Development of a Neonatal Nursing Handbook

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Background
- SMH NICU is undergoing expansion; transitioning into a higher acuity facility by Spring 2014
- Extensive education and training are anticipated for new and current staff nurses
- Neonatal Nursing Handbook (NNH) Team formed
- Quality Improvement project implemented to evaluate NNH

Purpose
- Explore whether knowledge and confidence of neonatal nurses increase after utilizing a quick reference Neonatal Nursing Handbook (NNH)
- Secondary aim was to examine whether access to NNH increases patient safety and quality of care provided to NICU

Needs Assessment
- Consulted The Hospital for Sick Children on their experience of developing a handbook
- 43 NICU nurses completed an interest survey to determine the need and interest in NNH within unit
- Survey participants (93%) indicated a NNH will help minimize learning gaps among experienced and novice nurses; (92%) indicated a NNH will be useful in their practice; 83% indicated they will buy a NNH

The Neonatal Nursing Handbook Team
- NNH Team: Educators (n = 2); Patient Care Coordinator (n = 1); Neonatologist (n = 1); Respiratory therapist (n = 1); Physiotherapist (n = 1); Pharmacist (n = 1) and Occupational therapist (n = 1)
- Contributors to NNH: Staff nurses, Manager and NICU director

Project Methods
- NNH was created incorporating significant topics as identified by the team members
- Members of team assigned topics every 6 weeks
- Team members received instructions/format to follow when writing up topics
- All content and pictures in the handbook were referenced
- Prior to completion of the NNH, piloted randomly selected topics from the NNH with the NICU staff.

Evaluation Results
Pre surveys (n = 48) Post surveys (n = 21)
- Nurses’ confidence level had a statistically significant increase after using NNH
- Knowledge scored higher in post survey though not statistically significant
- No statistical differences in nurses’ perception of patient safety and quality of care were found after using the handbook.
- Forty-eight nurses completed the pre-test, but less than half (n = 21) completed the post-test.
- No significant differences were found in pre-test scores between the group completing the pre-test only and the group that completed the pre and post-test.
- Differences between senior and junior nurses responses on pre-and post test was not evaluated separately in pilot project

Discussion
- Nurses’ feedback indicate limited opportunity to use handbook at work before completing post survey
- Knowledge and feedback can be gained through several means including from NNH

Evaluation Measures
- Surveys created by NNH Team:
  - Content Validity Index: Relevance: Clarity:
  - 4 indicators for evaluating effectiveness of project:
    - Nurses’ perception of their
      - confidence in practice
      - neonatal knowledge
      - patient safety
      - quality of care
- Surveyed nurses pre & post to evaluate pilot handbook

Evaluation Results: Participants
(N = 48)

Years of NICU Experience
- < 1 year
- 1-5 years
- 6-10 years
- > 10 years
- Nursing Student

Level of NICU Education
- Neonatal Theory Course &
- Neonatal Respiratory Course
- Acute Care Course
- All of the above
- Not Applicable

Next Steps
- Complete remaining 25% of NNH project
- Final NNH project to be launched in Jan 2014
- NNH will be offered to NICUs in region after approval by Current Practice Council and potentially to NICUs in province
- Future goal: Offer NNH in electronic format via hospital intranet, phone application, or similar venues

Leadership Journey
- Challenge the Process: Identified the need for bridging knowledge gaps and extensive training for new and current nurses
- Advocated for including policies and procedures in NNH as part from nurses’ feedback
- Requested support from Manager to use work hours for meetings and project planning

Enable Others to Act: Strengthened interdisciplinary relationships via sharing of expertise between staff nurses and interdisciplinary HCP
- NNH Team members helped recruit HCP to write topics, make decisions and trouble shoot together

Model the Way: Led team to problem solve and work around limitations and challenges
- NNH Team included as a Social Work Team in Professional Practice Council

Encourage the Heart: Fellow acknowledge contribution from team by sending notes of appreciation
- Recognize achievements and celebrate milestones during team meetings

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