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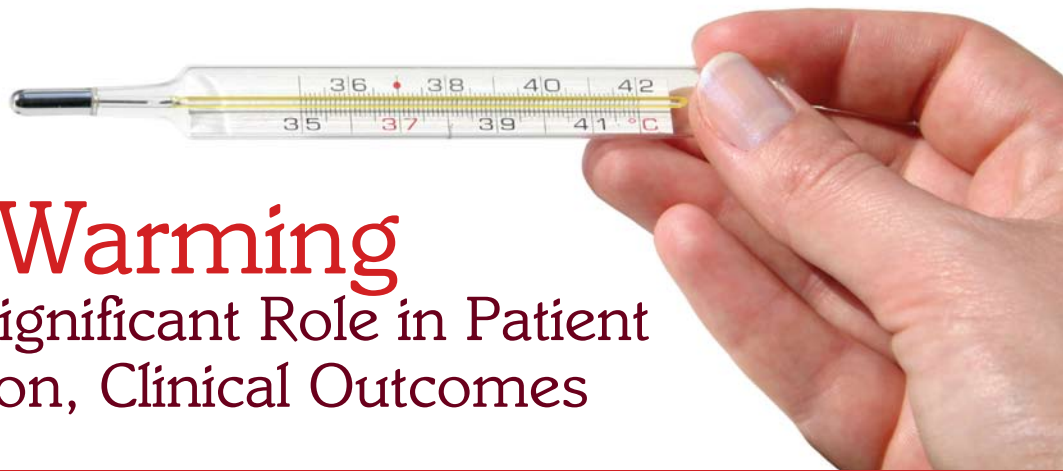
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## Hand Hygiene and Skin-Care Issues in Infection Prevention

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# Patient Warming

## Plays a Significant Role in Patient Satisfaction, Clinical Outcomes

By Al Van Duren

The old adage, “The customer is always right,” has long been the mantra for those providing consumer goods and services. Whether purchasing the latest technology or dining at the newest restaurant, it has become generally accepted that customers will show their satisfaction through return visits, future purchases, or referrals.

Healthcare, however, has traditionally followed a different path. Patients became accustomed to the bland hospital food or ill-fitting hospital gowns. These “symbols” of hospital care became unpleasant realities that patients endured as part of receiving care for their conditions. Patient comfort, modesty and emotional support were secondary issues to treating disease. Outcomes outranked the patient experience.

Today, the healthcare industry is in the midst of an enormous change. The line of thinking in place for decades is quickly losing traction as consumer-directed healthcare plans and pay-for-performance reimbursement arrangements increasingly emphasize the importance of improved outcomes, patient satisfaction and the entire care experience.

The focus is shifting to consumers, who are more empowered to make choices related to their care. And hospitals must now look at patients as customers — individuals who can choose where to receive care, weigh in on treatment options and even select the physicians who attend to them. To keep pace with this transformation, progressive facilities are thinking competitively and developing improvements that can raise the bar on patient care and satisfaction while also maintaining, or even enhancing, the bottom line.

Many hospital strategies to improve patient satisfaction seem to primarily focus on upgraded service amenities — room service dining or gourmet coffee — or revolve around improving the patient’s perception of care through cosmetic changes like attractive waiting areas and in-room plasma televisions.

Facilities may be better served by investing in patient satisfaction improvements that not only enhance the experience for their customers, but also bring clinical benefits that can improve patient outcomes. To be successful, hospitals must commit to improving the quality of care in substantive ways rather than simply implementing superficial enhancements.

According to Irwin Press, PhD, cofounder of Press Ganey Associates and author of *Patient Satisfaction: Understanding and Managing the Experience of Care*, “Of all the reasons for paying attention to patient satisfaction, only one transcends correctness, accountability, or accreditation standards — quality of care. Patient satisfaction is important because it is a component of care as well as an outcome of care. When patients are satisfied, both the immediate care and

subsequent clinical outcomes are enhanced. At the same time, when the quality of care is high, satisfaction will be measurably high. This ‘double whammy’ should be sufficient to make improving and monitoring patient satisfaction a core concern of every healthcare institution and provider.”<sup>1</sup>

This article explores the patient satisfaction equation and focuses specifically on how improving patients’ physical comfort in a very elemental, but influential way — by actively warming them — can boost patient satisfaction while also elevating their level of care. We will examine:

- Why patient satisfaction is driving change in the healthcare industry
- How patient warming factors into current patient satisfaction measurements
- The results of a recent patient satisfaction survey related to a unique patient warming gown that actively warms patients
- The proven clinical benefits of active patient warming

### Patient Perception is Reality

Press defines patient satisfaction as “a person’s experience and perception of care.”<sup>2</sup> The way patients feel — emotionally as well as physically — can determine whether they’ll return to a facility or recommend a doctor/healthcare facility to their family and friends.<sup>2</sup> If patients have a good experience and the desired clinical outcome was achieved, they may be more likely to tell family and friends, increasing business by generating referrals and repeat customers.

Even more important is the patient who has a bad experience. It is estimated that an unhappy patient will tell 10 to 12 people about their experience.<sup>2</sup> As word of that person’s experience spreads, so can negative feelings and perceptions about that healthcare facility. Word of mouth about how a hospital serves its patients can either bolster visits or potentially lead patients to another hospital down the street or across town.

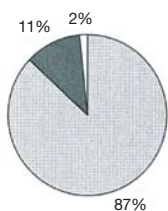
A positive patient experience can become a distinct competitive advantage for a healthcare facility. It can set them apart, drive traffic to their door and feed their revenue stream. Studies have shown that individual purchase decisions are influenced more by personal experiences and the experiences of significant others or family than by a public claim of quality from hospitals or a published report card.<sup>3</sup> According to the Kaiser Family Foundation, 70 percent of Americans said they are more likely to choose a hospital, doctor, or health plan based on the recommendation of a family member or friend versus industry ratings.<sup>4</sup>

Patient satisfaction also can be closely linked to the financial strength or profitability for a healthcare facility. A 51-hospital study found a strong relationship between hospital financial performance and patients' ratings of care. The study's authors concluded that "Relatively small increases in the level of patient satisfaction are associated with millions of dollars in year-end earnings for the average hospital."<sup>5</sup>

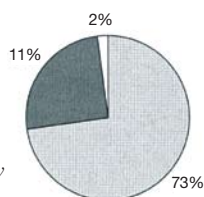
In addition, studies conducted in 2002 and 2003 show a direct correlation between the patient satisfaction scores and financial strength of more than 1,300 hospitals examined by Press Ganey & Associates and *Hospitals & Health Networks* magazine. Their findings revealed that the higher the patient satisfaction score, the more profitable the hospital.<sup>6</sup>

Specific survey findings include:<sup>10</sup>

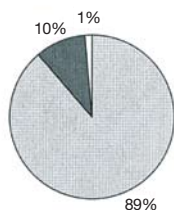
*The warming gown kept me comfortable*



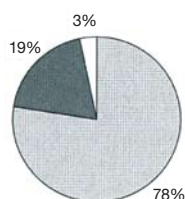
*The warming gown had a positive impact on my surgical experience.*



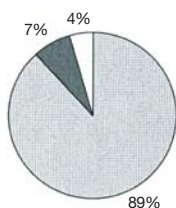
*The warming gown protected my modesty (personal privacy).*



*When I talk about my surgical experience with my friends, I will tell them about the gown*



*I prefer the warming gown over a standard hospital gown.*



So, what does this all mean for today's healthcare facilities? In short, today patient satisfaction is an inseparable part of care, quality and successful operations. Patient satisfaction is a potent mechanism for increasing and sustaining a facility's quality, efficiency, market share and bottom line. Best of all, efforts to improve patient satisfaction more than pay for themselves.<sup>1</sup>

### Feeling Cold a Top Concern

Patients may not be well versed in the science or methods behind a particular surgery, but they can easily assess whether or not they were comfortable while receiving care and how they felt about the experience. They will remember if they were too cold or too hot, if the bed was uncomfortable or the food unappealing. They'll also remember feeling overly nervous, exposed, anxious or vulnerable, and such feelings may

affect how they feel about — and how they rate — their provider or healthcare facility.

So it's little surprise that when surveyed, nurses cited warmth most often (33.3 percent) as the top patient comfort concern, followed by pain management (18.3 percent) and patient positioning (12.2 percent).<sup>7</sup>

Shivering occurs in approximately 40 percent to 60 percent of all unwarmed patients recovering from general anesthesia.<sup>8</sup> However, if shivering is caused by cold, only active warming will bring relief and protect the patient from the potential consequences of unintended hypothermia.

Thermal comfort is significantly greater in patients who are actively warmed than in patients who are not.<sup>9</sup> Research conducted in 2001 revealed that none of the actively warmed patients in the study verbalized being cold and 66 percent reported a score of "most comfortable" on the comfort scale.<sup>9</sup>

These results underscore the need for active warming interventions — not simply in the clinical context in maintaining normothermia, but also as a means of increasing overall patient comfort in the perianesthesia setting.<sup>7</sup>

### A Study of Patient Warmth, Satisfaction

In an effort to identify how patient warming affects patient satisfaction and the overall patient experience, Arizant Healthcare Inc., a leading manufacturer of patient temperature management systems, worked with U.S. healthcare facilities in 2006-2007 to gather feedback from surgical patients across the country. Each patient involved in the survey was provided the company's forced-air warming gown prior to surgery.

The written survey of 1,844 surgical patients was conducted with those who had used this forced-air warming gown for at least 30 minutes prior to surgery. The results of the survey showed a strong correlation between patient satisfaction and comfort and the use of the forced-air warming gown.

Of particular interest, 83 percent of respondents said they preferred the forced-air warming gown over the standard hospital gown and more than 77 percent said they would tell a friend or family member about their experience with the forced-air warming gown. More than 86 percent said the forced-air warming gown kept them comfortable before surgery.

### The Comfort Theory

Developed by Katharine Kolcaba, PhD, RN, C, the Comfort Theory is based on the "strengthening aspect of comfort as being central to nursing"<sup>7</sup> and focuses on improving the patient experience in four contexts:

- Physical
- Psycho-spiritual
- Socio-cultural
- Environmental

Patient warming and thermal control are essential elements of the physical and environmental contexts outlined by Kolcaba.

The Comfort Theory proposes that when patients are comfortable on these four levels, they are more likely to engage in health-seeking behaviors that can improve their condition. Healthcare facilities also can benefit from the Comfort Theory in that health-seeking behaviors can lead to reduced costs, increased patient satisfaction and improved outcomes for the facility.<sup>7</sup>

One particular warming method, forced-air warming, has also been shown to reduce patient anxiety before surgery, which is clinically desirable because a patient who is less anxious may require less anesthesia, fewer interventions, and typically has a better overall experience.<sup>11</sup>

The study, conducted by Kolcaba, Doreen Wagner, RN, PhD, CNOR, and Michelle Byrne, RN, PhD, CNOR, also demonstrated that putting patients in control of their own thermal warmth while using forced-air warming produced better results than did the application of warmed cotton blankets for certain aspects of comfort, including thermal comfort, self-perception of body temperature, perception of room temperature, shivering and warmth in the chest area.<sup>11</sup>

### Active Warming's Clinical Benefits

While patient comfort is important and the primary focus of this paper, the importance of patient outcomes also deserves mention given the proven clinical benefits of active warming and the maintenance of normothermia in surgical patients. More than 14 million U.S. surgical patients experience unintended hypothermia each year<sup>12</sup> and unintended hypothermia is a common occurrence in surgery.<sup>13</sup>

Studies have suggested that maintaining normothermia in some general-type surgeries may yield positive results such as:<sup>14</sup>

- Reduction in the rate of postoperative wound infections
- Decreased likelihood of postoperative myocardial infarction
- Decreased ICU time
- Shortened length of hospital stay
- Lowered mortality rates
- Reduction in the use of blood products
- Decreased likelihood of mechanical ventilation
- Reduced probability of needing a transfusion

Normothermia's relationship to surgical site infections (SSIs) has garnered special attention in recent years, with national initiatives citing normothermia maintenance as a tool in SSI reduction efforts. Hypothermic patients with core temperatures just 1.5 degrees Celsius to 2 degrees C below normal have three times as many culture positive surgical wound infections as normothermic patients.<sup>15</sup>

### Warm From Start to Finish

The induction of anesthesia is the single greatest contributor to unintended hypothermia, resulting in 81 percent of total heat loss due to redistribution temperature drop (RTD).<sup>16</sup> Actively warming surgical patients before the induction of anesthesia — known as prewarming — is an effective way to head-off hypothermia before it begins.

Forced-air warming gowns and blankets, when used preoperatively, can prevent hypothermia in most surgical procedures and can delay the onset of hypothermia in longer procedures. When prewarming is combined with intraoperative warming, it can prevent hypothermia for longer procedures as well. Prewarming can easily be incorporated into the pre-surgical routine. A general strategy should include the initiation of warming therapy as soon as patients are admitted to the pre-surgical area.

For convenience, forced-air warming gowns are an ideal solution for obtaining full staff compliance. The patient gown embodies the ideal warming technology because it travels directly with the patient from preop, into the operating room (OR) and then to PACU.

### The Parts Comprise the Whole

Patient satisfaction relies on multiple factors and entities to create the best possible patient experience. And the best possible patient experience in turn delivers greater patient satisfaction scores.

Implementing a preoperative patient warming program as one element of an overall effort to improve patient satisfaction requires only a minimum investment of time and can be cost-effective, eliminating

staff trips to the blanket warmer, yielding fewer patient complaints and reducing laundry costs and replacement expenses for cotton blankets and gowns. Studies have also suggested that maintaining normothermia can result in savings of \$2,500 to \$7,000 per patient<sup>14</sup> that might otherwise be spent treating the complications of unintended hypothermia.

Patient warming holds tremendous potential for strong returns in terms of both improved patient outcomes and increased patient satisfaction. Hospitals need to address improving the patient experience as a long-term strategic goal, committing to improvement in the quality of care while making more than just cosmetic enhancements. Now more than ever, including the patient experience in strategic plans is a key component to securing future growth. **ICT**

*For more information about the Bair Paws Patient Satisfaction Study or the Bair Paws System, contact Al Van Duren at (952) 947-1247 or via e-mail at [avanduren@arizant.com](mailto:avanduren@arizant.com).*

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