Purpose
Akron Children's Hospital, a thriving children's hospital with a distinct re-designation, established seven NSQI teams to engage nursing staff, interdisciplinary staff, and parents to develop and sustain a culture of safety with exemplary NSQI outcomes.

Strategy and Implementation
In 2011, the organization's nursing shared governance core assembly formed NSQI teams to focus on NSQI most relevant to inpatient units:

- Patient falls
- Facility-acquired pressure ulcers
- Central line associated bloodstream infections
- Peripheral intravenous catheter infection
- Restraint use
- Catheter associated urinary tract infection
- Pain assessment – intervention – reassessment cycle

Recruited and appointed team members
- Direct-care nurses
- Shared clinical experience
- Participated in review/synthesis of literature
- Serve as data collectors
- Completed education on EBP and NSQI
- Shared governance council member review of practice changes

Clinical experts
- Identified professional standards related to NSQI
- Shared clinical experience
- Assisted with synthesis of the literature
- Helped standardize NSQI terminology
- Interdisciplinary perspective

Evidence-based practice coordinator
- Developed charts to guide scope of work
- Provided team education and mentoring on skills for implementing Rosswurm-Larrabee Model
- Coordinated a workshop with sessions on statistically sound data sampling methods, use of collaboration software, time for mentoring on the literature critique, development of an evidence table
- Implemented EBP, QRN (Quality, Risk, Nurse) Round with Magnet Coordinator, staff nurses, and CNO
- Mentored groups on performing searches of electronic databases and hand searches of published literature
- Coordinated integration of evidence into nursing guidelines

Performance improvement coordination
- Used a Lean, Six Sigma Green Belt project for Falls
- Reviewed internal data and benchmark statistics for NSQI outcomes
- Developed online data collector training for improved reliability of NSQI data
- Provided data collector training prior to data collection
- Provided NSQI data graphs for unit dashboards
- Mentored teams on QI methodology (e.g., Model for Improvement) to test changes on a small scale using Plan-Do-Study-Act cycles
- Tracking, trending, and analyzing NSQI data determines the effectiveness of sustaining practice changes
- Nursing staff education on NSQI through presentations, online learning modules, and Internet tip sheets
- Quality Council member education on analysis of unit level NSQI data
- Guidance on development of an action plan for NSQI data trends below the threshold

Parent Advisory Council members
- Provided patient perspective (e.g., safety interventions, parent education content)
- Key family-centered care focus

Quality Advisors
- Transformational nurse leaders
- Structural empowerment (e.g., schedule flexibility, secretarial support, paid time to attend education and mentoring sessions, access to external experts)
- Fiscal resources for participation in multi-center collaborative for two EBP
- Navigated competing priorities and resources (e.g., electronic health record (EHR) implementation)

Interventions
- Each workshop selected and implemented evidence-based nursing interventions
  - Patient falls
    - Visual cue, arm band, and hand-off communication
    - Identification of four fall categories
    - Modified safety event reporting software for more detailed report
    - Evidence-based plan of care in EHR
  - Facility-acquired pressure ulcers
    - Standardized age specific risk assessment scales
    - Integrated risk assessment scales into EHR
    - Developed EBP report for data collection
    - Removed ring, foam cut outs or donut type devices from supply inventory
  - Central line associated bloodstream infections
    - Insertion bundle
    - Maintenance bundle (adapted for unique populations)
    - Peripheral intravenous catheter infection
    - Phlebitis scale and infiltration scale integrated into EHR
    - Patient information on need for IV checks on all shifts and during sleep
    - Standardized peripheral IV accessment method
    - Posters for unit staff with images of infiltration stages
  - Restraint use
    - Violent and non-violent restraint use
    - Disseminated The Joint Commission standards and Centers for Medicaid and Medicare regulations for safe use
    - Developed EHR screens for documentation of required interventions
    - Developed EBP report for data collection
  - Pain assessment – intervention – reassessment cycle
    - Evidence-based plan of care in EHR
    - Catheter associated urinary tract infection
      - Insertion bundle
      - Maintenance bundle
    - Patient falls
      - Research study forbum population
    - Pain assessment – intervention – measurement cycle
      - Adoption of Verbal Analogue Scale
    - Standardized method for documenting pain score for sleeping patients
    - Developed EBP report for data collection
  - Evidence-based plan of care in EHR

Evaluation
- Improved NSQI outcomes as compared to internal trends and national benchmark statistic (data graphs available at conference session)
- Two awards for low central line associated blood steam infection rates
- Team members serve on national advisory panels
- Team member serves on NICU QI Collaborative; involved in disseminate collaborative work
- Team members serve on OCHPSF Collaborative to spread and sustain patient safety
- Organization re-designation as a Magnet Hospital with 12-exemplars for outcomes

Significance
- Nursing leaders are key in promoting evidence-based practice to foster planned changes in practice
- Nurses benefit from mentoring in evidence-based practice (EBP) and quality improvement (QI)
- Implications for patient outcomes, cost and reimbursement for care, and recognition of quality nursing care
- This strategy can be replicated in other healthcare settings

Implications for Practice
- Mentoring in workgroups develops staff EBP and QI skill sets through experiential learning
- The EBP model requires involvement of key stakeholders with the right mix of clinician expertise/experience and parent perspective
- Staff ownership of NSQI outcome data leads toenculturation of best practices
- Sustained practice changes requires nursing leadership and staff commitment

References