

## Modeling Satisfaction And Behavioral Intentions Of Inpatients Of Community Health Center-Based Service Delivery System

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**ABSTRACT** : This study aims to formulate a model of satisfaction and behavioral intentions of inpatients at Community Health Center (CHC) in East Java based on service delivery system. Sample selection of districts / cities, CHC, and respondents based on purposive sampling. The districts / cities of the sample are District of Blitar, Lumajang, Pamekasan and City of Surabaya. The analysis used: (a) Structural Equation Modeling with the method of partial least squares (PLS) and (b) descriptive analysis. The results of PLS analysis showed that the contact personnel can improve inpatients satisfaction at CHC in East Java, the physical support is proven to increase inpatients satisfaction at CHC in East Java and the inpatients satisfaction can influence the behavioral intentions of inpatients at CHC in East Java. While the process has not been able to increase inpatients satisfaction at CHC in East Java.

**KEYWORDS** : Contact Personnel, Physical Support, Process, Satisfaction, Behavioral Intentions

### I. INTRODUCTION

The winds of change are already blowing of decentralization policy brought big changes regarding the role of government in health care. Regional autonomy in the perspective of the health sector will impact the expansion of local authorities to formulate and develop a health care system in the area concerned, in accordance with the aspirations and needs of local communities and state and local capabilities. Community Health Center (CHC) is one of the types of organizations that serve the public health highly enjoyed by the general public. The existence of a policy of decentralization of health services and the demand for quality of health services, forcing health care institutions such as CHC to think about change management systems. Environmental and policy changes may force a change in management paradigm that will ultimately bring with it changes in its management systems (Wibowo, 2013)[1].

One of the flagship programs of health services in the province of East Java is an effort to develop CHC into two functions namely CHC of inpatient and CHC of non-inpatient. Improvement of the status of CHC into CHC of inpatient is an effort to expand access of health services to public and medical care services especially. In addition, CHC of inpatient is also designed to be used as satellites or miniature of health organizations. The policy was taken therefore motivated by the increasing visits for treatment to CHC, and hospitals (referral) overwhelmed to receive referrals of patients from the CHC so that it feared would affect the burden of health care workers and patient care will decline (Setiawan, 2011) [2].

CHC is the spearhead of health services to the district/city level. Based on Table 1 we can see that until 2013, the number of CHC in the province of East Java as much as 960 units consisting of 505 CHC of inpatient and 455 CHC of non-inpatient in 38 districts / cities. There is a rise in the number of CHC of inpatient in year of 2011 amounted 396 units to 400 units in year of 2012, an increase of 1%. In year of 2013 the number of CHC of inpatient increased by 26.25% compared to the year of 2012. This reality shows that City or District Government in East Java has developed into a status of CHC of inpatient with a variety of services such as CHC with the specification to reference the birth of the baby, CHC "Plus" by presenting consulting a specialist doctor, and others. The forms of service innovation programs can take the form of CHC of traumatic, CHC of online, CHC of mannered moral, CHC of mental services and others.

**Table 1. The Developments of CHC in East Java Year 2011 – 2013**

Number	Status of CHC	2011	2012	2013
1.	Inpatient	396	400	505
2.	Non-Inpatient	550	556	455
<b>Total</b>		<b>946</b>	<b>956</b>	<b>960</b>

Source: Data Base of CHC (Ministry of Health of R.I, 2014) [3]

On the other hand the ability and resources at the CHC level, such as the number of doctors and dentists still inadequate, even a specialist doctor is very minimal amount. The reality in the field that health services in CHC is mostly done

by paramedical staff (nurses and midwives), while the doctor changed into the head of the CHC, which is busy for the affairs of administrative managerial. Besides, the existence of the facilities and the means dentistry is still very limited for each CHC (Setiawan, 2011) [4]. At this time more and more people use the inpatient services of CHC, not just those who are able but also poor people in large numbers. People who are not able to take advantage of free health care in the form of public health insurance (*Jamkesmas* or *Jamkesmasda*). While the capabilities and resources at the CHC level, such as the number of doctors and dentists still not adequate, even specialist doctor is very minimal in number. Facilities and other medical facilities are still very limited in number. This condition causes the health services of inpatient CHC can not be maximal. Based on this phenomenon, it is necessary immediately redesign the strategy of health care of inpatient CHC in East Java based on the concept of service delivery system which previously has not been done by other researchers. Lovelock and Wright (2002: 60) [5] states that the service delivery system is the services operation system that consist of the parts that seen by consumers (society): the physical support and contact personnel are related to each other, and the parts that are not visible to the consumer (society), in which the consumer (the public) think of it as a core technical activities, even whose existence is not known by the consumer (the public) but the activity results can be felt by the consumer (public). Goncalves (1998: 80) [6] says that the service delivery system is formed by the dimensions of people, physical evidence and process.

This study was conducted with the intent to provide the solution of problems related to health care that organized by the inpatient CHC in East Java. The purpose of this study is to formulate a model of satisfaction and behavioral intentions of inpatients at CHC in East Java based on service delivery system.

## II. LITERATURE REVIEW

**Service Delivery System :** According to Lovelock and Wright (2002: 60) [7], a service organization is seen as a system consisting of service operation system and the service delivery system. In service operation system, a component found in the entire service organization system, where the input is processed and the elements of the service product are created through human resource component and a physical component. At the service delivery system, relating to when, where, and how services are delivered to customers, including elements of the service operation system and other matters presented to other consumers. Service organization comprised of service operation system, and service delivery system that is the part that can be seen by the consumer (front office) namely the physical support and the contact personnel are interconnected with each other, and the parts that are not visible to the consumer (back office), where consumers consider it a core technical activities, even whose existence is not known to the consumer, but the results of activity can be felt by consumers. Meanwhile, Heskett *et al.* (1997: 154) [8] states that the service delivery system is formed by (1) the support of information systems, (2) the location of the company, (3) the atmosphere of the service / decor, (4) spatial, (5) customer response management, (6) courtesy officer, (7) equipment and company policies. Best (2000: 205) [9] also explained that the operating system and the delivery of services is closely related to three things, namely, (1) after-sales services, (2) the availability, in particular linked to the speed of access on the services, and (3) the current service transactions are made, such as the payment system on credit, money back guarantee, and so forth. Goncalves (1998: 80) [10] says that there are three main components of a service system that is composed of people, physical evidence and process. People give meaning that quality of service is highly dependent on the quality of the people who provide those services. The quality of the people can be obtained from the initial filter recruitment, training programs for new employees, development program and advanced training for employees of the old, the employee evaluation program and participation of the management in training and development programs. All these programs should be oriented to customer needs. Physical evidence suggests that although the service is not visible but require physical evidence that can help to produce services or customers will be reminded of its existence. The physical evidence may be image that formed through color, design, logo, prints, decorations, employee uniform, or even standardization of services that can provide a concrete image. The process is a company's efforts in running the activities of the company to meet the needs and desires of customers.

According to Nguyen and Leblanc (2002: 245) [11], the physical environment is measured by the ambient conditions, the atmosphere, the exterior design, interior design, decoration, parking facilities, appearance and location of the building and the park. Ambient conditions consists of various elements such as color, lighting, temperature, noise, odors and music. Shamdasani and Balakrishnan (2000: 407) [12] states that the physical environment is measured by the ambient, symbols and objects. In healthcare organizations, physical environment includes the location, equipment and facilities, which are considered important by hospital patients (Hutton and Richardson, 1995: 52) [13]. The location is the location of the health organization's strategic position, which is connected to public facilities as well as easy to achieve. This is in accordance with the opinion of Heskett *et al.* (1997: 154) [14] that one of the elements of the service delivery system is the location, while Sabarguna (2004: 12) [15] states the location is used to reach the destination customer and require a relatively quick time. Similar opinion was delivered by Al-Hawary (2012) [16] that the ease to get to the health service is an important indicator of the accessibility variables which are determinants of service quality of healthcare provider organizations. Physical facilities are not moving objects, real and can be felt by the patient such as a representative equipment, a beautiful building interiors, exteriors of buildings, parking facilities, canteen, bank, and security guarantees. Equipment is equipment that healthcare

organizations owned health organizations that are directly related to the needs of patients. Furthermore, according to Hutton and Richardson (1995: 52) [17], food provided can also be referred to as the physical evidence in healthcare organizations. Facilities which can be viewed by the consumer is part of an important manifestation of the overall services offered (Lamb *et al.*, 2002: 483) [18]. The comfort level in healthcare organizations also need to be considered in addition to the facilities and equipment. This is in accordance with the opinion Sabarguna (2004: 12) [19] also states that health organizations in addition to ensuring the proper equipment. In addition, the layout of room and the procedures of service given officer is an important element in the delivery of services. According to Heskett *et al.* (1997: 9) [20] also states that the service delivery system as an important and related spatial planning, layout, and work procedures.

Contact personnel are all human element involved in the delivery of services and have direct contact with the buyer. According to Nguyen and Leblanc (2002: 245) [21], contact personnel composed of all employees who are on the front lines of the organization and have direct contact with customers. According to Snook (1992: 65) [22], the medical staff of health organizations are a doctor, dentist, podiatrist, and staff of health professionals who care for patients. Lim *et al.* (2000: 290) [23] states that the most important element in the organization of health care is a doctor and nurse. Doctors and nurses play a critical role in creating the quality of service in a healthcare organization.

As a high contact service, personnel at the health organization is central to the delivery of services. In accordance with the opinion of Lovelock and Wright (2002: 197) [24] that, "in high-contact services, service personnel are central to service delivery". Further Lovelock and Wright (2002: 324) [25] states that, "in the eyes of Reviews their customers, service personnel may also be seen as an integral part of the service experience". According to Nguyen and Leblanc (2002: 250) [26] contact personnel was measured with 3 items, namely, appearance (appearance), competence (competence) and professionalism (professionalism). Furthermore, Nguyen and Leblanc (2002: 245) [27] states that the appearance of personnel is a combination of clothing, hairstyles, makeup, and hygiene. Employee competence built by expertise and experience. Zeithaml and Bitner (2000: 19) [28] also explains that all the attitudes and actions of employees, even the way employees dress, and appearance of employees have an influence on consumers' perceptions or the success of the service in real time. Shamdasani and Balakrishnan (2000: 402) [29] uses the indicator contact personnel, the expertise, similarity, knowledge, hospitality and mutual disclosure. Personnel speed in completing the work will make them happy. According to Best (2000: 230) [30] that from the customer side, the speed of access to care is an important service delivery system. This is supported by Aschner (1999: 453) [31] states in the field of services, almost all service attributes determined by assessment of the speed and accuracy of customer personnel in response to their complaints. Gudmundson and Cristine (2002: 6) [32] states that the personnel function as a service provider in a service organization should realize that they are actually a marketer and behavior will affect the success of an organization in the long run. Thus the elements, both physical support and contact personnel can build the organization's reputation in the eyes of the patient's health or the patient's family as found by Widiastuti (2010) [33]. While the image of the company can affect customer satisfaction and customer loyalty (Andreassen and Liddestad, 1998) [34]. Bloemer and Schroder (2002) [35] stated that the company's image affects customer satisfaction, satisfaction affects trust and trust affects customer commitment. Customer commitment has a strong influence on purchase intention and word of mouth (WOM). Based on the relationship between these variables, the hypothesis can be formulated as follows:

H1: Contact personnel has a positive influence on the satisfaction of inpatients

H2: Physical support has a positive influence on the satisfaction of inpatients

H3: Process has a positive influence on the satisfaction of inpatients

**Satisfaction :** According to Albari (2013) [36], customer satisfaction as a customer evaluation after behaving in a certain place and time. While Tian-Cole *et al.* (2002) [37] state that the satisfaction is the results of the psychological of customers on the direct experience of the past. Satisfaction can be measured directly (Yu *et al.*, 2006) [38], for example through a statement of feeling that pleasant - unpleasant or satisfied - dissatisfied (Tian-Cole *et al.*, 2002) [39].

Stephens and Gwinner (1998) [40] states that customers who do not complain about dissatisfaction, should need special attention from management, because the dissatisfaction can damage the reputation of management as the negative impact of communication to others. Because of the existence of a complaint it should be considered as a positive activity for better management.

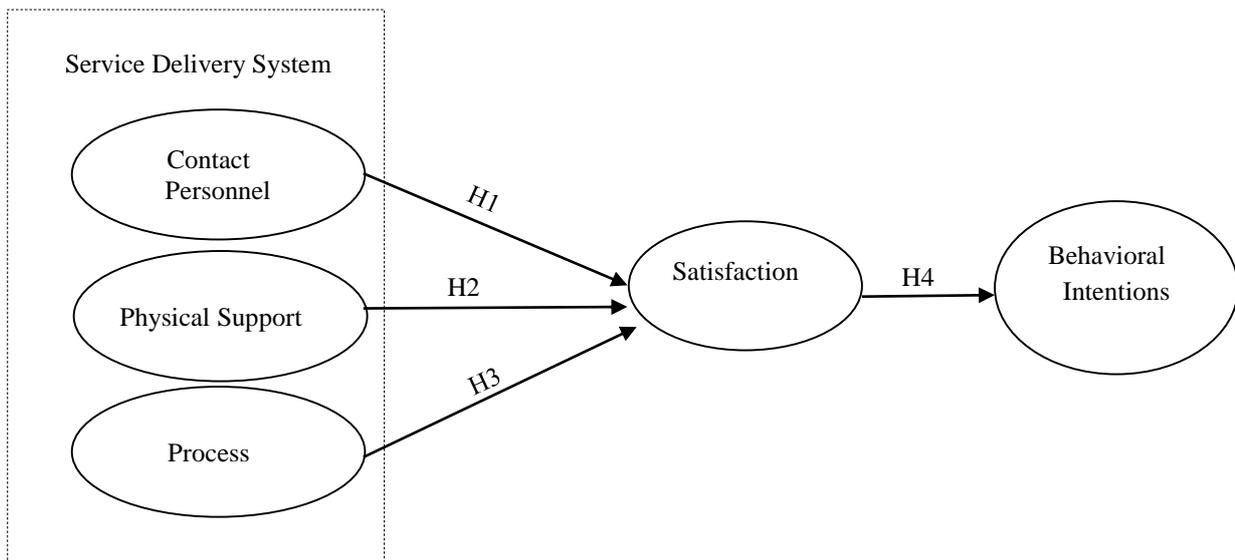
In connection with the possibility or interest of the community to behave again, Huang and Lin (2005) [41] identified that satisfaction can be a positive influence on customer likelihood to recommend and re-behaved, as the shape of their loyalty. Maxham III (1998) [42] stated that the level of satisfaction has positive influence on interest to behave back. In other words, satisfaction has positive influence on behavioral intentions.

**Behavioral Intentions :** Behavioral intentions is one of the forms, the public statement of loyalty to a particular behavior in the future (Wang, 2008) [43]. Albari (2013) [44] measure of behavioral intentions with oral communication, recommendation, interest in the short-term behavior (dislike of any company, product, other brands and will not stop eating), as well as interest in the long-term behavior (will not be moved to a company, product or other brands). Tian-Cole *et al.* (2002) [45] measure of behavioral intentions by telling the positive and inviting to others, re-use, pay more and buy continuously. Associated with the variables previously described, behavioral intentions can be affected by satisfaction (Huang and Lin, 2005 [46]; Maxham III and Netemeyer, 2002) [47]. Customer satisfaction is also an important antecedent of behavioral intentions and actual behavior (Oliver 1999) [48]. It is generally believed that satisfaction leads to repeat purchases and positive word of mouth (WOM) recommendations, which are the main indicators of loyalty. The results of the research Liang and Zhang (2011) [49] found that customer satisfaction has a positive and significant influence on behavioral intentions. Furthermore we assume that if consumers are satisfied with a product/service, they are more likely to continue to purchase it, and are more willing to spread positive WOM. In other words, behavioral intentions positioned as the dependent variable for the variable of satisfaction. Thus the hypothesis can be formulated as follows:

H4: The satisfaction of inpatients have a positive influence on behavioral intentions

Based on the literature review that described above and the relationship between variables, it can be described as a research model in Figure 1.

Figure 1. Research Model



### III. RESEARCH METHODOLOGY

Based on the goal, this study uses the design of the quantitative approach. Quantitative approach used in this study was descriptive and inferential. Descriptive quantitative methods are mainly used to determine the perception of the inpatients or the inpatients' family of CHC inpatient based on service delivery system, inpatient satisfaction and behavioral intentions of inpatients. Inferential quantitative approach is used to find a causal relationship between inpatient services based on service delivery system with inpatients satisfaction and behavioral intentions of inpatients. The results of hypothesis verification will be used to formulate causal models development CHC inpatient in East Java based on service delivery system.

The population in this study is the entire district or city in East Java province that has CHC inpatient. Determination of the district or city as the study sample is determined by using purposive sampling, taking into account the representation of culture in East Java province, so district or city that into the sample in this study is Lumajang (representing the Pandalungan culture), Surabaya (representing the Arek culture), Blitar (representing of Mataram culture), and Pamekasan (representing the Madura culture).

The determination of the CHC and inpatient respondents in each district / city sample, selected based on a purposive technique by considering the criterion-based selection, where the number of CHC and inpatient respondents defined themselves by researchers with particular consideration. The main considerations that determine the respondents, is the mastery of information and knowledge required by researchers. This research was conducted in CHC of inpatient in District of Blitar, Lumajang, Pamekasan, and City of Surabaya.

Respondents filled out a questionnaire relating to the dimensions of services inpatient-based on service delivery system that includes contact personnel, physical support and process as well as inpatients satisfaction and behavioral intentions of inpatients. The number of questions there are 19 items for the variable of contact personnel, 12 items for the variabel of physical support, 6 items for the variable of process, 5 items for the variable of inpatients satisfaction and 3 items for the variable of behavioral intentions inpatients. The scale measurement of the respondents' answers using a Likert scale of 5 (five) points ranging from a score of 1 to 5. In accordance with the problems and research objectives, the method of analysis used in this study is the analysis of structural equation modeling (SEM) and descriptive analysis. The method of SEM that used was Partial Least Square (PLS). The analysis of PLS is used to formulate the development of causal models of inpatient services CHC based on service delivery system.

#### IV. RESULTS AND DISCUSSION

**Analysis of The Value Outer Loading and Mean :** Outer loading value indicates the weight of each indicator as a measure of each variable. Indicator which has the highest value of the outer loading indicates that the indicator as a measure of the strongest (dominant) of the variable, or can be interpreted as the most important indicator. While the mean value of each indicator shows the actual condition, of course in the judgment or the perception of respondents.

**Table 2. The Outer Loading and The Mean of Indicators of The Contact Personnel**

Indicators	Outer Loading	Mean
The ability of doctors to provide services	0.568	3.67
The ability of nurses to provide services	0.657	3.64
The ability of non-medical personnel to provide services	0.712	3.38
The confidence of inpatients to doctors services	0.772	3.59
The confidence of inpatients to nurses services	0.726	3.59
The confidence of inpatients to non-medical personnel services	0.707	3.54
The friendliness of doctors providing services	0.561	3.78
The friendliness of nurses providing services	0.609	3.56
The friendliness of non-medicals providing services	0.584	3.43
The responsiveness of doctors providing services	0.663	3.61
The responsiveness of nurses providing services	0.644	3.54
The responsiveness of non-medical personnel providing services	0.641	3.28
The speed of doctors providing services	0.530	3.59
The speed of nurses providing services	0.621	3.50
The speed of non-medical personnel providing services	0.699	3.34
The ease meet doctors	0.605	3.41
The ease meet nurses	0.516	3.80
The suitability of a doctor's examination time	0.706	3.57
The promptness of food by the officer	0.620	3.54
Grand Mean		3.55

Source: Primary Data Processed (2014)

Based on Table 2 shows that the indicator of the confidence of patients to doctors services is the most important indicator in variable of contact personnel with the highest value of outer loading that is equal to 0.772. This means that the confidence of patients to doctors services is an indicator that has provided the greatest contribution to measure the variable of contact personnel. These findings illustrate that many inpatients in the CHC that psychologically trust and sure in the recovery because of the role of doctors services. Doctors have a very important role in inpatient care at CHC. The second biggest indicator is the confidence of inpatients to nurses services with outer loading value of 0.726. These results are consistent with the results of the research Wibowo *et al.* (2013) [50] that the quality and qualifications of medical personnel have an important role in developing inpatient services at CHC. Findings that the medical staff has an important role strengthened by his opinions Tomar and Dhiman (2013) [51] that the doctors and nurses as medical personnel have a role to encourage the healing of patients, especially the friendliness and special attention to the patient.

**Table 3. The Outer Loding and The Mean of Indicators of The Physical Support**

Indicators	Outer Loading	Mean
Feasibility of building	0.735	3.57
Feasibility Diagnostic Equipment	0.599	3.46
Feasibility of non-diagnostic equipment	0.624	3.61
Comfort of care room	0.728	3.50
Comfort of waiting room	0.691	3.39
Feasibility of the treatment room	0.648	3.50
Feasibility of waiting room	0.742	3.39
Hygiene of CHC	0.623	3.39
The strategic location of CHC	0.656	3.54
Ease achieving CHC location	0.701	3.63
Availability of public transportation to the CHC location	0.527	3.59
Grand Mean		3.51

Source: Primary Data Processed (2014)

Overall indicator of physical support variable has a value of outer loading above 0.5. This means that all indicators of physical support have contributed to the measurement of physical support. Some indicators have a high value of the outer loading is feasibility of waiting room of 0.742, the feasibility of building of 0.735, comfort of care room of 0.728, and ease achieving CHC location of 0.701. This finding is similar to results of studies Wibowo *et al.* (2013) [52] who concluded that the infrastructure has an important role in the development of CHC inpatient in East Java. Similar findings as obtained from the results of the study of Kristiani *et al.* (2006) [53] who concluded that the development of the quality designs of inpatient services CHC can be implemented by order of priority include: the infrastructure of inpatient services are well maintained ranks first priority, the availability of medical facilities and adequate medical support ranks third priority, as well as the availability of means of transport 24-hour ambulance ranks fifth priority.

**Table 4. The Outer Loding and The Mean of Indicators of The Process**

Indicators	Outer Loading	Mean
Service procedures (admission and discharge of patients)	0.768	3.59
Clarity of the information provided by officers	0.671	3.50
The accuracy of prescriptions drug	0.806	3.50
The quality of drugs received by patient	0.804	3.51
Availability of drugs in the CHC	0.713	3.42
Grand Mean		3.50

Source: Primary Data Processed (2014)

Based on Table 4 it appears that the indicators of variable outer loading process has a value greater than 0.5 even the most low 0.671. This means that all indicators can be said as a measure of process variables. Indicator which has the greatest outer loading is accuracy of prescriptions drug is equal to 0.806, followed by the quality of drugs received by patient with outer loading value of 0.804. Both indicators have a dominant role to shape the process variables. In other words, indicators of the quality of drugs received by the patients and the accuracy of prescriptions drug is an important factor that determines the quality of inpatient care at CHC in East Java.

**Table 5. The Outer Loding and The Mean of Indicators of The Satisfaction**

Indicator	Outer Loading	Mean
Satisfaction of the overall service outcomes	0.820	3.53
Satisfaction of the way of services	0.834	3.53
Satisfaction of the doctors care	0.621	3.59
Satisfaction of the nurses care	0.612	3.65
Satisfaction of the non-medical personnel care	0.587	3.24
Grand Mean		3.51

Source: Primary Data Processed (2014)

Table 5 shows that the indicators of satisfaction of the way of service and satisfaction of the overall service outcomes get the value of the outer loading relatively more large than the others, respectively 0.834 and 0.820. This illustrates that satisfaction of the way of services of CHC inpatient and satisfaction of the overall service outcomes, are indicators that have contributed greatly to the measurement of inpatients satisfaction of CHC. The indicator that has the lowest outer loading rate is satisfaction of non-medical personnel care is equal to 0.587.

**Table 6. The Outer Loading and The Mean of Indicators of The Behavioral Intentions**

Indicator	Outer Loading	Mean
Willingness to return to the CHC	0.861	3.62
Willingness to motivate others to visit and return to the CHC	0.791	3.54
Willingness to suggest improvements to the CHC	0.836	3.01
Grand Mean		3.39

Source: Primary Data Processed (2014)

Overall indicator of the variable of inpatients' behavioral intentions had value of outer loading greater than 0.5. Indicator of willingness to return to the CHC has the greatest value of outer loading is 0.861. This means that indicator of willingness to return to the CHC is the most dominant indicator that determines the measurement of inpatients' behavioral intentions. The indicator of second sequence is willingness to suggest improvements to the CHC with the outer loading value 0.836. This means willingness to suggest improvements to the CHC is also an important indicator to measure the variable of inpatients' behavioral intentions.

**The Model of Satisfaction and Behavioral Intentions-Based Service Delivery System :** Testing in the causal model was conducted of the 4 paths the causal relations that include contact personnel with inpatients satisfaction, physical support with inpatients satisfaction, process with inpatients satisfaction as well as inpatients satisfaction with behavioral intentions of inpatients. Based on the results of the PLS analysis to test the paths of causal relationship obtained the results as in Table 7.

**Table 7. Results of Hypothesis Testing with the PLS method**

Relationship	Path coefficient	T-Statistic	Remarks
Contact Personnel → Inpatients Satisfaction	0.498	3.430	Significant
Physical Support → Inpatients Satisfaction	0.319	2.396	Significant
Process → Inpatients Satisfaction	0.083	0.445	Not Significant
Inpatients Satisfaction → Behavioral Intentions of Inpatients	0.647	6.588	Significant

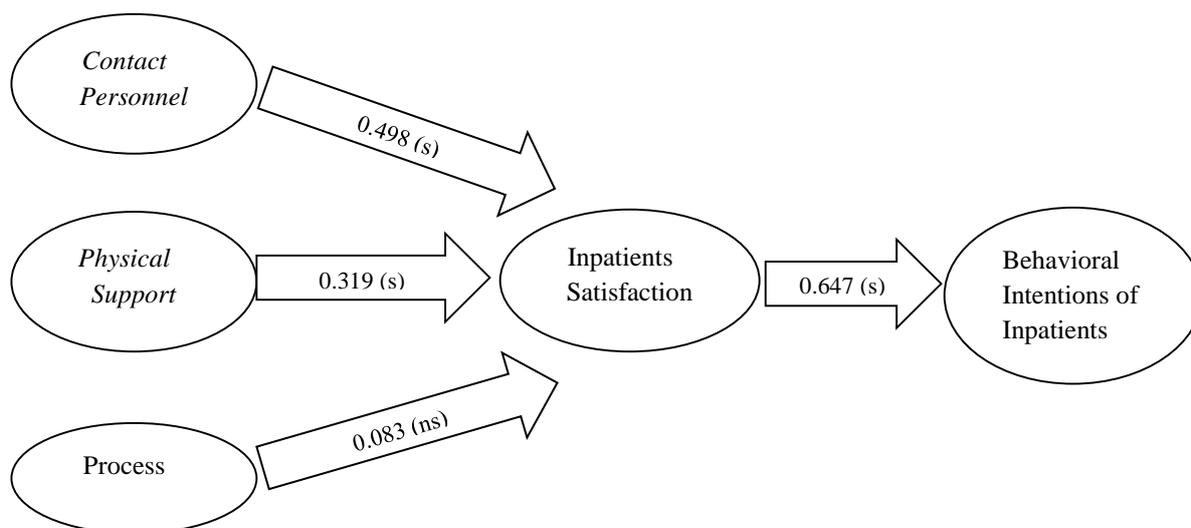
Source: Primary Data Processed (2014)

Based on the testing by using PLS obtained the results that contact personnel have an influence on inpatients satisfaction. The results of the analysis using PLS obtained path coefficient value of 0.498 with t-statistic of 3.430 is greater than 1.96 so that said contact personnel has significant influence on inpatients satisfaction. Given the path coefficient is positive, it can be interpreted that the better the contact personnel conducted by medical and non-medical personnel of CHC, the inpatients will be higher satisfied. Relationship path between physical support with inpatients satisfaction also showed similar results. The result of PLS testing showed that the physical support has an influence on inpatients satisfaction. Table 7 shows that the results by PLS analysis obtained that the path coefficient of 0.319 with t-statistic value of 2.396 is greater than 1.96, so it can be said that the physical support has a significant influence on inpatients satisfaction. Positive sign of the path coefficient means that the better condition of physical support that has been conducted by the management of CHC and the local government will increase inpatients satisfaction.

The different results occur in the process variable. As the results in Table 7 shows that the PLS testing results obtained findings that the process variable has no effect on inpatients satisfaction. This is reflected by the value of path coefficients are very small of 0.083 with t-statistic value of 0.445 is smaller than 1.96. Based on these results it can be concluded that the process has no effect on inpatients satisfaction at CHC in East Java. Another finding of this study is to obtain the results of patient satisfaction variables have an influence on inpatients' behavioral intentions at CHC in East Java.

This is indicated by the results of the PLS analysis as in Table 7 shows that the path coefficient, the effect of inpatients satisfaction on behavioral intentions of inpatients at CHC in East Java was 0.647 with t-statistic value of 6.588 is greater than 1.96. Referring to these results it can be concluded that the higher inpatients satisfaction, the behavioral intentions of inpatients at CHC in East Java is also getting bigger. The test results directly influence the pathways that can be displayed in the path diagram in Figure 2.

Figure 2. Path Diagram of Inpatient Services of CHC-Based Service Delivery System

**Note:**

s : significant

ns : not significant

Empirically, contact personnel that have an influence on inpatients satisfaction at CHC in East Java. These results indicate that the competence of human resources, especially doctors and nurses affect inpatients satisfaction. This finding supported the results of the descriptive analysis that the assessment of inpatients to the ability of doctors and nurses categorized well with the average value of the respective scores of 3.67 and 3.64. Only drawback is largely inpatients of CHC in East Java complained to the doctor for the time consultation. This is indicated by the average value of the indicator to the ease meet doctors just of 3.41. The another fact is that many doctors at CHC of inpatient do visit only 1 (one) times a day, sometimes not at all. Furthermore, many inpatients complained of no specialist doctor at the CHC of inpatient. According to Tomar and Dhiman (2013) [54] doctors and nurses have a strategic role in the development of inpatient services at CHC. Doctors and nurses as a medic role to encourage the healing of patients, especially the friendliness and special attention to the patient.

Based on the results of the PLS analysis it is known that physical support has an influence on inpatients satisfaction of CHC. This condition reflects that if the feasibility of building, equipment, treatment rooms, and the other support facilities improved, the inpatients satisfaction of CHC will increase. As well as the aspect of location of CHC and ease of transportation to CHC is an important factor. The more strategic and easy transportation to the CHC, the increasing inpatients satisfaction. Some indicators of physical support variables that perceived by the community obtain an average value that is not good, namely the comfort and feasibility of the waiting room, the cleanliness of the health centers as well as the feasibility of diagnostic equipment. This condition suggests that infrastructure, medical equipment and the support equipment of administrative operational still needs to be improved, in fact the infrastructure and supporting facilities determine the quality of service, and ultimately have an impact on satisfaction and loyalty of inpatients of CHC. Some results of studies such as that done by Boller *et al.* (2003) [55], Andaleeb (2000) [56], Baltussen *et al.* (2002) [57] and Duong *et al.* (2004) [58] identified that the medical facility is part of the inpatient service quality dimensions. The results of the research Sharma and Narang (2011) [59] prove that the medical facility had significant relationship with the repeat visits of inpatients.

## V. CONCLUSIONS AND RECOMMENDATIONS

**Conclusions :** The PLS analysis results showed that the inpatients' beliefs against doctors, nurses and non-medical personnel is a major indicator of its role in measuring the contact personnel. The ability of doctors and nurses assessed by inpatients is the best among other indicators. While that perceived by inpatients of the lowest performance is the speed of non-medical personnel in providing care for inpatients. Contact personnel have been able to increase inpatients satisfaction at CHC of inpatient in East Java. Based on the PLS analysis it is known that the feasibility of building / construction, comfort treatment room, waiting room feasibility, and ease of location of CHC are important indicator in determining the physical support. Inpatients assume that the ease of location of CHC already meet the expectations of the inpatients. While the feasibility of comfort and hygiene of waiting room of CHC are not meet the standards set. However, the physical support shown to increase inpatients satisfaction at CHC in East Java. Process variables which include service procedures, clarity of information, prescription provision, the quality of medicines and availability of medicines still not up with an average score of 3.50 so that the process variables have not been able to increase inpatients satisfaction. Furthermore, inpatients satisfaction can lead to the inpatients' intention to make the return visit to the CHC.

**Recommendations :** Based on the research results can be recommended some suggestions to be acted upon. The CHC and the health office of district / city government is expected to pay attention and improve facilities, medical equipment and facilities supporting for inpatient services of CHC. Weaknesses that still exist in the development of inpatient care at CHC in East Java such as quality of human resources non-medical require attention and followed up immediately by CHC management, District/City Health Office and Health Office of East Java Province. This can be through recruitment planning, placement, and training of staff required in accordance with the designation.

## REFERENCES

- [1] Wibowo, N.M. 2013. Strategi Pengembangan Pelayanan Rawat Inap Puskesmas Berbasis Service Delivery System. *Jurnal Ekonomi dan Keuangan* 17(3): 337-356.
- [2] Setiawan, O. 2011. *Mengkritisi Pengembangan Puskesmas Rawat Inap*. Media Online Bhirawa.
- [3] Pusat Data dan Informasi Kementerian Kesehatan R.I. 2014. Data Dasar Puskesmas Kondisi Desember 2013. Jakarta.
- [4] Setiawan, O. 2011. *Mengkritisi Pengembangan Puskesmas Rawat Inap*. Media Online Bhirawa.
- [5] Lovelock, C. and L. Wright. 2002. *Principles of Service Marketing and Management*. Prentice Hall Internasional. Inc. USA.
- [6] Goncalves, K.P. 1998. *Service Marketing A Strategi Approach*. Prentice Hall. New Jersey
- [7] Lovelock, C. and L. Wright. 2002. *Principles of Service Marketing and Management*. Prentice Hall Internasional. Inc. USA.
- [8] Heskett, J.L., W.E. Sasser and L.A Schlesinger. 1997. *The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value*. The Free Press, Simon & Schuster. New York.
- [9] Best, R. 2000. *Market Based Management. Strategies for Growing, Customer Value and Profitability*. PrenticeHall. New Jersey.
- [10] Goncalves, K.P. 1998. *Service Marketing A Strategi Approach*. Prentice Hall. New Jersey
- [11] Nguyen, N. and G. Leblanc. 2002. Contact Personnel, Physical Environment and Perceived Corporate Image of Intangible Services by New Clients. *International Journal of Service Industry Management* 13: 242-262.
- [12] Shamdasani, P.N. and A. Balakrishnan. 2000. Determinants of Relationship Quality and Loyalty in Personalized Services. *Asia Pacific Journal of Management* 17: 399-422.
- [13] Hutton, J.D and L. Richardson. 1995. Healthscapes: The Role of Facility and Physical Environment on Consumer Attitudes, Satisfaction, Quality Assessments, and Behaviors. *Health Care Management Review* 20: 48-60.
- [14] Heskett, J.L., W.E. Sasser and L.A Schlesinger. 1997. *The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value*. The Free Press, Simon & Schuster. New York.
- [15] Sabarguna, B. 2004. *Pemasaran Rumah Sakit*. Konsorsium RSI. Yogyakarta
- [16] Al-Hawary, S.I.S. 2012. Health Care Services Quality at Private Hospitals, from Patients' Perspective: A Comparative Study Between Jordan and Saudi Arabia. *African Journal of Business Management* 6(22): 6516-6529.
- [17] Hutton, J.D and L. Richardson. 1995. Healthscapes: The Role of Facility and Physical Environment on Consumer Attitudes, Satisfaction, Quality Assessments, and Behaviors. *Health Care Management Review* 20: 48-60.
- [18] Lamb, C.W, J.F. Hair and C. Mc. Andiel. 2002. *Marketing*. South Western College Publishing. United States of America.
- [19] Sabarguna, B. 2004. *Pemasaran Rumah Sakit*. Konsorsium RSI. Yogyakarta
- [20] Heskett, J.L., W.E. Sasser and L.A Schlesinger. 1997. *The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction, and Value*. The Free Press, Simon & Schuster. New York.
- [21] Nguyen, N. and G. Leblanc. 2002. Contact Personnel, Physical Environment and Perceived Corporate Image of Intangible Services by New Clients. *International Journal of Service Industry Management* 13: 242-262.
- [22] Snook, I D. 1992. *Hospitals, What They Are and How They Work*. An Aspen Publishers. Gaithersburg, Maryland.
- [23] Lim, C. P., K. Nielson and H.Tang.2000. A Study of Patients EXpectation and Satisfaction in Singapore Hospital International. *Journal of Health Care Quality Assurance* 13(7): 290-299.
- [24] Lovelock, C. and L. Wright. 2002. *Principles of Service Marketing and Management*. Prentice Hall Internasional. Inc. USA.
- [25] Lovelock, C. and L. Wright. 2002. *Principles of Service Marketing and Management*. Prentice Hall Internasional. Inc. USA.
- [26] Nguyen, N. and G. Leblanc. 2002. Contact Personnel, Physical Environment and Perceived Corporate Image of Intangible Services by New Clients. *International Journal of Service Industry Management* 13: 242-262.
- [27] Nguyen, N. and G. Leblanc. 2002. Contact Personnel, Physical Environment and Perceived Corporate Image of Intangible Services by New Clients. *International Journal of Service Industry Management* 13: 242-262.
- [28] Zeithaml, V.A. and M.J. Bitner. 2000. *Service Marketing*. Mc Graw-Hill Companies Inc. Singapore.
- [29] Shamdasani, P.N. and A. Balakrishnan. 2000. Determinants of Relationship Quality and Loyalty in Personalized Services. *Asia Pacific Journal of Management* 17: 399-422.
- [30] Best, R. 2000. *Market Based Management. Strategies for Growing, Customer Value and Profitability*. PrenticeHall. New Jersey.
- [31] Aschner, G.S. (1999) Meeting Customers' Requirements and What Can be Expected. *The TQM Magazine* 11(6): 450-455.
- [32] Gudmundson and Cristine. 2002. *Internal Marketing: A Way of Improving Service Quality*. Ostersund. Sweden
- [33] Widiastuti, Y. 2010. Sistem Penyampaian Jasa dan Citra Rumah di Surabaya Barat. *Jurnal Manajemen* 6(1): 1-13.
- [34] Andreassen, T.W. and B. Lindestad. 1998. The Impact of Corporate Image on Quality, Customer Satisfaction and Loyalty for Customer With Varying Degrees of Service Expertise. *International Journal of Service Industry Management* 9(1): 7-23.
- [35] Bloemer, J. and G.O. Schroder. 2002. Store Satisfaction and Store Loyalty Explained by Customer and Store Related Factors. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior* 15: 68-83.
- [36] Albari. 2013. Penilaian Kinerja Pelayanan Kepada Masyarakat Dengan Model Layanan yang Berkeadilan. Prosiding Seminar Nasional dan Call for Paper Forum Manajemen Indonesia (FMI) Ke-5. Fakultas Ekonomi Universitas Tanjungpura.
- [37] Tian-Cole, S., JL Crompton and VL Willson. 2002. An Empirical Investigation of the Relationships Between Service Quality, Satisfaction and Behavioral Intentions among Visitors to a Wildlife Refuge. *Journal of Leisure Research*. 34 (1): 1-24.
- [38] Yu, HC., HC. Chang and GL. Huang. 2006. A Study of Service Quality, Costumer Satisfaction and Loyalty in Taiwanese Leisure Industry. *The Journal of American Academy of Business* 9 (1): 126-133.
- [39] Tian-Cole, S., JL Crompton and VL Willson. 2002. An Empirical Investigation of the Relationships Between Service Quality, Satisfaction and Behavioral Intentions among Visitors to a Wildlife Refuge. *Journal of Leisure Research*. 34 (1): 1-24.
- [40] Stephens, N. and KP. Gwinner. 1998. Why don't some People Complain? A Cognitiveemotive
- [41] Huang, JH. And CY. Lin. 2005. The Explanation Effects on Costumer Perceived Justice, Satisfaction and Loyalty Improvement: An Exploratory Study. *The Journal of American Academy of Business*. 7 (2): 212-218.
- [42] Maxham III, JG. (1998), *Service Recovery's Influence on Complainant Attitudes andIntentions: A Perceived Justice Framework*, Dissertation, Louisiana: Louisiana State University and Agricultural & Mechanical College, 199 pages.

- [43] Wang, J. 2008. The Relationships Between Perceived Justice and Consumers' Behavioral Intentions after Service Complaint Handling and the Role of Anger. *The Business Review* 10 (1): 218-222.
- [44] Albari. 2013. Penilaian Kinerja Pelayanan Kepada Masyarakat Dengan Model Layanan yang Berkeadilan. Prosiding Seminar Nasional dan Call for Paper Forum Manajemen Indonesia (FMI) Ke-5. Fakultas Ekonomi Universitas Tanjungpura.
- [45] Tian-Cole, S., JL Crompton and VL Willson. 2002. An Empirical Investigation of the Relationships Between Service Quality, Satisfaction and Behavioral Intentions among Visitors to a Wildlife Refuge. *Journal of Leisure Research*. 34 (1): 1-24.
- [46] Huang, JH. And CY. Lin. 2005. The Explanation Effects on Customer Perceived Justice, Satisfaction and Loyalty Improvement: An Exploratory Study. *The Journal of American Academy of Business*. 7 (2): 212-218.
- [47] Maxham III, JG. And RG. Netemeyer. 2002. Modeling Customer Perceptions of Complaint Handling Over Time: The Effects of Perceived Justice on Satisfaction and Intent. *Journal of Retailing*. 78 (4): 239.
- [48] Oliver, L.R. (1999), Whence consumer loyalty?. *Journal of Marketing* 63 (4): 33-44.
- [49] Liang, R. and J. Zhang. 2011. The Effect Of Service Interaction Orientation On Customer Satisfaction And Behavioral Intention: The Moderating Effect Of Dining Frequency. *Procedia Social and Behavioral Sciences* 24: 1026-1035.
- [50] Wibowo, N.M., D.L. Panglipursari, Y. Widiastuti, dan R. Hasibuan. 2013. Model dan Strategi Pengembangan Pelayanan Kesehatan Berbasis Service Delivery System Pada Puskesmas Rawat Inap di Provinsi Jawa Timur. Laporan Tahunan Penelitian Hibah Bersaing. Universitas Wijaya Putra. Surabaya.
- [51] Tomar, A. and A. Dhiman. 2013. EXploring the Role of HRM in Service Delivery in Healthcare Organizations: A Study of an Indian Hospital. *Vikalpa* 38(2): 21-39.
- [52] Wibowo, N.M., D.L. Panglipursari, Y. Widiastuti, dan R. Hasibuan. 2013. Model dan Strategi Pengembangan Pelayanan Kesehatan Berbasis Service Delivery System Pada Puskesmas Rawat Inap di Provinsi Jawa Timur. Laporan Tahunan Penelitian Hibah Bersaing. Universitas Wijaya Putra. Surabaya.
- [53] Kristiani, Y.R., T. Kuntjoro, dan A. Utarini. 2006. Pengembangan Desain Mutu Pelayanan Rawat Inap Puskesmas Karanganyar Kebumen Menggunakan Quality Function Deployment. *Jurnal Manajemen Pelayanan Kesehatan* 9(4): 209-214.
- [54] Tomar, A. and A. Dhiman. 2013. EXploring the Role of HRM in Service Delivery in Healthcare Organizations: A Study of an Indian Hospital. *Vikalpa* 38(2): 21-39.
- [55] Boller, C., K. Wyss, D. Mtasiwa, and M. Tanner. 2003. Quality and Comparison of Antenatal Care in Public and Private Providers in the United Republic of Tanzania. *Bulletin of the World Health Organization* 81(2): 116-122.
- [56] Andaleeb, S.S. 2000. Public and Private Hospital in Bangladesh: Service Quality and Predictors of Hospital Choice, *Health Policy and Planning* 15(1): 95-102.
- [57] Baltussen, R.M., Y. Ye, S. Haddad, and R.S. Sauerborn. 2002. Perceived Quality of Care of Primary Health Care Services in Burkina Faso. *Health Policy Plan* 17: 42-48.
- [58] Duong, D.V., C.W. Binns, A.H. Lee, and D.B. Hipgrave. 2004. Measuring Client-Perceived Quality of Maternity Services in Rural Vietnam. *International Journal of Quality Health Care* 6: 447-457.
- [59] Sharma, J.K. and R. Narang. 2011. Quality of Healthcare Services in Rural India: The User Perspective. *Vikalpa* 36(1): 51-60.