



# PREVENTION ABOVE ALL

TARGETED INTERVENTIONS • PRACTICAL SOLUTIONS

*Combining Innovative Products  
with Evidence-Based Solutions*

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*There is compelling evidence that many hospital-acquired conditions (HACs), specifically those targeted by CMS as “never events,” are preventable.*

*And there are plenty of great products and evidence-based solutions available. The challenge is implementing these solutions; the need to educate caregivers, organize data and assist the healthcare provider with process improvement.*

*Medline brought together health care’s best strategic thinking on practice, policy and patient safety to develop targeted interventions that translate research into practice, creating Prevention Above All.*



## Introducing Prevention Above All targeted interventions for increasing patient safety and care

***Medline presents a powerful and comprehensive solution to six of the most common hospital-acquired conditions (HACs).***

Preventing HACs is one of the most important issues in health care today. Simply put, the CMS reimbursement changes that took effect October 1, 2008 mean healthcare professionals must eliminate HACs and improve patient safety – or risk losing Medicare reimbursement dollars.<sup>1</sup> In addition, we see private insurers are adopting the same payment structures as the Centers for Medicare & Medicaid Services (CMS). All healthcare reimbursement is at risk with HACs.

The good news is that CMS has determined HACs are preventable through the application of evidence-based guidelines. Medline's Prevention Above All provides education, practical solutions and products to assist you with six of the most common HACs.

The six conditions targeted by Prevention Above All are:

- 1. Operating Room and Surgical Errors**  
Gold Standard Safety Program
- 2. Hospital-Acquired Infections**  
Hand Hygiene Compliance Program
- 3. Pressure Ulcers**  
Pressure Ulcer Prevention program
- 4. Harm Avoidance and Patient Satisfaction**  
Educational Packaging
- 5. Objects Retained After Surgery**  
ClearCount SmartWand-DTX™ and SmartSponge® System
- 6. Catheter-Associated Urinary Tract Infection (CAUTI)**  
ERASE CAUTI™ Foley Catheter Management System

## Fostering a culture of ideas, innovation and research— Medline's Discoveries Grants

Listening to customers who are on the front line every day is a key reason Medline has been able to deliver innovative products and programs to meet clinicians' needs. The input we receive is especially important since innovation is critical to advancing healthcare technology.

Innovation, however, isn't limited just to new products – it's also about stretching the good ideas and products we have in place to their fullest. With that in mind, Medline is committing up to \$1 million over several years to stimulate the gathering of solid evidence that supports the adoption of solutions into clinical practice.

### Objectives

- To stimulate research that will lead to the development of new targeted interventions aimed at reducing medical risks and harms associated with hospital-acquired conditions (identified by CMS in 2008 IPPS final rule).
- To test the cost and effectiveness of interventions and programs designed to reduce the incidence of hospital-acquired conditions.
- To disseminate practical, evidence-based solutions to healthcare facilities, leading to a reduction in hospital-acquired conditions.

Recipients of awards will be paired with a research mentor/consultant through the grant program to develop methods and guide the conduct of the study, ensuring that a rigorous research process is followed. These studies can be small pilot studies aimed at developing and testing the feasibility of new solutions or larger evaluation studies to more fully test the cost, effectiveness or dissemination of evidence-based solutions.

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*“I am pleased that Medline brought the Gold Standard safety products to our facility. As part of our safety initiatives, the Gold Standard products provide a visual reminder of our commitment to safety in the OR, and promote safety without requiring us to change our existing protocols. That makes it easy for us to implement and allows us to help remind our staff of the importance of safety in the OR.”*

Peggy Trevor, RN, BSN, CMRP  
Director, Regional Surgical Optimization  
Baptist Health System  
San Antonio, Texas



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*“The goal of the University Community Hospital (UCH) program is to increase hand-washing compliance given that 70% of infections are spread through the hands, but it is also to fall in line with goals set out by the Joint Commission to reduce hospital infections. Among those goals are for hospitals such as UCH to fall in line with CDC and World Health Organization hand-hygiene guidelines.”*

Debbie Martoccio, RN, BSN, MBA, CNAA-BC  
Vice President of Patient Care  
and Chief Nursing Officer  
University Community Hospital  
Tampa, Florida



## Intervention #2



**Target:**  
**Hospital-Acquired Infections**  
***Hand Hygiene Compliance Program***

**The Challenge:**

As the number one defense against healthcare-acquired conditions – it is estimated that hand washing alone could prevent 20,000 patient deaths per year<sup>7</sup> – proper hand hygiene is one of the cornerstones in preventing the spread of healthcare-associated infections (HAIs).<sup>8</sup> Studies have shown, however, that despite being a proven effective practice, hand hygiene compliance among healthcare workers is poor, with the World Health Organization reporting an average compliance rate of 40 percent.<sup>9</sup>

**The Impact:**

There are two million HAIs annually in the United States, resulting in more than \$30 billion in avoidable healthcare costs and 90,000 inpatient deaths.<sup>10</sup>

**The Prevention Above All Intervention:**

The Hand Hygiene Compliance Program contains three products – Sterillium Comfort Gel<sup>®</sup>, Medline Remedy<sup>®</sup> Products and AloeTouch<sup>®</sup> Exam Gloves – clinically proven to moisturize dry skin. The program includes an intensive educational module developed by an expert panel of infection control professionals. Healthcare workers can earn up to four continuing education credits by completing the training program. Additional components include testing for skill and competency validation through the use of Visirub and a UV light box. Patient education pamphlets, facility posters and a rewards program are also included to reinforce positive behavior change.

**Fact:**

*Hand hygiene compliance among healthcare workers is poor, with the World Health Organization reporting an average compliance rate of 40 percent.<sup>9</sup>*

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*“With the new CMS ruling, wound care nurses have a huge role to play in transferring the expertise they’ve accumulated on pressure ulcers in their practices, some over dozens of years, to a whole team of players. So, Medline’s Pressure Ulcer Prevention Program is an excellent tool for nursing staff. If you just look at the pressure ulcer part of the CMS ruling, there’s a high training and education component that each facility is going to have to grapple with. It’s more complicated than just learning four stages or six types of pressure ulcers; there are things that look like they might be pressure ulcers but aren’t. And it’s going to be an ongoing implementation issue from one facility to another, depending on their case mix and who comes to their facility.”*



Diane Krasner, PhD, RN, CWCN, CWS, BCLNC, FAAN  
Wound & Skin Care Consultant  
York, Pennsylvania



## Intervention #4



### **Target:** **Harm Avoidance and Patient Satisfaction** *Advanced Wound Care Educational Packaging*

#### **The Challenge:**

Wound care costs the U.S. healthcare system more than \$20 billion each year, including more than \$4 billion spent on wound management products.<sup>13</sup> On many wound care products, the indications and directions for application are printed only on the package insert, which is regularly thrown away. Moreover, the inner pouch usually contains limited information. Not only can the lack of this information leave the user guessing what the dressing looks like, what its indications are, how to apply and when to remove it, but it also creates additional time and product waste.

#### **The Impact:**

The Institute for Healthcare Improvement (IHI) estimates that nearly 15 million instances of medical harm occur in the United States each year – a rate of more than 40,000 per day.<sup>14</sup> These medical errors cost the nation approximately \$37.6 billion each year; about \$17 billion of those costs are associated with preventable errors, according to the November 1999 report of the Institute of Medicine.<sup>4</sup>

#### **The Prevention Above All Intervention:**

Medline's Advanced Wound Care packaging allows each package to serve as a two-minute course on advanced wound care. The innovative design is an improved delivery and communication system to help healthcare professionals better understand and more easily deliver wound care at the patient's bedside. It reduces confusion with clear, step by-step information, eliminating the clutter and highlighting critical information. In a study, the use of educational packaging made a significant improvement in the nurse's ability to select and apply the correct dressing the proper way.<sup>15</sup>

#### **Fact:**

*The Institute for Healthcare Improvement (IHI) estimates that nearly 15 million instances of medical harm occur in the United States each year – a rate of more than 40,000 per day.<sup>14</sup>*

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*The number of retained foreign objects left in after surgery is continuing to increase each year.*

*According to the California State Department of Public Health, from FY 2008 to FY 2009 the increase was 39%.*

*Currently, the increase from FY 2009 to FY 2010 is on track to end with an additional 15% increase.<sup>22</sup> It was suggested in a closed-claims study that in 88% of the cases involving retained instruments in which a count was conducted, the count was documented as being correct.<sup>23</sup>*



## Intervention #5



### **Target:** **Objects Retained After Surgery** **ClearCount SmartWand-DTX™ and SmartSponge® System**

#### **The Challenge:**

Retained surgical sponges are a big problem. Despite designation as a “never event,” retained items are estimated to occur in one of every 1,000 to 1,500 abdominal surgical procedures. Human counting error is the most common cause of unaccounted-for sponges being left behind. Studies attribute falsely correct sponge counts mainly to team fatigue, difficult or long operations, sponges “sticking together,” shift changes or procedures with a large number of sponges.<sup>16</sup>

#### **The Impact:**

Miscounts are costly and require timely actions needed to rectify the discrepancy (recounts, post X-rays, etc). Retrieving a sponge can cost hospitals an average of \$63,000 in follow-up operation expenses (according to Federal Register and Medicare statistics) per incident, not including legal fees and potentially large settlements.<sup>12</sup>

#### **The Prevention Above All Intervention:**

The SmartWand-DTX™ and SmartSponge® System uses a technology featuring chip-embedded sponges to count and locate sponges during surgery which, in turn, helps eliminate surgical errors and improve patient safety. The SmartSponge System can read and record the unique ID number of each sponge as it comes out of its packaging in the OR, as it is used in the patient, and as it is removed and disposed of. Both the SmartSponge and SmartWand-DTX count multiple sponges and read through blood and tissue, and they can locate a missing tagged sponge using radio waves to signal the RFID tag to identify itself, giving surgeons and operating room teams a new tool to prevent the anxiety of a potentially devastating operating room error.

#### **Fact:**

*The number one preventable harm on the CMS list of nonreimbursable condition is “foreign object retained after surgery.”<sup>1</sup>*

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*“Aside from a nurse having competencies and being taught Foley insertion procedures, it would be ideal to have a kit that is fully instructional and visual to remind the user of the steps for preventing infection during each and every procedure.”*



Catherine Soumerai, MT-ASCP, RN, BSN, CIC  
Director of Infection Control  
Florida Medical Center  
Fort Lauderdale, Florida



## Intervention #6



### **Target:** **Catheter-Associated Urinary Tract Infection (CAUTI)** **ERASE CAUTI™ Foley Catheter Management System**

#### **The Challenge:**

While the use of indwelling urinary catheters is thought to be the most significant risk factor for developing a facility-acquired urinary tract infection,<sup>17</sup> clinicians often pay little attention to the insertion decision, its optimal management and its timely removal.<sup>18</sup> Supporting data suggests that physicians are commonly unaware their patients have an indwelling urinary catheter.<sup>19</sup> Even though clinicians do their best to practice good aseptic technique, infections still happen.

#### **The Impact:**

CAUTIs are a major drain on hospital resources, increasing length of stay by one to three days. Such infections add approximately \$675 per patient to the costs of hospitalization. When bacteremia develops, this additional cost increases to at least \$3,800.<sup>20</sup> CMS reported that in 2007 patients with CAUTI had an average cost of \$44,043 per hospital stay.<sup>12</sup>

#### **The Prevention Above All Intervention:**

The new ERASE CAUTI program combines design, education and awareness to tackle catheter-associated urinary tract infection.

**Design:** The innovative one-layer tray design guides the clinician through the process of placing a catheter to ensure aseptic technique.

**Education:** The acronym ERASE is easy to remember, reminding the clinician to:

- E** — Evaluate indications
- R** — Read directions and tips
- A** — Aseptic technique
- S** — Secure catheter
- E** — Educate the patient

**Awareness:** As part of raising awareness, Medline has set a goal to introduce 100,000 nurses to its CAUTI prevention education program.

#### **Fact:**

*Urinary tract infection is the most common healthcare-associated infection; 80 percent of these infections are attributable to an indwelling urethral catheter.<sup>21</sup>*

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## Intervention #1



Surgical Time Out Drapes



### Target: Operating Room and Surgical Errors Gold Standard Safety Program

#### The Challenge:

The list of what can go wrong during a surgical experience is long and intimidating. Foreign bodies, mislabeled pathology specimens, operative fires, transfusion and medication errors, as well as wrong site, wrong procedure and wrong person surgery are just some of the preventable hazards. Studies show that patient safety is threatened when interruptions and frequent interferences occur.<sup>2</sup> Adverse events occur more often in surgery than in any other specialty and disproportionately greater harm results from surgical errors.<sup>3</sup> In addition, the Occupational Safety and Health Administration reports that the most injuries sustained by hospital employees occur in the OR.

#### The Impact:

The Institute of Medicine estimated that medical errors cost the United States between \$37.6 and \$50 billion each year.<sup>4</sup> Medical liability carriers paid an average of \$48,087 to patients for wrong-site orthopedic surgery claims and an average of \$76,167 to patients for wrong site surgery in other specialty areas.<sup>5</sup>

#### The Prevention Above All Intervention:

Medline's Gold Standard Safety Program is designed to break down barriers in surgical safety compliance by offering products, analysis tools and checklists. The program offers four levels of safety options:

1. The Gold Standard Safety Bundle: Six products that serve as visual safety reminders to reduce needle sticks and wrong site surgery. These products are a gold color that will alert the surgical team to the safety focus as well as set a gold standard in practice and compliance.
2. Innovative safety products: Surgical Time Out Procedure (S.T.O.P.™) Drapes (patent pending), ClearCount, SmartSponge Detection System and Universal Electrosurgical Pads.
3. AORN Checklist: Wrong site, wrong procedure, wrong patient surgery prevention.
4. Med-Pack™: Electronic pack audit and a review of safety components.

#### Fact:

*Wrong site surgery is the number one most frequently reported sentinel event and represents 13.4 percent of all errors reported to the Joint Commission.<sup>6</sup>*

## Intervention #3



### **Target:** **Pressure Ulcers**

#### ***Pressure Ulcer Prevention Program***

#### **The Challenge:**

Nearly 60,000 U.S. hospital patients are estimated to die from complications due to hospital-acquired pressure ulcers each year.<sup>11</sup> It is estimated that 2.5 million patients are treated each year in U.S. acute care facilities for pressure ulcers.<sup>11</sup>

#### **The Impact:**

The total cost of treatment of pressure ulcers in the United States is estimated at \$11 billion per year.<sup>11</sup> According to CMS, 257,412 preventable pressure ulcers were reported as secondary diagnoses in hospitals in 2007.<sup>12</sup> The average cost of each of those pressure ulcers is estimated to be \$43,180 per hospital stay.<sup>12</sup>

#### **The Prevention Above All Intervention:**

The Pressure Ulcer Prevention Program includes a strategic product bundle to assist in reducing or preventing pressure ulcers and incontinence-associated skin conditions. Products include Medline Remedy® Advanced Skin Care Products, Ultrasorbs® AP Dry Pads, Restore®/Remedy Adult Brief, and Theratech pressure redistribution mattresses. Specific OR products include Advantage O.R. table pads, Sahara® OR table sheets and gel positioners. This program also packages together education and training tools so a healthcare team can implement an effective pressure ulcer prevention program and immediately begin reducing the incidence of healthcare-acquired pressure ulcers. Included are workbooks, interactive DVDs for the CNA, LPN, RN, OR, and MD, patient and family education brochures and a rewards program.

#### **Fact:**

*Nearly 60,000 U.S. hospital patients are estimated to die from complications due to hospital-acquired pressure ulcers each year.<sup>11</sup>*

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*“One of the things that I really like about the packaging is how clearly things are stated... all the information is there.”*



Shelia Thomas, RN, BSN, CWOCN  
Borgess Medical Center  
Kalamazoo, Michigan

*“I think the packaging will help patients because a lot of times patients and families are overwhelmed by all the teaching you’re doing in the clinic setting... I know if they get a Medline product that basically they’re going to have everything they need.”*



Lynne Grant, MS, RN, CWON  
Sequoia Hospital  
Redwood City, California

