

Quality Qorner

The Power of Process

The task was simply stated: Update all transfusion service practices in British Columbia (BC) to be compliant with the recently-revised Canadian Standards Association "Blood and Blood Components" Standard Z-902. How would the transfusion services ensure such compliance? It would be through province-wide procedure templates (ie, by developing generic documents that all BC transfusion services of any size or scope would follow, allowing for legitimate facility-specific differences, such as different computer systems).

For BC's 125+ hospitals that are scattered across an area the size of several western states combined, this promised to be a most challenging prospect. Even more challenging was the chosen project representatives reaching agreement on the format and content of the provincial procedures—and to complete them within the 1-year budget allocated by the provincial blood office for the project. Here in the United States, we often cannot get just 2 transfusion services in the same health care system to come to agreement on a single document! So, how could we convince a whole province-full of transfusion services—from tiny few-bed hospitals in the sub-arctic to major medical centers in Vancouver—to agree on a set of province-wide procedures that would facilitate everyone's complying with the new blood standard? How could we overcome the natural resistance to change and the normal skepticism of such a sizable and diverse group and ultimately reach consensus? Where could we develop a common vision?

As I have found over the past several years with respect to any laboratory project, the best place to start is with a review of the quality management system model. This model describes a service's path of workflow and 12 quality system essentials that support it. In our discussions, it became apparent that any transfusion service has, actually, 2 paths of workflow. The first path, for patient sample testing, is identical to the generic laboratory path of preanalytic, analytic, and postanalytic activities. The second path, for managing incoming and outgoing blood component inventory, is analogous to that of managing drugs in the hospital pharmacy.

Each path of workflow is a sequence of processes with each process consisting of linked activities that need to be performed correctly each time, every time. This basic quality concept is especially true in transfusion medicine where there is no room for blood mistyping and antibody identification errors that could directly harm or kill a patient. Through flowcharting technique, the BC project participants identified the patient testing and inventory management paths and determined that they connected at the point of blood component allocation. Participants then identified the several major processes within each path of workflow. In so doing, it was easy to see that smaller transfusion services did not perform some of the processes, such as antibody identification, maternal and neonatal testing, or serologic testing on an automated platform.

We also used process flowcharting as a means to determine the correct sequence of activities within each of the processes in each path of workflow. For example, I certainly hope that every transfusion service follows a pretransfusion procedural sequence of evaluating the patient's blood sample, followed by evaluating any blood transfusion order that may have accompanied it,

followed by checking the patient's transfusion history, and then followed by performing the appropriate serologic testing. It wouldn't do to perform testing first, evaluate the sample later, and skip the patient history check!

Flowchart after flowchart, the representatives came to consensus on an acceptable sequence of process activities and the contents of the respective procedures, and in so doing, improved them all. Of course there was discussion—plenty of it, in fact, by scheduled conference calls and periodic face-to-face meetings—but the discussions revealed that most transfusion service procedures could be documented with built-in optimal practice. Ultimately, the BC participants realized that the only real difference between their transfusion services were the processes they did not perform, instead of the ones that they did.

In less than a year they had accomplished it—a documented set of transfusion service process flowcharts with all the procedures contained in each process. In addition, they developed common training and competence assessment modules based on the work processes and procedures, thereby providing consistency in training for whatever the size or scope of the service. To say this team worked hard and was productive is a huge understatement of their countless hours of effort and willingness to find consensus.

So, what is the power of process? Simply this: all work is a series of processes and all processes can be documented. We can train people to follow documented work processes, assess their competence in their performance of assigned work processes, measure and monitor overall process performance, identify opportunities for improvement, and improve all processes.

The British Columbia Provincial Laboratory Coordinating Office intends to take advantage of the lessons learned from the transfusion medicine project to tackle the bigger issue of bringing all provincial hospital laboratories into compliance with the international medical laboratory standard, ISO 15189. For example, it should be apparent by now that the process for setting up and operating any given automated analyzer can be documented and procedures written for the laboratories using that analyzer. The end result would be optimal practice (improved efficiency), compliance with requirements (improved effectiveness), and thus, improved patient safety.

We should pay attention to the work being done in BC—they are going where no state has gone before. Oh yes, there is also a process to celebrate achievement, and the Transfusion Service Compliance Work Group performed it with champagne and cake and laughter and hugs—in that sequence.

This Month's Quality Quote:

"Vision without action is merely a dream. Action without vision just passes the time. Vision with action can change the world."
—Joel Arthur Barker, *Futurist*

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