In survey, about half of ORs are using the WHO checklist

Nearly half of ORs (48.5%) in an online survey by OR Manager say they have implemented the World Health Organization (WHO) Surgical Safety Checklist. Of those, almost two-thirds (64%) say they think it has improved patient safety. Several said the checklist helped avert serious errors.

The online survey was sent to 490 OR Manager subscribers in June 2009, with 136 responding (28%). The 2009 OR Manager Salary/Career survey also asked about safety checklists and briefings (sidebar, p 7). The Institute for Healthcare Improvement (IHI) reports more than 800 hospitals have tried the checklist. IHI challenged hospitals to try the checklist in a “sprint” by April 1, 2009.

Still, despite the perceived benefit, the majority of online respondents said surgeons and nurses accepted the checklist “with reservations.” Those who have not implemented the checklist all said they already use a similar one.

The WHO checklist, introduced in 2008, has 3 phases:
• sign in (before induction of anesthesia)
• time-out (before skin incision)
• sign out (before the patient leaves the OR).

A worldwide study found patient deaths and complication rates declined substantially after the WHO checklist was introduced at 8 hospitals. Results were published in the January 29, 2009, New England Journal of Medicine.

Good catches

One respondent to the OR Manager survey described how the WHO checklist enabled the team to catch a “near miss” in the preoperative area. The patient had injuries on both wrists, and there was confusion about the correct side for surgery. “The patient, schedule, and consent did not match,” the respondent said. The patient was not moved to the OR until the situation was resolved with another set of x-rays.

In another case, an anesthesia provider was stopped from starting an interscalene block on the wrong side even though the correct side was marked.

Several others referred to catching equipment problems before a case, such as a wrong implant delivered by a sales rep, missing films, and consent inaccuracies. (These issues could also have been caught by the Joint Commission’s Universal Protocol for surgical site verification.)

Some said the checklist contributed to better communication and teamwork.

“The surgeons really like the staff introductions. We have many new personnel and vendors,” one person interviewed by OR Manager said. Another
commented, “It has helped with getting the surgeons to be more interactive, specifically with special equipment and needs.”

**Universal Protocol and WHO checklist**

Several said physicians and nursing staff were confused about the overlap between the WHO checklist and the Universal Protocol. The Joint Commission says the two do not conflict but have different purposes. The purpose of the Universal Protocol is surgical site verification. The WHO checklist also covers site verification but with fewer details. In addition, the WHO checklist includes other items intended to improve communication, such as introducing team members before the case; a sign out at the end of the case; and checks for anesthesia risks, allergies, antibiotics, and so forth. (See Joint Commission Online, February 2009, at www.jointcommission.org/.../jconline_02_09.htm)

**Putting checklist into practice**

Interviewed by *OR Manager*, four perioperative nurse managers who have implemented the WHO checklist say the cultural change doesn’t seem as great as it might have been a few years ago. By now, OR teams are accustomed to team training and the Universal Protocol. Two challenges have been meshing the WHO checklist with the Universal Protocol and figuring out the logistics for involving all team members.

**Adapting the checklist**

The managers all said they have modified the checklist to meet their needs, which WHO encourages.

“We tried to keep it focused on the things important to us,” says Pat Robinson, RN, CNOR, OR clinical manager for the 6 ORs at St Joseph Hospital in Nashua, New Hampshire. The hospital is part of a statewide collaborative to implement OR briefings and debriefings.

In St Joseph’s small OR where everyone knows each other, introductions at the beginning of the case are omitted.

“We do go over the antibiotic administration, VTE [venous thromboembolism] prophylaxis and normothermia if appropriate,” Robinson says.

OR teams also have started performing the sign out, or debriefing, at the end of cases. The opportunity to reconcile specimens during the sign out has been a particular benefit, Robinson says. This step gives the surgeons “a sense of security” and is one reason they bought into the WHO checklist quickly, she notes.

**Checklist logistics**

Planning is needed to decide which checks to perform in the holding area.
Checklists and briefings

In the 2009 OR Manager Salary/Career Survey, most respondents said their OR has implemented a surgical safety checklist in some form. The question was not specific to the WHO Surgical Safety Checklist.

Has your OR implemented surgical safety checklists to improve patient safety?

- Yes: 86%
- No: 14%

ORs that have implemented briefings and debriefings to improve patient safety

<table>
<thead>
<tr>
<th>Briefings</th>
<th>Debriefings</th>
</tr>
</thead>
<tbody>
<tr>
<td>No: 49%</td>
<td>No: 70%</td>
</tr>
<tr>
<td>Yes: 51%</td>
<td>Yes: 30%</td>
</tr>
</tbody>
</table>

and which to do in the OR. The surgeon may not be available for all of the checks recommended before induction.

In the main ORs at the Hospital of Central Connecticut in New Britain, the solution is to hold 2 time-outs for major cases. The first is led by the anesthesiologist, nurse, or surgical resident before the surgeon is in the OR. The second takes place after the attending surgeon arrives. At this time, the team also reviews the other items on the checklist, notes Carol Sparks, RN, MSN, CNOR, senior director of perioperative services. The hospital has 16 ORs in 2 facilities.

Lakeland Health Care in St Joseph, Michigan, is combining the WHO checklist with the OR briefings and debriefings it is implementing as part of Michigan’s Keystone: Surgery, a patient safety collaborative of 75 hospitals.

“Some parts we do in the holding area, and some we do in the OR after induction,” says Ellen Augustyn, RN, BSN, CNOR, OR manager for the 9 ORs.

In the holding area, the team confirms the patient’s procedure, site, and site marking as directed by the Universal Protocol. Also reviewed are any patient allergies and airway risks. Anesthesia safety checks are performed in the morning before the schedule begins rather than during the sign in as suggested by the WHO checklist. In the OR before incision, the team conducts the time-out and discusses anything unusual that is expected. At the end of the case, a debriefing is performed as recommended by Keystone: Surgery, similar to the WHO checklist sign out.

Sprint for the checklist

Implementation at Provena Mercy Medical Center, Aurora, Illinois, got a big boost from IHI’s “sprint” day, says Beth Martinez, RN, MSN, director of perioperative services. Martinez found IHI’s “starter kit” helpful, with its tips, strategies, and links to videos (www.ihi.org/IHI/Programs/ImprovementMap/WHOSurgicalSafetyChecklist.htm).

“We had everyone watch a video on how to do the checklist the right and
wrong way,” she says. As evidence, she shared with the physicians the New England Journal of Medicine study report.

Some team members initially were concerned that the checklist was long, but she says others welcomed it, saying, “Now we have something tangible to use. If nothing more, the checklist heightens safety awareness and makes the whole team feel more like a team,” Martinez says.

She thinks the WHO checklist offers a fresh approach to the time-out, which for some was becoming rote. A new twist is to include the vendor representative to verify that the correct implant is available.

**Documenting the checklist**

How to document and audit use of the WHO checklist has been a question.

Robinson notes that she and the nursing staff did not want to add another form to the medical record, which is on paper. Instead, nurses document use of the checklist with a checkbox on the nursing documentation. Copies of the checklist are available in the OR for reference.

As a visual aid, the hospital is ordering preprinted whiteboards that will include the items on the checklist. The boards will have red and green slides to indicate which activities have been completed.

Sparks’s advice to others who want to implement the WHO checklist: “Look at this not as just another task but as a means to prevent complications. It works—the literature shows it works. It is really a benefit to patients, the physicians, and the nursing staff.”

—Pat Patterson

**Reference**