# NDNQI DATA FROM EVERY ANGLE: A HOSPITAL-SCHOOL OF NURSING COLLABORATION TO MAXIMIZE MSN STUDENT RESEARCH EXPERIENCES

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#### Purpose

Description of a mutually beneficial hospital/school of nursing collaborative project to provide MSN students with real-time research/evidence based practice experiences impacting clinical and management decision making in identified nursing units. The project provided data to describe the relationships among perceptions of nurse satisfaction, quality of care, and hourly rounding to evaluate the implementation of a house-wide interdisciplinary hourly rounding program

#### Significance

This collaborative approach results in more efficient use of human and material resources for both institutions and reinforces collaborative relationships since there are limited resources for collection and analysis of nursing unit based EBP/ Research data in health care settings

Exemplifies an innovative collaboration between education and service. Hospital COO/VP/ of Patient Services and School of Nursing Dean executed a collaborative arrangement in which school provides a faculty researcher as a consultant/advisor for EBP/Research

Provides a method for the Hospital Director of Professional Development, Practice and Magnet, Research Council, Nursing Leaders and Research advisor/faculty to collaborate regularly using aggregate NDNQI data to address hospital and student EBP/research needs

Graduate Nursing Administration students are required to complete a EBP/Research project and this relationship provides valuable real time NDNQI/EBP/Research experiences

Provides an example of how aggregate NDNQI data can be used in various ways such as developing unit level research to focus on hospital /unit specific needs.



## **INDIANA UNIVERSITY**

SCHOOL OF NURSING

## Strategy and Implementation

Hourly rounding program presented to hospital staff and roll out dates announced

Prior to implementation, most recent quarterly NDNQI nurse sensitive indicators and satisfaction (aggregate data) are reviewed as baseline data in order to "drill down" to more hospital/unit specific data related to program impact

Research Advisor and Director of Professional Development in conjunction with Nursing Leaders determine that the evaluation should be done at unit level by conducting a research study

Research Advisor / Graduate Faculty for nursing administration EBP/Research Capstone course assigns a student to assist with development of a method to assess the impact of hourly rounding as student project

Student develops hypothesis driven proposal

10 item questionnaire piloted to assess perceptions of satisfaction, quality of care(based on NDNQI items), and hourly rounding prior to hourly rounding implementation is administered electronically to all classifications of staff on 2 M/S Units after IRB approval (Exempt Review).

3 M/S Units (all staff), Allied Health Staff (PT, OT, Pharmacy, Dietary, Lab, Radiology, Social Services,) and non clinical staff (Maintenance, Security, Housekeeping, Administration, Office Staff) invited to participate in evaluation after program roll out

Graduate students assigned to each of the areas and develop hypothesis driven proposals

Participants recruited via email blasts offering participation or flyers posted in areas of the hospital

Original10 item questionnaire used to collect data on Nursing Units after IRB approval (Exempt Review)

Questionnaire tailored for Allied Health and non clinical staff after IRB approval (Exempt Review)

Data collected electronically or via paper and pencil questionnaire by graduate students (facilitated by Unit Managers, Director of Professional Development and Research Advisor/Faculty)

Confidentiality/Anonymity of participants maintained

Data analyzed by students and Research Advisor/ Faculty using SPSS – Pearson's R or Spearman's Rho

Findings presented a t Research Council



#### Evaluation

#### Collaborative relationship resulted in 7 quantitative unit/staff based mini studies in which staff, management, students and faculty participated. Data provided used to evaluate and revise program implementation.

| MS Units                                   | Variables        | Significant Findings           | r = p=           |
|--|------------------|--------------------------------|------------------|
| Study1                                     | Demographics     | Tenure/# Call Lights           | r=422 p = .028   |
| Pilot (N = 37)                             | Job Satisfaction | Care Rounds/QOC                | r=.395 p=.028    |
|  | Call Lights      |                                |                  |
|  | Quality of Care  |                                |                  |
|  | Care Rounds      |                                |                  |
| Study2 (N = 8)                             | Demographics     | #Call Lights/Care Rounds       | r=.826 p =.043   |
|  | Job Satisfaction |                                |                  |
|  | Cal Lights       |                                |                  |
|  | Quality of Care  |                                |                  |
|  | Care Rounds      |                                |                  |
| Study3 (N = 17)                            | Demographics     | Age/Job Satisfaction           | r=50 p =.049     |
|  | Job Satisfaction | Tenure/# Call Lights           | r=.548 p=.035    |
|  | Call Lights      | QOC/Job Satisfaction           | r=.754 p=.000    |
|  | Quality of Care  |                                |                  |
|  | Care Rounds      |                                |                  |
| Study 4((N = 37) (2ndary analysis study 1) | Demographics     | Tenure/# Call Lights           | r=422 p = .028   |
|  | Skin Breakdown   | Care Rounds/QOC                | r=.395 p=.028    |
|  | Call Lights      | #Call Lights/Total Ulcers      | r=980 p= .020    |
|  | Job Satisfaction | #Call Lights/PreExUlcers       | r = .944 p =.016 |
|  | Quality of Care  |                                |                  |
|  | Care Rounds      |                                |                  |
| Study 5 (N=37) (2ndary analysis study1)    | Demographics     | Tenure/# Call Lights           | r=. 422 p=.028   |
|  | Falls            | Care Rounds/QOC                | r=.395 p=.028    |
|  | Call Lights      | Care Rounds/Falls Risk         | r=365 p=.05      |
|  | Job Satisfaction | Falls Assess/Falls Risk        | r=. 889 p=.000   |
|  | Quality of Care  |                                |                  |
|  | Care Rounds      |                                |                  |
| Study 6 Allied Health                      | Demographics     | Care Rounds/QOC                | r=. 628 p=. 012  |
| (N = 23)                                   | Job Satisfaction | Care Rounds/Job Satisfaction   | r=.516 p=.041    |
|  | Call Lights      |                                |                  |
|  | Quality of Care  |                                |                  |
|  | Care Rounds      |                                |                  |
| Study 7 Non Clinical Staff (N = 58)        | Demographics     | Care Rounds/QOC                | r=.545 p =.000   |
|  | Job Satisfaction | QOC (Service)/Job Satisfaction | r= .393 p=.003   |
|  | Call Lights      | Care Rounds/Action             | r=.301 p =.023   |
|  | Quality of Care  | On Unit/Tasks not done         | r=.259 p=.049    |
|  | Care Rounds      |                                |                  |
|  |                  |                                |                  |

#### Implications for Practice

Positive student and staff experiences provide opportunities to use similar approaches in designing and implement in unit specific research studies

The success of this collaborative approach indicates that it should be further explored and utilized in similar settings This approach provides a template for sharing resources in academic/hospital environments

Provides a method to support achievement of Magnet Hospital Criteria

Potential method to evaluate programmatic from a unit and systems perspective

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