



LOVE THE SKIN YOU'RE IN!

PRESSURE INJURY MANAGEMENT

K. Johnson BSN, RN, WOC-RN, WCC; L. Welch BSN, RN-BC, CPN, WOC-RN, WCC; M. Waldron MSN-Ed, MSN, RN-BC, CPN
P. Allen RNC-NICU, WCC; L. Hayes BSN, RNC-NIC; N. Kramer BSN, RN, CPN; S. Hamilton BSN, RN, CPN; B. Bissell BSN, RN

Children's National Hospital, Washington, D.C.

DISCLOSURE

The presenters have no conflicts of interest or financial disclosures to report.

No sponsorship or commercial support was provided.



SYMPOSIUM OBJECTIVES

CREATING SUSTAINABILITY

- Describe effective interventions that led to a sustainable skin and wound program.
- Describe the active learning strategy for ongoing professional development of ST members.

OPTIMIZING SKIN INTEGRITY

- Discuss the patient impact associated with prevention of medical device related pressure injuries (MDRPIs).
- Describe the key components of a unit based 'One Simple Change' project.

BETTER TOGETHER

- Summarize the professional development outcomes for Skin Team (ST) members participating in pressure injury prevalence/ prevention educational activities.
- Identify unique programmatic evaluations that result in improved patient outcomes.



DEFINITIONS

- **Hospital Acquired Condition (HAC):** a medical condition or complication that a patient develops during a hospital stay, which was not present at admission.
- **Pressure Injury (PI):** localized damage to the skin/underlying soft tissue over a bony prominence or under a medical device.
 - **Hospital-acquired pressure injury (HAPI):** a PI that occurred after admission.
 - **Medical device-related pressure injury (MDRPI):** describes an etiology.
 - **Serious Harm Events (SHE):** stage 3, stage 4, and unstageable (UTS) PIs.
- **Prevalence:** number of patients with a hospital-acquired PI (HAPI) at a set point in time.

References: Edsberg, L. E., Black, J. M., Goldberg, M., McNichol, L., Moore, L., & Sieggreen, M. (2016). Revised National Pressure Ulcer Advisory Panel Pressure Injury Staging System: Revised Pressure Injury Staging System. *J Wound Ostomy Continence Nurs*, 43(6), 585-597.



INTRODUCTION

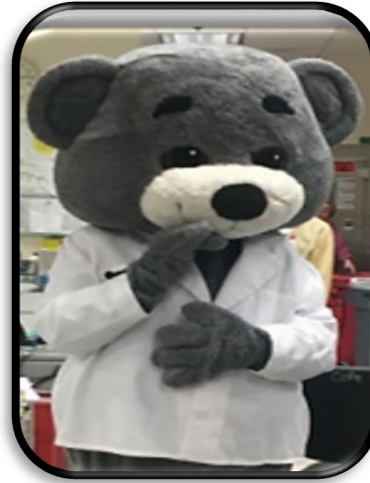
Children's National Hospital & the Skin Team

Kara Johnson BSN, RN, WOC-RN, WCC

Laura Welch BSN, RN-BC, CPN, WOC-RN, WCC



CHILDREN'S NATIONAL HOSPITAL (Washington, DC)



CHILDREN'S NATIONAL **SKIN TEAM** (ST)

- 70+ Registered Nurses & Patient Care Technicians
 - All 10 inpatient units
 - 6 non-inpatient departments
 - 2 ambulatory clinics



CREATING SUSTAINABILITY

A Nurse-Led Skin Program

Kara Johnson BSN, RN, WOC-RN, WCC

Laura Welch BSN, RN-BC, CPN, WOC-RN, WCC



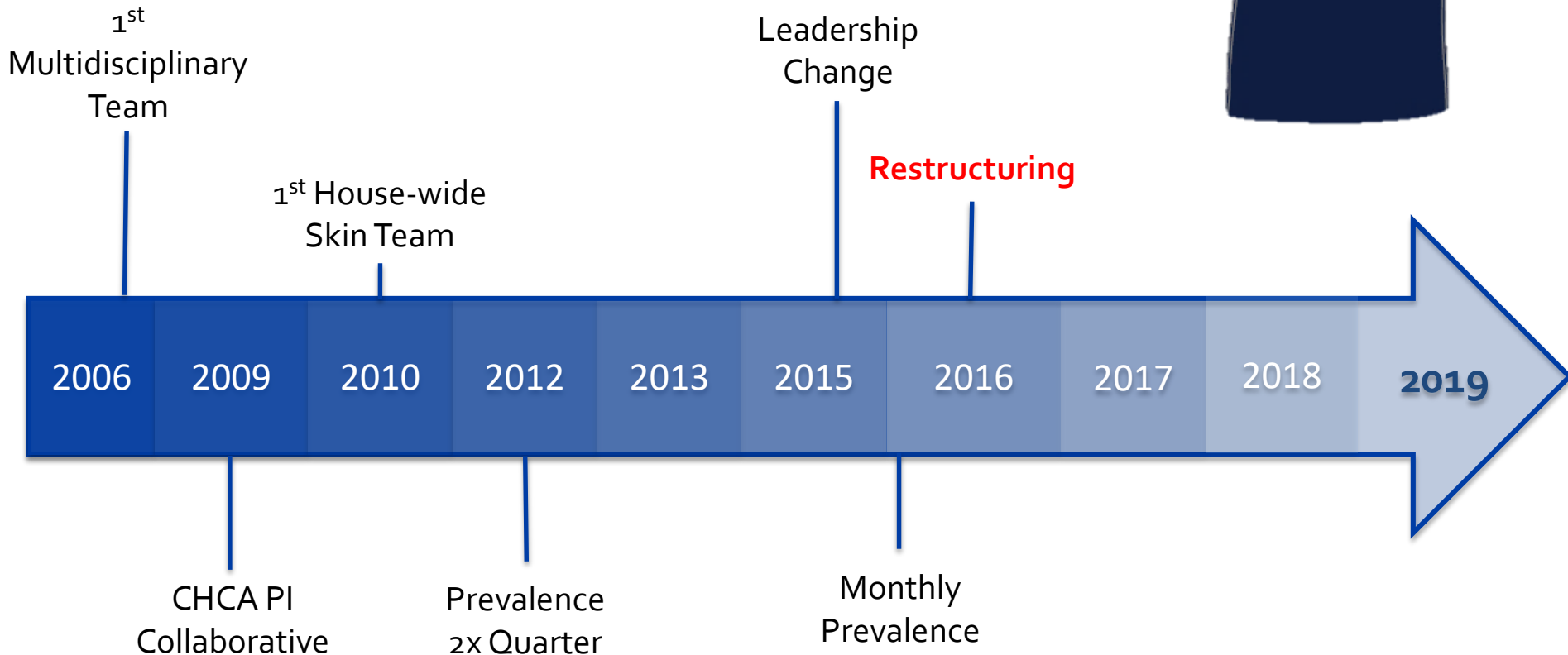
OUR SKIN TEAM HISTORY

"The more you know about the past, the better prepared you are for the future."

—Theodore Roosevelt



13 YEARS & COUNTING

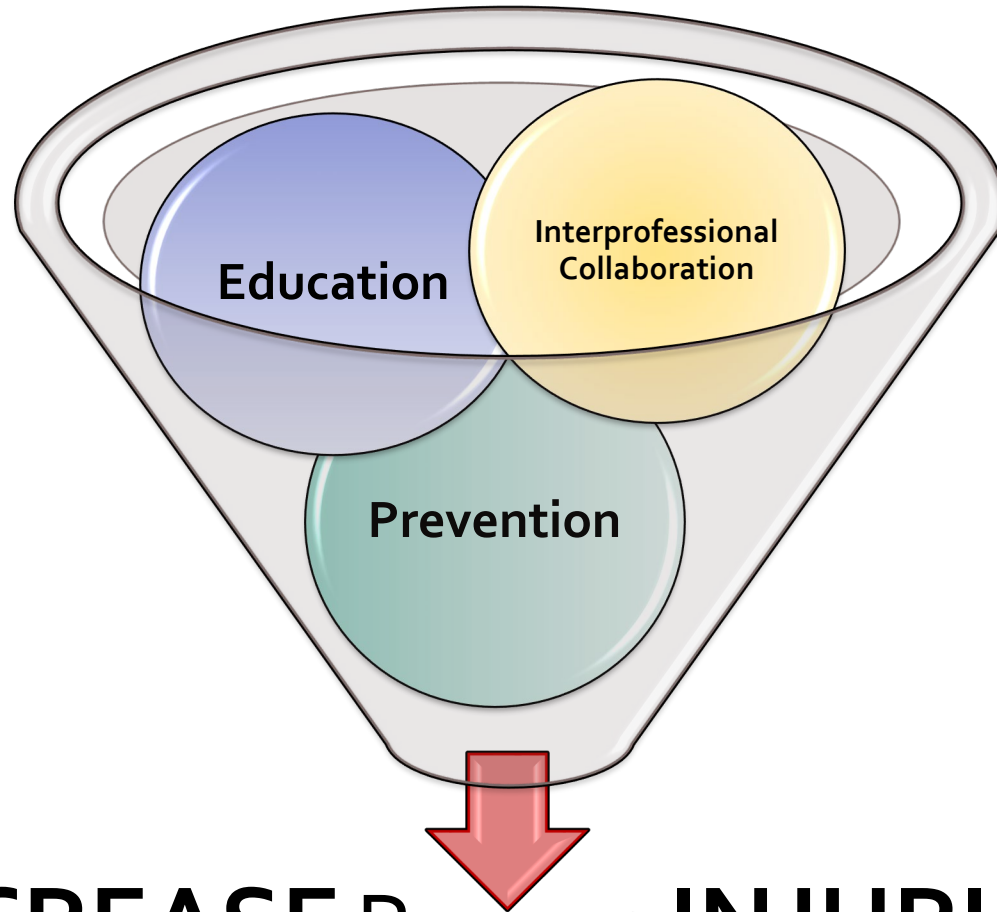


RESTRUCTURING FOR SUSTAINABILITY

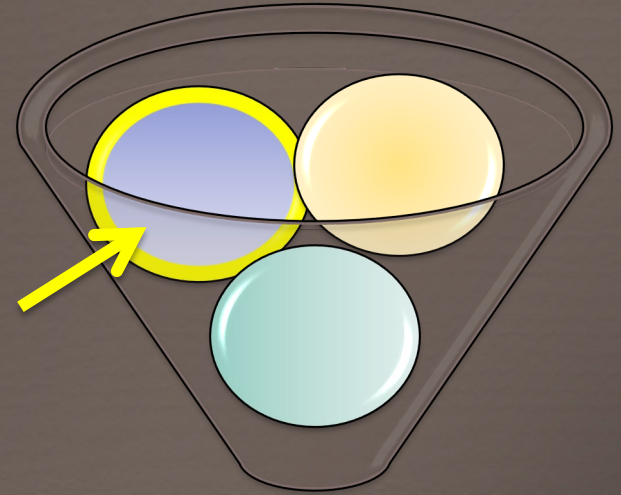
"We are here to create history, not repeat it."
–Chantelle Renee



PROGRAMMATIC CHANGES

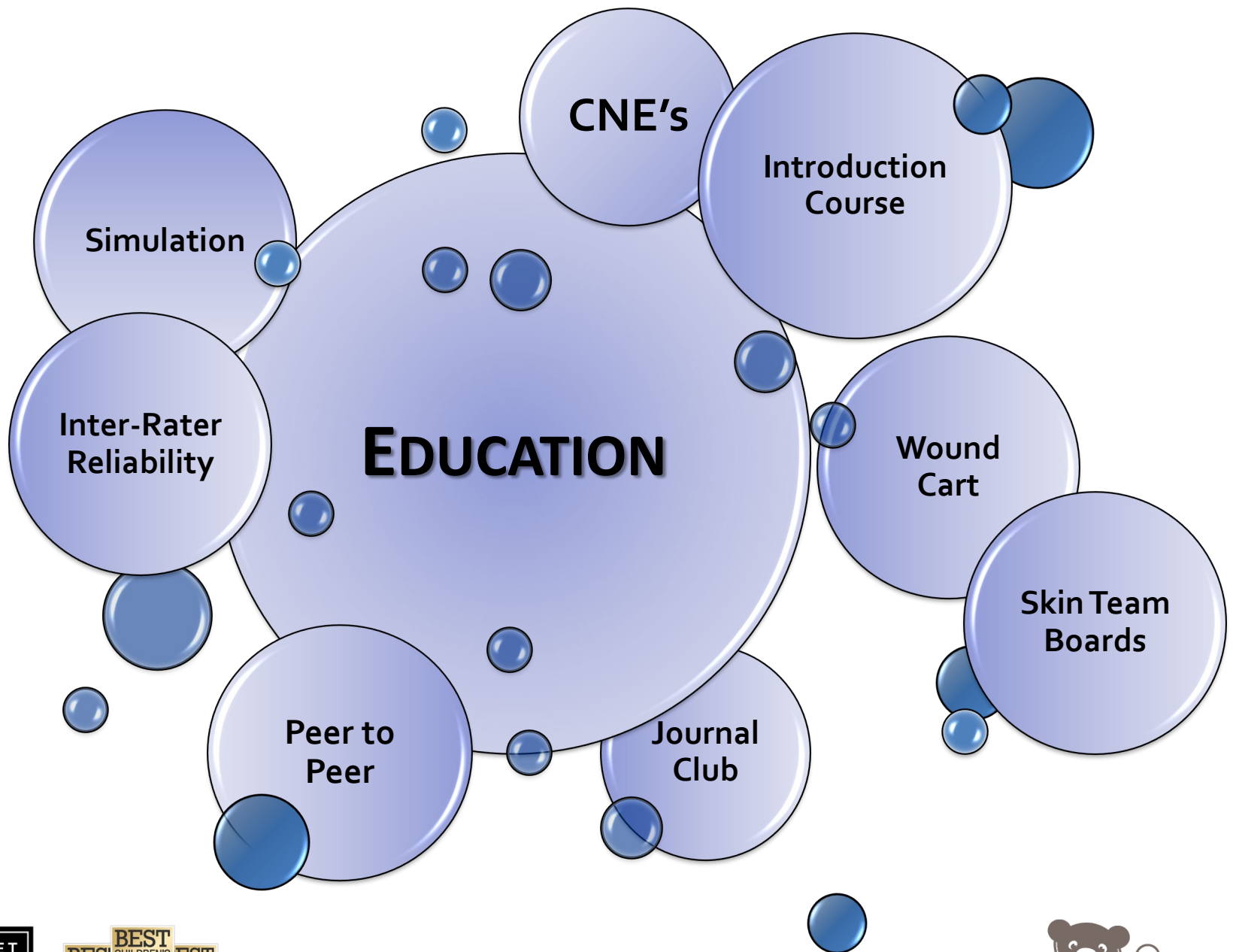


EDUCATION



*"Tell me and I'll forget. Show me and I may remember.
Involve me and I learn."*
-Benjamin Franklin





STANDARDIZATION

- Product 101's
- Wound Cart Simulators
- Measurements & Documentation
 - E-Learning Module
 - Skills validation



WHAT IS IN THE WOUND CART?






SURGICAL SALLY

A SURGICAL BANDAGING SIMULATOR

Surgical Sally has 14 different surgical wounds to choose from: 3 are closed with sutures, 3 are closed with staples, and 3 are open to air. There are also 3 different drains to use on this model. Along with a sacral stage 2 pressure injury, and an ileostomy and colostomy.

With so much to choose from, this makes Sally ideal for providing hands-on education for wound/surgical site assessment & management and dressing change practice.

Sally's skin is formulated to be drier, allowing bandages to adhere better.

SALLY'S RESOURCES

- **NURSE PRACTICE GUIDELINES (NPG)**
 - o Skin Care
 - o Chest Tube Management
 - o Care of Sternotomy
- **UNIT SPECIFIC GUIDELINES**
- **NATIONAL PRESSURE ULCER ADVISORY PANEL (NPUAP) WEBSITE** for the sacral stage 2
 - o www.npuap.org
- **HOLLISTER/COLOPLAST WEBSITES**
 - o www.hollister.com
 - o www.coloplast.us



PRODUCT 101 – EAKIN SEAL

Eakin Seal® is a soft, moldable skin protector that fits around the base of the stoma to provide a leak proof seal. (<http://www.eakinofknl.com>)



INDICATIONS FOR USE AT CNHS

- Intended for use with ostomies
 - o Prevents leaks by smoothing out skin creases/cracks
 - o Prevents irritated skin
 - o Protects skin from contact with stool

FAQ FOR USE AT CNHS

- **WHERE DO I FIND EAKIN SEAL?**
 - o Unit stock or Central Supply (box of 6).
 - o Home medical companies can order this product.
- **HOW DO I USE EAKIN SEAL?**
 - o Clean and dry the skin surrounding stoma.
 - o Warm the Eakin between your hands before removing the plastic wrap.
 - o Remove the plastic wrap and mold the Eakin by gently teasing and stretching it into the shape around the stoma.
 - Masticol may be used on the skin side of the Eakin to lengthen its wear time.
 - o Position Eakin on the body & carefully mold to ensure a snug fit around the stoma.
 - Try to have minimal skin around the stoma exposed.
 - You can apply Eakin to the back of ostomy bag as well as front side - if using a 2 piece ostomy appliance.
 - o Flatten the outer edge of the Eakin. Warmth from your hands will help to ensure a good seal is achieved.
 - o Fit the pouch as normal and hold in position for 30 seconds.
- **CAN I CUT EAKIN SEAL?**
 - o YES. Remember to keep unused portion in a resealable baggie, so it doesn't dry out.
- **CAN I USE EAKIN SEAL ON MORE THAN JUST AN OSTOMY?**
 - o YES. It can also be used on fistulas & wounds.
 - o It cannot be used around trach's!
 - It could dislodge & obstruct the airway.
- **WHEN DO I CONTACT THE WOUND TEAM?**
 - o If you are still noticing leaking ostomy sites, despite appropriate use & application of Eakin.

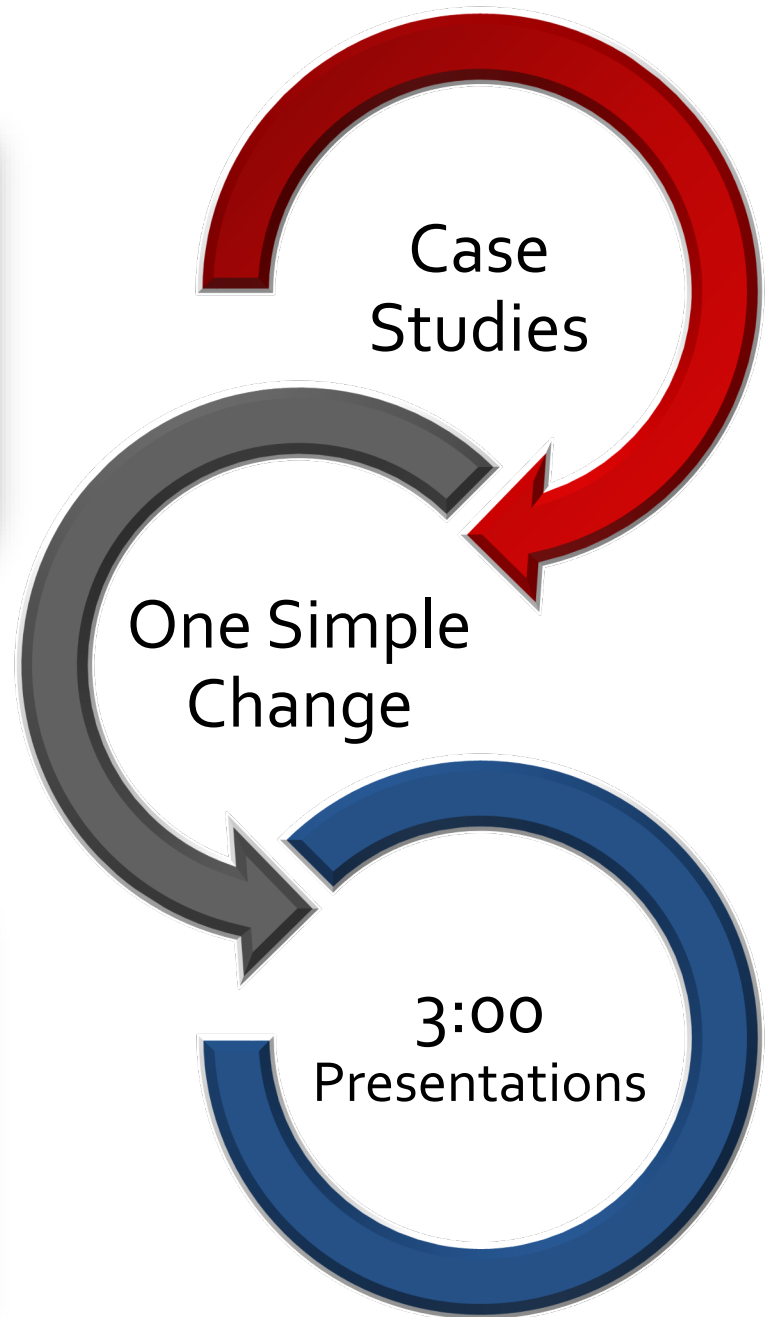


WHO DO I CONTACT WITH QUESTIONS?

June Ameling – x 5086
 Sarah Choi – x 1551
 Kara Johnson – x 5548
 Laura Walsh – x 6055

Last Updated 08/2017

PEER TO PEER



SKIN TEAM BOARDS

REQUIRED ELEMENTS

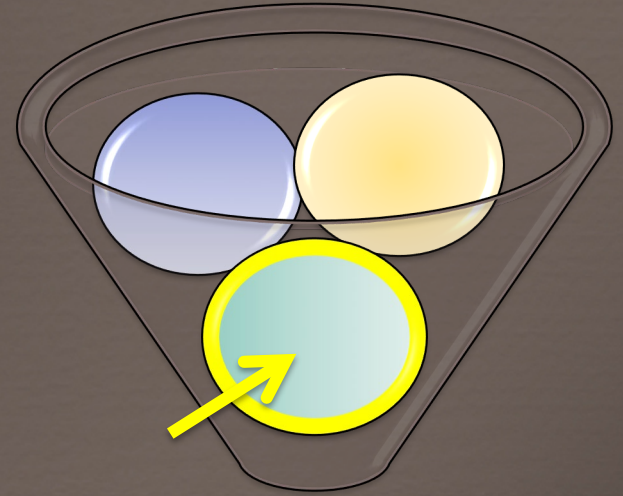
- Unit-based Skin Team members
- Diaper Dermatitis algorithm
- PI Bundle Elements

OPTIONAL ELEMENTS

- Product updates
- Cushion to Protect
- Unit HAPI prevalence rate
- Announcements/updates



PREVENTION



"Treatment without prevention is simply unsustainable."

-Bill Gates





CUSHION & PROTECT

CUSHION those Devices to PROTECT Skin Integrity

NGT/OGT;
Nasal
Cannula



Apply piece of Duoderm
on cheek
underneath tube with
No Sting Skin Prep,
Secure with Hypafix,
Change PRN

NIRS



For "at risk" pts only:
Cover site with Mepitel
One. Place probe on
Mepitel One dressing.
Change daily

Pulse Ox
Probe



For "at risk" pts only:
Cover site with Mepitel
One. Place probe on
Mepitel One dressing.
Change daily

Trach



For skin barrier superior and
inferior to stoma site options:
-Duoderm or
Mepilex Border Lite
For secretions drsg options
-Mepilex Transfer with 2x2
gauze or Drawtex

Anchor vent tubing
Change drsg PRN

BiPap/CPap
Sipap



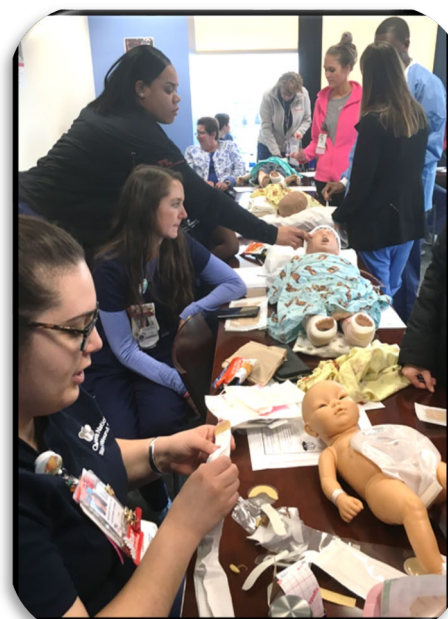
Cover points of mask-skin
contact with Mepilex
Transfer or Mepilex
Neonates; Duoderm
below nares &
apply Mepilex or Drawtex
to septum cut in "T" fashion
Change PRN

Peripheral
IVs; CVL's



Place prepackaged foam
between skin and IV hub &
under wings,
Change w drsg change

CUSHION & PROTECT HANDS-ON



BUNDLE COMPLIANCE

PRESSURE INJURY PREVENTION BUNDLE ELEMENT – PATIENT POSITIONING

CARE DESCRIPTION OF ELEMENTS

- Turn ALL SEDATED, IMMOBILE, AND/OR INSENSATE PATIENTS at least EVERY 2 HOURS.
 - In NICU, re-positioning is timed with care.
- Maintain HOB ≤ 30 degrees (unless medically contraindicated).



DOCUMENTATION EXPECTATIONS

	19:00 EST	17:00 EST	15:00 EST	13:00 EST	11:00 EST	09:00 EST	07:00 EST
Activity Status ADL	Bed	Bed	(2) Gua...	(2) Bed	Bed	Bed	Maximu...
Activity Assistance	Maximu...	Maximu...	Maximu...	Maximu...	Maximu...	Maximu...	Maximu...
Assistive Device	None	None	None	None	None	None	None
Extremity Side							
Orthopedic Device Location							
Orthopedic Device Use		Off	Off	Off	Off	Off	Off
Positioning/Pressure Reducing Devices		Pillow	Pillow	Pillow	Pillow	Pillow	Pillow
Types of Beds		Crib	Crib	Crib	Crib	Crib	Crib
Position in Crib/Isolette/Bed	Patient ... Patient ... Patient ... Patient ... Patient ... Patient ... Patient ...						
HOB Elevated	16-30 d... 16-30 d... 16-30 d... 16-30 d... 16-30 d... 16-30 d... 16-30 d...						

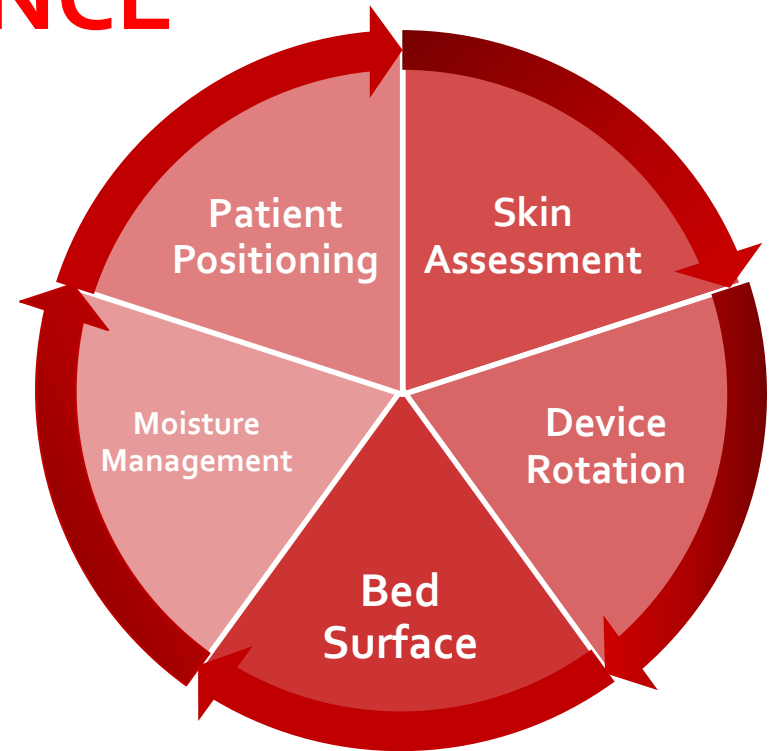
View → Activities of Daily Living → Patient Activities → Position in Crib/Isolette/Bed & HOB Elevation

SPECIAL CIRCUMSTANCES

- Patients ≤ 12 months of age who are NOT sedated, immobile, and/or insensate.
- Patients who CAN REPOSITION themselves.
 - Document "Patient moves self" Q24hrs in ADLs.
- Patients who are clinically UNSTABLE/MEDICALLY CONTRAINDICATED.
 - Requires LIP order Q24hrs + document medically unstable in ADLs.
- Patient/family REFUSAL.
 - Document refusal(s) in ADLs with each Q2 interval.

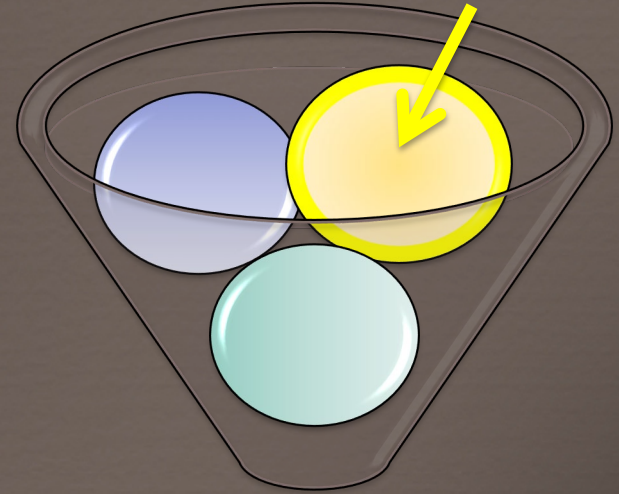
In order for the P1 Prevention Bundle to be deemed compliant, ALL 5 elements need to be performed & documented on every shift.

Created by K. Johnson, L. Welch March 2019



Skin Team Member:				Unit:		Due Date: April Prevalence (04/10/2019) Date Range: 03/14/19 - 04/09/19		
Patient Information				Pt Repositioning		Follow-Up		
	Date/Time	MRN	At-Risk Criteria	Q2hr Turned?	# Missed	RN/PCT	Follow-up	Barrier Identified
Directions	24hr look back (2 consecutive 12hr shifts)	MRN #	Risk Assessment Scale, Diagnosis, Clinical Condition	Yes/No	Give #	RN: Name; PCT: Name	Face-to-Face, E-mail	E.g. didn't feel at-risk, patient/family refused, forgot to chart, communication, etc.
Example	3/27AM - 3/27PM	0123456789	MRCP	No	3	Smith; PCT: Jack Frost	Face-to-Face, both	Forgot to chart
Patient Information				Pt Repositioning		Follow-Up		
Patient	Date/Time	MRN	At-Risk Criteria	Q2hr Turned?	# Missed	RN/PCT	Follow-up	Barrier Identified
1								
Comments:								

INTERPROFESSIONAL COLLABORATION

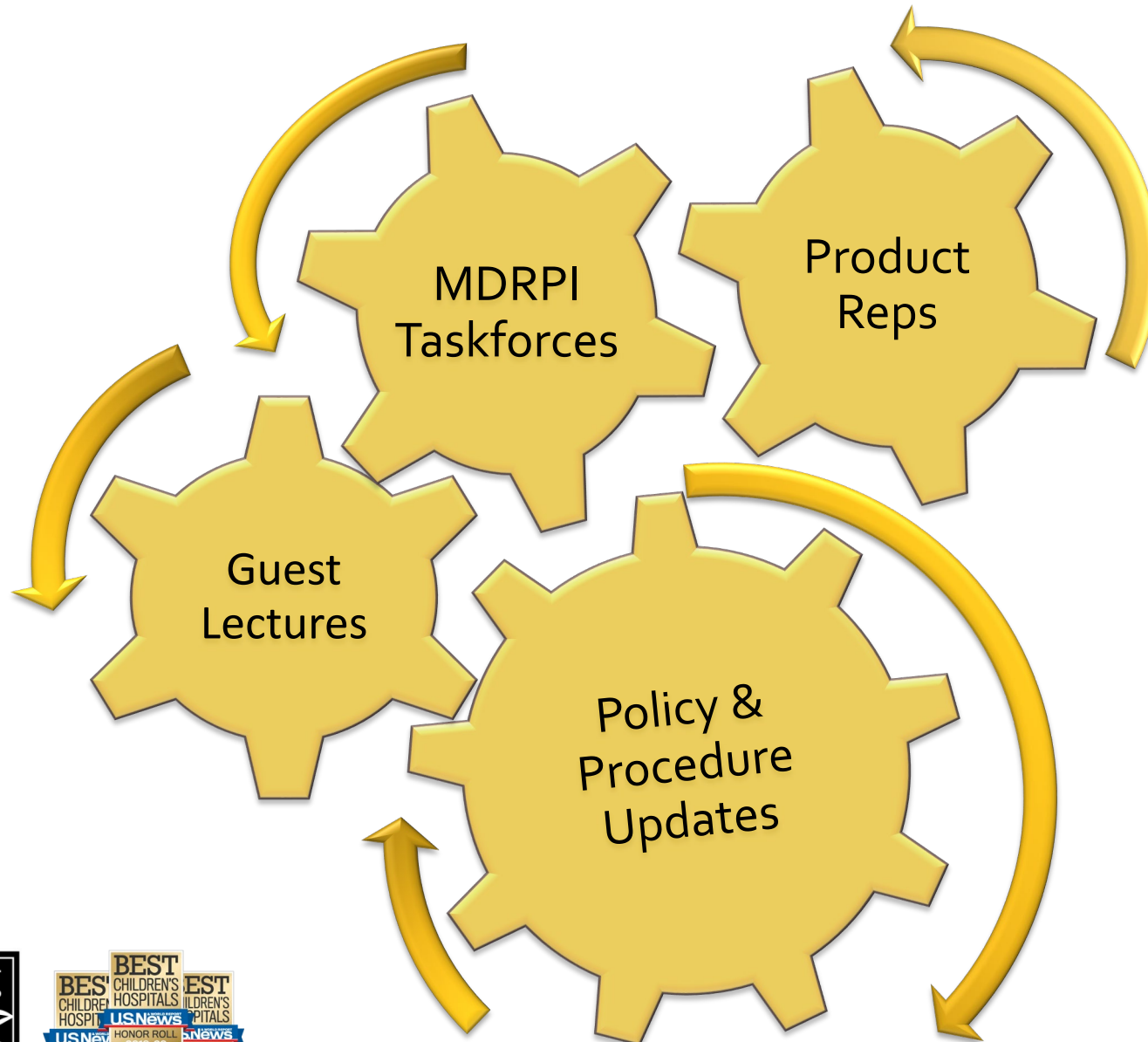


"We can't solve problems by using the same kind of thinking we used when we created them."

-Albert Einstein



INTERPROFESSIONAL COLLABORATION



YEAR AT A GLANCE

Quarter	Topic	Month	Guest Speaker/Product Representative	Hands-On
Q1	Pressure Injuries	January	Introduction Course & Journal Club	
		February	Interventional Radiology Line/Tubes/Drains Procedures	Padding & Stabilizing of Lines, Tubes, Drains
		March	Neurology EEG Procedure	EEG Turban Application & Skin Protection
Q2	Skin Injuries & Wound Care	April	Introduction Course & Journal Club	
		May	Dermatology Dermatological Skin Conditions	Wet Pajamas & Wound Cultures
		June	General Surgery Physician Abscesses, Incisions, & Fistulas	Wound Packing
Q3	Ostomies & Fistulas	July	Introduction Course & Journal Club	
		August	Hollister Rep Stoma & Bag Selection	Ostomy Bag Application
		September	Gastroenterology Surgical Procedure for Stoma Formation	"Pouch Me Home"
Q4	Negative Pressure Wound Therapy	October	Introduction Course & Journal Club	
		November	Orthopedics Debridement & Surgical Site Wounds	Surgical Site Wounds
		December	Acelity Rep Negative Pressure Wound Therapy	V.A.C Application



PRODUCT REPS

Skin & Wound Products

- Negative pressure wound therapy
- Ostomy pouches
- Support surfaces (specialty beds)
- Repositioning aids
- Foam dressings
- Barrier products

Hands-On Learning



DIDACTIC LECTURES

Content Expert

- Burn Team
- Trauma
- Orthopedics
- Gastroenterology
- General Surgery
- Neurology
- Dermatology
- Interventional Radiology
- Physical Therapy
- Respiratory Services
- Vascular (IV) Team

Hands-On Learning



MDPRI TASKFORCES

2016

- Neurology (*EEG*)
- Respiratory (*non-invasive ventilation*)

2017

- Peripheral Vascular Team (*peripheral IVs*)
- Trauma (*cervical collar*)

2018

- Anesthesiology/Cardiovascular Surgery (*endotracheal tube*)

2019

- Respiratory (*non-invasive ventilation*)
- ECMO

Children's National Medical Center
Division of Nursing & Patient Services

Nursing Practice Guideline

Chapter: General Nursing 2

Date Effective: 09/03
Last Updated: 06/17

Skin Care

Table of Contents

I.	Introduction	2
II.	Definitions/Explanations	2
III.	Risk Factors	4
IV.	Assessment	5
V.	Prevention	6
a.	Antiseptics	6
b.	Skin Barriers, Skin Adhesives & Skin Adhesive Removers	7
c.	Routine Care	7
d.	General Prevention Methods	8
e.	Therapeutic Support Surfaces (Specialty Beds)	9
VI.	Interventions/Care Plans	9
a.	Central Venous Line (CVL)	10
b.	Cervical Collars	10
c.	Diaper Dermatitis	10
d.	Electroencephalogram (EEG)	10
e.	Endotracheal Tube (ETT) / Tracheostomy	10
f.	Extracorporeal Membrane Oxygenation (ECMO)	10
g.	Feeding Tube	11
h.	Intravenous Infiltration/Extravasation	11
i.	Near-Infrared Spectroscopy (NIRS)	11
j.	Ostomy	11
k.	Respiratory Equipment	11
l.	Negative Pressure Wound Therapy	11
VII.	Patient/Family Education	12
VIII.	Documentation	12
IX.	References	13
X.	Reviewers	14
XI.	Legal Statement	15
XII.	Approval	16
XIII.	Appendix(s)	16
a.	Appendix A - Therapeutic Support Surfaces (Specialty Beds)	17
b.	Appendix B - Staging Algorithm	19
c.	Appendix C - Cushion and Protect	20
d.	Appendix D - Skin Care Product Index	21
e.	Appendix E - Diaper Dermatitis Algorithm	23
f.	Appendix F - Diaper Dermatitis Chart	24
g.	Appendix G - Pressure Injury Bundle	25

Skin Care 1

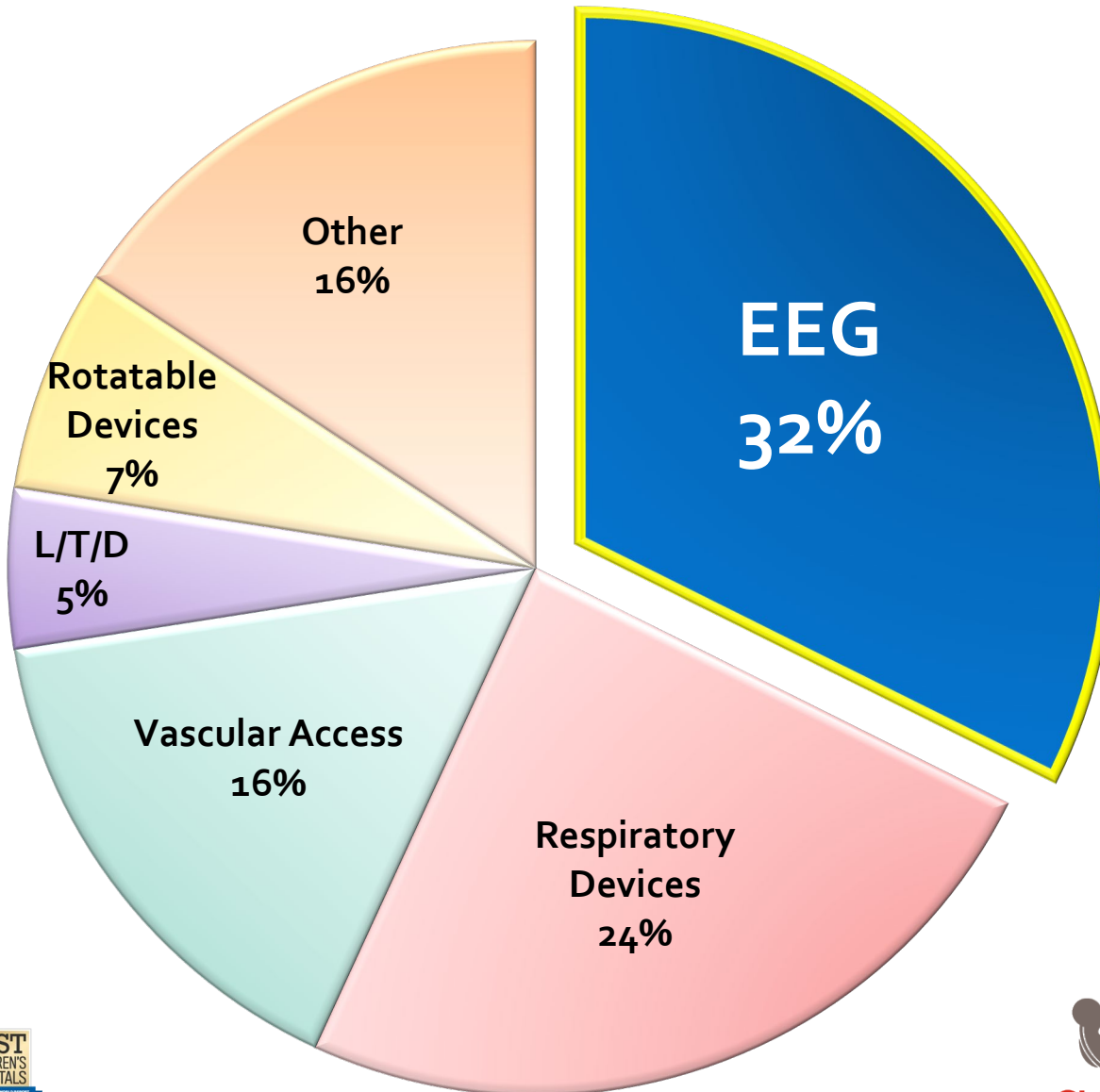
OPTIMIZING SKIN INTEGRITY

One Simple Change for Hospitalized Children

Kara Johnson BSN, RN, WOC-RN, WCC; **Laura Welch** BSN RN-BC, CPN, WOC-RN, WCC; **Nora Kramer** BSN, RN, CPN; **Sarah Hamilton** BSN, RN, CPN; **Bridgett Bissell** BSN, RN; **Pam Allen** RNC-NICU, WCC & **Leia Foster** BSN, RNC-NIC



2016 MEDICAL DEVICE-RELATED PIs



GOING TURBANLESS

Nora Kramer BSN, RN, CPN; Sarah Hamilton BSN, RN, CPN; & Bridgett Bissell BSN, RN



REDUCING EEG-RELATED PIs

Clinical Significance



- January – July 2016
 - 45 EEG-related PIs
 - 78% occurred in the 3 ICUs
- Our top MDRPI
- Interprofessional quality improvement (QI) initiative
 - Focus areas: CICU/PICU
 - The Team
 - Skin Team RNs in CICU & PICU
 - Neurologists
 - EEG Technicians

GOING TURBANLESS

PRE
Intervention

*Turbaned
EEG*



POST
Intervention

*'TurbanLESS'
EEG*



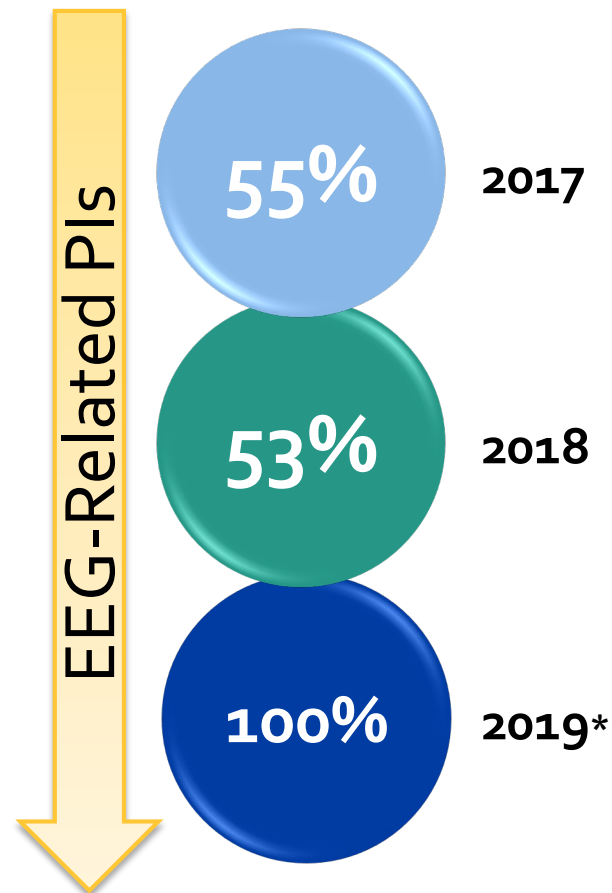
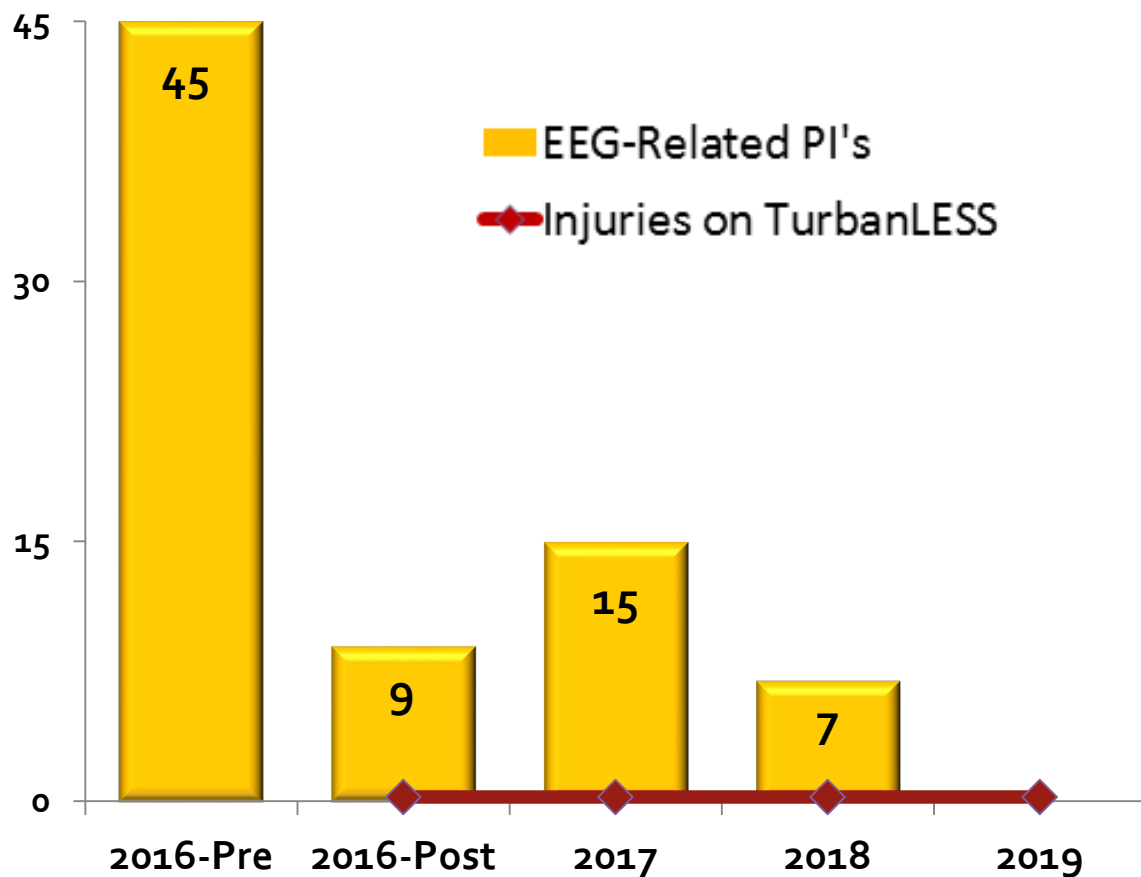
**Phase
1**

- Turban-less EEG studies in CICU/PICU
- New 'flutter' EEG leads
- Weekly EEG rounds

**Phase
2**

- **Education**
 - Skin protectors
 - Turban pressure
 - EEG surveillance

TURBANLESS OUTCOMES



*Data through September 2019

