# Creating a Climate for Inquiry at the Frontline of Patient Care



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### INTRODUCTION

<u>Problem.</u> Nurses enter practice with varying education levels presenting the profession with challenges – among these clinical decision making skills associated with research and evidence-based practice (EBP) can exceed a nurse's educational exposure. Many staff nurses are practicing with diplomas or associate degrees, and depending on their years of experience, may not have been exposed to research and/or EBP concepts. Clinical inquiry is crucial to these processes.

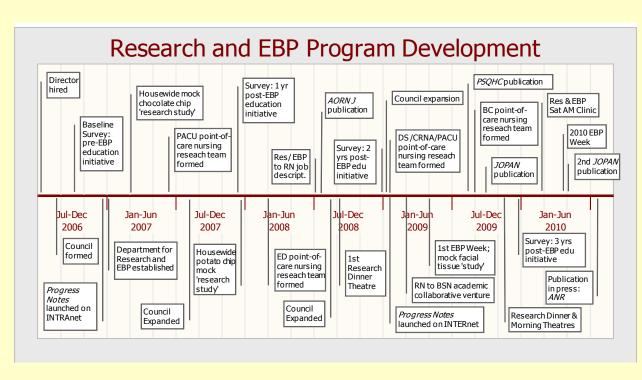
<u>Evidence</u>. Ponder the volume of research, carried out by academicians, which frontline nurses do not read and thus has not made its way into practice. Yet the use of best research evidence to inform clinical decision making empowers nurses to transform their practice.

<u>Strategies</u>. The chief nursing officer and nursing leadership at this 258-bed, Magnet, community hospital took an innovative approach in hiring a research scientist to develop a research and EBP program for its nurses. A point-of-care model (1) involving teams of nurses, mentored by the program director or an experienced advanced practice nurse, was implemented.

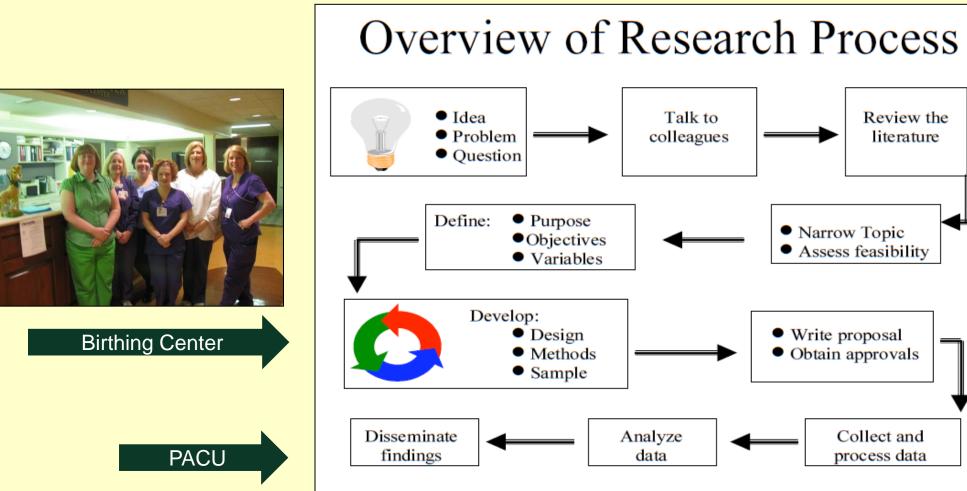
### **RESEARCH & EBP PROGRAM**

### PROGRAM STRUCTURE

- Department for Research and Evidence-Based Practice: result of administrative directive to enculturate research and EBP
- Research and Evidence-Based Practice Council: comprised of 9 nurses, who serve as coordinators, educators & mentors
- Clinical Research Review Board: federally registered IRB established to review noninvasive clinical research proposals
- Education Courses and Activities
  - ➤ <u>Interactive Courses</u>: Let's Get Cooking with EBP, Searching the Literature, Appraising the Literature, Grading the Evidence
  - Online Courses: EBP101, EBP201
  - Annual Activities: Research Theatre, EBP Week, Clinic
- Job Performance Expectation: research and/or EBP competency added to RN job description effective July 2009
- Communication Vehicle: monthly online newsletter, Progress Notes, highlights research & EBP initiatives

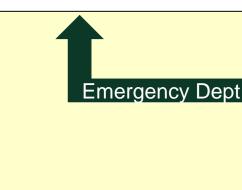


## NURSING RESEARCH POINT-OF-CARE TEAMS











| Nursing<br>Research Team           | Title of Research Study  | Status and Accomplishments  |  |  |
|------------------------------------|--|---|--|--|
| PACU                               | The Impact of Music on the PACU Patient's Perception of Discomfort   | Study findings disseminated: national meeting poster presentation, guest & peer-reviewed journal publications |  |  |
| Emergency<br>Department            | Comparison of Temporal Artery and Rectal Thermometry Measurements in Pediatric Emergency Department Patients | Data analysis nearing completion; abstract accepted for 2010 national meeting podium presentation (ENA)       |  |  |
| Day Surgery /<br>Anesthesia / PACU | Comparison of Controlled Breathing with or without Peppermint Aromatherapy for the Relief of PONV            | IRB approval obtained; data collection underway   |  |  |
| Birthing Center                    | Evaluation of the 'Coping with Labor Algorithm' as an Effective Pain Management Tool in Laboring Patients    | Study design nearing completion; research proposal being written  |  |  |

Brunt BA. Overview of research process. Exhibit D In: Evidence-based staff development: strategy for effective implementation. Marblehead, MA: HCPro, Inc.;2007.

### **KNOWLEDGE GROWTH**

| Question Theme  | <b>2006</b> % n=138 (N=219) | 2007 %<br>n=71<br>(N=104) | 2008 %<br>n=154<br>(N=210) | <b>2009</b> % n=138 (N=205) | 2006 vs. 2009 Δ<br>(increase)<br>(decrease) |  |
|---|-----------------------------|---------------------------|----------------------------|-----------------------------|---|--|
| Decision making method most used  |                             |                           |                            |                             |   |  |
| Trial and error   | 0                           | 2.8                       | 0                          | 0.7                         | Slight                                      |  |
| Recommendations from others   | 39.9                        | 12.7                      | 11.7                       | 6.5                         | 6.14-fold                                   |  |
| Tradition   | 10.9                        | 1.4                       | 1.3                        | 0.7                         | 15.5-fold                                   |  |
| Best evidence   | 49.3                        | 83.1                      | 87.0                       | 92.0                        | 1.86-fold                                   |  |
| Confident performing literature searches  |                             |                           |                            |                             |   |  |
| No  | 16.7                        | 16.9                      | 19.5                       | 13.8                        | 1.21 fold                                   |  |
| Yes, confident  | 44.2                        | 42.3                      | 39.6                       | 27.3                        | 1.62-fold                                   |  |
| Yes, with assistance  | 39.1                        | 40.8                      | 40.9                       | 51.2                        | 1.31-fold                                   |  |
| Confident interpreting research literature  |                             |                           |                            |                             |   |  |
| No  | 31.9                        | 43.7                      | 37.7                       | 55.8                        | 1.75-fold                                   |  |
| Yes   | 68.1                        | 56.3                      | 62.3                       | 44.2                        | 1.54-fold                                   |  |
| n: number of direct care provider responses; corresponding (N): total number of survey responses (direct and nondirect care nurses) |                             |                           |                            |                             |   |  |

- Anonymous electronic surveys launched annually
  - pre-education initiative survey: 2006
  - post-education initiative surveys: 2007, 2008, 2009
- Direct care nurses reported use of best evidence for decision making has nearly doubled since program inception from 49% to 92%
- Awareness of what frontline nurses know regarding their literature searching & appraisal abilities has become more realistic over time

### SUMMARY

- > ~20% of nurses are engaged in research demonstrating frontline nurses are indeed highly motivated to improve their clinical practice
- Council members are mentoring nurses in research and EBP
- Nurse researchers' national recognition since program inception:
  - ➢ 3 poster presentation awards: 16<sup>th</sup> National EBP Conf., Iowa City; 55<sup>th</sup> Annual AORN Congress, Anaheim; 9<sup>th</sup> Annual EBP Conf., Phoenix
  - ➤ 1 podium presentation finalist: 2008 International MUSE Conf., Dallas
  - ➤ 1 publication award: AORN J 2008 Writers Contest Winner

Recommendations. Utilizing a program model that takes into account common research barriers (2) voiced by nurses, e.g., lack of time, lack of resources, and lack of knowledge, is vitally important. The support of nursing leaders who are responsible for allocating the resources required for creating a climate for clinical inquiry is required.

<u>Lessons Learned</u>. Frontline nurses demonstrated they were capable of making practice changes. Practical clinical questions were asked and answered through systematic study in the absence of formal research training under the direction of a mentor. CVMC is pioneering a workable solution to a profession-wide problem.

#### **Bibliography**

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## **CONTACT INFORMATION**

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We are proud of all nurses in the organization who have stepped out of their comfort zone to participate in nursing research studies and/or EBP projects, and we gratefully acknowledge our colleagues on the Research and EBP Council.