

**P.O.L.**

# Insight

A Continuing  
Education  
Publication for the  
Physician Office  
Laboratory

## ***In This Issue:***

- ***New Hire Training***
- ***EMR & Laboratory Information Systems***
- ***Coding Nursing Visits***

**2008-C**

**Issue 53**

## Accreditation Statements

AAFP Physician's Proficiency Testing Program has been reviewed and is acceptable for up to 12 Prescribed credits by the American Academy of Family Physicians. AAFP accreditation begins 3/3/08. Term of approval covers three events offered within one year from this date with option for yearly renewal.

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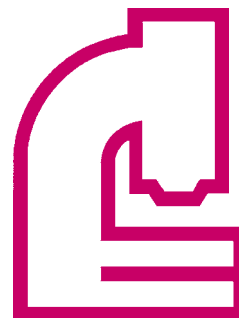
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10. D	22. D	
11. D	23. A	
12. A	24. B	

To earn the CME, answer the questions included with this issue of the *Insight*, using the form included, or submit the test online at [www.aafp.org/pt](http://www.aafp.org/pt) –  click on Continuing Medical Education.

## CME Learning Objectives

Following completion of the self-instructional material, the participant will be able to:

1. Identify the four parts of a complete training program; and use the CLSI GP21-A2 document to develop an effective new hire training program
2. Define what constitutes a nursing visit for billing purposes; identify individuals who can perform a nursing visit; describe the documentation required to bill a nursing visit, and recognize the financial impact of billing nursing visits properly.
3. Understand how the EMR and LIS relate; understand which should be installed first and why; learn the advantages of going paperless in the lab; and recognize how an LIS can positively impact practice finances.

### ATTENTION PHYSICIANS AND LABORATORY PERSONNEL P.A.C.E.<sup>®</sup> Approved for Laboratory Personnel !

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Event 2008-A .....	February 27, 2009 .....	254-001-08
Event 2008-B .....	May 31, 2009 .....	254-002-08
Event 2008-C .....	September 30, 2009 .....	254-003-08

## The Importance of New Hire Training

By Lucia M. Berte, MA, MT(ASCP)SBB, DLM; CQA, CMQ/OE(ASQ), President, Laboratories Made Better! P.C.

Regardless of how much previous experience a new hire presents on his/her CV, this new person does not know the work processes and procedures in *your* laboratory. And it's erroneous to assume that previous laboratory experience equates to skills and competence in your laboratory's tests, instruments, paperwork, and computer systems. Therefore, the only solution to ensuring knowledgeable competent employees in your setting is to train them in your laboratory's processes, however extensive their background. You may think that your laboratory will save money by hiring only experienced employees and providing minimal or no technical training on your tests and instruments. However, failure to train up front often requires the management of errors and problems later down the workflow where it's much more expensive to correct them—if indeed they are caught at all.

New hires do get trained, though. When new hire training is weak or absent, they glean bits and pieces of "how it's done here" by watching and listening to other staff. The problem with such informal training is that what they're learning this way may not be what is correct to do.

The simple formula for removing this problem has a 4-part approach, as described in the Clinical and Laboratory Standards Institute (CLSI) Guideline, GP21-A2. [1] Linking the four concepts of process, procedure, training, and competence has proven to be highly effective

and well received by new staff. Experienced employees also benefit; for example, when your laboratory implements a new process, all staff needs to be trained. **Table 1** describes the 4 parts of a good training program.

This article provides an overview of the GP21 guideline; you're encouraged to obtain a copy and use or modify the sample forms to suit your laboratory's needs. Customizable versions of the forms described in this article are available on the companion GP21 Toolkit CD.[2] The guideline and toolkit are the most comprehensive overview of job-related laboratory training and competence assessment currently available. [Note: The CLSI is a global, non-profit standards developing organization that promotes the development and use of voluntary consensus standards and guidelines within the health care community.[3] All persons serving on CLSI committees and work groups are volunteers and receive no compensation or other remuneration for their contributions to the preparation of CLSI documents.]

### Part 1: Process

Work happens in processes, which are defined sequences of activities that take place across time. For example, the sequence of activities for receiving collected blood samples begins with the arrival of the samples in the laboratory, evaluation to determine if any are broken or contaminated, evaluation of the adequacy of sample and request, determination of the need for any pretesting manipulation, and the ultimate distribution of the samples to the testing area(s). The process activities need to proceed in this sequence to ensure a successful end result.

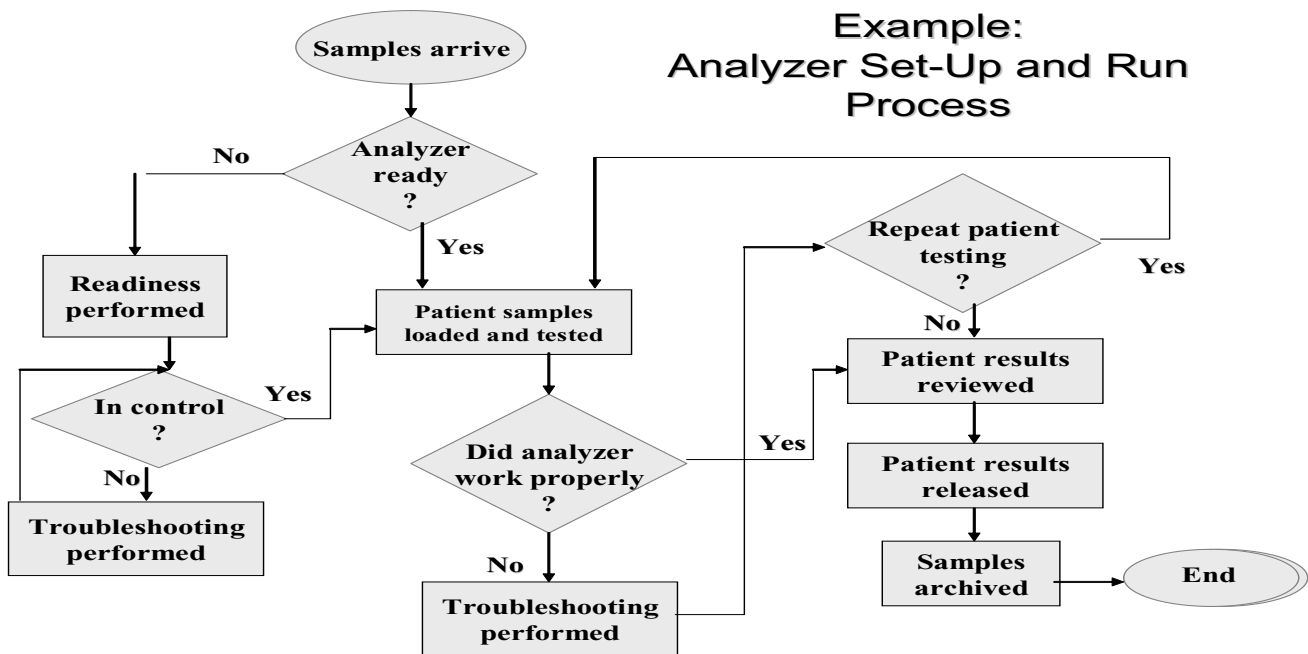
Part	Definition
1. Process	Flowcharts of laboratory preanalytic, analytic, and
2. Procedure	Stepwise instructions for activities in the work pro-
3. Training	Preparation and use of a training event packet for each
4. Competence	Tools for assessing employee competence initially after train-



Work processes are best documented as flowcharts because most people comprehend material better when it is presented visually. An additional benefit of process flowcharts versus verbal descriptions is the graphic representation of decisions that are made when differing conditions arise. A flowchart that depicts the process for setting up and operating an analyzer is presented in **Figure 1**.

**Figure 1. Process flowchart for setting up an automated analyzer**

After a flowchart has been developed for a given laboratory work process, these lengthy SOPs can be replaced with shorter, more specific instructions for each activity described in the process flowchart's rectangles. A more effective way to organize a procedures manual then consists of putting the process flowchart at the front of the manual, followed by the procedures in the order in which they are performed in the process. Each procedure also contains examples of properly completed forms, worksheets, labels, and tags that are used in that procedure. Additional tabbed



**Part 2: Procedure**

“SOPs” (Standard Operating Procedures) is the term laboratories often use for their procedure documents, which are usually written for single analytes, often written only to fulfill requirements and please inspectors, and infrequently used for training and actual laboratory work. These SOPs are merely long verbal descriptions of a long process, usually have some embedded instructions, and often lack complete or vital information for successful performance. The SOPS are also often placed into procedures manuals in alphabetical order for ready reference. However, because work does not happen in alphabetical order the analyte-based SOPs are not effective in communicating important laboratory process information to employees.

sections of manuals for automated testing include schedules and instructions for quality control, preventive maintenance, and calibration, or reference to their locations in the manufacturer’s operator’s manual.

This mini-procedures manual is now specific for a given process or analyzer and can easily serve as the training manual. Having process-based procedures manuals is the key to efficient and effective training and competence assessment.

**Part 3: Training**

New staff members need training on the work processes and procedures in their respective jobs. Thus, someone who collects blood samples from patients would be scheduled for a training event on the sample collection process described in Part 1 above. If this person



**Table 2. Description of the elements of the CLSI GP21 Training Event Packet**

<b>Section</b>	<b>Description</b>
<b>Training Guide Overview</b>	This page lists the objectives, training methods, training materials and means to evaluate learner outcomes for the given process.
<b>Trainer Responsibilities</b>	This page describes to the assigned trainer how to prepare to conduct the training event. Space is allowed for insertion of specific materials to be used for demonstration and practice.
<b>Learner Responsibilities</b>	This page describes the general objectives to be achieved by the learner, along with instructions for how to prepare for the training event, a description of the delivery of training, and a listing of how the learner will be evaluated.
<b>Training Schedule</b>	This form provides space for entering the dates, days, and activities to be covered in the training event.
<b>Training Checklist</b>	This page provides a listing of all the documents that will be reviewed in the training event, with space for dates of review and trainer and learner signatures.
<b>Evaluation of Training Experience</b>	This page provides a form for the learner to evaluate the training experience. This exercise provides information to laboratory management about the effectiveness of the training event and the trainer's performance.
<b>Written Assessment Form</b>	This page provides for four different types of questions to be asked of the learner to determine the knowledge gained from the training event. Each training event (process) would have its own written assessment (quiz). This form can be used during both initial and ongoing competence assessments.
<b>Direct Observation Checklist</b>	This form provides an opportunity for a person to observe the learner perform the actual process and procedures (i.e., "direct observation") to determine readiness for independent performance. This form can be used during both initial and ongoing competence assessments.
<b>Competence Assessment Follow-up Action Plan</b>	This form provides the means to document the specific knowledge and skills the need improvement after an unsuccessful written or direct observation assessment.

Summarized from CLSI approved guideline GP21-A2 - Training & Competence Assessment; Approved Guideline - 2nd Ed. (ISDN 1-56238-531-3).



will also be performing testing, he or she would also receive training in the analyzer testing process described in Part 2.

The CLSI GP21 guideline provides a set of forms—a training event packet—to develop effective process-based training and competence assessment for your laboratory's identified work processes. Your laboratory completes one training event packet for each work process and each analyzer used. The completed training event packet can be used every time training is conducted for that work process. A major benefit of using the training event packet is that it promotes consistency in training between different trainers and also ensures that each training event conveys all important information for successful work performance. These packets don't need major revision unless the process or procedures undergo significant changes. Contents of the training event packet are described in **Table 2**.

Summarized from CLSI approved guideline *GP21-A2¾ Training and Competence Assessment; Approved Guideline¾ Second Edition* (ISDN 1-56238-531-3).

#### **Part 4. Competence Assessment**

The U.S. Clinical Laboratory Improvement Act of 1988 (CLIA '88) requires that the competence of laboratory staff to perform their assigned tasks is assessed initially after training and periodically thereafter. The purpose of initial assessment of new employees is to determine the effectiveness of training as well as the person's readiness to perform his or her assigned tasks in the live work environment, where little or no direct supervision occurs. Initial assessment is usually accomplished through administering written and oral tests of knowledge and also having the employee demonstrate successful performance of the work process. The purpose of ongoing competence assessment is to ensure that staff retains the knowledge and skills needed to perform the work processes and procedures without personal deviation.

The training event packet contains a template for writing theory, technique, interpretation, and problem solving questions for the knowledge assessments. Several questions of each type can be developed and different combinations used to create different tests. The packet also contains a template for developing direct observation checklists that can be used to observe a person work through an entire process or perform an individual procedure.

Your laboratory should set minimum acceptable performance levels on both the tests and direct observations. If a person is initially

unsuccessful, additional training and time for practice may be needed; the packet contains useful forms for this purpose.

The completed Training Event Packet becomes your laboratory's documentation of a new employee's successful journey through training and initial competence assessment. The packet conveys valuable information to outside assessors who often want more verification of the training process and outcomes than simply a list of procedures signed by the employee and countersigned by a supervisor. More importantly, the approach to training described in this article and set forth clearly in the CLSI guideline will help your laboratory provide new employees with an effective training experience that better ensures quality laboratory testing.

#### **References:**

1. Training and competence assessment; Approved guideline GP21-A2—Second edition. Wayne, PA: Clinical and Laboratory Standards Institute, 2004.
2. Training and competence assessment toolkit; GP21-A2-C. Wayne, PA: Clinical and Laboratory Standards Institute, 2004.
3. About CLSI. [www.clsi.org](http://www.clsi.org) Accessed on August 15, 2008.

Note: Copies of the current editions may be obtained from Clinical and Laboratory Standards Institute 940 West Valley Road, Suite 1400, Wayne, PA 19087-1898 USA, 2004.

**“Training turns good intentions into good results.”**

**Thomas Berry**



## Can You Afford **NOT** to bill for your Nursing Visits??

*By Shannon O. Smith, CRTT, CPC, CMSCS, Director of Coding & Reimbursement, DoctorsManagement, LLC*

Nurse visits are a huge untapped source of revenue for the physician office-based laboratory. Medicare Bell Curve statistics show us that every physician of every specialty is expected to bill nurse visits. On average, nurse visits are expected to be billed approximately 5% of the time.

So why do so many of these visits go unbilled? There are many answers to this question. Many practices and laboratories do not know what a nurse visit is, who can perform a nurse visits, what documentation requirements are needed, when the services are billable, and many do not realize the financial impact of billing nurse visit encounters. Within this article we will explore each of these so you will be able to tap this steady stream of revenue for your lab.

Let's start by defining the nurse visit. A Nurse visit is a visit in which a minimal management encounter of an established patient is performed, and will not require the presence of a physician. Usually, the presenting problem is minimal, and typically, only requires approximately five minutes performing the service-although time should not be a basis for this service. 99211 should be used only when the ancillary staff provides a medically necessary service to an established patient. Technically, nurse visits are being billed incident-to the providers service (i.e., under the providers name and billing number), and therefore, must have a plan of care already established for the patient. This is why this service is only billable for patients of the lab/practice who are established.

Nurse visit services are not to be used to bill for services that would otherwise be non-covered through Medicare. Billing nurse visits for non-covered Medicare services in order to obtain reimbursement for the non-covered service may constitute fraud.



Now that we know what a nurse visit is we should define who can perform this service for the lab/practice. Nurse visits do not have to be provided by nursing staff. Anyone the physician feels is capable of properly performing and documenting the service may perform and bill for this type of service. The 99211 nurse visit does not require any specific credentialed staff. Many practices have the misconception that only RN's can bill for the nursing visit, and this is far from the truth. The only requirement regarding individuals who may perform the service is the provider should be someone who has been trained, and whom the physician has confidence in- as well, anyone billing the nurse visit code should have the training to perform the service according to state and payer requirements. This service may therefore be billed by medical assistants, laboratory technicians, or any other trained ancillary service providers.

Nurse visits do not have complex documentation components, as most levels of service do. There are no specific requirements of the amount of history, exam, and medical decision-making that is required. Logically thinking through when and for what purposes a nurse visit encounter is allowed for tells what the justifying documentation requirements are. The nurse visit documentation should include a presenting problem. Essentially, this would be the chief complaint of the patient on this date. A patient may present with amenorrhea in need of a pregnancy test, and of course on this date of service the presenting problem would be amenorrhea. The documentation should also include the findings from the nursing interview/encounter with the patient, i.e., symptomatic findings related to the presenting problem. For example, in our patient presenting with amenorrhea we may find that she has

had nausea and vomiting that occurs mainly at mealtime. Simply documenting 1-3 symptomatic features of the presenting problem is sufficient substantiating documentation. The documentation will also need to identify the outcomes of this encounter- i.e., a plan of care. An appropriate plan of care for a nursing visit encounter would be to continue the current plan and

return to the clinic as needed. Any new changes to the plan of care would require a provider level encounter, and would then need to be documented by the provider and billed at a higher level of service. The plan of care for nurse visits have a continuing plan of care, and require documentation to substantiate. \*Remember that the minute a nurse visit encounter requires a physician or non-physician face-to-face encounter, the visit changes from a 99211 nurse visit to the appropriate higher level E&M service.\*

For the most part, nurse visits can be billed any time the patient presents to the office for a medically necessary event and sees ancillary staff in lieu of a provider (i.e., MD, DO, PA, NP), and the encounter is documented. The encounter must be face-to-face and an identifiable medically necessary service must be performed.

**What makes an encounter medically necessary?** Medical necessity has been interpreted in many ways, but Medicare defines medical necessity as *Services or items **reasonable** and necessary for the diagnosis or **treatment** of illness or injury or to improve the functioning of a malformed body member.* Since Medicare establishes the rules that most payers follow, this would then be the coup de grace of all interpretations. Any service performed and billed must be *reasonable* for the *treatment of illness/injury*. This means that most every encounter a patient has with ancillary staff would be justified as medically necessary. Most non-medically necessary services will not require the patient to present to the lab/office.

The patient must be established in order to bill for these services. If the patient is a new patient, there is no established plan of care. A new plan of care, just as we discussed earlier with changes to the plan of care- also requires that the physician must first see the patient and establish a plan of care. Once the plan of care has been established, then nurse visits can be performed subsequently.

The ancillary staff must provide a face-to-face encounter. Telephone encounters cannot be billed as a nurse visit as this would not substantiate a medically necessary encounter. (However, the AMA released new codes this

year to allow for billing phone and on-line patient encounters.)

This service cannot be billed simply for having a patient come in and visit with the nurse while she tries to get a medication approved through the Medicaid system- again this service would not be medically necessary.

Code 99211 is commonly used for services such as patient education, simple rechecks, and medication reviews. Some examples of reasonable treatment of illness/injury:

- A patient returns to the physician office laboratory to have a repeat urine screen performed to verify that their UTI has cleared. While processing the urine, the lab technician/nurse asks the patient questions regarding his/her progression, such as breakthrough signs/symptoms, complications, or new problems related to the current issue.
- A patient presents to the physician office laboratory to have a urine pregnancy test run. The physician has authorized the test but does not see the patient. The lab technician/nurse may interview this patient to find out what prompted the testing.

An example of a service that is NOT medically necessary is when a patient presents to the lab to have their labs drawn for their office visit the next week. There is no medical necessity for the patient encounter since we are simply following an order for a specific service, with no regard to the patient's current status.

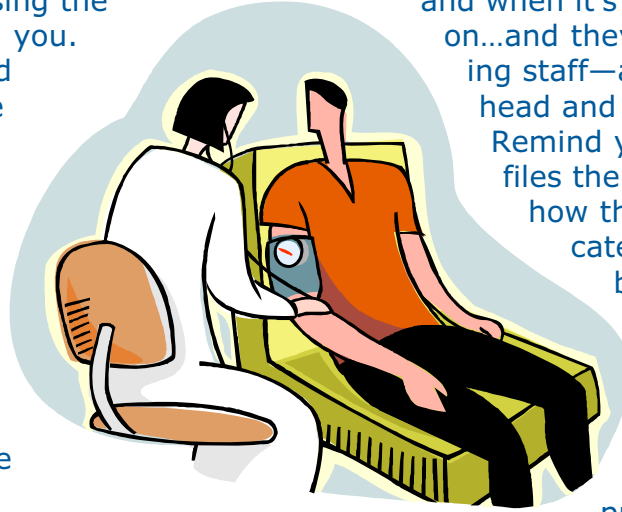
Usually, incorrect usage of code 99211 involves one of two situations- the nurse/technician performs the service and does not report it at all, or a physician sees the patient and codes the nurse visit level of service. Obviously, both are incorrect in terms of reporting and billing for services at the highest level of coding specificity.

On average these services reimburse \$23, and can really give the laboratory a boost in revenue. This additional flow of revenue will help to financially support your nursing/laboratory staffing needs. On average we predict that this service should be billable at a minimum of 5 times per day. Based on these statistics, this could potentially be an increase of \$30,000 reimbursement annually.



The Laws of Averages predict that for every pro there is a con- this article would not be complete without discussing the "con" of nurse visits with you.

Be aware that some third party payers will hold the patient accountable for their co-pay for these services. BUT, also be reminded that your nursing staff represents an expense to you and your practice and that is what makes this service a reimbursable service through insurance filing.



I had an older and wiser physician once tell me, "I tell my patients that if they would like to meet me in a field for treatment, I would be

happy to. BUT, they enjoy coming into my office and when it's hot outside- my A/C is on, and when it's cold outside, my heat is on...and they even enjoy my pretty nursing staff—all of these represent overhead and for that- there is a charge."

Remind your patients that your office files their insurance as a courtesy, but how the insurance company adjudicates/process their claim is between the patient and the insurance company.

Medicare and other insurance payers continue to cut reimbursement to the point of making it difficult for some providers to even pay their overhead. We as providers should not feel guilty for billing services that are provided, billable, and reimbursable based on insurance guidelines.

## EMR & LIS: Working Together

By Kerry Foster, Director of Marketing, Orchard Software

If your practice is considering an EMR, it may be your opportunity to get an LIS!

For a smaller laboratory running multiple analyzers, the installation of a Laboratory Information System (LIS) may have never been seriously considered. An LIS is an information system/software package designed to electronically handle laboratory orders, testing, reviewing, approving, and reporting laboratory results; and storing information generated by the clinical laboratory.

The basic installation of an LIS includes electronic interfaces with the analyzers. Under this scenario, lab orders are keyed in and bar code labels are generated and applied to the samples/tubes for that order. The samples are placed on the analyzers; the analyzers read the bar code labels and run the appropriate test; and results are sent back to the LIS to compile and place in the patient file both in the LIS and on the paper report. The lab order and results are stored electronically in the LIS.

Besides managing lab information electronically, there are many advantages to having an LIS, and a true return on investment can be

realized. Unfortunately, in many cases, the managing physicians simply elect to not spend the money. However, there is now a powerful force moving throughout the healthcare community that may catch your practice by surprise, and may provide you with a very good opportunity to finally acquire the LIS you always wanted (and needed). That powerful force impacting physician groups across the country is the infamous Electronic Medical Record (EMR).

So be on the alert! If your physicians are even thinking of getting an EMR, this article will arm you with all the information you need to approach your managing practitioners and convince them that it is time to get an LIS.

If your physician group is looking into the purchase of an EMR, often the biggest concern they face is the integration of other systems.

The primary benefits of the EMR and the integration of systems are the elimination of paper, the seamless flow of data, and the consolidation of patient information into an electronic format. To do this, there must be a way to manage orders and incorporate results from your lab and your reference laboratory into your EMR. If your physicians are considering the purchase of an EMR, you need to approach them regarding the method for

handling lab orders and results. This is your opportunity for acquiring an LIS.

Estimates state that over 60 percent of the clinical data providers use to diagnose and treat patients comes from the lab. Without an LIS, the process for orders and results is paper—paper orders and paper results to and from your in-house lab and possibly from a nearby hospital or reference laboratory. So, now with the new EMR, how will the physicians order lab tests? How will the results get back to the physician? Via paper?

As you think through how you will present your case to your managing physicians, consider the following:

- Understand and show how the EMR and LIS relate and integrate.
- Understand and explain the reason for installing the LIS first and why.
- Learn and present all of the various advantages of eliminating manual entry and paper in the lab.
- Know and show how an LIS can positively impact your practice's bottom line.
- Do your homework. Laboratory industry publications and the Internet contain valuable information. One of the obvious places to go is the websites of the LIS vendors. Most LIS vendors will present the advantages and benefits of having an LIS and may have links to related supporting articles.

After gathering some initial information, pick up the phone and speak with various LIS vendors. Their representatives will be more than happy to work closely with you. Ask them to visit your lab to show you a demonstration of the software and how it can work to address your facility's specific needs. They can consult with you and help present to your managing providers all the reasons and benefits for acquiring an LIS.

### EMR/LIS Integration

Without a lab system, there is no way to electronically populate the EMR with lab results. While your EMR vendor may suggest that your analyzers be interfaced directly to the EMR, it is not recommended!

There are numerous issues surrounding analyzers being interfaced directly to the EMR. Be sure to fully understand the ramifications and what can and cannot be done without having an LIS in between your EMR and your analyzers.

The biggest issue is Quality Assurance. Interfacing analyzers directly to the EMR allows physicians to see results as soon as they are available. On the surface that may sound like a time saver, but it potentially could be grounds for a legal suit. If a physician treats a patient based on an incorrect result that was not properly evaluated for validity as required, and the patient suffered harm from that treatment, a legal suit could be on the horizon. Besides all the other issues, this alone is reason enough to invest in an integrated LIS!

With the LIS, all results come to one place. The lab personnel can compare all results (and prior results) and make a valid clinical judgment on the appropriateness of the result values. Without the LIS, this can still be done, but lab personnel will need to bounce from analyzer to analyzer, search for the specimen ID and try to match results to the other analyzer results on that patient.

When the provider sees an abnormal result in the EMR, he/she needs to be confident in the accuracy of that result. Without review by trained technologists to catch all of the above in the lab, how can the physicians possibly be confident in their lab results?

CLIA also requires all critical results to be called immediately to the provider. How does the EMR vendor plan to set up all the normal and critical ranges to alert the physician? Most EMRs receive results well, but they cannot evaluate them.

Besides results, other issues surround lab orders. Without an LIS, how will the orders get to the instruments? If a patient has a CBC, UA, TSH, BMP, it is possible that the tests will be run on 4 different instruments. How will the specimen be identified? Where does the accession number originate? Does the EMR print bar codes? If not, each specimen ID will need to be manually entered in each analyzer and human intervention adds a chance to introduce an error, not to mention the redundancy of data entry. How will the facility track when the



specimen was drawn, received, and resulted? Does the instrumentation track who reported the result? How will the EMR match the electronic fingerprint that the LIS tracks for each user? How will the EMR handle non-reportable comments? Does the instrument indicate if a result has been amended? When, and by whom? These are all areas under the lab manager's accountability and control and require supporting documentation by CLIA. Without an LIS, what will the lab do at inspection time?

These are just a few of the issues a lab may face without having an LIS interfaced between the EMR and the analyzers. For a physician practice installing an EMR with an in-house laboratory running multiple analyzers, the integration of an LIS is highly recommended.

Complete system integration provides a seamless flow of data between your EMR, practice management/billing system, instruments, and reference lab (see integration diagram below). Integration eliminates manual entry, reduces errors, and ensures accurate invoicing for completed lab tests. The overall value of system integration makes it easier for management, administrators, and lab managers to justify the purchase of an LIS.

**Which comes first – the EMR or the LIS?**

There are two key benefits for installing the LIS first. The first is that your LIS will begin collecting and storing patient results, so that when the EMR is installed and turned on, your providers will immediately have access to their

patients' historical results. If 100 percent of laboratory information is not delivered electronically to the EMR, paper records will still exist, and if a provider knows the electronic file is incomplete, he'll be obligated to check the paper charts. Having historical lab data in the EMR on Day One will enhance your providers' experience of utilizing the EMR.

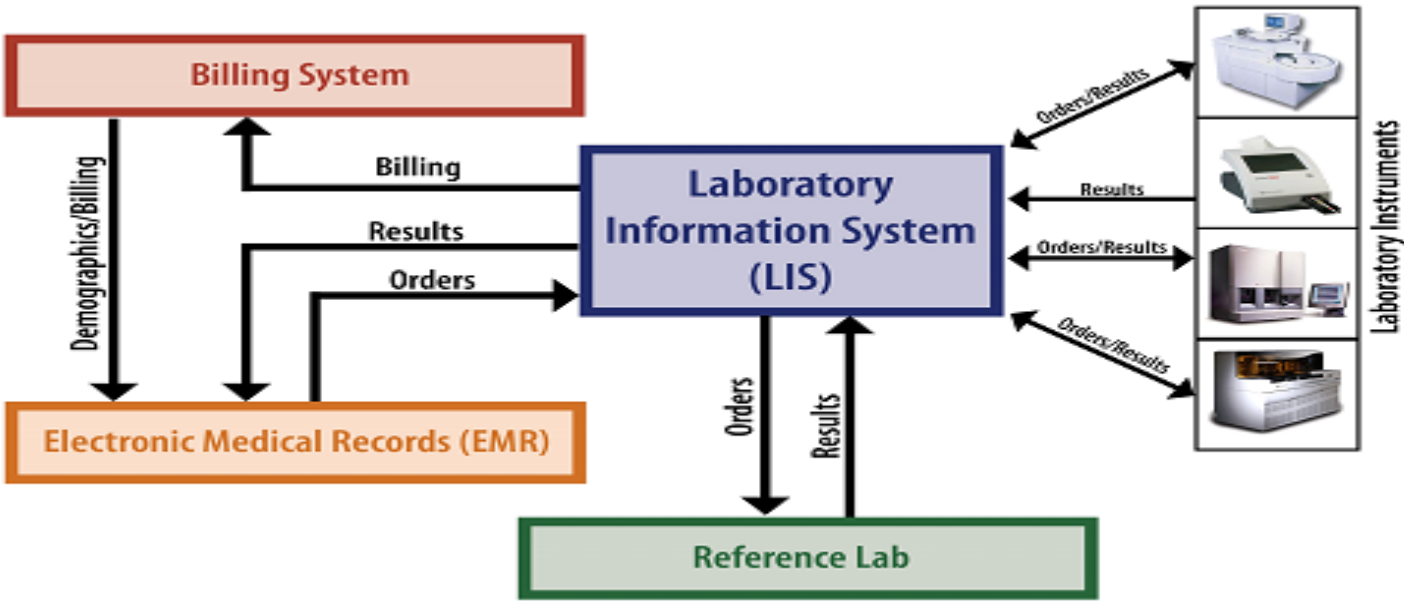
The second benefit is that the installation of the LIS impacts only a small portion of the overall practice. It is a smaller project and easier to make sure that your LIS is up and running smoothly before tackling the bigger task of interfacing the LIS to the EMR and integrating it into your practice's workflow. The installation of the LIS first will be a quick win and takes substantially less time than the full implementation of the EMR system.

**Reduce Paper and Storage Costs**

An obvious cost reduction is the elimination of paper and all the costs associated with printing requisition forms and storing paper files. With an LIS, orders for tests are electronically placed through the EMR system or through a web-based remote ordering portal. By going electronic, even with increased testing, one lab was able to reduce their cost of paper and storage by 23 percent over a three-year period.



**LIS/EMR INTEGRATION DIAGRAM**



## Reduce Risk Exposure

The LIS eliminates a lot of manual entry, which helps to minimize the risk of reporting errors. Improving risk management and reducing exposure to medical errors can be a huge return on your investment. Determine what your current risk exposure is due to clerical errors, missing results, long turn around time, and then identify the potential savings associated with a reduction in this exposure.

## Increase Productivity

Simply said, an LIS can be a very powerful tool for increasing productivity. One of the most recognized returns on an LIS investment is the increase in efficiency. Valuable FTE resources can be redirected to other productive work. As an example, one lab processed about 150,000 tests with 14.3 FTEs before implementing their LIS. As the practice grew and added more sites, they were able to process over 250,000 tests annually with only 12.5 FTEs.

Within the lab, the LIS manages electronic interfaces between the EMR, the practice management system, analyzers, and reference lab(s) to facilitate data flow between systems and eliminate duplicate manual entry of demographics, insurance, orders, and results. With an integrated LIS, the billing department will also notice a reduction in claim resubmissions as a result of reducing manual charge entry.

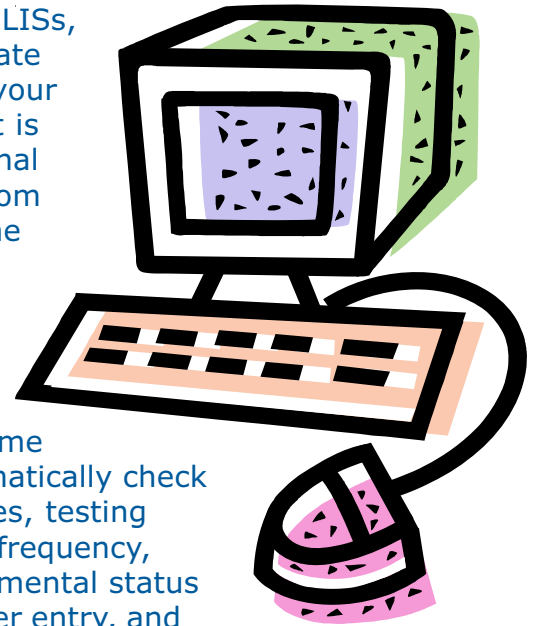
## Simplify the Inspection Process

Another benefit frequently overlooked is the reduction of stress and the time spent preparing for and during the inspection process. Think about all the boxes and paper files you have to sift through to procure the documents requested by the inspector. By having an LIS, all the necessary reports are at your fingertips and printable on demand.

Some LISs provide Levey-Jennings graphs and easy access to data that show QC and allow you to pull up the necessary documentation. This eliminates the manual search for reports, and may even help improve your inspection score because everything is automatically documented.

## Recapture Additional Revenue from Non-reimbursed Medicare Claims

With most LISs, an immediate return on your investment is the additional revenue from reducing the number of write-offs due to improper diagnosis coding. Some LISs automatically check ICD-9 codes, testing necessity, frequency, and experimental status during order entry, and will flag all potential reimbursement issues.



One lab manager worked with her billing department to determine how many lab claims had been written off, and they found \$30,000 worth of CBCs had been written off the year before. The good news is that something like this can help justify to your administration that they need the medical necessity screening of an LIS.

## Recapture Missed Billing Opportunities

Many lab charges for pap smears or add-on tests, such as urine cultures, manual differentials, Taxo A, sensitivities, and micro IDs, are missed due to inefficient paper processes for charge entry. Also, due to insurance company contracts, many tests are routed to the wrong lab, and that reimbursement is lost. The rules-based technology built into some LISs will capture all appropriate charges automatically and route testing to the contracted laboratory. Both have a direct impact on the bottom line.

## Reduce Claim Resubmissions and Days in Accounts Receivable

For many practices, there is a lot of revenue tied up in the Accounts Receivable department due to improper diagnosis codes and other billing errors that result in denied claims. Not only is revenue delayed and cash flow affected, but billing and laboratory personnel are kept busy rectifying each claim. With an LIS, you can identify many of these errors during



order entry, and reduce or even eliminate these delays and inconveniences.

### An LIS is a Good Investment

The biggest difficulty in helping lab managers justify an LIS purchase is access to historic financial data. Many organizations have a difficult time collecting and analyzing the information, and the amount of write-offs due to medical necessity is one of the toughest to track down.

Once the cost savings and increased revenue are identified, you can compare these against the cost of the LIS. Amortize the cost of the LIS over at least five years, but with some LIS vendors who regularly include upgrades, you can justify going longer. Also be sure to include the cost of annual support and upgrades (if they are not included with support).

Healthcare information systems are a necessary tool in today's healthcare environment, and your practice's investment in an LIS will generate a return by saving time, reducing costs, minimizing errors, and increasing revenue, not to mention improving patient safety and the quality of patient care.

For a list of possible LIS vendors, a good source is *CAP Today's* annual LIS survey. In years past, this is found in the November issue, or online at [www.cap.org](http://www.cap.org) in the Reference Resources and Publications tab under Periodicals.

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## 2008-A CME Questions .....

The material necessary to review to answer the following questions may be found in this issue of the *P.O.L. Insight* and the *AAFP-PT Handbook* or on the AAFP-PT website (<http://www.aafp.org/pt> and click on Continuing Medical Education). The Test Sheet may be found on page 16 of the *P.O.L. Insight*. The Accreditation information may be found on the inside cover of this issue.

1. True or False: Previous job experience is a good substitute for formal training.
  - A. True
  - B. False
2. The four components of an effective training program are:
  - A. Process, procedure, training, and practice
  - B. Process, procedure, training, and competence
  - C. Observation, practice, review, and testing
  - D. None of the above
3. True or False: Having a training program in place benefits both new hires and established employees.
  - A. True
  - B. False
4. True or False: CLSI is a global, non-profit, standards developing organization that develops voluntary consensus standards & guidelines for health care.
  - A. True
  - B. False
5. Processes are:
  - A. Instruments or kits used for testing
  - B. Steps in performing a laboratory test according to the package insert
  - C. Sequences of activities that take place across time
  - D. How specimens are prepared for testing



6. True or False: Process activities must proceed in the proper sequence to ensure successful end results.
  - A. True
  - B. False
7. Work processes are best documented as \_\_\_\_\_ .
  - A. Flowcharts
  - B. Manuals
  - C. Forms
  - D. Computer files
8. True or False: SOPs are an effective means of communicating process information
  - A. True
  - B. False
9. True or False: Flowcharts can replace procedure manuals.
  - A. True
  - B. False
10. The most effective way to organize a procedure manual is:
  - A. Alphabetically by analyte
  - B. By job description & duties
  - C. Sticking all the manufacturer's package inserts into a binder
  - D. Placing all procedures in the order in which they are performed in the process
11. In addition to outlining the steps in a procedure, manuals should also include:
  - A. Examples of properly completed forms or worksheets
  - B. Samples or labels or tags
  - C. QC & maintenance schedules
  - D. All of the Above
12. True or False: Using the CLSI GP21 forms to develop training packets promotes consistency between trainers and ensures that critical information is conveyed.
  - A. True
  - B. False
13. Completed training event packets can be used to:
  - A. Document successful initial training
  - B. Document on-going competency assessment
  - C. Provide verification of the training process to outside laboratory inspectors
  - D. All of the above
14. Office Nursing Visits can be billed if performed by:
  - A. Nursing staff only
  - B. Only personnel with medical credentials
  - C. Anyone designated by the physician
  - D. None of the Above



15. True or False: Nursing visits are only billable if provided to an established patient with an existing plan of care.
  - A. True
  - B. False
16. Documentation to justify billing a nursing visit include:
  - A. Presenting complaint
  - B. Findings from the patient interview/encounter
  - C. A plan of care
  - D. All of the above
17. True or False: A Nursing Visit may still be billed, even when there is a change to the existing plan of care.
  - A. True
  - B. False
18. Nursing visits are coded under:
  - A. 99226
  - B. 99312
  - C. 99211
  - D. 99222
19. True or False: Billing 99211 has an average reimbursement of \$23.
  - A. True
  - B. False
20. Common uses of code 99211 include:
  - A. Patient education
  - B. Simple rechecks
  - C. Medication reviews
  - D. All of the above
21. True or False: A Laboratory Information System (LIS) is the most effective way to automatically populate lab data to an EMR.
  - A. True
  - B. False
22. The primary benefit(s) of integrating laboratory systems with the EMR is (are):
  - A. Elimination of paper
  - B. Seamless flow of data
  - C. Consolidation of patient information in an electronic format
  - D. All of the above
23. True or False: Directly interfacing a laboratory analyzer to the EMR can have unexpected ramifications.
  - A. True
  - B. False



24. True or False: Directly interfacing a laboratory analyzer to the EMR allows invalid or aberrant values to be detected before reaching the patient record.
  - A. True
  - B. False
25. True or False: Installing a LIS prior to acquiring an EMR system offers several advantages.
  - A. True
  - B. False
26. More than \_\_\_\_% of the clinical data used for diagnosis & treatment comes from lab tests.
  - A. 25%
  - B. 60%
  - C. 75%
  - D. 96%
27. True or False: Installing an LIS may result in increased productivity by both lab staff & billing department.
  - A. True
  - B. False
28. True or False: Use of an LIS minimizes the risk exposure associated with:
  - A. Clerical errors
  - B. Missing results
  - C. Reporting delays
  - D. All of the above
29. True or False: Using LIS-generated QC documentation simplifies the inspection process.
  - A. True
  - B. False
30. Many charges for add-on laboratory tests are missed due to inefficient paper processes resulting in a loss in revenue.
  - A. True
  - B. False
31. True or False: Potential improvement in patient safety and quality of care are not benefits of acquiring a LIS.
  - A. True
  - B. False
32. True or False: The price of a LIS always includes annual support & upgrades.
  - A. True
  - B. False



# AAFP-PT CME Test Answer Sheet

**ALL INFORMATION MUST BE COMPLETED TO OBTAIN CREDIT**

**2008-C** (submit by February 27, 2009 to obtain credit)

**Fill in the circles for the correct answers:**

**Please print:**

**Individual AAFP #:** \_\_\_\_\_

*(All participants in the AAFP-PT are now assigned a 7-digit AAFP number; AAFP-member physicians should use their AAFP-ID number; non-member physicians and laboratory personnel are assigned an ID number the first time CME is submitted)*

**Lab AAFP #:** \_\_\_\_\_

*(All labs enrolled in AAFP-PT are assigned a 7-digit AAFP number. The Lab ID number may be found on the Order Confirmation and on evaluations.)*

\_\_\_\_\_  
Name (Last) (First) (Initial)

\_\_\_\_\_  
Street

\_\_\_\_\_  
City / State/ Zip Code

\_\_\_\_\_  
Fax Number

- Address or Fax change       Name change

**Select one if you are a physician:**

- FP                       IM  
 PED                     OB/GYN  
 Other

**Select one if you are laboratory personnel:**

- MT                     MLT                     Nurse Practitioner  
 RN                     LPN                     Physician Assistant  
 Med. Assist.             Laboratory Manager  
 Laboratory Consultant  Other

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
1.	○	○	○	○
2.	○	○	○	○
3.	○	○	○	○
4.	○	○	○	○
5.	○	○	○	○
6.	○	○	○	○
7.	○	○	○	○
8.	○	○	○	○
9.	○	○	○	○
10.	○	○	○	○
11.	○	○	○	○
12.	○	○	○	○
13.	○	○	○	○
14.	○	○	○	○
15.	○	○	○	○
16.	○	○	○	○
17.	○	○	○	○
18.	○	○	○	○
19.	○	○	○	○
20.	○	○	○	○
21.	○	○	○	○
22.	○	○	○	○
23.	○	○	○	○
24.	○	○	○	○
25.	○	○	○	○
26.	○	○	○	○
27.	○	○	○	○
28.	○	○	○	○
29.	○	○	○	○
30.	○	○	○	○
31.	○	○	○	○
32.	○	○	○	○

**Evaluation:** please fill in bubble between 1 & 5 – 1 denotes poor, 5 denotes excellent:

1. To what extent were the objectives achieved?  
*poor*      ①      ②      ③      ④      ⑤      *excellent*
2. To what extent did the AAFP-PT education program *content* relate to the program's objectives?  
*poor*      ①      ②      ③      ④      ⑤      *excellent*
3. Rate your overall degree of satisfaction with this education program.  
*poor*      ①      ②      ③      ④      ⑤      *excellent*
4. In what general area of laboratory practice would you like to receive educational materials? (please mark all that apply).
  - CLIA and/or regulatory. requirements
  - Good laboratory practices
  - Test Procedures
  - Technical Subjects
  - Business/Financial Aspects
  - Other, please specify \_\_\_\_\_



Return to: AAFP-PT Education Program  
 11400 Tomahawk Creek Parkway  
 Leawood, KS 66211-2672  
 or Fax to 913-906-6079

**Important: Keep a copy of the completed form for your records. Documentation of CME hours earned is mailed to lab personnel in July and January. Allow 7-10 business days for requested transcripts.**