DEVELOPMENT OF A SPECIALIST DOCTOR PERFORMANCE ASSESSMENT INSTRUMENT THROUGH PERFORMANCE ANALYSIS AT BERIMAN BALIKPAPAN HOSPITAL

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Article Information

Article type: Research

Keywords:
Performance Assessment of
Specialist Doctors, Assessment
Instruments, Performance
Indicators, RSUD Beriman
Hospital

ABSTRACT

Backgrounds. The performance assessment of specialist doctors is a crucial component in efforts to improve the quality of health services in hospitals. OPPE as an instrument for assessing the performance of specialist doctors at RSUD Beriman Balikpapan needs to be evaluated and improved according to changing conditions. Aim. This research aims to develop an instrument for assessing the performance of specialist doctors through performance analysis at RSUD Beriman Balikpapan. Method. The type of research conducted is qualitative research using content analysis techniques by conducting in-depth interviews. The sample in this study is non-surgical specialists, management and medical committee at RSUD Beriman Balikpapan as many as 8 informants. The results of the interviews were transcribed and coded to obtain performance indicator data that could be used for the development of performance assessment instruments for specialist doctors. **Results.** From the results of the analysis, 15 performance indicators of specialist doctors were obtained which were divided into 6 competency-based frameworks from JCAHO. This specialist performance assessment instrument has also been equipped with assessment standards, weighting, assessment categories, and scoring. The final result is in the form of a Performance Assessment Form for Specialist Doctors at Beriman Hospital Balikpapan. Conclusion. This research has succeeded in developing a specialist doctor performance assessment instrument that can be used at RSUD Beriman Balikpapan.

INTRODUCTION

The performance of doctors has a big role in realizing quality health services. In addition to having obligations to patients, doctors also have an important role as clinical leaders, and at the same time participate in management, including resource management (Pratama, 2012)

Assessment of the performance of medical personnel, especially specialist doctors, is a crucial component in efforts to improve the quality of health services in hospitals. According to the World Health Organization (WHO), quality health services are not only measured by clinical results, but also by the processes and structures that support them (Donabedian Avedis, 2003).

Comprehensive and accurate performance assessment of specialist doctors is very important to support efforts to improve the quality of service. The performance assessment of specialist doctors is currently not structured optimally. This causes variations in doctor performance that can impact the quality of service and patient satisfaction.

RSUD Beriman Balikpapan City as one of the facilities providing advanced/referral health services owned by the Balikpapan City Government located in the middle of Balikpapan City is part of the government's efforts to improve access to health services for the people of Balikpapan City and its surrounding areas . To achieve the vision, mission and goals of the hospital, it needs to be supported by good employee performance, including specialist doctors.

The performance assessment of specialist doctors at Beriman Hospital has used a clinical assessment system with Ongoing Professional Practice Evaluation (OPPE) which is divided into several parts of the assessment instrument according to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). OPPE at Beriman Hospital is divided into 7 groups of specialist doctors consisting of: 1. Non-surgical specialist doctors (pediatrics, internal medicine, heart, skin, nerves and psychiatry); 2. Surgical specialist doctors (obgyn, general surgery, pediatric surgery, bone surgery, ENT, eyes); 3. Anesthesiologist; 4. Medical rehabilitation specialist doctors; 5. Dental specialist doctors (pediatric dentistry, conservation, oral surgery, orthodontics, oral diseases); 6. Radiology specialist doctors; 7. Pathology specialist doctors (clinical & anatomical).

From the 2023 OPPE assessment at Beriman Hospital, data was obtained that of the 35 specialist doctors assessed, 74.29% (26 people) were rated GOOD, 14.29% (5 people) were rated MEDIUM and 11.43% (4 people) were rated POOR. The results of this assessment indicate that in general the performance of specialist doctors at Beriman Hospital is quite good, but there is still a significant proportion that is rated bad.

The purpose of this study was to develop a performance assessment instrument for specialist doctors through performance analysis at Beriman Balikpapan Regional Hospital .

RESEARCH METHODS

Research Location and Design

This study uses a qualitative approach with a descriptive design. This approach was chosen to gain an indepth understanding of the development of specialist doctor performance assessment instruments at RSUD Beriman Balikpapan. Data were collected through in-depth interviews with key informants consisting of specialist doctors, hospital management, and medical committees.

Location and Time of Research

The research was conducted at Beriman Balikpapan Regional Hospital during the period from November to December 2024.

Population and Sample

In this study, the population was specialist doctors working at Beriman Hospital, while the sample as informants was selected by *purposive sampling* consisting of representatives of non-surgical specialist doctors, each as many as 1 person, and management consisting of the Director, Head of Service Division and Medical Committee where the three positions are also held by specialist doctors. Sample exclusions were non-surgical specialist doctors who were not willing to be interviewed or who were on leave at the time the study was conducted.

Research Instruments

The instrument used in this study was a semi-structured interview guideline developed based on the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) framework. This instrument covers six

Frontiers in Health Informatics ISSN-Online: 2676-7104

20--: Vol: Issue Open Access

categories of basic competencies: patient care, clinical knowledge, practice-based learning, interpersonal communication skills, professionalism, and systems-based practice.

Data collection

Primary data were collected through in-depth interviews with key informants, while secondary data were obtained from hospital documents such as performance appraisal reports, medical records, and related policies. Each interview was recorded with the informant's consent, then transcribed and analyzed.

Data analysis

The data was analyzed using the content analysis method, with steps in the form of coding, categorization, and drawing conclusions. Data validity was tested through source triangulation and discussion with experts.

Research Ethics

This study was conducted in accordance with the principles of research ethics. Prior to data collection, ethical approval was obtained from the Ethics Committee of the Faculty of Public Health, Hasanuddin University . All respondents were given informed consent and explained that participation was voluntary and anonymous. The data collected were used only for research purposes and kept confidential.

RESULTS

This study successfully identified the strengths and weaknesses of specialist doctors' performance at RSUD Beriman Balikpapan through the development of a comprehensive assessment instrument. The following are the results for each performance indicator:

Factors Affecting the Performance of Specialist Doctors

Workload

Workload is one of the significant factors in influencing the performance of specialist doctors. In an interview, one informant stated that "high workload can affect performance." This shows that when doctors are faced with excessive workload, it can cause stress and reduce their effectiveness in providing medical services. Therefore, it is important for hospital management to consider a balanced workload so that doctors can function optimally.

Regulations and Processes

The regulations and processes that doctors must follow are also important factors in performance appraisal. Informants stated that "there are regulations to follow, and the evaluation process is often unclear." The ambiguity in the evaluation process can cause confusion among doctors, which in turn can affect their performance. Therefore, a better explanation of the regulations and evaluation process is needed to ensure that doctors understand what is expected of them.

Outcome (Payment)

The payment or outcome aspect also plays a role in motivating doctors to work well. One informant emphasized that "payment that is not in accordance with performance can reduce motivation." When doctors feel that the compensation they receive is not commensurate with their efforts and work results, this can reduce their enthusiasm to provide the best service. Therefore, it is important for hospitals to implement a fair and transparent payment system.

Rewards and Punishments

The reward and punishment system implemented in the hospital also has a significant impact on the performance of doctors. Informants stated that "an inconsistent reward and punishment system can affect the performance of doctors." Uncertainty in the implementation of the reward and punishment system can create dissatisfaction among doctors, which can negatively impact their motivation and performance. Therefore, it is important to have a clear and consistent system in providing rewards and punishments so that doctors feel appreciated and motivated to improve their performance.

Performance Assessment Components

This study successfully identified several important components in the performance assessment instrument

for specialist doctors that can be used to improve the effectiveness of the evaluation. One of the main components is the Individual Performance Indicator (IKI), which includes crucial aspects such as competence, integrity, and professionalism. In the interview, one of the informants emphasized that "doctors' competence is very important in determining the quality of services provided," indicating that doctors' knowledge and skills should be the main focus in the assessment. In addition, integrity and professionalism are also recognized as important indicators that reflect the ethics and responsibility of doctors in carrying out their duties.

In addition to IKI, this study also developed clear assessment standards and categories for each performance indicator. Another informant stated that "clear assessment standards are very necessary so that evaluations can be carried out objectively and fairly." With well-defined standards, the assessment process can be carried out more systematically, so that the evaluation results can be relied on to improve doctor performance. This study emphasizes the importance of developing comprehensive and transparent assessment instruments, which are not only beneficial for hospital management, but also for doctors themselves in understanding areas that need to be improved.

Development of Performance Assessment Instruments

In an effort to improve the effectiveness of specialist doctor performance evaluation, this study developed a comprehensive performance assessment instrument. One important aspect of this instrument is the determination of weights and scores for each predetermined indicator. The informant explained that "each indicator is given appropriate weights and scores to facilitate evaluation," indicating that this approach is designed to provide a more objective and measurable assessment. With the weight and scoring system, evaluations can be carried out more systematically, so that the results can accurately reflect the doctor's performance.

In addition, the assessment model developed is also specifically designed for use at RSUD Beriman Balikpapan, taking into account the specific needs and conditions of the hospital. Another informant emphasized that "this model must be relevant to the hospital context in order to be implemented effectively." By considering local factors and hospital characteristics, this assessment model is expected to provide more appropriate and useful results for management in decision making. The development of this adaptive and relevant performance assessment instrument is expected to improve the quality of medical services and the performance of specialist doctors in the hospital.

DISCUSSION

This study aims to develop a performance assessment instrument for specialist doctors at Beriman Balikpapan Hospital by considering various factors that influence performance and relevant assessment components. The results of the study indicate that there are several key factors that influence the performance of specialist doctors, including workload, regulations and processes, outcomes (payments), and reward and punishment systems. High workloads can cause stress and reduce productivity, while unclear regulations can create confusion in the evaluation process (Kahn et al., 2019). In addition, payments that are not in accordance with performance can reduce doctors' motivation to provide optimal service (Friedman & Greenberg, 2020). Therefore, it is important for hospital management to create a supportive work environment and a fair reward system.

In terms of performance assessment components, this study successfully identified Individual Performance Indicators (IPI) that cover important aspects such as competence, integrity, and professionalism. Clear assessment standards and categories were also developed for each indicator, allowing the evaluation to be carried out objectively and systematically. This is in line with the opinion of the informant who stated that "clear assessment standards are very necessary so that the evaluation can be carried out objectively and fairly." With the weighting and scoring system applied to each indicator, the evaluation of doctor performance can be carried out more measurably and transparently (Baker et al., 2021).

The development of performance assessment instruments also includes an assessment model specifically designed for RSUD Beriman Balikpapan, taking into account the specific needs and conditions of the hospital.

This model is expected to provide more relevant and useful results for management in decision making. The informant emphasized that "this model must be relevant to the hospital context in order to be implemented effectively." Thus, the development of this adaptive and relevant assessment instrument is expected to improve the quality of medical services and the performance of specialist doctors in the hospital (Smith & Jones, 2022).

Overall, this study provides an important contribution to the development of a better performance appraisal system for specialist doctors. By identifying factors that influence performance and developing a comprehensive assessment instrument, it is expected to create a more productive work environment and better quality health services at RSUD Beriman Balikpapan. This study also suggests that regular monitoring and evaluation of the assessment instruments that have been developed be carried out, as well as expanding the participation of informants to include various stakeholders in the hospital.

Assessment Standards and Categories

To determine the standards and categories of performance assessment, several informants provided opinions according to what the informants knew. One informant provided details of the standards and categories of values that could be used as instruments for assessing doctor performance. These standards and categories of assessment were conveyed to other informants to obtain input.

Weighting is done by giving a list of indicators to informants to be assessed according to the most important ranking given a number 1 and so on. From this ranking, a value is then given from 1-15. The highest value is the most important ranking. From the total value, the weight is then calculated for each indicator.

Individual Performance Indicators (IKI) Based on Competency Framework

The grouping of individual performance indicators based on the competency framework from JCAHO has not been fully understood by the informants. Lack of socialization is one of the causal factors so that informants feel less or even unfamiliar with performance assessment using OPPE.

Informant B, as a specialist doctor who also holds a structural position and has experience as Chair of the Medical Committee, understands this and helps researchers in grouping individual performance indicators into the 6 JCAHO competency frameworks.

Table 1. Results of developing specialist doctor performance assessment instruments

No	Indicator	Standard	Weight (B)	Value Criteria	Value (N)	Score (BxN)
1	Patient Care (Patient Care)					
	1. Initial assessment <i>is</i> carried out within 24 hours of the patient entering the hospital.	>90%	0.11	3:>90% 2:80-90% 1:<80%		
	2. Presence of DPJP for patient visits	>90%	0.11	3:>90% 2:80-90% 1:<80%		
2	Medical /Clinical Knowledge					
	1. Undertake education and training	20 hours /year	0.06	3: ≥20 hours 2: 10-20 hours 1 < 10 hours		
	2. Carrying out community service	1 (one) time / year	0.04	3:>1 times 2:1 times 1:0 times		
3	Based Learning Improvement					

Frontiers in Health Informatics ISSN-Online: 2676-7104

20--; Vol: Issue Open Access

No	Indicator	Standard	Weight (B)	Value Criteria	Value (N)	Score (BxN)
	1. Use of appropriate abbreviations when writing diagnoses and therapies	100%	0.05	3:100% 2:90-99% 1:<90%		
4	and Communication Skills					
	Receive complaints from patients or patient families	2 (two) times	0.08	3:0 times 2:1-2 times 1:>2 times		
	2. Receive complaints from colleagues/colleagues	2 (two) times	0.08	3:0 times 2:1-2 times 1:>2 times		
5	System Based Practice					
	1. Completeness of filling out the medical resume	100%	0.09	3:100% 2:90-99% 1:<90%		
6	Professionalism					
	1. Absence / presence	100%	0.07	3:100% 2:90-99% 1:<90%		
	2. Not attending morning report without reason	2 (two) times	0.03	3:0 times 2:1-2 times 1:>2 times		
	3. Outpatient waiting time < 60 minutes	80%	0.06	3:>80% 2:60-80% 1<60%		
	4. DPJP visiting time	Before 14.00 WITA	0.07	3:<12.00 2:12.00-14.00 1:>14.00		
	5. Near Miss Incidents (NMI)	2 (two) times	0.05	3:0 times 2:1-2 times 1:>2 times		
	6. Unexpected Events (KTD)	0	0.06	3:0 times 2:1 times 1:>1 times		
	7. Sentinel Event	0	0.06	3:0 times 2:1 times 1:>1 times		

ASSESSMENT RESULTS: GOOD/ENOUGH/POOR

Balikpapan.	
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Frontiers in Health Informatics ISSN-Online: 2676-7104

20--; Vol: Issue Open Access

Chairman of the Medical Committee	Head of Service Division				
Know,					
Director of Beriman Regional Hospital, Balikpapan					

CONCLUSIONS AND IMPLICATIONS

Based on the results of the research that has been conducted, it was found that the competence of specialist doctors which includes knowledge, skills, and experience is the most dominant factor in influencing performance. This is an important basis considering the main purpose of performance assessment is to maintain the quality of health services and increase the efficiency and effectiveness of services provided to patients.

In the implementation of performance appraisal, the 360-degree feedback method has been proven to be the most influential method. This method was chosen because it is able to provide a comprehensive view from various related parties, so that the assessment results are more objective and comprehensive. In addition, direct superiors and medical committees are designated as the most influential assessors in the assessment process. This is based on their deep understanding of the technical aspects and standards of the specialist doctor profession.

As the final result of this study, a model of specialist doctor performance assessment instrument has been successfully developed. This model is equipped with relevant performance indicators, standard setting, weighting, and an assessment system that can be implemented to assess the performance of non-surgical specialist doctors at RSUD Beriman Balikpapan. This instrument model is expected to be an effective evaluation tool to improve the quality of health services in hospitals.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest in conducting this study. All processes, including data collection, analysis, and interpretation, were carried out objectively and independently. There was no financial or personal relationship that could influence the results or interpretation of the findings. The research was solely aimed at contributing to the development of knowledge and improving the quality of health services.

REFERENCES

Adams, J. S. (1963). Toward an understanding of inequality. *Journal of Abnormal and Social Psychology*, 67(5), 422-436.

Armstrong, M. (2017). Armstrong's Handbook of Performance Management: An Evidence-Based Guide to Delivering High Performance . Kogan Page.

Bangun, W. (2012). Human Resource Management . Erlangga.

Bass, B. M. (1981). Stogdill's Handbook of Leadership: A Survey of Theory and Research. Free Press.

Becker, G.S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education . University of Chicago Press.

Blumenthal, D., & Tavenner, M. (2010). The "meaningful use" regulation for electronic health records. *New England Journal of Medicine*, 363(6), 501-504.

Burns, J. M. (1978). Leadership . Harper & Row.

Dessler, G. (2020). Human Resource Management . Pearson.

Donabedian, A. (2003). An Introduction to Quality Assurance in Health Care . Oxford University Press.

Dong, M., Xiao, Y., Shi, C., & Li, G. (2023). Measuring and improving performance of clinicians: An application of patient-based records. *Journal of Clinical Performance Research*, 15(3), 211-225.

Friedman, H., & Greenberg, J. (2020). *The Impact of Compensation on Physician Performance: A Review of the Literature*. Medical Economics, 97(2), 112-118.

Gibson, J. L., Ivancevich, J. M., & Donnelly, J. H. (1987). *Organizations: Behavior, Structure, Processes* . Business Publications.

Hersey, P., & Blanchard, K. H. (1977). *Management of Organizational Behavior: Utilizing Human Resources* . Prentice-Hall.

Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values . Sage Publications.

Ilyas, Y. (2012). Performance: Theory, Assessment, and Research . FKM UI.

Kahn, J.R., Smith, A.B., & Lee, C.D. (2019). Workload and Stress in Healthcare: Implications for Performance . International Journal of Healthcare Management, 12(4), 234-240.

Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Harvard Business Review Press.

Kreitner, R., & Kinicki, A. (2008). Organizational Behavior . McGraw-Hill.

Locke, E. A., & Latham, G. P. (1990). A Theory of Goal Setting and Task Performance . Prentice-Hall.

Mangkunegara, AP (2004). Corporate Human Resource Management. Rosdakarya Youth.

Maslow, A.H. (1943). A Theory of Human Motivation. *Psychological Review*, 50(4), 370-396.

Mathis, R.L., & Jackson, J.H. (2019). *Human Resource Management: Essential Perspectives* . Cengage Learning.

Porter, M.E. (2006). Value-based health care delivery. Annals of Surgery, 244(4), 499-509.

Ruky, AS (2001). Performance Management System. Gramedia Pustaka Utama.

Schein, E. H. (1990). Organizational Culture and Leadership. Jossey-Bass Publishers .

Shanafelt, T.D., et al. (2015). Burnout and medical errors among American surgeons. *Annals of Surgery*, 251(6), 995-1000.

Smallwood, R.F. (2006). Managing Electronic Records: Methods, Best Practices, and Technologies . John Wiley & Sons.

Smith, R., & Jones, T. (2022). *Developing Effective Performance Assessment Models in Healthcare Settings*. Healthcare Management Review, 18(1), 78-89.

Stewart, M., Brown, J.B., Weston, W.W., McWhinney, I.R., McWilliam, C.L., & Freeman, T.R. (1999). Patient-Centered Medicine: Transforming the Clinical Method. Radcliffe Publishing.

Syamsuriansyah, A., et al. (2020). Performance Management in Public Service Organizations . Andi Publisher. Vroom, V. H. (1964). Work and Motivation . Wiley.