got skin?

Roxy Cantu, RN
Jennifer Knox, RN, BSN, CCRN
Kelly Schultz, RN, BSN
Amy Silva, RN, BSN
Monica Wilson, RN, BSN, CCRN

Coach: Vickie S. Simpson, RN, MSN, CCRN, CPN, CPHQ
Background

- PICU has highest pressure ulcer (PU) rate in the hospital
  - Before the CSI Academy project, PICU PU incident rate was 3.1/1000 patient days
  - Device-related PU accounted for 77% of the total PU occurrences in PICU before project start (23 of 30 identified PICU PUs)
- Device-related PUs are the most difficult to predict, because there is no valid and reliable pediatric PU risk assessment scale that incorporates risk associated with devices
- There is no benchmark data available for device-related PU
Overall PICU Hospital-Acquired Pressure Ulcer (HAPU) Rate

80% decrease in PU since March 2013!
Mean PICU HAPU Rate

- May 2012 to April 2013: 3.51/1000 patient days
- May 2013 to May 2014: 0.69/1000 patient days
- Comparing the first 12-month interval to the current 12-month interval shows an 80% decrease in overall HAPUs
  - Excluded: PUs originating in other hospital areas or community; PUs from EEG and respiratory equipment (these departments have their own PU metrics)
PICU Device-Related HAPU Rate

This chart is a subset of the overall PICU PU rate.
PICU Device-Related HAPU Rate

- March 2012 to June 2013: 2.10/1000 patient days
- A 100% decrease in device-related HAPUs since the CSI Academy “got skin?” campaign rolled out
What Does It All Cost?

- PUs cost $9.1 billion to $11.6 billion per year in the US.\(^1\)
- Agency for Healthcare Research and Quality estimated a PU added $43,180 to a hospital stay.\(^1\)
- PUs can increase the length of stay by 3.5 to 5 days.\(^2\)
- Cost of PU treatment: \(^3\)
  - Stage I: Approximately $2000
  - Stage 2: $3000 - $10,000
  - Stage 3: $5900 - $14,840
  - Stage 4: $18,730 - $21,410
- Prevention of PUs has been effective up to an investment of approximately $821 per patient day. \(^3\)
Purpose

- Decrease the incidence of device-related PUs in the PICU at Dell Children’s
- Increase patient/family satisfaction
- Increase staff compliance with patient skin care
- Promote family involvement in measures that help reduce device-related PUs and PUs in general
Strategy: “Got Skin?” Campaign
Timeline

- **January 2013**: AACN CSI Academy committee met and started researching ideas
- **May-June 2013**: Pre-kickoff data collection
- **July 10-11, 2013**: “got skin?” kickoff event
- **August 2013**: Skin Day form rolled out
- **December 2013**: “Booster” of Skin Day form
- **January-February 2014**: Auditing staff compliance
- **April 2014**: Survey of staff knowledge
- **Ongoing**: Monitoring outcome measures throughout project
Pre-Kickoff (May-June 2013)

- Audits of electronic medical record charting on preventive measures
- Pulse oximetry probe site change audits
- SurveyMonkey staff skin care knowledge survey
- Parent survey developed and data collected
- Outcome measure data collection

“got skin?” was born!
After our teaching and e-mails, we saw an increase by 80% in pulse oximetry change documentation.

<table>
<thead>
<tr>
<th>Respiratory Pattern</th>
<th>Description</th>
<th>Chest Motion</th>
<th>Chest Symmetry</th>
<th>Breath Sounds-All Regions</th>
<th>Breath Sounds-Left</th>
<th>Breath Sounds-Right</th>
<th>Nasal Drainage Color</th>
<th>Cough Description</th>
<th>Suction Device</th>
<th>Oxygen Delivery Method</th>
<th>Room air</th>
<th>Room air</th>
<th>Room air</th>
<th>Room air</th>
<th>Room air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen Saturation</td>
<td>%</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>95</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probe Site Changed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probe Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
July 10 and 11 “got skin?” Kickoff Event (Day and Night Shifts)
Product Representative
Physician involvement!

And everybody loves food!
Staff Survey Questions

Survey Monkey - Pilot questions - PICU/IMC

1. How often should you change c-collar pads? Q24hrs
2. Do you know where to document c-collar care? Yes / No / if yes, where?
3. How often do you do c-collar care? Q12hrs
4. When should you notify WOCN about c-collar? Within 24hrs? (need to verify)
5. Do you know where/how to document your wounds? Yes / No / if yes, where?
6. What patient populations generate automatic WOCN referral? ECMO / pre-existing pressure ulcers / fresh trach / c-collars (need to verify)
7. Do you use PIV hub guards? Yes / No / what are those?
8. Are you documenting pulse ox probe site changes? Yes / No / there’s a place for that?
9. How often should you change pulse ox probe sites? Q12
10. If a patient comes back from OR and skin is red, what do you do? See if it blanches and document
11. How often do you turn a patient on a z-flow?
12. What unit do you work on? PICU / IMC
13. What shift do you work on? 7a / 7p
Swag for all who attended in-servicing!
Family Education

- Posted in patients’ rooms
- In English and Spanish

How can you help the medical team prevent skin breakdown while your child is in the ICU?

- Repositioning
  - Your child should be repositioned every two hours to prevent breakdown. Even at night, it is very important. If you notice your child has not been repositioned in the last two hours, a friendly reminder to staff is greatly appreciated!!

- Lotion: Sween Cream
  - Moist skin helps prevent breakdown. By applying lotion at least every eight hours, the risk of skin ulcers decreases. Ask your nurse if you can help!

- Extra Eyes
  - You know your child from head to toe better than we do! If you see any redness or discoloration to his/her skin, let us know!
  - Hospital devices are hot spots for breakdown. (ie: IVs, lines and tubings, blood pressure cuffs, pulse ox probes, EKG leads) You can be our second set of eyes to help keep their skin healthy.

- Switch it up!
  - Changing the site of blood pressure cuffs and pulse ox probes is proven to decrease skin symptoms. Remind us to ‘Switch it up!’

A member of the Seton Family of Hospitals
August 2013: Wednesday Skin Day

This form is to be used as a guide for COMPASS charting. Please update every Wednesday both day and night shift on a new form and place behind care plans in the chart.

Reminders:
- Q 12 hrs: C-Collar care
- POX change: Q12 and BP cuff change daily
- Automatic WOCN referral for: fresh trachs, ostomies, c-collar after 48 hours, and any skin breakdown

Please identify all lines, tubes, wounds, drains, and respiratory equipment below. Assess for breakdown. Please label appropriately. If any breakdown is noted please place a WOCN referral and write number next to the wound below.

Wound List on back of form. ------
Skin Caddy
Barriers

- Staff willingness
  - “Another form to fill out?”
- Little data on cost for Stage 1 and 2 PUs, because many heal with minimal intervention
- Time
- Budget
- Unit relocation/renovation
- Changes in team membership
- Night shift involvement
Unintended Positive Outcomes

- Physician engagement and improved physician/midlevel PU documentation
- Improved skin documentation in EMR by staff
- RT participation—separate project in their department to decrease Bipap mask PU, with excellent results
- Hospital-wide interest
- Nurse receptiveness
Conclusion

- Decreased overall PU incidence by 80%
  - Pre “got skin?” May 2012-April 2013: 3.51/1000
  - Post “got skin?” May 2013-April 2014: 0.69/1000
- Decreased device-related PU incidence to ZERO
- Decreased number of PUs from 31 to 19! None was stage 3 or 4.
- Based on the Agency for Healthcare Research and Quality’s average PU cost of $43,180,¹ the annual fiscal savings for this project is $518,160!
Conclusion

- Increased awareness of skin care among staff and families
- Promoted a change in location to chart pulse oximetry and blood pressure cuff changes, with further skin documentation changes pending
References

