

# Nursing Service Quality Model Based on Nursing Performance and Patient Satisfaction Analysis in Gresik District Hospital

Abdul Muhith

STIKES Majapahit Mojokerto, Jl. Raya Jabon Km. 02 Gayaman, Mojoanyar, Mojokerto 61634, Indonesia

## Abstract

Basic shift of competitive advantages in hospital is not only determined by profit oriented, but also value creation and added for customers. Nurses who frequently often contact to patients and most of their time serve patients, have an important role in caring for the patient. Patient satisfaction as quality indicator is the key success for competitiveness of service in hospital. The aim of this research was to develop nursing service quality model based on the behavioral performance of nursing, organizational and work behavior and patient satisfaction. This study used a cross-sectional study, with 14 inpatient rooms, and 176 nurses. Factors that affect research organizational factors (organizational culture and leadership), factors work (feedback and a variety of jobs), nurse characteristics (motivation, attitude, commitment and mental models), nursing practice, interpersonal communication, nurse and patient satisfaction. Results of the research that has been done, are: 1) nursing practice is influenced by factors of work and not be influenced by organizational factors; 2) interpersonal communication or nursing professionals are influenced by the nursing practice; 3) Professional care is affected by nurses' satisfaction; 4) Patient satisfaction is affected by nursing professionals. Based on the overall results, the model suggested are: 1. Providing the freedom of nurses working in nursing practice and improve their communication skills or professional nurses; 2. Provide more incentives and provide feedback, as well as various jobs or responsibilities; 3. The clan and market of culture should be maintained or increased; 4. The type of leadership "coaching" is more suitable than directing for the performance of a team of nurses.

**Keywords:** Nursing, Service Quality, Determinant Factors of Performance, Satisfaction

## 1. Introduction

The development of health services in Indonesia has succeeded in improving health care more evenly. Advances in science and technology has resulted in educated segments of society and controls the information is increasing, so that they can select and demanded to obtain quality health care (Supriyanto, 2010). Therefore, it needs to be studied development issues and opportunities that arise in health development efforts, one of which is the quality of health services. Quality of health services as the quality of services is an important part that needs attention from healthcare provider organizations. Packaging the quality of services to be produced should be one hospital marketing strategy that will sell services to users of its services. The hospital management should always try to make product and services offered can still survive or sustainable, so as to seize market share.

Health care organizations, such as hospitals is essentially public services organizations. Hospitals need to have the quality of character excellent service in accordance with the expectations of patients. Interaction between health officers to patients can be done with embed trust and credibility. The patient is a hospital service users who have the right to judge the performance of such services. The better the assessment of the patient, the better the quality of the hospital's health services (Donabedian, 1980).

The quality of the quality of nursing service the hospital depends on the skill, speed, ease and accuracy in performing of nursing practice act. Meaning of nursing services depends on the efficiency and effectiveness of existing structural in the overall system of a hospital. Nursing service quality is one of the basic necessity of every person. Until now experts in the field of health and nursing trying to improve: the quality of self, profession, nursing devices, managerial capability and quality of nursing care nursing (Potter, 2005).

In 2005 the Directorate of Nursing Services Department of Health in collaboration with the World Health Organization (WHO) conducted an assessment of nursing service East Kalimantan, North Sumatra, West Java, East Java, and Jakarta indicate that: 1) 70.9% of nurses over the past 3 years is not getting training; 2) 39.8% of nurses still perform non-nursing assignments; 3) 47.4% of nurses do not have a written job description; and 4) have not been developed specifically nurses performance evaluation.

Data in Hospital Gresik in 2010 showed that the ratio (comparison) the number of nurses and the number of beds has not been standardized Department of Health 2005 means that the number of nursing personnel is still lacking (Depkes, 2005). Data Indicators of inpatient services at the Hospital of Gresik in 2010 showed that the use BOR (Bed Occupancy Rate), Gresik hospital inpatient units has been efficient. As well as a data service indicator inpatient unit at the Hospital of Semen Gresik in 2010 shows the condition BOR (Bed Occupancy Rate) Hospital Semen Gresik in the standard category means the utilization of hospital beds can be categorized is efficient. Indicator data services inpatient unit at the Hospital Petrokimia Gresik in shows utilization data Hospital beds Petrokimia Gresik in Year 2010 compliant and efficient, although in 2009 and 2010 there was increase in the number of nurses and beds. While the indicator data services inpatient unit at the

Hospital Muhammadiyah Gresik showed utilization beds of Hospital Muhammadiyah Gresik still not efficient and less standardized categories.

Quality of service and implementation of hospital nursing care Gresik has not met the standard (100%). Hospital Semen Gresik is better because of the level of patient satisfaction has fulfilled the concept of Pareto 80:20. Based on the background description of the data shows that the importance of nursing care. The research objective is the development of the quality of nursing care models based on the analysis of the performance of nurses and nurse job satisfaction and patient satisfaction.

## 2. Research of Method

This study uses survey research methods and using cross-sectional design with the nature of the research (explanatory research). This study was implemented in March 2011 to February 2012. The population in this study were all hospital inpatient units in Gresik, namely Hospital Gresik, Semen Gresik Hospital, PKG Hospitals and Hospital Muhammadiyah Gresik. To choose the room as the study sample, first performed a preliminary study of the type of culture and the type of leadership in four hospitals. The samples were all heads of inpatient units, nurses and patients in the inpatient hospital in Gresik with the inclusion criteria: have one of three types of culture (clan, market and hierarchy) and has one of two types of leadership coaching and directing, While that has a mix of culture and leadership that are not included in the study sample. Of the inclusion criteria are eligible Hospital Hospital Gresik and Semen Gresik. The sample size of the two hospitals that meet the criteria for inclusion in this study were 14 inpatient unit. Sampling with simple random sampling, which means that the observed per day that meet the inclusion criteria then taken at random in accordance with the amount to be taken per day. The analysis technique used is Partial Least Square (PLS).

## 3. Result and Discuss

Results of the testing of hypotheses that direct effect on among variables, are presented in as shown below table :

Table 1. Results of hypothesis testing direct effect among variables

No	Relationship Among Variables	Coefficient Line (Standardize)	T- Statistic	Information
1	<b>Organizational culture and leadership of the inpatient unit of the individual characteristics of nurses</b>	<b>0.189</b>	<b>0.386</b>	<b>Not significant</b>
2	Feedback and variety of work on the individual characteristics of nurses	0.688	5.214	Significant
3.1	Characteristics of individual nurses to nursing care standards	0.845	8.159	Significant
3.2	Standard nursing care to the performance standards of professional nurses	0.818	3.003	Significant
3.3	Standard nursing care to job satisfaction of nurses	0.833	8.450	Significant
3.4	The performance standards of professional nurses on patient satisfaction	0.736	5.169	Significant
4	<b>Job satisfaction of nurses to the performance standards of professional nurses</b>	<b>0.152</b>	<b>0.616</b>	<b>Not significant</b>

Explanation comprehensively presented in Figure 1 as follows :

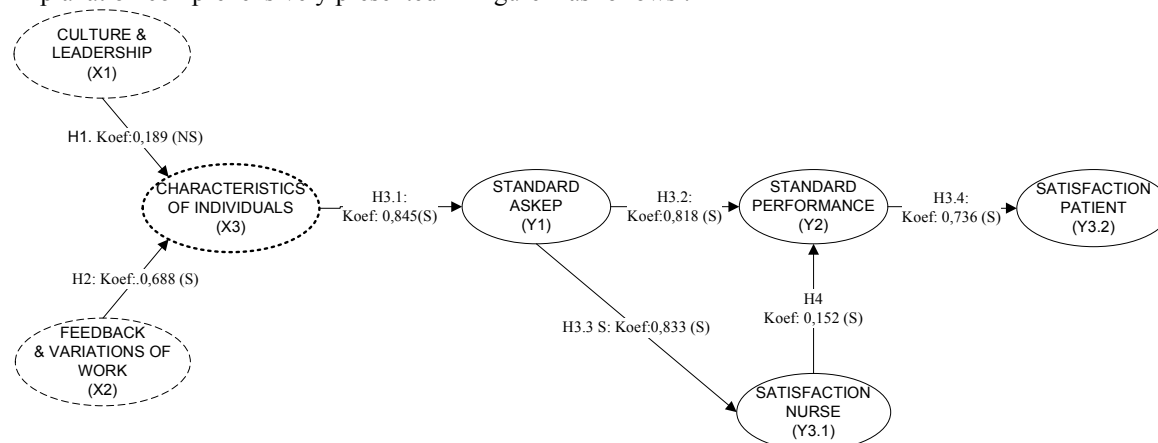


Figure 1. Hypothesis Test Results

### *3.1 The Effect of Organizational Culture and Leadership On Nurses Individual Characteristics*

Research results in Figure 1 show that there is no significant influence of organizational culture and leadership inpatient hospital unit to the individual characteristics of nurses room. Type of room dominated organizational culture is a culture of clan 50%, 28.6% market culture and the culture of hierarchy 21.4%.

Culture clan that dominates are in accordance with the characteristics of nurses in giving the motivation and commitment of nurses working height. Hierarchical culture is needed on the situation and the mental attitude of self-reliance model or nurses to work is weak, because the hierarchical culture oriented monitoring and controlling the work of subordinates. Type inpatient unit leadership is largely coaching (57.8%), then directing (42.9%). Leadership coaching or mentor and facilitator will establish effective communication between team members and foster strong participation among its members. Coaching in the organizational culture reflected in clan culture. coaching is the behavior of the leader with the direction of orientation of high correlation and high task orientation. Control decision-making remains the leader (Cameron, 2006).

Results showed that the type of leadership coaching tend to be good in motivation and commitment (> 80%), such as clan culture but weak on the mental model or independence of work and work attitudes of nurses (<49%). Leadership directing tend to give enough value to all components of the characteristics of nurses (commitment, motivation, mental model or independence of work and work attitudes of nurses).

The results showed that there was no significant influence of culture and leadership inpatient unit of the quality of nursing care (nursing care standards, standards of professional performance of nurses and nurse and patient satisfaction) in hospitals Gresik.

### *3.2 The Effect Variations Employment Feedback And Nurses On Individual Characteristics*

Research results inform you that there is significant influence of feedback and variations in the work of nurses affect the performance standards of professional nurses. The influence of feedback and variations to the performance standards of professional work of nurses through a nurse characteristics (motivation, commitment, attitude and mental models or independence nurse work). The research proves that the research hypothesis 2 is true. Feedback from employers is still low (50% run) and variation of work is quite high (71.4%), so it can be predicted when the feedback as supervision and control efforts improved job and add a little more variety monotonous work or not work anymore, it would provides increased motivation and work commitment and mental attitude and nurses working model and ultimately affects the standard of performance of professional nurses. This is consistent with the theory (Kopelman, 1986), that factor affects the performance of nursing work melalui mediating factor motivation and commitment of nurses. Hence the need for priority and attention to the feedback control or supervision of the leadership of a room can improve the motivation and commitment of subordinates with consequences on performance improvement.

The results showed that there was a significant effect of feedback and variations in the work of nurses in the inpatient unit of the quality of nursing care (standards nursing care, standards of professional performance of nurses, the job satisfaction of nurses and patient satisfaction) through the individual characteristics of nurses (motivation, attitude, commitment and mental model or independence of nurses) in hospitals Gresik.

### *3.3 Characteristics The Effect Nurses On Quality Nursing Care*

Results of path analysis proved no significant effect of individual characteristics of nurses (motivation, attitude, commitment, mental model or independence of nurses) on the quality of nursing care, namely: 1. The characteristics of individual nurses to nursing care standards, 2. The standard of nursing care standards for professional performance nurses and nurse satisfaction and professional performance 3. Standard nurse to patient satisfaction. These results prove that the hypothesis is proven.

### *3.4 Characteristics The Effect On Nurse Nursing Care Standards*

Results of path analysis showed no significant effect of individual characteristics of nurses (motivation, attitude, commitment and independence of the mental model or nurses) to run the compliance standards of nursing care (Figure 1). Motivation and commitment of nurses on the job highly rated, so it needs to be maintained, if necessary, improved continuously. Attitudes on work and mental models to be able to work independently and professionally is still weak. When the quality of nursing services contribute in winning the competition far hospital, independence and professional in carrying out nursing should be of concern to each hospital (Leebov, 1994).

### *3.5 The Effect Nursing Standards of Professional Performance Standards On Nurses*

Those who carry out nursing care standards that better adherence will also conduct performance standards of professional nurses (interpersonal communication) is better for patients. Similarly, on job satisfaction of nurses.

### 3.6 The Effect Nursing Standard Nurse Satisfaction

Application of nursing care standards affect the job satisfaction of nurses. Nurses' satisfaction is one indicator of loyal nurse, so loyal, motivated nurses who provide services to patients with better.

Satisfaction of nurses in organizational support with reference to Abraham Maslow's theory are mostly located on the needs of the affiliates and the need for supervision in performing the work. Analogous to Maslow's theory of motivation theory. Results of path analysis showed no effect on the standards nursing care nurse satisfaction.

### 3.7 Influence Performance Professional Nurse Patient Satisfaction

Results of path analysis showed that there is influence patient satisfaction with the implementation of performance standards of professional nurses. Patient satisfaction on the performance standards of professional nurses in a hospital inpatient rooms are quite satisfied, both in terms of caring, collaboration, empathy, courtesy and sincerity. Empirical studies on the satisfaction level of satisfaction was quite satisfied, meaning that although there was an effect, this suggests that the performance of professional nurses should be increased, if hospitals are to be successful in winning the competition.

Influence the performance of professional nurses on patient satisfaction showed that patient satisfaction in the performance standards of professional nurses in a hospital inpatient rooms are quite satisfied, both in terms of caring, collaboration, empathy, courtesy and sincerity. Empirical studies on the satisfaction level of satisfaction was quite satisfied, meaning that although there was an effect, this suggests that the performance of professional nurses should be increased, if hospitals are to be successful in winning the competition.

Patient satisfaction in nurses who can be observed is the process of delivering the service or professional standards of nursing, and not on aspects of nursing (nursing practice standards) itself.

### 3.8 The Effect Job Satisfaction Performance Standards of Professional Nurses On Nurses

The results showed that nurses work motivation is high. The same high assessment to the work commitment and enough on the mental attitude and the work of nurses. Basically productivity of nurses is influenced by various factors such as level of education, training, motivation, work ethic, work experience, mental attitude, physical condition, technology, social security, workplace health and safety, management and policies implemented, especially the leadership(Supriyanto, 2007).

The attitude of nurses in nursing care or assessment activity until sufficient evaluation. This is possible because nursing is a job as a manifestation of the skills of nurses that are routine, so just enough to give a boost employment. The research proves that there is an association of variation work against karakterisitk nurse, especially working attitude.

#### Final Result of Line Test on Research

From the overall results of hypothesis testing, it can be seen that a significant trajectory or path, which describes the model results.

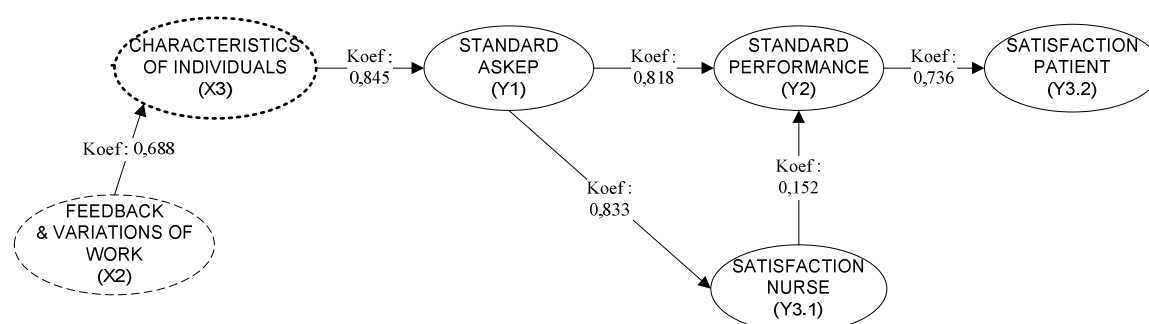


Figure 2. Final Model of Research

**Line 1.** The path of feedback and variations in characteristics of individual jobs nurse nurses → standards nursing care nurse professional performance standards → patient satisfaction. These findings provide evidence that nursing job characteristics and individual characteristics of nurses is an important determinant in running performance, standards nursing care and nursing standards of professional performance for improvement or increase in patient satisfaction. And these findings also indicate that external conditions (feedback and variations nursing job) and internal (attitudes, motivation, commitment and independence of the mental model or nurses) be the deciding factor or variable (enablers) on improving the quality of nurse's performance.

**Line 2.** The path of feedback and variations in the characteristics of individual jobs nurse nurses → standards nursing care nurse satisfaction. These findings indicate that the feedback and variations in the internal conditions

of employment of nurses and nurse (attitude, motivation, commitment, self-reliance mental model or nurses) may be a factor or determinant variables (enablers) job satisfaction of nurses.

#### **Quality of Nursing Care Model Development**

The development model of nursing care quality refers to the quality system and the findings of the analysis of research performance (empirical) and theoretical study.

**The basic assumption :** model of of nursing care long put more emphasis on the application of nursing (the nursing and caring), has not been comprehensively considered all components of system performance or the quality system by Donabedian (1980), which meliptui structural components (input), process and outcome.

**The second assumption :** Evolution paradigm of quality, which was originally driven from the "provider-driven" to "customer driven). Customer driven is one of the keys to success in winning the competition SDM (competitive advantage). Customer driven is the quality of service that seeks to meet the needs and expectations of customers.

From both of these assumptions, the development of the quality of nursing care, starting from the current condition outcomes (patient satisfaction and nurse satisfaction), then in the analysis of the cause in the quality process (application of nursing care and the professional performance of nurses). Problems in the quality processes cause analysis in structural components.

#### **Outcome Patient Satisfaction and Nurse**

##### **Patient Satisfaction**

Results showed that patient satisfaction in terms of caring, collaboration, empathy, courtesy and sincerity categorized quite satisfied. Patient satisfaction is one indicator of the quality of services provided and the capital to get a lot more patient and loyal (faithful). Patients who will be loyal to reuse the same health care when they need it again. In fact it is known that patients will be loyal to invite other people to use the same health care facilities (Kaplan, 1996).

Professional performance related to a nurse's ability to communicate, establish interactive relationships in performing therapeutic nursing must be improved. Patients are more easily assess how nurses deliver nursing care of technical aspects. Therefore the task of nursing professional organizations, namely how to improve communication skills as a complementary therapeutic nurse in delivering nursing care standards. This may include additional education beyond nursing profession.

The development of quality to the performance of professional nurses can be done by providing better training on / off the training on the correct therapeutic communication. On the job training can be done by involving nurses in a seminar on nursing, provides the opportunity for nurses to attend training associated with increased competence of nurses. Moreover, it can also bring in trainers from outside relevant. So the mental competence of nurses and nurses working model or independence can be improved. In the off-the-job training that can be done is to increase the education level of nurses in strata S1.

##### **Nurse Satisfaction**

Form of performance may be speed, convenience, and comfort of how nurses in providing medical services, especially nursing at a relatively fast cure time, ease in meeting patients' needs and comfort provided with attention to cleanliness, friendliness and completeness of hospital equipment.

The results showed that the nurses' satisfaction is more influenced by the application of standards of nursing care can be implemented as compared to the support organization (facilities, salaries, promotion and the suitability of the type of work). The perceived value of nurses to the application of standards of nursing care in the assessment, diagnosis, planning is high (100% can be implemented properly), and evaluation sedangkan for implementation has not been able dilaksanakan 100%. Organizational support perceived by nurses to the extent reasonably satisfied.

The results above indicate that the nurse still needs to be improved ability to implement the standard of nursing care by improving the competence (knowledge and skills). Similarly, support for conducive and facilitative organization for nurses to apply the standard of nursing care in full.

#### **Organizational Characteristics, Work and Individuals.**

##### **Development of Organizational Culture and Leadership Head of Hospitalization**

Woke organization set of values, as the crystallization of the value of the individual, the group and eventually became a common value (Cameron, 2006). From research conducted by Cameron and Quinn (2006) can be determined that there are four types of culture or leadership of the organization, namely the clan leadership, hierarchy, market and adhocracy. Typology of cultural, business organization's leadership is based on the theory of management: effective performance, leadership and management skills. From this management theory raised indicator (measure) in the six measurement dimensions.

Results of the study informs that the type of organizational culture is largely dominated culture Clan (emphasizes collaboration and teamwork), and has started there is a culture of market orientation or the fulfillment of the needs of patients. Type of room most of the leadership in the dominance of the type of coaching (leadership with the type of assistance). Directing type of leadership is still found in teamwork nurse.

This shows that nurses are not guilty of professional cooperation.

#### **Development of Job Characteristics (Feedback And Variations Nurse Jobs)**

When carrying out functions and activities related to employee satisfaction and rate of return, so it can be added other factors, namely: 1. Expectations regarding remuneration, 2. Perception of tasks, 3. Encouragement external or leadership 4. The need according to Maslow and 5. Factor work (designs , variety of tasks, feedback, supervision, and control). Job-related factors, the research results inform you that feedback about the work done by the head nurse of inpatient hospital and nursing work variations are quite varied.

If the process associated with the theory(Kopelman, 1986), the work of the feedback factor, variation, design work, workload, job design affect the individual performance through variable attitudes, knowledge, ability and motivation. It can be concluded in general that the lack of feedback that is done by the leadership of hospitalization can affect the performance of individual nurses.

The proposal to do is feedback as a means of controlling leader. Head of hospitalization perform control, control and supervision, and not too much focus on non-nursing job or task.

#### **Development Attitude, Motivation, Commitment and Mental Model Or Independence Working Nurses**

Commitment to the job and work motivation of nurses is high, but in the ability to perform self-reliance is still sufficient, then the type of room in this type of leadership coaching and directing still felt necessary. However, with increased levels of competence through the on / off-the-job education, making the nurse is able to carry out the quality of nursing care (able), supporting the type of leadership can be considered.

No type of situational leadership is most suitable for all purposes condition, and the condition of the behavior of subordinates. The fact research all types of situational leadership delegating, supporting, coaching and directing all there. Type coaching and directing the widely practiced by heads of hospitalization. To increase the independence of nurses in implementing nursing care independently and professionally.

On the job training required in the workplace for the management of knowledge management (knowledge management); the QCC (Quality Control) so that the end result is the independence of a great nurse. In addition there needs to be remuneration of nurses. Currently remuneration is the most effective forms to increase the commitment. Remuneration of nurses can be done in the form of a system of rewards and while focusing on the nursing team.

On the job training can also be done in the form of hand skill improvement in nurses. Is expected to increase the commitment and mental models or independence nurse working. More nurses attitude and believe in his ability. In the off-job training that needs to be proposed is the improvement of education level of nurses in strata S1. In principle, the improvement process and input with on the job training or off the job training will have an impact on the management of knowledge (knowledge management) and improved communication skills. Surely in the input - process - outcome there should be support for organizations (hospitals), as well as the role of professional organizations of nurses.

## **5. Conclusion**

### **Model of Test Results**

Organizational culture and leadership hospitalization no significant effect on the characteristics of nurses (motivation, attitude, commitment and mental models or independence nurse work). Type of organizational culture is largely dominated culture Clan (emphasizes collaboration and teamwork), and has started there is a culture of market orientation or the fulfillment of the needs of patients. Type leadership hospitalization largely dominated type of coaching (leadership with the type of assistance). Directing type of leadership is still found in the work sam team of nurses. Feedback and variations significantly influence the work of nurses nurse characteristics (motivation, attitude, commitment and mental models or independence nurse work). Feedback less work is done by a nurse-led inpatient hospital and nursing work variations are quite varied. Level of motivation and commitment to high employment, while working attitude and independence of professional work as a nurse (mental models) in the category enough.

Nurse characteristics (motivation, attitude, commitment and mental model or independence of nurses) significant effect on the quality of nursing care (nursing care standards, performance standards of professional nurses, nurse job satisfaction and patient satisfaction). 1) There is a significant effect of the individual characteristics of nurses to nursing care standards. 2) There is a significant influence on the standard of nursing care nurse professional performance standards. 3) There is a significant influence on the standard of nursing care nurse satisfaction. 4) There is a significant influence of the professional standards of nurses on patient satisfaction. Job satisfaction of nurses no significant influence on the implementation of the performance standards of professional nurses. Job satisfaction of nurses in support of the organization is quite satisfied. Standard nursing care is the activity associated with competence (knowledge and skills), while the performance of nursing professionals is related soft skills, which have received less attention in the process of nurse education.

### **Nursing Care Quality Development Model proposed**

Models compiled with the principle; 1. Based on the analysis of the test results of the research track, 2. Analysis

of reality or factual conditions of a descriptive analysis, 3. Synthesis of the results of descriptive analysis and track, then developed a model which refers to the needs and expectations of the customer (customer driven) which leads to a competitive advantage hospital (competitive advantages). So generally the development model of the existing quality of nursing care refers to a comprehensive quality system.

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