As point-of-care testing (POCT) continues to expand in the hospital environment, the desire of physicians to participate in the performance of testing may increase. This article discusses the required competencies for a physician who wishes to be involved in laboratory testing and some practical considerations for the POCT coordinator who monitors the testing.

The POCT coordinator sits in the office and pulls a pile of QC paperwork towards her, as the phone rings. The laboratory reception area says that there is a cardiac anesthetist demanding to talk to the person who controls the lab testing in the Operating Room (OR).

When the doctor arrives in the office, a discussion begins. “How come I cannot run the testing that I need to manage my patient myself? Why do I have to hand it to someone else and wait?” the doctor fumes.

As point-of-care testing (POCT) continues to expand in the hospital environment, the desire of physicians to participate in the performance of testing may increase.

But how can POCT coordinators ensure physician competencies in laboratory testing at the point of care?

The article will discuss the testing commonly performed in the OR and Critical Care areas of a hospital. This testing commonly includes non-waived testing such as chemistry or blood gas testing as well as Activated Clotting Time (ACT).

A brief mention will be made of the tests that are commonly called Physician Performed Microscopy (PPM) or Physician Performed Testing (PPT). These tests are usually performed during the physical examination of a patient and include such tests as direct wet-mount preparations and KOH, fern testing, pinworm examinations, fecal leukocyte, nasal granulocytes and mucus examinations.

**Competence in a POCT context**

The Oxford American Dictionary defines “competence” as “being competent”. “Competent” is defined as
“having the ability or authority to do what is required”. A secondary definition is “adequate or satisfactory [1]”. For point-of-care testing (POCT), “competence” is the knowledge and ability to produce a test result that provides information that results in appropriate patient care.

Other definitions of what constitutes competency and its assessment are important when discussing POCT, as those definitions will be gleaned from the agencies inspecting a POCT program. The two major agencies of this kind in the United States are the College of American Pathologists (CAP) and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

CAP states in the Laboratory General Checklist that the competency of each person to perform their assigned duties must be assessed. The competency assessment for each individual must include the following six items:

- Direct observation of routine patient test performance, including patient preparation, if applicable, specimen handling, processing and testing
- Monitoring the recording and reporting of test results
- Review of the intermediate test results or worksheets, quality control records, proficiency testing results and preventative maintenance records
- Direct observation of performance of instrument maintenance and function checks
- Assessment of test performance through testing previously analyzed specimens, internal blind testing samples or external proficiency or testing samples
- Evaluation of problem-solving skills [2]

The above not only needs to be documented, but the documentation needs to be available to the inspector as well. This element of the assessment is to be performed every six months during the first year of testing performance and yearly thereafter.

JCAHO also requires the assessment and documentation of competency of testing personnel annually. This assessment can include but is not limited to the criteria below:

- Routine patient test performance, including patient preparation, if applicable, specimen handling, processing and testing
- The recording and reporting of test results
- Quality control, proficiency testing and preventative maintenance performance
- Instrument function checks and calibration performance
- Test performance assessment as defined by laboratory policy (for example, testing previously analyzed specimens, internal blind testing samples or external proficiency or testing samples)
- Assessment of problem-solving skills as appropriate to the job [3]

According to CAP and JCAHO [4, 5], the definition of testing personnel does not release an MD from performing the exact same competencies for testing as a nurse, patient care assistant or a laboratory technologist.

In some institutions, especially teaching hospitals, the training of doctors to do laboratory testing may be required of the POCT coordinator. The author’s institution has stated that unless the test is covered under a PPM or PPT listing, physicians will not perform POCT.

Consequently, the author, a POCT coordinator, has no role in training physicians to perform testing. This stance has been shaped by several factors.

“No doctor testing”

In 2004, San Antonio POCT coordinators and some of the pathologists who oversee POCT met to discuss the issue of doctor competency in the wake of the JCAHO changes in competency requirements. This meeting, which the author participated in, discussed mainly OR POCT usage, ACT analyzers in particular.
San Antonio has four major hospital systems with at least four separate hospitals. These hospitals are spread over a wide geographical area. A citywide discussion was held to attempt to institute a “One Stop POCT Shop” for the doctors to come and obtain the competencies for all of the analyzers in use.

All of the hospital systems would agree between them as to what constituted competency. At that time, all of the hospitals included in the conference were using similar instrumentation in the OR for ACT and/or other testing. Most of the doctors in town practice in at least two of the systems.

When the discussion started, only one out of the four hospital systems with six hospitals allowed physicians do any testing in the OR. There was also a huge variation in instrumentation from hospital to hospital within the same system.

For example, the author’s four hospitals were all standardized, but one of the other systems had different ACT analyzers at three out of the six hospitals within the same system. There was also the problem of difference in capabilities of the various analyzers in use, such as ID strings for both patients and operators.

These factors made a “One Stop Shop” almost impossible. There would be little agreement between the systems as to what constituted competency since all of the physicians would have to train on four different ACT analyzers alone, depending on where they practiced.

The group aborted the discussion at that point and gave the problem back to the hospital system that had allowed the physicians to perform testing initially.

Factors affecting physician training

The other factors that went into the “no doctor testing” in the author’s institution’s decision were the difficulties in monitoring charting by physicians and the difficulty in having a busy physician fulfill competency requirements once per year.

Doctors are no more or less difficult to train than any other learner for POCT. It is the time and motivation factors that affect the training of a physician more than any other factor.

In the United States, physicians usually have practice privileges at several hospitals, especially those who practice in large metropolitan areas. Physicians may be tasked to see patients at five different hospitals in one very long day.

The logistics involved mean little time for the physician to actually perform the testing needed to make the patient’s treatment decision.

A physician not only sees patients in the hospital but is also responsible for seeing patients that have appointments in his office. Efficiency is required to care for the amount of patients a physician may have to see in one day.

Unless the testing is a part of the physical examination of the patient, such as the PPM or PPT testing, the doctors have neither the motivation, inclination nor the time to learn to perform POCT testing, as it is not an efficient use of their time.

It is far more efficient for the physician to have the result on the chart when he is able to see the patient. This time factor will usually preclude the physician returning for the required recertification.

When the testing is a part of the examination or direct care of the patient, the physician tends to perform the test and act on the result.

When performing chart reviews of physician charting for the PPM and PPT tests, many times there is a charge for the test but no documentation of a test result.

The documentation requirement is impossible for a POCT coordinator to enforce. Documentation is important for not only the regulatory agencies in the United States who monitor hospitals and laboratories, but for any legal consequences that may result from the care of a patient.
Conclusion

The role of the POCT coordinator should ensure that physicians are not hampered in their ability to obtain appropriate test results at POCT to assist in treating the patient.

In the author’s experience, the best way to do this is to continually train the operators who perform the testing and focus on developing their competencies instead of training physicians in doing the testing themselves.

In the author’s institution, a validation of this approach was obtained by a physician comment to a nurse recently. The cardiac anesthesiologist asked the nurse why he could not perform the testing himself.

The nurse asked him why he would want to do that when she could not only operate the instrument, but also fix it if it were broken. He told her, “You’re right, and the wait is really not of great consequence”.

References


