek in office 220 • Urine for microalbumin: negative • Previous lab (> 6 mos ago) HgbA1C: 8 • Lipid Profile (fasting) • HgbA1C • Referral to Dr. Mickey Mouse for dilated eye exam • Referral to Dr. Olive Oil for Pap smear
Assessment	• Hypertension, controlled • Diabetes Type II • GERD • Pt to call back in 1 month if no improvement in FBS • Diabetic teaching reinforced in regards to diet and home monitoring of blood sugars • Patient Instructions provided • Health Summary provided • F/U in 3 months

Plan	• Rx
	   – HCTZ 12.5 mg qd x 6 months
	   – Lopressor 100mg bid x 6 months
	   – Prevacid 30mg q HS x 6months
	   – Discontinue: Metformin 500mg bid x 3 months
	   – Add: Actos 10mg daily

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[2] Information included in this scenario may appear to contain personally identifiable data; however, this data is representational only. No personally identifiable information (PII) or protected health information (PHI) is contained herein.

4   Evaluating the Scenario

Use the evaluation matrix to evaluate how each of the vendors do with the scenario.

Vendors should be able to walk through this scenario once they have entered the background data provided.   Allot time for the vendor to demonstrate other features of interest after the scenario is completed.

Instructions: Note difficulties in performing the documentation tasks, and score the ease of each task from 1 (very difficult or time-consuming) to 5 (easy and quick). Make sure to pay attention to the number of mouse clicks and screen changes it takes to complete one task and check for visibility of key information and the intuitiveness of the user interface.

Exhibit 3 Scenario Evaluation[3]

Duty	Task	Notes	Score (1-5)
Receptionist	Patient calls in to schedule a follow up appointment for diabetes, HTN, GERD	• Scheduling of patient • Documentation of Visit reason • Health Maintenance prompts • Ability to auto confirm appointments • Prompts to remind patient to fast due to fasting blood sugar	Click here to enter text.
Receptionist	Patient comes in for appointment	• Insurance information entered/ Insurance card scanned • Signed HIPAA release • Eligibility checked electronically • Health History Gathered? • Patient checked in/ Alert to MA that patient is in waiting room	Click here to enter text.
MA	MA sees alert and rooms the patient	• Patient identified • Patient visit status updated • Patients chart pulled up	Click here to enter text.
MA	MA reviews visit reason and patients chart	• Patients chart • Easily identify visit reason • Preventive care prompts and action	Click here to enter text.
MA	MA documents chief complaint's Diabetes, HTN, GERD	• Multiple chief complaints • Entered in a note template or in MA view	Click here to enter text.

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[3] Information included in this scenario may appear to contain personally identifiable data; however, this data is representational only. No personally identifiable information (PII) or protected health information (PHI) is contained herein.

Duty	Task		Notes	Score (1-5)
MA	MA Documents: • Weight, 180 • Height, 5'9" • BP, 180/95 • Pulse, 89 • Temp, 97.6F MA Reviews: • Allergies, Penicillin>urticara • Medication List, HCTZ 12.5mg.qid, • Lopressor 100mg bid, Prevacid 30mg • hs, Metformin 500mg bid		• BP- lying, sitting, standing (Prompts for out of Range) • Pulse- oral, radial, pedal, femoral • Temperature- Fahrenheit, Celsius • Height-feet/inches, centimeters • Calculates and displays BMI • Allergy documentation – food, drug, environment • How are medications updated?	Click here to enter text.
MA	MA Reviews: • PMH – Diabetes, Type II, Hypertension, GERD • Surg/Hosp Hx –hospitalized pneumonia 1998 • Family Hx – mother L & W, father dec. CHF • 3 children normal vag. Deliveries • Social Hx – nonsmoker, retired • Immunizations – Tetanus 98, flu 10/04 • Pneumovax 99 • Advanced Directive – signed 1/3/02 • Preventative Care – mammogram 99 MA completes entry		• Content specific to each Hx item • Ease of documenting year and relationship to patient • PQRI prompt for smoking status	Click here to enter text.
Physician	Physician is prompted that patient is ready		• Physician prompt easily identified • Identify correct patients chart • Patients chart/ medical Hx easily accessible	Click here to enter text.
Physician	Physician looks at CC, PMH and past visit		• Chief complaint entered by MA visible/can it be edited • Option to default PMH into note • Ease of viewing past visit • Alerts reminders when a note is opened	Click here to enter text.
Physician	Physician opens new note and documents HPI	Follow up diabetes, hypertension, GERD. Patient states experiencing elevated fasting blood sugar at home.	Click here to enter text.	Click here to enter text.

Duty		Task	Notes	Score (1-5)
Physician	Physician reviews/updates PMH/PSH/FH/Med. list/Soc.Hx/Allergies/ Immunizations	Diabetes Type II, Hypertension, GERD	Click here to enter text.	Click here to enter text.
		Meds: HTCZ 12.5mg qid, Lopressor 100mg bid, Prevacid 30mg hs, Metformin 500mg bid	Click here to enter text.	Click here to enter text.
		Allergies: Penicillin>urticara	Click here to enter text.	Click here to enter text.
		Three normal, spontaneous vaginal deliveries	Click here to enter text.	Click here to enter text.
		Hospitalized once for Pneumonia in 1998	Click here to enter text.	Click here to enter text.
		Nonsmoker	Click here to enter text.	Click here to enter text.
		Last Tetanus 1998	Click here to enter text.	Click here to enter text.
		Influenza vaccine 10/04	Click here to enter text.	Click here to enter text.
		Pneumovax 1999	Click here to enter text.	Click here to enter text.
		Mammography 1999	Click here to enter text.	Click here to enter text.
Physician	Physician documents the Physical Exam	Resp. 28 regular and unlabored	Click here to enter text.	Click here to enter text.
		Repeat B/P: 130/78	Click here to enter text.	Click here to enter text.

Duty		Task	Notes	Score (1-5)
		General: no distress noted	Click here to enter text.	Click here to enter text.
		HEENT: nasal congestion	Click here to enter text.	Click here to enter text.
		Lungs: clear to auscultation	Click here to enter text.	Click here to enter text.
		Abd: soft on palpation, nontender	Click here to enter text.	Click here to enter text.
		Neuro: Alert, oriented x3.	Click here to enter text.	Click here to enter text.
		Foot exam: (visual): normal	Click here to enter text.	Click here to enter text.
Physician	Physician documents lab	Accuchek in office 220	Click here to enter text.	Click here to enter text.
		Urine for microalbumin: negative	Click here to enter text.	Click here to enter text.
		Previous lab (>6 mos ago) HgbA1C: 8	Click here to enter text.	Click here to enter text.
Physician	Physician documents assessment	Viral URI	Click here to enter text.	Click here to enter text.
		Hypertension, controlled	Click here to enter text.	Click here to enter text.
		Diabetes Type II	Click here to enter text.	Click here to enter text.

Duty	Task		Notes	Score (1-5)
		GERD	Click here to enter text.	Click here to enter text.
Physician	Physician documents plan	Rx: HCTZ 12.5mg qd x 6 months, Lopressor 100mg bid x 6 months, Prevacid 30mg q HS x 6 months, <u>Discontinues</u> Metformin 500mg <u>Add:</u> Actos 10mg daily	Click here to enter text.	Click here to enter text.
		Lipid Profile (fasting), HgbA1C, Referral to Dr. Mickey Mouse for dilated eye exam, Referral to Dr. Olive Oil for Pap smear	Click here to enter text.	Click here to enter text.
		Patient to call back in 30 days if no improvement in fasting blood sugar. Routine follow up in 3 mo.	Click here to enter text.	Click here to enter text.
Physician	Physician chooses charge level		• Current diagnosis and procedure codes built-in • E&M coding advice to providers based on documentation • Data validation procedure to diagnosis, procedure/diagnosis to patient age and gender • Billing/coding interface	Click here to enter text.
Physician	Physician completes and signs note		• Prompts unfinished patient chart documentation • Spellchecking • Provider alerts for missing charting elements • Records locked after signature • Ability to make amendment to record • Option to put note on hold	Click here to enter text.
Biller	Billing		• Invoice Creation • Claim Scrubbing • Electronically submit claim • Payments received distributed with adjustments • Electronic Remittance Advice • Collections	Click here to enter text.

Exhibit 4 Additional Questions

Questions	Answers	Score (1-5)
Can you submit insurance claims electronically?	Click here to enter text.	Click here to enter text.
Can you provide patient health status on request?	Click here to enter text.	Click here to enter text.
Can you provide clinical summaries per visit?	Click here to enter text.	Click here to enter text.
How do you provide care summaries for referrals?	Click here to enter text.	Click here to enter text.
Can you provide data exchange with immunization registries?	Click here to enter text.	Click here to enter text.
Can you provide surveillance data to public agencies?	Click here to enter text.	Click here to enter text.
Can you report quality measure to CMS?	Click here to enter text.	Click here to enter text.
Do you have relationship with any HIE's?	Click here to enter text.	Click here to enter text.

5 Questions for EHR Vendors

These questions address issues other than product functionality. Some of these questions may be important to ask early in the vendor selection process, and others may be more appropriate to ask when choosing between two or three vendors.

- Vendor Name: Click here to enter text.
- Date of Meeting: Click here to enter a date.
- Name of Sales Contact: Click here to enter text.

5.1   QUESTIONS ABOUT THE COMPANY

1. How long has your company been in business? How many employees do you have?
   Click here to enter text.
2. Of those employees, how many are dedicated to research of new products, sales, and ongoing support? What is the R&D budget?
   Click here to enter text.
3. How long has the EHR product been offered. Was it bought from another company? Was the practice management system bought from another company?
   Click here to enter text.
4. What were your total sales last year? Last quarter? How many sales people and trainers are assigned to this region?
   Click here to enter text.
5. What is your total customer base? What is your total customer base? Of those, how many are new within the last year?
   Click here to enter text.
6. Does the company hold regular user meetings?
   Click here to enter text.
7. Is your company involved now in any litigation with a customer? Has your company been fired from a job in the past three years?
   Click here to enter text.

5.2   QUESTIONS ABOUT THE PRODUCT

1. Is your software sold modularly or does it need to be purchased as a complete package? What functions are available? Can you add functionality as the need grows?
   ☐ Practice Management
   ☐ Inter-office messaging
   ☐ E-prescribing
   ☐ Lab viewing/reporting/graphing
   ☐ Other
   Click here to enter text.
2. What operating platform does the product work on?

Click here to enter text.

3. Is the product used anywhere in a multi-site implementation?
    Click here to enter text.
4. Will your company guarantee in the contract that the software will comply with all current and future federal and state mandates? HIPAA? Does the software have a HL7 lab interface?
    Click here to enter text.

5.3   PRICING QUESTIONS:

1. How are the licenses issued? Concurrent user versus per practitioner?
    Click here to enter text.
2. What is the cost per practitioner (or concurrent user), for entire package?
    Click here to enter text.
3. What does the price include?
    ☐ Software
    ☐ Hardware
    ☐ Training
    ☐ Maintenance
    ☐ Upgrades/further training/maintenance
    ☐ Travel for your employees
    ☐ Other
4. How much will on-going maintenance and upgrades cost?
    Click here to enter text.

5.4   INTERFACE QUESTIONS

1. Can your software interface with practice management systems? Lab systems? Is there an added cost for these interfaces?
    Click here to enter text.
2. What existing interfaces are up and running?
    Click here to enter text.
3. Can I speak with a provider or administrator a clinic presently using these interfaces?
    Click here to enter text.

5.5   IMPLEMENTATION QUESTIONS

1. Will your company assume all aspects of implementation (i.e., hardware and software)?
    Click here to enter text.
2. Does the training occur onsite or at your facilities? Is this training included in the overall cost?
    Click here to enter text.
3. Are you willing to be flexible with your training methods (e.g., individual versus group training based on our needs)?
    Click here to enter text.

4. Is your software tailored for physician specialties (e.g., ob/gyn)? What sort of customization, if any, is needed for specialties?
   Click here to enter text.
5. Describe the process of transition to EHR. What are some of the difficulties? What can I expect?
   Click here to enter text.
6. (If interested in voice recognition) Describe how your voice activated system works. How easy or difficult is the transition? Will I need to have an "auditor" for some time after I move to voice activated notes?
   Click here to enter text.
7. At what point in the process does the salesperson transition to implementation specialist?
   Click here to enter text.
8. How often will a support person(s) be available once the system goes "live," in case of any system difficulties?
   Click here to enter text.

5.6 ONGOING SUPPORT QUESTIONS

1. What is the frequency and depth of upgrades?
   Click here to enter text.
2. What is your process for enhancement requests?
   Click here to enter text.
3. What happens if the system fails? How do I reach you, and how accessible is your decision support?
   Click here to enter text.

5.7 TECHNICAL/MAINTENANCE QUESTIONS

1. What personnel and qualifications do I need to support and operate this system?
   Click here to enter text.
2. Does your system include any database reporting tools or special links to popular reporting products that run under Windows? Which ones?
   Click here to enter text.
3. Does this system work over the Internet or do I need to purchase a server?
   Click here to enter text.
4. Does the system require regularly scheduled (e.g., daily, monthly) down time for backups, system maintenance, etc.? Briefly explain.
   Click here to enter text.
5. What safeguards (e.g., fault tolerance, hardware redundancy) are included that eliminates unplanned downtime?
   Click here to enter text.
6. What are your data retention capabilities, if any, and recommendations for maintaining history on-line?
   Click here to enter text.