

## **Sigma's 30th International Nursing Research Congress**

### **Knowledge and Educational Experiences of Nurse Managers in Acute Care Settings Related to Cost Management**

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#### **Purpose:**

The purpose of this study was to assess unit based nurse manager's training and educational experiences related to cost and cost management in the acute care hospital setting. A secondary aim was to compare the mean responses from the business domain of the *Nurse Manager Inventory Tool* by educational preparation and professional role.

#### **Methods:**

This feasibility study was designed to assess the knowledge and educational preparation and practices of unit based nurse managers related to cost and cost management. The *Nurse Manager Inventory Tool* developed by the American Organization of Nurse Executives (AONE), American Association of Colleges of Nursing (AACN), and American Organization of perioperative Registered Nurses (AORN) to assess requisite skills and behaviors of the successful nurse manager<sup>20</sup> was used to examine mean responses from unit based nurse managers in the business domain of success for managers. A secondary aim was to compare the mean responses from the business domain by educational preparation and professional role.

*Participants:* A randomized convenience sample of 175 registered nurses completed an anonymous Qualtrix survey containing questions from the Nurse Manager Assessment Tool. Potential candidates were contacted through public Facebook posts on multiple professional Facebook webpages that included AONE, ANA, ASNA, AORN, ANCC, Sigma Theta Tau, and Golden Key International.

*Power Analysis.* Using G-Power, we determined that a sample of 172 would be sufficient to achieve 90% to detect a medium effect size (.25) using a one-way between-groups ANOVA with two-groups at a .05% significance level.

#### **Results:**

Based on the findings of this study nurse managers self-reported that they did not comprehend financial concepts when presented in their undergraduate degree programs. Nurses who graduated from associate degree or two year programs reported that they did not receive financial concepts within their programs at all. Only as nurses moved into the post-graduate masters or doctorate programs did they report competence with financial concepts. It was also noted that years of experience in a management role did not alter the individual nurse managers self-perception of financial and business competence. It was significant that years of experience and education did not correlate with an increasing level of self-perceived competency.

#### **Conclusion:**

Promotion to the role of unit based manager has typically been based upon clinical proficiency and interpersonal skill.<sup>9-14</sup> The practice of promoting nurse managers based upon clinical excellence, often with only the undergraduate degree, assures the new manager has not received adequate preparation for managing the business aspect of patient care.<sup>4,7</sup> Neither traditional undergraduate nursing programs nor

continuing educational courses adequately prepare nurses for the transition from staff nurse to nurse manager.<sup>4,7</sup>

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**Title:**

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Competence, Finance and Business and Nurse Manager

**References:**

1. Health Care Costs and Gross Domestic Product. (Accessed October 3, 2017). <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html>
2. Health Care Cost and the US Economy (Accessed October 3, 2017) <https://aspe.hhs.gov/basic-report/effects-health-care-spending-us-economy>
3. Nurse Managers Cost and Cost Management Education (Accessed October 3, 2017). <http://www.aone.org/education/enmo.shtml>
4. Muller, R., & Karsten, M. (2012). Do you speak finance? *Nursing Management*, 52-54. doi-10.1097/01.NUMA.0000412228.68794.fa
5. Strickler, J., Bohling, S., Kneis, C., O'Conner, M., & Yee, P.L. (2016). Developing nurse leaders from within. *Nursing* 2016 46(5), 49-51. doi-10.1097/01.NURSE.0000482261.78767.c2
6. Rome, B., Nickitas, D., & Lawrence, D.A. (2016). The financial landscape and implications for nursing. *Nurse Leader*, 33-37. <http://dx.doi.org/10.1016/j.mnl.2015.11.001>.
7. Schuettner, K.A., Van Sell, S.L., & Sheriff, S. (2015). Nursing administration degree as the foundation of practice for future nurse managers. *Nurse Leader*, 86-97. <http://dx.doi.org/10.1016/j.mnl.2014.12.004>.
8. Kirby, K.K., & DeCampi, P. (2008) Nurse manager development beyond the classroom. *Nurse Leader*, 44-47. Doi:10.1016/j.mnl.2008.02.005
9. Doria, H. (2015). Successful transition from staff nurse to nurse manager. *Nurse Leader*. 78-81. <http://dx.doi.org/10.1016/j.mnl.2014.07.013>.
10. Korh, J. (2016). Communication and coaching: Keys to developing future nurse leaders. *Nurse Leader*, 207-211. <http://dx.doi.org/10.1016/j.mnl.2015.04.004>.
11. Kleinman, C.S. (2003). Leadership roles, competencies, and education: How prepared are our nurse managers? *Journal of Nurse Administration*, 33(9), 451-455.
12. Sanford, K.D. (2011). The case for nursing leadership development. *Healthcare Financial Management*, 100-106.
13. Nurse Manager Competencies. American Organization of Nurse Executives. (Accessed October 3, 2017) <http://www.aone.org/resources/nurse-leader-competencies.shtml>.
14. Golden, T.W. (2008). Connecting the dots: Responding to the challenges of budget and finance education for nurse leaders. *Nurse Leader*, 42-52. doi.10.1016/j.mnl.2008.04.003.
15. Jensen, D., & Ward, E. (2016). Adapting the revenue cycle for value-based purchasing. *Healthcare Financial Management*, 70(9), 80-84.
16. Raso, R. (2015). Value-based purchasing: Are you part of the shift? *Nursing Management*, 24-31. doi:10.1097/01.NUMA.0000463882.54082.64
17. *The Essentials of Baccalaureate Education for Professional Nursing Practice*. [www.aacnursing.org](http://www.aacnursing.org) (Accessed November 25, 2017)
18. Welch, T. D. (2016). *Evolution of expertise among critical care nurses* (Order No. 10127864). Available from ProQuest Dissertations & Theses Full Text. (1798479318). Retrieved from <https://search.proquest.com/docview/1798479318?accountid=14472>

19. Faul, F., Erdfelder, E., Lang, A.G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavioral Research Methods*, 39(2), 175-191.
20. *Nurse Manager Skills Inventory*. <http://www.aone.org/resources/nurse-manager-skills-inventory.pdf> (Accessed November 30, 2017).

### **Abstract Summary:**

A feasibility study to assess the knowledge and educational experiences of unit based nurse managers in the acute care hospital setting as it relates to cost and cost management.

### **Content Outline:**

#### **Knowledge and Educational Experiences of Nurse Managers in Acute Care Settings Related to Cost Management**

##### I. Introduction

According to the Centers for Medicare and Medicaid, healthcare spending in the United States increased 5.8% in 2015 to reach \$3.2 trillion. This consumes 17.8% of the gross domestic product (US economy).<sup>1</sup> Expenditures for acute care hospital costs increased 5.6% to \$1.0 trillion in 2015 and account for 32% of the overall costs in health care.<sup>1</sup> In an industry where cost and expenditures are growing at two times the national rate of inflation<sup>2</sup>, unit based managers are uniquely positioned to have a significant impact on controlling the quality and cost of healthcare.

Nurses make up the largest portion of the healthcare workforce in the United States with an estimated 3.1 million licensed professional nurses currently in practice.<sup>6,7</sup> Value-based purchasing financial models focused on quality improvement and nursing excellence are driving the financial landscape of healthcare delivery today.<sup>6</sup> As a result, the quality of patient care, patient outcomes, and the patient experience along with the associated costs of providing care are under intense scrutiny.<sup>6</sup>

The nursing unit as a part of the larger organizational whole depends on qualified managers to manage the daily business of patient care and to understand the impact of healthcare costs.<sup>6</sup> Unit based managers are directly responsible and accountable for the allocation and consumption of healthcare resources.<sup>6,7</sup> Their ability to maintain continuous quality improvement in an efficient cost-effective manner is the foundation of economic viability and success for the institution.<sup>4,7,14</sup>

Unit based nurse managers can no longer focus exclusively on patients and patient care. To be successful they must also become fluent in the language and knowledge of budgets and finance.<sup>14</sup> Their ability to maintain continuous quality improvement in an efficient cost-effective manner is the foundation of economic viability and success for acute care hospitals.<sup>4,7,14</sup> The inability to manage costs at the micro level will have a significant ripple effect across the institutional base impacting reimbursement and compounding healthcare costs systematically.

##### II. Body

The purpose of this study was to assess unit based clinical nurse managers' training and educational experiences related to cost and cost management in the acute care hospital environment. Focusing on the business domain of the *Nurse Manager Inventory Tool*, mean responses from unit based nurse managers were used to assess their self-reported competence in the requisite business skills and behaviors of the successful nurse manager.<sup>20</sup>

Based on the findings of this study nurse managers do not comprehend financial concepts when presented in undergraduate degree programs. Nurses who graduated from associate degree or two year programs reported that they did not receive financial concepts within their programs at all. Only as nurses

moved into the post-graduate masters or doctorate programs did they report competence with financial concepts. It was also noted that years of experience in a management role did not alter the individual nurse managers self-perception of financial and business competence. It was significant that years of experience and education did not correlate with an increasing level of self-perceived competency. Findings suggested that:

A. The comprehension of financial concepts had a direct correlation to academic degree.

- Data were examined as 4 paired samples t tests. All results were significant for each of the five topics of nurse management competency (accounting, finance and reimbursement, budgeting, and policy).
- Nurses with MSN degree reported receiving more education during their graduate degree program than during their undergraduate degree program.

B. Years of experience as a nurse manager did not have a direct correlation with self-perception of financial and business competency.

- Based on the findings if this study years of experience as a nurse manager did not correlate with any of the business skills reported on the Nurse Manager Inventory Tool.
- Years of experience didn't correlate with self-reported perception of expert.

C. Nurses promoted to management positions at non-Magnet facilities did not receive orientation while nurses promoted to new management positions at Magnet distinguished facilities did.

- The data was analyzed with a chi square test of independence and was highly significant.
- A breakdown of those nurse managers working in hospitals that have received Magnet distinction as opposed to those who work for non-Magnet facilities and received management or leadership orientation following promotion.
- Nurse managers at magnet hospitals (93%) received an orientation on management and leadership while only 33% of those at non-magnet hospitals did.

### III. Conclusion

In the acute care hospital, unit based managers are uniquely positioned to have a significant impact on controlling the quality and cost of healthcare. According to the findings within this study, nurse managers self-reported as novice or competent at managing financial skills.

To halt the escalating costs of healthcare nursing must understand healthcare finance, financial language and basic accounting skill.<sup>6,7</sup> These skills are essential in developing proficiency in fiscal resource management and engaging non-nursing professionals when advocating for resources to meet patient care needs.<sup>3,6</sup> Until bedside nurses and unit based managers acquire the essential skills of cost management the US healthcare system will not be able to rein in healthcare cost and waste.<sup>6,15,16</sup> The impetus for change should start with those who consume the resources.

Promotion to the role of unit based manager has typically been based upon clinical proficiency and interpersonal skill.<sup>9-14</sup> The practice of promoting nurse managers based upon clinical excellence, often with only the undergraduate degree, assures the new manager has not received adequate preparation for managing the business aspect of patient care.<sup>4,7</sup> Neither traditional undergraduate nursing programs nor continuing educational courses adequately prepare nurses for the transition from staff nurse to nurse manager.<sup>4,7</sup>

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**Author Summary:** Dr Welch is an Assistant Professor at the Capstone College of Nursing. She is an EdD prepared registered nurse who holds a doctorate of Education in Instructional Leadership from the University of Alabama. Dr Welch is an ANCC Board Certified Advanced Nurse Executive with 29 years of clinical experience and 21 years management experience. Her research interests lie in the understanding of the development of expertise in critical care nursing.