

## Research Article

## The Relationship of Clinical Pathway Implementation towards Patient Satisfaction at Dr Wahidin Sudirohusodo Hospital in 2019

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**Abstract:** Clinical Pathway is created as a system that can overcome the many variations of services provided to patients even with the same diagnosis. This study aimed to analyze the implementation of Clinical Pathway as a quality control tool for cost constraints in the implementation of national health insurance in Dr. Wahidin Sudirohusodo Hospital. This research was a quantitative study. Data collected through the patient satisfaction survey questionnaire. The sample in this study was 45 patients. The results indicated a significant level of less than 0.05, it was concluded that there is a relationship between the implementation of Clinical Pathway with patient satisfaction.

**Keywords:** Clinical Pathway, Patient Satisfaction Survey, Hospital.

### INTRODUCTION

The National Health Insurance (JKN) developed in Indonesia is part of the National Social Security System (SJSN). The National Social Security System is implemented through a compulsory Social Health Insurance mechanism pursuant to Law No.40 of 2004 concerning the National Social Security System. The aim is that all Indonesians are protected in the insurance system, so that they can meet the basic needs of adequate public health.

Demands for quality health services make the problem of therapy failure a center of attention among health care practitioners and academics. The failure of therapy is caused by inappropriate medical decision making process which has adverse medical effects such as disability due to drug and procedural side effects so that the hospitalization becomes longer, and it has an impact on the high cost of treatment (Weingart *et al.*, 2000). These problems are not only influenced by clinical skills, mastery of updated knowledge, clinical awareness, level of concern for clinical quality issues, but not the management of the stem and procedures

integrated medical management for patients (Dwiprahasto, 2001).

The hospital is one industry in the service sector which currently has many stands in Indonesia through foreign investment which is equipped with modern facilities and infrastructure. In line with the competition, the old paradigm in which patients who need a doctor or hospital has shifted to be a patient who will choose a doctor or hospital in accordance with their expectations and abilities. In a situation of global competition like this, the implementation of good corporate governance is a necessity in order to build strong and sustainable company conditions.

Clinical governance arises because of various bad realities in the health care system such as high cases of malpractice. In addition, clinical governance arises because the "desperation" of the government and health service facility managers in the UK in implementing the Total Quality Management (TQM) or Continuous Quality Improvement (CQI) approach to health services on the grounds is not widely accepted because staff The clinic considers that TQM and CQI are too "identical"

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to management without identifying a clear role for clinicians in improving this quality.

The basic concepts of Clinical Governance are:

(1) Accountability, namely that every medical effort must be scientifically, ethically, morally accountable and based on current and reliable evidence (evidence-based medicine); (2) Continuous Quality Improvement, namely efforts to improve quality must be carried out systematically, comprehensively and continuously; (3) High Quality Standards of care, which implies that every medical effort is always based on the highest standards that are professionally recognized; and (4) facilitate and create an environment that ensures the implementation of quality health services.

Activities to implement the basic concepts of clinical governance consist of activities: clinical audit, providing clinical data of good quality, outcome measurement, clinical risk management, evidence based practice, and mechanisms for monitoring service outcomes.

Clinical governance is an effort to improve service quality and ensure service quality by building a good clinical service environment in a health service provider organization. One of the systems implemented in clinical governance is Clinical Effectiveness. With Clinical Effectiveness an organization of health care guarantees providing the best evidence-based services effectively. Clinical effectiveness can be done by preparing clinical pathways.

Clinical governance in a hospital is a guideline that covers all activities from patients entering and leaving the hospital. This guideline is useful for improving service quality and controlling service costs. This clinical pathway can be used as an evaluation for quality medical services and to avoid unnecessary actions or activities. This is a basic guideline for calculating the cost of services so that patients get the certainty of costs from efforts to cure the disease.

Clinical Pathway is one of the technologies currently created by hospital management in the world, which is a written, concise, simple and evidence based medicine based guide. Clinical pathway is created as a system that is able to overcome the many variations of services provided to patients even with the same diagnosis. This is important, because so far many variations of the service have always been carried out by taking refuge in the word "Medicine is Art" in the wrong sense, where patients often get unnecessary additional therapies and examinations, which results in inflated medical costs, by making uniform services for the same type of diagnosis, will increase the effectiveness and efficiency of therapy.

Variations in medical treatment for the same clinical condition are influenced by several factors including changes in clinical conditions, complexity of clinical problems, differences in resources, and patient ability (DiMatteo, 2004). Reducing variation in the complexity of the maintenance industry is done through standardizing the service process. Standardization begins with a focus on evidence-based care in the clinical context of each patient (Winters *et al.*, 2009). Evidence-based medicine has become important in medical decision making and clinical assessment. In addition to ethical considerations, important variation problems are caused due to pressure factors to reduce health care costs without reducing quality in patient care (Panella, 2003). This is in line with Evans-Lacko *et al.*, (2010) which states that the development of clinical pathways is a strategy to reduce variations in health service delivery especially in terms of improving facilities. Although it seems new in Indonesia, the clinical pathway has been known for a long time internationally, especially in countries that have used universal coverage in their health systems, so that health service payments are provided based on package packages, with a system like this, if hospitals still provide treatment or unnecessary checks, it will cause harm to the hospital's financial system.

## METHODOLOGY

### Research Design

The research method used in this study is a quantitative research method. This research was conducted at the Dr. Wahidin Sudirohusodo General Hospital since August 2019 - September 2019.

### Population and Sample

The population in this study was inpatients at the Integrated Heart Center Dr. Wahidin Sudirohusodo General Hospital. The total sample for quantitative data is the number of inpatients in the 5th floor at the Integrated Heart Center Dr. Wahidin Sudirohusodo General Hospital. The sample is a portion taken from the whole object studied and is considered to represent the entire population. The number of samples taken by researchers was 45 patients. The procedure for sampling is to use a total sampling technique. Total sampling is a sampling technique where the number of samples is equal to the population. The reason for taking total sampling is because the total population is less than 100, the entire population is used as a research sample. Samples taken were 45 people.

### Data Analysis

Analysis of the data used is univariate analysis to get an overview of the research problem. To see the effect of each independent variable on the dependent, bivariate analysis was used using the Chi-Square test.

**RESULTS**

Univariate data analysis was performed to obtain a general description and respondents' perceptions of the variables used in the study. The data is described through a frequency distribution in the form of a table. Univariate analysis consists of descriptive analysis of respondent characteristics, research variables, and dimensions that most contribute to forming a variable.

**Table 1. Gender Frequency Distribution Dr. Wahidin Sudirohusodo General Hospital in 2019**

Gender	Frequency	Percent
Male	33	73.3
Female	12	26.7
Total	45	100

Source: Primary Data, 2019. at

Table 1 relates to frequency distribution table for gender variables, from the table it can be seen that the number of male respondents is 33 people or 73.3% and the number of women is 12 people or 26.7% of the total respondents as many as 45 people.

**Table 2. Distribution of Education Frequencies in Dr. Wahidin Sudirohusodo General Hospital in 2019**

Education	Frequency	Percent
Doctoral	1	2.2
Master	9	20
Bachelor	7	15,6
Senior High School	27	60
Junior high school	1	2.2
Total	45	100

Source: Primary Data, 2019.

Table 2 relates to frequency distribution table for the Education variable, from the table it can be seen

that the number of respondents who have Doctoral Education level is 1 person or 2.2%, Masters education level is 9 people or 20%, Bachelor education level is 7 people or 15, 6%, Senior High School levels as many as 27 people or 60%, and junior high school education as many as 1 person or 2.2% of the total respondents as many as 45 people.

**Table 3. Distribution of LOS Frequency in RSUP Dr. Wahidin Sudirohusodo in 2019**

Number of days	Frequency	Percent
1-5 days	10	22.2
5-10 days	35	77.8
Total	45	100

Source: Primary Data, 2019.

Table 3. shows the frequency distribution table for the LOS variable, from the table it can be seen that the number of respondents treated for 1-5 days is 10 people or 22.2% and the number of respondents treated for more than 5 days is 35 people or 77.8 % of the total respondents were 45 people.

**Table 4. Patient Satisfaction at Dr. Wahidin Sudirohusodo General Hospital in 2019**

Patient Satisfaction	Frequency	Percent
Not satisfied	8	17.8
Satisfied	37	82.2
Total	45	100

Source: Primary Data, 2019.

Table 4 shows the frequency distribution for the Patient Satisfaction variable, from the table it can be seen that the number of Dissatisfied respondents is 8 people or 17.8% and the number of Satisfied 37 people or 82.2% of the total respondents as many as 45 people.

**Table 5. Patient satisfaction dimension of Reliability at Dr. Wahidin Sudirohusodo General Hospital in 2019**

	Patient satisfaction	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not satisfied	9	20,0	20,0	20,0
	Satisfied	36	80,0	80,0	100,0
	Total	45	100,0	100,0	

Source: Primary Data, 2019.

Table 5 shows the frequency distribution for the Patient Satisfaction variable on the Reability Dimension, from the table it can be seen that the

number of Dissatisfied respondents is 9 people or 20.0% and the number of Satisfied 36 people or 80.0% of the total respondents is 45 people.

**Table 6. Patient satisfaction dimensions in Assurance at Dr. Wahidin Sudirohusodo General Hospital in 2019**

	Patient satisfaction	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not satisfied	10	22,2	22,2	22,2
	Satisfied	35	77,8	77,8	100,0
	Total	45	100,0	100,0	

Source: Primary Data, 2019.

Table 6 shows the frequency distribution for the Patient Satisfaction variable in the Assurance Dimension, from the table it can be seen that the

number of Dissatisfied respondents is 10 people or 22.2% and the number of Satisfied 35 people or 77.8% of the total respondents is 45 people.

**Table 7. Patient satisfaction in Tangible dimensions at Dr. Wahidin Sudirohusodo General Hospital in 2019**

	Patient satisfaction	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not satisfied	12	26,6	26,6	26,6
	Satisfied	33	73,3	73,3	100,0
	Total	45	100,0	100,0	

Source: Primary Data, 2019.

Table 7 shows the frequency distribution for the variable Patient Satisfaction in the Tangible Dimension, from the table it can be seen that the

number of Dissatisfied respondents is 22 people or 48.9% and the number of Satisfied 23 people or 51.1% of the total respondents are 45 people.

**Table 8. Empathy dimension patient satisfaction at RSUP Dr. Wahidin Sudirohusodo in 2019**

	Patient satisfaction	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not satisfied	16	35,6	35,6	35,6
	Satisfied	29	64,4	64,4	100,0
	Total	45	100,0	100,0	

Source: Primary Data, 2019.

Table 8 shows the frequency distribution for the Patient Satisfaction variable in the Empathy Dimension, from the table it can be seen that the

number of Dissatisfied respondents is 16 people or 35.6% and the number of satisfied 29 people or 64.4% of the total respondents are 45 people.

**Table 9. Patient satisfaction dimensions of Responsiveness at Dr. Wahidin Sudirohusodo General Hospital in 2019**

	Patient satisfaction	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not satisfied	12	26,7	26,7	26,7
	Satisfied	33	73,3	73,3	100,0
	Total	45	100,0	100,0	

Source: Primary Data, 2019.

Table 9 shows the frequency distribution for the Patient Satisfaction variable in the Responsiveness Dimension, from the table it can be seen that the number of Dissatisfied respondents was 12 people or 26.7% and the number of satisfied 33 people or 73.3% of the total respondents were 45 people.

### BIVARIATE ANALYSIS

Bivariate data analysis was performed to find whether there was a relationship between the implementation of Clinical Pathway and patient satisfaction. In determining statistical tests, to see the relationship of each variable can use Pearson correlation test..

**Table10. Correlations between Implementation of Clinical Pathway and Patient Satisfaction in Dr. Wahidin Sudirohusodo General Hospital in 2019**

		Patient Satisfaction	Implementation of Clinical Pathway
Patient satisfaction	Pearson Correlation	1	,349*
	Sig		,019
	N	45	45
Implementation of Clinical Pathway	Pearson Correlation	,349*	1
	Sig	,019	
	N	45	45

Source: Primary Data, 2019.

In table 10 the correlation coefficient between CP implementation and patient satisfaction is 0,349 with a significant level (Sig. (2-tailed)) = 0.019, a

significant level is smaller than 0.05, it is concluded that the relationship between CP implementation and patient satisfaction is significant. Besides using Pearson

correlation test. Bivariate data analysis was also carried out using Chi-Square analysis to find the relationship

between the implementation of Clinical Pathway and patient satisfaction.

**Table 11. Cross tabulation between the implementation of Clinical Pathway and Patient Satisfaction in Dr. Wahidin Sudirohusodo General Hospital in 2019**

			Implementation of Clinical Pathway		Total
			Not Implemented	Implemented	
Patient satisfaction	Not satisfied	Count	4	4	8
		% of total	8,9%	8,9%	17,8%
	Satisfied	Count	5	32	37
		% of Total	11,1%	71,1%	82,2%
Total	Count	9	36	45	
	% of total	20%	80%	100%	

Source: Primary Data, 2019.

Table 11 shows the Cross Tabulation between CP Implementation and Patient Satisfaction, in the table above it is known that the number of patients implemented was 36 people where there were 4 Dissatisfied people and 32 Satisfied people. While the

number of patients who are not implemented is 9 people where there are 4 people who are not satisfied and 5 people who are not satisfied. The total number of respondents was 45 people.

**Table 12. Chi-Square test results between the Implementation of Clinical Pathway and Patient Satisfaction in Dr. Wahidin Sudirohusodo General Hospital in 2019**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5,473 <sup>a</sup>	1	,019		
Continuity Correction <sup>b</sup>	3,430	1	,064		
Likelihood Ratio	4,639	1	,031		
Fisher's Exact Test				,039	,039
Linear-by-Linear Association	5,351	1	,021		
N of Valid Cases	45				

Source: Primary Data, 2019.

Table 12 shows the results of the Chi-Square test between CP Implementation and Patient Satisfaction, the Chi-Square Pearson Value is 5.473 with a significant level (Sig. (2-tailed)) = 0.019, a significant level is less than 0.05, it is concluded that the relationship between Clinical Pathway Implementation and significant patient satisfaction.

**DISCUSSION**

Satisfaction means a feeling of satisfaction, pleasure and relief someone due to consume a product or service to get the service of a service. Satisfaction is the level of feeling in which someone expresses the results of comparisons of the performance of products received and expected (Kotler, 2000). According to Supranto (2001) a service is a performance performance, intangible and quickly disappear, faster can be felt than owned, and customers can participate more actively in consuming these services. The service will determine the level of patient satisfaction at Dr. Wahidin Sudirohusodo General Hospital. There are 5 sub-variables or dimensions in food service namely tangible, reliability, responsiveness, assurance,

empathy. In accordance with Gerson & Gerson (2006) a customer is satisfied if his needs are real or only expectations are met or exceeded expectations. Patient Satisfaction in the Reability Dimension can be seen that the number of Dissatisfied respondents is 9 people or 20.0% and the Satisfied number is 36 people or 80.0% of the total respondents as many as 45 people so that the management of Dr. Wahidin Sudirohusodo General Hospital needs to maintain hospital services so that patients remain satisfied.

Patient Satisfaction Variable in Assurance Dimension, can be seen that the number of Dissatisfied respondents is 10 people or 22.2% and the number of Satisfied 35 people or 77.8% of the total respondents is 45 people. In this dimension the number of patients who are satisfied is also more than those who are dissatisfied but of course there are still many things that still need to be improved. Tangible Dimension, it can be seen that the number of Dissatisfied respondents is 12 people or 26.6% and the number of Satisfied 33 people or 73.3% of the total respondents is 45 people. The number of patients who feel quite a lot of this may be due to the

new Integrated Heart Center building, access and facilities that are very adequate. Empathy dimension, it can be seen that the number of respondents who are not satisfied is 16 people or 35.6% and the number of people who are satisfied is 29 people or 64.4% of the total respondents as many as 45 people. This dimension assesses the hospitality of the caregiver to the patient. The number of patients who are satisfied is more than those who are dissatisfied. This is because the polite and friendly attitude of the officers is very important besides the nurses have been provided with various types of training specifically to deal with consumers directly. Responsiveness dimension, it can be seen that the number of respondents who are not satisfied is 12 people or 26.7% and the number of satisfied people or 73.3% of the total respondents are 45 people.

The Responsiveness Dimension, from the table, it can be seen that the number of Dissatisfied respondents is 12 people or 26.7% and the number of satisfied people or 73.3% of the total respondents is 45 people. According to the level of perception experienced by patients, the responsiveness of medical personnel in responding to complaints submitted by patients including the level of satisfaction, where medical calm applies well in response to complaints submitted by patients. Chi-Square test results between the Implementation of CP with Patient Satisfaction, Pearson Chi-Square Value was 5.473 with a significant level (Sig. (2-tailed)) = 0.019, a significant level smaller than 0.05, it was concluded that the relationship between CP Implementation and Patient Satisfaction significant.

## CONCLUSION

Finally, this research showed that there is a relationship between clinical pathway implementation with patient satisfaction. The results obtained based on

a significant level of less than 0.05 so that the conclusion obtained the relationship between the Implementation of Clinical Pathway and Patient Satisfaction is significant.

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