Two hospitals recognized by the Institute for Healthcare Improvement (IHI) describe their protocols.

Small hospital diligent on warming

Perioperative staff at 45-bed Porter Hospital Inc in Middlebury, Vt, has paid close attention to patient warming.

Porter was recognized by IHI for a 0 infection rate in more than 350 surgical procedures performed during IHI’s 100,000 Lives Campaign. The campaign’s goal is to prevent unnecessary hospital deaths by encouraging evidence-based practice.

The current record at Porter Hospital is 1 infection in more than 400 procedures.

Porter’s normothermia protocol includes monitoring patients’ temperatures in the preoperative holding area, the OR, and the postanesthesia care unit (PACU).

Forced-air warming blankets are placed on all patients in the OR and remain on into the PACU. The blankets are removed either when patients say they are too warm or are discharged from the PACU. All patients also receive warmed IV solutions.

Ann Beauregard, RN, BS, Porter’s performance improvement manager, reviews all patient charts monthly to monitor that the normothermia protocol is being followed. The team checks for readmissions within 30 days of surgery. They also send questionnaires to surgeons asking them to report any postoperative infections they see in their offices.

The nursing staff and physicians “eagerly anticipate the monthly data reports” and usually ask for the numbers before she has them ready, Beauregard says. “They want to keep that infection rate at 0,” she says. “Once the staff see the value in what they are doing, they will take it on and go with it.”

Porter has 3 ORs and is opening a new 3-room OR suite this fall.

Staff, physicians back protocol

All surgical patients at OSF St Joseph Medical Center, Bloomington, Ill, receive forced-air warming blankets in the OR, even for short procedures such as dilatation and curettage. The blankets are left on in the PACU if the patients want them for comfort, says Jan Weaver, RN, CNOR, clinical manager of surgical services. Each of the 5 ORs has a blower for the blankets, and the PACU has 2.

Patients also receive warmed irrigation fluids for laparoscopic cases and warmed IV fluids for longer cases. The ambient OR room temperature has been raised. Bladder catheter thermometers are used to monitor patient temperatures for long cases, and liquid-crystal forehead temperature indicator strips are used for short cases.

One sticking point with the staff was raising the ambient room temperature to 64°F from about 55°F.

Many staff said 64°F was too warm, “so we looked at ways to cool the staff, such as cooling vests,” says Weaver.
The normothermia protocol was developed by Patricia Conte, RN, MSN, CNOR, director of surgical services, as a part of the hospital’s participation in the Surgical Infection Prevention (SIP) program sponsored by the Centers for Medicare and Medicaid Services and the Centers for Disease Control and Prevention in 2002 and 2003. Because SIP was a corporate initiative, the administration supported development and funding of the normothermia protocol, Conte says.

St Joseph has been so successful at lowering its infection rate that it is nationally recognized by IHI as a mentor for other facilities in the fight to prevent surgical site infections (graph).

“Putting forced-air warming blankets on all surgical patients adds a small cost to each case, but the cost of having a patient with an infection is so much higher, and the administration recognized this,” she says.

Buy-in was almost immediate

At first, anesthesia personnel were opposed to using warming blankets for short cases, Weaver says, but after she informed them that the nursing protocol was to place warming blankets on all patients, buy-in was almost immediate.

Surgeons don’t object to warming all patients as long as they are getting good results. “We have not had any issues with patients being hypothermic since we instituted this protocol,” she adds. “Change is always hard, which is why you should always start off with education. You have to educate the staff on how warming the patient lowers the infection risk.”

Now that the staff have seen the statistics on patient warming and watched the infection rate drop, they are behind the protocol 100%, she says.

—Judith M. Mathias, RN, MA

### Monitoring surgical site infections

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Source: OSF St Joseph Medical Center, Bloomington, Ill