



## THE MODEL OF INPATIENT UNIT SERVICE QUALITY AT THE INDONESIAN CHRISTIAN UNIVERSITY GENERAL HOSPITAL BASED ON MALCOLM BALRIDGE CRITERIA

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### ABSTRACT

**Background:** In 2022, there was a decrease in the satisfaction rate and BOR in the UKI General Hospital inpatient unit. Improvements in the quality of health are needed. The Malcolm Balridge criteria is the method of measuring the quality of health services from the United States. The malcolm balridge criteria has a dynamic framework and provide as an independent and comprehensive assessment.

**Purpose:** Seven criteria are leadership, strategic planning, patient focus, measurement, analysis and knowledge management, workforce focus, work operation focus and organizational performance results. The researcher measured the quality assessment at the UKI General Hospital inpatient unit based on Malcolm Balridge's Criteria.

**Method:** This research was conducted on 70 respondents in the inpatient unit, using a qualitative approach with univariate analysis and scoring based on Malcolm Balridge's Criteria.

**Results:** The score was 276.5 out of 1000 points. It is an early result position, the poor quality. There are gaps in the approach and implementation stages as well as the deployment in several categories. Criteria that are below the average value are workforce focus and organizational performance results.

**Conclusion:** The purpose was to provide an overview of the model development for the quality health services in the UKI General Hospital inpatient unit based on Malcolm Balridge's criteria.

### INTRODUCTION

Based on data from UKI RSU, in 2022 there will be a 75.3% reduction in patient satisfaction in the UKI RSU inpatient unit. Then the UKI RSU BOR figure from 2022, has decreased by 66.7%. In addition, there have been complaints from the workforce regarding the inadequate education and training system. So that the UKI RSU inpatient unit still shows deficiencies and needs improvement. Regulation of the Minister of Health of the Republic of Indonesia number 80 of 2020, states that hospitals are obliged to improve quality and maintain hospital service standards through the implementation of good hospital quality governance (kemenkes RI, 2020).

The Malcolm Balridge Criteria is an independent measurement tool to improve the quality performance of an organization. Parast and Golmohammadi (2019) state that

Malcolm Balridge's criteria are valid and reliable measurement tool for health service organizations (Parast & Golmohammadi, 2019).

The purpose of this research are:

1. Analyzing the description of the quality of the inpatient unit at RSU UKI based on Malcolm Balridge criteria.
2. To explore the quality of inpatient units at RSU UKI based on the Malcolm Balridge criteria
3. To explore the problems that exist in the UKI RSU inpatient unit.

To explore the development model for inpatient units at RSU UKI based on the Malcolm Balridge criteria.”

The Malcolm Balridge Criteria is an award given by an organization in the United States. Malcolm Balridge (1981-1987) was a secretary of commerce in the United States who contributed greatly to long-term quality improvement in the United States. Malcolm Balridge have a dynamic work assessment framework that can be assessed and assist the delivery of health services. Balridge assessment is an instrument to improve organizational performance. There are 7 criteria of Malcolm Balridge namely Leadership, strategic planning, patient focus, measurement, analysis, and knowledge management, focus on workforce, focus on process, and organizational performance results. The Malcolm Balridge criteria not only assess input and process components, but also assess output components, namely results.

## RESEARCH METHODS

The research begins with conducting an initial survey, system identification and hospital profiles. Data collection was carried out using questionnaires, in-depth interviews, and document review. The researcher made a list of questions based on Malcolm Balridge's criteria guided by three experts as expert judgements. Then a Forum Group Discussion (FGD) was held with the UKI General Hospital. and given an assessment according to Malcolm Balridge's criteria. Assessments are made according to process criteria, namely ADLI (*Approach, Deployment, Learning and Integration*) and outcome criteria, namely LeTCI (*Levels, Trends, Comparisons, Integration*).

Then a final score is determined and a discussion is carried out to provide implications for the problems found. The number of respondents was 70 respondents. The validity test and reliability test have been carried out by previous researchers, namely by Manurung (2017) with cronbach alpha  $\geq 0.8$  (Manurung, 2017). Data processing is done. To obtain valid data, a data validity check is carried out. Checking the validity of the data was carried out using the data triangulation method, namely source triangulation, method triangulation and data triangulation. Data analysis was carried out by qualitative analysis with univariate analysis.

## RESULTS AND DISCUSSION

### Relations Between Criteria

#### Service Quality Related to Leadership Based on the Malcolm Balridge Criteria

Leadership is how senior leaders can guide and sustain the organization, setting the organization's vision, values and performance expectations. Communicating with employees, developing future leaders and creating an environment that encourages ethical behavior and high performance. Leaders also outline how to improve organizational performance and capabilities. The literature says that there is a significant relationship between leadership and the service quality of a hospital (Organ Denis W, 1997). According to Tannenbaum (1997), a leader must have the ability to influence other people to be willing to work to achieve the goals set (Tannenbaum et al., 1997).

### **Service Quality Related to Strategic Planning Based on the Malcolm Balridge Criteria**

The ability of the organization to develop strategies properly will provide opportunities for innovation and as a performance reference that can understand core competencies. Organizations are able to compete and collaborate with various parties now and in the future. Good strategic planning will be a change that may affect the quality of organizational services, increase innovation and the ability to take advantage of a variety of opportunities, and can direct resources to be able to make priorities in dealing with health service problems. Strategic planning is the main step to carry out a strategic management that provides direction and boundaries for operational activities. Trilogy Juran (1999), one of the activities to improve the quality of which is strategic planning that leads to operational activities (Juran & Godfrey, 1999a) Katsioloudes (2002) also states that strategy is a big picture of how an institution or individual achieves the desired goals (Katsioloudes Marios, 2002).

### **Service Quality Related to Patient Focus Based on the Malcolm Balridge Criteria**

The patient focus variable indicates that providing services with empathy aimed at patients and their families. The hospital is a service where humans are the center of service. According to Gaspersz (2011), patient satisfaction is highly dependent on perceptions, patient expectations, as well as factors that influence it such as needs and desires, past experiences, experiences from friends, and advertising or marketing (Gaspersz, 2011). Quality according to Juran (1999) is a product feature that meets patient needs in order to increase patient satisfaction (Juran & Godfrey, 1999b).

### **Service Quality Related to Measurement, analysis and knowledge management Based on the Malcolm Balridge Criteria**

The organization analyzes and develops information data and assets that are owned to then review its performance. Quality can be known if the organization is willing to analyze and develop its performance as a service provider at all levels. This can be done with performance measurement, performance analysis and performance improvement. Information data, information resources and technology can be used to determine the state of the quality of an organization. Performance measurement, analysis and performance review can be a reference for the quality assessment process. According to Crosby (1979), the management of quality is zero *defect* (Wijono, 2000). So it is necessary to measure and improve performance, freedom of technology to produce quality appearance standards in the form of flawless. Deming (1986) also states that it is possible to save as much as 30% of operating expenses in organizations by solving quality problems such as errors, avoidable complaints, negligence, wasted effort, inefficient systems, untrained personnel and problems. other (Wijono, 2000). Research conducted by Kusumapradja et al (2021), explains that information management systems improve employee performance because employees feel usefulness, ease of use, and computer self efficacy. Behavioural intention to use has positive effect when the technology is used (Kusumapradja et al., 2021)

### **Service Quality Related to Workforce based on the Malcolm Balridge criteria**

Organizations must be able to assess the capabilities and capacities of their workforce in order to build a good working climate. A good work environment creates safety, security and an appropriate work climate so as to improve the quality of an organization. The workforce involved in every decision making increases the sense of belonging and love of the workforce towards the hospital. Rewards employees for achieving high performance. The success of an organization depends on the quality and capacity of its employees, so it depends on the knowledge, skills, creativity and motivation

of employees and the placement of employees. The organization defines, manages and develops its workforce to utilize its full potential in alignment with the overall organization's mission, strategy and work plan. Quality management according to Deming (1986) is the TQM triangle in the form of commitment, scientific knowledge and workforce involvement (Wijono, 2000).

#### **Service Quality Related to Focus on Process based on the Malcolm Balridge criteria**

A good process at work produces a good output. Organizations that build good work systems can produce good quality output. Work system design, system management built for patient satisfaction and organizational quality. The key to a good work process resulting in effectiveness in the work process is the key to obtaining patient satisfaction which leads to good quality. Work systems, work design, management and improvement of work processes to implement work systems and organizational sustainability. Improvement of work processes produces quality of service quality. The Juran Trilogy (1999) stated that quality planning in the form of process development is capable of producing the features of a product (Wijono, 2000). In research conducted by Duarte (2013), it was stated that one of the innovations that affect the quality of the service system in hospitals is process management innovation. (Duarte, Goodson, and Arnold 2013).

#### **Service Quality Related Organizational Performance Outcome Based on Malcolm Balridge criteria**

The results of performance in health services in the form of patient satisfaction. To be able to determine the good quality of an organization, the results of leadership, products and processes, the focus of health services on patients, the effectiveness of operations, strategy implementation, and focus on patients are the key results of quality patient satisfaction. According to Kotler (2007), the role of the quality of health services will increase consumer satisfaction that arises after comparing the resulting performance to the expected performance (Kotler, 2007). According to Donabedian (2005), in carrying out a quality assessment it is necessary to plan all resources, processes in standardized interactions and the output of performance results in the form of patient satisfaction (Wijono, 2000). The performance results are in the form of health process and service results, patient focus results, workforce focus results, leadership and governance results, financial and market results. Research conducted by Chandrawati in 2017 stated that performance results at Kemayoran Hospital had significant results on quality in service (Chandrawati, 2017).

#### **Leadership**

According to Balridge, senior leadership in an organization not only manages and directs the organization but also must be capable of managing and socially responsible. The results showed that the leadership variable had an average total value of 3.08 (table 1) . The results of the study illustrate that inputs for organizational improvement and support for community activities have not been realized. Organizational management related to resources to improve service quality is still lacking. Senior leadership in the UKI RSU inpatient unit pays little attention to input from the workforce for organizational improvement. Perhaps this is due to the limited authority of senior leaders. In the journal written by Prybutok and Cutshal (2004), there is a significant relationship between leadership and service quality in terms of Malcolm Balridge's criteria (Prybutok & Cutshall, 2004).

Leadership in the UKI RSU inpatient unit is centered on the UKI hospital foundation. So that the cascade of hospital leadership and governance needs to be further evaluated.

### **Strategic Planning**

Malcolm Balridge describes strategic planning by examining how strategy development is how the organization determines its strategy and strategy deployment is how the organization transforms strategic objectives into action plans related to performance measures. The results showed that the implementation of strategic planning has an average total value of 3.03 (table 1) . UKI RSU inpatient unit strategic planning already has an approach that is responsive to basic needs and has involved senior leadership. But in improving the strategic plan there are obstacles. Its implementation is still in its early stages and not yet comprehensive. And still in several work units.

The strategic objectives of the UKI RSU inpatient unit are starting to be in line with patient needs. RSU UKI already has strategic planning in the form of strategic planning for health facilities and physical strategic planning, namely the construction of hospital renovations, but may be constrained by implementation and procurement. Here the researchers see that maybe this is due to the many considerations from the UKI foundation. In the study of Duarte et al (2013) strategic planning is an innovation that can be carried out in innovating in hospitals (Duarte et al., 2013).

### **Focus on the Patient**

According to Balridge, patient focus tests how organizations listen to patient voices and earn patient loyalty. Listening to the patient's voice means how the organization can determine the patient's expectations and needs, involve the patient in every policy in the organization, ensure the linkage of health services. While patient loyalty means how the organization builds relationships to acquire, fulfill and retain customers, increase loyalty and develop new opportunities for health services.

In a study conducted by Ayuningtyas et al in 2005, it was stated that focus on patients is a variable that has a significant effect on improving the quality of service in hospitals (Ayuningtyas, 2005). Patient-focused services will produce customer satisfaction. Positive Word of mouth will increase patient satisfaction and increase interest in seeking treatment again which leads to customer loyalty and also generates positive *word of mouth* (Ruswanti Endang et al., 2020).

The results of the study on patient focus criteria illustrate that the conditions that take place in the UKI General Hospital inpatient unit are in good condition, where each question has an average value of 3.16 (table 1). Systematic and effective patient information has been carried out through patient satisfaction surveys and service performance reports. Evaluations have been carried out and patient loyalty has been built through good communication with patient-focused services.

### **Knowledge Measurement, Analysis and Management**

According to Balridge, the criteria for measurement, analysis and knowledge management test how an organization selects, obtains, analyzes, manages and develops the data, information and knowledge assets it has. Measurement, analysis and improvement of organizational performance describes how an organization measures performance, analyzes and reviews performance and improves performance. Meanwhile, information management, information technology and knowledge describe how an organization ensures the quality and availability of data and information needed by employees, suppliers and patients.

The results of measurement, analysis, management and knowledge research have a value of 3.00 (table 1). The approach has been carried out systematically, effectively and responsively to the basic need for data and information. There has been an evaluation of the existing process. To improve service performance, in this case the hospital seeks to

make efforts to improve hospital quality by conducting PDCA and root cause problem analysis (RCA) so that corrective action plans can be formulated. The implementation of PDCA and RCA also needs to be disseminated frequently to all units so that it can become a sustainable culture in the UKI RSU inpatient unit.

In research conducted by Cahyono at the Bhineka Husada hospital in 2012, it was stated that one of the elements that influence the quality of service at the hospital is measurement, analysis and knowledge management (Cahyono 2012).

### **Workforce Focus**

According to Balridge, the criterion of workforce focus examines how an organization assesses the ability and capacity of the workforce and builds a conducive work environment to produce a good level of performance. The work environment describes how the organization provides a supportive work environment so that safety, security and a good work climate are created for its workers. Workforce involvement describes how the organization provides compensation and rewards for the workforce to achieve high performance.

In Rachmawati's research, (2017) it was found that the focus variable on workforce significantly affected the quality of inpatient performance at Mampang Prapatan Hospital (Rachmawati, 2017). The workforce focus variable is the variable that has the lowest average value of 2.95 (table 1). The approach taken in the work environment requires determining the work system, in the form of suitability between the categories and the operating environment. The approach is in its early stages and has not been carried out systematically. Process evaluation and improvement is still early stage. A safe working climate can be created through adherence to the SOPs made. Management of the capacity and capability of the workforce in hospitals, can be done through the placement of employees according to their knowledge and skills. Implementation of education and training is an effort to increase employee competence. In the mutation and rotation system, hospital management should fully understand the competencies possessed by the workforce in order to create a safe work environment. This can be monitored by the K3 team (occupational health and safety), the PPI team (infection prevention and control) and the PMKP team (quality improvement and patient safety).

### **Focus on Process**

According to Balridge's criteria, the focus is on the process of testing how organizations design, manage and improve work systems and work operations for patient satisfaction. The work system prepares the design and management of work systems while the work process prepares the design and management of work processes. Organizational capabilities in designing, managing, improving and innovating work processes can increase the effectiveness of work processes and achieve success.

The results of the study illustrate that the criteria for focusing on surgery have a fairly good average value of 3.16 (table 1). The approach taken is in accordance with the SOP even though there are still obstacles in its implementation. The dissemination of SOPs has been carried out in each work unit but systematic evaluation and improvement has not been carried out optimally. Trilogy Juran (1999) states that quality planning in the form of process development is able to produce features of a product. In research conducted by Duarte (2013), it was stated that one of the innovations that affect the quality of the service system in hospitals is process management innovation (Duarte et al., 2013).

### **Organizational Performance Results**

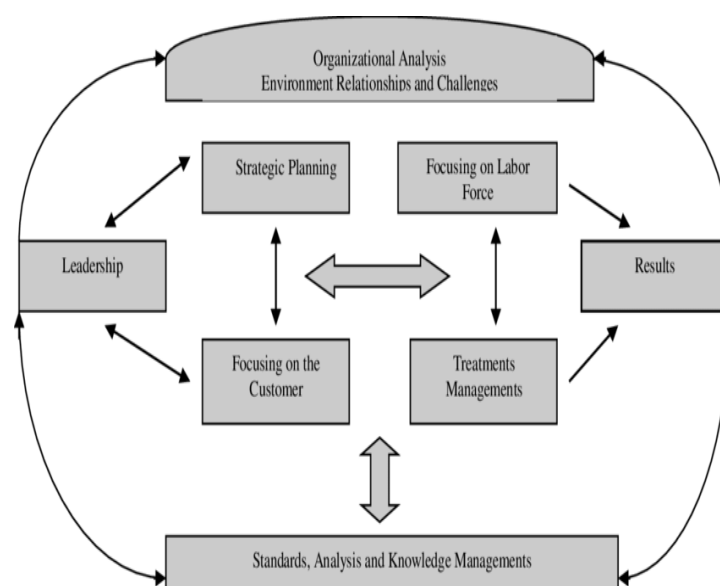
This criterion examines health care and process outcomes, patient focus outcomes, workforce focus outcomes, leadership and governance outcomes and financial and market

outcomes. Malcolm Balridge provides a systems perspective to manage the organization and process objectives of an organization to achieve optimal performance. The seven Malcolm Balridge criteria are a mechanism for integrating criteria in developing a superior organizational system. System perspective means viewing and managing the organization as a whole by integrating components towards optimal performance.

The Balridge Burger diagram (figure 1) consists of leadership, strategic planning and customer focus. It illustrates and represents the triad of leadership that these categories are placed together to emphasize and become the basis for the importance of leadership that focuses on strategic planning and customers. Focus on people, focus on process and performance results represents the trinity of results. Workforce and process objectives do the work of the organization to produce superior performance results. Then the leadership triad and results triad are connected by horizontal lines in order to illustrate the important linkages for organizational excellence. Two-way arrows indicate the need for feedback within a management system to produce effective performance. Meanwhile measurement, analysis and knowledge management are important to management effectiveness and to knowledge management systems based on facts, namely performance measurement and analysis for continuous performance improvement. According to Kotler (2007), the role of the quality of health services will increase consumer satisfaction that arises after comparing the resulting performance to the expected performance (Kotler, 2007).

Research conducted by Tiara Alyssa et al in 2020 states that performance results have significant results in improving quality in health services (Tiara et al., 2020). Based on the research results, the focus variable on labor and performance outcome variables have lower average values of 2.95 and 2.96 (table 1). Process work results are reported well and responsive. The results of focus performance on patients are reported to be good but not optimal. For performance results focusing on workforce, the level of performance improvement and performance sustainability is not good. Little comparative information is reported.

Performance results of leadership and governance results are reported well to meet several requirements and existing SOPs, there is no clear performance improvement and performance sustainability. For financial and market performance results, few performance results are reported and there is no comparative information. While the patient focus and process focus variables have a major contribution. This is in accordance with the balridge burger diagram (figure 1).



**Figure 1. Balridge Burger Diagram**

**Table 1. Table of Score Results and Average Value of Malcolm Balridge Criteria**

Kategori Baldrige	% skor	Point MB	Skor hasil (% x point)	Nilai rata-rata
Leadership		120	34	3,08
a. Senior leadership	20%	70	14	
b. Responsible management	20%	50	10	
Strategic planning		85	23	3,03
a. Strategy Development	35%	40	14	
b. Strategy deployment	20%	45	9	
Focus on the patient		85	28	3,16
a. Patient's voice	35%	45	14	
b. patient loyalty	35%	40	14	
Measurement, analysis and knowledge management		90	29,5	3,00
a. Measurement, analysis and improvement of organizational performance	30%	45	13,5	
b. Information Management, Information Technology and Knowledge	35%	45	15,75	
Focus on the workforce		85	12,75	2,95
a. Working Environment	15%	40	6	
b. Workforce Engagement	15%	45	6,75	
Focus on Operations		85	32	3,18
a. Work System	40%	45	18	
b. Work Process	35%	40	14	
Organizational performance results		450	127,5	2,96
a. process results and health services	40%	110	40	
b. Focus Results on Patients	35%	90	31,5	
c. Results Focus on Workforce	25%	80	20	
d. Leadership and governance outcomes	30%	80	24	
e. Financial and Market Results	15%	80	12	
The total score of the inpatient unit of RSU UKI is 276.5				Total 3,04

## CONCLUSION

The variables of leadership, patient focus and surgery focus have higher average values than the other variables. Meanwhile, the variable focus on labor and performance outcomes has a lower average value than the other variables. So the researchers concluded that the criteria for workforce focus and performance results were considered not in accordance with Malcolm Balridge's criteria.

Complaints from the workforce include a lack of education/training, an unclear transfer/rotation system, and inappropriate compensation. According to the researchers, this was due to a lack of coordination and communication between the workforce and the UKI hospital management department. The function of the leadership cascade can be



restored and improved to make it even better. For performance issues in the form of patient visits, namely a significant reduction in BOR, cases of labor accidents and complaints from patients. According to information, this is due to the infrastructure facilities of UKI Hospital which are starting to fall behind. UKI General Hospital physical strategic planning has been prepared so that acceleration is needed to make it happen.

The overall inpatient unit score at RSU UKI was 276.5 out of 1000 points. This means that the UKI RSU inpatient unit is in an early result position where the quality of the UKI RSU inpatient unit is relatively not good and still needs to be improved. The UKI RSU inpatient unit is in a systematic approach, early stages of deployment, with minimal evaluation and no improvement yet

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