

Dear Colleagues,

We are pleased to inform you that we have completed the analysis of surveys for the Consortium for Congenital Cardiac Care - Measurement of Nursing Practice (C4-MNP) state of practice assessment regarding pressure injury prevention for infants with congenital heart disease in the intensive care setting.

The purpose of this project was to describe and examine pediatric critical care staff nurses' use of a clinical practice guideline for the prevention of pressure injury for infants and children. Furthermore, this survey sought to establish a baseline of the state of practice for PI prevention for pediatric cardiac ICU patients.

The survey questions were developed by Linda Kulik PhD, RN, CWON, CCRN of Boston Children's Hospital.

Please find the aggregate result report below.

We would like to extend our heartfelt appreciation for your continued commitment to this collaborative as we work to improve outcomes for pediatric cardiovascular patients and their families.

Sincerely,

Linda Kulik PhD, RN, CWON, CCRN
Nurse Practice Specialist
Cardiac Intensive Care Unit
Boston Children's Hospital
Lindyce.Kulik@childrens.harvard.edu

Jean Anne Connor PhD, RN, CPNP, FAAN
Director, Nursing Research
Cardiovascular & Critical Care
Boston Children's Hospital
Jean.Connor@childrens.harvard.edu

Boston Children's Hospital

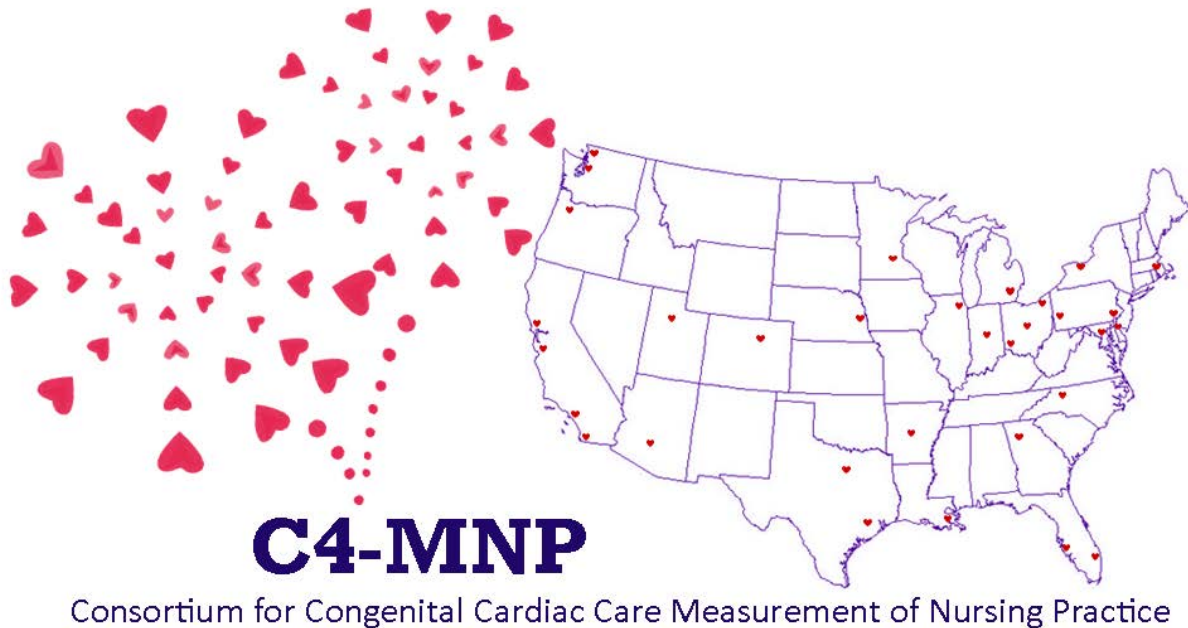
Consortium for Congenital Cardiac Care – Measurement of Nursing Practice

State of Nursing Practice Assessment Aggregate Result Report:

Pressure Injury (PI) Prevention

for Infants and Children with Congenital Heart Disease in the Intensive Care Setting

June 2018 - December 2018



Project Team:

Linda Kulik PhD, RN, CWON, CCRN

Benjamin Cerrato MPH, NREMT

Lauren Hartwell MPH

Jeffery Boateng MPH(C)

Courtney Porter MPH, CPHQ

Jean Connor PhD, RN, CPNP, FAAN

Table of Contents

Executive Summary	3
Demographics	4 - 8
Evidence Based Nursing Practice	
Value	8 - 10
Knowledge	10 - 12
Practices	12 - 14
Practical Experience	14 - 15
Pressure Injury Prevention Practices in the Pediatric Cardiac ICU	15 - 19
Factors that Influence Ability to Provide Pressure Injury Prevention	19 - 25

Executive Summary

Survey Overview

Despite limited evidence, pediatric Intensive Care Unit (ICU) patients with congenital heart disease (CHD) develop both immobility and medical device-related pressure injuries (PI). It has been documented that periods of immobility, medical devices, critical illness, poor tissue perfusion and oxygenation, and ICU settings are clinical factors that increase the risk for pediatric PI. The current state of practice of the use of pediatric nursing recommendations from evidence-based clinical practice guides for PI prevention is unknown. The goal of this survey was to describe and examine pediatric critical care staff nurses' use of a clinical practice guideline for the prevention of pressure injury for infants and children. Furthermore, this survey sought to establish a baseline of the state of practice for PI prevention for pediatric cardiac ICU patients.

Key Findings

The response rate was 24% with 311 staff nurse respondents submitting useable surveys from 15 unique pediatric ICUs for complete study analysis. The majority of the respondents had between 3 and 10 years of nursing experience and held a BSN as their highest nursing degree. For respondents that indicated they were a bedside staff nurse, the mean score for value for evidence based practice (EBP) was 4.3, knowledge of EBP was 2.62, and implementation of EBP was 1.84 on a Likert scale from 1-5 (N=311). On a scale of 0-24, with a higher score indicating more use of pediatric recommendations from PI prevention guidelines, the mean score was 21 (N=311). When asked to list 1 to 2 most important resources available that help provide PI prevention care, 230 nurses responded with 39 unique resources. When asked to list any resources that they would like to have to assist in providing PI prevention care, 28 out of 110 respondents had no requests, while 82 out of 110 respondents provided a total of 18 unique resources.

Conclusions

The findings demonstrate a reported high value, but lower knowledge and lowest implementation scores of evidence-based practice. Respondents reported frequent use of the National Pressure Ulcer Advisory Panel pediatric recommendations from a PI prevention clinical practice guideline. These staff nurses reported more perceived facilitators than barriers to PI prevention care; notable barriers include patient status, having enough time, lack of easy access to pressure redistribution surfaces and aides, and need for PI education. There was no meaningful relationship between the domains of evidence-based practice and use of the pediatric recommendations from the clinical practice guideline. In conclusion, there are opportunities for improvement regarding ongoing risk identification, use of prevention interventions, and parent engagement. Next steps include potential benchmarking, further study and development of PI prevention strategies, particular in response to identified potential barriers of prevention care.

Demographics

1. Gender.

Respondents (N=299)	
Gender	Frequency (%)
Male	13 (4.3)
Female	283 (94.7)
Other	3 (1.0)

2. Would you describe yourself as Hispanic or Latino?

Respondents (N=302)	
Hispanic or Latino	Frequency (%)
Yes	17 (5.6)
No	285 (94.4)

3. How would you describe your race?

Respondents (N=299)	
Race	Frequency (%)
White	268 (89.6)
Native Hawaiian /Other Pacific Islander	13 (4.3)
Black / African American	8 (2.8)
Asian	2 (0.7)
Native American / Alaskan Native	1 (0.3)
Multiracial (More than one race)	1 (0.3)
Care Not to Answer	6 (2.0)

4. What is your highest nursing degree obtained?

Respondents (N=300)	
Highest Nursing Degree	Frequency (%)
Baccalaureate Degree	247 (82.3)
Associate Degree	25 (8.3)
Master's Degree	22 (7.3)
Diploma	5 (1.8)
PhD	1 (0.3)

4. Highest non-nursing degree if applicable?

Respondents (N=274)	
Highest Non-Nursing Degree	Frequency (%)
Yes	68 (24.8)
None	206 (75.2)

Of those responding 'Yes,' their highest non-nursing degrees are:

Highest Non-Nursing Degree	Frequency
Bachelor of Science – Science Related	27
Bachelor of Arts – Science Related	6
Bachelors	11
Bachelor of Arts – Non-Science Related	8
Bachelor of Science – Non-Science Related	6
Master's Degree	4
Associate Degree	3
No response	3

5. How many years have you been a nurse (since licensure)?

Respondents (N=296)	
	Mean (Range)
Years as Nurse	9.1 Years (0-42)

6. How many years have you been a pediatric ICU nurse caring for pediatric cardiovascular ICU patients?

Respondents (N=296)	
	Mean (Range)
Years as Pediatric ICU Nurse	7.02 Years (0 - 41)

7. Any nursing certifications that you have achieved? Please check all that apply.

Respondents (N=303)	
Nursing Certifications Achieved	Frequency (%)
CCRN	123 (40.6)
CPN	27 (8.9)
Other* (includes more than one)	48 (15.9)

Of those responding 'Other', other nursing certifications specified were:

Other Nursing Certifications
CWOCN
RNC
RNC-NIC
ENB 415 & 998, RSCN
Wound Associate Technician, Pain Resource Nurse
CEN, C-NPT
TCRN
CCNS/CNS
CLC
Bio/Chemotherapy
CPNP/PNP
CNL
SCRN, GRN

8. Where do you primarily practice?

Respondents (N=301)	
Primary Practice	Frequency (%)
Dedicated Pediatric Cardiac ICU	252 (83.7)
Pediatric ICU	49 (16.3)

9. Number of beds in your Pediatric Cardiac ICU or PICU?

Respondents (N=301)	
Number of Beds in Unit	Frequency (%)
21 to 30 Beds	114 (37.9)
10 to 20 Beds	98 (32.6)
Greater than 30 Beds	78 (25.9)
Less than 10 Beds	11 (3.6)

10. As a staff nurse in your unit, are you identified as a skin expert or skin champion?

Respondents (N=300)	
Identified as Skin Expert or Skin Champion	Frequency (%)
Yes	29 (9.7)
No	271 (90.3)

11. What UNIT-BASED resources are available to you in your ICU to assist with pressure injury prevention interventions? Please check all that apply.*

Respondents (N=303)	
Unit-Based Resources	Frequency (%)*
Skin champion team or unit-based skin experts	231 (76.2)
Dietician	197 (65.0)
Clinical Nurse Specialists	190 (62.7)
Manager/Director/Supervisor support	182 (60.1)
Certified Wound Ostomy Continence Nurse (CWOCN)	178 (58.8)
Evidence-based practice mentors or coaches	134 (44.2)
None	8 (2.6)

13. What education about pressure injury prevention have you had? Check all that apply.*

Respondents (N=303)	
Education about Pressure Injury Prevention	Frequency (%)*
During my initial nursing training/education for licensure	244 (80.5)
During my nursing orientation when I started my current employment	241 (79.5)
On-line learning modules	220 (72.6)
Unit or hospital in-services	215 (71.1)
Annual hospital or unit-based education program	210 (69.3)
Read professional journal articles	94 (31.1)
Attended a conference presentation	27 (8.9)
None	1 (0.3)

Evidence Based Nursing Practice: Value

1. The application of evidence-based practice (EBP) enables me to provide the highest quality of care.

Respondents (N=311)	
EBP Enables Quality Care	Frequency (%)
Strongly Agree	165 (53.1)
Agree	131 (42.1)
Neutral	4 (1.3)
Disagree	1 (0.3)
Strongly Disagree	10 (3.2)

2. I work in an environment that values change in practice based on evidence.

Respondents (N=311)	
Environment Values Practice Change Based on Evidence	Frequency (%)
Strongly Agree	168 (54)
Agree	121 (38.9)
Neutral	12 (3.9)
Disagree	4 (1.3)
Strongly Disagree	6 (1.9)

3. Evidence-based practice is valued by nursing leadership.

Respondents (N=311)	
Unit Nursing Leadership Value EBP	Frequency (%)
Strongly Agree	176 (56.6)
Agree	117 (37.6)
Neutral	8 (2.6)
Disagree	4 (1.3)
Strongly Disagree	6 (1.9)

4. By utilizing evidence-based practice I am able to change agency-wide nursing practice.

Respondents (N=311)	
EBP Enables Agency-Wide Nursing Change	Frequency (%)
Strongly Agree	84 (27)
Agree	143 (46)
Neutral	64 (20.6)
Disagree	16 (5.1)
Strongly Disagree	4 (1.3)

Evidence Based Nursing Practice: Knowledge

1. The steps of evidence-based practice.

Respondents (N=311)	
Knowledge of EBP Steps	Frequency (%)
Extremely Knowledgeable/Expert	14 (4.5)
Very Knowledgeable	69 (22.2)
Knowledgeable	168 (54)
Minimally Knowledgeable	55 (17.7)
Not at All Knowledgeable	5 (1.6)

2. How to form a PICO question.

Respondents (N=311)	
Knowledge on Formation of PICO Question	Frequency (%)
Extremely Knowledgeable/Expert	14 (4.5)
Very Knowledgeable	53 (17)
Knowledgeable	77 (24.8)
Minimally Knowledgeable	93 (29.9)
Not at all Knowledgeable	74 (23.8)

3. A ranking system of the hierarchy of evidence.

Respondents (N=311)	
Knowledge on Hierarchy of Evidence Ranking System	Frequency (%)
Extremely Knowledgeable/Expert	39 (12.6)
Very Knowledgeable	29 (9.3)
Knowledgeable	111 (35.7)
Minimally Knowledgeable	114 (36.7)
Not at all Knowledgeable	48 (15.4)

4. Performing a computerized literature search using an online database (e.g. CINHALL, Medline).

Respondents (N=311)	
Knowledge on Computerized Literature Search	Frequency (%)
Extremely Knowledgeable/Expert	19 (6.1)
Very Knowledgeable	95 (30.6)
Knowledgeable	132 (42.4)
Minimally Knowledgeable	44 (14.1)
Not at all Knowledgeable	21 (6.8)

5. Critically appraising a systematic review (e.g. Cochrane review).

Respondents (N=311)	
Knowledge on Critically Appraising Systematic Review	Frequency (%)
Extremely Knowledgeable/Expert	9 (2.9)
Very Knowledgeable	29 (9.3)
Knowledgeable	95 (30.5)
Minimally Knowledgeable	108 (34.8)
Not at all Knowledgeable	70 (22.5)

6. Critically appraising a qualitative research study.

Respondents (N=311)	
Knowledge on Critically Appraising Qualitative Research	Frequency (%)
Extremely Knowledgeable/Expert	7 (2.3)
Very Knowledgeable	28 (9)
Knowledgeable	104 (33.4)
Minimally Knowledgeable	114 (36.7)
Not at all Knowledgeable	58 (18.6)

7. Critically appraising a quantitative research study.

Respondents (N=311)	
Knowledge on Critically Appraising Quantitative Research	Frequency (%)
Extremely Knowledgeable/Expert	9 (2.9)
Very Knowledgeable	29 (9.3)
Knowledgeable	102 (32.8)
Minimally Knowledgeable	113 (36.3)
Not at all Knowledgeable	58 (18.7)

Evidence Based Nursing: Practices

1. In the past 12 months, how often have you performed the steps of evidence-based practice?

Respondents (N=311)	
Perform Evidence-Based Practice	Frequency (%)
Greater than 10 Times	51 (16.4)
6 to 10 Times	18 (5.8)
3 to 5 Times	50 (16.1)
1 or 2 Times	101 (32.4)
None	91 (29.3)

2. In the past 12 months, how often have you developed a PICO question related to a problem identified from your clinical practice?

Respondents (N=311)	
Developed a PICO Question	Frequency (%)
Greater than 10 Times	0 (0)
6 to 10 Times	1 (0.3)
3 to 5 Times	20 (6.4)
1 or 2 Times	71 (22.8)
None	219 (70.4)

3. In the past 12 months, how often have you performed a literature search?

Respondents (N=311)	
Performed a Literature Search	Frequency (%)
Greater than 10 Times	31 (10)
6 to 10 Times	27 (8.7)
3 to 5 Times	50 (16.1)
1 or 2 Times	102 (32.8)
None	101 (32.4)

4. In the past 12 months, how often have you critically appraised the evidence from a literature search that pertains to your clinical practice?

Respondents (N=311)	
Appraised Evidence from Literature Search	Frequency (%)
Greater than 10 Times	10 (3.2)
6 to 10 Times	15 (4.8)
3 to 5 Times	35 (11.3)
1 or 2 Times	101 (32.5)
None	150 (48.2)

5. In the past 12 months, have you shared the knowledge obtained from the evidence-based practice process?

Respondents (N=311)	
Shared Knowledge from EBP	Frequency (%)
Greater than 10 Times	8 (2.6)
6 to 10 Times	16 (5.1)
3 to 5 Times	47 (15.1)
1 or 2 Times	120 (38.6)
None	120 (38.6)

6. In the past 12 months, how often have you used the results from evidence-based practice to formally propose a change in clinical practice?

Respondents (N=311)	
Used EBP to Propose Clinical Practice Change	Frequency (%)
Greater than 10 Times	4 (1.3)
6 to 10 Times	8 (2.6)
3 to 5 Times	19 (6.1)
1 or 2 Times	92 (29.6)
None	188 (60.4)

7. In the past 12 months, how often have your results from evidence-based practice resulted in a change in clinical practice?

Respondents (N=311)	
EBP Results Changed Clinical Practice	Frequency (%)
Greater than 10 Times	1 (0.3)
6 to 10 Times	5 (1.6)
3 to 5 Times	16 (5.1)
1 or 2 Times	75 (24.1)
None	214 (68.8)

Evidence Based Nursing Practice: Practical Experience

1. A pressure injury risk assessment was performed on ADMISSION using a pediatric pressure injury risk assessment scale.

Respondents (N=311)	
Pressure Injury Risk Assessment Performed on Admission	Frequency (%)
Yes, Always	267 (85.9)
Sometimes	35 (11.2)
No, Never	9 (2.9)

2. A head-to-toe skin assessment was performed on ADMISSION, assessing the skin over bony prominences and under and around medical devices.

Respondents (N=311)	
Head-to-Toe Skin Assessment Performed on Admission	Frequency (%)
Yes, Always	281 (90.3)
Sometimes	27 (8.7)
No, Never	3 (1)

Pressure Injury Prevention in the Pediatric Cardiac ICU

1. A pressure injury risk assessment was performed at least DAILY using a pediatric risk assessment scale.

Respondents (N=311)	
Daily Use of Pediatric Risk Assessment Scale for Pressure Injury	Frequency (%)
Yes, Always	279 (89.7)
Sometimes	29 (9.3)
No, Never	3 (1)

2. Additional clinical risk factors were considered as part of the overall pressure injury risk assessment.

Respondents (N=311)	
Considered Additional Risk Factors in Assessment	Frequency (%)
Yes, Always	283 (91)
Sometimes	27 (8.7)
No, Never	1 (0.3)

3. Medical devices were considered as part of the overall pressure injury risk assessment.

Respondents (N=311)	
Considered Medical Devices in Assessment	Frequency (%)
Yes, Always	279 (89.7)
Sometimes	28 (9)
No, Never	4 (1.3)

4. The occiput was assessed at least DAILY for signs of pressure injury particularly for neonates and young children.

Respondents (N=311)	
Daily Assessment of Occiput for Pressure Injury	Frequency (%)
Yes, Always	226 (72.7)
Sometimes	83 (26.7)
No, Never	2 (0.6)

5. A head-to-toe skin assessment was performed at least DAILY, and more often if prolonged immobility or evidence of pressure injury.

Respondents (N=311)	
Daily Head-to-Toe Skin Assessment	Frequency (%)
Yes, Always	269 (86.5)
Sometimes	41 (13.2)
No, Never	1 (0.3)

6. The skin under and around medical devices was assessed at least every shift.

Respondents (N=311)	
Assessed Skin Around Medical Devices	Frequency (%)
Yes, Always	279 (89.4)
Sometimes	33 (10.6)
No, Never	0 (0)

7. The pressure injury risk assessment and skin assessment were documented in the medical record at least daily.

Respondents (N=311)	
Daily Documentation of Risk and Skin Assessment	Frequency (%)
Both	268 (86.2)
Yes, Risk Assessment Only	41 (13.2)
No, None	2 (0.6)

8. The parent or legal guardian was included when discussing pressure injury prevention goals for their child.

Respondents (N=311)	
Include Parent/Guardian in Prevention Goals	Frequency (%)
Yes, Always	64 (20.6)
Sometimes	221 (71.1)
No, Never	26 (8.3)

9. Nutritional requirements of critically ill children at risk for pressure injury were regularly assessed by a pediatrician, dietician, or other qualified health professional to identify whether caloric intake is meeting prescribed caloric goals.

Respondents (N=311)	
Assess Nutritional Requirements of Children at Risk	Frequency (%)
Yes, Always	274 (88.1)
Sometimes	37 (11.9)
No, Never	0 (0)

10. A specialized pressure redistribution support surface, mattress, or overlay was used for children at risk for pressure injury (e.g. change from the usual hospital mattress used).

Respondents (N=311)	
Use of Specialized Pressure Redistribution Support Surfaces	Frequency (%)
Yes, Always	222 (71.4)
Sometimes	84 (27)
No, Never	5 (1.6)

11. The head of neonates and infants was repositioned every 2 hours if ventilated and sedated, unless medically contraindicated.

Respondents (N=311)	
Repositioned Infants and Neonate's Head Every Two Hours	Frequency (%)
Yes, Always	288 (92.6)
Sometimes	23 (7.4)
No, Never	0 (0)

12. Heels were floated off the surface of the bed for patients at risk for pressure injury.

Respondents (N=311)	
Heels Floated Off Surface of the Bed	Frequency (%)
Yes, Always	235 (75.6)
Sometimes	74 (23.8)
No, Never	2 (0.6)

13. A prophylactic dressing was used with non-invasive positive pressure ventilation therapy (e.g. BiPAP/CPAP) to help prevent medical device pressure injury.

Respondents (N=311)	
Used Prophylactic Dressing for Patients on BiPAP/CPAP	Frequency (%)
Yes, Always	214 (68.8)
Sometimes	92 (29.6)
No, Never	5 (1.6)

14. Medical devices were rotated or repositioned if able, at least every shift or more often with cares.

Respondents (N=311)	
Medical Devices Rotated or Repositioned	Frequency (%)
Yes, Always	277 (89.1)
Sometimes	33 (10.6)
No, Never	1 (0.3)

Potential Factors that Influence Ability to Provide Pressure Injury Prevention in the Pediatric Cardiac ICU

1. Pressure injury prevention care is based on an evidence-based clinical policy or practice guideline in my unit or hospital.

Respondents (N=305)	
Prevention Care Based on Evidence-Based Policy or Guideline	Frequency (%)
Yes	270 (88.5)
Unsure	35 (11.5)
No	0 (0)

2. Pressure injury prevention is a healthcare team priority.

Respondents (N=305)	
Prevention is a Team Priority	Frequency (%)
Yes, Always	251 (82.3)
Sometimes	51 (16.7)
No, Never	3 (1)

3. Resources (e.g. specialized mattresses, or overlays, gel pillows, dressings) to provide pressure injury prevention care are easily accessible.

Respondents (N=305)	
Resources for Prevention Easily Accessible	Frequency (%)
Yes, Always	240 (78.7)
Sometimes	61 (20.0)
No, Never	4 (1.3)

4. The medical record includes dedicated space to document pressure injury prevention interventions including for medical devices.

Respondents (N=305)	
Space to Document Prevention Interventions	Frequency (%)
Yes	270 (88.5)
Unsure	26 (8.5)
No	9 (3)

5. I have enough knowledge to provide age-appropriate pressure injury prevention care.

Respondents (N=305)	
Knowledge to Provide Age-Appropriate Prevention Care	Frequency (%)
Yes, Always	289 (88.2)
Sometimes	34 (11.1)
No, Never	2 (0.7)

6. The patient's clinical condition tolerated implementation of pressure injury prevention care (e.g. repositioning).

Respondents (N=305)	
Patient's Clinical Condition Tolerated Prevention Care	Frequency (%)
Yes, Always	185 (60.7)
Sometimes	119 (39)
No, Never	1 (0.3)

7. There is enough time to provide pressure injury prevention care.

Respondents (N=305)	
Enough Time to Provide Prevention Care	Frequency (%)
Yes, Always	192 (63)
Sometimes	106 (34.8)
No, Never	7 (2.2)

8. List the ONE or TWO most important resources available that help you provide pressure injury prevention care. Similar responses may be grouped.

Important Resources Available for Pressure Injury Prevention Care	Frequency (%)
Clinical Nurse Specialists (CNS)	47 (12.6)
Z-flo positioners	47 (12.6)
Gel pillows, gel pads	42 (11.3)
Specialty mattress surfaces/overlays/specialty beds	29 (7.8)
Unit skin champions/PUP team/Skin team/HAPI team	23 (6.2)
Available WOCN/Wound specialist RN/WTA/Wound care team	20 (5.4)
Mepilex/mepilex lite dressings	17 (4.6)
Staff member available to assist with repositioning	16 (4.3)
Available assorted dressings (ex. specialty, protective, foam)	8 (2.1)
Available equipment to help pressure redistribution/off loading	8 (2.1)
Nursing colleagues to help	7 (1.9)
Resource nurses	7 (1.9)
Repositioning devices especially for heavier patients	7 (1.9)
Nurse educator	6 (1.6)
Pillows	5 (1.3)

Positioning pillows/foam wedges	5 (1.3)
Available supplies	5 (1.3)
Online resources: Internet/Elibrary/Employee.net/Wound Ostomy website-algorithms	5 (1.3)
Unit information book about skin care, prevention, pictures	5 (1.3)
Assistance from respiratory therapy to turn intubated patients	4 (1.1)
Allevyn dressings	4 (1.1)
Dedicated unit-based wound care nurse	3 (0.8)
Proper staffing ratios	3 (0.8)
Enough time to provide prevention care	3 (0.8)
Physical therapist	3 (0.8)
Careforce	3 (0.8)
Waffle cushions	3 (0.8)
Appropriate turning/reposition patients	3 (0.8)
Braden Q risk assessments	3 (0.8)
Perform skin assessments	2 (0.5)
Charge nurse/Leadership	2 (0.5)
Policy tech/ skin policies	2 (0.5)
Prevention education	2 (0.5)
Nursing experience	2 (0.5)
New evidence as it is available/clinical research articles	2 (0.5)
Skin care closet with supplies	2 (0.5)
Blanket rolls	2 (0.5)
Bedside reminders of important cues/reminders	2 (0.5)
Other (listed once in survey)	14 (3.8)

*May not add up to 100% due to rounding

Of those responding 'Other', other available resources specified were:

Occupational therapist
It is helpful having fields that automatically populate in the EMR that prompt documentation on repositioning/pressure injury prevention, which in turn prompts care. Also having these measures widely known as integral Nightingale measures makes them automatic/muscle memory.
Quality nurses auditing us
The Sunday night skin survey
Pressure evaluations with skin rounds
Daily rounds
Newsletter, huddle
Swaddling

IV rounds to ensure under hub of IV catheter is in place
Bridles for NG/OG tubes
Heel boots
Swings
Unsure

9. List any resources you would like to have to help you provide pressure injury prevention care. More than one response possible. Similar responses may be grouped.

Resources That You Would Like to Have for Pressure Injury Prevention Care	Frequency (%)
Specialty mattresses/beds that provide pressure relief include for adults	11 (8.9)
Education/materials to learn how prevent pressure injury across ages	10 (8.1)
Reference guide/ book about products, how to use, color pictures PI stages	9 (7.3)
More z-flo positioners	8 (6.5)
Adequate staffing for repositioning and extra time to look around devices	6 (4.9)
Small/large gel pillows, include for premies	5 (4.1)
CNS	3 (2.4)
More WOCNs/wound nurses	3 (2.4)
Different dressing types and sizes	3 (2.4)
More time to provide prevention care	3 (2.4)
Dedicated skin care team	2 (1.6)
Resource nurses	2 (1.6)
Nurse educators	2 (1.6)
Foam wedges for adult size patients	2 (1.6)
Easier access to positioning devices esp for heavy patients	2 (1.6)
Small reminders on bedside carts for cares	2 (1.6)
Use of text reminders to rotate pulse ox	2 (1.6)
Other (listed once in survey)	20 (16.3)
No resources needed/unsure/not applicable	28 (22.8)

*May not add up to 100% due to rounding

Of those responding 'Other', other resources to have to provide pressure injury prevention were:

Better BiPAP mask options for larger pediatric patients
Staff support, any resources
New product that can cover the whole patient instead of using z-flo + waffle and the two products separating
More streamlined documentation. I feel like I spend too much time documenting & not caring for the patient

I feel that my institution makes injury prevention and infection control (core nursing measures) a very important highlight in the care we provide. There are regular policy updates
Additional chairs for patients to get out of bed
More rounding other than once a week
Foam dressings to pad cannula
Something for long term lines
Body aligners for older kids, oxygen tubing padding for ears, bridles for NG tubes
Better products for holding the endotracheal tube off the lips
Pressure injury prevention items stocked at bedside, increase access to all products
Improved standard hospital beds
Bean bag bolsters
Mirror for assessments
Representation on Skin Committee
Turn team

10. Additional comments.

Additional Comments
I think we could improve on intentionally assessing the occiput and a daily skin/device assessment
In the CICU, depending on patient acuity, sometimes it is not feasible to frequently turn the patient without decompensation
Our unit is always very vigilant about keeping our patients free from injury.
Better tape to secure nasogastric-tube so won't have to constantly re-tape to prevent tube from moving toward nares constantly
Pressure injury prevention is a priority for care in our unit
EBP can only improve when the parties involved care about it. Not just people saying this is the practice we should follow. Share the articles about practice with the bedside RN's.... also practice can't get better without addressing other means to the end and analyzing what works better
More education
I feel that the biggest barrier to pressure injury prevention measures is acuity (not being able to safely reposition patients/equipment).
I found this survey confusing. It tells you to think about one patient but asks broad questions.
My answers may be skewed since I am currently in grad school in a research course
It's difficult to transfer very sick post-op patients to a better mattress/bed... so they should all come up from the OR already on an ICU/air redistribution mattress.
I am starting to be curious on the concept of skin failure and would want more information on this
I have been doing this care longer than there has been evidence for it. Experience is the best teacher and often negated

I have only been working here for 6 months so I am still learning.
Consider a turn team
Wound care nurses need to provide more in services about prevention
Some nurses don't make this a priority, it's not lack of resources or knowledge
Not always possible to do full skin assessment on patient on admission if unstable... Ex BP issues, massive blood loss, ECMO