SCIP-Inf-10 is Here: The National Normothermia Measure

On July 31, 2009, the Centers for Medicare & Medicaid Services (CMS) issued a final rule that revises policies and payment rates for general acute care hospitals that are paid for inpatient services under the Inpatient Prospective Payment System (IPPS), effective for discharges beginning October 1, 2009 (fiscal year 2010).

The IPPS FY 2010 final rule includes the chart-abstracted measure, SCIP Infection 10 – Surgery Patients with Perioperative Temperature Management. Below are some common questions and answers regarding this the measure.

Q: To whom does the measure apply?

A: SCIP-Inf-10 applies to all patients regardless of age undergoing surgical procedures under general or neuraxial anesthesia one hour or longer. For these patients, facilities must either use an active warming modality, such as forced-air warming, or achieve the target temperature of 36°C or greater within 30 minutes immediately before or 15 minutes immediately after anesthesia end time.[1]

Q: How will this measure affect my facility?

A: Measures are intended to strengthen the relationship between payment and quality of services for Medicare beneficiaries. Your facility may be actively warming more surgical patients than previously. A prior measure, SCIP-Inf-7, recommended patient warming for colorectal surgery patients. SCIP-Inf-10 supplants SCIP-Inf-7 and applies to a much broader patient population.

Q: Why is this normothermia measure beneficial?

A: Core temperatures outside the normal range pose a risk to all patients undergoing surgery. Research has identified a correlation between unintended hypothermia and impaired wound healing, adverse cardiac events and coagulopathies.[2] One study has shown that the incidence of culture-positive surgical site infections among those with mild perioperative hypothermia was three times higher than the normothermic perioperative patients.[3]

An editorial in *Anesthesia & Analgesia* says that the normothermia measure was proposed because "… the literature is strong, the practice gaps substantial, and effective management is inexpensive and easy to implement."[4]

The piece goes on to say, "Maintaining normothermia is usually easy… furthermore, the most commonly used warming systems are remarkably safe. There are few, if any, anesthetic interventions that have been proven to so markedly improve the outcome of surgery with so little effort, risk and cost…."[4]

In addition, a meta-analysis of outcomes and costs found that hypothermia is associated with a significant increase in adverse outcomes, including an increased rate of wound infection. These adverse outcomes resulted in prolonged hospital stays and increased health expenditures by $2,500 to $7,000 per patient.[5]

Q: Are newborns included in the SCIP-Inf-10 population?

A: For SCIP-Inf-10, the denominator includes all ages, even newborns.[1]

Q: What steps can my facility take to implement a patient warming program?

A: Conduct a temperature audit.* Determine how many of your patients currently are normothermic upon arrival at PACU. Some estimates say 50 percent or more of all surgical patients are hypothermic upon admission to the recovery room.[6]

Implement consistent, accurate patient temperature recording processes. The measure calls for at least one body temperature of ≥36°C to be recorded within the 30 minutes immediately before or the 15 minutes immediately after anesthesia end time. Simple tools like temperature tracking stickers adhered to patient charts can encourage data recording habits consistent with the measure.

Actively prewarm patients. Anesthetized patients are susceptible to unintended hypothermia because core temperature drops by as much as 1.6°C within the first hour of general anesthesia induction.[7] In shorter-duration surgeries, you may not have enough time to actively re-warm a patient to normothermia intraoperatively. Prewarming patients before surgery can help avoid this significant drop in temperature, essentially stopping hypothermia before it might otherwise begin.[8]

Make warm the norm. Choosing a system that is easy to implement and use can help improve staff compliance. Forced-air warming is present in more than 85% of U.S. hospitals. The equipment is available in most facilities and staff is already familiar with how to use it. By choosing a forced-air warming system that can easily accommodate your diverse surgical population or standardizing to patient warming gowns, you can effectively improve your success.

Expand the use of perioperative warming. Risks associated with unintended hypothermia include higher mortality rates[9], longer hospital stays[3] and an increased rate of wound infection.[3] Forced-air warming is a simple, proven, cost-effective method to prevent unintended hypothermia and its complications. Maintaining normothermia also is cited by healthcare initiatives around the world as a key factor in helping reduce the rate of surgical site infections.

Use forced-air warming. More than 100 scientific papers have been written about the benefits of forced-air warming and prevention of hypothermia. Studies have found forced-air warming to be the most effective method in general for preventing and treating unintended hypothermia.[10] Also, the goal of the measure is to help patients avoid unintended hypothermia and its complications, so be sure to have the most effective tools available.

Arizant Healthcare Inc. pioneered the concept of forced-air patient warming with the introduction of Bair Hugger® therapy in 1987. Today, more than 85 percent of U.S. hospitals use Bair Hugger therapy and its presence is growing around the globe. With the introduction of the Ranger® blood/fluid warming system and, most recently, the Bair Paws® patient adjustable warming system, our patient warming products have been used to maintain normothermia in over 125 million patients worldwide.

Arizant's most recent introduction, the Bair Paws Flex™ gown, combines the company's two most popular warming products: the Bair Paws warming gown and Bair Hugger upper and lower body blankets. This unique combination allows a single Bair Paws Flex gown to offer the ultimate in patient warming flexibility and the ability to quickly, easily warm every surgical patient—an important consideration with the normothermia measure now in place.

To learn more about Arizant's surgical temperature management solutions, contact your Arizant Healthcare representative or call Arizant Customer Service at 1-800-733-7775. You may also visit our websites at **www.bairhugger.com**, **www.bairpaws.com**, or **www.rangerfluidwarming.com**.

*For more information on how to conduct temperature audits for your facility, contact an Arizant Healthcare representative.

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Arizant Healthcare Inc. 10393 West 70th Street, Eden Prairie, MN 55344 tel: 1-800-733-7775 fax: 1-800-775-0002 web: www.arizant.com 603146B 7/10