Welcome

Enjoy the 2019 Pediatric Conference
Virtual Poster Presentation
A Hands-on Approach to Sustaining a Safety Culture
Carolyn Ziebert, DNP, RN, PCNS-BC; Cori Gibson, MSN, RN, CNL; Chris Lutze, BSN, RN; Julie Averbeck, MS, RN, CPNP
Children’s Hospital of WI

Background
- Effective communication is critical to patient safety and error prevention.
- Current safety training introduces staff to error prevention tools with minimal application exercises.
- Safety coaches are in place to support clinical practice but report needing more practice with tools and provide effective feedback during safety situations.
- Staff feedback, observations, and event reports indicate a certain tool (ARC) is more challenging to use.

PICO Question
For healthcare professionals: how does participation in a focused safety training session (using simulation and cognitive rehearsal) compare with basic safety education in increasing confidence in providing constructive feedback and use of organizational error prevention tools in practice?

Search Process
Literature search: CINAHL, PubMed, National Guideline Clearinghouse, and Cochrane Database of Systematic Reviews
- Tracked 255 articles
- 63 articles potentially relevant to project
- Review narrowed to 27 studies and 2 guidelines

Search rationale
Evidence suggests using various simulation methods and cognitive rehearsal techniques to enhance competence and self-confidence.

Methods
Safety Simulation Workshop
- Developed using a multifaceted approach with role play, active learning, and cognitive rehearsal techniques.
- Designed so all participants have an opportunity for active role in a scenario.
- Focused on error prevention tools coaches struggled with.
- Three scenarios were developed (pertinent to practice and based on safety events):
  - Managing behavior
  - Interaction with Spanish speaking family
  - Need to escalate concerns

Sample and Setting
- Seventeen safety coaches who were Clinical Quality Improvement Council members.
- Workshop held during monthly meeting (90 minutes)

Pilot

Measures
- Pre and immediate post survey
- 2-day "Boost" email
- 2-week "Boost" f 1-rounding
- 3-month follow-up survey

Results

Helpful aspects of workshop:
- Appreciate practicing real-life scenarios
- Seeing how to react to different hard situations
- Getting to do things twice to use different tools and see other people’s ideas and words in action
- Very beneficial that all of us had to play the lead in one simulation

Least helpful aspects of workshop:
- "More time to do them"
- "Maybe less helpful watching, but still appreciated getting the chance to give feedback"

Next Steps
- Share results with key clinical and operational leaders
- Spread workshop throughout the system
- Continue to evaluate with ePRO tool for feedback
- Hardwire into practice:
  - Share safety stories to illustrate how use of error prevention tools prevented harm and promoted safety
  - Incorporate into existing educational offerings, staged orientations and annual educational days

Implications
- Simulation and cognitive rehearsal are useful strategies to increase confidence in providing feedback in challenging situations.
- Safety coaches reported intention to use the tools more frequently.
- Next to spread training to more staff.

Acknowledgements
Children’s Hospital of Wisconsin Departments:
- Enterprise Safety
- Educational Services
Aromatherapy to Enhance Pediatric Post-Operative Comfort
Anita Norton MSN, RN, CPNP-PC; Danielle Gustafson BSN, RN

Background
- Discomfort caused by post-operative nausea and vomiting (PONV) is a common complaint after surgery.
- This can lead to other complications, such as dehydration, post-operative bleeding, wound complications and electrolyte imbalance.
- Research nurses at an outpatient surgery center were interested in exploring the use of aromatherapy for post-operative discomfort in our pediatric population using the Iowa Model of Evidence-Based Practice.

PICO Question
Does the use of aromatherapy enhance the post-operative comfort for pediatric same day surgery patients?

Synthesis of Evidence
- Conflicting evidence in the literature about the value of aromatherapy to decrease PONV or enhance post-operative comfort.
- Professional guidelines cite the usefulness of aromatherapy as a “tool” (not preventative) measure for PONV or to enhance post-operative comfort for adults.
- Cochrane review: no current, reliable evidence for the use of peppermint oil, noting that the evidence is incomplete, especially for the pediatric population, and further studies needed.
- Evidence from three randomized controlled studies in the adult literature supports that the availability of aromatherapy has a positive impact on patient and family satisfaction.
- Lack of evidence supporting the use of aromatherapy in the pediatric population to decrease PONV or enhance post-operative comfort.

Evaluation of Outcomes
- 24 of the 31 (77.4%) reported a decrease in nausea by 2 or more points on the BARI-P scale.
- Of the 27 contacted, 50% felt the product was helpful and 52% continued to use the product at home.
- Additionally, 100% of families reported appreciating the option of aromatherapy.

Search Process
- Database searched included CINAHL, Ovid, Scopus, PubMed and the Cochrane Library.
- Search strategies resulted in 127 articles.
- 17 articles critically reviewed based on relevance to PICO question.
- Contacted manufacturers of a common aromatherapy product for sample and outcome data related to children.
- Articles summarized in evidence table including level of evidence:
  - Level A - 1
  - Level B - 12
  - Level C - 3
  - Level D - 1

Next Step: Pilot Study
- Patients approached for enrollment in pre-op, consent &/or assent obtained.
- Inclusion criteria included ages 5-17, English-speaking, no history of anxiety, no allergy to essential oils or sensitivity to perfumes, and no family member with allergy to essential oils.
- 266 patients enrolled.
- Convenience sample of 31 participants who demonstrated post-operative discomfort.
- Comfort assessed post-operatively and those scoring 4 or greater on the Bader Animated Retching Faces (BARI) scale were instructed to use the aromatherapy product. Comfort then reassessed 5 minutes later, a 2 point or greater reduction in score was considered clinically significant.

Implications
- The study contributed to the body of knowledge surrounding the use of aromatherapy in pediatrics. It showed that aromatherapy can enhance post-operative comfort in pediatric surgical patients, and that the option of this additional therapy is a family satisfaction.
- Aromatherapy will be used as an adjunct therapy with pediatric post-op patients in an outpatient surgery center.

Acknowledgements
The authors would like to thank Karen Devenyi, Alyssa Cope, Valerie Eberhoff, Sue Fineman, Kathy Grabiner, Kathy Grabiner, Kelly Lytton, Saddie Noland, Erin Nolte, Fanny Notto, & Bonnie White-Teut.
Treatment of Infantile Spasms: An Evidence-Based Practice Investigation
Audrey Roach, BSN, CNRN, CPN
1. Children’s Hospital of Wisconsin 2. University of Wisconsin – Milwaukee

Introduction
• Infantile spasms (IS): Rare seizure disorder
• Approx. 1,200 infants diagnosed annually in U.S.
• Optimal therapy unknown; under debate

Optimal therapy for IS is under debate. The most common treatment is ACTH therapy. However, the efficacy of corticosteroids remains controversial. This review will provide evidence to support the use of corticosteroids in the treatment of IS.

PICOT Question
In infants diagnosed with infantile spasms, how does oral corticosteroid treatment compare with ACTH treatment in eliminating clinical spasms and resolving hypsarrhythmia after an eight week treatment course?

Search Process
• Embase, Medline, Pubmed, and the Cochrane databases searched for articles discussing treatment of IS, published in last 10 years using:
  - ACTH or oral corticosteroids
  - Key words included “infantile spasms and ACTH”, “infantile spasms and corticosteroids”, and “infantile spasm therapy”
  - Repeated search with “West syndrome”
  - 54 articles met inclusion criteria; 42 excluded:
    - using combination treatments
    - protocols not comparable to other studies
    - 5 strongest articles chosen for inclusion

Evidence Table

<table>
<thead>
<tr>
<th>Author, Year, Journal</th>
<th>Sample</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hancock, Osborne, &amp; Edwards, (2013) Cochrane Database of Systematic Reviews</td>
<td>Systematic review of 18 RCT studies, 916 patients, 12 different pharmaceutical agents, 4 of the included studies directly compared ACTH to oral corticosteroids</td>
<td>Poor methodology and small sample sizes identified in most studies reviewed; 10 of 18 studies published over 20 years ago; provides the historical context of IS treatment</td>
</tr>
<tr>
<td>Arya, Shinnar, &amp; Glueck, (2012) Journal of Child Neurology</td>
<td>Systematic review of 8 clinical trials with 211 infants; only two studies were methodologically adequate, but 3 studies provided enough raw data to recalculate efficacy outcomes</td>
<td>Efficacy of high-dose corticosteroids is similar to low-dose ACTH but inferior to high-dose ACTH; lack of rigorous evidence causes corticosteroids to be inferior to ACTH</td>
</tr>
<tr>
<td>Wanigasinghe et al., (2017), Pediatric Neurology</td>
<td>RCT of 97 infants ranging in age from 2-30 months old with previously untreated infantile spasms, excluding infants with tuberous sclerosis</td>
<td>Corticosteroids produced greater improvement in hypsarrhythmia, and in spasm control at 3 months, 6 months, and 12 months compared to ACTH</td>
</tr>
<tr>
<td>Raga &amp; Wilmshurst, (2018). Seizure</td>
<td>Systematic review of studies using oral corticosteroids or ACTH in the treatment of IS, 18 met inclusion criteria</td>
<td>Research shows there is efficacy of corticosteroids for treatment of IS, but there is higher classes of evidence supporting ACTH; therefore further research is needed on corticosteroids to improve the classes of evidence and strength of recommendations</td>
</tr>
<tr>
<td>Gonzalez-Giraldo et al., (2018), Pediatric Neurology</td>
<td>Retrospective review of 87 children, newborn to 24 months, with a diagnosis of IS that were treated with oral prednisolone</td>
<td>71.3% clinically spasm free at 2 weeks, 64.4% resolved hypsarrhythmia at 2 weeks, 62.1% clinically spasm free at 3 months – similar to ACTH outcomes from other studies</td>
</tr>
</tbody>
</table>

Drug | Adrenocorticotropic hormone (ACTH) | Oral Corticosteroids
---|---|---
Therapy | 1st line therapy | Similar treatment outcomes
Cost | $75,000 | $200
Education | Significant caregiver education | Reduced caregiver education
Hospitalization | Prolonged hospitalization to initiate therapy and obtain met (7 days) | Shorter hospitalization (2-3 days)
Administration | Daily IM injections | Oral
Emotional stress | Increased emotional stress | Decreased emotional stress

Evidence synthesis found no consensus regarding use of ACTH or oral corticosteroids in treatment of IS:

- The medication used, dosage regimen, and treatment duration vary significantly among studies
- All studies had small sample sizes resulting in underpowered results
- Recent studies have shown treatment outcomes from oral corticosteroids to be equivalent to ACTH
- Further research needed to validate these results

Implications for Practice
- Caregivers should partner with health care providers to decide on individual basis which medication most ideal for infant
- Parental preference for oral medication is significant reason to consider all options for treatment of IS
- There is growing literature supporting oral corticosteroids as a safe and effective therapy for IS

Acknowledgements
Julia Smithee, PhD, RN, FAAN and Eileen Sherburne, PhD, RN for their expertise in editing and formatting this poster

References
- Gonzalez-Giraldo et al., (2018)
- Raga & Wilmshurst, (2018)
- Wanigasinghe et al., (2017)
- Arya, Shinnar, & Glueck, (2012)
- Hancock, Osborne, & Edwards, (2013)
Nurse-Resident Collaboration and Communication: Implementing the Current Evidence and Practice Change

Shawn Feltz, BSN, RN, CPN; Ashley J. Stelter, MS, RN, PCNS-BC

Background/Setting

- 14-bed acute care unit with primary cardiology, nephrology, hepatology, and hematology pediatric patient populations
- 298-bed pediatric teaching hospital with rotating teams of medical students, residents (interns) and senior residents
- Medical and nursing students rotate every 4 weeks to new units throughout the hospital
- Communication between RNs and MDS is critical to creating a culture of safety as 73% of adverse events are caused by faults in communication
- Iowa Model of Evidence-Based Practice framework

Synthesis of Evidence

Emerging themes:
- Communication, respect, trust, and understanding of each other's roles and task priorities affect collaboration
- Formation of RN/MC work group
- Interdisciplinary rounding
- Implementation of RN led orientation for residents
- Increase unit specific knowledge: MDS more consistent and connected with RN team
- Provide opportunities for RNs/MC to build rapport
- Time for RN/MC to mingle within first 24 hours of rotation

Evaluation of Outcomes

- Preintervention (n=28) and postintervention (n=22) MD survey contained 8 Likert scored questions capturing MD perception of communication and collaboration with RNs
- Conversely, pre-intervention (n=24) and post-intervention RN surveys (n=11) focused on RN perception of communication and collaboration with MDS

Practice Change Based on Evidence

- Unit-specific orientation designed and implemented by RNs for residents rotating to C4 on 1st day of service with a joint welcome breakfast
  - Orientation includes information on collaborative admissions, ordering unit specific labs, how to reach your RN, interdisciplinary rounds, coordinated discharges, hand hygiene, and safety huddles
  - RN education created to increase communication and collaboration with residents as designed by RNs and MDS
  - Resident presence at daily safety huddle led by Charge RN
  - Resident workbook handout
    - List staff pictures, roles and interesting facts to build rapport
    - Tips for Vocaer use, resources, handoff protected times
  - Resident pictures with interesting facts posted for staff to build rapport

Implications

- Improving RN and MD collaboration and communication requires an evidenced based bundle of interventions
- MDS and RNs benefited from this practice change, although, a statistically significant difference was noted with MDS vs. RNs with reported satisfaction of collaboration and communication
- Barriers include finding mutually "good" times for RN/MC to engage in orientation, breakfast, and huddles as well as securing financial resources to fund a monthly welcome breakfast

Acknowledgements
Agreement Between NICU Health Care Providers and Parents About Infant Illness Severity: Does Primary Nursing Matter?

Kathryn J. Mailin, RN, MSN, NNP-BC,1 Joanna Lagosso, RD, MS,2 Sarah MacAndrew, MS1, Jacqueline Woodworth, MS1, Jonathan Leahey, RN,1 and Terese S. Johnson, RN, PhD1

1University of Wisconsin-Milwaukee, 2Children’s Hospital of Wisconsin, 3The Medical College of Wisconsin

Introduction

Many NICU health care providers and parents agree on stress severity which makes communication challenging. Parents’ perceptions of illness have been associated with self-management and quality of life outcomes. Furthermore, parents’ perception of their infant’s stress severity in the NICU has been associated with later development of posttraumatic stress disorder symptoms in parents.

In the neonatal intensive care unit (NICU), consistent nursing has been found to reduce length of stay, duration of mechanical ventilation, and infant outcome and nutritional requirements. It is unknown if consistent provider care of stress severity in primary nursing in the NICU increases the likelihood that parents and healthcare providers agree on infant illness severity.

Purpose

To examine the relationships between healthcare providers’ care of experience, and primary nursing with provider and parent perceptions of infant illness severity in the NICU.

Conceptual Framework

Primary nursing and relationships-centered care models frame this study. Primary nursing: routine nurses are responsible for care coordination from admission to discharge. Primary nursing has been associated with improved continuity of care, quality measurements, and increased involvement in professional nursing activities.

Methods

- Descriptive analysis of data from a prospective, longitudinal study of parents infant dyads (n = 122) in the NICU
- Parent, bedside nurses, and physician parent questions regarding perceptions of infant illness severity
- Perception of illness severity was measured by a 7-point Likert scale: "very stressful" to "not stressful at all."
- Nurse and physicians/parent illness severity was measured as total number of NICU outcomes and beliefs nurses reported regarding patient’s stress: "very stressful" to "not stressful at all."
- We performed a t-test to compare the reliability between provider and nurse perceptions of illness using a Kruskal-Wallis (K-W) document.
- Relationships between nursing similarity with agreement in perceived illness severity were further tested with multiple variable logistical regression adjusting for use of restraints, respiratory support, or major congenital anomalies as markers for objective illness severity.

Results

- 50% of families felt the primary nurse should participate in care planning decisions; patients and nurses agreed more often when an infant was stressed.
- Nurses and physicians disagreed more often than an infant was sick. Parents reported their infants to be at risk in many critical care units.
- For parents reporting their infant's stress as a nurse, nurses who were caring for the patient were more likely to agree with the parent’s stress (35%) than nurses who were not caring for the patient’s stress (40%) or more than their primary nurse (75%, p = 0.015).
- Multivariate analysis, adjusting for the use of restraints, respiratory support, or major congenital anomalies, indicated primary nurse nurses were more likely to agree with parent perceptions compared to nurses who did not care for the infant (OR, 95% CI: 1.55, 1.50 - 1.60, p = 0.02).
- Having more than 10 years of experience working in the NICU was not associated with significant difference in agreement for higher nurses of infant illness (OR = 1.05, p = 0.29).

Conclusions

- Primary nursing in the NICU is an important feature to improve bedside care in understanding and communication between parents and healthcare providers.
- Primary nurses in the NICU may be more attuned to parents’ perceptions of infant illness severity and may be more adept to explain perceptions to other nurses and family caregivers.
Cues to medication availability may lead to increased PCA use and opioid consumption in children

Keri R. Hainsworth, Michella L. Czarnecki, Pippa M. Simpson, Liyun Zhang, W. Hobart Davies, Devin Mueller, Johanna R. Michael, Steven J. Weissman

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Introduction
- The PCA pump used at CHW can provide feedback to patients about the lockout period via a green light and an auditory tone.
- Although potentially beneficial, the safety and efficacy of this technology has not been examined in children.
- Based on operant theory, this feature may result in stimulus control of behavior, which could lead to the use of PCA on stimuli (e.g., light) other than internal pain.

Aims
Determine whether the light cue and auditory tone feedback:
1) Improve patient satisfaction;
2) Reduce post-surgical state anxiety;
3) Affect the way children use the PCA pump.

Methods
Participants
- 125 children/adolescents, 7-18 years, 62% female

Design
Patients randomized to either Light Cues Group or No Light Cues Group (Control), while stratifying for gender and surgery type (e.g., orthopedic, abdominal, thoracic)

Outcomes
- Opioid Consumption (mg/kg/hr)
- State Anxiety (0-50)
- Pain Intensity (0-10 NRS)
- Injections/Attempts ratio
- Satisfaction with pain management

Statistical methods
- Mixed model with random time
- Pearson correlation test

Results
- Groups did not differ in:
  - Patient satisfaction
  - Post-surgical state anxiety
  - Pain intensity (all p > .05).
- More patients in the Light Group had a 1:1 injection/attempt ratio (p < .001).
- Children (6-12 years of age) in the light group (Mdn = 0.13, Q1 = 0.12 - Q3 = 0.06 mg/kg/hr) consumed more opioid than children in the control group (Mdn = 0.13, Q1 = 0.06 - Q3 = 0.025 mg/kg/hr) (p < .01).

Discussion
- This study expands our understanding of factors that affect PCA use in pediatric populations, and contributes to the evidence that pressing a PCA button is a complex behavior that is subject to the principles of operant conditioning.
- Although patients in the Light Cues group found it easier to know when their lockout period was over (p < .001), that difference did not equate to higher satisfaction with the pump/pain management.

Conclusions
- The overall pattern of findings suggests:
  - Cues to medication availability may lead to increased PCA use and opioid consumption in children <= 12 years old.
  - More studies are needed to further examine the effect of this feature before releasing it for pediatric use.

Fig 1. Opioid consumption is lower in No Light Cues group for age 7-12

Light Cues vs No Light Cues

Opioid consumption

Children

Teens

P = 0.007

P = 0.05
#7

Engaging Parents in Education for Discharge (E-PED) using an iPad Application

Nash J. Johnson, PhD, RN, CPNP-AC/PC,1,2,3 Deanne Lighter, PhD, CPNP-FAANP1,2,3,4 Michelle Paddon, PhD, RN, CPNP1,2,3,4 Marianne Villere, DNP, RN, CPNP1,2,3,4,5 Kathy Sauer, PhD, RN, CPNP1,2,3,4 Rosemary White-Train, PhD, RN, FAAN1,2,3,4,5,6,7,8,9,10

1Marquette University College of Nursing; 2Children’s Hospital of Wisconsin; 3Medical College of Wisconsin; 4University of Wisconsin-Milwaukee College of Nursing

Purpose
To assess the impact of the E-PED nursing practice intervention on:

- Quality of Discharge Teaching Delivery (QDTO)
- Care Transition Measures (CTM)
- Emergency department (ED) visits
- Unplanned Readmissions within 30 days of discharge (READMS)

Method
- 14-month quasi-experimental (longitudinal) study with control unit receiving usual E-PED intervention
- 6 screens of 5 questions each

Results

<table>
<thead>
<tr>
<th>Measure</th>
<th>ED Visits</th>
<th>READMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>QDTO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTM</td>
<td></td>
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</tbody>
</table>

Table 1. Demographics

Table 2. Mean Comparison between Implementation and Control Units

Conclusion and Implications

- Discharge teaching delivery was significantly higher for parents who received the engaging discharge teaching with the E-PED app.
- ED visits and readmissions were lower for the unit that used the E-PED app.

Practice Implications:
- The outcomes of this study indicate the importance of engaging all parents of children with teaching using a theory-based structured conversation guide such as the E-PED app.

### References

**Note:** The table and graph are placeholders for the actual data and visual representation. The text is a conceptual outline of the study's findings and implications.
**Health Literacy-Related Safety Events: One Children’s Hospital’s Experience**

Andrea K Morrison, MD, MS; Cori Gibson, MSN, RN, CNL; Clarairel Hillgins, RN; Michael Gutzeit, MD

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### Background
- Gaps in clear communication across the care continuum
- Uninformed communication can lead to misunderstanding and error in caring for a child
- Known higher risk areas for communication: Medication, Discharge
- It is not known what deficits in health literate communication lead to patient safety events

### Project Aim
- Develop themes of health literacy-related safety events by
  - Describe the impact of health literate communication on patient safety
  - Aid in prioritization of health literate safety practices

### Methods
- Safety events are entered into a system wide self-report safety event collection database
- Medical events tagged for health literacy events by trained safety specialist
- Database retrospectively queried for all health literacy tagged events
  - 18 month period (September 2015-May 2018)

#### Qualitative Analysis:
- Authors (AM, CG, CH) reviewed and independently coded health literacy-associated safety events
- Qualitative content analysis of events conducted
  - Met as a group for discussion and final coding
  - Disagreements were resolved by consensus
  - Themes emerged as coding progressed
  - Analysis of final themes conducted as a group
- Coding and analysis facilitated by NVivo 11.0

### Results

#### Health Literacy-Related Safety Events

**Medication** 55%

- **Subthemes:**
  - Medication administration
  - Medication reconciliation
  - Medication instructions
  - Multiple conflicting instructions
  - Immunizations

**Discharge/Transition** 28%

- **Subthemes:**
  - Discharge/transition
  - Docket instructions
  - Planning

**Health System** 27%

- **Subthemes:**
  - Non-English-speaking
  - Language barrier
  - Documentation

**Illustrative case**:
- **4x** per week.

### Conclusion
- Lack of health literate practices impacts patient safety for patient/parent understanding of:
  1. Medication
  2. Discharge/transition
  3. Health system
- Prioritize health literate safety practices to address specific themes:
  - Medications: Improvements for dose titration in electronic medical record
  - Improvement in medication reconciliation
- Incidents involving poor communication should be considered markers for possible harm
- Organizations should review and address health literacy-related safety events

#### Limitations:
- Only includes reported events
- Communication errors have not specifically been targeted to be entered

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### Future Directions

- Developing White Paper with a Health Literacy Action Plan for hospital system
- Collaborate with other Children’s Hospitals in Solutions for Patient Safety to improve reporting of communication related safety events to improve:
  - Safety practices
  - Health equity
- Develop performance standards for health literate communication
- Work with national groups to create a policy or statement of best practices for patient safety
Pediatric Hospital Medicine and Complex Care Program

Inpatient Partnership

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¹Department of Pediatrics, Medical College of Wisconsin; ²Children’s Hospital of Wisconsin, Milwaukee WI

BACKGROUND

Our Complex Care Program (CCP) provides medical co-management & care coordination for children with medical complexity in both the inpatient and outpatient care settings. Inpatient care is delivered by rotating CCP providers who round daily on all inpatients enrolled in the CCP & serve as consultants to the admitting Pediatric Hospital Medicine team (PHM). In 2018, over 200 children received care under this PHM-CCP partnership.

OBJECTIVE

Identify which aspects of the care provided by CCP team in the PHM-CCP partnership model are most and least helpful.

METHODS

Qualitative data collected Oct-Dec 2018 from inpatient RNs (9), inpatient case managers (20), hospitalists (12), residents (20), CCP RNs (7), CCP Care Coordination Assistants (7), CCP MD/NPs (9), social workers (3).

Each group was asked 2 questions.

1) What does the CCP team do during an inpatient admission you find most helpful?
2) What things does the CCP team do that are not helpful?

A 5-person multidisciplinary group reviewed responses and identified themes.

RESULTS

Table 1: Example responses by theme for Question 1

<table>
<thead>
<tr>
<th>Knowledge of Child</th>
<th>Knowledge of Family/Family Advocacy</th>
<th>Continuity of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCP MD/NPs</td>
<td>Hospitalists</td>
<td>Residents</td>
</tr>
<tr>
<td>What worked and what didn't work</td>
<td>Understanding past hospitalizations</td>
<td>Let us know baseline</td>
</tr>
<tr>
<td>Attention to detail for non-acute issues</td>
<td>Provide context for admission Know details</td>
<td>Reassuring face to the family</td>
</tr>
<tr>
<td>Understanding family social complexity</td>
<td>Know what equipment is at home</td>
<td>Help with difficult parents</td>
</tr>
<tr>
<td>Trusted by family</td>
<td>Know family dynamics, preferences, what they can handle at home.</td>
<td></td>
</tr>
<tr>
<td>Patient history/baseline</td>
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</tbody>
</table>

Continuation to home

<table>
<thead>
<tr>
<th>Written Care Coordination note</th>
<th>Transition to home</th>
<th>Help get patients home sooner</th>
<th>Help with patient and family individual needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pending tests</td>
<td>Help get patients home sooner</td>
<td>Help get patients home sooner</td>
<td>Help get patients home sooner</td>
</tr>
<tr>
<td></td>
<td>Work with inpatient case managers</td>
<td>Provide a medical home</td>
<td>Provide a medical home</td>
</tr>
<tr>
<td></td>
<td>Established sick plans</td>
<td>Scheduling</td>
<td>Scheduling</td>
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CONCLUSION

• Themes identified as helpful related to long-term relationships with patients and families.
• Transitions were identified as high-impact areas.
• CCP provider familiarity with patient increased perceived helpfulness.
• Themes identified as unhelpful highlight the need to optimize communication and collaboration between the CCP and PHM team and clarify the goals of each team.
• Limitations relate to small sample size.

NEXT STEPS

• We are currently surveying families regarding their views of the PHM-CCP partnership.
  o Initial results demonstrate families perceive the PHM-CCP partnership as valuable with similar themes.
• Continue ongoing QI work to improve the PHM-CCP partnership
• Focus resources and CCP effort on the contributions most valued by hospital collaborators and families
• Investigate costs of incorporating non-admission-related chronic care orders to an inpatient hospitalization (i.e. imaging, routine labs)
# Using Simulations and Skills Stations to Enhance Emergency Preparedness in Pediatric Urgent Care

**Ilanlee Cabrera, MSN, RN, CPNP, Wilma Santiago, BSN, RN, CPNP, Tiffany Christensen, Rachel Lucas, DO**  
Children’s Hospital of Wisconsin

## Introduction

Children’s Hospital of Wisconsin's Urgent Care clinics have encouraged an increase in both patient visits (Figure 1) and patient safety (Figure 2) in recent years.

![Figure 1: Patient visits](image1)

![Figure 2: Patient safety](image2)

Research shows:
- Emergency response skills deteriorate quickly after training.
- Regularly and repeatedly practicing a skill may prevent rapid skill deterioration.
- More frequent training is superior to conventional training to ensure high quality recall of skills.

## Aim

- Improve emergency preparedness by holding regularly scheduled multidisciplinary simulations and skills practice sessions in order to provide the best and safest care to our patients.
- Simulation lab: participant assessment of feeling well prepared or very well prepared for an emergency will increase 50% from pre-survey to post-survey.
- In situ (inciting) simulations: post simulation surveys will reflect 75% of participants feeling more prepared for an emergency after the simulation.

## Methods

**Curriculum design and implementation**
- High and low fidelity manikins
- Emergency scenario: asthma and hypoxia, severe bronchospasm, seizures, hemodynamic shock, diabetic ketoacidosis, anaphylaxis, and cardiac arrest of the child and adult.
- Deliberate practice of skills using equipment available in clinic:
  - Cervical collar application
  - NIV helmet removal
  - Weight estimation using measuring tool
  - Ventilation of a tracheostomy tube
  - Initiation of emergency response
  - Effective team communication

**Survey design**
- Likert scale pre-survey:
  - Prior simulation experience
  - Prior involvement in clinical education
  - Self-assessment of emergency preparedness
- Likert scale post-survey:
  - Self-assessment of emergency preparedness

## Results

### Simulations November 2017 - August 2019

- **Participants:** 148 unique participants (n=80), repeat visits (n=64)
- **Surveys:** January 2019 - August 2019 (n=140, survey response rate 100%)

**Prebrief (simulation lab only):**
- The basic assumption that all staff are intelligent, capable, and try their best.
- Rapid contract: scenario is as real as possible but learning depends on full participation.
- Preparatory information given, introduction to room and manikin.

**Debrief (simulation lab and In situ):**
- Re-examine scenario for learning.

Figure 3: Simulation lab and In situ survey.

### In situ simulations (Figure 4)

- More prepared after the simulation: 81%

## Conclusions

- Staff preparedness increased after simulation participation.
- All staff play an important role during an emergency.
- According to research, regular and repeated practice may increase retention and prevent skill deterioration.
- Multisite and in situ simulations are essential to staff preparedness to perform high quality care during an emergency event.

## Limitations

- Survey data is self-reported and subjective.
- Unable to assess improvement in preparedness from in situ simulations given no pre participation survey.
- Difficult to compare data between simulation dates as scenario may differ between simulations.

## Next steps

- Future data could compare preparedness to:
  - Years working in Urgent Care
  - Total years of experience in healthcare
  - Previous simulation attendance
  - Role within Urgent Care
- Inter-departmental simulations:
  - Rapid cycle: deliberate practice versus traditional simulation.

## References


**Acknowledgments**

Thank you to Kathy Jaspars, BSN, RN; Amanda Sokoloski, DNP, RN; CPNP-AC; CUC; Lauren Ludwig, RN; Jacqueline Bunting, MPH; CPHIA; Louise Smith, BSN, RN, AARC; Danielle Smith, MSN, RN, CNE; Vashali Singh, MD; Amy Romaniuk, MD; Heather Fendrich, MD; and Todd Peterson, MD, NABE.

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**Children's Hospital of Wisconsin**

Kids deserve the best.
Values Clarification: Eliciting the Values That Inform and Influence Mothers’ Treatment Decisions for an Extremely Premature Birth

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1Children’s Hospital of Wisconsin, WI; 2Indiana University, IN

Introduction
- The majority of extremely premature infants (i.e., born between 22 and 24 weeks gestation) die or suffer moderate to severe disability. Parents and clinicians are faced with the unique and unfortunate challenge of having to make ‘end-of-life decisions’ at the very beginning of life.
- Values clarification can assist families facing the threat of an extremely premature birth in navigating the complexity of competing values related to death, disability, and quality of life.

Aim
- Overall study aim was to prospectively assess attitudes, perceptions, and coping mechanisms related to death and disability from the perspective of pregnant women and fathers/important others when making decisions concerning the birth of an extremely premature infant.
- For this presentation we explored and clarified values that inform resuscitation decision-making among pregnant women facing the threat of an extremely premature birth.

Method
- Prospective and longitudinal mixed methods design
- Interviews were conducted prenatally
- Inclusion criteria:
  - English and Spanish speaking women presenting to Labor & Delivery
  - Between 220 to 230 weeks gestational age with a pregnancy complication (i.e., rupture of membranes, preterm labor, shortened cervix, pre-eclampsia, and growth restriction) that poses the potential threat or need for an extremely premature birth.
- 3 values clarification (VC) activities as part of a semi-structured interview:
  - First, participants read 9 conditions describing mild-to-severe impairments that may result from an extremely premature birth, then identified which conditions they considered an acceptable or unacceptable quality of life for a child.
  - Next, participants received 7 cards that listed common concerns of parents facing decision-making for an extremely premature infant and were asked to rate each one (scale 0-10, not at all to extremely important) and then rank them from least to most important.
  - Finally, parents read 6 statements regarding end of life treatment, disability, and quality of life, indicating ‘agree or disagree’ for each.
- Descriptive analyses of the quantitative data.

Quality of Life and Disability
- All participants considered mild disabilities (i.e., mild vision, hearing and learning problems) to represent an acceptable quality of life.
- More than 66% also considered blindness, deafness, and being unable to walk or toilet train an acceptable quality of life for their child.
- In contrast, two-thirds considered long-term mechanical ventilation unacceptable.

Rating and Ranking of Common Concerns Related to Treatment Decisions
- For this card sorting activity, impact on Physical/Mental Health (5.65) and Financial Concerns (5.35) were rated as the most important concerns, whereas ‘impact on Career’ (3.50) was the lowest.
- Religious/Spirtual Beliefs ranked highest, while ‘impact on Other Children’ and ‘impact on Career’ ranked lowest.

Views on End-of-Life Treatment, Disability and Quality of Life
- 83% agreed with the statement, “A short comfortable life is better than a long, painful life.”
- 49% disagreed with the statement, “Some disabilities are worse than death.”

Conclusion and Implications
- Most mothers had a threshold for disability considering only the most severe conditions to represent an unacceptable quality of life.
- Our study offers important insights into parental perspectives in decision-making and potential values clarification tools for decision support.
- These values clarification activities were well-tolerated and accepted by expectant mothers.

Funding
Funded by the National Institutes of Health (NIH), Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) (R21 HD089032-01)
Its contents are solely the responsibility of the authors and do not necessarily represent the official views of NICHD.

Acknowledgement
- We are grateful to the expectant mothers who participated in this research.
Introduction

- Central line-associated bloodstream infections (CLABSI) in the neonatal period are associated with an increased risk of morbidity and mortality, as well as extended hospital stays and higher healthcare costs.
- Limited evidence exists on best practices in the care of central lines that is specific to neonates.
- Nurse-driven initiatives are needed in the care and maintenance of central lines in the neonatal population.

Purpose

- To examine CLABSI risk points in the neonatal population and to create changes in nursing practice to mitigate those risks.
- Overall goal of decreasing NICU CLABSI rate.

Setting

A 70-bed Level 4 NICU in a 300-bed Midwestern pediatric hospital with a staff of over 250 nurses.

NICU CLABSI team infrastructure

Practice Changes

The NICU implemented the following practice changes:

1. Created dressing integrity guidelines
   - Hospital-wide policy change
   - Added objective guidance to a subjective process
   - Provides more consistency in nursing interpretation of dressing integrity

2. Introduced a silicone-based adhesive remover with dressing removal
   - Previous product being used left behind a film on the skin as a protective barrier
   - Dressing removal was made faster and easier
   - Skin injury was minimized due to adhesive removal
   - Line migration risk was minimized

3. Increased use of hemostatic agents with bleeding lines
   - Bleeding lines can present added challenges to dressing maintenance and skin integrity
   - Extends the time that a dressing requires changing
   - Bactericidal against a wide range of microorganisms

4. Created strict diapherent practices
   - Removed wipes, diapers, and other supplies from incubators
   - Changed nursing practice to place soiled diapers immediately on scale instead of in patient's bed
   - Emphasized good hand hygiene techniques

Results

- Overall CLABSI rate decreased from 1.6 per 1000 line days in 2017 to 1.05 in 2018.
- A positive shift in the nursing culture within the NICU and placing the utmost importance on strict central line care practices.

Conclusion

- In the spirit of innovation and collaboration, we were able to make changes to dressing change products and nursing practice that showed a positive effect on our outcomes.
- A culture that is focused on CLABSI prevention and led by bedside nurse champions will help provide the best possible patient outcomes.

Acknowledgements

The authors would like to thank the following:

- The Central Access Team nurses for their expertise, guidance, and support.
- The Patient Safety department for providing dedicated resources to CLABSI prevention.
- The NICU nursing staff for providing the best care to the babies each and every day.
Establishment of a Human Milk Kitchen with Integration of Web-based Scanning Preparation Program

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Children's Hospital of Wisconsin Departments of Lactation Services* and Neonatal Intensive Care Unit**

Introduction
- The reduction of mortality and morbidity associated with feeding human milk has increased the use of mothers’ own milk and human milk products in the hospital setting.
- Centralized handling of human milk and formula in a designated preparation space is considered best practice.
- Children's Hospital of Wisconsin expanded on the practice of preparing human milk across various hospital units.
- Human milk feedings were prepared at the bedside by nurses.
- Human milk identification was completed via scanning into the electronic health record (EHR) via the medication administration record (MAR).
- This put patients at risk for misadministration of human milk.
- Children's Hospital of Wisconsin opened the Milk Kitchen staffed with certified milk technicians for management and preparation of human milk for the NICU with the desire to increase the scope to all inpatient units.
- A new milk identification system was incorporated which links mother, baby, and milk at all points for improved milk management.
- Goals were to facilitate a zero human milk misappropriation rate, systematic aseptic preparation, bedside delivery, safer inventory and storage methods, and decreased RN time used for preparation of human milk.

Aim
- The purpose of this poster is to describe the development of a human milk kitchen and implementation of a barcoding system for provision of human milk in a level IV Neonatal Intensive Care Unit.

Milk Techs 2016

Method
- A two-year multidisciplinary timeline was developed.
- Outcomes, impacts, and scope of service were defined.
- Evidence review, collaboration with functional milk kitchens and best practice guidelines were used.
- Assessment of needs for physical planning resulted in a two-room kitchen design in the NICU.
- Partnerships with clinical nutrition, nutrition services, dietetics, lactation services, information services, medical providers, RN staff, logistics, finance, pharmacy and environmental services were created.
- Lactation consultants and RNs provided a critical link between the clinical realm, engagement of staff and continuous quality improvement hospital wide.
- RNs participated in workflow Plan-Do-Study-Act (PDSA) cycles for Milk Tech and provider support.

Results
- Initial Do-Die of all systems occurred in August 2015 with one 29 bed NICU unit.
- Lean assessment and workflow review determined the need for additional equipment and Milk Tech PTEs.
- Expansion to fully service the 73 bed NICU occurred in February 2016.
- Change was difficult to implement on this large of a scale.
- Some staff had difficulty perceiving a centralized workflow as a possible change.
- Challenges were overcome with continued education and support throughout the transition.
- Human milk misappropriations and "near misses" for the NICU were 0 during the transition.

Discussion
- Human Milk Kitchen with bar code scanning are becoming the standard of care in the hospital setting.
- Implementation requires networking of teams and services across the institution.
- A robust scanning and preparation system that links to the electronic health record is required.
- Strong education and a support plan is key to success.
- Joint Commission feedback indicates interest in the safe provision of human milk.
- RN staff no longer have to prepare feedings allowing more valuable patient care time.
- Lactation consultants report higher satisfaction as they no longer manage storage areas and maintain provision of human milk products.

Follow up
- Additional units were added over time to the milk kitchen workflow for fortified human milk.
- Each unit instituted the milk identification system.
- Human milk continues to be stored on each unit. Milk techs pick up milk, prepare and deliver fortified feedings to the unit.
- Milk techs serve 26-65 patients 8 feeds per patient daily.

Future state
- Installation of human milk analyzer to provide nutrient profile to individualize nutrients used for fortification.

Units Served by Milk Kitchen

Acknowledgements
Mary Beth Foulds, MS, RD, CSP, DC; Brittani Clark, MS, RD, CNSC; Ram Mangaraj, RN, BSN*, Lisa Collins, RN, BSN*, Eileen O'Malley, RN, BSN*, Lisa Brock, RN, BSN, IBCLC, RLC*
Improving the Quality of Asthma Education

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Background
- Asthma is the most common chronic disease of the pediatric population, impacting 10% of children aged 18 years and younger (Ezzed, 2017).
- Over half of asthma patients are non-compliant with their medication treatments due to significantly increasing disease burden (Al-Muthen et al., 2015).
- Verbal education is often interrupted in a hospital setting while written education may overcome one's health literacy. Fragmented knowledge or ineffective teaching can result in poorer outcomes, increased Emergency Department (ED) visits and hospital readmissions, and costs to the individual and system (Wood et al., 2017).

Evaluation
- A hospital-wide survey was sent to patient care staff (nurses, respiratory therapists, and physicians) to assess the current state of asthma teaching in November 2018.
- Chart audits were performed to assess baseline documentation of asthma education.
- Families were surveyed through the patient experience team to gain familial perspectives on the discharge teaching process.

Analysis & Findings
- Pre-implementation survey:
  - 155 staff emphasized a lack of communication between who is teaching and what is being taught.
  - More than 50% of surveyed families reported education instructions as difficult to understand.
- Chart audits:
  - 170 asthma patient charts were audited to collect baseline documentation of asthma education received by patients and families. These audits had completed documentation rates of:
    - 50% verbal education
    - 22% written education
    - 0% video education

New Education Process
- Hospitalized patients with an asthma protocol and their families should receive an Asthma Care Notebook and asthma video education throughout their hospital stay.

Project Aims
- Decrease rates of ED utilization and readmissions for asthmatics aged 2-18 years.
- Increase the percent of patients and caregivers receiving multimodal asthma teaching to 30% verbal, 70% written, 50% video within 1 year of implementation (May 2020).

Methods
- Multidisciplinary meetings identified means to reduce variation in asthma teaching (Figure 1).
- Written and video asthma education materials were updated with standardized content and supplied to staff.
- Asthma RN champions were identified to assist with unit-specific input for incorporating iPad video education into the workflow.
- Video education determined by asthma RN champions in the form of 2-10 minute video bundles:
  - Video Bundle 1 Topics:
    - What is Asthma
    - Asthma Signs & Symptoms
    - Asthma Triggers
  - Video Bundle 2 Topics:
    - Asthma Medicines

Outcome
- Scripted teach-back questions were created for staff to assess patient and family understanding.
- Skills station poster boards placed on W11 & W12 for staff to reference as needed.
- Asthma RN champions piloted new education materials with patients and families in March 2019.
- Staff formally introduced to new education process at staff meetings in April and May 2019.

Initial Results
- Bedside staff and leadership shared excitement toward new asthma education materials with patients and families yet recognize that education is limited by family disinterest or lack of availability.
- Initial implementation of new education process increased the percent of video asthma education received by patients and families (Figure 2).

Conclusion
- Inconsistent completion and understanding of asthma education exists at current state for both staff and families.

Acknowledgments
- Cori Gibson, MSN, RN, CNL
- Amanda Guesnells, W11 & W12 Patient Care Director
- Kimberly Zimmack, W12 CNS, & Pamela Gage, W11 CNS
- W11 & W12 Nursing Staff
- Children's Hospital of Wisconsin

References

Figure 1. Key Driver Diagram – Education Interventions for Inpatient Asthmatics

Figure 2. Percent of Asthmatic Patients & Families who Received Verbal, Written, and Video Education between October 2018 – April 2019

Implications for the CNL Role
- The CNL is able to connect with leadership and bedside staff to address unit needs through the completion of a through microsystem assessment.
- The CNL can increase safe patient outcomes by ensuring that the new asthma education process and expansion to additional patient care areas.

http://search.ebscohost.com/login.aspx?account=26011900&site=eds-live&b=0&bcookie=1&c=cookie,ip,cpid&custid=1
Innovative Electronic Suicide Screening in the EDTC

Ashley Servi, DNP, RN, PCNS, CPN; Tara Pelozza, BSN, RN, CPN; Kristin Kuharske, BSN, RN; Michelle Pickett MD, MS; Frances Kaczor, MSW, APSW; Amy Ciriacks, AAS

Introduction

Suicide is a growing public health concern since it is the second leading cause of death in adolescents. The Ask Suicide-Screening Questions (ASQ) is a 4-question validated suicide screening questionnaire that identifies youth at risk for suicide. A discrete and convenient way to capture sensitive information in this fast-paced emergency department (ED) setting created innovative development of an electronic version. The patients’ responses from the electronic tablet upload into the electronic health record (EHR) and identified high risk patients to nurses and providers.

Aim

The goal was to determine if a self-administered electronic version of the ASQ questionnaire was feasible to screen adolescents in the ED.

Method

This QI project included patients 11 years old and older at a pediatric ED. Baseline data was collected 7/1/18 to 10/23/18. Mandatory suicide screening utilizing the tablet version of the 5-question ASQ screening was implemented on 10/23/18. A positive response is “yes” to any question, or any unanswered question. Literature supports unanswered questions demonstrate risk and justify follow up. Chi-squared tests were used to compare subgroups (gender and age).

Incomplete screens were able to be viewed and addressed by nursing staff if unable to be screened during the registration process.

ASQ Questions

1. In the past few weeks, have you wished you were dead?
2. In the past few weeks, have you felt you or your family would be better off if you were dead?
3. In the past few weeks, have you thought about killing yourself?
4. Have you ever tried to kill yourself?
5. Are you having thoughts of killing yourself right now?

Results

Post-implementation, 9,467 adolescents were screened for suicide, resulting in 15% of adolescents with a positive suicide screen (n=1512). Social work consulted 266 adolescents. Females with a positive screen (15%) was significantly higher compared to males (11%), p<0.01. The majority of patients with positive screens presented to the ED for non-psychiatric complaints (87%).

Conclusion & Implications

Implementation of an electronic, self-administered ASQ questionnaire in an ED was feasible and identified at-risk teens to prompt supportive conversation and resources. Suicide is a public health concern and requires ongoing effort to identify adolescents with suicidal ideation early to prevent negative outcomes. All healthcare staff can play an important role in screening.

Acknowledgements

Thank you to Kibler Nimmer for the support and data contributions.
Thank you to Patrick Rockett and our registration staff for providing support to our suicide screening.

Post-Implemented encounters

Implemented workflow
The Let’s Cope Together Program: Supporting Patients With Sensory And Developmental Conditions in the Emergency Department

Macy Connors, MS, CCLS; Alyssa Bauer, CCLS; Kelsey Tebbe, MS, CCLS; Ashley Servi, DNP, RN, PCNS, CPN; Carolyn Zenoni, RN, Karen Hauser, RN, and Jane Mathews, RN

Introduction

Literature shows that children with Autism Spectrum Disorder (ASD) struggle with increased anxiety and challenging behaviors (defined as kicking, hitting, spitting, crying, trembling) that may be provoked by the hospital environment. Studies conclude that children with autism are roughly 26% more likely to be hospitalized than typically developing children, with longer lengths of stay and higher costs.

Data supports that approximately 770 children with autism come through the CMH EDTC each year. Research indicates that listening to and involving caregivers, gathering information on how the child reacts in different situations, and providing education and training for hospital staff will help hospital staff work with patients with autism.

Aim

- Positively provide positive coping strategies for patients who may experience increased anxiety throughout their stay in the EDTC.
- Reduce patient anxiety, empower parents to advocate for their child’s needs, and enhance confidence in providing child-centered care to all patients.
- Provide medical staff with the tools to feel confident and safe when providing exceptional care.

Method

Strategy included evaluating similar programs from children’s hospitals around the country, collaboration with multidisciplinary members, and retrospective analysis.

Implementation included development and approval of a screening tool and assessment questions by a multidisciplinary clinical practice council.

In preload, RN ask caregivers, “Does the patient have a history of sensory or developmental conditions?” If caregiver says “yes,” the RN clicks the “yes” button which automatically pages the Certified Child Life Specialist (CCLS).

Once the patient is roomed, the CCLS meets with the family to assess previous medical experiences, triggers, and coping skills, and provide resources and support as needed throughout admission. This assessment is shared with multidisciplinary members of healthcare team verbally and via patient’s medical record.

Results via Family Feedback

“Was nice that I didn’t have to ask for it the support because I’m thinking about so many different things at the same time. So; to have the support without having to ask was wonderful.”

During procedure mom stated, “This is the best it has ever gone, maybe she does like this [procedure].” Patient was able to cope positively with distraction and sensory stimulation with very little resistance.

“You made the experience so much more positive for [patient]. We really appreciated your help.”

“I want you to come every time I have to go to the hospital!” From a 12 y.o. patient.

Data

Prior to implementation of The LCT Program, child life had supported an estimated 12 patients with sensory or developmental conditions from January 1, 2015 until June 30, 2019.

Since the program was implemented on July 1, 2019, the EDTC has screened over 500 patients eligible for the LCT program. Approximately 150 of which were able to be introduced to the program via a CCLS.

The LCT Program allows child life to be involved in the healthcare experience from admission to discharge, including preparation, developmentally appropriate education, and procedural support.

Conclusion & Implications

Increased EDTC Child Life coverage is needed to allow for 24 hour support of this program, and balancing all patient needs in the EDTC.

To continue supporting the LCT program, more equipment has been added to include such as weighted vests or blankets, noise cancelling headphones, and a VECTA machine.

Child Life recommends expanding the LCT Program to other areas of the hospital in order to promote continuity of care between appointments and inpatient stays, as demonstrated in the graph below.

Potential Coping Tools for Future Success

- Weighted Blanket
- Noise-Cancelling Headphones
- VECTA Machine

Acknowledgements

This paper is directly supported by Magnet®, the AMSSS, and the ACHIEVE, CCLS, and the addition of the program for patients with sensory needs.

Thank you to the Child Life Program at Hennepin Children’s Hospital in Minneapolis, MN, for providing insight into a successfully implemented sensory program.
**Background**

The Down Syndrome Clinic (Milwaukee, WI) at Children’s Hospital of Wisconsin will be establishing a Transition Clinic. In the coming year, with specific clinic appointments focusing on transitioning their son or daughter from pediatric to adult community and healthcare services. There is lack of comprehensive transition planning guidance from health care providers. Prior to officially opening the Transition Clinic, we wanted to hear input from families of established patients that we could prioritize the services and resources that families needed most. We developed a 4-question survey that was available for applicable families at clinic appointments at the Down Syndrome Clinic, as well as an online version. IRB approval was not required (CMHR Human Research Protection Program #2019-21). We also reached out to families from the Down Syndrome Association of Wisconsin and Adoptive Community Approach Program for additional responses.

**Objective**

- To gather insightful comments, feedback, and experiences of families who are preparing their son or daughter for transition from pediatric to adult healthcare and community services, currently undergoing transition, and those who have already completed their transition.
- To learn what families want prioritized at Transition appointments.
- To have a better understanding of the current challenges faced by families with regards to transition.

**Methods**

We developed different surveys for families with children preparing for transition (14-17yo), currently in the process of transitioning (18-20yo), or who have already completed transition (21-30yo).

**Summary**

- 14-17yo
  - Biggest fears: Safety of their child, having knowledgeable adult healthcare providers, whether their child’s social life and independence will look like in the future.
  - 12 out of 26 (46.2%) respondents have not thought about or begun discussions focused on transitioning.
  - Families would like lists of adult medical care providers with experience serving patients with special needs, as well as guidance through the entire transition process.

- 18-20yo
  - Most helpful resource so far: Other Parents.
  - Most families are interested in having access to lists of adult providers and resources via website, etc.
  - Current worries: Future housing and living situation, doing what is best for their child.

- 21-30yo
  - Biggest challenges: Finding suitable jobs, day programs, and social opportunities after high school for their son or daughter.
  - Advice for other parents: Start early, reach out to other parents for support, and continue to advocate and facilitate social opportunities for their child.
  - What parents/guardians would have done differently: More persistent with community agencies and school systems, gather more information earlier.

**Conclusion**

We need to discuss transition as early as possible with families.

We will coordinate a voluntary online support network of parents and guardians so that they can reach out to one another about various questions and challenges.

We need to ensure that families have complete access to the many healthcare and community resources that are available to them to assist with transition.

**Age Group**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Completed Surveys</th>
<th>Total # of Distributed Surveys</th>
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</thead>
<tbody>
<tr>
<td>14-17yo</td>
<td>33</td>
<td>57</td>
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<tr>
<td>18-20yo</td>
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<tr>
<td>21-30yo</td>
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<td>59</td>
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</table>

**References**

Children with Congenital Heart Disease (CHD) experience physical and psychological trauma.

Literature suggests trauma leads to Posttraumatic Stress Disorder (PTSD) in up to 1/3 of these children.

The goal of this project is to identify PTSD among CHD patients in the Herma Heart Institute (HHI) and provide resources.

194 patients in the HHI screened for PTSD with CRIES Tool

CHD Patients at Risk for PTSD

Cardiac Transplant Patients at Risk for PTSD

Project Timeline

9/2018
• Screen Pre-Cath
• CRIES-13
• All Risk—Refer to SW/Psych

11/2018
• Child Life Pre-Procedure

3/2019
• Screen 3 MD OP Clinics

5/2019
• CRIES-13
• Screen OP only

9/2019
• Screen Transplant OP
• Child Life Pre-Cath

Conclusions

• Signs of PTSD are common, but often missed in children with CHD.

• A screening tool for PTSD helps identify patients at risk, and offers opportunities to provide resources for treatment.
Taking the Pressure Off: Decreasing the Risk of Medical Device Related Pressure Injuries in Children

Ashley Albrecht, BSN, RN, Mary Wehlage, RN, Rebekah Barrette, MS, RN, PCNS-BC, WCC, CWOCN
Children’s Hospital of Wisconsin, Milwaukee, WI

Introduction
- Children are at risk for developing hospital-acquired pressure injuries.
- ↑ incidence of pressure injuries were observed from these medical devices
  - non-invasive ventilation (NIV) devices (NIV masks)
  - electroencephalogram (EEG) leads
  - peripheral intravenous (PIV) hubs

Method
- Innovative awareness raising methods generated during monthly PUP meetings, including:
  - rounding cart with prevention strategies
  - helpful tools for staff to use
  - MDRPI pictures
- Newsletter topics created for hospital-wide distribution
- PUP champion rounding
- Solutions for Patient Safety Respiratory Device work-group
  - reduce respiratory MDRPI amongst multiple pediatric hospitals
- EEG lead work-group
  - identify recent skin injuries, best practices, & prevention measures

Results
- ↓ PIV & NIV mask pressure injuries in 2019
- Practice changes:
  - ↑ awareness of need for:
    - cushioning under device
    - Moving or removing device
  - ↑ communication & collaboration
    - Nursing
    - Respiratory Therapy
    - EEG techs
    - Providers

Implications for Practice
- Nursing staff engagement and sustainable practice changes occurred under the leadership of the Clinical Nurse Specialist and PUP champions.
- Nursing knowledge increased, which enabled the bedside nurse to improve care and outcomes for hospitalized children at risk for MDRPI.
- Targeted education and communication was effective in reducing pressure injuries from specific medical devices.

Aim
- Medical device related pressure injuries (MDRPI) account for more than half of the pressure injuries at CHW
  - 41% of these were from NIV devices, PIV hubs, and EEG leads
- 2019 Pressure Ulcer Prevention (PUP) Team Goal
  - ↓ incidence of MDRPI
  - ↑ nursing staff awareness of medical device skin injury risk & prevention

Acknowledgements
Pressure Ulcer Prevention Team
Eileen Sherburne PhD, ACNS-BC, FNP-BC, CRNP, CNRN, WCC
Colleen Furey, Safety Specialist

Best Practices for Prevention of Medical Device-Related Pressure Injuries in Pediatric Populations

[Image of medical devices and nursing staff]
What Matters Most at Multidisciplinary Cleft Lip and Palate Team Evaluation

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1 Children’s Hospital of Wisconsin; 2 Medical College of Wisconsin

Background
• Cleft Team consists of:
  • Nurse Coordinator
  • Craniofacial Nurse Clinicians
  • Speech Pathologist
  • Plastic Surgery
  • ENT
  • Audiologist
  • Psychologist
  • Dentist
  • Orthodontist
  • Prosthodontist
  • Genetic Counselor
  • Pulmonologist
  • Sleep Medicine Specialist
  • Scheduling Coordinator

• Patients begin cleft team care at 15 months. Follow-up care happens every 6 months for the first two years. Annual visits follow until the age of 18.

• Individual patient schedules for any multidisciplinary cleft lip and palate (CLP) team visit are set ahead of time based on standards of care, previously identified needs and internal protocol.

• Not every patient is scheduled to see every provider at every CLP team visit.

• Average length of CLP team visit is 3-4 hours.

• CLP team visits can be more frequent based on patient needs.

• Prior to April 2019, the question “What matters most?” was not asked at CLP team evaluations.

• It was not known if the CLP team was meeting the family’s needs.

• Beginning in April 2019, all families attending their CLP team visit (135 families in total) were asked “What matters most?” (WMM) at the start of their multidisciplinary CLP team evaluation in order to better understand the specific priorities and concerns of the family, and ensure that these main concerns are addressed.

Aim
• The purpose of this project is to:
  > Ensure that the identified needs of families are addressed during a multidisciplinary clinic visit.
  > Ensure that all staff working with the family understand what the family’s main concern is during the visit.

Method
• Families were asked WMM by the provider who saw them first at their CLP team visit.
  Answers were hand written on a tracking sheet that was passed from provider to provider during the clinic visit.

• CLP nurse coordinator verified WMM was asked during CLP visit.

• Answers were later recorded as part of the CLP clinic nurse’s documentation in EPIC.

• Attempts were made to address WMM as soon as possible in the visit.

• At the end of the visit, the last provider to consult with the family ensured WMM were addressed. If not, a follow-up plan was created.

Results
• Responses to WMM were used to ensure that patients and families’ needs were being met during the cleft team visit by:
  > Raising team members awareness of patient & family concerns
  > Adding an additional CLP team provider to the patient’s schedule for the visit based on patient & family response to WMM
  > Clinic visits were tailored to meet patient & family needs

• Initial feedback from families has been favorably responsive.

Implications for Practice
• Team visit plan may be modified based on response to WMM.

• New team providers need to be trained on the use of WMM.

• Procedures should be identified to ensure use of WMM when nurse coordinator is absent from the CLP team visit.

• The cleft team will continue to ask WMM, analyze collected data, and impact to clinic flow.

• The cleft team plans to educate other ambulatory clinics in the implementation of WMM.
Children's Hospital of Wisconsin's Evidence Based Practice & Nursing Research Council and the Quality Department for sponsoring this year's poster session and awards.

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