

Manuscript received February 12, 2026; revised February 22, 2026; accepted February 22, 2026; date of publication June 01, 2026

Digital Object Identifier (DOI): <https://doi.org/10.35882/ijahst.v6i3.606>

Copyright © 2026 by the authors. This work is an open-access article and licensed under a Creative Commons Attribution-ShareAlike 4.0 International License ([CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/))

**How to cite:** Azwan Rahmadhan Putra, Edi Prasetyo, Mia Mariani and Dicky Budiman, "A Mixed-Methods Analysis of the 7P Marketing Mix and Outpatient Visit Interest at a Regional Public Hospital in Indonesia", International Journal of Advanced Health Science and Technology, Vol. 6 No. 3, pp. 233-240, June 2026.

# A Mixed-Methods Analysis of the 7P Marketing Mix and Outpatient Visit Interest at a Regional Public Hospital in Indonesia

Azwan Rahmadhan Putra, Edi Prasetyo , Mia Mariani, Dicky Budiman

Master of Hospital Administration Study Program, Yarsi University, Jakarta, Indonesia

Corresponding author: Azwan Rahmadhan Putra (e-mail: [azwanputra81@gmail.com](mailto:azwanputra81@gmail.com))

**ABSTRACT** Public hospitals frequently face challenges in maintaining competitiveness due to sub-optimal service delivery and marketing strategies. This study examines the influence of the 7P marketing mix (Product, Price, Place, Promotion, People, Process, Physical Evidence) on public interest in utilizing outpatient services at RSUD Bengkalis. Employing a mixed-methods approach with a sequential explanatory design, this research integrates quantitative analysis via multiple linear regression with qualitative insights derived from fishbone diagrams. Primary data were collected from general-paying patients through structured questionnaires, followed by in-depth qualitative interviews. Quantitatively, simultaneous analysis reveals that all seven marketing mix elements significantly influence visit interest, with an Adjusted R<sup>2</sup> value of 81%, indicating high predictive power. Partially, Product, Place, People, and Physical Evidence exert a positive and significant impact on patient interest. Conversely, Price, Promotion, and Process show no statistically significant effects. Qualitative findings clarify that the insignificance of Process and Promotion stems from operational barriers, specifically inefficient manual queuing systems and restricted promotional outreach for specialized services targeting general patients. In conclusion, while the hospital's core service offerings, accessibility, personnel, and infrastructure successfully attract patients, administrative inefficiencies and weak marketing limit its full potential. To enhance public interest and institutional competitiveness, the management of RSUD Bengkalis must prioritize the digital transformation of administrative and registration workflows, streamline the patient flow, and consistently improve staff hospitality to foster sustainable patient loyalty.

**INDEX TERMS** Marketing mix, Outpatient services, Patient interest, Hospital service quality, RSUD Bengkalis.

## I. INTRODUCTION

Healthcare service quality is recognized as an essential indicator of national welfare and public health development [1], [2]. Hospitals are not only expected to provide comprehensive medical services but also to maintain patient satisfaction and competitiveness in an increasingly dynamic healthcare environment [3], [4]. In Indonesia, the implementation of the National Health Insurance (JKN) system has intensified competition among hospitals because patients now have broader access to various accredited healthcare facilities [5], [6]. Consequently, hospitals are required to develop effective marketing strategies that are capable of attracting and retaining patients, particularly within outpatient services, which serve as the primary gateway for continuous healthcare utilization [7]. In this context, healthcare marketing is no longer limited to promotional activities but also encompasses service quality, accessibility, human resources, and patient-centered experiences [8].

One of the most widely applied frameworks in healthcare marketing is the 7P marketing mix, consisting of Product, Price, Place, Promotion, People, Process, and Physical

Evidence [9]. Previous studies have demonstrated that the implementation of the 7P framework significantly influences patient satisfaction, loyalty, and healthcare utilization decisions [10]-[12]. Research conducted in Iran reported that Physical Evidence and People were dominant determinants influencing hospital selection, while Promotion remained relatively weak [13]. Similarly, studies in Indonesia revealed inconsistent findings regarding the influence of individual 7P components on outpatient revisit intentions and patient decisions [14]-[16]. Some studies identified Process as the most influential variable, whereas others emphasized Product, Place, and People as the primary determinants of healthcare utilization [17], [18]. These variations indicate that the effectiveness of the marketing mix is highly context-dependent and influenced by organizational characteristics, patient demographics, and healthcare system dynamics [19].

At RSUD Bengkalis, outpatient visits demonstrated positive growth from 2021 to 2023 but experienced fluctuations and a notable decline in 2024. Furthermore, hospital utilization remains heavily dominated by insured patients, accounting for approximately 96.68% of total visits,

while general or self-paying patients contribute only 3.32%. This imbalance indicates a critical managerial challenge because dependence on insured patients may reduce financial flexibility and competitiveness in the long term. In addition, patient satisfaction surveys identified weaknesses in service procedures, waiting time, administrative efficiency, and dissemination of healthcare information. These conditions suggest that the hospital requires a more evidence-based understanding of the factors influencing public interest in utilizing outpatient services.

To strengthen the theoretical foundation, this study integrates the 7P marketing mix framework with Andersen's Behavioral Model, which explains healthcare utilization through predisposing, enabling, and reinforcing factors [20]. Within this perspective, the 7P elements function as enabling factors that can be modified institutionally to influence patient perceptions, decision-making processes, and healthcare utilization behavior. Despite numerous studies on hospital marketing, limited research specifically examines the influence of the 7P marketing mix on general patient interest in outpatient services within regional public hospitals in Indonesia, particularly in the Bengkalis context. Therefore, this study aims to analyze the influence of the 7P marketing mix on public interest in utilizing outpatient services at RSUD Bengkalis. The contributions of this study include:

1. Providing empirical evidence regarding the influence of the 7P marketing mix on outpatient visit interest among general patients.
2. Integrating the 7P framework with Andersen's Behavioral Model to enrich healthcare marketing analysis.
3. Offering practical recommendations for improving hospital competitiveness through service quality enhancement and digital transformation.

This paper is organized as follows: Section II discusses related literature and theoretical foundations; Section III explains the research methodology; Section IV presents the findings and discussion; and Section V concludes the study and provides recommendations.

## II. METHOD

This study employed a mixed-methods approach using a sequential explanatory design, in which quantitative analysis was conducted as the primary stage and qualitative analysis served as a supporting stage to strengthen the interpretation of findings [21]. The quantitative component aimed to examine the influence of the 7P marketing mix variables Product, Price, Place, Promotion, People, Process, and Physical Evidence on patients' interest in utilizing outpatient services at RSUD Bengkalis. Subsequently, qualitative analysis using a Fishbone Diagram (Ishikawa Diagram) was performed to identify underlying factors contributing to both significant and non-significant quantitative results.

### A. STUDY DESIGN AND SETTING

The quantitative phase applied an associative causal study with a cross-sectional design, where data were collected at a single point in time from respondents receiving outpatient services [22]. The study was conducted at RSUD Bengkalis,

Riau Province, Indonesia, from July to September 2025. RSUD Bengkalis was selected because it functions as the primary referral hospital in the region and experiences fluctuating outpatient visit trends, particularly among general or self-paying patients.

### B. POPULATION, SAMPLE, AND SAMPLING TECHNIQUE

The study population consisted of all general outpatient visits recorded in 2024, totaling 3,057 patients. The sample size was determined using Slovin's formula with a 10% margin of error, resulting in a minimum sample of 97 respondents [23]. Sampling was conducted using proportionate stratified random sampling to ensure representative distribution across outpatient clinics.

The inclusion criteria comprised outpatients aged at least 17 years or represented by parents/guardians for pediatric patients, patients using general/self-payment methods, respondents capable of reading and understanding the questionnaire independently, and individuals willing to provide informed consent. Exclusion criteria included patients with communication or mental disorders, respondents returning incomplete questionnaires, individuals serving only as patient companions, and insured patients covered by government or private insurance programs.

### C. RESEARCH VARIABLES AND INSTRUMENTS

The independent variables in this study were the seven elements of the service marketing mix: Product (X1), Price (X2), Place (X3), Promotion (X4), People (X5), Process (X6), and Physical Evidence (X7). The dependent variable was outpatient visit interest (Y). Each variable was operationally defined according to conceptual indicators adapted from previous healthcare marketing studies [24].

Primary quantitative data were collected using a structured questionnaire with a five-point Likert scale ranging from strongly disagree to strongly agree. The questionnaire measured respondents' perceptions regarding healthcare services, accessibility, service costs, staff competence, promotional effectiveness, administrative processes, and physical facilities. Prior to data collection, the instrument underwent validity testing using Pearson Product Moment correlation and reliability testing using Cronbach's Alpha to ensure measurement accuracy and consistency [25].

### D. DATA COLLECTION PROCEDURE

Data collection in the quantitative phase was conducted by distributing questionnaires directly to selected respondents in outpatient waiting areas after they received healthcare services. Respondents completed the questionnaires independently under researcher supervision to ensure completeness and comprehension.

The qualitative phase was conducted after completion of quantitative analysis. Supporting qualitative information was obtained through field observations, hospital documentation review, and focused interviews with selected healthcare personnel, including outpatient staff and unit coordinators. These findings were then analyzed using a Fishbone Diagram to identify possible causal factors affecting patient interest in outpatient services [26].

### E. DATA ANALYSIS

Quantitative data were coded and analyzed using SPSS version 30. Descriptive statistics were used to summarize respondent characteristics and variable distributions. Data quality testing included validity and reliability analysis. Classical assumption tests comprising normality, multicollinearity, and heteroscedasticity tests were subsequently performed before regression analysis [27].

Multiple linear regression analysis was employed to determine both simultaneous and partial influences of the 7P marketing mix variables on outpatient visit interest. Statistical significance was evaluated using the F-test and t-test with a significance level of 0.05. The coefficient of determination (Adjusted R<sup>2</sup>) was also analyzed to determine the explanatory power of the regression model [28].

Qualitative data analysis utilized Fishbone Diagram categorization based on several dimensions, including Man, Method, Machine, Material, Measurement, and Environment. Triangulation through observation, documentation, and interview findings was applied to strengthen the credibility and validity of the qualitative interpretation [29].

### F. ETHICAL CONSIDERATIONS

Information is not available.

## III. RESULTS

### General Description of the Research Location

Bengkalis Regional General Hospital is one of the government hospitals located in Bengkalis Regency, established in 1927. Initially, it was located on Jalan Sudirman in Rimbaskampung Village, with only 2 inpatient units, 1 nurse dormitory, and 1 mortuary unit. From 1937 to 2005, Bengkalis RSUD moved to Jalan Ahmad Yani with a facility of 50 beds, consisting of: 3 Class I beds, 11 Class II beds, and 36 Class III beds, with a total of 167 employees. In 2004, the Bengkalis Regency Government built a new general hospital located on Jalan Kelapapati Tengah, featuring a majestic 4-story building and complete facilities, both in terms of infrastructure and health service equipment. After the building became operational based on Regional Regulation Number 17 of 2004, Bengkalis RSUD transformed into a Regional Hospital managed as a Regional-Owned Enterprise (BUMD) of Bengkalis Regency, named PT Bengkalis Grand Hospital. It had 150 beds, consisting of: 2 VVIP Class beds, 12 VIP Class beds, 10 Class I beds, 64 Class II beds, and 62 Class III beds, with a total of 203 employees.

On August 5, 2005, Bengkalis Regional General Hospital was inaugurated by the Regent of Bengkalis, H. Syamsurizal, as a Type B Non-Educational hospital. Over time, the hospital grew and developed; various facilities and service standardizations were continuously improved to meet quality service standards. By 2005, it provided Administrative and Management Services, Medical Services, Nursing Services, Emergency Services, and Medical Records services. The management of PT. Bengkalis Grand Hospital operated for approximately one year, and since 2007, it returned to being Bengkalis RSUD under Bengkalis Regent Regulation Number 10 of 2008. As such, Bengkalis RSUD became one of the

Regional Apparatus Work Units (SKPD) within the Bengkalis Regency Government, with a structural position. The Acting Director at that time was dr. H. Abdul Mutholib Rambe, Sp.A. Currently, in accordance with the Decree of the Minister of Health of the Republic of Indonesia Number 1217/Menkes/SK/XI/2007 concerning the Class Upgrade of Bengkalis RSUD, owned by the Bengkalis Regency Government, Riau Province, Bengkalis RSUD has officially become a Type B Non-Educational Regional General Hospital.

Quality improvement has been carried out continuously and sustainably. By 2012, Bengkalis RSUD had 13 health service activities, including; Hospital Occupational Health and Safety, Nosocomial Infection Prevention, General Surgery Services, Radiology Services, Laboratory Services, Pharmacy Services, Outpatient Services, Inpatient Services, Hemodialysis Services, and Medical Check-Up. The current operational permit is the Decree of the Governor of Riau Number KPTS.677/IX/2014 dated September 25, 2014, concerning the extension of the operational license for Bengkalis Regional General Hospital. Bengkalis RSUD has become a BLUD (Regional Public Service Agency) Hospital in accordance with Bengkalis Regent Decree Number 530/KPTS/XII/2014 concerning the designation of Bengkalis RSUD as a Regional Public Service Agency, effective as of December 29, 2014.

TABLE 1

Frequency Distribution		N=97	%
Category			
Gender	Male	48	49.5
	Female	49	50.5
Age	Teenager (10 – 18 Years)	6	6.2
	Adult (19 – 59 Years)	81	83.5
	Elderly (≥ 60 Years)	10	10.3
Visit Type	First Visit	38	39.2
	Return Visit	59*	60.8
Clinic	Pediatrics	14	14.4
	Surgery	6	6.2
	Digestive Surgery	1	1.0
	Oncological Surgery	1	1.0
	Vascular Surgery	1	1.0
	Internal Medicine	9	9.3
	Dental	4	4.1
	Endodontics	1	1.0
	Hemodialysis	1	1.0
	Psychiatry	2	2.1
	Obstetrics & Gynecology	9	9.3
	Dermatology & Venereology	9	9.3
	Ophthalmology	8	8.2
	Pulmonology	4	4.1
	Cardiology	2	2.1
	Psychology	1	1.0
Radiology	1	1.0	
Medical Rehabilitation	0	0	
Neurology	9	9.3	
ENT	8	8.2	
VCT	6	6.2	

Based on TABLE 1 The demographic data of respondents presented in Table 5 illustrates the characteristics of 97 general outpatient patients at Bengkalis Regional General Hospital. Gender distribution is nearly balanced, with 49.5% male patients and 50.5% female patients. In terms of age, the adult group (19-59 years) dominates with a very high

percentage of 83.5%, while teenagers (6.2%) and the elderly (10.3%) have significantly smaller proportions. The majority of patients (60.8%) are return visits, indicating an existing returning patient base, although first visits are also significant (39.2%). The clinic visit pattern shows variation, with the Pediatrics Clinic being the most visited (14.4%), followed by Internal Medicine, Obstetrics & Gynecology, Dermatology & Venereology, and Neurology clinics, each at 9.3%. Several specialist clinics such as Digestive Surgery, Oncology, and Vascular Surgery have minimal visits (1% each), reflecting more specialized service needs.

**TABLE 2**  
Normality Test

Sig.	Results
0.309	Normal

Based on TABLE 2, The normality test results presented in Table 8 indicate that the research data meets the assumption of normal distribution, with a significance value (Sig.) of 0.309. Since this significance value is substantially greater than the critical threshold of 0.05, the null hypothesis stating that the data is normally distributed is accepted. The fulfillment of this normality assumption provides a valid foundation for proceeding with parametric statistical analyses, such as the multiple linear regression test employed in this study. Consequently, the hypothesis testing results and coefficient interpretations conducted in subsequent analytical stages are statistically reliable.

**TABLE 3**  
t-test

Model	t	Sig.
1 (Constant)	-	.022
	2.330	
X1	4.200	.000
X2	-.113	.910
X3	4.339	.000
X4	.734	.465
X5	2.813	.006
X6	1.695	.094
X7	4.180	.000

Based on the results of the partial statistical test (t-test) presented in TABLE 3, it can be concluded that of the seven independent variables, there are four variables that have a significant effect on the interest in visiting general outpatients at Bengkalis Regional General Hospital, namely: Product (X1) with a value of  $t = 4.200$  and  $p = 0.000$ , Place (X3) with  $t = 4.339$  and  $p = 0.000$ , People (X5) with  $t = 2.813$  and  $p = 0.006$ , and Physical Evidence (X7) with  $t = 4.180$  and  $p = 0.000$  (all  $p$  values  $< 0.05$ ). In contrast, the variables Price (X2) ( $t = -0.113$ ;  $p = 0.910$ ), Promotion (X4) ( $t = 0.734$ ;  $p = 0.465$ ), and Process (X6) ( $t = 1.695$ ;  $p = 0.094$ ) did not show a statistically significant influence ( $p > 0.05$ ), which indicates that these three factors are not the main determinants of visiting interest in the context of this study.

Based on the results of the simultaneous test (F-Test) in TABLE 4, the F-count value was obtained at 58.524 with a significance level of 0.000 ( $p < 0.05$ ), which indicates that the

seven independent variables (7P marketing mix elements) together have a significant effect on the interest in visiting general outpatients at Bengkalis Regional Hospital. The hypothesis stating that there is a simultaneous influence between all independent variables on the dependent variable can be accepted.

**TABLE 4**  
F-Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	489.969	7	69.996	58.524	.000 <sup>b</sup>
Residual	100.466	84	1.196		
Total	590.435	91			

**TABLE 5.**  
Hypothesis

Hypothesis	Variable	Sig.	Decision	Description
H1	Product (X1)	0.000	Accepted	Product has a significant influence.
H2	Price (X2)	0.910	Rejected	Price does not have a significant influence.
H3	Place (X3)	0.000	Accepted	Place has a significant influence.
H4	Promotion (X4)	0.465	Rejected	Promotion does not have a significant influence.
H5	People (X5)	0.006	Accepted	People has a significant influence.
H6	Process (X6)	0.094	Rejected	Not significant.
H7	Physical Evidence (X7)	0.000	Accepted	Physical Evidence has a significant influence.
H8	All X variables simultaneously	0.000	Accepted	There is a simultaneous influence between the 7P and patient visit interest.

**TABLE 6**  
Coefficient of Determination  
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.911	.830	.816	1.09363	1.428

Based on TABLE 5 which summarizes the results of hypothesis testing, it can be concluded that partially, four of the seven elements of the 7P marketing mix are proven to have a significant effect on visit interest, namely Product (H1 accepted,  $p = 0.000$ ), Place (H3 accepted,  $p = 0.000$ ), People (H5 accepted,  $p = 0.006$ ), and Physical Evidence (H7 accepted,  $p = 0.000$ ), while the other three elements namely Price (H2 rejected,  $p = 0.910$ ), Promotion (H4 rejected,  $p = 0.465$ ), and Process (H6 rejected,  $p = 0.094$ ) do not show a significant effect. Simultaneously, all independent variables (7P) are also proven to have a significant effect on visit interest (H8 accepted,  $p = 0.000$ ), which confirms that the overall model has valid predictive power.

Based on the results of the determination coefficient analysis in TABLE 6, the Adjusted R Square value was obtained at 0.816, which indicates that as much as 81.6% of the variation in the interest of general outpatient visits at

Bengkalis Regional Hospital can be explained simultaneously by the seven independent variables (7P marketing mix elements), while the remaining 18.4% is influenced by other factors outside this research model. The R value (correlation coefficient) of 0.911 indicates a very strong relationship between the independent and dependent variables, while the Durbin-Watson value of 1.428 (approaching 2) indicates the absence of autocorrelation in the regression model used.

#### IV. DISCUSSION

##### A. THE INFLUENCE OF PRODUCT (PRODUCT/SERVICE) ON VISIT INTEREST

The Product variable was found to have a significant influence on patient visit interest (Sig. 0.000 < 0.05). This indicates that the quality, completeness, and variety of healthcare services provided by RSUD Bengkalis play a central role in shaping patient decisions to seek treatment. Patients tend to prioritize hospitals that are able to provide comprehensive diagnostic services, competent specialists, and adequate treatment options. In this context, service products represent the core offering of the hospital, which directly determines perceived value and trust.

This finding is consistent with previous studies indicating that the completeness and reliability of hospital services significantly affect patient preferences in choosing healthcare facilities [31]. Similar results were reported in studies showing that service diversification and perceived service excellence increase patient loyalty and revisit intention [32]. These comparisons strengthen the argument that product/service quality remains the most fundamental component in healthcare marketing.

From an implication perspective, RSUD Bengkalis is encouraged to continuously develop flagship services and strengthen service differentiation to remain competitive and attractive to patients. However, this study is limited by its focus on perception-based measurement, which does not directly assess clinical outcomes or service performance indicators. Future studies should integrate objective service quality indicators to provide a more comprehensive evaluation.

##### B. THE INFLUENCE OF PLACE (LOCATION) ON VISIT INTEREST

The Place variable was also found to have a significant influence on patient visit interest (Sig. 0.000 < 0.05). The strategic location of RSUD Bengkalis as a referral hospital provides accessibility advantages for patients, particularly those living in the main service area. Ease of transportation access, infrastructure availability, and geographical proximity contribute significantly to patient decisions to visit the hospital.

This result aligns with previous findings that accessibility and geographic convenience are strong determinants of healthcare utilization, especially in regions with limited hospital distribution [33]. Studies in similar geographic contexts also confirm that patients tend to select healthcare facilities that minimize travel burden and logistical constraints [34]. This reinforces the importance of spatial accessibility in healthcare service utilization.

The implication of this finding is that RSUD Bengkalis should continue improving transportation support systems and inter-regional accessibility, particularly for populations outside the main island area. However, the limitation of this study is that it does not include spatial mapping or GIS-based accessibility analysis, which could provide more precise evidence regarding geographic barriers.

##### C. THE INFLUENCE OF PEOPLE (HUMAN RESOURCES) ON VISIT INTEREST

The People variable significantly influences visit interest (Sig. 0.006 < 0.05). This finding highlights that healthcare personnel, including doctors, nurses, and administrative staff, play a critical role in shaping patient trust and satisfaction. The professionalism, empathy, communication skills, and responsiveness of staff are key determinants in forming positive patient experiences.

This finding is supported by previous research indicating that human resource quality in healthcare services significantly influences patient trust and hospital selection behavior [35]. Other studies also emphasize that interpersonal communication and empathy from healthcare providers are strongly associated with patient satisfaction and revisit intention [36]. These consistent findings reinforce the importance of human-centered service delivery in hospitals.

Practically, RSUD Bengkalis should continuously invest in staff training programs, particularly in communication skills and patient-centered care approaches. However, this study is limited by its reliance on patient perception data without direct evaluation of staff competency or performance audits. Future research should include multi-source assessments to strengthen validity.

##### D. THE INFLUENCE OF PHYSICAL EVIDENCE ON VISIT INTEREST

The Physical Evidence variable significantly influences patient visit interest (Sig. 0.000 < 0.05). Physical evidence such as hospital infrastructure, cleanliness, waiting room comfort, and availability of medical equipment serves as a tangible indicator of service quality. Patients often use physical appearance as an initial benchmark in assessing hospital credibility.

This finding is consistent with previous studies showing that physical environment and facility completeness significantly affect patient trust and perceived service quality [37]. Other studies also confirm that modern facilities and comfortable environments increase patient willingness to seek treatment at a healthcare institution [38]. This demonstrates that physical evidence remains a critical component of healthcare service marketing.

The implication is that RSUD Bengkalis should maintain and continuously improve facility quality to strengthen patient confidence. However, a limitation of this study is the absence of objective facility assessment data, as evaluation is based solely on patient perception, which may introduce subjective bias. Future studies should incorporate objective measurements of facility quality, such as infrastructure audits, equipment availability, and compliance with healthcare

service standards, to provide a more comprehensive evaluation. In addition, longitudinal research is recommended to examine whether improvements in healthcare facilities lead to sustained increases in patient trust over time.

#### **E. THE INFLUENCE OF PRICE (COST/TARIFF) ON VISIT INTEREST**

The Price variable was not found to have a significant influence on visit interest (Sig. 0.910 > 0.05). This suggests that cost is not a primary consideration for patients when choosing RSUD Bengkalis. This condition can be explained by the dominance of BPJS and other insurance schemes, which reduce direct financial burden on patients.

This finding is consistent with research indicating that in healthcare systems dominated by insurance-based payment mechanisms, price sensitivity tends to decrease significantly [39]. However, contrasting studies have shown that in out-of-pocket healthcare systems, cost remains a major determinant of hospital choice [40]. This difference highlights the contextual influence of health financing systems.

The implication is that although price is not a direct driver of visit interest, hospital management should still ensure transparency and affordability perception. The limitation of this study is that it does not differentiate between insured and non-insured patient groups in analyzing cost perception.

#### **F. THE INFLUENCE OF PROMOTION ON VISIT INTEREST**

The Promotion variable does not significantly influence visit interest (Sig. 0.465 > 0.05). This indicates that promotional activities in conventional forms such as advertising do not strongly affect patient decisions. Instead, patient awareness is primarily shaped by referral systems and word-of-mouth communication.

This result is consistent with studies showing that in referral-based healthcare systems, promotional activities have limited influence on patient decision-making [41]. However, other studies suggest that structured healthcare marketing strategies can still improve hospital image and patient engagement [42]. This contrast indicates that promotion effectiveness depends heavily on healthcare system structure.

The implication is that RSUD Bengkalis should focus on strengthening reputation-based promotion strategies, including patient experience improvement and referral network optimization. A limitation of this study is the lack of analysis on digital promotion channels, which are increasingly influential in healthcare decision-making.

#### **G. THE INFLUENCE OF PROCESS ON VISIT INTEREST**

The Process variable does not show a statistically significant influence on visit interest (Sig. 0.094 > 0.05), although it is close to the significance threshold. This suggests that procedural aspects such as registration flow, waiting time, and service efficiency are not primary determinants of initial hospital selection.

This finding contrasts with several studies that found service process to significantly influence patient satisfaction and hospital choice [43]. However, other research supports that in monopolistic or limited-choice healthcare settings,

patients tend to tolerate inefficiencies as long as medical needs are met [44]. This aligns with the contextual conditions of RSUD Bengkalis.

The implication is that although process does not significantly influence visit interest, it remains a critical determinant of long-term satisfaction and loyalty. The limitation of this study is that it does not measure waiting time objectively or analyze workflow efficiency in detail.

#### **H. THE SIMULTANEOUS INFLUENCE OF THE 7P MARKETING MIX ON VISIT INTEREST**

The results of the F-test show that the 7P marketing mix variables simultaneously have a significant influence on patient visit interest ( $F = 58.524$ ; Sig. 0.000 < 0.05). The Adjusted R Square value of 0.816 indicates that 81.6% of visit interest variation can be explained by the combined influence of Product, Price, Place, Promotion, People, Process, and Physical Evidence.

This finding is consistent with integrated marketing theory, which emphasizes that healthcare service decisions are influenced by a combination of multiple marketing mix elements rather than a single factor [45]. Previous studies also confirm that the 7P model is highly effective in explaining patient behavioral intention in hospital selection [46].

The implication of this finding is that RSUD Bengkalis should adopt a holistic marketing strategy that integrates all 7P components rather than focusing on individual elements. However, the limitation of this study is that 18.4% of variance is explained by other variables not included in the model, such as cultural factors, health status urgency, and family influence, which should be explored in future research.

#### **V. CONCLUSION**

This study aimed to evaluate the structural influence of the 7P marketing mix framework—comprising Product, Price, Place, Promotion, People, Process, and Physical Evidence—on outpatient service visit interest among general-paying patients at RSUD Bengkalis. The findings demonstrate that the 7P marketing mix, when analyzed as an integrated model, is a strong and statistically significant determinant of patient visit intention, accounting for 81.6% of the total variation in outpatient interest (Adjusted  $R^2 = 0.816$ ) with a highly significant overall effect ( $F = 58.524$ ,  $p = 0.000$ ). The partial regression results indicate that four variables significantly influence outpatient visit interest, namely Place ( $t = 4.339$ ,  $p = 0.000$ ), Product ( $t = 4.200$ ,  $p = 0.000$ ), Physical Evidence ( $t = 4.180$ ,  $p = 0.000$ ), and People ( $t = 2.813$ ,  $p = 0.006$ ), highlighting the importance of accessibility, service quality, facility condition, and human resource performance in shaping patient decisions to utilize hospital services. In contrast, Price ( $t = -0.113$ ,  $p = 0.910$ ), Promotion ( $t = 0.734$ ,  $p = 0.465$ ), and Process ( $t = 1.695$ ,  $p = 0.094$ ) do not show a statistically significant effect, which may be explained by the characteristics of the National Health Insurance (JKN) referral system, reduced direct cost sensitivity among patients, and relatively standardized service procedures that do not strongly influence initial hospital selection. These results suggest that patient decisions in public healthcare settings are driven more

by perceived service value, accessibility, and institutional quality than by promotional activities or cost considerations. Therefore, hospital management is recommended to prioritize improvements in service differentiation, infrastructure quality, human resource competency, and regional accessibility, while also strengthening digital transformation to enhance administrative efficiency. In addition, long-term strategies should focus on reducing dependency on insured patients, which currently accounts for 96.68% of operational reliance, in order to improve financial sustainability and resilience. Future research is recommended to adopt longitudinal approaches to examine the stability of patient visit intentions over time, expand sampling across multiple healthcare institutions to improve generalizability, and incorporate behavioral outcome measures such as actual revisit rates to provide a more comprehensive evaluation of the 7P marketing mix framework in healthcare service contexts

### ACKNOWLEDGEMENTS

The authors express their sincere gratitude to the Director and management of RSUD Bengkalis for granting formal administrative permission and providing vital institutional support during this study. Deep appreciation is extended to the outpatient service staff for their professional assistance, and to all outpatient participants who voluntarily allocated time to complete the survey questionnaires. Finally, the authors acknowledge Universitas Yarsi Jakarta for providing the academic guidance and resources necessary to maintain scientific rigor throughout this research.

### FUNDING

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

### DATA AVAILABILITY

The quantitative data used to support the findings of this study, including the results of the multiple linear regression and descriptive statistics, are included within the article. Raw data generated during the study are available from the corresponding author upon reasonable request.

### AUTHOR CONTRIBUTION

Azwan Rahmadhan Putra contributed to the conceptualization of the study, development of the methodology, field data collection, formal statistical analysis, and preparation of the original manuscript draft. Edi Prasetyo provided academic supervision, validated the methodological framework, and contributed to the critical review and editing of the final manuscript. Mia Mariani was responsible for qualitative data analysis using fishbone diagram techniques and contributed to the contextual interpretation of the empirical findings. Dicky Budiman provided strategic supervision, expert guidance throughout the research process, and contributed to the formulation of public health policy recommendations.

### DECLARATIONS

#### ETHICAL APPROVAL

This study received ethical approval from the Health Research Ethics Committee of Poltekkes Kemenkes Surabaya with approval number EA/4010/KEPK-Poltekkes\_Sby/V/2025. The study was conducted in accordance with established ethical principles for research involving human participants. All participants provided informed consent prior to participation and were informed about the study objectives, procedures, potential benefits, and their right to withdraw from the study at any time without consequences. Participant confidentiality and anonymity were maintained throughout the research process.

#### CONSENT FOR PUBLICATION PARTICIPANTS.

Consent for publication was given by all participants

#### COMPETING INTERESTS

The authors declare no competing interests.

### REFERENCE

- [1] World Health Organization, "Global health services outlook," Geneva, Switzerland, 2023.
- [2] A. Radulian, I. Cetiņa, and N. Manea, "Particularities of marketing application in medical services," *Res. Sci. Today*, vol. 23, no. 1, pp. 51–57, 2022.
- [3] Republic of Indonesia, "Law No. 17 of 2023 concerning Health," Jakarta, Indonesia, 2023.
- [4] M. Mutia and P. Pujiyanto, "Literature review: Application of the 7P mix marketing on patient satisfaction at hospitals," *J. Pendidik. Tambusai*, vol. 6, no. 2, pp. 11677–11686, 2022.
- [5] R. Rindu, M. Hafizurrachman, A. N. Haryanto, and W. N. A. Zakaria, "The 7Ps marketing mix in hospital services: A systematic mapping of applications through a scoping review," *J. Pendidik. Keperawatan Indones.*, vol. 10, no. 1, pp. 1–12, 2025.
- [6] Kementerian Kesehatan Indonesia, "Transformation of healthcare services in Indonesia," Jakarta, Indonesia, 2022.
- [7] N. F. Dewi, R. Setiawati, R. K. Santoso, and N. Rahma, "Marketing mix and customer loyalty in Hermina Galaxy Hospital," *Proc.*, vol. 83, no. 1, pp. 1–8, 2022.
- [8] S. Alfani, B. Widjanarko, and A. Sriatmi, "Service marketing mix (7P) and patient decisions in selecting hospital services: Literature review," *Holistik J. Kesehat.*, vol. 17, no. 1, pp. 45–53, 2023.
- [9] E. N. Berkowitz, *Essentials of Health Care Marketing*, 5th ed. Burlington, MA, USA: Jones & Bartlett Learning, 2022.
- [10] Y. D. Lubis, R. B. Suroyo, and A. D. Fitriani, "Marketing mix analysis on outpatient satisfaction at Medan Haji General Hospital," *J. Asian Multicult. Res. Med. Health Sci. Study*, vol. 3, no. 2, pp. 45–52, 2022.
- [11] T. Lestari, P. Purwadhi, and Y. R. Widjaja, "Evaluation of the implementation of the 7P marketing mix in executive outpatient services," *J. Pengabd. Nas. Indones.*, vol. 6, no. 3, pp. 615–634, 2025.
- [12] K. Brittain, J. Taylor, and C. Wu, "Healthcare service quality and patient satisfaction trends," *Health Serv. Manage. Res.*, vol. 35, no. 2, pp. 80–88, 2022.
- [13] G. Abedi et al., "How marketing mix (7Ps) affect the patients' selection of a hospital," *BMC Health Serv. Res.*, vol. 20, no. 1, pp. 1–10, 2022.
- [14] H. Wati, "The influence of marketing mix on patient interest in healthcare services," *J. Hosp. Adm.*, vol. 4, no. 2, pp. 120–128, 2022.
- [15] I. A. Priyanka and I. D. Hardy, "Marketing mix and outpatient visits in regional hospitals," *Indones. J. Public Health*, vol. 17, no. 1, pp. 88–96, 2023.
- [16] D. N. Marpaung, E. Ernawaty, D. Prayoga, and S. Lailiyah, "Implementation of marketing mix 7P on patient satisfaction in hospitals," *VISIKES*, vol. 20, no. 1, pp. 30–38, 2022.
- [17] M. Mardiah and S. Wahyu, "The role of hospital marketing mix to the selection of hospital consumers," *Proc. Int. Conf. Appl. Sci. Health*, vol. 4, pp. 1065–1071, 2022.

- [18] N. Q. Batubara and A. Wibowo, "The influence of marketing mix to patient satisfaction in hospitals: Narrative review," *Proc. Int. Conf. Appl. Sci. Health*, vol. 4, pp. 1042–1050, 2022.
- [19] V. A. Zeithaml and M. J. Bitner, *Services Marketing: Integrating Customer Focus Across the Firm*, 8th ed. New York, NY, USA: McGraw-Hill, 2023.
- [20] R. M. Andersen, "Revisiting the behavioral model and access to medical care," *J. Health Soc. Behav.*, vol. 64, no. 1, pp. 1–15, 2024.
- [21] Wasiyem et al., "Analisis Strategi Manajemen Kesehatan dalam Memaksimalkan Mutu Pelayanan di Rumah Sakit: Literature Review," *J. Ilmu Kedokt. dan Kesehat. Indones.*, vol. 5, no. 2, pp. 325–334, 2025.
- [22] H. Syahrizal and M. S. Jailani, "Jenis-Jenis Penelitian Dalam Penelitian Kuantitatif dan Kualitatif," *QOSIM J. Pendidik. dan Hum.*, vol. 1, no. 8, pp. 13–23, 2023.
- [23] R. A. Siroj, W. Afgan, Fatimah, D. Septaria, and G. Z. Salsabila, "Metode Penelitian Kuantitatif Pendekatan Ilmiah Untuk Analisis Data," *J. Rev. Pendidik. dan Pengajaran*, vol. 7, no. 3, pp. 1861–1864, 2024.
- [24] Y. A. Puspitasari and I. U. Septialisman, "Pengaruh Persepsi Harga Tiket dan Keamanan terhadap Minat Menggunakan Maskapai Wings Air," *J. Kewarganegaraan*, vol. 6, no. 1, pp. 1145–1155, 2022.
- [25] F. Aryanti, Q. F. P. Wahyono, C. D. Araminta, and L. K. Jannah, "Uji Validitas dan Reliabilitas dengan Software SPSS," *Algoritm. J. Mat. Ilmu Pengetah. Alam*, vol. 2, no. 5, pp. 1–8, 2024.
- [26] M. T. D. Haq et al., "Pendekatan Analisis Kualitatif dalam Pelayanan Kesehatan," *Manuju Malahayati Nurs. J.*, vol. 2, no. 3, pp. 641–648, 2022.
- [27] J. Pallant, *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS*, 8th ed. London, U.K.: Routledge, 2022.
- [28] J. W. Creswell and J. D. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 6th ed. Thousand Oaks, CA, USA: Sage, 2023.
- [29] M. Taherdoost, "Validity and Reliability of Research Instruments in Healthcare Studies," *J. Healthc. Eng.*, vol. 2022, pp. 1–10, 2022.
- [30] R. Lopez and A. Martin, "Ethical considerations in research involving healthcare students," *J. Med. Ethics*, vol. 49, no. 4, pp. 245–251, 2022.
- [31] Y. Zhang, H. Sun, and L. Chen, "Service quality and patient satisfaction in public hospitals: Evidence from healthcare marketing perspective," *BMC Health Services Research*, vol. 22, no. 1, pp. 1–12, 2022.
- [32] A. S. Wiyono and R. D. Pratama, "Determinants of patient revisit intention in hospital services: The role of service quality and perceived value," *International Journal of Healthcare Management*, vol. 15, no. 4, pp. 312–321, 2022.
- [33] M. A. Rahman, S. S. Khan, and T. Islam, "Accessibility and healthcare utilization in developing countries: A spatial analysis approach," *Health Policy and Planning*, vol. 37, no. 6, pp. 721–732, 2022.
- [34] J. K. Lee and S. H. Park, "Geographical accessibility and hospital choice behavior: Evidence from urban and rural healthcare systems," *International Journal of Environmental Research and Public Health*, vol. 19, no. 8, pp. 1–14, 2022.
- [35] N. F. Abdullah and M. Y. Ali, "Human resource quality and patient trust in healthcare services," *Journal of Healthcare Quality Research*, vol. 37, no. 2, pp. 98–106, 2022.
- [36] S. K. Gupta and R. Verma, "Empathy in healthcare services and its impact on patient satisfaction and loyalty," *Journal of Patient Experience*, vol. 9, 2022.
- [37] L. H. Nguyen, T. T. Pham, and D. Q. Tran, "Physical environment of hospitals and its effect on patient perceived service quality," *Journal of Health Management*, vol. 24, no. 3, pp. 245–256, 2022.
- [38] A. K. Smith and J. Brown, "Healthcare facility design and patient experience: Evidence from modern hospitals," *Health Environments Research & Design Journal*, vol. 16, no. 1, pp. 50–63, 2023.
- [39] R. J. Andersen and M. Davidson, "Behavioral model of health services use revisited: Insurance and healthcare access," *Medical Care Research and Review*, vol. 80, no. 2, pp. 123–140, 2023.
- [40] P. C. Liu and H. Wang, "Cost sensitivity and hospital choice under insurance-based healthcare systems," *Health Economics Review*, vol. 13, no. 1, pp. 1–10, 2023.
- [41] T. R. Morgan and J. L. Lee, "Referral systems and patient decision-making in public healthcare institutions," *Social Science & Medicine*, vol. 318, 2023.
- [42] M. K. Sharma and P. Gupta, "Healthcare marketing strategies and digital transformation in hospital promotion," *Journal of Medical Marketing*, vol. 23, no. 2, pp. 88–97, 2023.
- [43] E. H. Kim and J. S. Choi, "Service process efficiency and patient satisfaction in hospitals," *BMC Health Services Research*, vol. 23, no. 1, pp. 1–13, 2023.
- [44] D. R. Patel and S. Mehta, "Waiting time and patient tolerance in public hospitals: A behavioral perspective," *International Journal of Public Health*, vol. 68, no. 1, pp. 1–9, 2023.
- [45] P. Kotler and K. L. Keller, *Marketing Management*, 16th ed. Harlow, UK: Pearson, 2022.
- [46] J. H. Lee, S. Y. Kim, and M. Park, "Application of 7P marketing mix in healthcare service selection: A structural equation modeling approach," *BMC Health Services Research*, vol. 24, no. 1, pp. 1–15, 2024.