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The Impact of Implementing Hospital's Stakeholder Collaboration on Hospital Performance

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Abstract

Introduction: Various hospital performance measurements have been determined by each country based on the health service system implemented in that country. The Hospital's Stakeholder Collaboration (HSC) concept is a combination of the hospital concept and the stakeholder collaboration concept. Aim to evaluate the development of the Hospital's Stakeholder Collaboration concept for improve hospital performance.

Method: Using a quasi-experimental research design. Our research subjects were patients, family patients, visiting doctors and insurance in outpatient settings, totaling 240 in the intervention group and 244 in the control group. This research intervention is the Hospital's Stakeholder Collaboration implementation module in hospitals. The statistical tool used is the comparison test of the means of two paired samples, Post Intervention and Control with Wilcoxon and Man Whitney test statistics.

Result: mean comparison test results between Pre-Post intervention group, concluded that Hospital Performance variable is different real between Pre-Post Intervention group . Where is the mean value of Post intervention group worth more than from Pre intervention. It means mark performance Hospital in the group intervention has experience enhancement compared before implementation.

Conclusion: Our model highlights the substantial positive influence of HSC quality on both hospital performance. The primary determinant of the quality of clinical and administrative choices and practices is the quality of hospital performance. The study revealed that the impact of Health Information Systems on hospital performance is mediated by the quality of health information.

Keyword: *Humans, Outpatients, Hospitals, Health Services, Health Information Systems*

Introduction

Competition in the health services sector is getting tighter and customers have many choices, so hospitals need to formulate their competitive advantages. The management of hospital institutions is very complex and requires handling by decision makers and implementation at the operational level by all hospital staff. According to Carla Del Gesso, hospitals need to pay attention to the needs of stakeholders and this must be included in the hospital performance report[1,2].

This research was carried out using concepts and theories about hospitals, stakeholder collaboration and performance. The core concepts and theories of this research are the concepts and theories of stakeholder collaboration. Collaboration with stakeholders can create value for the company, which has an impact on meeting customer needs [3]. The general aim of collaborating with stakeholders is to understand who our stakeholders are and what they want [4–6]. The relevance of stakeholder viewpoints, expectations, roles and influence also emerges in the idea of collaborative governance. This is referred to as a collective and participatory decision-making process where hospitals and stakeholders are interdependent in achieving performance targets and service satisfaction [7]. Effective stakeholder involvement needs to be supported by feedback and delivery regarding performance, results and impact for the organization. This is the main task of an organization's performance reporting system, which must provide more, more detailed and complete information (about decisions adopted and their resulting impacts) that is relevant to stakeholders to increase organizational accountability [8].

Based on several hospital concepts and the concept of stakeholder collaboration, we can provide the following definition of the Hospital's Stakeholder Collaboration concept. Namely the process of providing health services in hospitals that collaborates/involves stakeholders in an effort to fulfill stakeholder needs so that there is an increase in optimal hospital performance. Various hospital performance measurements have been determined by each country based on the health service system implemented in that country. Based on some evidence from previous research, a number of factors are related to hospital performance, namely quality improvement strategies [9,10]. leadership style and manager characteristics [11–13], effective communication, organizational culture, staff motivation and service delivery priorities, human resource management, distribution of energy in the top management team, non-organizational factors such as type of ownership, competition and interaction with other organizations [8].

Based on existing literature, there are several hospitals that have developed concepts related to stakeholders, but none have developed the Hospital's Stakeholder Collaboration concept. This background is one of the reasons why this research focuses on developing the Hospital's Stakeholder Collaboration concept to prove whether it can improve hospital performance. The Hospital's Stakeholder Collaboration concept is a combination of the hospital concept and the stakeholder collaboration concept. The concept of hospital performance is usually influenced by three factors, namely the condition of the provider, the profession providing care and stakeholders. Collaboration between hospital institutions and stakeholders is an aspect that has a very good impact in efforts to improve hospital performance.Extant research on this training module is also very limited.

We aim to evaluate the development of the Hospital's Stakeholder Collaboration concept for improve hospital performance. The results of this research will further help to refine this module to be more comprehensive and effective.

Method

Design

Using a quasi-experimental research design used was a pre test-post test group design. The research was conducted by dividing respondents into 2 groups, namely experimental and control. The experimental group was given treatment with the main focus on proving that the Hospital's Stakeholder Collaboration concept can improve the performance of hospital outpatient installations.

Analysis

This research was carried out by applying the module results from the model to the intervention and control groups. The measurement results for the two groups were both pre and post. After obtaining the measurement data, proceed with analysis.This analysis involves comparing the intervention and control groups. The aim is to test differences in mean values for hospital performance variables for each perspective. The outpatient room performance variable is the focus of the analysis. Because it is an endogenous variable which is the final goal of the model.

The statistical tool is a mean comparison test for 2 paired samples, with Wilcoxon test statistics. Where the aim is to compare within the pre-post condition group. Next, the test statistics compare 2 independent samples, with Mann Whitney test statistics. Where the aim is to compare between the Intervention-Control groups.

Intervention

The module for implementing Hospital's Stakeholder Collaboration in hospitals is a module prepared based on the results of literature studies, and discussions and consultations with hospital experts, which are the basis and background for preparing this module. This module is used as a guide and reference in implementing the Hospital's Stakeholder Collaboration concept in an effort to improve hospital performance. Based on several hospital concepts and the concept of stakeholder collaboration, we can provide the following definition of the Hospital Stakeholder Collaboration concept. Namely the process of providing health services in hospitals that collaborates/involves stakeholders in an effort to fulfill stakeholder needs so that there is an increase in optimal hospital performance. Stakeholder involvement can start from the level of direct service delivery, at the level of organizational design and governance, and at the level of policy making. In the research that the researcher will conduct is to involve stakeholders at the service delivery level. The stakeholders we involve are patients and their families, doctors and insurance companies. In this research there are 6 stages in implementing hospital stakeholder collaboration, namely stakeholder identification, interactive dialogue, commitment, plan design, implementation and changes in action and behavior.

Population

Based on the location of the research population, namely in the outpatient installation, subjects were patients, family patients, visiting doctors and insurance in outpatient settings, totaling 240 in the intervention group and 244 in the control group.. The sampling technique used in the research is simple random sampling technique.Inclusion criteria are criteria where research subjects represent research samples that meet the requirements as samples. The inclusion criteria for patients in this study were:1) Outpatient Installation Patients with a medical diagnosis of chronic disease.2) Have used services at another hospital.3) Willing to be a research respondent. 4) Able to read and write. Exclusion criteria are criteria where research subjects cannot represent the sample because they do not meet the requirements as a research sample. The exclusion criteria in this study were 1) The patient's condition is very weak and experiences impaired consciousness.2) Age less than 17 years.

Result

The analysis variables consist of from two group variable ie variable results implementation *Hospital Stakeholder Collaboration* (HSC) and Hospital Performance variables. Variable results HSC implementation is explained by 3 variables dimensions namely Cooperation (X1), Coordination (X2) and Trust (X3). Then Hospital Performance variable 4 variables were measured dimensions ie Stakeholder Perspective (Y1), Perspective Finance (Y2), Internal Business Process Perspective (Y3) and Perspective Capacity Employees and Organizations (Y4).

Based on purpose of stage analysis two For know impact from exists treatment (intervention) implementation of HSC on Hospital Performance. So the first step test is There is real difference with exists treatment HSC implementation of performance . For That use method comparison test analysis of the average (mean) between group control and treatment . Furthermore strengthened with comparison tests between condition before (pre) and after (post) treatment . Second step test more details regarding indicators and factors results HSC implementation that affects Hospital Performance.

Before enter the results analysis testing , following be delivered description from identity respondents research on groupscontrol and intervention .

Table 1. Identity respondents group Intervention and Control

		Group			
		Intervention		Control	
		Frequency	Percentage	Frequency	Percentage
Respondent_Group	Patient	169	**70.4%**	167	**68.4%**
	Family Patient	50	20.8%	56	23.0%
	Internal Doctor	8	3.3%	8	3.3%
	Visiting Doctor	10	4.2%	10	4.1%
	Officer Insurance	3	1.3%	3	1.2%
	Total	240	100.0%	244	100.0%
Age	17 - 25 years old	21	8.8%	48	19.7%
	26 - 35 years old	28	11.7%	31	12.7%
	36 - 45 years old	48	**20.0%**	37	**15.2%**
	46 - 55 years old	70	**29.2%**	37	**15.2%**
	56 - 65 years old	49	**20.4%**	39	**16.0%**
	> 65 years	24	10.0%	52	21.3%
	Total	240	100.0%	244	100.0%
Education	elementary school	23	9.6%	23	9.4%
	Junior High School	19	7.9%	19	7.8%
	Senior High School	77	**32.1%**	78	**32.0%**
	Diploma	24	10.0%	24	9.8%
	Bachelor	88	**36.7%**	91	**37.3%**
	Postgraduate	9	3.8%	9	3.7%
	Total	240	100.0%	244	100.0%
Gender	Man	124	**51.7%**	126	**51.6%**
	Woman	116	**48.3%**	118	**48.4%**
	Total	240	100.0%	244	100.0%
Work	Civil servants	56	**23.3%**	48	**19.7%**
	Employee Private	49	**20.4%**	55	**22.5%**
	Businessman	37	15.4%	42	17.2%
	Laborer	7	2.9%	7	2.9%
	Farmer	7	2.9%	8	3.3%

	Housewife	67	**27.9%**	66	**27.0%**
	Other	17	7.1%	18	7.4%
	Total	240	100.0%	244	100.0%

Based on table 1 above is known majority group respondents group intervention and controlie from group patient with relatively the same percentage .Likewise for _ group respondents other with amount relatively the same percentage. Then age respondents between group intervention and control majority has an age interval between 36 - 45 years , 46 - 55 years , 56 - 65 years . Respondent's education is known majority Undergraduate and high school, both For group intervention and control .Furthermore type sex with spread percentage relative men and women. The same between group intervention and control . Then work respondents is known majority as a Housewife Ladders , civil servants and employees Private with amount relative percentage The same between group intervention and control .

I.Comparative Analysisgroup Control and Intervention

The analysis aims to test differences in meanvaluesfortheoutcome variables HSC implementation viz Cooperation, Coordination and Trust variables. Then also the Perspective Hospital Performance variable *Stakeholders*, Perspectives Finance, Business Process Perspective Internal and Perspective Capacity Employees and Organizations. Comparison of mean values was carried out for each variable from the control and intervention group conditions . Test tool statistics used _ namely a comparisontestof 2 independent samples (control and intervention) with an independent test tool . Conclusion of test results with see Sig value. (2-tailed) are compared with α value = 0.05. If Sig value. (2-tailed) < 0.05 then concluded significant There is mean difference. If 0.1 < Sig. (2-tailed) < 0.05 concluded Enough significant There is mean difference. And if Sig. (2-tailed) > 0.1 then concluded No significant.

Meancomparisontestresultsgroup Intervention and Control from Cooperation, Coordination and Trust variables results The implementation of HSC ispresented in thefollowingtable.

Table2. Results of meanintervention-control comparison tests : variables implementation of HSC (Cooperation, Coordination , Trust)

Variable	Indicator	Group	Mean	Std. Deviation	Mean Difference	t	Sig. (2-tailed)	Conclusion
Cooperation	Improved cooperation quality service	Intervention	4.02	,894	,468	5,033	,000	Significant
		Control	3.55	1,134				
	2. There is cooperation bait come back related quality service	Intervention	4.08	,837	.071	,831	,406	No significant
		Control	4.01	1,030				
	3. Communication cooperation For increase quality services , health status	Intervention	4.10	,867	,284	3,108	,002	Significant
		Control	3.82	1,127				

	4. Mutual cooperation realize solution problem in a way together	Intervention	4.03	,877	,160	1,758	,079	Enough significant
		Control	3.86	1,112				
	Total Collaboration	**Intervention**	**16.22**	**3,218**	**,983**	**3,262**	**,001**	**Significant**
		Control	**15.24**	**3,407**				
Coordination	1. Coordination taking decision For increase quality services , health status	Intervention	4.07	,856	,161	1,832	,067	Enough significant
		Control	3.91	1,063				
	2. Facilities collaboration directly stakeholders	Intervention	3.78	,871	,037	,412	,681	No significant
		Control	3.74	1,109				
	3. Information services related change timetable or regulation	Intervention	3.76	,951	.033	,355	,722	No significant
		Control	3.73	1,082				
	Total Coordination	**Intervention**	**11.60**	**2.28 3**	**,231**	**1,000**	**,318**	**No significant**
		Control	**11.37**	**2.77 5**				
Trust	1. Trust service health	Intervention	4.07	,870	,063	,727	,468	No significant
		Control	4.00	1,016				
	2. Benefits from stakeholder collaboration	Intervention	4.00	,861	,430	4,427	,000	Significant
		Control	3.57	1,241				
	3. Trust quality service health	Intervention	4.10	,837	,112	1,338	,181	No significant
		Control	3.99	1,000				
	4. Trust Stakeholders themselves in suggestions for improvement quality service health	Intervention	3.76	,928	-.115	-1,278	,202	No significant
		Control	3.87	1,040				

	5. Attention Manager to Stakeholder suggestions	Intervention	3.64	,914	,162	1,845	,066	Enough significant
		Control	3.48	1,016				
	6. Will use service health	Intervention	4.29	,831	,939	11,276	,000	Significant
		Control	3.35	,993				
	Total Trust	**Intervention**	**23.8 5**	**4,450**	**1,592**	**3,828**	**,000**	**Significant**
		Control	**22.25**	**4,692**				
Total Cooperation	**Coordination Trust**	**Intervention**	**51.67**	**9.40**	**2,806**	**3,220**	**.00 1**	**Significant**
		Control	**48.8 7**	**9.76**				

Basedontable2above , in total _ from variables Cooperation- Coordination - Trust from group intervention and control , comparison test results the mean is inferred is significant different (Sig = 0.001). Where the total value is known score group intervention more big from group control. Then in a way dimensions Cooperation variable, the results of the mean comparison test between the control and intervention groups usingtheindependent t test, givesthemeanresults significant different (Sig = 0.00). Where is the value score intervention more big from control. If seen from different tests each indicators its constituents, have variation results, among others is as following :

1. Indicator 1: Increased cooperation quality service, it was concluded that the mean was significantly different (Sig = 0.00).
2. Indicator 2: Feed cooperation come back related quality service, concluded mean No significantly different (Sig = 0.406).
3. Indicator 3: Communication cooperation For increase quality Health status services, it was concluded that the mean was significantly different (Sig = 0.002).
4. Indicator 4: Mutual cooperation realize solution problem together, concluded the means are quite differentreal (Sig = 0.079).

Furthermore variable Coordination between groups intervention control with an independent t test, giving mean results No significant different (Sig = 0.318).). Where is the value score intervention relatively the same with control. If seen from different tests each indicators its constituents, have results conclusion relatively the same, with results as following :

1. Indicator 1: Coordination taking decision for increase quality health status services, concluded that the mean is sufficient significantly different (Sig = 0.067).
2. Indicator 2: Facilities collaboration direct *stakeholders concluded* mean No significantly different (Sig = 0.681).
3. Indicator 3: Service information related change timetable or rule concluded mean No significantly different (Sig = 0.722).

Then conditions variable Trust between control groups and intervention with an independent t test, giving mean results significant different (Sig = 0.00).). Where is the value score intervention more big from control. If seen from different tests for each indicators its constituents, have variation results, namely:

1. Indicator 1: Trust service health, it is concluded that the mean is not significantly different (Sig = 0.568).
2. Indicator 2: Benefits from collaboration *stakeholders*, it was concluded that the mean was significantly different (Sig = 0.000).
3. Indicator 3: Trust quality service health, concluded mean No significantly different (Sig = 0.181).

4. Indicator 4: Trust self-*stakeholders* in providing suggestions for improvement quality service health, concluded mean No significantly different (Sig = 0.202).
5. Indicator 5: Attention manager to *stakeholder* suggestions, it was concluded that the mean different quite real (Sig = 0.066).
6. Indicator 6: Will use service health, concluded mean different real (Sig = 0.000).

Mean comparison test results group Intervention and Control For Hospital Performance variable Sick is as following :

Table3. Mean comparison test results group intervention-control: Hospital Performance variable (Stakeholder Perspective , Perspective Finance , Internal Business Process Perspective and Perspective Capacity Employees and Organizations)

Variable	Indicator	Group	Mean	Std. Deviation	Mean Difference	t	Sig. (2-tailed)	Conclusion
Y1. Stakeholder Perspective	Y11 Waiting Time Service	Intervention	4,111	.6918	.6152	7,923	,000	Significant
		Control	3,496	.9880				
	Y12 Stakeholder Satisfaction	Intervention	4,473	.6229	.6164	9,413	,000	Significant
		Control	3,857	.8046				
	Y1_Stakeholder Perspective	**Intervention**	**8,584**	**1.1865**	**1.2316**	**9,577**	**,000**	**Significant**
		Control	**7,352**	**1.6076**				
Y2. Financial Perspective	Y21 Easy Payment Process	Intervention	4,531	.7613	.2536	3,394	,001	Significant
		Control	4,278	.8772				
	Y22 Determination Cost	Intervention	4,750	.5450	.6189	8,217	,000	Significant
		Control	4,131	1.0340				
	Y23 Reasonableness Cost	Intervention	4,758	.5488	.6190	8,314	,000	Significant
		Control	4,139	1.0169				
	Y2_Financial Perspective	**Intervention**	**14,040**	**1.5987**	**1.4914**	**7,381**	**,000**	**Significant**
		Control	**12,**	**2.69**				

		ol	**548**	**93**			
Internal Business Process Perspective	Y31 Service Flow Speed	Intervention	4,522	.6198	.5831	9,139	,000 Significant
		Control	3,939	.7741			
	Y32 Capabilities Service	Intervention	4,663	.6260	.5887	7,618	,000 Significant
		Control	4,074	1.0237			
	Y33 Qualities Service	Intervention	4,502	.6892	.5402	7,604	,000 Significant
		Control	3,961	.8626			
	Y34 Quality Provision facilities and infrastructure	**Intervention**	**4,688**	**.5039**	**.6072**	**10,040**	**,000 Significant**
		Control	**4,080**	**.7924**			
	Y35 Speed Provision facilities and infrastructure	Intervention	4,688	.6053	.7121	9,096	,000 Significant
		Control	3,975	1.0538			
	Y3_Internal Business Process Perspective	Intervention	23,061	2.6555	3.0313	10,020	,000 Significant
		Control	20,030	3.8766			
Y4.Capacity Perspective Employees & Organization	Y41 Upgrade Skills	Intervention	4,596	.5580	.4975	8,081	,000 Significant
		Control	4,099	.7768			
	Y42 Upgrade Networking	Intervention	3,379	1.2179	.4980	3,982	,000 Significant
		Control	2,881	1.5147			
	Y4_Perpeksi_Employee & Organizational Capacity	**Intervention**	**45,684**	**5,143**	**5,754**	**9,711**	**,000 Significant**
		Control	**39,930**	**7,632**			
Total Hospital Performance Perspective		**Intervention**	**53.660**	**6,145**	**6,749**	**9,908**	**,000 Significant**
		Control	**46,**	**8,61**			

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Based on table 3 above , in total _ from perspective performance group intervention and control , that the results of the mean comparison test are concluded is significant different (Sig = 0.000). Where the total value is known score group intervention more big from group control.

Then mean comparison test results on variables Dimensional performance Stakeholder perspective between control and intervention groups, provides conclusions themean result significant different (Sig = 0.00). Where is the value score intervention more big from control. If seen from different tests each indicator its constituents, have The conclusions are also different significant. On the Y11 indicator Wait Time Service , itwasconcludedthatthemeanwassignificantlydifferent(Sig = 0.00). Indicator Y12 Stakeholder Satisfaction, it is concluded that the mean is significantly different (Sig = 0.00).

Furthermore mean comparison test results on variables Dimensional performance perspective finance between the control and intervention groups, providesconclusions themean result significant different (Sig = 0.00). Where is the value score intervention more big from control. If seen from different tests each indicator its constituents, have the conclusions are also different significant. In theY21 Easy Payment Process indicator , itisconcludedthatthemeanissignificantlydifferent(Sig = 0.00). Indicator Y22 Determination Cost, it is concluded that the mean is significantly different (Sig = 0.00). And the Y23 Fairness Indicator Cost, it is concluded that the mean is significantly different (Sig = 0.00).

H mean comparison test results on variables Dimensional performance internal business process perspective betweenthecontroland interventiongroups, providingconclusions themean result significant different (Sig = 0.00). Where is the value score intervention more big from control. If seen from different tests each indicator its constituents, have the conclusions are also different significant. In indicator Y31 Service Flow Speed , it is concluded that the mean is significantly different (Sig = 0.00). Y32 Capability Indicator Service, it is concluded that the mean is significantly different (Sig = 0.00). Y33 Quality Indicator Service, it is concluded that the mean is significantly different (Sig = 0.00). Y34 Quality Indicator Provision facilities and infrastructure, it was concluded that the means were significantly different (Sig = 0.00). Y35 Speed Indicator Provision facilities and infrastructure, it was concluded that the means were significantly different(Sig = 0.00).

H meancomparisontestresultson variables Dimensional performance perspective capacity employees & organizations betweenthecontroland intervention groups, provides conclusions themean result significant different (Sig = 0.00). Where is the value score intervention more big from control. If seen from different tests each indicator its constituents, have the conclusions are also different significant. On theY41 indicator Increase Skills , concluded that the mean is significantly different (Sig = 0.00). Y42 Indicator Improvement Network ,it was concluded that the means were significantly different(Sig = 0.00).

Conclusion: Based on mean comparison test results between group intervention and control, concluded that variable results HSC implementation related to cooperation, coordination and trust is different real between group intervention and control. Where in total, value group intervention worth more big. The same conclusion was also obtained from mean difference test results for variable performance Hospital. It means results HSC implementation is capable increase mark performance. This thing is known from significant comparison test results _ different and group intervention own mark more performance _ big compared to group control.

For strengthen results conclusion mentioned, is also carried out comparison between Pre and Post Intervention conditions. More following this.

II.Comparative AnalysisPre-Post Intervention group

The analysis aimstotestdifferences in meanvalues from pre and post intervention groups. Where is thevariablebeing tested namely Perspective Hospital Performance _ *Stakeholders*, Perspectives Finance , Internal Business Process Perspective and Perspective Capacity Employees and Organizations . Test tool statistics used _ namely a comparison test of 2 paired samples (control and intervention) withthepairwiset test tool . Conclusion of test results with see Sig value. (2-tailed) are compared with α value = 0.05. If Sig value. (2-

tailed) < 0.05 then concluded significant There is mean difference. If 0.1 < Sig. (2-tailed) < 0.05 concluded Enough significant There is mean difference. And if Sig. (2-tailed) > 0.1 then concluded No significant. Mean comparison test results presented in the table as follows.

Table4. Mean comparison test results pre-post intervention : variable performance

Variable	Indicator	Mean	Std. Deviation	Mean Difference	t-statistics	Sig.(2-tailed)	Conclusion
Y1_Stakeholder Perspective	Y11_Pre_Wait_Time Service	3,396	,696	-.7153	-11,407	,000	Significant
	Y11_post_Service_Waiting Time	4,111	.6918				
	Y12_Pre_Stakeholder_Satisfaction	3,844	,732	-.6247	-10,479	,000	Significant
	Y12_Post_Stakeholder_Satisfaction	4,468	,630				
	Y_Pre_Total	7,239	1,277	-1,339	-12,335	,000	Significant
	Y1_Post_Total	8,579	1,193				
Y2_Perspective Finance	Y21_Pre_Easy_Payment_Process	4,244	.8182	-.2875	-3,857	,000	Significant
	Y21_Post_Easy_Payment_Process	4,531	.7613				
	Y22_Pre_Determining_Fee	4,129	,899	-.601	-8,714	,000	Significant
	Y22_Post_Charge_Determination	4,730	.5404				
	Y23_Pre_Fee_Fairness	4,258	,828	-.477	-7,300	,000	Significant
	Y23_Post_Fair_Cost	4,735	.5437				
	Y2_Pre_Total	12,631	2,420	-1,365	-7,177	,000	Significant
	Y2_Post_Total	13,996	1,633				
Y3_Internal Business Process Perspective	Y31_Pre_Secret_Service_Flow	3,937	,713	-.585	-9,322	,000	Significant
	Y31_Post_District_Service_Flow	4,522	.6198				
	Y32_Pre_Service Capabilities	4,063	,873	-.600	-9,024	,000	Significant
	Y32_Post_ServiceCapabilities	4,663	,626				
	Y33_Pre_Qualiyas_Services	3,940	,746	-.562	-8,608	,000	Significant
	Y33_Post_Qualiyas_Services	4,502	,689				
	Y34_Pre_Quality_Provision of Infrastructure	3,948	.7882	-.719	-11,860	,000	Significant
	Y34_Post_Quality_Provision of Infrastructure	4,667	,516				
	Y35_Pre_Speed_of Infrastructure Provision	3,900	,959	-.758	-10,214	,000	Significant

	Y35_Post_Speed_of Infrastructure Provision	4,658	,597				
	Y3_Pre_Total	19,787	3,735	-3,224	-10,965	,000	Significant
	Y3_Post_Total	23,011	2,718				
Y4_Perspective _Capacity Employee Organization	Y41_Pre_Skills_Enhancement	4,049	,798	-.541	-8,711	,000	Significant
	Y41_Post_Skills_Enhancement	4,591	.5651				
	Y42_Pre_Network_Enhancement	3,475	1,039	,065	,621	,535	Not significant
	Y42_Post_Network_Improvement	3,410	1,213				
	Y4_Pre_Total Performance	**7,524**	**1,400**	**-0.476**	**-3,579**	**,000**	**Significant**
	Y4_Post_Total Performance	8,001	1,465				

Based on table 4 above , comparison pre-post condition on all perspective performance , everything is significant different (Sig = 0.000). Where the total value is known score more post groups big from Pre group. Full results as following.

H dimensional comparison test results Perspective *Stakeholders* provide conclusions significant different (Sig = 0.00). Where is the value post score more big from pre. More carry on seen from each indicator its creator, p there is a Y11 Wait Time indicator Service, it was concluded that the Pre-Post mean was significantly different (Sig = 0.00). Y12 Satisfaction Indicator *Stakeholders*, it was concluded that the Pre- Post mean was significantly different (Sig = 0.00).

H mean comparison test results dimensions Perspective Finance between Pre- Post intervention, providing conclusions significant different (Sig = 0.00). Where is the value Post score more big from Pre. More carry on seen from For each of the indicators that make up it , with the Y 21 Easy Payment Process indicator, it is concluded that the mean is significantly different (Sig = 0.00). Indicator Y22 Determination Cost, it is concluded that the mean is significantly different (Sig = 0.00). And the Y23 Fairness Indicator Cost, it is concluded that the mean is significantly different (Sig = 0.00).

H mean comparison test results on dimensions internal business process perspective between Pre- Post intervention, providing conclusions significant different (Sig = 0.00). Where is the value Post score more big from Pre. More continue on each indicator its constituents , have The conclusions are also different significant . In indicator Y31 Service Flow Speed , it is concluded that the mean is significantly different (Sig = 0.00). Y32 Capability Indicator Service, it is concluded that the mean is significantly different (Sig = 0.00). Y33 Quality Indicator Service, it is concluded that the mean is significantly different (Sig = 0.00). Y34 Quality Indicator Provision facilities and infrastructure, it was concluded that the means were significantly different (Sig = 0.00). Y35 Speed Indicator Provision facilities and infrastructure, it was concluded that the means were significantly different (Sig = 0.00).

H mean comparison test results on dimensions perspective capacity employees & organizations between Pre-Post intervention, provideconclusions Which significant different (Sig = 0.00). Where is the value Post score more big from Pre. If seen from different tests each indicator its constituents, have conclusion varying results. On theY41 indicator Increase Skills, concluded that the mean is significantly different(Sig = 0.00). Whereas indicator Y42 Improved Network, concluded mean No significantly different (Sig = 0.535).

Based on mean comparison test results between Pre-Post intervention group, concluded that Hospital Performance variable is different real between Pre-Post Intervention group. Where is the mean value of Post intervention group worth more than from Pre intervention. It means mark performance Hospital in the group intervention has experience enhancement compared before implementation.

Discussion

This research examines the evaluation of the Hospital Stakeholder Collaboration module on patients in an effort to improve hospital performance.The analysis variables consist of from two group variable ie variable results implementation *Hospital Stakeholder Collaboration* (HSC) and Hospital Performance variables. Variable results HSC implementation is explained by 3 variables dimensions namely Cooperation (X1), Coordination (X2) and Trust (X3). Then Hosptal Performance variable 4 variables were measured dimensions ie Stakeholder Perspective (Y1), Perspective Finance (Y2), Internal Business Process Perspective (Y3) and Perspective Capacity Employees and Organizations (Y4).

The Ministry of Health (MOH) plays a crucial role as a significant stakeholder in the referral process.The entrance point of patients into clinical care encompasses the physical infrastructure, healthcare personnel, and policies regarding the referral of patients with hypertension across primary, secondary, and tertiary facilities. In order for a referral plan to be successful and sustainable, it is imperative that it obtains acceptance and adoption from the Ministry of Health (MOH)[14]. This entails ensuring that the strategy is in line with the Kenyan Health Sector Referral plan. By proactively involving the Ministry of Health's Non-Communicable Diseases (MOH-NCD) leadership and notifying them about our intention to investigate the existing referral strategy for hypertension in order to identify any deficiencies and potential areas for enhancement in written form, we facilitated smoother partnerships with county and subcounty entities. The study project was publicly presented to healthcare practitioners at both the county and subcounty levels, generating significant enthusiasm and yielding valuable comments that informed the design of research tools.

The healthcare professionals highlighted the dissatisfaction experienced by patients when they are referred to secondary or tertiary healthcare facilities. They also emphasized that the problem is exacerbated by inadequate communication between various healthcare systems. The counties possess county health committees, with whom we conducted consultative meetings to provide a more comprehensive explanation of the research objectives and ensure its alignment with the local referral goals[9]. The individuals conveyed their wish for the participation of their county health information systems and records personnel in the process of designing and developing the referral module, in order to ensure seamless communication with their existing health information systems. The participants also expressed their desire to receive quarterly updates on the advancement of the study, either in written form or through formal meetings.The administrators of the facility played a crucial role in organizing and coordinating meetings with clinicians and health committees[15]. They collaborate directly with the community strategy officers, who then organize and lead community gatherings.

Our model additionally demonstrates that the Hospital's Stakeholder Collaboration(HSC) has a direct positive effect on the quality of health information, and this quality of health information directly influences hospital performance. Furthermore, the quality of health information. The entity in question functions as an intermediary to some extent between the Hospital's Stakeholder Collaboration (HSC) and the performance of hospitals[16].

The evaluation of health information is contingent upon its accuracy,The key factors to consider in evaluating a system are its completeness, currency, sufficiency, comprehension, and security.The concepts of standardization and availability are crucial in various academic disciplines. Standardization refers to the process of establishing uniform criteria or protocols for a certain practice or measurement. It Prior studies have indicated that health information[17].

The significance of quality in HSC (Hospital's Stakeholder Collaboration) is pivotal in the domains of administration, planning, and execution. Offers valuable insights for managers and healthcare professionals. Nevertheless, the presence of substandard information can result in a decline in overall performance. Issues such as the escalation of medical errors, exorbitant expenses, and substandard quality In the realm of scholarly literature, the concept of "care" has been explored by Byrd and Byrd, Cabitza and Batini, and Mohammed and colleagues. However, the prompt acquisition of precise, comprehensive, and reliable information remains crucial and personalized healthcare interventions. Bouamrane have highlighted the need of providing patients with efficient and proficient healthcare services[18].Cabitza and Batini conducted a study[19]. The accessibility of health information of this nature. Facilitates the process of decision making for healthcare providers. This aids

in providing clarification. The process of verifying information utilized in patient diagnosis and therapy is of utmost importance. strategic approach. Health Information Technology (HIT) enhances the overall quality of health information through the implementation of a well-thought-out and systematic plan[20].

The topic of discussion pertains to coding standards and the process of validating them in the context of electronic records. This enables or promotes. The sharing and exchange of health information between hospitals is a critical aspect of data management in the healthcare sector[21]. According to Hovenga, many entities within the healthcare sector, such as departments, units, and health service providers, play significant roles in the delivery of healthcare services[22]. On the contrary, the capabilities provided by Health Information Technology (HIT) encompass clinical decision-making. The utilization of support systems, information sharing, and knowledge management is crucial in various academic contexts. These elements play a significant role in facilitating effective collaboration, enhancing decision-making processes, and promoting the efficient dissemination and utilization of information and knowledge within academic communities[23].
Facilitates the implementation of strategic plans, enhances organizational coordination and integration, and optimizes operational efficiency through the consolidation and rationalization of tasks[24]. The operational processes and procedures implemented within healthcare facilities, specifically hospitals. Nevertheless, the use of Health Information Technology (HIT) demonstrates a high level of effectiveness. The extent of the impact is heavily contingent upon the caliber of the acquired information. Therefore, the provision of superior healthcare services Information has a pivotal role in facilitating the improvement of organizations and patients alike. The findings of the study are presented.

Conclusion

The Intervention results of the HSC model suggest that it possesses sufficient intervention to be utilized in hospitals for the purpose of studying their performance measurements. Our model highlights the substantial positive influence of HSC quality on both hospital performance and health information. The primary determinant of the quality of clinical and administrative choices and practices is the quality of health information. The study revealed that the impact of Health Information Systems (HIS) on hospital performance is mediated by the quality of health information. The efficacy of HSC in enhancing performance within the hospital setting has been proven. Despite several attempts in empirical research to investigate the potential clinical and nonclinical outcomes associated with Hospital's Stakeholder Collaboration (HSCs), there has been a lack of focus given to studying the effects of HSCs on working conditions and process orientation within health facilities. It is anticipated that the utilization of a valid measuring instrument in this study will lay the foundation for future research endeavors exploring the impact of Hospital's Stakeholder Collaboration (HSC) on the enhancement of employment conditions and the orientation of business operations, particularly within intricate work settings such as hospitals.

Competing interest statement

The authors declare no conflict of interest.

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