Crossing your Ts in POCT: training and technology

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Every POCT program today struggles with providing a solid program that is error free. Each program must be designed to fit the needs of the organization, so having the right people in key positions is important.

Additionally, training and competency programs are necessary so that each POCT operator understands the expectations for testing procedures.

Technology can enhance the POCT processes by using existing applications or by including them as part of new instrumentation purchases. By using a shared drive for lab-based procedures, paper manuals can be eliminated and standardization better achieved across multiple facilities.

Posting POCT operator procedures to an intranet provides easy and consistent accessibility to the most current procedures and quality control log sheets. Training and technology programs can lead to a successful and error-free POCT program.

Point of care testing is now common place in most institutions. Health care professionals are working together to provide better care to patients by performing testing at the bedside.

So what can you do to prevent errors in your POCT program? It is not an easy task to keep track of the testing performed by hundreds and sometimes thousands of operators!

However, there are a few keys to success that will help assure your POCT program meets your expectations. Training and technology are just two of these keys that can move your program to another level and keep your program error-free.

Having the right people

The laboratory is best suited to oversee a point-of-care testing program. Several programs have now included nurses or respiratory care practitioners to hold these leadership roles as well.

What is truly important is that you have the right person(s) in the position to direct and oversee the program as needed in your institution.

An appointed position to oversee the program is crucial and in large, comprehensive programs, dedicated POCT staff is necessary in order to monitor the testing activities of the numerous POCT operators.

The Administrative leadership of your organization should support these requirements in order to have a successful program.

Establish a POCT Committee

To establish and maintain a successful POCT program, the development of a POCT Committee is essential.

The POCT Committee should be multidisciplinary and include those responsible for the development and maintenance of a quality program. Representatives should include: physicians, nurses, laboratorians, respiratory care practitioners and Administrative support.

IT, Finance and Materials Management representatives are also valuable and may become ad hoc members after the program has been established.

The duties of the POCT Committee can include development of training and competency programs, development of policies and procedures, and selection of POCT technology.

Training is essential

A solid training program is one of the most important tools in a successful and error-free POCT program. Training can be accomplished using a variety of methods: formal classes/presentations, computer- based programs, staff meetings, storyboards, or one-on-one sessions.

An excellent format is to incorporate POCT training with new employee orientation. By using this process, the new employee is ready to perform all POCT duties when placed in their assigned nursing unit.

This is the time to define the expectations for POCT policies, the steps for each procedure, and to allow each new operator to become comfortable with the new procedures prior to actually performing a patient test. If your program has allowed for dedicated lab-based POCT staff, this is where they can be invaluable.

These staff members can follow up with newly trained operators to assure they are confident with the testing procedures. Their high visibility on the nursing units allows the development of strong relationships with the POCT operators and they become the resource person for laboratory questions.

Your training program can also be used to introduce new procedures and instrumentation, or if needed, remedial training.

Training must be ongoing

Your training program should not end at orientation. A competency program needs to be developed that includes all tests in your POCT menu. Maintain an on-going database of all active operators with their orientation and re-certification dates.

Utilize systems that "*lock out*" invalid operators - those who are not trained or who have not completed re-certification. Strive for POCT operators to be error-free from their very first day of employment.

Use existing technologies to enhance your programs and to eliminate errors. Many POCT programs now provide computer-based competencies for their operators. If your organization has these applications, by all means enlist the IT department to provide your interactive POCT competencies online.

Utilizing these applications will enable the achievement of high rates of completion and satisfaction from your POCT operators. If your organization does not have these applications yet, there are now competency programs available for purchase.

These address PPMP as well as waived testing

competencies. Additionally, your instrument vendors may have competency tools available. Many of these applications compute pass/fail scores and generate reports to collate completion and success rates.

Using technology to your advantage

Another easy way to use existing technologies to reduce errors in practice is to provide current testing procedures on your intranet for POCT operators. This can eliminate paper copies of manuals in the nursing areas and still provide easy access to these documents.

Remember to keep POCT operator procedures simplified and focused on the tasks. Do not include pages of laboratory lingo that is not value-added to the POCT operator.

Additionally, load QC log sheets for your manual POCT tests to the intranet. This will eliminate the time to take a paper copy to each unit and allows for additional copies to be available at any time.

When loading these documents to your intranet, use a format that is easy to follow and user-friendly for staff to retrieve information. Work with your IT department as there may be standards in place for your organization when adding new policies and procedures.

The intranet is also a great way to maintain control of test procedures in order to reduce errors. Many institutions use this for all their lab-based procedures as well. Within our organization, we currently keep only the POCT test procedures performed by non-laboratory staff on the intranet.

The other lab-performed procedures are kept on a shared drive secured specifically for the lab-based POCT staff. These procedures include acceptance studies for new lot numbers, quality control studies, and calibration verification.

Additionally, any forms used in the POCT department are kept on this shared drive. The access to this shared drive allows the POCT staff from facilities across our system

to store quality control records and to have use of the most current version of these documents electronically. We have saved many trees this way!

Example of a shared drive

I have included slides below to demonstrate the format of this shared drive. See **Fig. 1.** This includes just a sampling of documents stored there. Each folder contains associated files/documents pertinent to the work done by the lab-based POCT staff members at each of our six facilities.
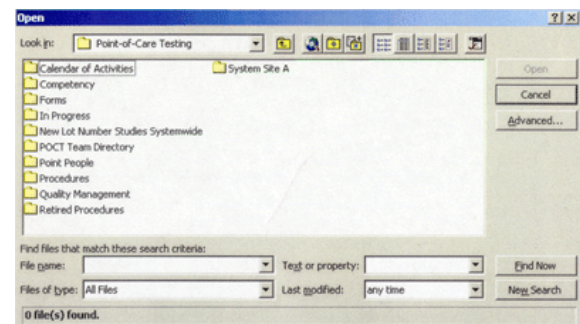

FIG. 1.

The **Calendar of Activities folder** holds the schedule of all of the non-daily duties performed by the POCT staff. Since we have a large POCT testing menu, it became necessary to map out all the activities that may slip through the cracks.

Activities on this calendar include CAP survey ship dates, calibration verifications, method comparisons, centrifuge calibrations, and internal proficiencies. This helps everyone to stay on task and benefits the lab-based staff as they rotate to other sites.

The Competency folder contains a calendar of the Skills Days for which POCT staff participates across our system. This folder also contains the "*tip sheets*", competency tests and test keys for each test performed at the bedside.

The "*tip sheets*" are used to provide refresher information to POCT operators at the time of their annual competency review or during Skills Day sessions throughout the year. All POCT operators are required to

do an annual competency for each test they perform.

The competency tests are designed to address recurrent issues and to reinforce important steps of each procedure. See **Fig. 2** for an example.

All of these activities contribute to a solid testing program. Evaluate your training and competency program regularly to assure the content is correct, complete and creative.

FIG. 2.

The **Forms folder** holds all forms used in the POCT area. These include worksheets used for precision and accuracy studies.

We added an **In Progress folder** on the shared drive to hold items that we are currently working on: procedures, forms, etc. This allows the POCT staff to provide input to documents in development or to add QC data to spreadsheets being used by several staff members.

We also keep our database of active operators here since this document is constantly being updated. This database allows the POCT staff easy access to

competency information for operators that perform testing at multiple sites.

The **New Lot Number Studies System-wide folder** holds the records of the system-wide studies done for our sequestered reagent lots.

Sequestered lot numbers benefit our program in that all sites are on the same reagent lot, and quality control studies can be performed to compare sites, instruments and operators as needed. This also allows us to have the same reagent lot for a longer period of time so as to reduce the frequency of extensive parallel testing.

The **POCT Team Directory** is a current list of the POCT staff and their contact information.

The **Point People folder** holds a file for each site listing the contact persons for each POCT unit. This is especially important for the lab-based POCT staff as they cover other sites for their co-workers. This list is kept current so that the lab-based POCT staff has access to the right people at any time.

The **Procedures folder** holds the files for lab-based POCT procedures.

The **Quality Management folder** holds the documents we use for CAP survey follow-up and policies/procedures on document management, method validation and our overall QC program. See **Fig. 3.** The Retired Procedures folder holds the original documents for procedures no longer in use.
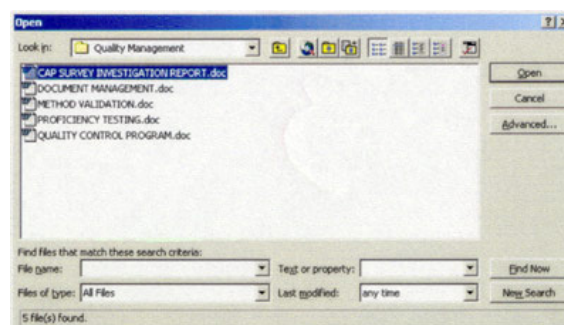

FIG. 3.

Each of the six facilities has a site-specific folder (System Site A) as well. See **Fig. 4**. A file lists the current POCT tests approved for each nursing area in that facility. The facility QC data is recorded on a standard template and is saved under each site's folder, after administrative review and approval.
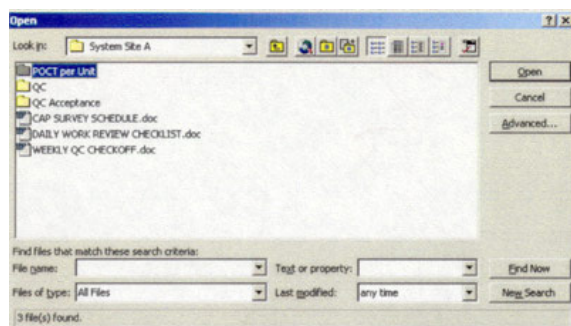

FIG. 4.

QC Acceptance studies are also recorded, approved and saved here. Acceptance studies are performed on each new batch of reagents prior to release for patient testing.

A site-specific **CAP Survey Schedule** is kept on this shared drive. This schedule is developed each year to designate which units will be participating in the CAP survey for each shipment of material. This assures that all units participate throughout the year.

Additionally, each site holds their work review checklists on this drive. The format is the same for all sites but the site-specific nursing units are listed on each individual facility template.

All policies, procedures and approved quality control studies are password protected so they cannot be inadvertently changed. Keeping these procedures in a "*read-only*" format is important for document control and assures POCT standardization across the organization.

Conclusion

Since the implementation of this shared drive, the POCT staff has gained efficiencies that we only dreamed about before. The use of current technology has provided us a mechanism to share information across our system with ease while preventing errors.

Developing a POCT program that is error-free takes time and effort from the entire organization. It is a collaborative process and support is necessary from each department. Using the strengths of your training program and enhanced technologies, you too can lead the way to an error-free POCT culture within your organization.