

Analyzing The Impact of Health Insurance Policy Structures on Service Accessibility and Satisfaction for Sustainable Development

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Abstract: The type of health insurance policies provided influences both the access and satisfaction of services offered to policyholders. All features of these plans such as reimbursement methods, adequacy of the network, cost-sharing, and scope of coverage impact how an individual receives and utilizes healthcare resources. For example, policies with lower cost-sharing may enable beneficiaries to access a wider range of services; conversely, policies with small networks and higher out-of-pocket expenditures may limit access. In addition, the efficacy and the general structure of the reimbursement system has a great influence on levels of satisfaction among policyholders. This, combined with their insurance experience, affects overall perception. For this reason, insurers, legislators, and healthcare system providers must appreciate the specific interactions among these factors and how they influence the level of issue accessibility and satisfaction in order to streamline the provision of services for optimal consumer experience. The focus of this paper is to analyze the interwoven elements of satisfaction with services given, ease of access to the services, and organization of the health insurance policies. Through an thorough analysis, we uncover factors that are actively transforming the healthcare space

Keywords: Service Accessibility, Health Insurance, satisfaction, coverage, sustainable development, environmental

1. INTRODUCTION

Health insurance is necessary for ensuring whether the patients get proper care, medical facility, also their satisfaction level. This study seeks to explore the complex relationships that exist between service accessibility, patient satisfaction, and health insurance policy designs. It is important to understand how the characteristics and design of health insurance policies influence people's experiences as the healthcare environment evolves. This in-depth study seeks to establish areas that may require reform, as well as the accessibility of healthcare services under different legislative environments and patient satisfaction levels. Understanding how the architecture and characteristics of healthcare will evolve as the field evolves. The aims of this in-depth study include assessing the accessibility of healthcare services under different policy designs, determining patient satisfaction levels, and identifying areas of potential improvement. Through exploring these factors, the study primarily seeks to provide insights that can be used to improve health insurance offerings, ultimately resulting in better healthcare experiences for individuals. It is becoming increasingly important to understand how the characteristics and design of health insurance policies influence people's experiences as the healthcare environment evolves. This in-depth research seeks to establish areas that may require reform, as well as to assess how accessible healthcare services are under different legislative environments and patient satisfaction levels. To obtain useful data from participants, this study employs a range of quantitative methods, particularly Likert scale-based questionnaires. It is expected that the knowledge gained from this study project will explain the benefits and limitations of existing health insurance plans, providing a holistic understanding of their impacts on patient satisfaction and service accessibility. The subsequent sections will briefly outline the research methodology, provide relevant literature, provide results, and provide implications. This study is an effort to contribute to the

useful information to the ongoing debate on health insurance schemes and their effects on the health sector.

2. REVIEW OF LITERATURE

Hamzeh, A., et al. (2023). Businesses emphasize elements like loyalty and experience because they know that satisfied customers are essential to their success. SERVEQUAL model is used to analyse the Policyholders' satisfaction in Iran on supplemental health insurance services. A substantial and unfavorable discrepancy in all facets of service quality is found in the study, which used a descriptive survey methodology with a sample size of 686 policyholders. In order to reduce financial risk and improve health care accessibility for Lao people who predominantly pay for medical treatment out of pocket, Bodhisane, S., & Pongpanich, S. (2017) aimed to investigate the impacts of community-based health insurance. Comparing 126 insured families and 126 non-insured families in the same study locations, the researchers conducted a cross-sectional study design on financial protection against risk and access to care among Lao individuals who pay most of their medical bills out of pocket. Comparing 126 insured families and 126 non-insured families in the same study locations, the researchers conducted a cross-sectional study design. Because catastrophic health expenditure was still an issue, they concluded that insurance did not substantially enhance access or provide financial protection. Insured households were less likely to be driven into financial devastation compared to non-insured households. The extent of medical services and treatments covered by a health insurance policy is referred to as the breadth of coverage, and it is a major determinant. Larger coverage policies are linked with higher levels of service accessibility, as a result of which people are more likely to get essential care without the fear of cost ceilings, according to research conducted by Smith et al. (2019). However, limited coverage policies most likely result in delayed or avoided use of healthcare, especially among poor and vulnerable groups (Jones & Brown, 2020).

Copayment, coinsurance, and deductible cost-sharing programs significantly influence service accessibility and satisfaction. High out-of-pocket expenses have been reported to lead to a reduction in the accessibility of essential medical care, which could have detrimental impacts on health and lead to increased financial burdens. (Sommers et al., 2017). Additionally, the complexity of cost-sharing plans has been recognized as a hindrance to understanding and utilizing health insurance benefits, which thus results in beneficiary dissatisfaction. (Johnson et al., 2021).

Adequacy of the network also comes into play for accessibility of services under health insurance coverage. Research conducted by Chen and colleagues (2018) has made a correlation between increased accessibility of care and increased beneficiary satisfaction and policies with broad provider networks. Small networks, however, have been correlated with fewer options and lower satisfaction, particularly in rural and underprivileged areas where access to healthcare providers is restricted (Hall et al., 2019).

Effectiveness and transparency of the reimbursement processes come into play for the level of satisfaction of the beneficiaries with the health insurance plans. Delayed or denied reimbursement can make the policyholders lose their patience with and confidence in insurers, which can have a negative impact on their attitude towards the insurance process in general (Gangopadhyaya & Garrett, 2019). Plans with effective reimbursement processes and effective communication channels, in contrast, have been proven to increase policyholder satisfaction and insurer confidence (Lee et al., 2020).

Statement Of The Problem

Healthcare services must be accessible and beneficiaries must be content in an excellent healthcare system. Nevertheless, however, there remains so much ambiguity surrounding the ways the parameters are impacted by the designs of health insurance policies. Even with attempts at expanding coverage and reducing spending, gaps persist in the availability of healthcare, and beneficiaries' contentment with their insurance plans significantly differ. It is important to recognize how particular attributes of health insurance plans—such as coverage range, cost-sharing arrangements, network sufficiency, and payment policies—affect service availability and satisfaction. Additionally, with the current debate on healthcare

reform and the necessity of improving the performance of health insurance programs, it is important to recognize ways of maximizing policy designs and enhancing the quality of healthcare experiences for each beneficiary. This research attempts to investigate the intricate relationships between health insurance policy frameworks and service satisfaction in order to offer evidence-based insights to assist policy decisions and raise the bar for healthcare delivery. Health insurance policy frameworks have a significant impact on how individuals seeking medical care perceive the constantly evolving healthcare environment. Some studies have examined the impact of different policy frameworks on patient satisfaction and service accessibility, despite the fact that health insurance is vital to society. Thorough investigation is necessary for factors including policy wording complexity, coverage information clarity, and insurance company responsiveness.

3. RESEARCH GAP

A considerable knowledge vacuum exists on the ways in which these elements interact in a comprehensive model, despite the fact that earlier research has looked at a number of areas of service accessibility and their effect on customer satisfaction. Furthermore, the impact of digital service accessibility in the context of fast changing technical landscapes has not received much attention in studies. Furthermore, there has not been enough research done on how demographic and psychographic variables influence this association. Tackling these voids can yield a more comprehensive comprehension of how customer happiness is impacted by service accessibility in various consumer segments and settings. Through their identification and resolution, the research can enrich the current corpus of knowledge and provide insightful information on the connection between customer pleasure and service accessibility.

4. OBJECTIVES OF THE STUDY

1. To evaluate the service accessibility under different health insurance policy structures.

5. HYPOTHESIS OF THE STUDY

H0: Service accessibility and satisfaction do not significantly differ from one another.

H1: Service satisfaction and accessibility differ significantly from one another.

6. SCOPE OF THE STUDY

Service accessibility and satisfaction are two important characteristics that will be examined in this study as they relate to different health insurance policy systems. Examining various aspects will be part of this, including how different policy structures affect insured people's access to healthcare services, how certain policy features relate to patient satisfaction, whether there are any differences in service accessibility and satisfaction between different demographic groups, and how policy parameters like copayments, deductibles, and out-of-pocket limits affect these factors.

7. MATERIALS AND METHODS

Research Design: Descriptive research is conducted to explore the differences in awareness and perception among genders. This makes it possible to conduct in-depth research on attitudes and views of government health insurance programs based on gender in addition to statistical analysis of awareness levels.

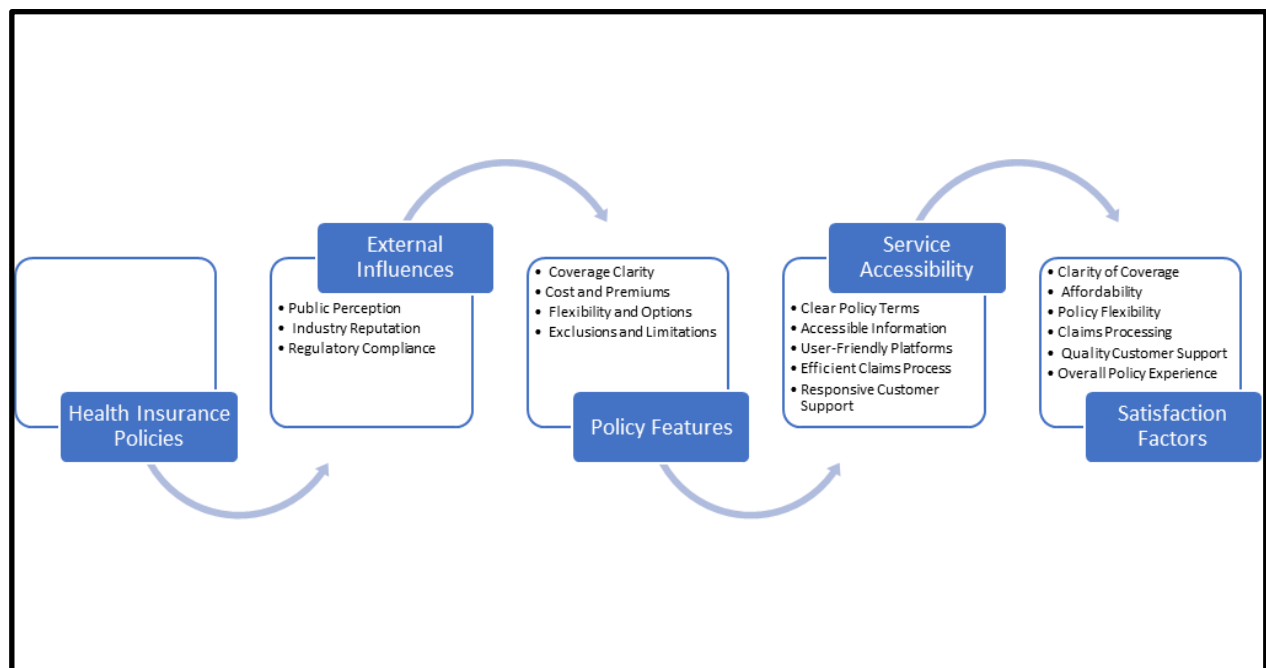
Sampling Frame: Population Involves the respondents of Ernakulam District. Data fairly represented in all demographic groups; Judgement sampling is employed.

Data Collection: Primary data are gathered through surveys employing questionnaires. The researcher has taken a sample size of 200 respondents. Secondary sources, including websites, journals, and annual reports, are used to gather secondary data.

Analysis of Data: Data was analyzed using statistical technique like Percentage Analysis, Factor Analysis , and ANOVA.

8. Results and Discussions

Fig 9.1. Health Insurance Satisfaction Framework



The interrelationships between external circumstances, policy features, service accessibility, and satisfaction are illustrated by the Health Insurance Satisfaction Framework. With arrows showing the direction of effect, this model's interrelated categories and components are shown as boxes. The table 9.1 represents the respondents' demographic traits.

Table-9.1 The respondents' demographic profile (N=200)

Dimensions		Frequency	Percentage
Gender	Male	161	80.5
	Female	39	19.5
Age	Below 30	25	12.5
	30 - 40	71	35.5
	41- 50	89	44.5
	Above 50	15	7.5
Educational Qualification	Up to SSLC/Higher secondary	15	7.5
	Graduation	70	35
	Post Graduation	107	53.5

	Ph.D / M. Phil	8	4
Occupation	Private Employee	43	21.5
	Government Employee	20	10.0
	Business	91	45.5
	Professional	46	23.0
Monthly income	Below 25000	18	9.0
	25001-50000	53	26.5
	50001-75000	67	33.5
	75001-100000	11	5.5
	Above 100000	51	25.5
Types of insurance	Public	34	17.0
	Private	143	71.5
	Both	23	11.5
Kinds of Insurance Policy	Employer-sponsored health insurance	33	16.5
	Individual health insurance	130	65.0
	Government-sponsored health insurance	18	9.0
	Other	19	9.5

Source: Primary data

The gender distribution among respondents in the health insurance satisfaction study is predominantly male (80.5%), while females constitute 19.5%. Age-wise, the study reflects a varied demographic with 12.5% below 30 years old, 35.5% aged 30-40, 44.5% aged 41-50, and 7.5% above 50 years old. Educational details indicate 53.5% of respondents with post-graduation, 35% Graduation, 7.5% Higher secondary and 4% are Ph.D. holders. Occupation details indicate that 45.5% of respondents are in business, 21.5% are private employees, and 10% are government employees. Monthly income breakdown reveals that the largest group (33.5%) earns between 50,001-75,000, followed by those earning above 100,000 (25.5%), 25,001-50,000 (26.5%), below 25,000 (9.0%), and 75,001-100,000 (5.5%). Regarding insurance types, the majority (71.5%) have private insurance, 17.0% have public insurance, and 11.5% have both. When it comes to insurance policy types, 65.0% hold individual health insurance, 16.5% have employer-sponsored health insurance, 9.0% have government-sponsored health insurance, and 9.5% have different types of insurance.

FACTOR ANALYSIS OF SERVICE ACCESSIBILITY ON SATISFACTION

A measure of sample adequacy called the “Kaiser-Meyer-Olkin (KMO)” measure is used to determine whether the data are suitable for factor analysis. The KMO statistic has a range of 0 to 1, with values

greater than 0.5 being considered acceptable, values between 0.5 and 0.7 being mediocre, values between 0.7 and 0.8 being good, and values between 0.8 and 0.9 being superb. The total matrix's KMO value, which is 0.768, indicates that the sample chosen for the factor analysis in this study is statistically significant.

TABLE 9.2

Test of "KMO and Bartlett's"		
Sampling Adequacy Measure - "Kaiser-Meyer-Olkin"		.768
Bartlett's Test of Sphericity	Approx. Chi-Square	2907.397
	df	36
	Sig.	.000

The table 2 expresses that there is a good degree of relationship strength between the variables. with a KMO statistic of 0.768 and a rejected null hypothesis for "Bartlett's test", as the P-Value is less than 0.001. Therefore, the factor analysis can be applied.

TABLE 9.3

Total Variance Explained						
Component	"Initial Eigenvalues"			"Rotation Sums of Squared Loadings"		
	Total	Percentage of Variance	Cumulative Percentage	Total	Percentage of Variance	Cumulative Percentage
1	6.409	71.207	71.207	4.538	50.424	50.424
2	1.129	12.547	83.754	3.000	33.329	83.754
3	.564	6.272	90.025			
4	.480	5.337	95.363			
5	.258	2.868	98.231			
6	.092	1.024	99.254			
7	.036	.398	99.653			
8	.022	.245	99.898			
9	.009	.102	100.000			
Extraction Method: "Principal Component Analysis."						

The table expresses eigenvalues and the proportion of variance explained by each component, both before and after rotation. The first component explains 71.207% of the variance, the second explains 12.547%, and cumulatively, the first two components explain 83.753% of the variance in the data. After rotation, the first two components explain slightly different percentages of the variance (50.424% and 33.329%, respectively), but the cumulative percentage remains the same at 83.753%. The PCA suggests that two components are sufficient to explain about 83% of the variance in the data.

Table 9.3.1 “Rotated Component Matrix” ^a		
	Component	
	1	2
How satisfied are you with the responsiveness of your health insurance policy in addressing your healthcare needs?	.937	.111
Overall quality of healthcare services covered by your health insurance policy	.879	.369
Convenience of the healthcare service providers within your health insurance network	.855	.369
Health insurance policy meets your expectations for coverage of medical services	.820	.245
How satisfied are you with the overall quality of healthcare services covered by your health insurance policy?	.746	.614
Health insurance policy provides adequate coverage for preventive healthcare services?	.695	.521
Health insurance policy enables you to access the necessary healthcare services without significant financial burden?	.265	.924
How satisfied are you with the accessibility of healthcare services provided by your health insurance policy?	.203	.899
Empathy and understanding displayed by the staff of your health insurance provider	.596	.598
Extraction Method:” Principal Component Analysis.”		
Rotation Method: “Varimax with Kaiser Normalization.”		
a. Rotation converged in 3 iterations.		

Two factors with location eigenvalues larger than unity were found. Factor which have a component loading of 0.5 and above are said to be significant that induces service accessibility on satisfaction of health

insurance. Rotated component matrix of the data showed “How satisfied are you with the responsiveness of your health insurance policy in addressing your healthcare needs”, “Overall quality of healthcare services covered by your health insurance policy”, “Convenience of the healthcare service providers within your health insurance network”, “Health insurance policy meets your expectations for coverage of medical services”, “How satisfied are you with the overall quality of healthcare services covered by your health insurance policy”, “Health insurance policy provides adequate coverage for preventive healthcare services”, have a component loading of 0.5 and above. Hence the six variables form the first factors are found to be significant.

The second factor “Health insurance policy enables you to access the necessary healthcare services without significant financial burden”, “How satisfied are you with the accessibility of healthcare services provided by your health insurance policy and empathy and understanding displayed by the staff of your health insurance provider are found to be significant.

Factor one contributes 50.424 percent to the determinants of the factors which influence the accessibility on satisfaction of health insurance. The other factors contribute 33.329 towards the determinants of the factors considered accessibility on satisfaction of health insurance. The total cumulative percentage of determinants is the factor considered the accessibility of satisfaction of health insurance at 83.754 percent.

Anova

H0: Service accessibility and satisfaction do not significantly differ from one another.

H1: Service satisfaction and accessibility differ significantly from one another.

Inference

Table 9.4. Anova Test between Service accessibility factors and satisfaction

“Anova”					
Satisfaction					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8772.910	11	797.537	33.061	.000
Within Groups	4511.000	187	24.123		
Total	13283.910	198			

Also, a one-way Anova was conducted to determine the degree of satisfaction with the current health insurance system. Service accessibility and customer satisfaction do not significantly differ from one another, according to the null hypothesis. It was decided to reject the null hypothesis because the Anova results showed a P-value of less than 0.01. This implies that the average degree of satisfaction with present health insurance is influenced by opinions about service accessibility considerations. As the factor analysis and Anova show that all of the service accessibility factors have significant relationships with customer satisfaction, you would reject the null hypothesis (H0) and accept the alternative hypothesis (H1), concluding that service accessibility and customer satisfaction do indeed have significant relationships.

9. SUGGESTIONS

1. To Focus on aspects related to responsiveness, quality, convenience, meeting expectations, coverage adequacy, and empathy.
2. To Expand coverage, reduce out-of-pocket expenses, and provide financial assistance programs.
3. To Invest in staff training for better communication, empathy, and understanding of policyholders' needs.
4. To Regularly evaluate service quality, gather feedback, and implement improvement measures.
5. To Encourage the use of preventive services through educational campaigns and incentives.
6. To Provide clear information about coverage, benefits, and procedures to manage expectations.
7. To Continuously monitor satisfaction levels and use data to refine strategies. These actions can collectively enhance satisfaction with health insurance accessibility, leading to better customer experience and loyalty.

10. CONCLUSION

11. The research establishes direct relationship between patient satisfaction, service accessibility, and health insurance plan types. Policy complexity, in turn, is an important factor in determining the healthcare system structure that affects accessibility of services and patient satisfaction. It is of utmost importance that policymakers and stakeholders analyze the outcomes so that delivery efficiency can be gauged and healthcare quality can be determined. Various priority areas of enhancing accessibility to health insurance satisfaction are determined by the factor analysis outcome. Emphasis on items with high component loadings like ease of use, empathy, responsiveness, and quality of service can help insurance companies enhance the overall customer experience. Furthermore, being open, encouraging preventative care, enhancing financial accessibility, and improving communication and compassion are all necessary to address the various needs of policyholders. Furthermore, addressing the various needs of policyholders necessitates consistent efforts to remain open, encourage preventative care, enhance financial accessibility, improve communication and compassion, and enhance the quality of services continuously. On the basis of these recommendations, insurance companies may be able to make a huge difference in customer satisfaction and, in turn, improve their relationship with the customers.

12.SCOPE FOR FURTHER RESEARCH

In the future, studies can conduct longitudinal analyses to examine how policy changes affect the accessibility and satisfaction of services over time. Comparative analysis can also examine how various insurance plans affect the experiences of beneficiaries. We might need to conduct further qualitative studies to examine the underlying drivers of service accessibility and satisfaction. Future directions are to examine differences between demographic groups and to examine the effectiveness of certain policy solutions. Lastly, applying the principles of behavioral economics can allow us to better understand how beneficiaries make choices about the designs of health insurance programs. These questions can be answered, which can improve evidence-based practice and policy as well as the quality and effectiveness of healthcare.

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