

Increasing Nurse Participation During Interdisciplinary Rounds

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Problem and Purpose: Miscommunication between members of the healthcare team plays a major causal role in preventable medical errors, which cause 251,000 deaths annually in the U.S. Hospitals employ interdisciplinary rounds (IDR) to foster teamwork and communication, but nurse participation during rounds frequently remains low. Nurses often perceive lower levels of teamwork than other healthcare professionals, and inadequate collaboration is associated with poor patient outcomes. The purpose of this quality improvement project was redesigning IDR to increase nurse participation in a 16-bed intensive care unit (ICU).

Methods: All ICU healthcare professionals who attended rounds were invited to complete the Safety Attitudes Questionnaire to measure perceptions of teamwork, safety, and communication on a five-point Likert scale. Three additional questions measured satisfaction with rounds. T-tests analyzed differences between nurse and physician responses. Observers recorded nurse participation during rounds at random intervals. During eight weeks of implementation, all nurses presented their patients using structured tools. Following implementation, staff surveys were repeated and t-tests determined differences between disciplines and pre-post scores.

Results: The pre-implementation survey achieved a 91% completion rate (intensivists n=6, residents n=10, and nurses n=32). Nurse teamwork scores were significantly lower than physicians (4.19 vs. 4.54; p=.01). Intensivist satisfaction with rounds (3.39) was significantly lower than both residents (4.23; p=.004) and nurses (4.24; p=.002). After incorporating the structured tools, nurse participation during rounds increased from 3% (224 observations) to 100% (317 observations). Post-implementation survey completion was 92% (intensivists n=9, residents n=12, and nurses n=46). Nurses demonstrated significant increase in interdisciplinary teamwork (4.19 to 4.55; p=.01) and communication (4.21 to 4.53; p=.03), thereby closing the nurse-physician collaboration gap (4.50 vs. 4.55; p=.69). Intensivist satisfaction with rounds increased significantly (3.39 to 4.37; p=.001). Satisfaction also increased for residents (4.23 to 4.49; p=.08) and nurses (4.24 to 4.31; p=.44).

Conclusion: Interdisciplinary rounds cannot be fully achieved without active participation from nurses. Presenting on rounds with structured tools may better empower nurses as active members of the interdisciplinary team. Increasing nurse participation during rounds may reduce the gap in perception of collaboration, reduce medication and other errors, and improve patient outcomes including length of stay and quality of life.

BACKGROUND

- **Errors in healthcare** lead to 250,000 preventable deaths each year in the U.S.
- **Miscommunication** between members of healthcare team contributes heavily to errors through delays in care, serious errors, failure to rescue, and death.
- **Interdisciplinary rounds using structured communication tools** are designed to improve care quality through increased team collaboration, however:

Passive attendance at rounds does not ensure interdisciplinary engagement.

OBJECTIVES

- **Quality Improvement Project:** Implement a structured communication tool in a 16-bed intensive care unit (ICU) in a community teaching hospital
- **Short Term Goal:** Increase nurse participation during rounds by 20% over eight weeks using a structured communication tool
- **Long Term Goal:** Over one year, increase teamwork scores measured by staff surveys by 5%

METHODS

- **All ICU nurses were asked to present their patients during rounds using:**

- (1) a **checklist** on a badge, or
- (2) a **script** template.

- **Perceptions of teamwork** measured using Safety Attitudes Questionnaire; surveys offered to all ICU staff pre and post-implementation
- **Nurse participation during rounds** defined as a verbal contribution *excluding* answering a question or amending content; measured by random observations during rounds
- **Six nurse champions** presented during rounds using the tools during the education phase

STRUCTURED TOOL

RN Presents:

- ✓ Patient name, age
- ✓ Summary of hospital course & acute problem
- ✓ Intravenous lines
- ✓ Urinary catheters
- ✓ Restraints
- ✓ Mobility plan

Resident/NP/PA Presents:

- ✓ Plan of care

- Observations of rounds continued during implementation

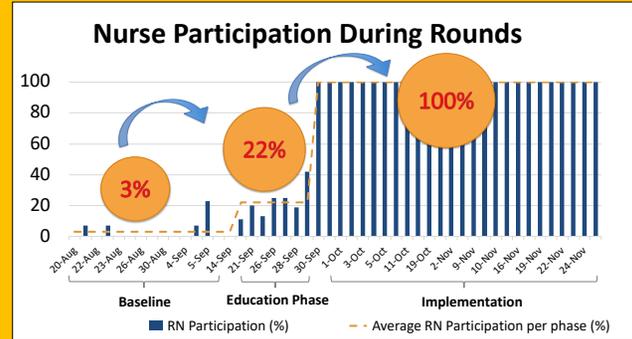
Analysis:

- Nurse participation plotted on a run chart; t-test compared pre-post participation
- T-tests compared differences in staff survey responses between disciplines and between pre and post data.

RESULTS

After implementing use of a badge checklist or paper script:

- **Nurse participation** increased from 3% to 100% ($p < .001$)



- **Teamwork scores** increased for nurses ($p = .01$); **this closed the nurse-physician teamwork gap** (4.50 vs. 4.55; $p = .69$)
- **Intensivist satisfaction with rounds** increased ($p = .01$)

- **Baseline:** Rounds were well-attended by nurses, however, nurse participation averaged only 3% (224 observations) with a median of 0%. Pre-implementation, **nurses perceived less interdisciplinary teamwork than physicians** (4.19 vs. 4.54; $p = .01$).
- **Education Phase:** 22% nurse participation (109 observations)
- **Implementation Phase:** 100% nurse participation (317 observations)

Staff Surveys:

- Pre-implementation 91% completion rate (intensivists $n = 6$, residents $n = 11$, and nurses $n = 34$)
- Post-implementation 92% completion rate (intensivists $n = 9$, residents $n = 12$, and nurses $n = 46$)

"I did not realize how uninvolved we were in rounds until we started presenting."

-Clinical Nurse

DISCUSSION

Increased interdisciplinary participation is associated with improved teamwork, communication, and staff satisfaction.

- Tool implementation empowered increased nurse participation.
- Increasing nurse perceptions of teamwork is meaningful as there was a disparity between disciplines.
- Some nurses had difficulty with public speaking; buy-in was not easy.
- Support from interdisciplinary leadership was pivotal to the success of nurses assuming a new role.

Limitations:

- Meaningful outcomes not recorded: (1) error or miscommunication identified or corrected during rounds, (2) patient outcomes.

CONCLUSIONS

Use of a structured tool can **increase nurse participation** during interdisciplinary rounds.

Implications for Practice

- Shifting unit culture requires time and buy-in of the nursing staff, but early outcomes of this quality improvement initiative have been very positive.
- Units should restructure rounds to include nurses in the presentation.

Potential for Future Development

- Engage additional disciplines (e.g. respiratory therapy to presenting results of ventilator weaning)
- Adjust the tool to include future unit-specific quality improvement projects

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Teamwork
Communication
Safety
Staff Satisfaction