Critically Analyze the Evidence

The **GRADE criteria** were used to evaluate the quality of evidence presented in research articles reviewed during the development of this guideline. The table below defines how the quality of evidence is rated and how a strong versus a weak recommendation is established.

<table>
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**PICO Question 1:** For nurses practicing in an inpatient pediatric hospital, what strategies increase engagement of nurses in patient and family-centered rounds?

**Recommendation(s):** Strong recommendation with low quality evidence to utilize shared decision-making and ensure the active inclusion of the nurse in PFCRs. (1-3)

Three studies were found that evaluated the barriers and facilitators for nurse engagement in ward rounds. (1-3) Two studies were qualitative and one study used a descriptive, Delphi technique. Walden and Elliott (2009) cite no standard time for rounds and other coinciding patient care responsibilities as two key barriers to nurse participation in rounds. (1) Another primary barrier identified by all three studies is that, often times, physicians do not request RNs presence at rounds or do not alter rounding time to accommodate the nurses ability to be present, which limits the nurse’s ability to participate. (1-3) Another barrier to nurses’ participation is when rounds and patient decision-making does not occur at the bedside. (1-3) When the nurses input is not solicited during rounds or is solicited at the end of rounds after the plan of care has been determined, the nurse is likely to feel that his/her input is not valued or respected. (1-3) The medical team should recognize and engage nurses in the provision, interpretation, and analysis of patient care data and care planning and create an environment in which nurses are encouraged to provide input and ask questions. (1-3) Hill (2003) also reported that it was important that nurses were familiar with the format of rounds and the correct time to provide input. (2) Hill (2003) also reported that optimal participation in patient care rounds occurred when nurses knew what their goals were with respect to the patient discussion and when true interdependent planning and collaborative decision-making was evident in the rounding process. (2) Strategically positioning themselves at the front of rounds, instead of on the periphery, and maintaining eye contact are two additional strategies reported that can facilitate nurses’ participation in the rounding process. (2,3)

**PICO Question 2:** In nurses practicing in an inpatient pediatric hospital, does specified rounding times or advanced notification of rounds increase nurse engagement in patient and family centered rounds?

**Recommendation(s):** Strong recommendation with very low quality evidence to ensure there is an explicit rounding time that at a minimum consists of advanced rounding notification for nurses. (4)

A review of the literature found one study that utilized the strategy of communication to increase nurse engagement in rounds. The study discovered local barriers for nursing attendance of rounds with an un-validated needs assessment survey. Nurses in their unit were unsure if their contributions were appreciated and also unaware of when rounds would occur. During 7 months of data gathering, this group demonstrated with a control chart that after their intervention, there was a change in mean nurse attendance of rounds from 47% to 80%. The intervention consisted of a 5-10 minute pre-rounding notification to nurses by a medical student (using nurse assignment list printed by administrative staff). This was on a single unit where the staff and administration valued patient and family centered rounds. They did not alter the rounding order or the nursing assignments for this study. A secondary intervention of a workshop on PFCRs for nursing staff was not shown to influence rounds attendance by nurses. (4)
PICO Question 3: In nurses practicing in an inpatient pediatric hospital, does teamwork and collaboration training increase engagement in patient and family centered rounds?

Recommendation(s): Weak recommendation with low quality evidence to continue the use of PFCRs and provide collaboration training to PFCR participants, including at a minimum nurses and physicians, to enhance their teamwork. (5)

One randomized controlled study was found that evaluated interdisciplinary rounds to improve length of stay and cost. Patients were allocated to standard rounds versus interdisciplinary rounds with a training intervention to improve nurse-doctor collaboration. The mean LOS for interdisciplinary rounds was 5.46 days, compared with 6.06 days for traditional care (p = 0.006), whereas mean total charges were $6,681 and $8,090 (p = 0.002) for the two groups, respectively. This study suggests that interdisciplinary rounds including physicians and nurses who have undergone collaboration training may improve average LOS and decrease average charges. The authors assessed teamwork, communication, and understanding of patient care with a survey and also found a significant difference (p <0.006) with intervention group having a greater understanding of patient care, more effective communication, and more teamwork. (5)

PICO Question 4: In nurses practicing in an inpatient pediatric hospital, does the use of rounding tools (i.e., checklist, goal documentation on white board) increase nurse engagement in patient and family centered rounds?

Recommendation(s): Strong recommendation with low quality evidence utilize a rounding tool to provide structure for rounds and document patient goals. (6-10)

Three studies addressed the value of utilizing a daily goal sheet to improve communication regarding patient care during rounds. (6-8) The goal sheets provided indirect evidence for nursing engagement during rounds. A post-implementation questionnaire given to nursing staff in a pediatric PICU identified that 85% of nursing staff reported improved communication between the MD and RNs and that this communication during rounds improved the quality of care for children in the PICU. (6) Another ICU setting evaluated a standardized worksheet and identified physicians and nurses perceptions of their understanding of the goals of care. The time to complete the worksheet was minimal and both physician and nurses reported significant improvement in communication. Nurses also indicated that it had a positive effect on patient outcomes. (7) One study demonstrated that a core team of 20 RNs and MDs, led by an APN, identified best practice for nurse participation in rounds based on their review of NICU and CVICU rounds. The core team developed a rounding tool and educated staff members on its use which led to a 19% improvement in RN active participation in rounds in a pediatric ICU. (9) The Rehder (2012) study implemented three interventions 8-12 weeks apart to improve communication in rounds. Interventions included new resident progress note format, creating a performance improvement “dashboard” and documenting patient goals on bedside white boards. After all interventions were implemented, agreement with the attending physician’s stated daily goals increased from 56.9% to 82.7% (p<0.0001). Multiple barriers to communication were reduced, including bedside nurse multitasking during rounds (27.5% to 9.4%, p< 0.0001). Solicitation of bedside nurse input increased (74.3 to 97.0%, p<0.0001). Time required to complete rounds was unchanged from 12.3 vs. 12.2 minutes per patient. (10)

Apply the Evidence

- Ensure there is a process for notification of start time for nurses to attend PFCRs (at least a 5- to 10-minute notice). A standardized time for PFCRs is preferred.
- Implement strategies for nurses to have protected time for PFCRs.
- Utilize a rounding tool or scripting for conducting PFCRs.
- Consider the use of a patient goal sheet to provide consistency of communication and improve patient outcomes.
- Increase collaboration by addressing barriers to nurses’ participation in PFCRs (e.g., nurse position in the rounding circle, making eye contact, scripting for rounds, ensuring shared decision making, respecting and valuing all team members input).
- Consider training to enhance team effectiveness (e.g., collaboration and communication) during PFCRs.
References
   & Infant Nursing Reviews, 9(3), 169-174.
   patient- and family-centered rounds. Hospital Pediatrics, 4(1), 1-5.
   continuous quality improvement. Medical Care, 36(8 Suppl), AS4-AS12.
   and privacy. Pediatric Critical Care Medicine, 8(3), 220-224.
   sheets. Journal of Critical Care, 23(2), 227-235.
   rounds in the pediatric intensive care unit. Critical Care Nurse, 33(3), 89-91.
    intensive care unit. Pediatric Critical Care Medicine, 13(1), 6-10.
Clinical Standards Preparation
This clinical standard was prepared by the Evidence-Based Outcomes Center (EBOC) team in collaboration with content experts at Texas Children’s Hospital. Development of this clinical standard supports the TCH Quality and Patient Safety Program initiative to promote clinical standards and outcomes that build a culture of quality and safety within the organization.

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Additional EBOC Support
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Development Process
This clinical standard was developed using the process outlined in the EBOC Manual. The literature appraisal documents the following steps:
1. Review Preparation
   - PICO questions established
   - Evidence search confirmed with content experts
2. Review of Existing External Guidelines
   - N/A
3. Literature Review of Relevant Evidence
   - Searched: Cochrane Collaboration Database, National Guideline Clearinghouse, PubMed, CINAHL, Resources from Institute of Patient- and Family-Centered Care website, SCOPUS
4. Critically Analyze the Evidence
   - 1 randomized controlled trial and 9 nonrandomized studies
5. Summarize the Evidence
   - Materials used in the development of the clinical standard, literature appraisal, and any order sets are maintained in an Increasing Nursing Engagement in Patient and Family Centered Rounds evidence-based review manual within EBOC.

Evaluating the Quality of the Evidence
Published clinical guidelines were evaluated for this review using the AGREE II criteria. The summary of these guidelines are included in the literature appraisal. AGREE II criteria evaluate Guideline Scope and Purpose, Stakeholder Involvement, Rigor of Development, Clarity and Presentation, Applicability, and Editorial Independence using a 4-point Likert scale. The higher the score, the more comprehensive the guideline.

This clinical standard specifically summarizes the evidence in support of or against specific interventions and identifies where evidence is lacking/inconclusive. The following categories describe how research findings provide support for treatment interventions.
- **“Evidence Supports”** provides evidence to support an intervention
- **“Evidence Against”** provides evidence against an intervention

Recommendation

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Recommendations
Practice recommendations were directed by the existing evidence and consensus amongst the content experts. Patient and family preferences were included when possible. The Content Expert Team and EBOC team remain aware of the controversies in increasing nursing engagement in patient and family-centered rounds. When evidence is lacking, options in care are provided in the clinical standard and the accompanying order sets (if applicable).

Approval Process
Clinical standards are reviewed and approved by hospital committees as deemed appropriate for its intended use. Clinical standards are reviewed as necessary within EBOC at Texas Children’s Hospital. Content Expert Teams are involved with every review and update.

Disclaimer
Practice recommendations are based upon the evidence available at the time the clinical standard was developed. Clinical standards (guidelines, summaries, or pathways) do not set out the standard of care and are not intended to be used to dictate a course of care. Each physician/practitioner must use his or her independent judgment in the management of any specific patient and is responsible, in consultation with the patient and/or the patient’s family, to make the ultimate judgment regarding care.

Version History

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<tr>
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DATE: April 2014