

# DEVELOPMENT OF AN ASSESSMENT TOOL IN MEASURING COMPETENCIES OF HEAD NURSE

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## ABSTRACT

Competencies have been considered as the single biggest contributor for the difference between effective and ineffective managers. Competencies assessment is critical for head nurses who must move between and among health care settings. Competency assessment is an ongoing process of initial development, maintenance of knowledge and skills, educational consultation, remediation, and redevelopment.

The aim of this study was focused on the validity and the reliability of the assessment tool in measuring competencies for head nurses. This study developed an assessment tool in measuring competencies of the head nurses from the competencies published by AONE, 2005. Content validity was done by the expert review. The respondents were 100 head nurses in the hospitals in Pampanga, the Philippines. The reliability test was done by Cronbach alpha test.

From the initial assessment tool which had 91 items, it became 74 items after the expert review and the reliability test was conducted. The computed Cronbach's alpha for the 74-item Scale for Head Nurses' Competencies was 0.988, indicating very high internal consistency. So the instrument is reliable for measuring the competencies of head nurses.

This study concluded that the assessment tool in measuring competencies of the head nurses had demonstrated evidence of internal consistency reliability and content validity. It provided an objective tool for assessing the head nurses competencies in the various areas of the hospitals.

**Keywords :** *Competencies, Head Nurses, Assessment Tool*

## INTRODUCTION

The health care delivery system is complex surroundings that require fundamental and change of system to produce high quality outcomes and satisfying work environment. Head nurses live with this complexity, which is a daily experience for them. They work at the front line to make sure patient care is safely delivered through high quality practice (O'Rourke, 2007). In the hospital setting, the head nurse is the vital link between executive management and the nursing staff members, who provide direct patient care. The ability to effectively and efficiently develop competent head nurses is a major challenge in today's health care environment. Competencies have been considered as the single biggest contributor towards the differences between effective and ineffective managers. Research has shown that competencies, defined as cluster of skills, behavioral attributes, and personal attitudes

make a greater contribution to the effectiveness of managers than either formal qualifications or number of years of experience.

The World Health Organization (WHO) Global Advisory Group in 2000 emphasized that it is imperatively important to ensure nurses' competence levels. The American Joint Commission on Accreditation of Healthcare Organization (AJCAHO) has proclaimed that in order to provide quality patient care, the individuals delivering patient care services must be competent enough to do so. AJCAHO standards also require that leaders should ensure that the competence of staff members is continually assessed, maintained, demonstrated and improved (Liu *et al.*, 2007).

All managers, irrespective of where or what they manage, need to develop several competencies that will enable them to effectively perform the four generic

functions of planning, organizing, leading and controlling (Pillay & Mckenna, 2009). According to Donaher (2007), 63% of nurse managers do not possess a graduate degree, which is the minimum preparation recommended by the joint research of the American Association of Colleges of Nursing and the American Organization of Nurse Executive (AONE) (Donaher *et al.*, 2007)

Based on the preliminary survey conducted by the researcher in four hospitals, in Angeles City, it was found that, there are two hospitals that have periodic assessment system for their nurses. This procedure of assessment was only for the staff nurses, but there is no specific assessment for the nurse managers. The other two hospitals have periodic assessment specific for the head nurses, but that is for the performance instead of competency.

Competencies assessment is critical for head nurses who must move between and among health care settings. Competency assessment is an ongoing process of initial development, maintenance of knowledge and skills, educational consultation, remediation, and redevelopment. Competency assessment and staff development are increasingly viewed as a central strategy for improving the effectiveness of the individuals providing care [5]. Hospitals are required to assess, maintain, demonstrate, track, and improve the competence of the head nurse.

Several studies have profiled the head nurse, but have focused on the characteristics and responsibilities of these individuals. This study delineated and identified specific competencies that are considered important and effective for hospital-based head nurse manager. Based on AONE, Nurse Managers must be adequately competent to carry out communication and relationship building, knowledge acquisition of the healthcare environment, leadership, professionalism, and business skills. This study gives evidence on the validity and reliability of an assessment tool in measuring competency of the head nurse to establish their proficiency.

## METHOD

This development of an assessment tool in measuring competency for head nurses used a non-experimental descriptive design. The study consisted of two phase:

(1) preliminary phase including two steps, and (2)

gathering data or research phase including three steps. The data gathering used the competencies self-assessment tool for head nurses.

The subjects of this study were one hundred (100) head nurses from all departments of the hospitals. Samples of this study used purposive sampling method or judgmental sampling using following criteria: 1) the head nurse must be a regular employee; 2) he/she must have been working for at least one year. These methods used the researcher's knowledge about the population and decided purposely to select subjects who were judged to be typical of the population or particularly knowledgeable about the issues under study (Polit & Hungle, 2004).

This research utilized the Nurse Executive Competencies Assessment Tool developed by the American Organization of Nurse Executives (AONE). The researcher selected some items which are appropriate in relation with the head nurses' job description in the hospital setting. This assessment tool measures the five main competencies of nurse managers. Each competency consists of several parts with different criteria.

The first competency is Communication and Relationship Building. This competency has 25 items separated in 7 parts. The second competency is Knowledge of Health Care Environment. The whole items in this competency are 21 items separated in 9 parts. The third competency is Leadership. It has 13 items separated in 3 parts. The fourth competency is Professionalism. There are 14 items included in this competency. Those items are separated in 4 parts. The last competency is Business Skill. This competency has 15 items separated in 3 parts. All in all, this assessment tool has 88 items. Statistical analysis was carried out using SPSS version 15. Internal consistency was assessed by utilizing Cronbach's alpha.

## RESULT

### Existing Tools be Evaluated based from AONE

The researcher went to four hospitals, and gathered the assessment tool that they used for evaluation of the nurses. Hospital 1 has a specific evaluation tool for the head nurses. Hospital 2 has a tool to periodically evaluate the nurses, but it does not have a specific tool to evaluate the head nurses. Hospital 3 has an evaluation tool that is specific for the head nurses. Hospital 4 does not have specific evaluation tool for the

head nurses, but it has an evaluation tool applicable for all the nurses.

All the evaluation tools present in the four hospitals are for the evaluation of the performance of the nurses. In other word, it does not focus on the competencies. (Kak *et al.*; 2001) said that performance and competencies are different.

However the researcher matched the items present in the evaluation tools of each hospital with the list of competencies published by AONE. All hospitals do not evaluate the business skill in their evaluation. Almost all items are present in Hospital 1 assessment tool in comparison to AONE main competencies. But some items are not evaluated by hospital 1. These are the delivery care method, change management and evidence-based practice. Hospital 2 has items which matched with three items in the communication and relationship building, some items matched with three items in the competency number two namely knowledge of healthcare environment. Again some items matched with one item in the leadership competencies, and items matched with two items in the professionalism competency.

None of the performance evaluation tools present in the hospitals, evaluate about diversity. This item is considered important by AONE under the competency of communication and relationship building. In relation to the global changes, diversity management is crucial and needs to be mastered by the head nurses.

Item which deals with delivery model, healthcare economics, healthcare policy, governance, evidence-based practice, and risk management are considered important by AONE under the competency of knowledge of healthcare environment. But none of those items emerge in the performance evaluation tools of the four hospitals.

Change management is also not considered by the four hospitals in their performance evaluation tool. The process of mastering change management is considered important by AONE under the competency of leadership. In today's ever changing healthcare environment, nurses, especially administrators and managers, require leadership skills that provide direction for a new generation of nurses. Change management is also included in Mahoney study in its part of leadership.

Under the competency of professionalism AONE considered items about evidence-based clinical management practice and advocacy. But none of those hospitals have that particular item in their performance evaluation tool. Specific indicator for professionalism is important to ascertain the professional nurse. Lastly, the competency of business skills is not being evaluated by all hospitals in their performance evaluation tool. But according to AONE head nurses must have business skill competency.

### **Assessment Tool In Measuring The Competence of Head Nurses Be Designed**

The competency assessment tool was designed by some items. The items were derived from the AONE's competency list. Each item had a score of 1 to 5, where one is reflected as novice, two as advanced beginner, three as competent, four as proficient and five as expert.

The first draft of this tool was submitted to two experts for their comments and suggestions. After the expert review, three items numbered thirty two, thirty three and seventy three was considered as unclear, so those items were deleted from the tool. From 91 items that the toll had before, finally there were 88 items.

The first competency is Communication and Relationship Building. There are 7 parts under this competency. These are Effective communication (1 item), relationship management (5 items), influencing behavior (3 items), diversity (3 items), shared decision making (3 items), medical staff relationship (6 items), and academic relationship (3 items). Change happened in the sequence of these parts after the expert reviews, but the number of items under each part is stable.

The second competency is the knowledge of the health environment. This competency is important with regard to the legality, insurance, etc. under this competency, originally there are 23 items. Two of those items are considered not clear according to the experts' review, so there are now 21 items left.

The 22 items are spread into eight parts in this competency. There are clinical practice knowledge (4 items), delivery model (2 items), health care economics (1 item), health care policy (1 item), governance (2 items), evidence-based practice (3

items), patient safety (5 items), quality improvement (1 item), and risk management (2 items).

The third competency is leadership. In this main competency there are 13 items. All of these items were considered relevant by the expert review.

The 13 items are spread into three parts. These are foundational thinking skills (3 items), personal journey discipline (5 items), and change management (5 items).

The fourth competency is professionalism. Four parts under this competency are: Personal and Professional Accountability (6 items), Ethics (3 items), Evidence-Based Clinical and Management Practice (2 items), and Advocacy (4 items). There were 15 items originally. After the expert review, one item was deleted because it was considered as not clear. The item was "Role model, the perspective that patient care is the core of the organizations' work". So there are now 14 items left.

The last competency is Business Skills. There are three parts under this competency. The parts are Financial Management (1 item), Human Resource Management (8 items), and Information Management and Technology (6 items). All in all, there are 15 items under the business skills competency. This competency is the competency that should present in the head nurses in relation to the global world.

## **ASSESSMENT TOOL BE TESTED FOR ITS VALIDITY AND RELIABILITY**

### **Content Validity**

Measuring content validity of instrument is important. This type of validity can help to ensure construct validity and give confidence to the reader and researchers about the instrument. Content validity refers to the degree that the instrument covers the content that is supposed to be measured.

Researcher asked the expert to check the relevance of each item in the instruments. The experts capable of reviewing the particular instruments are the nurse executives (N VII) in the Philippine General Hospital. Both experts agreed that this instrument is more or less already relevant to the Philippine setting. There were three items considered irrelevant because those items were not clear enough. The two items were item no 32 and 33 both items lie under the competency 2: i.e. knowledge of the healthcare environment, in delivery models. The other one item was item no 73 this item

was under the advocacy part in the competency 4: professionalism.

Minimum additional and/or change words were added in some items in the instrument to make the instrument more understandable. The sequence in the first part of the competency, which is communication and relationship building, are needed to be rearranged to make it more systematic.

### **RELIABILITY OF THE INSTRUMENT**

Reliability of the instrument is the degree of the consistency or dependability with which an instrument measures the attributes it is designed to measure. Reliability testing can be done by one time or two times administration. Cronbach's alpha is the most common form of internal consistency reliability coefficient. Alpha equals zero when the true score is not measured at all and there is only an error component. Alpha equals 1.0 when all items measure only the true score and there is no error component.

In this research, the reliability of the instrument was tested using the Cronbach's alpha technique. Cronbach's alpha can be interpreted as the percentage of variance in the observed scale that would explain the hypothetical true scale composed of all possible items in the universe. Alternatively, it can be interpreted as the correlation of the observed scale with all the other scales measuring the same thing and using the same number of items. There were three items deleted after the contents validity testing. The instrument now has 88 valid items.

The computed Cronbach's alpha for the 88-item Scale for Head Nurses' Competencies was 0.989, indicating very high internal consistency. This means there is a very high degree of association between the items in the scale.

In the corrected item-total correlations showed that all items had positive correlations with the total scores, the lowest of which was 0.520, which implies that all the items in the scale are good indicators of the competencies of head nurses. However, only 75 items meet the minimal correlation of 0.70 which is necessary to claim the instrument and its subscale scores are internally consistent.

Furthermore, individual analysis of Cronbach's alpha is done if item deleted showed that the alpha coefficient remained the same if any item is deleted,

which implies that an item may be deleted without affecting the overall reliability of the scale.

The table 4 is the final assessment tool for measuring the head nurses' competencies. This tool has five main competencies, which are communication and relationship building, knowledge of healthcare environment, leadership, professionalism and business skills. Each competency has its own items. The communication and relationship building competency has 23 items. The knowledge of healthcare environment has 14 items. The leadership competency has 12 items. The professionalism competency has 13 items. The business skills competency has 12 items. Each item has scoring from 1 to 5, which is "1" refers to novice and "5" refers to expert.

This tool may be used in the same time with the regular schedule of staff evaluation in each hospital. But it is dependent on the hospital situation and policy. Each head nurse is asked to rate themselves as novice to expert based on the items written in the tools. The final average score will be the description of their competency as a head nurse.

## CONCLUSION

The instrument for measuring of competencies for head nurse was shown to be valid and reliable tool for assessing competencies for head nurses. The researcher suggested that the instrument may be utilized by the chief nurses to do evaluation to the head nurses. And the evaluation of the head nurses' competencies may be done together with the performance appraisal in the same time.

### Reliability Analysis for the 75-Item Scale for Head Nurses' Competencies

Items	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Manage conflict	.652	.988
2. Build trusting, collaborative relationships with: Peers ·Superiors ·Other disciplines and ancillary service, Physicians	.714	.988
3. Follow throughon promises and concerns	.722	.988
4. Care about people as individuals and demonstrate empathy and concern, while insuring organizational goals and objective are met	.743	.988
5. Accomplish objectives through persuasion, celebrate successes and accomplishment.	.784	.988
6. Assert views in non-threatening, non-judgmental ways	.760	.988
7. Create and communicate a shared vision	.738	.988
8. Reward appropriate behaviors and confront and manage inappropriate behaviors.	.717	.988
9. Develop, communicate and monitor behavior expectations.	.777	.988
10. Create an environment which recognizes and values differences in staff, physicians, patients.	.753	.988
11. Define diversity in terms of gender, race, religion, ethnic, sexual orientation, age, etc.	.722	.988
12. Confront in appropriate behaviors and attitude towards diverse groups develop process to incorporate cultural beliefs into care.	.652	.988
13. Engage staff and others in decision-making.	.752	.988
14. Promote decisions that are patient-centered	.755	.988
15. Provide an environment conducive to opinion sharing.	.726	.988
16. Build credibility with physicians as a champion for patient care, quality and nursing professionalism.	.721	.988

17. Confront and address in appropriate behavior towards patients and staff.	.724	.988
18. Collaborate with medical staff leaders in determining needed patient care services.	.742	.988
19. Collaborate with physicians to develop patient care equipment and facility needs	.655	.988
20. Facilitate disputes involving physician and nurses or other disciplines.	.723	.988
21. Identify educational needs of existing and potential nursing staff.	.734	.988
22. Collaborate with nursing programs to provide required resources and as a preceptor for the students.	.744	.988
23. Collaborate with nursing faculty in nursing research and incorporate research into practice.	.664	.988
24. Maintain knowledge of current nursing practice and the roles and functions of patient care team members.	.661	.988
25. Articulate patient care standards/practice	.692	.988
26. Understand, articulate, and ensure compliance with the Philippine Nursing Act, Philippine Regulation, and Policies of the Organization.	.770	.988
27. Role model lifelong learning, including clinical subjects, such as disease processes, pharmaceuticals, and clinical technology.	.709	.988
28. Maintain current knowledge of patient care delivery systems and innovations.	.763	.988
29. Articulate various delivery systems and patient care models and the advantages/disadvantages of each.	.734	.988
30. Articulate the country laws and regulations which affect the provision of patient care. I.e., malpractice/negligence, reimbursement.	.783	.988
31. Credentialing	.750	.988
32. Performance Management	.776	.988
33. Support the development and implementation of an organization-wide patient safety program.	.671	.988
34. Support safety surveys; responding and acting on safety recommendations.	.658	.988
35. Ensure staff is clinically competent and trained on their role in patient safety.	.643	.988
36. Articulate the organization's QI program and goals.	.699	.988
37. Identify areas of risk/liability.	.726	.988
38. Ensure staff is educated on risk management and compliance issues.	.757	.988
39. Maintain curiosity and an eagerness to explore new knowledge and idea.	.698	.988
40. Demonstrate reflective leadership and an understanding that all leadership begins from within.	.730	.988
41. Learn from setbacks and failure as well as successes.	.732	.988
42. Assess one's personal, professional and career goals and do career planning.	.794	.988
43. Seek mentorship from respected colleagues.	.684	.988
44. Promote system thinking as a value in the nursing organization.	.781	.988
45. Provide leadership in building loyalty and commitment throughout the organization	.799	.988
46. Utilize change theory to plan for the implementation of organizational changes.	.751	.988
47. Serve as a change agent, assisting others in understanding the importance, necessity, impact and process of change.	.760	.988
48. Support staff during times of difficult transitions.	.732	.988

49. Recognize one's own reaction to change and strive to remain open to new ideas and approach	.784	.988
50. Adapt leadership style to situational needs.	.782	.988
51. Create an environment that facilitates the team to initiate actions that produce result.	.726	.988
52. Hold self and others accountable for actions outcomes.	.721	.988
53. Career Planning	.743	.988
54. Develop own career plan and measure progress according ton that plan.	.756	.988
55. Create an environment wherein professional and personal growth is an expectation.	.720	.988
56. Articulate the application of ethical principles to operations.	.778	.988
57. Integrate high ethical standards and core values into everyday work activities.	.742	.988
58. Create an environment that has a reputation for high ethical standard.	.719	.988
59. Advocate use of document based practice	.692	.988
60. Teach and mentor others to routinely utilize evidence-based data and research.	.702	.988
61. Ensure that nurses are actively involved in decisions that affect their practice.	.788	.988
62. Active membership in Professional Organization.	.807	.988
63. Support and encourage others participate in a professional organization.	.701	.988
64. Educate patient care team members on financial implications of patient care decisions.	.713	.988
65. Use corrective discipline to mitigate workplace behavior problems.	.659	.988
66. Create opportunities for team member to be involved in decision making.	.693	.988
67. Reward and recognize exemplary performance.	.695	.988
68. Identify and eliminate sexual harassment, workplace, violence, verbal and physical abuse	.650	.988
79. Identify clinical and leadership skills necessary for performing job related tasks.	.718	.988
70. Provide mentorship and counseling to aspiring clinicians and leaders to develop required skill test	.709	.988
71. Use telecommunication devices.	.734	.988
72. Utilize hospital database management, decision support, and expert system's programs to access information and analyze data from disparate sources for use in planning for patient care process and systems	.703	.988
73. Participate in evaluation of information systems in practice settings	.698	.988
74. Demonstrate awareness of societal and technological trends, issues and new developments as they apply to nursing	.678	.988
75. Demonstrate proficient awareness of legal and ethical issues related to client data, information, and confidentiality	.770	.988

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