Application of QSEN competencies in a practice setting: The case of Cincinnati Children’s Hospital Medical Center

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Objectives for today’s talk

- Describe quality improvement, safety, and evidence-based practice (EBP) educational offerings for nurses at Cincinnati Children’s
- Highlight exemplar nurse-led projects that address QSEN competencies
- Discuss challenges and opportunities associated with implementing QSEN competencies in a practice setting
CCHMC’s improvement journey

- RWJF Pursuing Perfection grantee, 2002
  - Cystic fibrosis as a test case for improvement
- The James M. Anderson Center for Health Systems Excellence, est. 2010
  - Quality improvement
  - Research
  - Rapid translation of evidence into clinical care
  - Training the next generation of health care improvers and improvement science researchers
- Our motto:
  - We will be the best at getting better.
CCHMC quality, safety, and EBP programming

- Rapid Cycle Improvement Collaborative
- Intermediate Improvement Science Seminar
- Advanced Improvement Methods
- Quality Scholars Program
- Point-of-Care Scholars Program
- Web-based modules
QI methodology

- Model for Improvement and Deming’s System of Profound Knowledge
- Specific aims and well-developed measures
- Use of theory to guide interventions & testing
- Data plotted on run/control charts to see trends over time and effects of interventions
- Iterative Plan-Do-Study-Act cycles
- Planning for sustain and spread
Rapid Cycle Improvement Collaborative

- Improvement in a highly-focused project in **120 days**
- For team leaders and their respective teams
- Goals:
  - Develop team leaders
  - Build team member capability in Model for Improvement
Rapid Cycle Improvement Collaborative (RCIC)

Noise Reduction on the TCC (beginning 3/21/11)
Maximum Reading of the Hourly Averages

Decibel (dB(A)) level of noise

03/21/11 03/22/11 03/23/11 03/24/11 03/25/11 03/26/11 03/27/11 03/28/11 03/29/11 03/30/11 04/01/11 04/02/11 04/03/11 04/04/11 04/05/11 04/06/11 04/07/11 04/08/11 04/09/11 04/10/11 04/11/11 04/12/11 04/13/11 04/14/11 04/15/11 04/16/11 04/17/11 04/18/11 04/19/11 04/20/11 04/21/11 04/22/11 04/23/11 04/24/11 04/25/11 04/26/11 04/27/11 04/28/11 04/29/11 04/30/11 05/01/11 05/02/11 05/03/11 05/04/11 05/05/11 05/06/11 05/07/11 05/08/11 05/09/11 05/10/11 05/11/11 05/12/11 05/13/11 05/14/11 05/15/11 05/16/11 05/17/11 05/18/11 05/19/11 05/20/11 05/21/11 05/22/11 05/23/11 05/24/11 05/25/11 05/26/11 05/27/11 05/28/11 05/29/11 05/30/11 06/01/11 06/02/11 06/03/11 06/04/11 06/05/11 06/06/11 06/07/11 06/08/11 06/09/11 06/10/11 06/11/11 06/12/11 06/13/11

Nightly Dates
- Max reading of the Hourly Average Noise level
- Median of maximum reading of the hourly averages of noise levels
- Goals
- Linear (Goals)

Visual cues
Various visual cues
Equipment malfunction
“Do not enter” sign on pt. door
Screensaver to each computer
Trash cans into hallway?
Change pyxis stock times?
Electrical outage reset device and lost data
Huddle reminder
Proper lead placement reminders and visual aide
Informational board
Staff survey
Intermediate Improvement Science Seminar

• A transformational QI & leadership development course for physician, nurse, allied health professional, admin. and support staff leaders. Candidates must be nominated by executive leaders.

• Goals:
  – Develop intermediate level of QI knowledge to do improvement, lead improvement, and get results in six months
A5N Days-Between 5 Rights Related Medication Administration Errors
January 1, 2010 thru January 12, 2011

Days Since Previous Event

Average Days Between Events

Control Limits

Result = 14.5 Days Between

Project Goal: Increase average days between from 10.8 days to 14.04 days.

1- 9/19/11 "Light" testing initiated
2- 10/28/11 Oedication Administration Process Review Tool
3- 11/4/11 System Issue Communication Log Sheet
4- 11/28/11 Daily Pt. Room Computer Reboot
5- 11/30/11 Medication Administration Bundle
Point-of Care Scholars Program

• 12-month EBP program for nursing and allied health employees
  – 2 cohorts/year, 12-20 per cohort
  – 8 hours per week dedicated to program

• Desired outcomes
  – Scholar gains EBP skill set and enriches home unit by assisting others
  – Critical appraisal of literature, resulting in:
    • Practice/policy change when evidence is supportive (& QI skills to support implementation)
    • Small research study when more evidence is needed
    • Best Evidence Statement (BEST) and/or publication of findings
Additional supporting structures

- Unit-based councils
- Hospital-level councils for RNs and APNs
- Grand Rounds
- Consultations with nurse scientists
- Center for Clinical and Translational Science (NIH CTSA)
Challenges

• Limited RN knowledge/skills/attitudes regarding QSEN competencies
• View of bedside RN as subject matter expert but not a team leader
• Scarce RN time and competing priorities
Opportunities

• Implementation/continuation of programming to developing and reinforce QSEN competencies
  – Nursing orientation/residencies
  – Dissemination of RCIC/I2S2/POCS knowledge at unit level
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