
Analysis of the Impact of the 7p Marketing Mix on Patient Loyalty with the Moderating Variable of Hospital Brand Image (A Study at Anna Hospital and Anna Medika Hospital, Bekasi)

Sri Rahayu Iriani*, Sparta

STIE Indonesia Banking School, Indonesia

Email: sri.20242111069@ibs.ac.id*, sparta@ibs.ac.id

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Abstract

The transformation of the global healthcare sector has undergone a significant paradigm shift, where hospitals are no longer perceived solely as social institutions but also as business entities that must remain competitive in an increasingly intense market environment. Private hospitals are required not only to focus on clinical quality but also to implement effective marketing strategies capable of building sustainable patient loyalty. According to global health surveys, approximately 40%–60% of patients tend to switch to other hospitals, highlighting the importance of patient loyalty as a key determinant of business sustainability through quality service delivery. This study aims to analyze the effect of the 7P Marketing Mix (Product, Price, Place, Promotion, People, Process, and Physical Evidence) on patient loyalty, with Brand Image serving as a moderating variable at RS Anna and RS Anna Medika, Bekasi. A quantitative approach was employed using a survey method involving 155 inpatient and outpatient respondents covered by BPJS, insurance, and self-paying schemes. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that, in terms of direct effects, Product, Physical Evidence, and Brand Image have the most significant influence on patient loyalty. Meanwhile, Price, Place, People, Process, and Promotion do not show significant direct effects. Brand Image is proven to function as a moderating variable that strengthens the relationship between marketing mix elements and patient loyalty, particularly within the People dimension related to interpersonal service quality.

INTRODUCTION

The transformation of the global healthcare sector has undergone a significant paradigm shift, where hospitals are no longer seen solely as social institutions, but as business elements that must be able to survive in increasingly fierce competition. This change in perception does not occur internally, but comes from the desire of the community as a party to be served by their health. A survey from Deloitte Global Health Care Outlook 2025 proves that;

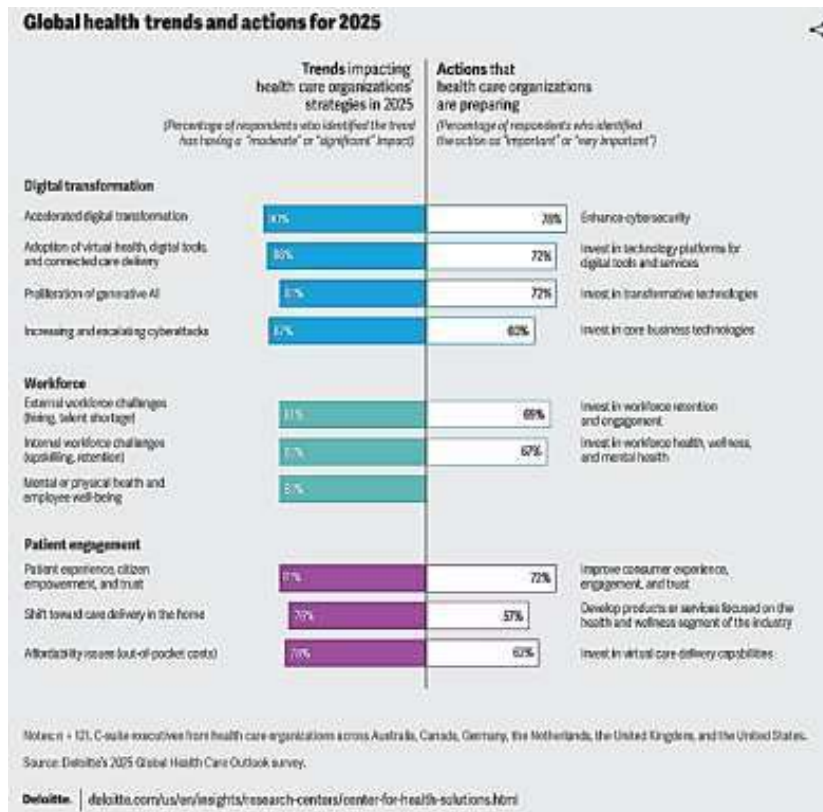


Figure 1. Global Survey of Health Sector Trends and Actions 2025

The results of the survey in Figure 1 above report that healthcare sector managers in various parts of the world are more focused on driving efficiency, increasing productivity, and increasing patient engagement by 2025, according to the results of a survey conducted by the Deloitte US Center for Health Solutions. A survey conducted on patients gathered their opinions, around 57% of patients stated that the health sector should develop health products and services, 62% wanted health services to be carried out virtually, and the highest 72% of patients wanted the health service sector to increase patient trust (Siegel, 2025). Regarding patient trust where health services such as hospitals are supposed to be "homes" for the sick, in fact very little gets loyalty from their patients. Hospitals are currently aware of the pursuit of increasing their agency's revenue, but 40%-60% of patients tend to move to other hospitals when they get recommendations or find more attractive alternatives. A survey conducted by the Healthcare Financial Management Association in 2024, revealed that only 45% of patients expressed satisfaction with their experience in the hospital, and of these, only 52% stated that they would be loyal to return to the same hospital for future medical needs (HFMA, 2024).

Meanwhile, the reality in Indonesia shows a challenge that is no less complex, for the Global Healthcare Index, Indonesia is ranked 39th, as shown in the following table.

Table 1 Global Healthcare Index 2024

Rank	Country	Health Services Index	Infrastructure & Medical Professionals	Drug Availability and Cost	Government Readiness
1	Taiwan	78,72	87,16	83,59	82,30
2	Korea Selatan	77,70	79,05	78,39	78,99

3	Australia	74,11	90,75	82,59	92,06
4	Canada	71,32	86,18	78,99	88,23
5	Sweden	70,73	78,77	74,88	74,18
14	Singapore	57,96	76,39	67,47	71,33
39	Indonesia	42,99	64,37	54,02	55,79
83	Thailand	33,01	67,36	50,73	63,20
87	Philippine	32,55	73,74	53,81	57,45
88	Malaysia	32,52	73,36	53,59	58,14
89	Vietnam	32,42	71,39	52,53	53,70
98	Myanmar	26,30	68,20	50,39	50,36
106	Bolivia	22,30	64,20	49,60	47,96
107	Paraguay	21,90	64,00	49,25	47,73
108	Nepal	21,40	63,90	49,17	47,03
109	Honduras	19,60	63,40	49,15	46,58
110	El Salvador	18,60	62,60	48,96	46,22

Source; CEO world Magazine, 2024

CEO WORLD Magazine released the Health Care Index 2024 which assesses the quality of health care systems in 110 countries based on factors such as infrastructure, competence of health workers, cost per capita, availability of drugs, and government readiness. Based on Table 1 shows that out of 110 countries surveyed, Taiwan's health services are in the first position on the list, while Indonesia is in 39th place, losing out to other ASEAN countries such as Singapore in 14th. However, at least Indonesia outperforms Thailand, which is far below at 83rd, the Philippines 87th, Malaysia 88th, and Vietnam 89th, and even Myanmar is 98th (D. Wilson, 2024). In the 2023 Indonesian Health Survey (SKI), it was stated that Indonesia still experienced obstacles in terms of the quality of health services that have not reached the target (Ministry of Health, 2024).

Health services that have a big responsibility in providing quality services, in this case in general, Indonesia's score in the WHO is 68, is still below the target score of 75 (WHO, 2024). On the Ministry of Health's website, there are no reports on patient loyalty surveys in general towards hospitals, the majority of reports lead to patient satisfaction (Cho, 2024; Cui et al., 2025). At least the private hospital classification report on data from the Indonesian Ministry of Health in 2024, indicates that the average satisfaction rate of private hospital patients reaches 76%, but the patient loyalty rate is only around 58%.

In addition, hospitals are related to marketing, because hospitals are classified as semi-business organizations, whose characteristics of semi-business organizations as stated by Weinberg and Lovelock (2016) are suitable for hospitals, namely: many public, many purposes, the main product is services and is supervised by the community, there is administrative malfunction in health services. This indicates that there is a difference in services, especially for BPJS Kesehatan patients at this time, which creates a gap in access and quality of services between patient segments due to strict rules from the Regulator in the current *JKN* era.

In this context, the marketing steps of the healthcare sector are becoming increasingly relevant as a strategy to maintain a competitive advantage and build sustainable patient loyalty. The CEO World report above states that this condition reflects the structural challenges faced by the national health system, where hospitals as the vanguard of health services are required to be able to provide services that are not only medically competent, but also able to provide a satisfactory experience for patients. Because of its promotive nature as a health service unit,

there must be efforts made by hospitals to maintain the overall quality of public health. The quality of health services refers to the level of perfection of health services that provide satisfaction for patients as users and is multidimensional, or not only the sick and healthy themselves are considered but the performance of hospital management as well (Ombuh et al., 2021), especially if it is able to create loyalty from patients.

Government Regulation Number 47 of 2021 concerning the Implementation of the Hospital Sector, Article 5 Paragraph 2 states that the type of health services in hospitals must meet the availability of human resources, buildings, facilities, and equipment. In this regard, numerous studies have shown that combining the perspective of healthcare providers with the physical environment is essential to creating an effective environment that meets the needs of patients. The physical environment of health facilities can have a significant impact on the quality of services provided (Fatima et al., 2018; Iyendo et al., 2016). Various aspects of the physical environment, such as localization, indoor environment, natural and artificial lighting, can have a direct influence on the quality of service (Brambilla et al., 2020). The impact of the physical quality of a good healthcare facility environment can positively affect patient health outcomes (Tekin et al., 2023). Thus, experts state that the physical environment owned by the hospital has something to do with the quality of service (Saanin et al., 2022; Setyawati & Hanny, 2020; Sariatmi & Yoga Pramana, 2022). In this regard, it is seen that the physical environment factor is very important to consider, because if the level of quality of service provided and the physical environmental conditions provided by the service provider are in accordance with or even exceed what is expected by the patient (Ali & Haeruddin, 2024), it will lead the patient to return to the hospital service.

In this aspect, the researcher claims, it does not mean that the hospital expects people to get sick. Health conditions have become a reality of people's needs, not only for treatment, hospitalization, or acute disease surgery, but also for routine check-ups including the scope of health services. Therefore, from this reality, hospitals must be able to compete in terms of management, service, and marketing, in order to increase competitive value in the minds of the public. Especially in the field of marketing management, the 7P (Product, Price, Place, Promotion, People, Process, Physical Evidence) aspect of the marketing mix is theoretically positioned as a comprehensive framework that is able to optimize the patient experience and build long-term loyalty. Especially in private hospitals that experts admit must be more aggressive in marketing than government-owned hospitals. Government-owned hospitals are considered easier to adjust, especially in terms of price, location, human resources, products, processes, facilities and physical infrastructure. Government-owned hospitals are said to not need excessive promotion because financial resources come from the government, in contrast to private hospitals with management managed by private ownership where if they do not do good management, one of which is marketing, they will face the risk of bankruptcy (Chen et al., 2019 & Naamati Schneider, 2021).

One of the private hospitals in this case is Anna Hospital, Bekasi. This hospital was originally established in 2003 known as the Mother and Child Hospital (RSIA), then in 2010 changed its status to a General Hospital (RSU), and was inaugurated as a hospital in 2013 and has been accredited at the main level in 2019. Anna Hospital which is classified as Class C is no different from hospitals in Class A and B, which provides health services for all types of diseases. It is no different from Anna Medika Hospital, which is a Group of Anna Hospital in

Pekayon; which is located in North Bekasi and was established in 2010. The difference is that Class C hospitals must have at least 100 inpatient beds (PP No.47 Th.2021). Overall, Anna Hospital has complied with Government Regulation No. 47 of 2021 concerning the Implementation of the Hospital Sector.

Anna Hospital, which is a private hospital that has been around for quite a long time and has enough competitiveness in the midst of the current competition for hospitals in the Bekasi area. The problem also occurs that there is a decrease in the number of insurance, company and general guarantee patients compared to the number of BPJS patients in the last three years. The BPJS era makes patients more dominant to receive treatment with BPJS guarantees, this must certainly be watched out for by the Management of Anna Hospital, because patients who receive non-BPJS treatment provide a relatively larger income margin than BPJS who use the InaCbgs tariff, which is based on a fixed service package that has been regulated by the government. Therefore, the researcher is interested in studying it from the 7 P Marketing Mix, in order to provide the necessary input to the private hospital so that it can maintain its revenue performance. The researcher sees the patient loyalty factor as an important retention to maintain business continuity through quality service and with the support of the Brand Image that has been created at the hospital.

Research conducted by Fadhilah & Katmini (2023) in their research in Pakistani hospitals found that the 7P marketing mix has a positive and significant influence on patient loyalty, with the people and process aspects being the most dominant factors. This result is in line with the findings of Ghabban (2025) who identified that people and process are the determining factors. However, research conducted by Siripipatthanakul & Chana (2021) showed different results, where not all elements of the 7P marketing mix had a significant influence on patient loyalty, with promotion aspects and physical evidence showing a weak influence. In line with this research, M. Andri Junaidi (2020) for Literature Review in presenting the Thesis of the Postgraduate Program in Indonesian Hospital Administration Studies stated that patient loyalty is influenced by a short service process, not long-winded, the short waiting time to get services greatly affects patient loyalty. The place or location of the hospital also has a positive effect on patient loyalty.

Previous research has also shown inconsistencies in the context of the influence of the promotion aspect on patient loyalty. A study conducted by Hassan (2024) in a Malaysian hospital shows that an intensive promotional strategy can increase awareness but does not automatically increase loyalty, and can even create an excessive commercial perception. On the other hand, research by Rosyida et al., (2025) at a hospital in Kediri shows that proper marketing can strengthen brand image and indirectly increase loyalty through increased trust and emotional connection.

Complexized Problems The research is growing when considering Indonesia's specific context, where cultural, socioeconomic, and health system factors have unique characteristics that can influence the dynamics of the relationship between the marketing mix, brand image, and patient loyalty. Research by Astuti et al., (2025) shows that Indonesian patients tend to give higher weight to the process and physical evidence aspects compared to the price and promotion aspects, a phenomenon that is different from the findings of research in western countries. However, previous research has not explored in depth how brand image moderates these relationships in the context of a relationship-oriented Indonesian culture, especially since

brand image is relatively new in the healthcare sector and its value is important for healthcare organizations to survive in this competitive era (Vimla & Taneja, 2021).

The most interesting research contradiction can be seen in the results of a study on the influence of the people aspect in the 7P marketing mix. Hai et al., (2021) research in a Vietnamese hospital shows that the quality of interaction between medical personnel and patients has the strongest influence on loyalty, with brand image acting as a catalyst that strengthens the relationship. On the other hand, the research of Fasanelli et al., (2017) in an Italian hospital found that excessive focus on interpersonal aspects can actually obscure patients' evaluations of technical competence, so that brand images that emphasize humanist aspects can weaken patients' perception of true quality.

The urgency of this research is underscored by the fact that in Mene Paradila's research (2021), it was found that Brand image will have a direct effect on high consumer satisfaction which will have an impact on hospital visits. The rapid development of the market requires companies to increase consumer satisfaction by encouraging consumers to pay more attention to the brand image rather than the physical characteristics of a product in deciding purchases and loyalty (Candra Setyawati, 2015). According to Chandra Setyawati, image correlates with customer satisfaction. Based on the experience that consumers (patients) have had, they will provide an assessment and evaluation of the entire performance of hospital services. Based on the comparison of the quality of expectations with the quality of service performance, customers will give positive or negative emotions, depending on whether the customer's expectations are met. For patients, having a good image in terms of brand will affect the patient's perception that the hospital has quality services. Therefore, this research aims to analyze the direct and moderating effects of the 7P Marketing Mix on patient loyalty, with Brand Image as a moderating variable, at Anna Hospital and Anna Medika Hospital, Bekasi. The novelty of this research lies in its examination of Brand Image as a moderating variable within the 7P framework in the context of Indonesian private hospitals, an area that has received limited empirical attention. The contribution of this research is to provide strategic insights for hospital management to enhance sustainable patient loyalty, particularly in balancing the needs of BPJS and non-BPJS patient segments. The benefits include practical recommendations for marketing policy formulation and theoretical advancements in healthcare marketing literature.

RESEARCH METHOD

Research Object

This research was conducted at Anna West Bekasi Hospital and Anna Medika Hospital in North Bekasi; which is one of the private hospitals in Bekasi, West Java which has a strategic location and is a large private hospital in Bekasi. Sparta (2015) in his Literature on the Influence of Software Quality, Information Accuracy, Information Timeliness, and Information Relevance on End-User Satisfaction of Accounting Information Systems said that quantitative research is a causal study, which is a study that describes the causal relationship of one or more problems in research. This study proves the direct causal relationship between the influencing variables (independent variables).

Research Design

The design of this study was research that was selected in a Cross-Sectional manner for observation at a single point in time to identify long-term patterns and trends. Data collection

was carried out in accordance with the research design that had been set. This research is a quantitative research. According to Kuncoro, from his book entitled "Quantitative, Qualitative & R&D Research Methods for Business and Economy" published in 2013 by Erlangga publisher in Jakarta, according to him quantitative research is systematic scientific research that focuses on collecting and analyzing data in the form of numbers or numerical data. The goal is to measure the relationships between variables, test hypotheses, and come to conclusions that can be objectively generalized using statistical methods. Measurement of variables performed quantitatively allows researchers to explain the cause-and-effect relationship or correlation between variables mathematically and empirically.

Sampling Techniques

The sampling technique in this study is with Google Form and filling out questionnaires by respondents through an online system. The technique used is Non Probably Sampling with the Purposive Sampling Technique approach, which according to Sinambela (2021) categorizes Purposive Sampling, is a technique in determining samples for certain purposes only, this technique is oriented to sample selection where the population and the specific purpose of the research are known by the researcher from the beginning so that the respondents who take the questionnaire have met the set criteria.

RESULTS AND DISCUSSION

Overview of Research Objects

This research was conducted at Anna Pekayon Hospital, which is located on Jl. Raya Pekayon No. 36, South Bekasi. As a long-standing healthcare provider, Anna Hospital has a strategic foundation that serves as a guideline in serving patients, which is contained in the Company's Vision, Mission, and Culture. This organizational identity is important to be presented in order to understand the context of the value that hospitals offer to their patients.

Based on the company's internal data, the following is the strategic profile of Anna Pekayon Hospital: Vision "To Become a Quality, Affordable and Trusted Hospital for all levels of society." This vision emphasizes Anna 11253Hospital focus on three main pillars: Quality (Product), Affordability (Price), and Trust (Brand Image/Amanah).

Hypothesis Testing

The basis for decision-making in accepting or rejecting the hypothesis refers to the T-Statistics and P-Values of the Path Coefficients results. The test was conducted with a confidence interval of 95% or a significance level (α) of 5%. The testing criteria are set as follows:

1. Accepted Hypothesis: If the T-Statistics value is > 1.96 and the P-Values value is < 0.05 . This shows that independent variables have a significant influence on dependent variables.
2. Hypothesis Rejected: If the T-Statistics value < 1.96 or the P-Values value > 0.05 . This shows that the influence between variables is not statistically significant.

In addition to seeing the significance, the direction of the relationship between variables is also considered through the Original Sample (O) value. A positive value indicates a unidirectional relationship, while a negative value indicates an opposite relationship. In more detail, the results of hypothesis testing will be described into two parts, namely direct effects testing and moderating effects.

Test of the Direct Influence of Marketing Mix 7P on Patient Loyalty

Direct influence testing aims to determine the significance of the relationship between independent variables (Marketing Mix and Brand Image) and dependent variables (Patient Loyalty) without involving moderation variables. Based on the bootstrapping results, a summary of the results of the direct influence test is presented in Table 2 below:

Table 2 Direct Influence Hypothesis Testing Results

Hypothesis	Relationship Pathway	Original Sample (O)	T-Statistics	P-Values	Results
H1	Product → Loyalties	0.362	4.337	0.000	Accepted
H2	Price → Loyalties	-0.157	1.783	0.075	Rejected
H3	Loyalties → Square	0.090	0.772	0.440	Rejected
H4	Promotion → Loyalty	-0.047	0.349	0.727	Rejected
H5	People → Loyalties	-0.004	0.055	0.956	Rejected
H6	Process → Loyalty	0.038	0.450	0.653	Rejected
H7	Physical Evidence → Loyalties	0.420	3.051	0.002	Accepted

Source: Primary data processed with SmartPLS 4, 2026

Based on the summary of the results of the hypothesis testing in Table 2 above, it can be seen that out of a total of seven direct influence hypotheses proposed, there are two hypotheses that are declared accepted and five hypotheses are declared rejected. This decision is based on P-Values that meet the significance requirements (< 0.05) and T-Statistics values that are above the critical threshold (> 1.96). An exception occurs for the Physical Evidence variable that has a T-Statistics value above the set standard, so that the effect is declared "statistically accepted". In more detail, the interpretation of the test results for each hypothesis is as follows:

1. Influence of Product and Physical Evidence (H1 & H7 Accepted)

Based on the test results in Table 4.23, it was found that there are two variables of the marketing mix elements that have a positive and significant influence on patient loyalty, namely Physical Evidence and Product. The Physical Evidence variable recorded the strongest influence with a path coefficient value of 0.420 (P-Value 0.002), followed by the Product variable with a coefficient of 0.362 (P-Value 0.000). These findings indicate that fundamentally, Anna Hospital's patient loyalty is built on "visible quality" and "core quality". Patients decide to be loyal and return to treatment mainly because of the comfort of physical facilities (cleanliness, modern equipment, atmosphere of the treatment room) and the reliability of medical services (healing and competence of doctors). These two aspects are the main foundations (hard factors) that are directly felt by the patient.

2. Influence of Price, Place, Promotion, People, Process (H2, H3, H4, H5, H6 Rejected)

Meanwhile, the other five variables of the marketing mix, namely Price, Location, Promotion, People, and Process, were shown to have no significant effect on direct patient loyalty (P-Value > 0.05). In the Price variable, although it shows a P-Value value of 0.075 which is close to the significance threshold in the direction of a negative coefficient (-0.157), this hypothesis is still statistically rigorous. This implies that patients tend to be less sensitive to price, promotion, or staff friendliness factors in forming long-term loyalty. As long as physical facilities are adequate and medical services are cured, other supporting factors are considered secondary by Anna Hospital patients. The insignificance of the People (HR)

variable in this direct influence model is also an interesting finding that will be discussed further in the moderation effect test, where the role of medical staff is likely to be more functional in strengthening brand reputation than influencing loyalty directly.

Moderation Effect Test

The moderation effect test aims to find out whether the Brand Image variable is able to strengthen or weaken the relationship between Marketing Mix variables (especially Product, Promotion, and People) on Patient Loyalty. Based on the results of bootstrapping data processing, a summary of the results of the moderation effect test is presented in the following table:

Table 3 Results of Testing the Moderation Effect Hypothesis

Hipotesis	Interaction Pathway (Moderation)	Original Sample (O)	T-Statistics	P-Values	Results
H8a	Brand Image x People → Loyalty	-0.233	3.168	0.002	Signifikan
H8b	Brand Image x Product → Loyalty	-0.055	0.566	0.571	Insignificant
H8c	Brand Image x Promo → Loyalty	0.036	0.436	0.663	Insignificant

Based on the test results in Table 3, it can be concluded that Hypothesis 8 is partially accepted (specifically for the People/HR variable). Here's the explanation:

1. Brand Image Interaction with People (Significant)

The test results showed that the interaction between Brand Image and People had a significant influence with a T-Statistic value of 3.168 (>1.96) and a P-Value of 0.002 (<0.05). However, the direction of the relationship formed was negative (-0.233). These findings indicate a "Substitution Effect". This means that the roles of Brand Image and Staff Service (People) work in place of each other. When the patient's perception of the Anna Hospital Brand Image is very high (patients strongly believe in the reputation of the hospital), their sensitivity to the quality of individual staff (People) services is reduced. Their loyalty is already "locked" by the big name of the hospital, so the variety in staff service doesn't shake their loyalty too much. On the other hand, if the Brand Image is considered low, then the role of staff friendliness becomes very crucial to maintain loyalty.

2. Brand Image Interaction with Products & Promos (Insignificant)

The interaction of Brand Image on the Product and Promo relationship showed a P-Value of 0.571 and 0.663 (>0.05) respectively. This shows that Brand Image does not function as a moderator on the aspects of medical products and promotion. This means that the influence of medical quality (Product) on loyalty is independent and absolute; patients are loyal because they are cured (Good product), regardless of whether the brand image is high or low. Similarly, with promotions, brand reputation does not significantly change the way patients respond to promotional activities

Coefficient Determination Test

In this study, the evaluation of the structural model was carried out by reviewing the value of the R2 Determination Coefficient to see the overall predictive strength of the model, as well as the value of f2 (Effect Size) to determine the magnitude of the influence of each

exogenous variable on the endogenous variable.

Table 4 R-Square Values

Variable endogenous	R-Square	R-Square Adjusted	Criteria
Patient Loyalty	0.628	0.600	Moderate

Source: Primary data processed with SmartPLS 4, 2026

The R2 determination coefficient test was performed to measure how much the model was able to explain the variation of dependent variables. Based on the results of the data processing presented, an R2 value for the Loyalty variable was obtained of 0.628. This value means that 62.8% of the variability or changes that occur in patient loyalty at Anna Hospital can be explained together by the variables of the marketing mix (7P) and brand image. This indicates that this research model is moderate to strong, because it is able to predict the majority of factors that form loyalty. Meanwhile, the remaining 37.2% (100% - 62.8%) were explained by other variables or factors outside the study model, such as the patient's residence location, the influence of insurance referrals, PPK1 referrals (health centers and clinics) or other psychological factors that were not studied in this study, which were the influence of other independent variables that were not measured in this study. Loyalty measurement now uses a multidimensional approach, combining behaviors, attitudes, and commitments. The R-Square Adjusted value recorded at 0.600 also confirms that the model remains robust even considering the number of independent variables used.

Discussion

The Influence of Products on Patient Loyalty

These findings indicate that the core of patients' decisions to remain loyal to Anna Hospital lies in the quality of the healthcare products they receive. In the context of hospital services, "Products" are not just medicines, but the entire clinical service package which includes the competence of doctors, accuracy of diagnosis, speed of medical treatment, and the diversity of available polyclinics. The significance of this variable confirms that Anna Hospital patients have a rational orientation that prioritizes medical outcomes. This means that the higher the quality of healing and the completeness of medical services felt, the higher the patient's commitment to make Anna Hospital the first choice and recommend it to others.

The Effect of Price on Patient Loyalty

The second hypothesis (H2) test aims to examine the effect of Price (Price/Cost of Treatment) on Patient Loyalty. Based on the results of the statistical test in Table 2, the Price variable shows a negative path coefficient value of -0.157 with a T-Statistic of 1.783 (< 1.96) and a P-Value of 0.075 (> 0.05). Referring to the criteria of statistical significance, Hypothesis 2 is rejected. It concluded that patients' perceptions of price, whether affordable or expensive, did not have a significant or decisive influence in shaping their loyalty to Anna Hospital.

The Influence of Place on Patient Loyalty

The third hypothesis test (H3) was carried out to determine the extent of the influence of Place (Location and Ease of Access) on Patient Loyalty decisions at Anna Hospital. Based on

the results of statistical calculations in Table 4.23, the Place variable shows a path coefficient value of 0.090 with a T-Statistic of 0.772 (less than 1.96) and a P-Value of 0.440 (greater than 0.05). Thus, Hypothesis 3 is rejected. These results conclude that hospital location, both in terms of distance and physical affordability, has no real or significant influence on patient loyalty.

The Influence of Promotion on Patient Loyalty

The fourth hypothesis test (H4) aims to measure the effectiveness of Promotion (Promotion/Marketing) in influencing Patient Loyalty. Based on the results of statistical analysis in Table 4.23, the Promotion variable recorded a very weak negative path coefficient value of -0.047 with a T-Statistic value of 0.349 (far below 1.96) and a P-Value of 0.727 (far above 0.05). Thus, it can be concluded that Hypothesis 4 is Rejected. These results confirm that promotional activities carried out by hospitals, whether through social media, banners, or brochures, do not have a significant impact on patients' decisions to be loyal.

The Influence of People on Patient Loyalty

The fifth hypothesis test (H5) examines the role of People variables (HR/Medical and Non-Medical Personnel) on Patient Loyalty. Based on the results of the direct effect test in Table 4.23, the People variable showed a very small coefficient value with a negative value of -0.004 with a T-Statistic of 0.055 (far below 1.96) and a P-Value of 0.956 (> 0.05). Thus, Hypothesis 5 is Rejected. Statistically, these findings conclude that the friendliness, politeness, and interpersonal service of Anna Hospital staff independently do not have a significant influence on the formation of patient loyalty.

The Influence of Process on Patient Loyalty

The sixth hypothesis test (H6) aims to evaluate the influence of Process (Process/Service Flow) on Patient Loyalty. Based on the results of statistical analysis in Table 4.23, the Process variable has a very weak path coefficient value of 0.038 with a T-Statistic of 0.450 (< 1.96) and a P-Value of 0.653 (> 0.05). These results show that Hypothesis 6 is Rejected. Statistically, the speed of the administrative flow, ease of registration, and service procedures at Anna Hospital did not have a significant impact on shaping patient loyalty.

The Effect of Physical Evidence on Patient Loyalty

The seventh hypothesis test (H7) aims to prove the influence of Physical Evidence on Patient Loyalty. Based on the results of the direct effect test in Table 4.23, this variable recorded the highest path coefficient value compared to other variables, which was 0.420, with a T-Statistic value of 3.051 (> 1.96) and a P-Value of 0.002 (< 0.05). Based on this empirical data, Hypothesis 7 is accepted. These results prove that physical facilities, including building conditions, cleanliness, lounge comfort, and visible medical equipment, are the most dominant determinants in building patient loyalty at Anna Hospital directly.

The Role of Brand Image Moderation in Marketing Mix Relationships and Patient Loyalty

The eighth hypothesis test (H8) aims to analyze whether Brand Image plays a role as a

moderator variable that strengthens or weakens the influence of marketing mix elements on Patient Loyalty. Based on the results of interaction testing (bootstrapping), it was found that Brand Image was proven to significantly moderate the relationship in the People (HR) variable, but not significantly in the Product and Promotion variables. Therefore, Hypothesis 8 is accepted specifically on the People Dimension.

Managerial Implications

Based on the results of the research and discussions that have been conducted, this study formulates implications that can be beneficial for hospital management.

Based on the findings of research where Physical Evidence and Product are the main determinants of direct loyalty, as well as the role of Brand Image that moderates the People aspect, the management of Anna Hospital and Anna Medika Hospital is recommended to implement the following strategies:

1. Investment Priorities on "Tangible Cues" (Physical Facilities & Medical Equipment)

Given that Physical Evidence is proven to be the variable with the strongest direct influence, management is advised not to hesitate to allocate a capital expenditure budget (CAPEX) on a priority basis for medical equipment rejuvenation and maintenance of physical facilities. Management needs to ensure that hospital hygiene standards are on par with hospitality standards, modernize waiting rooms to make them more comfortable, and update the appearance of medical devices that are directly visible to patients. This is crucial because Anna Hospital patients assess "invisible" medical qualities through "visible" physical evidence; Facilities that look outdated or dilapidated will directly reduce the perception of quality and patient loyalty.

2. In line with the increase in company revenue that will be pursued for the Non-BPJS portion, the researcher suggests an increase in Physical Evidence that is more current with the times. For example, creating a Café in the Hospital Building that sells Coffee or Tea and snacks at affordable prices. This is to increase the comfort of patients who receive treatment in the hospital. Making beautiful spots in the corner of the room will be refreshing for patients who are treated who are Instagram able, this can add patients from Insurance, companies or General.

3. Clinical Excellence Strategy over Price War

Since the Product variable has a significant effect while the Price proves to be insignificant, management should avoid marketing strategies that focus on "price wars" or position themselves as low-cost service providers. Instead, the focus of marketing communication should be directed to the promotion of the completeness of specialist doctors, the success rate of medical treatment, and the adoption of the latest health technologies (opening special services or developing existing one's completer and more modern). These findings indicate that patients of Anna Hospital have inelastic characteristics towards price; They are willing to accept reasonable rate adjustments as long as they are balanced with tangible evidence of medical outcomes and superior clinical services. This must be maintained by Management to create Customer Relationships which is part of creating long-term customer loyalty (Hassan, 2024). Loyalty is a behavioral response that results from cumulative satisfaction, where superior service quality results not only in satisfaction but also in a

commitment to buy back despite situational challenges." (Oliver, 1977)

4. Strengthening Brand Image as an "Umbrella" of Trust

The findings of negative interactions (substitution effects) between Brand Image and People show that the big name of the hospital is able to cover the variability of individual staff services. Therefore, management is recommended to invest heavily in Brand Building activities to build a solid institutional reputation as a "Trusted Hospital". When the Anna Hospital brand is very strong, patient loyalty will be locked to the institution, so they tend to be more tolerant if they occasionally encounter variations in staff service that are not perfect. However, management still needs to maintain standard operating procedures (SOPs) for staff services, human resource development, including training, coaching, and competency improvement programs such as continuous Medical Personnel Certification so that there is no expectation gap that is too extreme, which can hurt the reputation of the brand itself. Empathy & personalization of patient service must be created, for example with Active Listening Training and Verbal Empathy. Huang & Sarigöllü (2012) explain that brand image can affect patients' cognitive processing and emotional response to various elements of the marketing mix, which ultimately influences behavioral responses in the form of long-term loyalty. Because according to Oliver (1977) that "Loyalty is a behavioral response resulting from cumulative satisfaction, where superior quality of service results not only in satisfaction but also in a commitment to buy back despite situational challenges."

5. Efficiency and Reallocation of Promotional Budgets

Given that the Promotion variable (both directly and when moderated) has been shown to have no significant effect on loyalty, management is advised to make efficiency on conventional physical promotional budgets such as banners, brochures, or hard-selling advertisements and start increasing marketing through online social interactions, in the form of spoken medical services, Word of Mouth as the most effective organic promotional tool.

6. Digital Promotion Breakthrough

The researcher also suggested that promotions at Anna Group hospitals be further enhanced with digital promotions. Management needs to increase "Brand Engagement" and "Relationship" (relationship with customers) to increase customer loyalty and encourage repeat purchases. So that the form of creative content in Social Media that has existed before, both on websites, websites, and Instagram must be changed in the pattern of presenting videos, for example, using content such as polls, quizzes, or challenges on social media to engage new customers directly, thereby increasing likes, shares, and comments. This strategy is effective because it creates a fun and personalized experience from the first interaction. It can also collaborate with influencers or other relevant brands to reach new audiences, as well as hold free webinars or live sessions. Customize promotional messages based on new customer demographics, and encourage them to create their own (User Generated Content) such as testimonials or product photos. It can also be used to provide consumer experience information to other consumers in online promotional media, in the marketing discipline known as electronic Word of Mouth (e-WOM). This is to boost non-BPJS patients whose percentage of treatment to the hospital is still below 30%. It is expected that the company's revenue will increase even more with a new breakthrough compared to the previous digital promotion.

CONCLUSION

This study examined the impact of the 7P Marketing Mix on patient loyalty at Anna Hospital and Anna Medika Hospital in Bekasi using SEM-PLS, finding that Physical Evidence and Product (medical quality) are the only variables with a direct and significant effect on loyalty, with Physical Evidence carrying the strongest influence (coefficient 0.420). Price and Promotion proved insignificant, largely due to the dominance of BPJS patients (73.5%) who are insensitive to service rates and unresponsive to conventional advertising, while People and Process functioned merely as hygiene factors insufficient on their own to drive long-term loyalty. Brand Image was found to partially moderate the relationship between People and loyalty, though in a negative (substitution) direction, suggesting that a strong hospital reputation can compensate for gaps in individual staff interactions. The study is limited by its homogeneous respondent profile, single-city geographical scope, and cross-sectional design, all of which constrain the generalizability of its findings. Future research should adopt a longitudinal approach to determine whether the substitution effect between Brand Image and human resources is sustained over time, while also incorporating digital service quality variables such as telemedicine and online registration and extending comparisons across hospital classifications (Type A, B, and C) to better capture the diversity of patient segments and loyalty drivers in the Indonesian healthcare context.

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