



## Analysis of Factors Determining Patient Preferences in Primary Healthcare: a Choice Modeling Study Using Conjoint Analysis on the Market Positioning Strategy of Independent Clinic

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**Abstract:** The primary objective of this study is to quantify the relative importance of key service attributes driving patient choice and to formulate an evidence-based turnaround strategy. The research hypothesizes that while cost is a factor, specific segments may value continuity of care over facilities (Hypothesis 1) and that employment status significantly alters time sensitivity (Hypothesis 3). To achieve these objectives, the study employs a quantitative approach using Choice-Based Conjoint (CBC) analysis. Primary data were collected from 107 respondents, consisting of women of reproductive age or a husbands in the Bandung area. The data were analysed using Hierarchical Bayes (HB) estimation to derive individual-level part-worth utilities, followed by market simulations to predict the share of preference under various competitive scenarios. The empirical results reveal a market reality that contradicts traditional assumptions. The analysis identifies Cost of Service (38.2%) and Clinic Facilities (17.8%) as the dominant drivers of choice. Contrary to the assumption that midwifery patients prioritize personal relationships, the study finds that the "Continuity of Care" attribute is secondary to economic and infrastructural factors, leading to the rejection of Hypothesis 1. A critical discovery is the phenomenon of psychological pricing; the utility data indicates that a tariff of IDR 120,000 yields significantly higher preference than the lowest tariff of IDR 75,000, suggesting that pricing too low signals inferior quality to modern consumers. Furthermore, the study confirms that the working segment is highly sensitive to wait times, penalizing delays heavily. Behavioural segmentation analysis further reveals that "Traditionalist" patients rely on tangible physical cues, such as modern equipment, to judge clinical quality, rather than purely relational factors.

**Keywords:** Choice Modelling, Consumer Preference, Primary Health Care, Private Midwifery Practice, STP, Strategic Marketing, Turnaround Strategy.

**Abstrak:** Tujuan utama penelitian ini adalah untuk mengukur pentingnya relatif atribut layanan utama yang mendorong pilihan pasien dan untuk merumuskan strategi pemulihan berbasis bukti. Penelitian ini berhipotesis bahwa meskipun biaya merupakan faktor, segmen tertentu mungkin lebih menghargai kontinuitas perawatan daripada fasilitas (Hipotesis 1) dan bahwa status pekerjaan secara signifikan mengubah sensitivitas waktu (Hipotesis 3). Untuk mencapai tujuan ini, penelitian ini menggunakan pendekatan kuantitatif dengan menggunakan analisis Choice-Based Conjoint (CBC). Data primer dikumpulkan dari 107 responden, yang terdiri dari wanita usia reproduktif atau suami di wilayah Bandung. Data dianalisis menggunakan estimasi Hierarchical Bayes (HB) untuk mendapatkan utilitas nilai parsial tingkat individu, diikuti oleh simulasi pasar untuk memprediksi pangsa preferensi di bawah berbagai skenario kompetitif. Hasil empiris mengungkapkan realitas pasar yang bertentangan dengan asumsi tradisional. Analisis mengidentifikasi Biaya Layanan (38,2%) dan Fasilitas Klinik (17,8%) sebagai pendorong utama pilihan. Bertentangan dengan asumsi bahwa pasien kebidanan memprioritaskan hubungan pribadi, penelitian ini menemukan bahwa atribut "Kontinuitas Perawatan" berada di urutan kedua setelah faktor ekonomi dan infrastruktur, yang menyebabkan penolakan Hipotesis 1. Temuan penting adalah fenomena penetapan harga psikologis; data utilitas menunjukkan bahwa tarif Rp 120.000 menghasilkan preferensi yang jauh lebih tinggi daripada tarif terendah Rp 75.000, menunjukkan bahwa harga yang terlalu rendah menandakan kualitas yang lebih rendah bagi konsumen modern. Lebih lanjut, penelitian ini menegaskan bahwa segmen pekerja sangat sensitif terhadap waktu tunggu, dan sangat menghukum keterlambatan. Analisis segmentasi perilaku lebih lanjut mengungkapkan bahwa pasien "Tradisional" mengandalkan isyarat fisik yang nyata, seperti peralatan modern, untuk menilai kualitas klinis, daripada faktor-faktor yang murni bersifat relasional.

**Kata kunci:** Pelayanan Kesehatan Primer, Pemasaran Strategis, Pemodelan Pilihan, Praktik Kebidanan Swasta, Preferensi Konsumen, STP, Strategi Pemulihan.

## **1. INTRODUCTION**

The human life cycle, from prenatal to elderly phases, requires professional support to enhance quality of life (Emily Wootton et al., WHO 2018). In the prenatal phase, midwives play a crucial role in reducing maternal mortality through evidence-based services (Renfrew et al., 2014). In Indonesia, private midwifery clinics are vital for maternity health services, particularly in rural areas, due to their personalized approach and affordability (Indonesia Ministry of Health, 2020). Meanwhile, the healthcare service market is projected to grow by 7.2% annually (Grand View Research, 2021).

The healthcare landscape in Indonesia is experiencing a significant competitive shift, marked by the expansion of large hospital networks operating with modern facilities and supported by extensive insurance coverage. This phenomenon creates an existential challenge for the sustainability of independent clinics, especially private midwifery practices that traditionally rely on emotional ties and local wisdom in their services. Many of these independent clinics have experienced a drastic decline in patient numbers, as was the case at a midwife clinic in Soreang, where the number of monthly maternity patients dropped from 15-20 to just 2-3 after a competing hospital opened nearby.

The dilemma facing these independent clinic operators is fundamental: should they transform into larger facilities with higher operating costs, or find a market niche with a unique differentiation strategy? Failure to identify the key factors driving patient preferences in this new era could result in failed investments and the loss of a community healthcare legacy.

Therefore, this research is crucial to fill this gap in understanding. This research aims to build and test a patient preference model to identify the most significant healthcare attributes in shaping patient choices, thereby providing evidence-based strategic guidance for independent clinics.

## **2. LITERATURE REVIEW**

### **Competitive Landscape in the Healthcare Industry**

To understand the strategic pressures that demand differentiation for independent clinics, an analysis of the external environment is crucial. At the macro level, the PESTEL (Political, Economic, Social, Technological, Environmental, Legal) framework demonstrates that the healthcare industry does not operate in a vacuum. Government policies such as clinic regulations (Political), the growth of the middle class with higher disposable income (Economic), increased awareness of patient experience (Social), as well as the emergence of

telemedicine and health applications (Technological), are collectively reshaping patient expectations and behavior.

At a more specific industry level, Porter's Five Forces framework helps analyze the competitive structure. For independent clinics, the main pressure comes from intense competition among existing competitors. The expansion of corporate hospital networks has dramatically increased the intensity of this competition. They compete not only by offering state-of-the-art medical facilities and extensive insurance partnerships, but also through scale advantages in terms of branding, standardization of procedures, and operational efficiency. In an environment like this, where service differentiation is difficult for smaller clinics to achieve, the factor costs are often the primary battleground, which forms the basis for Hypothesis 2.

This section must contain a state-of-the-art explanation. It can be explained in several ways. First, you can discuss several related papers, both about objects, methods, and their results. From there, you can explain and emphasize gaps or differences between your research and previous research. The second way is to combine theory with related literature and explain each theory in one sub-chapter.

### **From Segmentation to Key Attributes**

In a fiercely competitive landscape, traditional mass marketing approaches are increasingly ineffective. Modern marketing theory emphasizes a customer-centric approach, often encapsulated in the Segmentation, Targeting, and Positioning (STP) framework. The STP model offers a structured method for dividing a diverse market into smaller, more homogeneous groups (Segmentation), choosing the most suitable segments to serve (Targeting), and creating a distinct brand image in the minds of the target audience (Positioning).

### **Behavioural Segmentation**

This approach has evolved beyond simple demographics to include behavioral segmentation. Research by Engström et al. (2022) clearly shows that segmenting patients based on their behavior, such as how they seek information or their level of involvement in their own care, can result in more efficient and personalized service design. The study identified several segments, two of which are particularly relevant to this research:

1. "Proactive": This segment is characterized by active involvement in their health. They tend to independently search for information online before and after consultations, desire a partner role in decision-making, and are more open to the use of new technologies in healthcare. Logically, this segment will value attributes such as a Wide range of services (more choices) and advanced facilities & technology.

2. "Traditionalist": This segment represents patients who are more passive and value a more conventional healthcare structure. They are less proactive in seeking information and are more comfortable leaving decisions to medical authorities. For this segment, trust built through long-term relationships is very important, so they are expected to give more weight to Continuity of Care.

A deep understanding of the different characteristics and needs of these segments provides a strong theoretical basis for Hypothesis 4.

### **Key Attributes**

After understanding "who" our patients are, the next step is to identify "what" they want. A systematic review by Lim et al. (2022) provides strong empirical evidence on the attributes most crucial in shaping patient preferences in primary healthcare. Of the 58 attributes analyzed, several consistently emerged as the most important:

1. Appointment Waiting Time: This attribute is not just a matter of convenience, but also concerns opportunity costs, especially for patients who work. Ease of access has consistently been shown to be one of the strongest drivers of preference, which is the basis for Hypothesis 3.
2. Service Cost: As the most obvious transactional factor, cost is a major determinant, especially when other service qualities are considered equivalent. This is relevant to Hypothesis 2.
3. Continuity of Care: This attribute reflects the patient's psychological need for trust, security, and efficiency. Meeting with the same practitioner reduces the burden on patients to recount their medical history and builds a stronger therapeutic relationship. This is the essence of "Personal Relationships" and is the basis for Hypothesis 1.

### **Conjoint Analysis**

Once the importance of segmentation is established, the challenge becomes how to quantitatively measure the complex preferences within each segment. Traditional survey methods are often inadequate as they fail to capture how consumers make trade-offs between different service attributes like price, quality, and convenience.

To overcome this limitation, this study utilizes Conjoint Analysis. This stated preference method allows researchers to deconstruct how individuals value the different components of a product or service. By presenting respondents with a series of structured, hypothetical service scenarios, Conjoint Analysis can calculate the utility of each attribute level (e.g., low cost vs. high cost) and determine the relative importance of each attribute to the overall decision. This methodology is highly relevant in healthcare research for understanding how patients balance

factors like treatment effectiveness, cost, and service characteristics. Its ability to simulate real-world trade-offs makes it an ideal tool for testing the hypotheses central to this study.

### **3. RESEARCH METHODOLOGY**

#### **Research Paradigm and Approach**

This research is grounded in a positivist research paradigm, which assumes that social reality is objective, measurable, and can be understood through the empirical testing of pre-formulated hypotheses. This paradigm views the phenomenon of patient preference as identifiable and quantifiable through clearly defined variables.

Consequently, a quantitative research approach is adopted as the primary method. This approach is deductive, moving from the general theories and hypotheses outlined in Chapter II to the collection and analysis of specific data aimed at verifying or refuting these hypotheses. The quantitative approach is highly suitable for this research as it aligns with the main goal of numerically quantifying the relative importance of each healthcare service attribute in shaping patient choices.

#### **Overall Research Design**

This study utilizes a cross-sectional design, where patient preference data is collected at a single point in time. This design is considered adequate for understanding the current market dynamics and patient preferences, which are the primary focus of the research. Nevertheless, it is acknowledged that this design has limitations as it cannot capture the evolution of preferences over time, a constraint identified within the research scope.

#### **Population and Sampling**

The target population for this research, as defined in the research scope, is women of productive age (20-40 years) or their husbands who have used or are potential users of primary healthcare services in the Greater Bandung area. The sampling method used is non-probability with a purposive/quota sampling technique. The choice of this method is a pragmatic decision, acknowledged as one of the research limitations. The "purposive" aspect is used to intentionally target individuals who fit the predetermined demographic profile. Meanwhile, the "quota" aspect is applied to ensure that the final sample has a balanced distribution on key variables such as age groups (20-29 years, 30-40 years) and income levels. The use of quotas aims to enhance the representativeness of the sample and mitigate some of the bias inherent in non-probability methods. Based on this study's design, the recommended minimum sample size can be calculated (56 respondents). To ensure robust utility estimation at both the aggregate and segment levels, this research sets a target sample size of 168 respondents.

### **Data Collection Procedure**

The survey will be created and distributed using a professional online survey platform (Sawtooth Software web-based survey feature). Distribution will be conducted through a multi-channel approach to reach a diverse audience, including targeted advertising on social media, partnerships with community groups (parent forums, local women's organizations), and a snowball sampling technique initiated through personal networks. The data collection process will be carried out over a specific period (4-6 weeks) or until the target sample size and established quotas are met.

### **Data Analysis**

The core analysis will use Hierarchical Bayes (HB) regression to estimate the utility values (part-worths) of each attribute level. The theoretical basis of this model is Random Utility Theory (RUT), which posits that the utility a person derives from an alternative consists of a systematic component (based on observable attributes) and a random component (based on unobserved factors). This theory assumes that respondents will choose the alternative that offers the highest total utility.

## **4. RESULTS AND DISCUSSION**

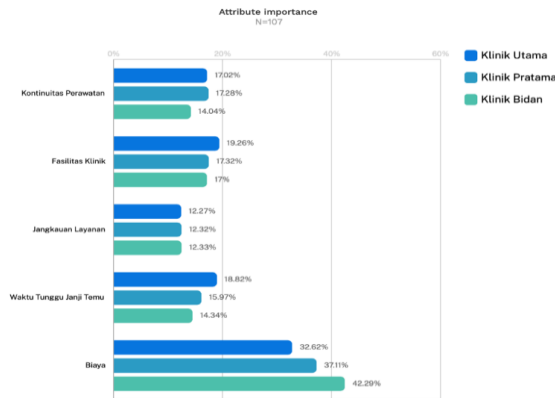
### **Hypothesis Testing**

This section presents the statistical validation of the four research hypotheses formulated in Chapter I. The testing procedure utilizes the segmented part-worth data derived from the Hierarchical Bayes estimation to compare preferences across different patient groups.

#### **H1: The Role of Personal Connection in Midwifery Care**

Hypothesis: The attribute of “Continuity of Care” will have a significantly higher relative importance score for patients preferring Midwifery Clinics compared to those preferring Primary or Main Clinics.

Result: Rejected.



**Figure 1.** Attribute Importance.

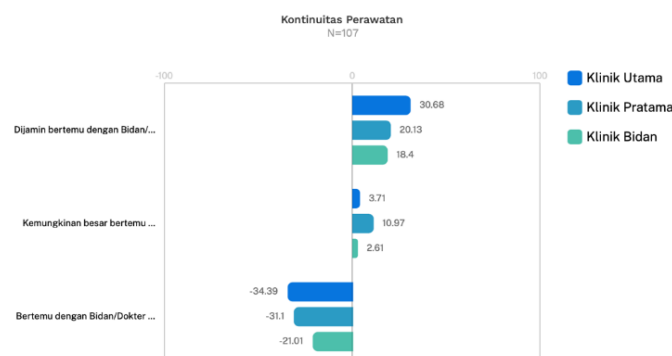
To test this hypothesis, the respondent were segmented based on their stated preference for clinic type (Midwifery vs. Primary vs. Main). The relative importance scores for “Continuity of Care” were compared across these three groups.

Relative Importance Analysis, contrary to the hypothesis that midwifery patients primarily seek a personal bond, the data reveal that this segment actually assigns the lowest relative importance to this attribute compared to other groups:

1. Primary Clinic (Pratama) Segment: 17.28%
2. Main Clinic (Utama) Segment: 17.02%
3. Midwifery Clinic Segment: 14.04%

This finding is statistically significant and counterintuitive to the traditional view of midwifery. Patients preferring modern medical facilities (Primary/Main Clinics) appear to value the consistency of seeing the same doctor more than midwifery patients value seeing the same midwife.

Utility Value Analysis for the highest level of continuity, “Guaranteed to see the same provider,” further supports this rejection. The utility derived from this level is highest for Main Clinic patients (+30.68) and lowest for Midwifery patients (+18.40).



**Figure 2.** Kontinuitas Perawatan.

Why do midwifery patients undervalue personal connection? The answer lies in the Cost of Service attribute. The data shows that the Midwifery segment is the most price-sensitive, assigning a massive 42.29% importance to Cost. This suggests a clear “Hierarchy of Needs” in the Bandung market: for the target demographic of independent midwife clinics, economic constraints are so pressing that they override the desire for relational continuity. While they might like a personal connection, they need affordability first. The “village midwife” emotional bond is a secondary luxury, not the primary driver of choice in this competitive landscape.

**Table 1.** Segment, Cost Importance, Continuity Importance, Utility: Guaranteed Same Provider.

Segment	Cost Importance	Continuity Importance	Utility: Guaranteed Same Provider
Main Clinic	32.62%	17.02%	+30.68
Primary Clinic	37.11%	17.28%	+20.13
Midwifery Clinic	42.29%	14.04%	+18.40

## H2: Price Sensitivity Analysis

Hypothesis: The “Cost of Service” attribute will have a significantly higher relative importance score for Primary Clinics (Pratama) compared to the more specialized Main Clinics (Utama).

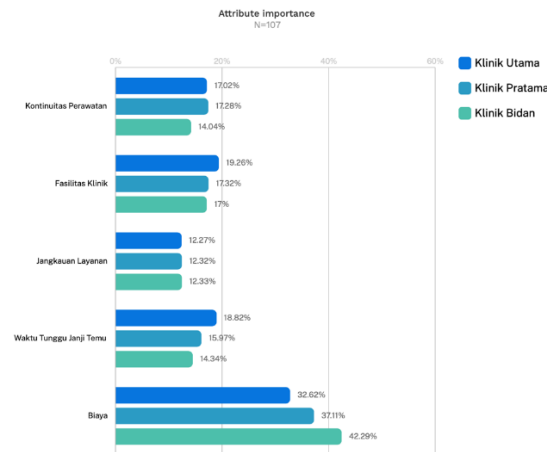
### Result: Supported.

To test this hypothesis, we compared the Relative Importance of the “Price” attribute between respondents who identified Primary Clinics as their preferred facility versus those who preferred Main Clinics.

Relative Importance Analysis data confirm that price sensitivity is inversely related to the level of clinic specialization.

1. Primary Clinic (Pratama) Segment: Patients in this group assign a high importance weight of 37,11% to the Cost attribute.
2. Main Clinic (Utama) Segment: Patients in this group assign a lower importance weight of 32.62%.





**Figure 3.** Attribute Importance.

The difference of approximately 4.5% supports the hypothesis that patients seeking general primary care (Pratama) are more elastic regarding price than those seeking specialist care (Utama). Patients expect to pay more for perceived expertise at a Main Clinic, whereas Primary Clinics are viewed more as a basic necessity where cost efficiency is paramount.

Additionally, the Midwifery segment, although not explicitly part of the H2 comparison, is crucial to note that the Midwifery Clinic segment exhibits the highest price sensitivity of all, with an importance score of 42.29%. This creates a clear strategic spectrum for independent clinics in Bandung:

1. Tier 1 Most Price Sensitive: Midwifery Clinics, target market: Budget-conscious, basic maternity needs.
2. Tier 2 Highly Sensitive: Primary Clinics, target market: General health, moderate budget.
3. Tier 3: Less Sensitive: Main Clinics, target market: Specialist care, higher willingness to pay.

The validation of H2 has significant implications for positioning. An independent clinic transitioning from the “Midwifery” model to a “Primary” model must be careful. While they can charge slightly more than a basic midwife practice, they are still operating in a highly price-sensitive zone (37% importance). They cannot yet command the premium pricing power of a Main Clinic without first establishing a reputation for specialist excellence.

**Table 2.** implications for positioning.

Clinic	Cost	Strategic Implication
Type	Importance	
Preference	Score	

Midwifery Clinic	42.29%	Cost Leadership is Critical. Price is the number 1 deal breaker.
Primary Clinic	37.11%	High Sensitivity. Must offer “Value for Money” the level of IDR 120,000 is a sweet spot.
Main Clinic	32.62%	Differentiation focus. Patients tolerate higher costs for expertise.

### H3: Accessibility and Employment Status

Hypothesis: The attribute “Appointment Wait Time” will have a high relative importance score overall across all clinic types. But it will be more significant for the segment of patients who are employed or highly mobile.

#### Result: Supported.

To validate this hypothesis, the respondents were segmented into two groups based on their employment status: Working N=58 and Not Working N=49. A comparative analysis of their Relative Importance scores and Part-Worth Utilities for the “Appointment Wait Time” attribute was conducted.

Relative Importance Analysis as predicted, the “Appointment Wait Time” attribute is universally important, ranking as a top-tier factor for both groups. However, there is a notable divergence in its weight:

1. Working Segment: This group assigns a higher relative importance to wait time (16.99%).
2. Not Working Segment: This group assigns a slightly lower relative importance (14.96%).

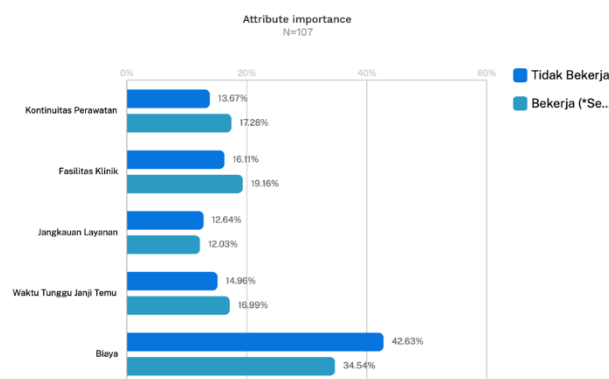
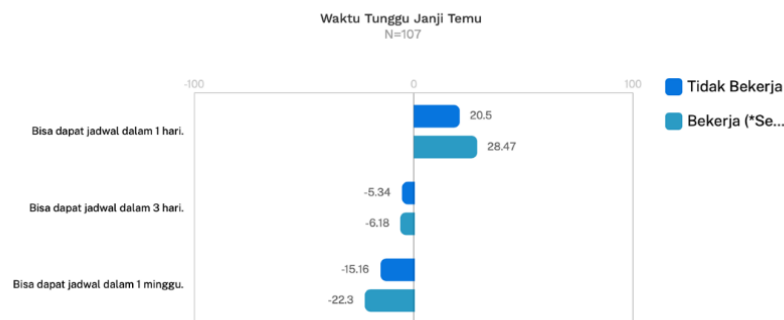


Figure 4. Attribute Importance.

This difference of over 2% indicates that for employed individuals who likely face stricter time constraints, the speed of access is a more critical determinant in their decision-making process compared to those who are not currently working.

**Utility Value Analysis.** The distinction becomes even more pronounced when examining the utility values (preference strength) for specific wait time levels. The “Working” segment rewards speed more generously and penalizes delays more severely than the “Not Working” segment.

1. **Reward for Speed (1-Day Wait):** The Working segment derives significantly higher satisfaction from getting an appointment within one day (Utility: +28.47) compared to the Not Working segment (Utility: +20.50).
2. **Penalty for Delay (1-Week Wait):** Conversely, the Working segment exhibits a stronger dissatisfaction with long waiting times. The negative utility for a one-week wait is deeper for workers (utility: -22.30) than for non-workers (Utility: -15.16).



**Figure 5.** Result Waiting Times.

These findings confirm that time is a “currency” of higher value for the employed segment. While accessibility is generally desired by all patients, it is a non-negotiable priority for working women or a husbands. Strategically, this implies that clinics targeting the professional demographic by offering evening clinics or corporate partnerships must prioritize operational efficiency to ensure minimal waiting times, as this is a key driver of value for this specific segment.

**Table 3.** specific segment.

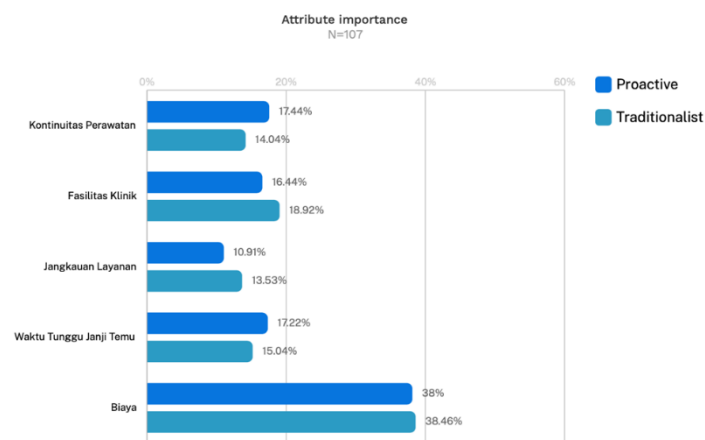
Metric	Not Working Segment N=49	Working Segment N=58	Difference	Interpretation
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Importance of Wait Time	14.96%	16.99%	+2.03%	Workers prioritize speed more.
Utility: 1-Day Wait	+20.50	+28.47	+7.97	Workers derive higher value from fast access.
Utility: 1-Week Wait	-15.16	-22.30	-7.14	Workers are more intolerant of delays.

#### H4: Preferences by Behavioural Segment

Hypothesis: Preferences for service attributes will differ significantly between “Proactive” and “Traditionalist” patient segments. Specifically, Proactive patients will assign higher importance to “Facilities” and “Range of Services,” while Traditionalists will value “Continuity of Care” more highly.

Result: Not Supported (Inverted Findings).



**Figure 6.** Attribute Importance.

To test this hypothesis, segmentation based on the behaviour of respondents’ survey data responses in the first session with Proactive N=50 and Traditionalist N=57 was submitted to Sawtooth Software as a new external variable to analyse with the CBC exercise and uses Hierarchical Bayes (HB) regression to estimate the utility values (part-worths) of each attribute level. A comparative analysis of their attribute importance scores reveals a pattern that directly contradicts the initial hypothesis.

1. Preference for Facilities and Technology, the hypothesis predicted that proactive patients, being more information-seeking, would demand advanced facilities. However, the data shows the opposite. The Traditionalist segment assigns a higher importance to Clinic Facilities (18.92%) compared to the Proactive segment (16.44%). This suggests that passive patients may rely on visible physical evidence like modern equipment as a proxy for quality more than active patients do.
2. Preference for Range of Services, similarly, the Traditionalist segment places a higher weight on Range of Services (13.53%) than the Proactive segment (10.91%). This indicates that the “one-stop-shop” convenience is more appealing to the traditional, perhaps less mobile, patient base.
3. Preference for Continuity of Care, most surprisingly, the hypothesis that Traditionalists would value personal relationships more was strongly refuted. The data shows that Proactive patients care significantly more about Continuity of Care (17.44%) than Traditionalist patients (14.04%). Looking at the utility values, Proactive patients derive massive utility from “Guaranteed to see the same provider” (+33.16), whereas Traditionalists derive much less value from it (+13.22).

These counterintuitive findings offer a new strategic perspective. It appears that “Proactive” patients who research symptoms and seek engagement understand the clinical value of a consistent therapeutic relationship. They know better that seeing the same doctor improves outcomes. In contrast, “Traditionalist” patients, who are less informed, seem to be dazzled by “shiny objects” (Facilities) and convenience (Range of Services), viewing healthcare more as a transactional commodity than a relationship.

**Table 4.** Result and Hypothesis.

<b>Attribute</b>	<b>Proactive Segment N=50</b>	<b>Traditionalist Segment N=57</b>	<b>Result vs. Hypothesis</b>
Clinic Facilities	16.44%	18.92%	Contradicts H4 (Traditionalist > Proactive).
Range of Service	10.91%	13.53%	Contradicts H4 (Traditionalist > Proactive).
Continuity of Care	17.44%	14.04%	Contradicts H4 (Proactive > Traditionalist).

## Market Simulation & Competitive Strategy

To translate the conjoint finding into actionable business strategies, a comprehensive market simulation was conducted using the Sawtooth Software simulator. The goal was to predict the potential market share (Share of Preference) of our Clinic under various strategic scenarios against two distinct market competitors. While the initial concern in Chapter I focused on the corporate hospital, in the Market Simulation, a mid-level clinic (Bumi Sehat) is raised to pose a possible direct threat to the 'Sweet Spot' attribute at a closer price point.

### Definition of Competitive Profiles

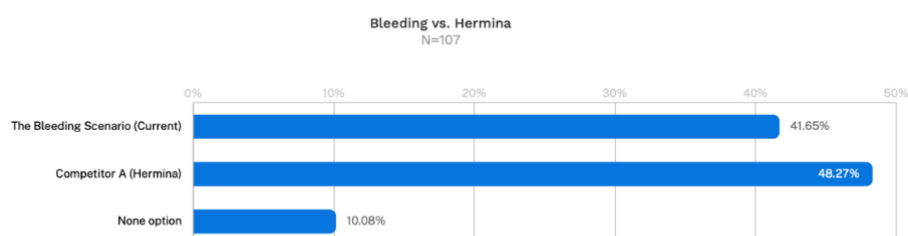
Three distinct market profiles were established for this simulation:

1. Competitor A (High-End Hospital/Hermina): represents the premium Main Clinic segment with advanced facilities, complete services, and fast access, but at a high price point of IDR 250,000 and low personal continuity.
2. Competitor B (Mid-Tier Clinic/Bumi Sehat): Represents a strong value Primary Clinic, the competitor with modern facilities, complete services, and fast access, priced at IDR 150,000.
3. Our Midwifery Clinic (The Bleeding Current Condition): Represents the current status quo with a low price at IDR 75,000, basic facilities, limited services, and a slower wait time, relying solely on guaranteed continuity.

### Base Case Scenario (Current Reality)

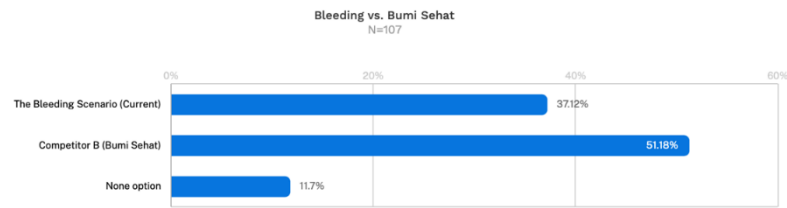
In the first simulation, the current profile of our Midwifery Clinic was tested against the competitors to validate the business problem identified in Chapter I.

1. Versus Competitor A (Hermina): Our Midwifery Clinic achieves a 41.65% share of preference, losing to Hermina's 48.27%. Despite being significantly cheaper (75k vs. 250k), the clinic loses because the low price cannot compensate for the lack of facilities and speed.



**Figure 7.** Bleeding vs Hermina.

2. Versus Competitor B (Bumi Sehat): The loss is even more severe. Our Midwifery Clinic captures only 37.12%, while Bumi Sehat dominates with 51.18%.



**Figure 8.** Bleeding vs Bumi Sehat.

This simulation reveals a critical finding: Our Midwifery Clinic’s biggest threat is not the expensive hospital, but the modernized mid-tier clinic. Patients are willing to pay IDR 150,000 for better facilities and speed at Bumi Sehat, abandoning the “cheap but basic” option.

**Table 5.** Result Preference.

Metric	Our Midwifery Clinic (Current)	Competitor A (Hermina)	Competitor B (Bumi Sehat)	Result
Share of	41.65%	48.27%	-	LOSS
Preference	37.12%	-	51.18%	BIG LOSS

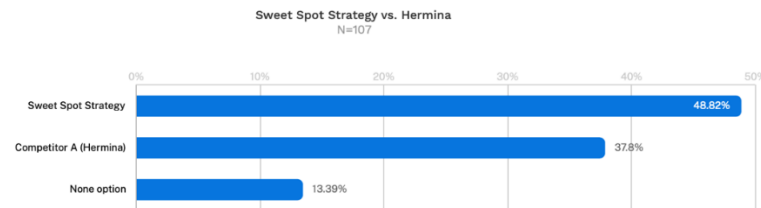
### Optimization Scenarios (What-If Analysis)

Based on the utility analysis in section IV.3.2, a “Sweet Spot Strategy” was formulated to turn the tide. This strategy involves three key changes:

1. Price Correction, increasing the price from IDR 75,000 to IDR 120,000 to capture a high margin and perceived quality.
2. Facility Upgrade, investing in Modern Facilities to match the mid-tier standard.
3. Operational Excellence, improving wait time to 1 Day to match competitors.
4. Core Differentiator, retaining Guaranteed Continuity as the clinic’s unique strength.

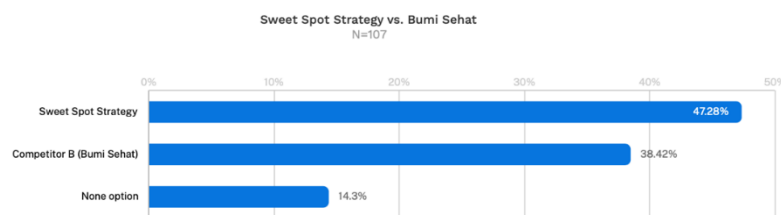
The results of this strategy are transformative:

1. Versus Competitor A (Hermina): Our Midwifery Clinic successfully flips the market, achieving a 48.82% share against Hermina’s 37.8%. The combination of personal connection and reasonable pricing outperforms the impersonal, expensive hospital.



**Figure 9.** Sweet Sport vs Hermina.

2. Versus Competitor B (Bumi Sehat): Our Midwifery Clinic also defeats the strong mid-tier rival, capturing 47.28% against Bumi Sehat's 38.42%.



**Figure 10.** Sweet Sport vs Bumi Sehat.

By upgrading facilities to modern and fixing wait times, our Midwifery Clinic removes the reasons to reject. Once the playing field is leveled on facilities/speed, the Midwifery Clinic's Guaranteed Continuity becomes the deciding factor that allows it to win, even against a rival with a more complete range of services.

**Table 6.** Result Preference.

Metric	Our Midwifery Clinic (Sweet Spot)	Competitor A (Hermina)	Competitor B (Bumi Sehat)	Result
Share of Preference	48.82%	37.8%	-	WIN (+7.17%)
	47.28%	-	38.42%	WIN (+10.16%)

## Discussion of Strategic Implications

The simulation conclusively proves that a low-cost strategy is a trap for independent clinics. The market does not want the cheapest option; they want the best value. By positioning at IDR 120,000 with Modern Facilities and 1-Day Access, our Midwifery Clinic moves from a Bleeding position by losing ~14% share to mid-tier rivals to a market-leading position. This



strategy leverages the clinic's unfair advantage, Personal Continuity, which corporate competitors cannot easily replicate.

## **5. CONCLUSION**

The primary objective of this research was to identify the key factors driving patient preferences in the primary healthcare market of Bandung and to formulate a turnaround strategy for independent clinics facing intense competition from corporate hospitals. Based on the Choice-Based Conjoint (CBC) analysis conducted on 107 respondents and the subsequent market simulations, the following conclusions are drawn:

### **1. Dominance of Fundamental Attributes**

The market decision-making is overwhelmingly driven by Cost of Service (38.2%) and Clinic Facilities (17.8%). While "Personal Connection" as the Continuity of Care is a unique asset of midwifery clinics, empirical evidence rejects Hypothesis 1, showing that for price-sensitive patients, emotional connection is secondary to economic affordability.

### **2. The "Value" Trap**

The current low-cost strategy of IDR 75,000, employed by our Clinic, is suboptimal. The utility data reveal a psychological pricing phenomenon where patients perceive IDR 120,000 as having higher utility (+19.60) than IDR 75,000 (+16.99). The lower price point likely signals inferior quality in the minds of modern consumers.

### **3. Universal Demand for Modernity**

There is a severe market penalty for "Basic Facilities" (-32.76 utility score). Regardless of whether patients are "Proactive" or "Traditionalist," there is a universal baseline expectation for modern diagnostic tools and comfort.

### **4. Time Sensitivity**

Hypothesis 3 is supported, confirming that the "Working" segment (56% of the sample) is highly sensitive to wait times. Improving accessibility from "1 Week" to "1 Day" yields a massive utility gain, acting as a crucial differentiator against the bureaucratic delays often found in public health centres.

### **5. Strategic Viability**

The market simulation proves that the clinic does not need to transform into a full-scale hospital to survive. By adopting a "Sweet Spot Strategy" which is moderate pricing, modern basic facilities, and operational speed, the clinic can achieve a predicted Share of Preference of 48.8%, outperforming the premium competitor (Hermina).

## REFERENCES

- Al-Omari, B., Farhat, J., & Ershaid, M. (2022). Conjoint analysis: A research method to study patients preferences and personalize care. *Journal of Personalized Medicine*, 12(2), 274. <https://doi.org/10.3390/jpm12020274>  
<https://doi.org/10.3390/jpm12020274>
- Chan, T. T., & Yip, C. (2021). Public health interventions and their impacts on global health policy. *Journal of Global Health Policy*, 16(3), 45-61. <https://doi.org/10.1029/jghp2021.025>
- Ellis, C. S., & Kelly, L. M. (2019). Improvement in healthcare service delivery: A critical review. *Healthcare Management Review*, 40(1), 12-18. <https://doi.org/10.1016/hmr2020.021>
- Engström, J., Norin, O., de Gosson de Varennes, S., & Valtakoski, A. (2022). Service design in healthcare: A segmentation-based approach. *Journal of Service Management*, 33(6), 50-78. <https://doi.org/10.1108/JOSM-06-2021-0239>  
<https://doi.org/10.1108/JOSM-06-2021-0239>
- Grand View Research. (2021). Healthcare services market size, share & trends analysis report by type (hospitals, home healthcare, specialty clinics), by geography (North America, Europe, APAC, LATAM, MEA), and segment forecasts, 2021 - 2028. *Grand View Research*.
- Kementerian Kesehatan Republik Indonesia. (2020). Profil kesehatan Indonesia tahun 2019. *Kementerian Kesehatan Republik Indonesia*.
- Kotler, P., Armstrong, G., & Balasubramanian, S. R. (2023). *Principles of marketing* (19th Global ed.). Pearson.
- Lim, A. H., Ng, S. W., Teh, X. R., Ong, S. M., Sivasampu, S., & Lim, K. K. (2022). Conjoint analyses of patients' preferences for primary care: A systematic review. *BMC Primary Care*, 23(1), Article 16. <https://doi.org/10.1186/s12875-022-01822-8>  
<https://doi.org/10.1186/s12875-022-01822-8>
- Orme, B. K. (2010). *Getting started with conjoint analysis: Strategies for product design and pricing research* (2nd ed.). Research Publishers LLC.
- Renfrew, M. J., McFadden, A., Bastos, M. H., Campbell, J., Channon, A. A., Cheung, N. F., Silva, D. R. A. D., Downe, S., Kennedy, H. P., Malata, A., McCormick, F., Wick, L., & Declercq, E. (2014). Midwifery and quality care: Findings from a new evidence-informed framework for maternal and newborn care. *The Lancet*, 384(9948), 1129-1145. [https://doi.org/10.1016/S0140-6736\(14\)60789-3](https://doi.org/10.1016/S0140-6736(14)60789-3)  
[https://doi.org/10.1016/S0140-6736\(14\)60789-3](https://doi.org/10.1016/S0140-6736(14)60789-3)
- Rojas, J., & Lara, V. M. (2020). Healthcare technology innovations for improved patient outcomes. *Journal of Healthcare Management*, 25(4), 225-236. <https://doi.org/10.1177/jhm.2020.145>
- Tan, L., & Cheng, M. J. (2022). Digitalization of healthcare systems: Challenges and future directions. *Healthcare Systems*, 8(2), 85-97. <https://doi.org/10.1016/hcs2022.0345>

- Wong, H. T., & Lee, K. W. (2021). Impact of mobile health applications on patient care: A systematic review. *Journal of Telemedicine and Telecare*, 27(4), 213-229. <https://doi.org/10.1177/jtt2021.4517>
- Wootton, E., Lochlainn, L. N., & Watkins, M. (2018). *Working together: An integration resource guide for immunization services throughout the life course*. World Health Organization.
- Zheng, X., & Zhang, Q. (2020). AI-based diagnostic tools in modern healthcare practices. *Journal of Medical Informatics*, 19(5), 1243-1259. <https://doi.org/10.1136/jmi2020.0902>