Tips for managing your POCT program

By James H. Nichols, PhD, DABCC, FACB

Managing point-of-care testing (POCT) is challenging. Unlike core-laboratory testing conducted by dedicated staff with formal laboratory education on a limited number of instruments, POCT is conducted in dozens of sites with hundreds of devices and thousands of operators. Agreement among so many devices on all types of patients is sometimes problematic.

POCT is further conducted by clinical staff whose primary focus is patient care, not laboratory diagnostics. It is, therefore, difficult to get clinical staff to remain focused on the test throughout an analysis when patient needs are requiring attention. Clinical staff also does not have formal training in laboratory variation, potential sources of error, or the rationale for quality control. Thus, concerns are raised over the ability of clinical staff to conduct POCT in a consistent manner that is necessary for reliable quality. Fortunately, POCT generates rapid results that the clinician can utilize in conjunction with the patient’s condition to determine further treatment or immediately question the validity of the result.

Despite these challenges, a number of practical tips can facilitate the management of multiple POCT sites, staff, and devices — and ensure quality POCT results:

**Standardize methods across the health system.** A wide menu of analytes is available in portable POCT formats, and multiple manufacturers currently exist in the POCT market. Waived urine pregnancy testing, for instance, has 15 different kits alone approved by the FDA. Standardizing an institution on a single kit minimizes the number of devices and simplifies the management of the testing process; a single policy can be shared among all of the sites performing testing. Use of a single device minimizes test interferences, allows shared reference intervals among sites (particularly imperative for coagulation testing where individual methods can vary), and also simplifies the training and competency of staff that may float between/among locations.

**Data management.** Newer POCT devices have the capability of computerized data capture and transfer. With so many devices, locations, and people to manage, the manual review of the volume data to detect quality trends is difficult. Computerization automates the data review process by calculating device quality-control means and can plot data for trending. The development of connectivity standards and marketing of universal POCT databases allow multiple devices and manufacturers to be captured in the same database and share common interface communication with laboratory and hospital information systems, ensuring that POCT results get reported to the patient’s medical record and get appropriately billed.

**Communication.** Standardization of methods promotes a single POCT policy and institutional vision that facilitates centralized oversight. The laboratory, however, cannot be at every site to monitor compliance 24 hours a day; clinical staff members need to take responsibility for their own quality. Good interdisciplinary communication is essential in order to set mutual expectations for individual roles within a POCT program. The laboratory may serve as a consultant to the clinicians for compliance and quality improvement, but the clinical staff needs to take charge of the day-to-day tasks like cleaning devices, checking reagent expiration dates, and performing quality control.

**POCT committee.** Oversight of POCT by a committee of representatives from all areas involved in the testing process formalizes a POCT program. Nursing, clinicians, purchasing, laboratory, and administration are key members of a POCT committee. Other representatives may include pharmacy, nutrition, distribution, outpatient clinics, ambulances, visiting nurses, and other areas where POCT may be performed or the results of POCT utilized in patient care.

Networking. A variety of resources are available to POCT coordinators, directors of POCT programs, and others involved in POCT. Books on POCT management are available, and articles on POCT topics regularly appear in trade and peer-reviewed journals. A network of POCT coordinators can be contacted on the Internet at www.pointofcare.net. This group holds regular regional meetings where POCT coordinators can get together to discuss solutions to common problems. The AACC also has a free listserv at www.aacc.org that is a forum where POCT coordinators can ask questions and get responses from experts in the field worldwide. Having contact with others helps lab personnel brainstorm unique solutions to common problems and offers the opportunity to discuss how others are handling similar issues.

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**Integration.** POCT is not an isolated process and should be integrated into overall patient care on the medical unit. Clinical staff often treats POCT as a laboratory issue — something that is being forced onto an already overburdened list of nursing responsibilities. In fact, POCT is an integral part of patient care and should be handled like drug administration, monitoring, or any other task involved in patient care. For quality results, time needs to be carved out of staff schedules to perform POCT duties, just as staff is provided time to attend to other patient care responsibilities. Nursing needs time to perform QC and manage day-to-day operations, and the POCT coordinator needs dedicated time to supervise program management. Just providing a faster test result, however, does not guarantee that POCT will improve patient outcome. Clinicians must consider why a test was ordered, how the result is going to be utilized in continued care of the patient, and — most vital — whether POCT is the most appropriate method for their particular patient's need. A recent systematic review of the scientific literature and practice guideline — “Evidence-Based Practice for POCT” makes recommendations on optimal use of POCT for improving patient outcome — and is available from the National Academy of Clinical Biochemistry at [www.nacb.org](http://www.nacb.org).

**Quality improvement.** Nothing is perfect; there is always room for improvement. Management of POCT is no exception, and administration needs to set an expectation for quality improvement by merging POCT issues into the overall hospital quality initiatives. The laboratory — as central oversight of a POCT program — has the fundamental role of reviewing site performance and indicating areas for improved compliance, while the clinical staff has the responsibility of following up on any issues and taking action to resolve any problems. Criticism, however, can be constructive and positive, or it can be taken negatively and be destructive to a POCT program. The manner and tone of delivery is critical to overall success, and POCT coordinators should work on communication skills to facilitate positive reinforcement of the POCT-program benefits. This is an area where a POCT committee can assist by mediating communication of problems and reinforcing program improvement.

Managing POCT is not a straightforward task, and POCT coordinators must bring together a variety of laboratory regulations, policy implementation, training, and interpersonal communication skills to be successful. They should not feel isolated, though — and a number of resources and networking opportunities exist that can aid in addressing problems that are encountered and in maximizing their effectiveness in improving ongoing quality. Staff is encouraged to think outside the laboratory or nursing “boxes” and to develop shared solutions to address problems unique to their institution. These tips provide just a few suggestions of ways to structure your POCT program and to address issues that will, hopefully, result in overall improvements to the quality of your POCT and to better patient care.

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