Survey shows assigning extra staff to OR cases is widespread

The standard staffing pattern for a surgical case is one scrub person and one circulating RN. But there are many situations for which ORs assign additional personnel. A surgeon may expect the hospital to provide an assistant, robotic-assisted surgery with its complex setup requires an additional person, additional help may be needed for patients who are morbidly obese, and so forth.

To learn more about how ORs assign additional personnel, OR Manager conducted an online survey in September 2010. OR Manager subscribers were polled about staffing patterns for 12 types of procedures as well as for other situations.

In all, 353 responses were received, with 69% of the responses from community hospitals, and 31% from academic hospitals with surgical residents.

The diversity in staffing patterns was striking. For bariatric surgery and total joint replacements, for example, community hospitals were evenly split on whether they use 1 scrub person or 2. For vaginal hysterectomies, while 57% use 1 scrub, 43% use 2 or 3 persons in the scrub role.

Comments reflected the differences. One person wrote, “Our staffing model rarely allows for only 2 staff in a room.” Another said, “We rarely assign 3.” Yet substantial numbers reported using additional personnel for common types of surgery, such as major abdominal surgery and complex spine cases. (See p 10.)

It’s not just complex surgery that drives staffing needs. A couple of respondents noted the demands placed by computerized charting.

“E-charts take longer to do than the procedures,” said one respondent. “Other OR staff have complained that the computer takes up too much time for just 1 circulator on many cases.” But “administration does not feel that way,” this person added.

First assistants

Use of hospital-employed first assistants is widespread, the survey found.

First assistants are defined by the American College of Surgeons (ACS) as trained individuals who assist the surgeon “by helping to provide exposure, maintain hemostasis, and serve other technical functions.”

In all, 67% of community hospitals and 53% of teaching facilities say they use first assistants on a daily basis. Several commented that they use first assistants for all or nearly all procedures (related article, p 12).

For community hospitals, surgical technologists (STs) are the most common type of first assistants, while in teaching hospitals, physician assistants are most frequently used.
Does your OR have specialty teams; ie, staff assigned regularly to certain specialties?

Community hospitals

- Yes: 64%
- No: 36%

Academic hospitals

- Yes: 87%
- No: 13%

Most common specialty teams

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Community hospitals</th>
<th>Academic hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac surgery</td>
<td>56%</td>
<td>77%</td>
</tr>
<tr>
<td>General surgery</td>
<td>37%</td>
<td>NA</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>84%</td>
<td>82%</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>43%</td>
<td>75%</td>
</tr>
<tr>
<td>Other</td>
<td>94%</td>
<td>53%</td>
</tr>
</tbody>
</table>

NA = not asked

Others named:
- Community hospitals: Urology, bariatric, robotics, ENT, vascular, ophthalmology, plastic surgery, endovascular, head and neck, pediatrics, dental.
- Academic hospitals: All services, robotics, urology, ophthalmology, GYN, general surgery, ENT, plastic surgery, bariatric, endovascular, transplant, pediatrics.

Do you routinely have unassigned staff (floats) who cover staff for breaks and lunch?

Community hospitals

- Yes: 63%
- No: 37%

Academic hospitals

- Yes: 76%
- No: 24%
Do you routinely use assistive personnel (e.g., nursing assistants, orderlies) to perform certain tasks during surgery (i.e., prepping and opening sterile supplies, holding a camera or a limb)?

<table>
<thead>
<tr>
<th>Task</th>
<th>Community Hospitals</th>
<th>Academic Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepping</td>
<td>14%</td>
<td>23%</td>
</tr>
<tr>
<td>Opening sterile supplies</td>
<td>64%</td>
<td>60%</td>
</tr>
<tr>
<td>Holding limb/camera</td>
<td>64%</td>
<td>60%</td>
</tr>
</tbody>
</table>

Other:
- Community hospitals: Supporting anesthesia providers, retraction, second scrub.
- Academic hospitals: Patient transfer, operating special equipment for total joint procedures, holding heart for CABG.

Are additional nursing personnel routinely assigned to monitor the patient for procedures performed under local anesthesia without sedation or regional anesthesia when monitoring is not provided by anesthesia personnel?

<table>
<thead>
<tr>
<th>Community Hospitals</th>
<th>Yes 65%</th>
<th>No 35%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic hospitals</td>
<td>Yes 68%</td>
<td>No 32%</td>
</tr>
</tbody>
</table>
Specialty teams

Also widespread is the use of specialty teams, in which staff are regularly assigned to the same service or surgeon.

The vast majority of respondents—64% of community hospitals and 87% of academic hospitals—have regular teams for at least some of their specialties.

In community hospitals, medium-sized and large departments were the most likely to have specialty teams:

- 1-4 ORs: 10%
- 5-9 ORs: 42%
- 10+ ORs: 43%

Teams were most common for orthopedics and cardiac surgery, though a wide variety of other types of surgery were named, including robotic, pediatric, bariatric, urologic, ophthalmologic, and endovascular surgery, to name a few.

“Everyone does all cases, but we have some people who do certain specialties on a regular basis,” one person commented. Another said that staff are often assigned to certain surgeons rather than to a specialty.

Though a surgeon and staff satisfier, specialty teams can be difficult to balance with the need to maintain enough personnel with generalist skills who can staff a variety of cases and take call.

Assistive personnel

Assistive personnel, such as nursing assistants and orderlies, sometimes are
used to stretch staffing for surgical cases. In all, 23% of community hospitals and 35% of academic facilities say they routinely use assistive personnel for tasks that don’t require an RN or an ST. The most common duties are opening sterile supplies and holding a limb or camera, with fewer using them for the surgical prep. Examples of other tasks these assistants perform are providing retraction and holding the heart during coronary artery bypass surgery.

**Floating for breaks**

To provide scrub and circulating nurses with needed breaks and lunches, the majority of respondents—63% of community hospitals and 76% of teaching hospitals—have staff who are unassigned, or act as floats, to cover staffing needs during these periods.

**Monitoring for sedation/analgesia**

For patients receiving sedation/analgesia, 71% of community hospitals and 63% of academic hospitals say they assign additional nursing personnel to monitor the patient when monitoring is not provided by an anesthesia provider.

Standards for monitoring during sedation/analgesia were imposed about 10 years ago after nurses reported they were being asked to administer anesthetic drugs and monitor patients, sometimes during long cases. Concerns were raised about patient safety as well as scope of practice. A number of professional associations adopted policies, and the Joint Commission adopted specific standards for sedation in 2000.

The 2010 Joint Commission hospital standards require persons giving moderate or deep sedation and anesthesia to “have credentials to manage
and rescue patients at whatever level of sedation or anesthesia is achieved, either intentionally or unintentionally.” In addition, a sufficient number of qualified staff must be present to evaluate the patient, provide the sedation, help with the procedure, and monitor and recover the patient (PC.03.01.01).

AORN recommended practices specify that a perioperative nurse monitoring a patient receiving moderate sedation/analgesia should “have no other responsibilities that would require leaving the patient unattended or would compromise continuous monitoring during the procedure.”

For patients receiving local anesthesia or regional anesthesia alone, 65% of community hospitals and 68% of teaching facilities say they assign an additional nurse to monitor patients.

AORN recommends that the RN managing the care of a patient receiving local anesthesia “should monitor and interpret the patient’s physiological and psychological responses throughout the procedure” but does not say the nurse must have no other duties.

**Robotic-assisted procedures**

For procedures performed with a robot, 38% of community hospitals and 50% of teaching facilities say they assign additional staff. For community hospitals, the type of additional personnel is evenly split between scrubs, circulators, or assistants. For teaching hospitals, additional staff are more likely to be circulators.
The additional staff help in setting up the equipment and starting the case as well as aiding turnover between cases.

At Ohio State University (OSU) Medical Center in Columbus, which was the first hospital to use a da Vinci robot and performs 1,200 robotic-assisted procedures a year, these cases are staffed by 1 scrub person and 1 circulating RN. The lead ST or the RN service coordinator for robotics is available to assist with case setup, relief, turnover, and other needs.

**Laparoscopic surgery**

Just over half of community hospitals (54%) but only a quarter of academic centers (24%) in the survey assign additional staff to minimally invasive procedures. By far, the extra person assigned is in the scrub role.

One OR director says her facility assigns a second scrub to any case with a laparoscopic camera. “Our doctors demand it,” she notes, saying it is “nearly impossible” to hold the camera still while reaching for instruments.

Others say a single scrub is adequate, or they assign an extra person only occasionally. One wrote that a metal arm is used to hold the camera.

**Morbidly obese patients**

About half of community hospitals (52%) and 27% of teaching centers provide additional personnel for patients who are morbidly overweight. By far, in community hospitals, these extra staff are scrub persons, while in teaching hospitals, they are split between scrub personnel and circulators.
A number of respondents commented that they assign extra personnel depending on the need, physician request, or staff availability. “If needed for exposure and retracting,” one wrote. “Someone will help the circulator with getting case started but [is] not assigned,” said another. Others assign a first assistant rather than an additional scrub or circulator.

—Pat Patterson

—Kathleen Miller, MSHA, RN, CNOR

References
