Skin Care Team in the Pediatric Intensive Care Unit: A Model for Excellence

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PRIME POINTS

- Alteration in skin integrity predisposes patients to infection and poor outcomes.
- Pressure ulcers can almost double patients’ length of stay.
- A pediatric skin care team provides expertise, trains staff, promotes policy, and leads evidence-based initiatives.
- Having a team committed to a specific entity such as skin care enhances resource availability, communication, and follow-through.

The skin is the largest organ of the body and has many complex functions.1 Intact skin is a barrier to infection; thus, alteration in skin integrity predisposes patients to infection and poor outcomes. Pressure ulcers are an important iatrogenic problem in health care with substantial financial costs.2,3 In a study of adverse events, Cho et al4 reported that pressure ulcers had the greatest effect on length of stay, with a 1.84-fold increase in stay for patients with such ulcers. Among the 7 groups of adverse events examined, pressure ulcers were the third most significant determinant of increased costs, after sepsis and pneumonia.4 Impaired perfusion, altered nutrition, unstable hemodynamic status, limited mobility, immunosuppression, and medications contribute to risk associated with altered skin integrity for critically ill children. Immature bowel and bladder control and large heads are inevitable contributory risk factors specific to children. Concomitant pain and altered appearance are physical and emotional burdens for patients and families already experiencing stress associated with hospitalization in a pediatric intensive care unit (PICU).

Pressure ulcers have an incidence of 7% and a prevalence of 7% among acutely ill children.5 The occurrence of pressure ulcers is associated with nutritional status, mobility, and level of consciousness. In infants and young children, pressure ulcers occur most often on the head and heels.5 Noonan et al7 reported a 27% incidence of pressure ulcers, of which 32% of the more significant ulcers involved the head. Fifty-seven percent of all ulcers were detected during the...
Indeed, children who are patients in a technology-rich environment such as a PICU may experience pressure ulcers early in hospitalization. Moreover, the adverse effects of immobility and physiological instability on a patient’s skin do not discriminate by age or developmental level. Noonan et al reported that more than 50% of medical devices that contributed to pressure-related skin injuries were pulse oximetry probes, artificial airways, and masks for bilevel positive airway pressure (BiPAP). These devices are often placed when the patient is admitted to a PICU, so tracking quality of care is imperative to prevent and identify problems.

Consumers are encouraged to learn about the law in relation to adverse health events and reporting. Bedsores are considered an adverse health event. Health care providers’ assessment methods and prevention strategies are defined and described so that consumers are empowered to make safe health care decisions. For example, a recent consumer report from the Minnesota Department of Health includes an easy-to-read pie chart indicating that serious bedsores account for 43% of adverse health events.

Benchmark data are available to pediatric critical care nurses. Moreover, skin care is a nursing research priority. Yet life-saving measures may preclude attention to less emergent skin and wound therapies in a critical care setting. At Children’s Hospital of Pittsburgh, in Pennsylvania, a large tertiary care hospital, a unit-based skin care team was established in the PICU. The team strives to maintain skin care as a top priority, thereby modeling excellence in skin care.

**Structure of the Skin Care Team**

The PICU skin care team is made up of professional staff nurses. An advanced practice nurse and clinical leader direct the team. Two certified wound ostomy care nurses (CWOCNs) support the team as consultants. The advanced practice nurse has pain as a specialty, augmenting skin care with comfort as another important team focus.

Selection of new nurses for the skin care team is a joint effort between PICU leaders and nurses currently on the team; consideration is given to having members representative of all shifts and of weekend staffing. Because expertise is primarily developed through direct patient care, modest effort is directed at limiting the team’s size to approximately 8 nurses. This limitation increases the number of opportunities for nurses to lead and participate in rounds.

The PICU skin care team is accountable to 2 hospital councils—a nurse skin care council made up of nurses from all inpatient care areas and a nurse practice council. Skin- and wound-related initiatives involving prescribed medication require approval by the hospital’s pharmacy and therapeutics committee.

**Skin Care Rounds**

Skin care rounds take place each Tuesday morning. Preparation begins with the clinical leader Monday night. Skin assessment findings, plans of care, and Braden Q scores (documented every 12 hours within the critical care service center) are routine components of the change-of-shift report (Table 1). This information is recorded by the night
### Table 1  Braden Q scale used at Children’s Hospital of Pittsburgh

<table>
<thead>
<tr>
<th>Intensity and duration of pressure</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobility</strong> The ability to change and control body position</td>
<td><strong>1. Completely immobile</strong> Does not make even slight changes in body or extremity position without assistance</td>
</tr>
<tr>
<td><strong>2. Very limited</strong> Makes occasional slight changes in body or extremity position but unable to completely turn self independently</td>
<td></td>
</tr>
<tr>
<td><strong>3. Slightly limited</strong> Makes frequent though slight changes in body or extremity position independently</td>
<td></td>
</tr>
<tr>
<td><strong>4. No limitations</strong> Makes major and frequent changes in position without assistance</td>
<td></td>
</tr>
<tr>
<td><strong>Activity</strong> The degree of physical activity</td>
<td><strong>1. Bedfast</strong> Confined to bed</td>
</tr>
<tr>
<td><strong>2. Chairfast</strong> Ability to walk severely limited or nonexistent Cannot bear own weight and/or must be assisted into chair or wheelchair</td>
<td></td>
</tr>
<tr>
<td><strong>3. Walks occasionally</strong> Walks occasionally during day, but for very short distances, with or without assistance Spends majority of each shift in bed or chair</td>
<td></td>
</tr>
<tr>
<td><strong>4. Patient too young to ambulate, or walks frequently</strong> Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours</td>
<td></td>
</tr>
<tr>
<td><strong>Sensory perception</strong> The ability to respond in a developmentally appropriate way to pressure-related discomfort</td>
<td><strong>1. Completely limited</strong> Unresponsive (does not moan, flinch, or grasp) to painful stimuli due to diminished level of consciousness or sedation; or has limited ability to feel pain over most of body surface</td>
</tr>
<tr>
<td><strong>2. Very limited</strong> Responds only to painful stimuli Cannot communicate discomfort except by moaning or restlessness; or has sensory impairment that limits the ability to feel pain or discomfort over half of body</td>
<td></td>
</tr>
<tr>
<td><strong>3. Slightly limited</strong> Responds to verbal commands, but cannot always communicate discomfort or need to be turned; or has some sensory impairment that limits ability to feel pain or discomfort in 1 or 2 extremities</td>
<td></td>
</tr>
<tr>
<td><strong>4. No impairment</strong> Responds to verbal commands Has no sensory deficit that would limit ability to feel or communicate pain or discomfort</td>
<td></td>
</tr>
<tr>
<td><strong>Tolerance of the skin and supporting structure</strong></td>
<td><strong>1. Constantly moist</strong> Skin is kept moist almost constantly by perspiration, urine, drainage, etc Dampness is detected every time patient is moved or turned</td>
</tr>
<tr>
<td><strong>2. Very moist</strong> Skin is often, but not always, moist Linen must be changed at least every 8 hours</td>
<td></td>
</tr>
<tr>
<td><strong>3. Occasionally moist</strong> Skin is occasionally moist, requiring linen change every 12 hours</td>
<td></td>
</tr>
<tr>
<td><strong>4. Rarely moist</strong> Skin is usually dry, routine diaper changes; linen only requires changing every 24 hours</td>
<td></td>
</tr>
<tr>
<td><strong>Friction and shear</strong> Friction: Occurs when skin moves against support surface Shear: Occurs when skin and adjacent bony surface slide across one another</td>
<td><strong>1. Significant problem</strong> Spasticity, contracture, itching, or agitation leads to almost constant thrashing and friction</td>
</tr>
<tr>
<td><strong>2. Problem</strong> Requires moderate to maximum assistance in moving Complete lifting without sliding against sheets is impossible Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance</td>
<td></td>
</tr>
<tr>
<td><strong>3. Potential problem</strong> Moves freely or requires minimum assistance During a move, skin probably slides to some extent against sheets, chair, restraints, or other devices Maintains relatively good position in chair or bed most of the time but occasionally slides down</td>
<td></td>
</tr>
<tr>
<td><strong>4. No apparent problem</strong> Able to completely lift patient during a position change; moves in bed and chair independently and has sufficient muscle strength to lift up completely during move Maintains good position in bed or chair at all times</td>
<td></td>
</tr>
</tbody>
</table>
clinical leader or charge nurse and is used by the skin care team during rounds the next morning.

Routinely conducting rounds early in the week yields consistency for PICU staff and provides the remainder of the week for follow-up of patients. The team cares for as many as 31 patients during rounds, a process that often consumes 3 to 4 hours. An 8-week schedule is posted to identify nurses to serve as rounds leaders. The nurse who leads rounds is not assigned a patient for the first 4 hours of the Tuesday day-light shift (7 AM to 11 AM).

The team accomplishes a variety of work (Table 2). At the conclusion of rounds, either the professional staff nurse leader or the advanced practice nurse prepares an electronic summary and disseminates it to all PICU nurses (Table 3). For patients who are off the unit for operative or diagnostic procedures or whose condition is too unstable for a full skin assessment, a member of the team returns later in the day to complete rounds.

A full skin assessment includes but is not limited to the examinations listed in Table 4 as applicable. A member of the team asks to be called for complex dressing changes scheduled to happen during times other than rounds (eg, a fasciotomy dressing at 2 PM). Bedside nurses communicate valuable information, augmenting the team’s assessments.

A skin care supply bag (Figure 1 and Table 5) is carried by the team to enhance product procurement for nurses and to minimize unnecessary, time-consuming trips to the supply room. Busy nurses appreciate on-the-spot delivery of products. Keeping the bag stocked and monitoring expiration dates of supplies are tasks well suited to new team members. Working with skin care supplies fosters familiarity with products.

**Education of Nursing Staff**

The skin care team assumes responsibility for education of nursing staff. Venues for such education include in-service training (eg, process for “windowing” or

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**Table 1** Continued

<table>
<thead>
<tr>
<th>Nutrition</th>
<th>Usual food intake pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Very poor</td>
<td>Nothing by mouth and/or maintained on clear liquids, or intravenous fluids for more than 5 days, or albumin &lt; 2.5 mg/dL or never eats a complete meal. Rarely eats more than half of any food offered. Protein intake includes only 2 servings of meat or dairy products per day. Takes fluids poorly. Does not take a liquid dietary supplement.</td>
</tr>
<tr>
<td>2. Inadequate</td>
<td>Is on liquid diet or tube feedings/tot al parenteral nutrition, which provide inadequate calories and minerals for age or albumin &lt; 3 mg/dL or rarely eats a complete meal and generally eats only about half of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement.</td>
</tr>
<tr>
<td>3. Adequate</td>
<td>Is on tube feedings or total parenteral nutrition, which provide adequate calories and minerals for age or eats more than half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally will refuse a meal, but will usually take a supplement if offered.</td>
</tr>
<tr>
<td>4. Excellent</td>
<td>Is on a normal diet providing adequate calories for age. For example, eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.</td>
</tr>
</tbody>
</table>

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*Adapted from Braden and Bergstrom and Curley et al., with permission. © Barbara Braden and Nancy Bergstrom, 1988.*
Table 2  Role of the skin care team in the pediatric intensive care unit

- Assess each patient’s skin from head to toe
- Assist bedside nurse with repositioning and changes in therapeutic support surface
- Start/stop use of therapeutic support surfaces
- Procure skin care products for bedside nurses (e.g., soft gel pillows, dressing supplies)
- Direct and assist with complex dressing changes (e.g., vacuum-assisted closure of wound, Stevens-Johnson syndrome, necrotizing fasciitis)
- Prevent pain with dressing changes (e.g., timing around preemptive analgesia, use of adhesive removers)
- Evaluate accuracy of documented Braden Q skin assessment scores
- Assist bedside nurse with diaper/incontinence garment and linen changes
- Weigh benefits and risks associated with treatments (e.g., methodological therapies for best approach to eschar debridement)
- Consult other services (e.g., recommend dietary protein assessment for new nutrition-related occipital alopecia)
- Provide skin care education and positive reinforcement for self-care behaviors to family members
- Check current skin and wound care orders for accuracy and adherence
- Enter new or update existing skin and wound care orders via a computerized system
- Complete new and follow up on prior patient safety reports related to skin care
- Document skin impairment during monthly prevalence rounds
- Collaborate with preceptors to provide hands-on experience for new nurse orientees
- Collaborate with critical care service center disciplines to tackle wound-related legal dilemmas (e.g., long-term care facility repeatedly not following wound care discharge instructions, resulting in patient’s readmission to the unit with fulminant sepsis)
- Educate professional staff nurses

Table 3  Example of a summary from skin care rounds

<table>
<thead>
<tr>
<th>Patient</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bed space 16, AG</td>
<td>Thin hydrocolloid dressing placed in operating room intact beneath tracheostomy tube ties (a hospital standard of care) Diaper dermatitis clinical effectiveness guideline initiated in anticipation of diet change Educated mom and dad about how to apply skin care products to diaper area</td>
</tr>
<tr>
<td>Bed space 21, TP</td>
<td>Helped nurse change cervical collar; skin on clavicles clear beneath collar under potential pressure points; trial of bilevel positive airway pressure planned for today; applied prophylactic thick hydrocolloid dressing to bridge of nose and other mask pressure points Soft gel pillows and protective film barrier to heels added to plan of care</td>
</tr>
<tr>
<td>Bed space 22, MD</td>
<td>Paged plastic surgeon; dad requested additional information about sharp debridement (eschar excision performed with a surgical blade) Wound in right side of groin redressed and healthy tissue shown to parents Update on wound progress given to critical care medicine fellow</td>
</tr>
</tbody>
</table>

Table 4  Examination sites included in head-to-toe skin assessment

- Occiput
- Face near endotracheal tube tape and beneath a mask for bilevel positive airway pressure
- Nasogastric or orogastric tube insertion site
- Skin beneath a cervical collar
- Site of pulse oximetry probe
- Tracheostomy site, including skin beneath tracheostomy tube ties
- Insertion site for abdominal gastric tube
- Skin beneath splints, sequential compression devices, and blood pressure cuffs
- Skin surrounding and beneath electrocardiography patches
- Insertion sites of intravenous catheters
- Skin surrounding dressings for central catheters; skin beneath transparent dressings for central catheters
- All pressure points, including elbows, heels, coccyx
- Perineal and buttock region

“picture framing” a site for central catheter insertion with transparent and hydrocolloid dressings), updates at monthly staff meetings (e.g., new products), electronic management updates (reminders to document Braden Q scores), and bedside education (e.g., explaining how to operate a vacuum-assisted wound closure device). New PICU nurses are required to attend skin care rounds 1 time as part of a nurse residency program or orientation. Less urgent
or supplemental information is reserved for the PICU edition of a critical care newsletter11 (Figure 2). Skin care may be the topic of monthly critical care evidence-based review clubs or journal clubs. Educating physicians about support surface indications is a primary role of the hospital’s CWOCNs, but nurses on the skin care team also share in this responsibility.

Performance Improvement

Hospital-wide prevalence rounds occur monthly. Skin impairment is recorded on prevalence day, the first Tuesday of each month. Data are submitted to the quality services department and reviewed as part of the hospital’s report card (Figure 3). They serve as a gauge for benchmarking against other hospitals of like size and acuity level. The prevalence form reflects new definitions from the National Pressure Ulcer Advisory Panel.12

For the first time, 2 quality indicators during fiscal year 2006 included prevention of epidermal stripping (skin tears) and prevention of BiPAP-related skin impairment (nose and other mask pressure points). Epidermal stripping was brought to the team’s attention by an increased number of reports of events related to patient safety. Both underuse of adhesive removers and the practice of taping devices (eg, urinary catheter tubing) directly to the skin instead of atop a hydrocolloid dressing were problems. During the first quarter, the incidence of epidermal stripping was 5%; in the second quarter, the incidence increased to a high of 19%. BiPAP-related skin impairment had a prevalence of 5% during the first quarter. BiPAP skin impairment was proactively adopted as a process improvement indicator in anticipation of the high-census/high-acuity respiratory illness season.

Once the underlying causes of epidermal stripping and BiPAP-related skin impairment were identified, education initiatives and

Table 5  Items in skin care supply bag
(Specify quantity of each, include list inside bag, and adapt to your unit’s needs)

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dressing supplies (transparent, nonadherent, hydrogel, hydrocolloid, absorptive)</td>
</tr>
<tr>
<td>Sterile scissors</td>
</tr>
<tr>
<td>Tape rolls, adhesive, and adhesive removal products</td>
</tr>
<tr>
<td>Tracheostomy ties</td>
</tr>
<tr>
<td>Adhesive skin closures (large, small)</td>
</tr>
<tr>
<td>Staple removers</td>
</tr>
<tr>
<td>Nonprescriptive creams (in accordance with Children’s Hospital of Pittsburgh’s diaper dermatitis clinical effectiveness guideline)*</td>
</tr>
<tr>
<td>Diaper dermatitis clinical effectiveness guideline</td>
</tr>
<tr>
<td>Permanent markers</td>
</tr>
<tr>
<td>Sterile cotton swabs</td>
</tr>
<tr>
<td>Sterile tongue blades</td>
</tr>
<tr>
<td>Soft gel pillows with covers</td>
</tr>
<tr>
<td>Nonsting protective barrier film wipes</td>
</tr>
<tr>
<td>Basic stoma supplies</td>
</tr>
<tr>
<td>Emery boards</td>
</tr>
<tr>
<td>Measuring tapes</td>
</tr>
<tr>
<td>Small mirrors</td>
</tr>
<tr>
<td>Skin integrity prevalence forms</td>
</tr>
</tbody>
</table>

* Prescribed medications for diaper dermatitis and other skin and wound therapies are ordered via a computerized order entry system for providers.
The following contains peer review or other sensitive information and is therefore privileged and confidential.

**Critical Care Newsletter**

**PICU Edition**

May 2007
Editor, Tracy Pasek, RN

http://www.nursingcenter.com/  
/upload/51751/ASWC_RE  
Philadelphia, FEDIP/hist  
Accessed 5/15/07

The National Pressure Ulcer Advisory Panel (NPUAP) has redefined the definition of a pressure ulcer & the stages of pressure ulcers. Included are the original 4 stages (I – IV) and 2 additional stages. The 2 additional stages are deep tissue injury (DTI) and unstageable pressure ulcers. This is a culmination of over 5 years of work beginning with the identification of DTI in 2001.

Pressure Ulcer Definition

A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear and/or friction. A number of contributing or underlying factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated.

Click on the link above to read more. At present, this redefinition of pressure ulcers & staging does not pose new or different practice implications at Children’s Hospital of Pittsburgh of UPMC. The PICU Skin Care Team in collaboration with our CWOCN will keep you updated.

**IS YOUR PATIENT AT RISK FOR SKIN TEARS?**

Risk factors for skin tears include the likelihood for friction/shear, frail skin, dehydration, history of tape/adherent dressings that were not removed with care. (Ayello, EA, 2003).

**SKIN TEAR PREVENTION**

Remember to avoid securing Foley catheters to patients’ legs with clear adhesive dressings. This may result in skin impairment. Instead, apply a hydrocolloid dressing to the skin and secure the Foley to the dressing.

**General Skin Updates**

- Thank you to the Clinical Leaders for improving communication. Skin care concerns and Braden Q Scores continue to be routinely integrated into patient hand-off.
- New laminated copies of the Braden Q Scale have been placed in all of the bedside charts.
- Skin care education is planned for May’s staff meetings. Don’t miss it!
- Please see the list of the new skin care product order numbers in the staff office. Skin care team members have a copy of this also.

**TRUE or FALSE**

The wound vacuum-assisted closure device (V.A.C.) is contraindicated with chronic open Stage IV wounds. FALSE The V.A.C. is indicated for use with chronic open wounds (e.g., some pressure ulcers); Stage III or IV wounds; acute & traumatic wounds; meshed grafts; subacute wounds (e.g., dehisced incisions) and flaps. Contraindications include necrotic tissue with eschar; untreated osteomyelitis and wounds containing malignancy.

**QUALITY FOCUS**

Braden Q Scores are being monitored weekly. Five random charts are being examined for practice associated with q. 12 hour skin assessments. For several weeks, the PICU has been 100% compliant. Keep up the good work!

**THE END**

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The goal of a support surface is to remove localized pressure (pressure relief) or to redistribute pressure evenly over the contact surface (pressure reduction). Selecting a mattress or seating surface on the basis of the assessment of a patient’s risk for pressure ulcers can be both efficacious and cost-effective. Regardless of the support system used and recommended for a patient, follow-up is imperative. When patients are not repositioned, pressure on bony prominences leads to skin impairment. This skin impairment does not indicate failure of a support surface to prevent breakdown.

Decisions related to support surfaces are made by nurses. The PICU skin care team is proactive and strategic, placing patients on support surfaces depending on the evaluation of the patients’ risk for pressure ulcers. Assessment of a support surface includes determining the patient’s underlying medical condition and current medical status, the ability to safely provide pressure redistribution for the patient, the patient’s current risk score for pressure ulcers, and significant existing comorbid diseases. Support surfaces are ordered preemptively if risk for pressure ulcers is anticipated (e.g., before starting continuous renal replacement therapy). Challenges include patients whose condition deteriorates too quickly to procure the best surface in time (e.g., use of extracorporeal membrane oxygenation in a child). Ideally, advanced planning prevents patients in a highly unstable condition from being moved at less than optimal times.

The critical care service center has 4 low-air-loss beds. These beds are used only for critically ill patients and are ordered at the discretion of the team and the hospital’s CWOCNs. Patients’ support surface requirements are communicated as a free text message in the computerized data system. Patients with scores of 15 or less on the Braden Q scale are considered at high risk for pressure ulcers (Table 1). Once a patient is at high risk, a PICU nurse notifies a nurse on the skin care team and decision making about selection of a support surface starts (Figure 4).
Consider the following scenarios.

An oncology patient with unstable hemodynamic status is admitted to the PICU and requires emergent endotracheal intubation with eventual high-frequency oscillatory ventilation. Her Braden Q score is 16. This child requires a pressure redistribution support surface, but her condition prevents using this procedure. Maintenance with soft gel pillows, maximal turning as tolerated, and rigorous skin inspection can be offered to this patient until an appropriate support surface can be instituted safely.

A patient who has undergone laryngotracheal reconstruction is expected from the operating room at 3 PM. Another PICU patient will be started on continuous renal replacement therapy at 1 PM. The skin care team must evaluate current use of support surfaces and decide if other PICU patients can relinquish support surfaces or if new support surfaces must be rented. If new surfaces must be rented, then the team must evaluate company delivery time in relation to the operating room admission and continuous renal replacement therapy goals.

Nurses on the skin care team, CWOCNs, and physicians may order support surfaces. Orders and charges are tracked by the CWOCNs via a computerized system. Occasionally, a patient’s family may ask that the patient be permitted to stay on a therapeutic surface for comfort when skin and wound condition no longer warrants such treatment. These situations are thoughtfully evaluated by the involved health care providers. Gentle education is provided to help patients and their families understand the indications for use of support surfaces. Families’ requests may prevail. Once, an overlay support surface was ordered for a solid-organ transplant recipient who had severe pain from rheumatoid arthritis. Pain rather than pressure redistribution was the primary indication for a support surface.

Influence and Future Work of the PICU Skin Care Team

The skin care team had a primary role in developing the computerized...
In 2006, PICU professional staff nurses reported that physicians’ orders did not include where to apply topical medications. At any given time, a critically ill child may have several topical medications ordered, which could include a combination of analgesics, antifungal medicines, antibiotics, steroids, diaper dermatitis prescriptives, and vasodilator ointments to promote wound healing. A team member collaborated with a clinical pharmacy specialist and a clinical effectiveness specialist to develop an order set for topical medications for PICU patients. This order set provides specific directions for the application of topical medications (eg, a “drop-down menu” listing face, buttocks, heels, and so on) and is being considered for hospital-wide use.

The Advanced Burn Life-Saving course was offered to nurses at the hospital in 2006. In an effort to be prepared to manage patients with minor burns and burnlike skin conditions and to learn how to apply associated dressings, nurses on the PICU skin care team were among the first to attend. Having several PICU nurses who are certified in Advanced Burn Life-Saving is also in keeping with the hospital’s plan for disaster preparedness.

The PICU skin care team’s role with intravenous therapy is expanding. The nurses collaborated with the hospital nurse intravenous team to lead hospital-wide education related to dressings at new intravenous cannulation sites. The skin care team currently manages mild cases of intravenous infiltration; a surgical service manages severe cases. The team is working with surgical physicians to improve communication when caring for shared patients. A digital camera has been purchased for the team to improve the tracking of wound healing by nurses and physicians.

Figure 4 Algorithm for selection of support surfaces.

Generic names: Accucair Overlay, continuous airflow system; Clinitron CII, air fluidized therapy; Clinitron Rite Hite, air fluidized therapy; head elevation, low to floor for easy exit out of bed; Egg Crate, convoluted foam overlay 2-3 in (5-8 cm) in depth: prevention; Flexicair Eclipse, mobile, 5-zoned low-air-loss bed; Geomattress, foam mattress overlay for infants <30 lb (<15 kg); Hard Crib, upgraded foam crib mattress: pressure redistribution; Magnum II, pressure redistribution for bariatric patients; Pressure Guard II, static alternating air: pressure redistribution; Total Care, static alternating air: pressure redistribution; Total Care Sport, alternating air: pressure redistribution; V-Cue, continuous lateral rotation therapy: low air loss, rotation, percussion, vibration.

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A clinical effectiveness guideline for diaper dermatitis (Figure 6) is the result of a collaborative effort among CWOCNs and skin care nurses. This guideline targets prevention rather than treatment. The hospital’s prevalence rate for diaper dermatitis for 2007 is 2.5% whereas the national prevalence rate is 16% to 42%.

Last, to assist with documentation of participation on the PICU skin care team and the hospital’s nurse skin care council, an agreement form is completed by all skin care nurses (Figure 7). The forms are kept on file with PICU leaders. These records support nurses’ annual performance reviews and clinical advancement.
Agreement to Participate

I agree to serve as a member of the PICU Skin Care Team for calendar year January 2008 thru December 2008. As a nurse on the PICU Skin Care Team I agree to the following during this time:

- Attend a minimum of 75% (9) of the scheduled hospital Skin Care Council meetings;
- For those meetings I am unable to attend, I will arrange to have another RN represent the PICU at the meeting;
- Actively participate in hospital Skin Care Council work (e.g. fulfill continuing education requirements);
- Report information from these meetings to my manager and colleagues at scheduled PICU staff meetings;
- Attend the annual PICU Skin Care Team strategic planning meeting;
- Commit to provide monthly education to my colleagues, either alone or with another PICU Skin Care Team nurse;
- Adhere to Children’s Hospital of Pittsburgh’s conference attendance guidelines when I attend skin-related continuing education offered outside the hospital;
- Assume responsibility with my schedule to ensure I lead skin care rounds with regular frequency;
- Write skin care summaries following weekly skin care rounds;
- Collect & fax monthly prevalence data if I round on prevalence day;
- Assume active role in skin-related PICU quality initiatives (e.g. design data collection forms, collect data, develop process improvement indicators);
- Assume active role with PICU Skin Care Team work (e.g. patient/family education initiatives, new product trials, standards of care);
- Act as a positive role model and Skin Care Team ambassador to services with shared initiatives, new product trials, standards of care);

Name (Please print) __________________________

Signature __________________________ Date __________

Unit __________________________

Manager signature __________________________ Date __________

Figure 7 Agreement form completed by all nurses on the skin care team.

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Acknowledgments

We are grateful to Janet Aradine, RN, MSc, clinical effectiveness specialist, Children’s Hospital of Pittsburgh of University of Pittsburgh Medical Center.

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References

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