Nurse Manager Competency Development through Organizational Based Interventions: State of the Science Review, Assessment through Instrumentation, and Research Study Results

Session ID 320

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Learning Objectives

Participants will be able to describe trends in nurse manager education and development

Participants will be able to describe how to use a psychometrically sound evidenced based nurse manager competency instrument to assess developmental needs of nurse managers in their organization.

Participants will be able to describe an evidence based approach to organizational nurse manager competency development.
Indiana University Health

- Total admissions: 136,731
- Total outpatient visits: 2,638,074
- Total staffed beds: 3,098
- Total Physicians: 3,707
- Total Nurses: 9,000+
- Total team members: 29,395

- Ten patient-care specialties at IU Health are nationally ranked in U.S. News & World Report’s 2015-2016 edition of "America’s Best Hospitals."
- Ten out of 10 specialty programs at Riley Hospital for Children at IU Health ranked among the top 50 children's hospitals in the nation.
- Seven Magnet-designated hospitals
Background

- Expectations of leaders are changing
- Shift from industrial era to knowledge era
- Shift to participative democracy (Kellerman, 2012)
- Technology, increased regulations, decreased payment, and healthcare reform add complexity
- Nurse manager role is vital for patient, staff, and organizational outcomes (Chase, 2012)
- Nurse manager roles have changed in scope and complexity (Gilbert & Broome, 2015)
- IOM 2010 Report
Significance

- Nurse managers are underprepared and underdeveloped
- Nurse managers experiencing emotional exhaustion and burnout *(Covell, 2009; Shirey, Ebright, & McDaniel, 2008)*
- Aging nurse manager workforce with decreased attractiveness of the role
- Projected shortage of 67,000 nurse managers by 2020 *(Shirey, Ebright, & McDaniel, 2008)*
- Traditional competency models focus on management skills and not leadership
- Call to action
State of the Science Review
Integrative Review

Methods

- Databases:
  - CINAHL Plus with Full Text
  - Business Source Premier
  - Health Business FullTEXT
  - Health Source: Nursing/Academic Edition
  - MEDLINE
- Years: 2004 – 2014(16)
- Search terms:
  - “nurse manager AND competency”
  - “nurse manager AND professional development”
  - “nurse Manager AND leadership development”
  - “nurse manager AND development program”
Integrative Review
Inclusion and Exclusion Criteria

• **Inclusion Criteria**
  • Academic peer reviewed journals in English
  • Intervention based studies
  • Studies designed by or conducted in healthcare organizations or professional nursing organizations
  • Studies with aim of increasing Nurse Manager Competency

• **Exclusion Criteria**
  • Studies published by for-profit companies in which the intervention was the product marketed and sold to HCOs,
  • Studies in which the intervention was designed and offered within a college or university as part of an educational curriculum for course credit
  • Studies which were based primarily on evaluation of teaching method (e.g. web based vs. didactic classroom)
Overview of Study Descriptions

• n=7 articles published 2004-2014
• 6 from USA, 1 from Australia
• Small studies (n=4 to n=43).
• Ranged from targeted intervention (conflict coaching model) to broad based
• 2 were done with RNs, 5 with NMs
• No standard instrumentation
• Most mixed methods, one qualitative
<table>
<thead>
<tr>
<th>Author(s), (Year), Country or Origin</th>
<th>Setting</th>
<th>Study Design</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brinkert (2011) USA</td>
<td>2 hospitals Health System Academic &gt;500 bed Magnet</td>
<td>One group mixed-methods quasi-experimental</td>
<td>20 Nurse Managers</td>
</tr>
<tr>
<td>Duffield (2005) AUS</td>
<td>4 Hospitals Area health service Academic</td>
<td>One group mixed-methods quasi-experimental posttest only</td>
<td>18 Nurse Managers</td>
</tr>
<tr>
<td>Fennimore and Wolf (2011) USA</td>
<td>University of Pittsburgh Medical Center</td>
<td>One group mixed methods quasi-experimental pilot study</td>
<td>25 Nurse Managers</td>
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<tr>
<td>Mackoff, Glassman, &amp; Budin (2013) USA</td>
<td>New York University Langone Medical Center</td>
<td>One group mixed methods pretest-posttest quasi-experimental pilot study</td>
<td>43 Nurse Managers</td>
</tr>
<tr>
<td>Titzer, Shirey, and Hauck (2014) USA</td>
<td>St. Mary’s Medical Center, Magnet designated 480-bed acute care hospital</td>
<td>One group mixed methods quasi-experimental pretest/posttest design</td>
<td>12 Registered Nurses</td>
</tr>
<tr>
<td>Vitello-Cicciu, Weatherford, Gemme, Glass, and Seymour-Route (2014) USA</td>
<td>4 in person sessions held over an 8 week period in various locations organized by the Organization of Nurse Leaders of Massachusetts and Rhode Island (ONL)</td>
<td>Descriptive Qualitative</td>
<td>34 Nurse Leaders</td>
</tr>
<tr>
<td>Wendler, Olson-Stiki, and Prater (2009) USA</td>
<td>Memorial Medical Center: 525 bed tertiary care hospital in central Illinois, Magnet designated level 1 regional medical center</td>
<td>One group qualitative posttest quasi-experimental design</td>
<td>4 Registered Nurses</td>
</tr>
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Overview of Interventions

- 6 different theoretical/conceptual models: Master Class to Benner
- Content varied
- Delivery Method: all had in person facilitated experience, some out of hospital, 3 with homework, 2 with field trips
- Dose: 1 not discussed, others 12-336 hours, range 4 days to 1 year.
- Cost: not discussed in 4, others roughly $5K per participant
Strengths of Interventions

- All studies had theoretical or conceptual basis
- All used literature to position reason for competency model chosen
- All followed attrition rate
- All aim to increase nurse manager competency
Lessons Learned From Published Studies

• Time to fit development in complex nurse manager work flow
• Development should be supported at senior levels
• Commitment to funding
• Attrition over time may be an issue
• Tailoring activities to all learning levels: novice vs. experienced nurse managers
• Immersive learning experiences to build team dynamic
Methods
IRB exempt study

Participants: Inpatient and procedural clinical nurse managers in an Academic Medical Center.

- A Nurse Manager Institute (NMI) was formed with the support of a grant from the organization’s philanthropic foundation sponsored by the CNO and led by two inpatient nursing directors.

- All who attended were administered the intervention and measurement.

- Informed by the results of the pre-survey identifying where the clinical nurse managers viewed skills were important and what skills they identified as being competent, curriculum topics and methods were developed to address the knowledge/skill deficit.
Design

Longitudinal quantitative non-experimental pre-test/post-test intervention design.

Pre-test results informed the priority competencies developed for the Nurse Manager Institute

- Two year program consisting of quarterly 4 hour development sessions and monthly hourly case study reviews which was made available to all facility nurse managers

- A committee steering team was established to plan for each seminar.

- Content included communication skill building, finance and budget management, strategy, and personal reflection.

- Methods use to deliver content varied from case studies to hands on demonstration and computer labs.
Instrumentation

Chase Nurse Manager Competency Instrument (CNMCI)

Reliable and valid instrument

Rates both the knowledge of and ability of the nurse manager to implement the five evidence-based nurse manager competency domains:

- Communication
- Relationship Management
- Knowledge of Healthcare Environment
- Managing the Business
- Professionalism
Coursework
Nurse Manager Institute (NMI)

- **Giving Feedback** – Case Based Learning
- **Leading a Team** – Case Based Learning
- **Communicating Effectively** – Guest Speaker Authors of *The Four Conversations*
- **Budget Management** – 2 Didactic Courses
- **Strategy** – Interactive Learning
- **Performance Management** – Didactic Learning
Procedures

Informed consent was obtained at the inaugural meeting.

Those that agreed to participate were asked to create a unique identification code for post-test measurement.

The CNMCI was administered at the first meeting and again upon completion of the program to measure intervention effectiveness.

Nurse Managers were asked:
- to rate their knowledge/understanding of the competency.
- rate their ability to apply/implement the competency.

Attendance taken at each session so that participants could review their coursework completion.

Demographics collected:
- Age
- Education Level
- Years of Experience
- Years of Formal Management Experience
- Years in Current Position
- FTEs Managed
Results

20 Nurse Manager Participants

Research results demonstrate that the total knowledge score was higher after the program (M=182.08, SD=11.78) than prior to the program, (M=171.00, SD=17.04), t(11) = -2.976, p=0.013.

For subscales, when compared to baseline, only the knowledge of business skills and principles subscale was significantly higher after the program (M=24.00, SD=3.44) than before the program (M=20.50, SD=5.96), t(11) = -2.528, p=0.028.

The total ability score was higher after the program (M=183.14, SD=17.91) than before (M=146.43, SD=17.73), t(6)= -4.425, p=0.004.

Two subscales significantly improved after the program: the ability subscale of Communication and Relationship Management and the Business Skills and Principles ability subscale.

The overall total score of the NMCI significantly improved after the program (M=343.71, SD=22.95) compared to baseline (M=315.57, SD=27.90), t(6) = -3.711, p=0.010.
National Perspective

- CNO view of nurse manager role
  - The Nurse manager role is critical to the success of an organization
  - The Nurse manager has the perspective of senior leaders and the perspective of the staff
  - Under support of the nurse manager role can result in lack of accountability, collaboration and decision making
  - CNO personal coaching of this role is critical

- Perspective on nurse manager competency development
  - New competencies on the horizon
    - Emotional intelligence
    - Optimism
    - Catalyzing change
    - Openness
    - Reflection
    - Authenticity

- Internal and external forces on the role
  - Decelerating reimbursement/Cost Pressure
  - Nursing shortage
  - Increasingly complex patients with co-morbidities
  - Aggressive patients and families evoking violence
  - Inexperience in the environment
CNO Relationship

• CNO relationship with nurse manager
  • Nurse Manager Council as a shared governance mechanism and development vehicle
  • Attendance at Director level meetings with managers
  • Triad meeting with CNO, Quality Director and nurse manager
  • 1:1 CNO/Nurse Manager chats
  • Offering special invitations
  • Offering unique opportunities
  • Meaningful appreciation
  • The CNO as the Nurse Manager whisperer- the nudge concept

• Leaders in the making
  • Process owners in Lean
  • Recruiting events
  • Nurses’ Week/appreciation events
  • Charge nurses
  • Nurse managers taking on departmental or system projects and roles
  • Magnet prep
  • Pay tribute to nurse managers
  • Reverse mentors to the CNO
  • Succession planning

• Time well spent- Inspiring, coaching and building trust in a nurse manager is a valued human investment; strong nurse managers will demonstrate reliable and consistent results.
Study Strengths and Limitations

• **Strengths**
  - Instrument reliability and validity
  - Anonymity of participants maintained
  - Demonstrated impact on competency development
  - Repeatable with different groups

• **Limitations**
  - Results may have been impacted by the convenience sampling
  - Subject attrition over the course of the study
  - Small sample size

• **Lessons learned**
  - Education sessions also have a positive impact on manager engagement
  - Case studies are a welcome method for manager learning and practice of competencies
  - Nurse managers in the cohort of learners emerge as peer consultants
  - Don’t let time be a barrier
  - Expose attendees to external experts
  - Social Capital – valuable social connections leading to information exchange
Recommendations for Future Research

• New and evolving competencies
  • Inter-professional collaboration - leading teams
  • Big Picture - Explorer, Planner, Energizer, Connector
  • Details - Expert, Optimizer, Producer, Coach

• Role dynamics and inter-professional development
  • HRSA Grant - IU Health - student experiences, triad leadership (nurse manager, MD, case manager)

• Nurse manager role and outcomes
  • Very few studies have been able to isolate specific competencies and link to specific outcomes
  • Several variables impact outcomes – research needed to study what is linked to manager competencies vs other variables.
REFERENCES


Mackoff, B. L., Glassman, K., & Budin, W. (2013). Developing a leadership laboratory for nurse managers based on lived experiences: A participatory action research model for leadership development. *Journal of Nursing Administration, 43*(9), 447-454. doi: 10.1097/NNA.0b013e3182a23bc1


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#AONE2016