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**Original Article** 

# Correlation Between Hospital Stakeholder Collaboration and Outpatient Department Performance: A Case Study of One Indonesian Hospital

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#### KEYWORDS

Hospital Stakeholder collaboration Performance Service improvement Patient centered care

#### ABSTRACT

**Introduction:** The emerging concept of stakeholder collaboration in healthcare settings enhance evidence-based practice, patient centered, decision-making, and ultimately, patient outcomes. However, the phenomenon evidence is scarce.

Purpose: The aim is to examine the correlation between hospital stakeholder collaboration (HSC) and the hospital performance factor (HPF) of Outpatient Department (OPD).

**Method:** The study employs quantitative cross sectional correlative design using structural equation modeling. The population was 2,338 stakeholders of hospital OPD, i.e. patients, families, internal and external physicians, and insurance staff. The study sample was 240 stakeholders result of random, and then convenience sampling. The variable investigated was HSC in correlation to the HPF of OPD. It analyzed the path correlation; the significance of path coefficients that construct each variable was analyzed to highlight the dominant factor using SEM PLS. A significance level of  $\alpha$ =5% was used, and the number of bootstrap samples set to 5000.

**Result:** The HSC components (X1, X2, X3, and X4) significantly influence HPF (Y) of OPD. Stakeholder Identification (X1) directly and indirectly affects Building Shared Goals (X4) through Interactive Dialogue (X2) and Building Commitment (X3) with coefficients of 0.356 and 0.476, respectively. In addition, Building Commitment (X3) directly impacts Building Shared Goals (X4) with a coefficient of 0.428.

**Discussion:** The study findings highlight the crucial role of stakeholder collaboration in enhancing OPD performance and provide valuable insights for hospital administrators to improve service quality.



#### Introduction

todav's healthcare landscape, In active stakeholder involvement, including patients, families, physicians, and insurers, is vital for enhancing quality [1]. Emphasizing Evidence-Based Practice (EBP) and Patient-Centered Care (PCC) highlights the need to engage stakeholders in care [2, 3]. As PCC becomes more common, there is a gradual 10% improvement in wellbeing and patient satisfaction [4]. Long-term strategies like network-building and fostering collaboration, as seen in a German study, are key to successful PCC [5]. Hospitals should sustain strong networks and a collaborative culture through effective communication [5]. Stakeholder collaboration holds promise for evidence-based practice, patient-centered decisions, and improved outcomes. Reports show patients involved in treatment decisions based on their preferences experience higher care quality [6-8]. The study is urgent because every year 8 million death occur in the LMICs (Low- and Middle-Income Countries) caused by poor quality health system. In addition, around 6 trillion USD worth of health finances loss to the same cause [9]. The high loss is due to some factors related to health care delivery and health care facility. It is found that most of the care delivered half than the standard of evidence-based practice. For instance, less than half of women that delivered in the health care facility receive health examination 1-hour post-labor. Almost one third of the OPD patient felt problem such as the disrespectful care, rushed consultation, poor health education, and long queues [9, 10]. This study also mentions that less than half of the service user belief that the health care facility is working well [9]. However, the collaboration does possess several barriers that hinder the successful stakeholder participation [11]. This study found three main barriers for stakeholder engagement, which were infrastructure to support engagement, building relationships, and maintaining relationships [12]. Subsequently, hospitals with greater engagement among staff and senior managers in Quality Improvement (QI) teams tend to achieve better hospital-level quality indicators [13]. Patient and patient family engagement is vital in the collaboration process, requiring professionalism, hospital service experience, and advocacy [14]. In quality improvement, involving a select few key stakeholders to represent inputs, processes, and outputs may be adequate; however, there is limited understanding of the collaborative process, particularly in healthcare system redesign with multiple stakeholders [15]. Understanding diverse stakeholder needs and the collaborative process is crucial for integrating their perspectives [14]. However, empirical evidence supporting their use in implementation remains limited [16]. This study aims to do an in-depth investigation to

This study aims to do an in-depth investigation to the correlation between hospital stakeholder collaboration (HSC) and hospital performance factors (HPF) within the OPD setting. By focusing on the unique context of these two variables, this study will provide valuable insights and recommendations to enhance stakeholder collaboration in OPD, ultimately leading to improved hospital care and service.

#### **Materials and Methods**

#### Design

This study aimed to investigate the correlation between hospital stakeholder collaboration (HSC) and the hospital performance factor (HPF) within the context of the Outpatient Department (OPD). It employed a quantitative approach with a cross-sectional correlative research design and utilized Structural Equation Modeling Partial Least Squares (SEM-PLS).

#### Model specification

This study developed a conceptual model that reflected the relationship between HSC and HPF within the hospital's OPD setting. It hypothesized that higher levels of HSC would lead to higher HPF within the OPD. The model also accounted for control variables that might have influenced this relationship, such as respondent characteristics.

#### Variable measurement

The study utilized a valid and reliable measurement tool designed for five key stakeholders (patients, patient families, internal physicians, external physicians, and insurance company staff) to assess HSC and HPF [17]. This tool, used to measure HSC and HPF, consisted of four construct variables each, with HSC stakeholder identification, encompassing interactive dialogue, commitment, and planning (X1, X2, X3, and X4), and HPF involving stakeholder perspective, financial perspective, internal business process, and staff and organizational capacity (Y1, Y2, Y3, and Y4). Each construct variable was measured using multiple indicators, as illustrated in Figure 1. These instruments have been validated and proven reliable for data collection.

# Population/Sample/Sampling

The research population consisted of stakeholders of the Universitas Muhammadiyah Malang OPD, including patients, patient families, internal physicians, external physicians, and insurance company staff. According to the hospital's data three months prior, the population comprised approximately 2,338 patients. The population of patient families was not recorded. All internal physicians, external physicians, and insurance company staff were included in the study. The insurance staff represented various companies. Patient selection utilized simple random sampling. Since not all patients were accompanied by family members, convenience sampling was employed to select patient family members. The total sampling technique was used to select internal physicians, external physicians, and insurance company staff. The sample size for patients was determined using the Lameshow formula with a 95% confidence interval, resulting in 169 OPD patients. There were 8 internal physicians, 10 external physicians, and 3 insurance company staff members.

# Data collection

Data were collected by distributing questionnaires to the selected participants. The questionnaire of HSC and HPF has been developed and proven valid and reliable. The questionnaire is designed for each stakeholder (patient, patient family, internal physicians, external physicians, and insurance company staff) [17].

#### SEM-PLS model estimation

The core analysis was conducted using Structural Equation Modeling Partial Least Squares (SEM-PLS). The SEM-PLS computed path coefficients to measure the relationship between HSC and HPF. A significance level of  $\alpha$ =5% is used, and the number of bootstrap samples is set to 5000. The data is analyzed using SEM-PLS 4 version, and the results are presented in graphical and tabular forms. SEM-PLS was chosen for its robustness against normality assumptions and suitability for relatively small sample sizes.

#### Model evaluation

The results of the SEM-PLS analysis were interpreted while considering model goodnessof-fit. Goodness-of-fit statistics, such as goodnessof-fit index (GFI) and comparative fit index (CFI), were examined to assess the model's alignment with the data.

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Figure 1: Validity and reliability test of the model

Characteristics	Detail	Mean (Min – Max) or Frequency (%)
Stakeholder type	Patient	169 (70.4%)
	Patient Family	50 (20.8%)
	Internal physician	8 (3.3%)
	External physician	10 (4.2%)
	Insurance company staff	3 (1.3%)
Gender	Male	124 (51.7%)
	Female	116 (48.3%)
Occupancy	Civil servant	47 (19.6%)
	Private sector	52 (21.7%)
	Entrepreneur	42 (17.5%)
	Labor	7 (2.9%)
	Farmer	8 (3.3%)
	Housewife	66 (27.5%)
	Other	18 (7.5%)
Last Education	Elementary	30 (12.5%)
	Middle high	22 (9.2%)
	Senior high	104 (43.3%)
	Diploma 3	32 (13.3%)
	Bachelor	46 (19.2%)
	Master	6 (2.5%)
Age (Years old)		47.6 (18 - 83)
Salary (IDR)		5,913,521 (300,000 – 15,000,000)

<b>Table 1</b> . Descriptive statistics (n= 240)	Table	<b>1</b> · Descriptive statistics $(n = 240)$
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The significance of path coefficients was further scrutinized to gauge support for the hypotheses.

#### Interpretation of results

The findings of the analysis were interpreted. The focus was on the path coefficients between HSC and HPF, explaining the extent to which HSC

influenced HPF within the OPD context. If there were significant mediator or moderator variables, their roles in this relationship were also interpreted. The study was ethically approved and recorded (2749-KEPK dated February 13, 2023.) by the Ethical Commission of the Faculty of Nursing, Universitas Airlangga.

#### **Results and Discussion**

The study recruited 169 patients, 50 patient families, 8 internal physicians, 10 external physicians, and 3 insurance staffs. Table 1 presents the respondents characteristics.

The stakeholder respond of the stakeholder collaboration is as follows. The stakeholders' identification reveals that most respondents had been using the services for an average of 26.5 months, with referrals from primary health facilities being the primary reason for utilization (33,8%). The majority of respondents rated various service aspects positively, such as the ease of registration (87,5%) and speed of service flow (92,9%). The interactive dialogue with the stakeholder found that the majority of respondents perceived communication mechanisms to be low (45%), but information flow was rated positively with a significant proportion considering it very high (73,8%). The response of stakeholder commitment building, reflects a positive motivation (42,1%) and high hopes (44,2%) for the unit's continuous improvement of various aspects of the services. The majority of stakeholders expressed high satisfaction with their active involvement in providing support for improving healthcare services (52.9% very high, 25% high) and evaluated the goal-setting process as highly effective (61.3% very good) with some room for improvement (19.6% fair) and a generally positive outlook (18.3% good). The stakeholder respond of the performance factor is as follows. The stakeholder perspective found that majority expressed very good satisfaction with the total service delivery time (42.5%) and stakeholder satisfaction (67.1%). The stakeholder perspective of finance was majority rated the payment process as very good (74.6%), and cost determination was also highly rated (73.8%), perceived fairness at 60.4%. with The stakeholder perspective of internal business process showed a majority rating of very good for the accuracy of service delivery (74.6%), service personnel capabilities (74.2%), service quality (73.8%), provision of infrastructure (82.1%), and speed in providing infrastructure (72.1%). Lastly, the majority of stakeholder rated the capacity of the staff and organization as very good (79,2%) and the majority said the network enhancement as good (80%).

# Structural equation modelling-partial least squares

#### Convergent validity and discriminant validity

To establish convergent validity, 34 indicator variables were assessed, and 10 with p-values > 0.05 were excluded. All remaining indicator variables successfully passed the discriminant validity test, as each exhibited a higher loading factor value than the cross-loading factor.

#### Factor reliability

Factor reliability was evaluated to ascertain the reliability of the 8 latent variables. All latent variables exhibited composite reliability values > 0.7, signifying their reliability in measuring the underlying constructs.

#### Outer weight significance

The outer weight values of all indicator variables against the latent variables were found to be statistically significant ( $\alpha$ =0.05), further substantiating the robustness of the measurement model.

#### Validation of the final model

Following rigorous validation, the final model was established, consisting of 8 latent variables and 24 indicator variables. This model underwent multiple tests to ensure its reliability and validity.

#### Structural model testing analysis

The structural model revealed that all path correlations between exogenous and endogenous factors had statistically significant effects on enhancing the endogenous factors. The hypothesis testing resulted a correlation among the components of Hospital's Stakeholder Collaboration. Stakeholder identification (X1) positively influenced interactive dialogue (X2), which, in turn, influenced building commitment (X3) and ultimately led to the establishment of shared goals (X4). The model showed that all path correlation between exogenous and endogenous factors have statistically significant effects in enhancing the endogenous factors. Based on the conducted hypothesis testing, the results reveal insightful interpretations concerning the relationship between the of Hospital's components Stakeholder Collaboration. Through hypotheses 1, 2, and 3, it becomes evident that the various factors constituting Hospital's Stakeholder Collaboration are intricately interconnected, and they positively influence one another in a sequence from stakeholder identification (X1) to interactive dialogue (X2), followed by building commitment (X3), and ultimately leading to the establishment of shared goals (X4). Furthermore, the collaborative efforts within the components of Hospital's Stakeholder Collaboration have a significant impact on the overall performance (Y) of the institution. In addition, the results the crucial role underscore played by performance perspectives, namely stakeholder, financial, internal business processes, and employee and organizational capacity, in driving positive outcomes for the OPD.

# Dominant factor analysis

The study's findings reveal that the Internal Business Process perspective is the most dominant factor contributing to the enhancement of the OPD performance (0.811). This suggests that a one-unit improvement in service quality, quality of infrastructure provision, service personnel capability, and timeliness of infrastructure provision results in a 0.811-fold improvement in performance. Moreover, the Employee and Organizational Capacity perspective plays a significant role (0,55), indicating that a one-unit increase of staff skill enhancement leads to a 0.55-fold improvement in performance. Moreover, the building shared goals perspective is crucial (0.548), resulting in a 0.548-fold improvement in performance with a one-unit increase of joint goal setting and stakeholder roles. The financial perspective also contributes significantly (0,399), indicating that a one-unit increase corresponds to a 0.399-fold

improvement in performance, with an influence value of 0.399 units, indicating that a one-unit corresponds to 0.399-fold increase а improvement in performance. Key indicators in this perspective are cost determination, ease of payment process, and reasonableness of costs. In Stakeholder Perspective addition. the is noteworthy, with an influence value of 0.321 units, signifying that a one-unit increase leads to a 0.321-fold improvement in performance. Stakeholder Satisfaction and Total Service Delivery Time are the dominant indicators within this perspective. These findings highlight the importance of these perspectives in optimizing the OPD performance.

# Predicted relevance (Q<sup>2</sup>)

Based on the  $Q^2$  value, it is evident that the endogenous variables value, namely X2 (Interactive Dialogue). X3 (Building Commitment), X4 (Building Shared Goals), Y (Performance), Y1 (Stakeholder Perspective), Y2 (Financial Perspective), Y3 (Internal Business Process Perspective), and Y4 (Employee and Organizational Capacity Perspective), are greater than 0. In conclusion, these six endogenous variables demonstrate significant predictive capabilities.

# Path analysis

Furthermore, the components of Hospital's Stakeholder Collaboration (X1, X2, X3, and X4) have a substantial impact on the hospital performance factor of OPD (Y). Stakeholder Identification (X1) influences Building Shared Goals (X4) directly and indirectly through Interactive Dialogue (X2) and Building Commitment (X3) with a coefficient of 0.356. Additionally, Interactive Dialogue (X2) affects Building Shared Goals (X4) through Building Commitment (X3) with a coefficient of 0.476. Moreover, Building Commitment (X3) directly impacts Building Shared Goals (X4) with a coefficient of 0.428. This highlights the crucial role of the components of Hospital's Stakeholder Collaboration in enhancing the OPD performance. The components of Hospital's Stakeholder Collaboration (X1, X2, X3, and X4) also

significantly contribute to the Stakeholder Perspective (Y1), Financial Perspective (Y2), Internal Business Process Perspective (Y3), and Employee Organizational and Capacity Perspective (Y4) of the OPD performance. These components exert their influence indirectly through various mediators, such as stakeholders' perspective, finance, internal business processes, and organizational capacity. Consequently, by considering these mediating factors, the Hospital's Stakeholder Collaboration plays a vital role in enhancing the overall performance of the OPD.

The study aimed to investigate the correlation between HSC and HPF of the OPD at Universitas Muhammadiyah Malang Hospital. The findings revealed the indicator variables of stakeholder collaboration influences various performance perspectives, ultimately affecting the overall efficiency and effectiveness of the hospital's operations [18]. The stakeholders' responses provided valuable feedback on their experiences with the healthcare services offered by the OPD. Most respondents had been utilizing the services for an average of 26.5 months, with referrals from primary health facilities being the primary reason for utilization. Overall, stakeholders rated various service aspects positively, such as the ease of registration and the speed of service flow. However, communication mechanisms were perceived as relatively low, indicating a need for improvement in this area. Research about patient retention to a health care found that, if the patient could communicate the needs about health care adequately then they will loyal to the hospital [6, 19]. Loyal stakeholders will remain with the same hospital, but it depends on the trust level [20]. The research to 92 heart disease patient suggests that there should be alignment in treatment goals between patients and the hospital. For instance, if a patient prefers direct communication for information delivery, outpatient departments (OPD) should ideally provide facilities to facilitate such communication at any time [8]. The path analysis conducted in this study revealed statistically significant effects between exogenous and endogenous factors within the Hospital's Stakeholder Collaboration model. The interconnections between

stakeholder identification (X1), interactive dialogue (X2), building commitment (X3), and building shared goals (X4) were found to have a positive influence on each other. This sequential relationship highlights the critical role played by stakeholder identification effective and collaborative dialogue in fostering commitment and shared goals within the hospital. These findings align with the research of Heckert (2020), who emphasized the importance of stakeholder engagement and collaborative processes in healthcare organizations to achieve improved performance outcomes [12, 13]. Interactive dialogue facilitates the establishment of commitment, which in turn leads to the development of shared goals. А study investigated collaboration between the community, healthcare staff, and the elderly to improve Dementia Care Services (DTCS) in Primary Care Settings (PCS). It highlighted a challenge: healthcare professionals often mistakenly associate dementia with normal aging, leading to suboptimal care. Effective DTCS necessitates collaboration between healthcare providers and families to assess dementia levels accurately and deliver suitable clinical and community-based care [7]. A systematic review mentioned that a quality teamwork in inpatient facility related to the patients' self-reported satisfaction. Patient received care from higher performing team of health care are more likely to be more satisfied [21]. The Internal Business Process perspective emerged as the most dominant factor contributing to the enhancement of OPD performance. This perspective encompasses indicators such as service quality, infrastructure provision, and service personnel capability, all of which significantly impact the overall performance of the hospital. In addition, the Employee and Organizational Capacity perspective was found to play a crucial role, with skill enhancement being a dominant indicator. This study highlights to troubleshoot severe inadequacy of service by involved the senior manager. This effort is beneficial because the senior manager has more experience and more influence to the hospital service process [22]. The significance of effective internal processes and a skilled workforce in driving organizational

performance in the healthcare sector [14, 15]. The stakeholder perspective on the employee and organizational capacity related directly to the OPD performance. A study to persons with stroke warning signs identified the key factors that would contribute to the development of primary health care services. The study found that the contribute factors are positive attitude of the health care providers toward the situation; congruence of the concepts regarding the services provided by the health care providers; collaboration and networking among the stakeholders; and, policies that were developed regarding the provision of needed services [23].

# Conclusion

To sum up, this study explains the correlation between hospital's stakeholder collaboration and hospital performance factor of OPD. The study emphasizes the importance of effective stakeholder engagement, collaborative dialogue, and commitment building in optimizing hospital Furthermore, performance. the study underscores the interconnected nature of performance perspectives and the need for a collaborative approach to achieve optimal outcomes in healthcare organizations. These insights provide valuable guidance for hospital administrators and policymakers seeking to enhance healthcare performance and stakeholder engagement. Future research in this field can explore additional mediators and moderators to gain a comprehensive understanding of the complex relationship between stakeholder collaboration and hospital performance

#### Limitation

The research conducted in one center which could be the source of bias. The researcher does acknowledge this, by mentioning in the title and the discussion which should be considered by the reader in the result generalization.

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#### **Authors' Contributions**

All authors contributed to data analysis, drafting, and revising of the paper and agreed to be responsible for all the aspects of this work.

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#### References

[1]. Wu J., Wang Y., Tao L., Peng J., Stakeholders in the healthcare service ecosystem, *Procedia CIRP*, 2019, **83**:375 [<u>Crossref</u>], [<u>Google Scholar</u>], [<u>Publisher</u>]

[2]. Engle R.L., Mohr D.C., Holmes S.K., Seibert M.N., Afable M., Leyson J., Meterko M., Evidencebased practice and patient-centered care: Doing both well, *Health care management review*, 2021, **46**:174 [Crossref], [Google Scholar], [Publisher] [3]. Bokhour B.G., Fix G.M., Mueller N.M., Barker A.M., Lavela S.L., Hill J.N., Solomon J.L., Lukas C.V., How can healthcare organizations implement patient-centered care? Examining a large-scale cultural transformation, *BMC health services research*, 2018, **18**:1 [Crossref], [Google Scholar], [Publisher]

[4]. Kuipers S.J., Cramm J.M., Nieboer A.P., The importance of patient-centered care and cocreation of care for satisfaction with care and physical and social well-being of patients with multi-morbidity in the primary care setting, *BMC health services research*, 2019, **19**:1 [Crossref], [Google Scholar], [Publisher]

[5]. Hower K.I., Vennedey V., Hillen H.A., Kuntz L., Stock S., Pfaff H., Ansmann L., Implementation of patient-centred care: which organisational determinants matter from decision maker's perspective? Results from a qualitative interview study across various health and social care organisations, *BMJ open*, 2019, **9**:e027591 [Crossref], [Google Scholar], [Publisher]

[6]. Chalermpichai T., Ratintorn A., Sindhu S., Ratanasuwan W., Reynolds N., Factors Associated with the Retention in Care After Delivery among Thai Mothers with HIV, *Pacific Rim International Journal of Nursing Research*, 2016, **20**:225 [Google Scholar], [Publisher]

[7]. Lhimsoonthon B.L., Sritanyarat W., Rungrengkolkit S., Development of care services for older people with dementia in a primary care setting, *Pacific Rim International Journal of Nursing Research*, 2019, **23**:214 [Google Scholar], [Publisher]

[8]. Phipatanapanit P., Pongthavornkamol K., Wattakitkrileart D., Viwatwongkasem C., Vathesatogkit P., Predictors of Perceived Quality of Care in People with Heart Failure, *Pacific Rim International Journal of Nursing Research*, 2019, **23** [Google Scholar]

[9]. Kruk M.E., Gage A.D., Arsenault C., Jordan K., Leslie H.H., Roder-DeWan S., Adeyi O., Barker P., Daelmans B., Doubova S.V., High-quality health systems in the Sustainable Development Goals era: time for a revolution, *The Lancet global health*, 2018, **6**:e1196 [Crossref], [Google Scholar], [Publisher]

[10]. Amathullah A.S., Rishard M., Walpita Y., Impacts of disrespectful care and abusive care practices in maternity units and potential interventions to improve the quality of care in low-and middle-income countries: A narrative review, *International Journal of Gynecology & Obstetrics*, 2023 [Crossref], [Google Scholar], [Publisher]

[11]. Maurer M., Mangrum R., Hilliard-Boone T., Amolegbe A., Carman K.L., Forsythe L., Mosbacher R., Lesch J.K., Woodward K., Understanding the influence and impact of stakeholder engagement in patient-centered outcomes research: a qualitative study, *Journal of General Internal Medicine*, 2022, **37**:6 [Crossref], [Google Scholar], [Publisher]

[12]. Heckert A., Forsythe L.P., Carman K.L., Frank L., Hemphill R., Elstad E.A., Esmail L., Lesch J.K., Researchers, patients, and other stakeholders' perspectives on challenges to and strategies for engagement, *Research Involvement and Engagement*, 2020, **6**:1 [Crossref], [Google Scholar], [Publisher]

[13]. Weiner B.J., Alexander J.A., Shortell S.M., Baker L.C., Becker M., Geppert J.J., Quality improvement implementation and hospital performance on quality indicators, *Health services research*, 2006, **41**:307 [Crossref], [Google Scholar], [Publisher]

[14]. Xie A., Carayon P., Cartmill R., Li Y., Cox E.D., Plotkin J.A., Kelly M.M., Multi-stakeholder collaboration in the redesign of family-centered rounds process, *Applied ergonomics*, 2015, **46**:115 [Crossref], [Google Scholar], [Publisher]

[15]. Patel H., Pettitt M., Wilson J.R., Factors of collaborative working: A framework for a collaboration model, *Applied ergonomics*, 2012,
43:1 [Crossref], [Google Scholar], [Publisher]

[16]. Norris J.M., White D.E., Nowell L., Mrklas K., Stelfox H.T., How do stakeholders from multiple hierarchical levels of a large provincial health system define engagement? A qualitative study, *Implementation Science*, 2017, **12**:1 [Crossref], [Google Scholar], [Publisher]

[17]. Purwaningsih P., Nasronudin N., Damayanti N.A., Mahmudah M., Andarini S., Qomarudin B., Chalidyanto D., Riyadi Yuwono S., Nugrah Septanto A., Zulkarnain H. *Ethiop J Health Sci.*, 2023, **33**:1075 [Publisher]

[18]. Siskaningrum A., Yusuf A., Mahmudah M., Machin A., Nurse Performance and Influence Factors in Discharge Planning Based on Knowledge Management SECI Model in Stroke Patients, *Journal of Medicinal and Chemical Sciences*, 2023, **6**:2558 [Google Scholar], [Publisher]

[19]. Y Othman S., S Hasan S., A Garjees N., Effects of a Home-Based Nursing Intervention Program on Caregivers Care Adherence of Children Affected with Type I Diabetes Mellitus, *Journal of Medicinal and Chemical Sciences*, 2023, **6**:2319 [Google Scholar], [Publisher]

[20]. Liu S., Li G., Liu N., Hongwei W., The impact of patient satisfaction on patient loyalty with the mediating effect of patient trust, *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 2021, **58**:00469580211007221 [Crossref], [Google Scholar], [Publisher] [21]. Rosen M.A., DiazGranados D., Dietz A.S., Benishek L.E., Thompson D., Pronovost P.J., Weaver S.J., Teamwork in healthcare: Key discoveries enabling safer, high-quality care, *American Psychologist*, 2018, **73**:433 [Crossref], [Google Scholar], [Publisher]

[22]. Åhlin P., Almström P., Wänström C., Solutions for improved hospital-wide patient flows–a qualitative interview study of leading healthcare providers, *BMC health services research*, 2023, **23**:1 [Crossref], [Google Scholar], [Publisher]

[23]. Chuenjairuang P., Sritanyarat W., Development of primary health care services for stroke prevention in persons with warning signs of stroke, *Pacific Rim International Journal of Nursing Research*, 2012, **16**:313 [Google Scholar], [Publisher]

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