Date: July 23, 2013

Title: Promoting Family Satisfaction during Care Level Transition

Clinical Question:

\[
\begin{align*}
\text{P (Population/Problem)} & : \text{Among inpatients who are transferred from a higher to lesser level of care,} \\
\text{I (Intervention)} & : \text{does a standardized written approach to anticipatory preparation* of the transfer} \\
\text{C (Comparison)} & : \text{compared to non-standardized preparation} \\
\text{O (Outcome)} & : \text{effect patient, family, or caregivers reported level of satisfaction?}
\end{align*}
\]

*Definitions for terms marked with * may be found in the Supporting Information section.

Target Population for the Recommendation:

Inpatients, transferring from PICU, CICU, and NICU to general pediatric medical/surgical unit

Patients may be admitted to an ICU for any period of time, but must be undergoing the transfer for the first time ever.

Recommendation:

It is strongly recommended that nursing staff use standardized information to educate patients and families prior to transfer, on the anticipated environmental changes and care delivery routines that they will experience upon transfer from an intensive care unit to a general floor to decrease anxiety (Brooke, Hasan, Slark, & Sharma, 2012 [1a]) and increase satisfaction. (Bailey, Sabbagh, Loiselle, Boileau, & McVey, 2010, [4a]; Herrera-Espineira, Aguila, Castillo, Valdivia, and Sanchez, 2009, [4b]; Rahmqvist, 2001 [4a]).

Note 1: Patient and caregiver anxiety was found to be inversely correlated with patient/caregiver satisfaction (Rahmqvist, 2001 [4a]; Herrera-Espineira et al., 2009 [4b]).

Note 2: Increased informational support as perceived by patients and families is positively correlated with satisfaction of care (Bailey et al., 2010 [4a]).

Discussion/Synthesis of Evidence related to the recommendation:

Brooke et al., (2012 [1a]), conducted a meta-analysis of randomized controlled trials involving a standardized intervention implemented prior to transfer of patients out of the ICU. Each of the studies used a written intervention (e.g. document, brochure) to educate the patients and families about the transfer and the new environment that resulted in a significant decrease in patient and caregiver anxiety (Brooke et al., 2012 [1a]). Additionally two exploratory descriptive studies using action-phase research cycle designed educational brochures on discharge from the ICU with patient and family input. The educational brochures resulted in high satisfaction rates among recipients (Linton, Grant, & Pellegrini, 2008 [4a]; Paul, Hendry, & Cabrellim, 2004 [4b]).

Three qualitative studies described patients having feelings of increased anxiety, unease, and mistrust of transfer and the new environment, especially when patients perceived an altered or reduced level of care (Field, Prinjha, & Rowan, 2008 [4a]; McKinney & Deeny, 2002 [4a]; Strahan & Brown, 2005 [4a]).

A descriptive pilot study of patients discharged found that increased informational support while in the ICU was significantly correlated to increased satisfaction with care (Bailey, Sabbagh, Loiselle, Boileau, & McVey, 2010 [4a]).

Johnson & Sandford (2005 [1b]) concluded from a systematic review of randomized controlled trials that provision of both written and verbal health information was more effective in increasing parent satisfaction than verbal information alone for children’s discharges from hospital to home.

It must be disclosed that in one repeated measures cohort study, (Gustad, Chaboyer, & Wallis, 2008 [4b]), when patients were transferred out of the ICU without a standardized informational intervention, not only did patient anxiety levels remain low, but there were no significant changes in patient anxiety from before to after the transfer.
Reference List:


Applicability Issues:
Standard educational content needs to be developed to ensure parent and caregiver confidence before and during a transfer out of the ICU. One avenue, which is supported by the literature, for this to be achieved is the use of a written format, such as a pamphlet or brochure. Unit staff or management will need to determine who will be accountable to distribute and discuss the information (i.e. sending unit, receiving unit). The pamphlet must be distributed within a realistic time frame that provides ample time for family and patients to read and have questions answered prior to transfer. The pamphlet needs to be easily tailored to individual unit environment specifics. Other modalities to educate families, such as a video for the CCHMC TV channel or a standardized unit tour can additionally be used to improve the parent or caregiver’s anxiety and confidence during and after a transfer out of the ICU.

Relevant CCHMC Tools for Implementation:
Cardiac Intensive Care Unit Guideline T-2: “Transfer Criteria for the CICU.”

Outcome or Process Measures:
Cincinnati Children’s Hospital and Medical Center uses Professional Research Consultants, Inc., (PRC) to collect patient/family satisfaction data post discharge. The survey utilizes a 5-point Linkert scale, where 5 is the best response (excellent). Two weeks after a patient’s transfer from the intensive care unit patient/family satisfaction will be
anonymously surveyed using the same language and Linkert scale as the PRC data collection. At this time, satisfaction with the receiving unit will be measured in the specific nursing sensitive metrics: nurses “communication with you,” nurse’s “courtesy and helpfulness,” and nursing “promptness in responding to (you/your and your child’s) calls,” and “overall, would you rate the quality of nursing care as...” These metrics are hypothesized to be effected by the standardized information intervention.

**Background/Purpose of BEST Development:**
Within the facility many families whose children are transferred from the PICU, CICU, or NICU have had no past experience in the hospital. These families can verbalize and display signs of insecurity and anxiety regarding the safety and health of their child upon transfer. Families express uncertainty about abilities of the nursing and medical staff that are to assume the care of their child and need reassurance and empowerment in this situation. An adjustment period is required in order to transition to the new environment, routines, and staff relationships (Brooke et al., 2012[1a]; Field et al., 2008 [4a]; McKinney & Deeny, 2002 [4a]; Strahan & Brown, 2005[4a]). In an effort to optimize family centered care this project sought evidence that would proactively assist families to prepare for a care transition in order to improve patient experience.

**Definitions:**

**Standardized anticipatory preparation:** is the development of set written information for patients and families that is routinely distributed prior to transfer of the patient out of the ICU to a general care floor to educate and inform families of the changes to expect in the environment, care practices, specific floor policies, and bedside staffing.

**Satisfaction:** refers to patient and family satisfaction of nursing care, measured in a survey within the specific metrics: nurses “communication with you,” nurse’s “courtesy and helpfulness,” and nursing “promptness in responding to (you/your and your child’s) calls,” and “overall, would you rate the quality of nursing care as...”

**Search Strategy:**

**Databases:** Cinahl, PubMed, PsycInfo

**Search Terms:** inpatients, caregivers, parent, family, pediatric, transition, ICU, intensive care, preparation, guidance, education, information, satisfaction, perception, experience, outcomes, anxiety, stress, patient satisfaction, relocation stress

**Limits, Filters, Search Dates:** English

**Date Search Done:** 1998-2013

**Group/Team Members:**

**Team Leader/Author:** Michelle M. Coleman, MN, RN, CPN

**Team Members:** Patti Besuner, MN, CNS, Center for Professional Excellence, Research and Evidence-Based Practice, Kathy Dressman, RN, MS, NEA-BC

**Conflicts of Interest were declared for each team member:**

☑ No financial or intellectual conflicts of interest were found.

☐ No external funding was received for development of this BEST.

☐ The following conflicts of interest were disclosed:
Note: Full tables of the LEGEND evidence evaluation system are available in separate documents:
- Table of Evidence Levels of Individual Studies by Domain, Study Design, & Quality (abbreviated table below)
- Grading a Body of Evidence to Answer a Clinical Question
- Judging the Strength of a Recommendation (dimensions table below)

### Table of Evidence Levels (see note above):

<table>
<thead>
<tr>
<th>Quality level</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a† or 1b†</td>
<td>Systematic review, meta-analysis, or meta-synthesis of multiple studies</td>
</tr>
<tr>
<td>2a or 2b</td>
<td>Best study design for domain</td>
</tr>
<tr>
<td>3a or 3b</td>
<td>Fair study design for domain</td>
</tr>
<tr>
<td>4a or 4b</td>
<td>Weak study design for domain</td>
</tr>
<tr>
<td>5a or 5b</td>
<td>General review, expert opinion, case report, consensus report, or guideline</td>
</tr>
<tr>
<td>S</td>
<td>Local Consensus</td>
</tr>
</tbody>
</table>

†a = good quality study; b = lesser quality study

### Table of Language and Definitions for Recommendation Strength (see note above):

<table>
<thead>
<tr>
<th>Language for Strength</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is strongly recommended that...</td>
<td>When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens. (or visa-versa for negative recommendations)</td>
</tr>
<tr>
<td>It is strongly recommended that... not...</td>
<td>When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.</td>
</tr>
<tr>
<td>It is recommended that...</td>
<td>There is insufficient evidence and a lack of consensus to make a recommendation...</td>
</tr>
<tr>
<td>It is recommended that... not...</td>
<td></td>
</tr>
</tbody>
</table>

Given the dimensions below and that more answers to the left of the scales indicate support for a stronger recommendation, the recommendation statement above reflects the strength of the recommendation as judged by the development group. (Note that for negative recommendations, the left/right logic may be reversed for one or more dimensions.)

### Rationale for judgment and selection of each dimension:

1. **Grade of the Body of Evidence**
   - High
   - Moderate
   - Low
   **Rationale:** High

2. **Safety/Harm (Side Effects and Risks)**
   - Minimal
   - Moderate
   - Serious
   **Rationale:** Minimal; only risk small risk of creating anxiety if family had not anticipated the transfer initially (Linton, Grant, & Pellegrini, 2008 [4a])

3. **Health benefit to patient**
   - Significant
   - Moderate
   - Minimal
   **Rationale:** Moderate; to minimize anxiety, but no effect on the physical health of the patient (Brooke et al., 2012 [1a]; Herrera-Espineira et al., 2009 [4b])

4. **Burden on patient to adhere to recommendation**
   - Low
   - Unable to determine
   - High
   **Rationale:** Low burden; family/patient must simply read pamphlet (Linton, Grant, and Pellegrini, 2008 [4a]; Paul, Hendry, & Cabrellim, 2004 [4b])

5. **Cost-effectiveness to healthcare system**
   - Cost-effective
   - Inconclusive
   - Not cost-effective
   **Rationale:** The cost to would be to create the pamphlet, and time of distributing it to families; distribution can be done by bedside or charge nurse during shift. Overall, there is a lack of evidence where cost of materials and time were measured.

6. **Directness of the evidence for this target population**
   - Directly relates
   - Some concern of directness
   - Indirectly relates
   **Rationale:** Directly relates to patients and their families transferring out of the intensive care environment.

7. **Impact on morbidity/mortality or quality of life**
   - High
   - Medium
   - Low
   **Rationale:** High impact on quality of life; lowering anxiety and increasing satisfaction of care (Brooke et al., 2012 [1a]; Herrera-Espineira et al., 2009 [4b]).
Copies of this Best Evidence Statement (BEST) and related tools (if applicable, e.g., screening tools, algorithms, etc.) are available online and may be distributed by any organization for the global purpose of improving child health outcomes.

Website address: http://www.cincinnatichildrens.org/service/j/anderson-center/evidence-based-care/bests/

Examples of approved uses of the BEST include the following:
- Copies may be provided to anyone involved in the organization’s process for developing and implementing evidence based care;
- Hyperlinks to the CCHMC website may be placed on the organization’s website;
- The BEST may be adopted or adapted for use within the organization, provided that CCHMC receives appropriate attribution on all written or electronic documents; and
- Copies may be provided to patients and the clinicians who manage their care.

Notification of CCHMC at EBDMinfo@cchmc.org for any BEST adopted, adapted, implemented, or hyperlinked by the organization is appreciated.


This Best Evidence Statement has been reviewed against quality criteria by two independent reviewers from the CCHMC Evidence Collaboration. Conflict of interest declaration forms are filed with the CCHMC EBDM group.

Once the BEST has been in place for five years, the development team reconvenes to explore the continued validity of the guideline. This phase can be initiated at any point that evidence indicates a critical change is needed. CCHMC EBDM staff performs a quarterly search for new evidence in an horizon scanning process. If new evidence arises related to this BEST, authors are contacted to evaluate and revise, if necessary.

For more information about CCHMC Best Evidence Statements and the development process, contact the Evidence Collaboration at EBDMinfo@cchmc.org.

Note:
This Best Evidence Statement addresses only key points of care for the target population; it is not intended to be a comprehensive practice guideline. These recommendations result from review of literature and practices current at the time of their formulation. This Best Evidence Statement does not preclude using care modalities proven efficacious in studies published subsequent to the current revision of this document. This document is not intended to impose standards of care preventing selective variances from the recommendations to meet the specific and unique requirements of individual patients. Adherence to this Statement is voluntary. The clinician in light of the individual circumstances presented by the patient must make the ultimate judgment regarding the priority of any specific procedure.