New consensus statement for cardiac cath labs

For the first time, cardiac catheterization laboratory personnel have a document defining best practices, including time-outs, infection prevention, and preprocedure checklists.

The statement, from The Society for Cardiovascular Angiography and Interventions (SCAI), issued in March 2012, is the first to represent consensus on the operation of cath labs, the lead author, Srihari S. Naidu, MD, FSCAI, an SCAI trustee, told OR Manager.

The statement can assist in meeting Joint Commission requirements. It also provides a benchmark that cath labs can use for their current practices and for setting future goals to elevate the standard of care, notes Dr Naidu, an interventional cardiologist and director of the cardiac cath lab at Winthrop University Hospital, Long Island, New York.

Best practices are divided into those that apply before, during, and after the procedure, including follow-up evaluation.

Time-outs new for cath lab

Though operating rooms routinely conduct time-outs, cath labs generally have not. The time-out is a final check before each procedure to verify the correct patient, procedure, and site.

The reason, says Dr Naidu, is that in the cath lab, procedures are performed on only one organ, the heart.

“For example,” he says, “it doesn’t matter which leg we use to access the heart, and we often change the location during a case, so there is no need to mark the site.”

Still, questions about the Universal Protocol arise during Joint Commission surveys, he says.

To address that concern, the consensus statement includes a streamlined time-out process that addresses issues of concern to cath lab personnel, such as identifying the appropriate patient and appropriate procedure, Dr Naidu says (sidebar).

Preprocedure checklist

The consensus statement recommends a preprocedure checklist and provides an example, which includes:

- planned procedure
- history and physical exam
- history of prior percutaneous coronary intervention or coronary bypass
- candidacy for drug-eluting stent
- allergies
- medications
- informed consent
- health care proxy
- sedations, anesthesia, and analgesia
- results of lab work and studies.

Sample cath lab time-out checklist

The sample cath lab time-out checklist includes the following:

- All team members must be present for the time-out.
- The time-out must take place immediately before vascular access is obtained.
- The physician taking ultimate responsibility for the procedure should lead the time-out and ensure each of the following items is announced:
  1. Patient’s name and medical record number
  2. Procedure to be performed (eg, left heart catheterization)
  3. Route to be used (eg, right femoral artery)
  4. Confirm availability of needed equipment or alternatives, including intended stent type
  5. Patient’s allergies and premedication if appropriate (eg, heparin-induced thrombocytopenia)
  6. Special laboratory or medical conditions (eg, elevated INR, chronic kidney disease).

Source: The Society for Cardiovascular Angiography and Interventions (SCAI).
“Most cath labs don’t have a preprocedure checklist,” says Dr Naidu, noting that the experts preparing the statement tried to make the checklist as relevant to their practice as possible without unnecessary elements.

“We tried to cut through to exactly what we think is reasonable and appropriate,” he says.

Where the checklist is completed depends on what route the patient comes into the hospital, says Dr Naidu. For the majority, the preprocedure checklist is completed in the preadmission testing area where the consent is obtained and laboratory testing is performed.

Cath lab vs OR protocols
Though all cath lab personnel wear gowns and gloves during procedures, hats and masks are still a point of controversy, says Dr Naidu. Studies have found the infection rate in cath lab patients is basically zero for percutaneous procedures, but attire is still an issue during accreditation surveys, he says.

“The Joint Commission tells us we should be wearing caps and masks because it’s an operating room type of environment,” says Dr Naidu. “But it’s not really an operating room environment because we don’t have the same ventilation requirements, and we don’t do open procedures.”

The cath lab does follow OR attire protocols for certain procedures, he notes, such as pacemaker implantations and closing of septal defects and patent foramen ovale. But for the most part, he says, full surgical attire is not necessary for cath lab procedures.

“In the consensus statement, we say, ‘Although their efficacy remains unproven, it is reasonable for hats and masks to be worn for every procedure,’ but we don’t make them mandatory except for specific high-risk procedures.”

Similarly, surgical hand scrubs for every case are deemed reasonable in the statement, though the consensus is that physicians should perform hand scrubs for the first case of the day and use self-drying antiseptic solutions before subsequent cases.

Antibiotic prophylaxis is not indicated for routine catheterization procedures but is routinely given before implantation of devices. The exception is stents because implantation of stents basically has a zero infection rate, he says.

Interventional cardiology procedures performed in a hybrid OR should follow OR protocols because open procedures are performed in these rooms, whereas only percutaneous procedures are performed in the cath lab, he notes. ♦

—Judith M. Mathias, MA, RN

Reference