



## Business strategy of home healthcare service to accelerate the adoption of care at home service in Indonesia

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### ABSTRACT

The healthcare industry is experiencing changes due to increased demand for value, evolving consumer behavior, and intense competition. To enhance care delivery, healthcare providers are seeking more effective methods, and this study aims to identify the critical factors for patient adoption of home healthcare services. The research uses the Analysis, Formulation, and Implementation framework and qualitative and quantitative methods, including online and offline data collection through questionnaires and interviews. The Analytical Hierarchy Process is applied to determine the critical adoption factors based on four criteria and sixteen sub-criteria. Patient adoption is influenced by factors such as economic viability, law, professional capabilities, patient needs, and breadth of services. To increase adoption, the study recommends a differentiation strategy focusing on preventive care, health maintenance, and post-acute care, targeting the premium market with technology-based solutions. The study provides a basis for stakeholders to make informed decisions, including organizational steps, regulation, and payment schemes for home healthcare services.



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## INTRODUCTION

The COVID-19 pandemic highlighted the need for improved home therapy as hospital capacity and COVID-19 risk made telehealth, telemedicine, and homecare options appealing. During the Covid-19 Pandemic, the challenges of hospitals increased along with the community's demands for safe, fast, and adequate health services while maintaining quality (Ekawati & Andriani, 2022). According to (Budo et al., 2020), quality health services is a measure of satisfaction that has an impact on the patient's desire to return to institutions that provide adequate health services. In the era of the COVID-19 pandemic, home care services are one of the services that are quite widely requested by the community. Where Home care is a comprehensive and non-stop service program provided to people and families in their homes to limit the effects of disease and expand the freedom of patients and families in considering and caring for relatives who have medical problems (Juwita et al., 2022). Because of the need for health services that can be accessed by patients at home, it is necessary to admit that the high number of COVID-19 cases in the middle of 2021 will make hospitals very crowded and quite scary to visit (Yonathan & Sulistiadi, 2022). In addition, according to (Maulidyana, 2022), Home care is a form of nursing service, including community nursing care carried out at home.

The target of home care services is patients who have chronic diseases but are reluctant to undergo treatment in the hospital for various reasons so as to choose home care (Suwedda & Daruki, 2020). According to (Sulbanir, 2021), there is a home care program, where this program is a continuous and comprehensive health service provided to individuals and families in their place of residence which aims to be able to improve, maintain or restore health or maximize the level of independence and minimize the consequences of the disease. Healthcare system transitions face various difficulties, including complex laws, rising technological adoption, and customer need. These factors have accelerated due to the pandemic. HOSPON should identify which home-based services meet patients' needs, as adoption depends on patient acceptance, payer coverage, and medical recommendations.

Many treatments that were formerly available directly in hospitals or doctors' clinics may now be delivered at home. Home healthcare refers to a variety of healthcare services that can be provided in your home for an illness or injury. According to Edwards & Fleiszer, in (Prasetyo et al., 2016), it is stated that what needs to be taken into account in carrying out this homecare treatment is to bring access

to services closer between these service providers and patients. Home healthcare is usually less expensive, easier to get, and just as good as care in a hospital or skilled nursing facility (U.S. Department of Health and Human Services, 2020). Health organizations must develop innovative care models that reduce risk, manage costs, offer best-practice results, and provide a great consumer-patient experience (Botos et al., 2019). According to (Steven et al., 2016) states that the growth of home healthcare services has a wide range of directions depending on several factors Stakeholders in the Industry; Technological Advancements; Economic Viability; Increased Breadth of the Services; Professional Awareness, Perceptions, and Capabilities; and Patient Needs. Patients, Providers (professionals and institutions), Payers (government, insurance companies, and third-party payors), and Policymakers (public health agencies and regulators) are referred to as "The four Ps" in healthcare. In addition, the industry (such as the medical device, pharmaceutical, and biotechnology sectors), the regulator, the academic researchers, and the media all play an important role (Ritz D., Althausen C., 2014). So that the current home care program aims to increase, maintain or maximize the level of independence and minimize the consequences of the disease (Fahrepi et al., 2019).

Research conducted by (Prasetyo et al., 2016) stated that this study identified health problems that had the potential to be carried out at home care, namely wound care, antenatal care, umbilical cord care, and palliative cases. Furthermore, research conducted by (Suwedda & Daruki, 2020) stated that the strategy for developing and marketing home care services is more adapted to economic considerations, namely by maximizing quality for patients but still providing low prices so that patients do not feel reluctant to do home care. So based on the description above, the authors want to research to analyze the home healthcare industry in Indonesia, identify the factors that influence the adoption of home healthcare services, and formulate recommendations for a new business strategy for HOSPON to accelerate home care adoption

## **RESEARCH METHODS**

The research method used in this study is a descriptive qualitative research analysis method, according to (Sugiyono, 2019). Qualitative research methods are often called naturalistic research methods because the research is carried out in natural conditions. This study uses primary and secondary data to gather information on the adoption factor of home healthcare in Indonesia. In-depth interviews and questionnaires are used to collect primary data from providers, while secondary data is obtained from published works. The analytical hierarchy process (AHP) is used to determine the adoption factor, which helps identify problems and formulate a business strategy. Data retrieval will be used to determine the preferences of people in adopting home healthcare, the considerations of providers in providing services, and the influence of policymakers and payers in providing regulations related to payments that support the system.

The data analysis will be validated and identify problems in home healthcare in order to formulate a business strategy for the study. The AHP is a systematic framework that sets up a hierarchical structure with interacting levels, compares the importance of different factors, and evaluates decision alternatives based on the existing structure. The main benefit of the AHP is that it can be used as a systematic assessment model to structure, rank, and measure decision problems. This gives policymakers a way to deal with decisions or standards that involve more than one criterion (Schmidt et al., 2015). The primary data collection's qualitative and quantitative findings will be analyzed using the appropriate method. Qualitative data from in-depth interviews with 20 respondents will be analyzed using content analysis to determine the interview results' key points. Quantitative data from 80 respondents' online questionnaires determines the hierarchy's factor values. This hierarchy will be identified using the AHP Model and Superdecision software to show the main factors that influence home healthcare use.

## **RESULTS AND DISCUSS**

### **Analysis**

The primary data collection's qualitative and quantitative findings will be analyzed using the appropriate method. Qualitative data from in-depth interviews with 20 respondents will be analyzed using content analysis to determine the interview results' key points. Quantitative data from 80 respondents' online questionnaires determines the hierarchy's factor values. This hierarchy will be

identified using the AHP Model and Superdecision software to show the main factors that influence home health care use.

### Qualitative Data Analysis

In-depth interviews with 20 stakeholders were conducted to gather qualitative data regarding the Patient, Provider, Professional, policymakers, and Payor perspectives. The list of names of the respondents is displayed in Appendices 1. The interviews were conducted online and offline with 10 questions that addressed the adoption factors of home healthcare services. List of questions shown in Appendices 2. The results of these interviews were then analyzed to create a result summary based on key takeaways from the stakeholder perspective.

**Table 1 Interview Summary**

No	Question and Answer
1	<p>Have you used home healthcare services?</p> <p>The average patient receiving homecare services for general care such as swab tests for antigen and PCR Covid-19 has used other types of inpatient services as well, including physical therapy, medical check-up, blood tests, geriatrics and more. Patients reported using the homecare services because they were more effective than waiting in line at the hospital and could be done at home after work hours and were more flexible. Patients felt that their pricing was competitive with inpatient care costs.</p>
2	<p>What is your opinion regarding the system in Indonesian home healthcare?</p> <p>Homecare services are still a little in demand, many people aren't aware. Hospital facilities and quality are more trusted than homecare services. People fear that the services and facilities they receive are not as good as a hospital and still have trust issues like unprofessional nurses and unwanted occurrences. The presence does not yet appear massive even though it is much needed in society. Many health agencies still prefer to stay in health facilities instead of going out into homes for patients.</p>
3	<p>What home health care services do you think are needed?</p> <p>What is needed is variety, So, the clinic will provide services according to the patient's needs. Patients are usually centered on the middle-class society due to the stigma that the service is still private and premium. Currently, the focus is more on treating diabetic wounds because the casualty rate in Indonesia is very high. People need care for their elderly parents, help with their babies, physiotherapy, and other general services at home. In the future, we may need to act quickly on serious diseases care like heart disease, treat people who have had a stroke, or treat diseases like cancer.</p>
4	<p>Do you think that services at the level of hospital facilities are needed such as emergency or post-emergency services in home healthcare?</p> <p>Possible but constrained by devices that cannot be mobile such as oxygen devices or breathing machines. Homecare is currently more effective at providing post-acute care at home but requires more and more sterile tools, making it difficult to obtain. For ICU and emergency care, patient need go to the hospital due to the complexity and facilities. An example is the cost of going to the hospital directly is more effective than services that come to the house.</p>
5	<p>What is your opinion regarding government regulation of home health care services?</p> <p>The government does not provide detailed regulations for home care professional to establish their own business. The government should provide standards, guidelines and policies regarding the equipment and techniques used, certification requirements, etc. It is up to local authorities to oversee the implementation of regulations; however, monitoring seems not to have been done thoroughly. Therefore, it is very easy to open a service business but the patient's safety cannot be guaranteed from the standpoint of special regulations set by the government. However, some improvements have already been done such as cooperation with Kemenkes in the field of technology such as teleconsulting and purchasing drugs can be done using an application.</p>
6	<p>What is your opinion regarding payment support or reimbursement through third parties such as insurance and BPJS?</p>

No	Question and Answer
	<p>Outside-of-hospital homecare services are not covered by the BPJS. However, private insurance companies provide critical illness cash payments to patients. A hospital must confirm this coverage with a letter of diagnosis stating that the insured has critical illness. This complexity raises the possibility of fraud if unscrupulous providers take advantage. If unchecked, providers can abuse patients in this way, making things harder for legitimate insurers. The importance of insurance and its possible support in paying for homecare is seen as vital, especially for elderly patients who are unable to attend a special health facility. There are still a few Hospitals that welcome elderly patients due to the long waiting lines; therefore, this type of facilities is not very effective. With the help of third-party payment providers, all types of healthcare services can be provided at home and not just limited to middle-class and upper-class segments of society due to the homecare products are relatively expensive and some people cannot afford them.</p>
7	<p>What is your opinion regarding the facilities, equipment and technology that support Home Healthcare services today?</p> <p>There are a number of adequate portable devices available. However, few providers want to invest in new technology or mobile devices due to budget constraints and high cost. In emergency care services the capacity of the equipment is limited and cannot support health care; for example, there is no mobile technology for breathing assistance devices, MRI, USG, etc. Only few large institutions have adequate equipment such as the RSPP with special vehicles only used during national crisis or government officials. The problem lies in home care not fully adopting new technologies seen overseas.</p>
8	<p>What is your opinion regarding the ability of health workers (Doctors and Nurses) in home healthcare services in Indonesia?</p> <p>Our health workers are sufficiently trained, if they have graduated from a healthcare education program and received their registration certificates, which indicate that they are qualified to provide homecare services. Many companies offer special training with specific certifications to improve the competence of their healthcare workers. Thus, what healthcare workers need to study is the etiquette and relationship with their patients in order to provide customer intimacy to patients.</p>
9	<p>What are the factors that make you not want to use home healthcare services?</p> <p>Three factors have hindered the development of home healthcare in Indonesia: economic factors, which make the cost of homecare more expensive than hospitalization, especially if patients are not covered by health insurance; social factors, such as patient's fear that something untoward may happen at home; and service-related factors, such as the lack of flexibility in providing non-emergency services and a shortage of adequate equipment.</p>
10	<p>What are your expectations for home healthcare services going forward?</p> <p>Home care should focus on preventive and maintenance health activities rather than treatment and care which are still mostly centered at hospitals in order to be competitive compared to hospital-based care. However, their hope for the future is to provide emergency and post-acute care in addition to offering continuous care at a lower cost at home by integrating home health services with hospitals, clinics, pharmacies, and others providers.</p>

### Quantitative Data Analysis

From the questionnaire that was distributed online, it was found that 89 respondents filled out the data and provided answers to each question. List of respondent and questions shown in Appendices 3 and 4 respectively. The results of filling in the 89 respondents were filtered so that 9 data that had unclear data on the name and contact person of the respondent such as cellphone number and email were removed, resulting in the final number of respondents being 80 people. The survey data results show the importance of considering several aspects of home healthcare and at the same time choosing which adoption factors are the most important for home healthcare services using the Analytical Hierarchy with 4 main criteria and 16 sub-criteria, where each criterion has 4 sub-criteria. The results of collecting data quantitatively are shown below as follows:

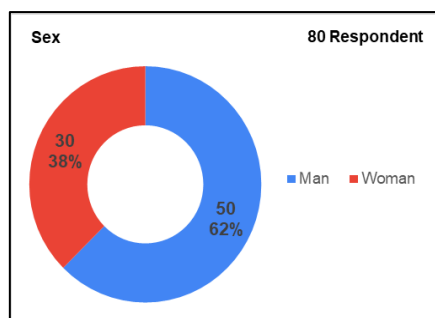


Figure 1 (Left) Respondent Profile by Sex

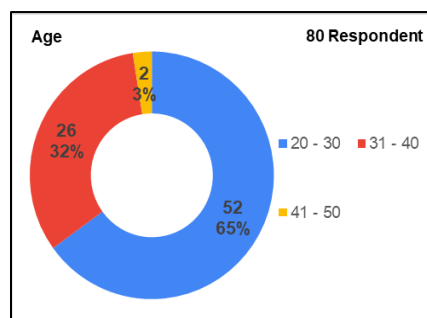


Figure 2 (Right) Respondent Profile by Age

The data from the respondents was dominated by males, who made up 50 people and accounted for 62% of the total respondents. This was followed by women, who made up 30 people and accounted for 38% of the total respondents. There was a total of 80 people who participated in the survey, and the age range of 20 to 30 years old was the most represented, with 52 people participating, which is equal to 65% of the total. The next group of respondents included those with ages ranging from 31 to 40 years old, this group included a total of 26 people, which is equivalent to 32 percent of the total respondents. The latter make up 3% of the total number of respondents and range in age from 41 to 50 years old, there are 2 people in this age range.

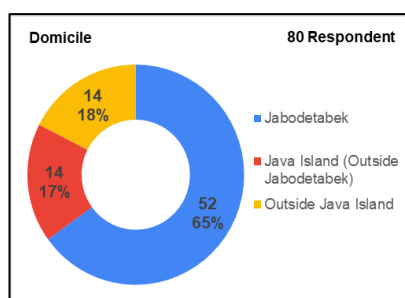


Figure 3 (Left) Respondent Profile by Domicile

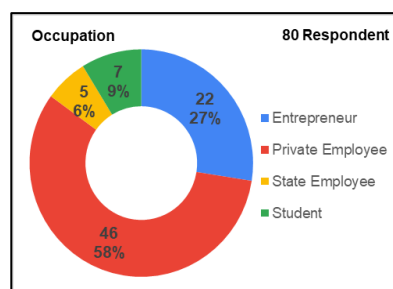


Figure 4 (Right) Respondent Profile by Occupation

After that, a domicile classification was carried out to determine the level of access to health services that respondents had. The results of this classification revealed that 52 people were located in Jabodetabek, making up 65% of the total respondents. Then, following that, 14 people are located on the island of Java outside of Jabodetabek and outside of Java respectively, so the value of each respondent's classification is somewhere between 17% and 18%. When the respondents were categorized according to their occupations, private employees made up the largest portion of the group with a total of 46 individuals, representing 58% of the vote. Business owners or entrepreneurs came in second with a total of 22 individuals, accounting for 27% of the vote. Students came in third with a total of 7 individuals, representing 9% of the vote. Finally, there were 5 state employees, representing 6% of the total.

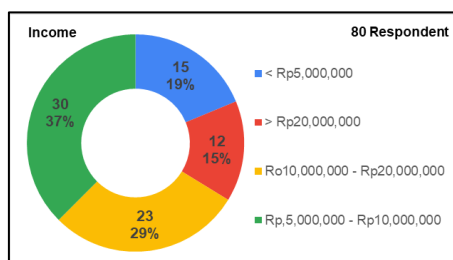
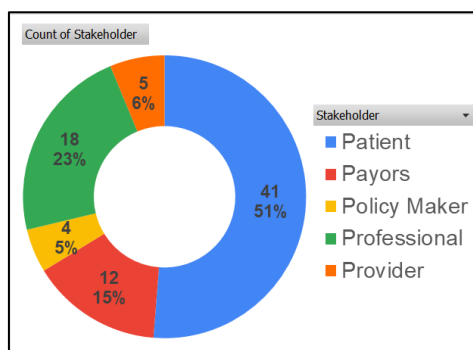


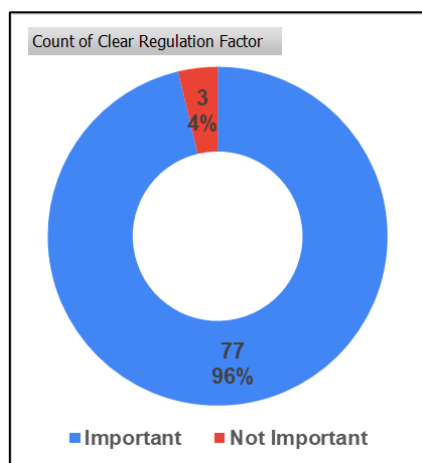
Figure 5 Respondent Profile by Income

Four classifications are carried out when grouping by income, with the majority of respondents having incomes in the range of IDR 5,000,000 - IDR 10,000,000 (as many as 30 people, or 37% of the total respondents), and these classifications are carried out. The next category is income, which varies from 10,000,000 to 20,000,000 IDR for 23 people, which equates to 29% of the total. Then, in the third position, there are 15 people whose income is below 5,000,000 IDR, which accounts for 19% of the total, and finally, the income is above 20,000,000 IDR, which accounts for 12 people, which accounts for 15%.

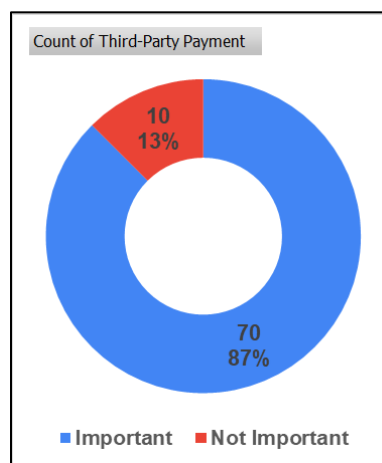


**Figure 6 Respondent Profile by Stakeholder Position**

After that, the Author added the Professional component to the targeted questionnaire to reach the total number of respondents targeted, which included the 4Ps of Healthcare Services, which are Patients, Payors, Policy Makers, and Providers. According to the findings of the survey, there were a total of 41 people who identified as patients, making up the majority of the total respondents with a value of 51%. Afterward, there are 18 professionals, which accounts for 23% of the total, 12 payors who are associated with insurance or BPJS, which accounts for 15% of the total, 5 people who are providers, which accounts for 6% of the total, and finally, there are 4 policymakers, which accounts for 5% of the total number of respondents.

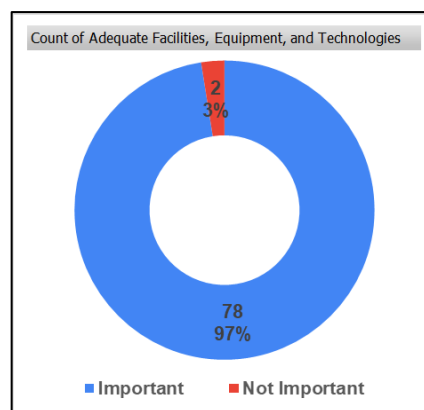
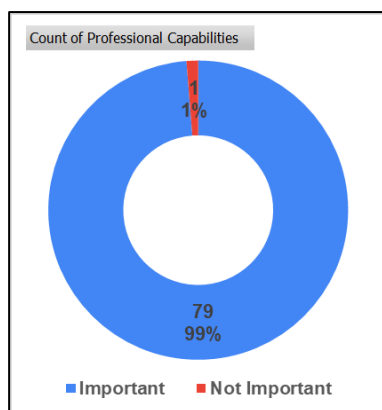


**Figure 7 (Left) Clear Regulation Factor**



**Figure 8 (Right) Third-Party Reimbursement Factor**

The importance of clear regulations for the role that the government plays in the utilization of home healthcare services is the first of the many factors that will be discussed. This will be done by the responses from the survey participants. The vast majority of respondents (a score of 96%, or a total of 77 people) selected the option Important, while the remaining three respondents (representing 3% of the total) selected the option Not Important. 87% of those polled, or 70 people, said that the Third-Party Payment factor was important, while the remaining 13%, or 10 people, said that it was not important.



**Figure 9 (Left) Professional Capabilities Factor      Figure 10 (Right) Adequate Facilities, Equipment, & Technologies Factor**

The vast majority of respondents with a score of 99%, or a total of 79 people selected the Important, while the remaining three respondents representing 3% of the total selected the option Not Important on the Professional Capabilities factor. 97% of those polled, or 78 people, said that the adequate facilities, equipment, and technology factor were important, while the remaining 3%, or 2 people, said it was not important.

1. Criteria: The limits set for each choice, namely
  - Insurance Payment & Clear Regulation (X.1 IPCR)
  - Breadth of Services (X.2 BoS)
  - Professional Capabilities (X.3 PC)
  - Patient Needs (X.4 PP)
2. Sub-Criteria: The choices available in this problem, in this case, there are 16 sub-Criteria that have been defined based by the criteria that has been define before, including:

**Table 2 Sub-Criteria Decision-Making Factor**

Sub-Criteria	Description
Sub-Criteria 1 (Insurance Payment & Clear Regulation)	
X.1.1 (TPPS)	Third-Party Reimbursement Payment (Insurance/BPJS)
X.1.2 (IP)	Individual Payment
X.1.3 (CR)	Clear Regulation
X.1.4 (PP)	Patient Protection
Sub-Criteria 2 (Breadth of Services)	
X.2.1 (HPMS)	Health Prevention and Health Maintenance Services
X.2.2 (NMCS)	Non-Medical Care Services
X.2.3 (ACS)	Acute Care Services
X.2.4 (PAS)	Post-Acute Care Services
Sub-Criteria 3 (Professional Capabilities)	
X.3.1 (GP)	General Physician
X.3.2 (SP)	Specialist Physician
X.3.3 (NST)	Nurse With Specialized Training Skill
X.3.4 (NRC)	Nurse with Registration Certificate (STR)
Sub-Criteria 4 (Patient Needs)	
X.4.1 (EDC)	Better and Efficient Delivered Care
X.4.2 (MA)	More Affordable
X.4.3 (CHS)	Comprehensive Health Services
X.4.4 (FET)	Adequate Facilities, Equipment, and Technologies

AHP data analysis was performed using the superdecision application from the highest average value taken. The next step is to create a hierarchical structure that begins with the goal of determining the adoption factors for home healthcare services according to the predetermined AHP model. The structure of the AHP model can be seen in Figure 11.

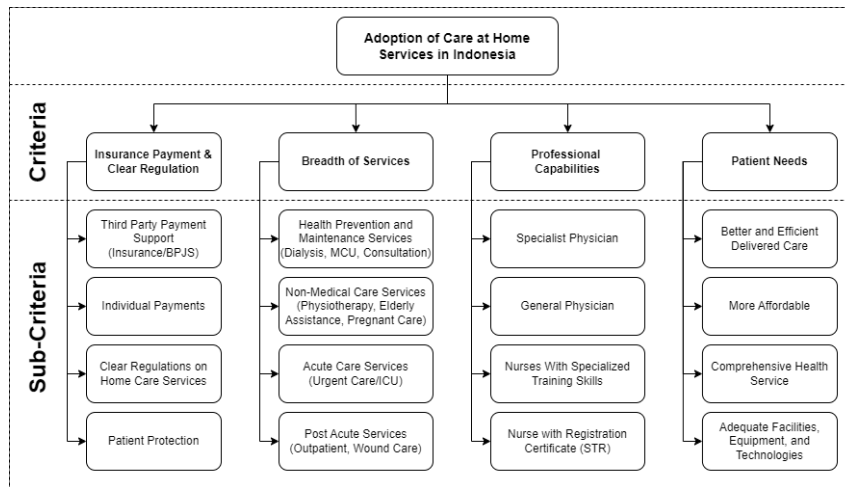


Figure 11 Hierarchy Model on Superdecision Software

The results of the computation of the hierarchical components for each of the criteria and sub-criteria were acquired from the responses that the respondents provided on the questionnaire. The application uses the Superdecision algorithm as the basis for data processing. The numbers that are generated as a result of data processing are displayed by the software. as a consequence, the matrix was created in the following format:

Following are the outcomes due to the matrix that built in Superdecision.

1. Choose	2. Node comparisons with respect to Adoption Factor	3. Results
Node Cluster	Graphical Verbal Matrix Questionnaire Direct	Normal Hybrid
Choose Node	Comparisons wrt "Adoption Factor" node in "Criteria" cluster	Inconsistency: 0.06626
Adoption Factor	X1 (IPCR) is extremely more important than X2 (BoS)	X1 (IPCR) 0.66556
Cluster: Goal	1. X1 (IPCR) >=9.5 9 8 7 6 5 4 3 2 2 3 4 5 6 7 8 9 >=9.5 No cor	X2 (BoS) 0.10936
Choose Cluster	2. X1 (IPCR) >=9.5 9 8 7 6 5 4 3 2 2 3 4 5 6 7 8 9 >=9.5 No cor	X3 (PC) 0.04598
Criteria	3. X1 (IPCR) >=9.5 9 8 7 6 5 4 3 2 2 3 4 5 6 7 8 9 >=9.5 No cor	X4 (PN) 0.17911
	4. X2 (BoS) >=9.5 9 8 7 6 5 4 3 2 2 3 4 5 6 7 8 9 >=9.5 No cor	
	5. X2 (BoS) >=9.5 9 8 7 6 5 4 3 2 2 3 4 5 6 7 8 9 >=9.5 No cor	
	6. X3 (PC) >=9.5 9 8 7 6 5 4 3 2 2 3 4 5 6 7 8 9 >=9.5 No cor	

Figure 12 The Calculation of All Criteria Using Superdecision

It can be seen that the respondents feel that Insurance Payment & Clear Regulation (X.1) is more important than Breadth of Services (X.2) and Professional Capabilities (X.3). Then Insurance Payment & Clear Regulation (X.1) is more important than Patient Needs (X.4). In addition to this, Breadth of Services (X.2) is more important than Professional Capabilities (X.3). Then, Professional Capabilities (X.3) is relatively more important than Breadth of Services (X.2). Last but not least, the requirements of the Patient (X.4) take precedence over those of the Professional (X.3).

The results shown that the value of Insurance Payment & Clear Regulation (X.1) is a top priority in determining the adoption factor for health services at home with a value of 0.6655. Occupying the second priority, namely Patient Needs (X.4) with a value of 0.1791, the third priority, namely Breadth of Services (X.2) with a value of 0.1093, and the last priority, namely Professional Capabilities (X.3) with a value of 0.0459. With an index inconsistency value of 0.0662 (less than 10%), the results obtained can be used as material for decision-making in determining the factors for adopting health services at home.



## Application of Superdecision on Insurance Payment & Clear Regulation (X.1)

Node Cluster	Priority Value
X1.1 TPPS	0.47775
X1.2 IP	0.04890
X1.3 CR	0.07912
X1.4 PP	0.39423

Figure 13 The Calculation of Sub-Criteria X.1 Using Superdecision

In Figure 13 it can show that the respondents feel that Third-Party Reimbursement Payment (X.1.1) is more important than Individual Payment (X.1.2) and Clear Regulation (X.1.3). Then Third-Party Reimbursement Payment (X.1.1) is just as important as Patient Protection (X.1.4). Furthermore, Clear Regulation (X.1.3) is relatively more important than Individual Payment (X.1.2). Then, Patient Protection (X.1.4) is more important and very important when compared to Individual Payment (X.1.2) and Clear Regulation (X.1.3).

The results shown in Figure 13 show that the value of Third-Party Reimbursement Payment Support (X.1.1) is a top priority in determining the adoption factor for health services at home with a value of 0.4775. The second priority is Patient Protection (X.1.4) with a value of 0.3942, the third priority is Clear Regulation (X.1.3) with a value of 0.0791, and the last priority is Individual Payment (X.1.2) with a value of 0.0489. With an index inconsistency value of 0.0887 (less than 10%), the results obtained can be used as material for decision-making in determining factors for adopting health services at home.

## Application of Superdecision on Breadth of Services (X.2)

Node Cluster	Priority Value
X2.1 HPMS	0.59754
X2.2 NMCS	0.06993
X2.3 ACS	0.19358
X2.4 PAS	0.13895

Figure 14 The Calculation of Sub-Criteria X.2 Using Superdecision

In Figure 14, it can be seen that the respondents felt that Health Prevention and Health Maintenance Services (X.2.1) were very important, more important, and relatively more important than Non-Medical Care Services (X.2.2), Acute Care Services (X.2.3), and Post-Acute Care Services (X.2.4). Then Acute Care Services (X.2.3) and Post-Acute Care Services (X.2.4) are somewhat more important than Non-Medical Care Services (X.2.2). Furthermore, Acute Care Services (X.2.3) are relatively more important than Post-Acute Care Services (X.2.4).

The results shown in Figure 14 show that the value of Health Prevention and Health Maintenance Services (X.2.1) is a top priority in determining the adoption factor for health services at home with a value of 0.5975. The second priority is Acute Care Services (X.2.3) with a value of 0.1935, the third priority is Post-Acute Care Services (X.2.4) with a value of 0.1389, and the last priority is Non-Medical Care Services (X.2.2) with a value of 0.0699. With an index inconsistency value of 0.0512 (less than 10%), the results obtained can be used as material for decision-making in determining factors for adopting health services at home.

### Application of Superdecision on Professional Capabilities (X.3)

Node Cluster	Weight	Priority
X3.1 GP	0.1202	3
X3.2 SP	0.5411	1
X3.3 NST	0.0736	4
X3.4 NRC	0.2650	2

Figure 15 The Calculation of Sub-Criteria X.3 Using Superdecision

In Figure 15 it can be seen that the respondents feel that the Specialist Physician (X.3.2) is very important, more important, and relatively more important than the General Physician (X.3.1), Nurse with Specialized Training Skills (X.3.3), and Nurse with Registration Certificate (X.3.4). Then Nurses with Registration Certificate (X.3.4) are relatively more important than General Physicians (X.3.1) and Nurses with Specialized Training Skills (X.3.3). Furthermore, General Physician (X.3.1) is relatively more important than Nurse with Specialized Training Skill (X.3.3).

The results show that the Specialist Physician (X.3.2) score is a top priority in determining the adoption factor for home health services with a value of 0.5411. Occupying the second priority is Nurse with Registration Certificate (X.3.4) with a value of 0.2650, the third priority is General Physician (X.3.1) with a value of 0.1202, and the last priority is Nurse with Specialized Training Skill (X.3.3) with value 0.0736. With an index inconsistency value of 0.0804 (less than 10%).

### Application of Superdecision on Patient Needs (X.4)

Node Cluster	Weight	Priority
X4.1 EDC	0.5538	1
X4.2 MA	0.0949	4
X4.3 CHS	0.2385	2
X4.4 FET	0.1125	3

Figure 16 The Calculation of Sub-Criteria X.4 Using Superdecision

In Figure 16, it can be seen that the respondents feel that Better and more Efficient Delivered Care (X.4.1) is more important and relatively more important than More Affordable (X.4.2), Comprehensive Health Services (X.4.3), and Adequate Facilities, Equipment, and Technologies (X.4.4). Then Comprehensive Health Services (X.4.3) is relatively more important than More Affordable (X.4.2) and X4.4 (FET). Furthermore, More Affordable (X.4.2) is as important as Adequate Facilities, Equipment, and Technologies (X.4.4).

The results show that the value of Better and Efficient Delivered Care (X.4.1) is a top priority in determining the adoption factor for health services at home with a value of 0.5538. The second priority is Comprehensive Health Services (X.4.3) with a score of 0.2385, the third priority is Adequate Facilities, Equipment, and Technologies (X.4.4) with a value of 0.1125, and the last priority is More Affordable (X.4.2) with a value of 0.0949. With an index inconsistency value of 0.0711 (less than 10%), the results obtained can be used as material for decision-making in determining factors for adopting health services at home.

Based on Figure 17, Criteria X.1, Sub-Criteria X.1.1, also known as Third-Party Reimbursement Payment, is the most ideal sub-criteria compared to other sub-criteria with a weight of 0.3137, and that Sub-Criteria X.1.4 Patient Protection is the second ideal sub-criteria with a weight of 0.2589. With a weight of 0.0373, the Health Prevention and Maintenance Services alternative meets the requirements of Criteria X.2, Sub-criteria X.2.1, and is deemed to be the most ideal choice. According to the weighting system used in Criterion X.3, Sub criterion X.3.2 Specialist Physician is the most ideal

alternative. The most ideal choice would be criterion X.4, sub-criteria X41 Efficient Delivered Care because it weighs 0.1209.

Name	Graphic	Ideals	Normals	Raw
X1.1 TPPS		1.000000	0.313767	0.156883
X1.2 IP		0.102364	0.032119	0.016059
X1.3 CR		0.165613	0.051964	0.025982
X1.4 PP		0.825186	0.258916	0.129458
X2.1 HPMS		0.118971	0.037329	0.018665
X2.2 NMCS		0.013924	0.004369	0.002184
X2.3 ACS		0.038543	0.012093	0.006047
X2.4 PAS		0.027665	0.008680	0.004340
X3.1 GP		0.023936	0.007510	0.003755
X3.2 SP		0.107741	0.033806	0.016903
X3.3 NST		0.014656	0.004599	0.002299
X3.4 NRC		0.052770	0.016557	0.008279
X4.1 EDC		0.385344	0.120908	0.060454
X4.2 MA		0.066059	0.020727	0.010363
X4.3 CHS		0.165986	0.052081	0.026040
X4.4 FET		0.078321	0.024575	0.012287

**Figure 17 Sub-Criterion Synthesis Results**

From all comparisons of sub-criteria with ideal values. We can rank the 5 most important factors in healthcare adoption as follows;

1. X.1.1 (1.0000) = Third-Party Reimbursement Payment
2. X.1.4 (0.8252) = Patient Protection
3. X.4.1 (0.3853) = Better and Efficient Delivered Care
4. X.4.3 (0.1659) = Comprehensive Health Services
5. X.1.3 (0.1654) = Clear Regulation

### Business Solution

The business solution was developed using the Diamond Strategy Model based on the business situation and environment analysis, interviews with stakeholders and influencing adoption factor using the AHP Model.

### Generic Business Strategy

By concentrating services on a particular market, such as individuals with certain medical problems or specific geographic areas, home healthcare providers may offer services that are more suited to that market's needs. This can aid businesses in boosting consumer happiness and expanding their market share in particular industries. Based on the primary and secondary data analysis, strategy formulation, and looking at future market opportunities, HOSPON determines to use a Differentiation Strategy in the market to increase the adoption rate and most importantly to improve the quality of services provided that achieve Value-Based Care.

**Table 3 HOSPON Generic Business Strategy**

		Competitive Advantage	
		Lower Cost	Differentiation
Competitive Score Broad Target		Cost Leadership Strategy	Differentiation Strategy

	Competitive Advantage	
	Lower Cost	Differentiation
Narrow Target	Cost Focus Strategy	Differentiation Focus Strategy

The adoption factor for the availability of third-party reimbursement payment schemes and patient protection has made HOSPON choose to take a Differentiation strategy in the market. Investments in appropriate equipment and technology and the capabilities of health workers are carried out to ensure that patients get better and efficient delivered care. HOSPON has a different focus than its competitors in the healthcare industry. While other providers currently focus on general care, such as elderly and maternity care in certain geographic area, HOSPON focuses on preventive care, health maintenance, post-acute care, and integrative continuum care that are tailored to patient needs. HOSPON targets national markets that have facilities-based care, health workers availability, and high potential patient populations, especially in metropolitan areas.

The Care at Home market is largely driven by demographics, urbanization, technological innovations, and rising patient expectations. While the emergence of Care at Home offers a platform for health systems to codevelop a new offering in their existing markets, national scale will likely require substantial capital and operational experience that may currently be out-of-reach for many health systems. This can be achieved through technology, or through scaling the Care at Home model across multiple markets. Health systems can leverage Care at Home to improve patient outcomes and reduce cost. Strategic partnerships can serve as an important means of accelerating growth aspirations both within and beyond their current markets.

### Strategy Diamond Model

Strategy diamond is a model for strategizing and challenging your strategic plans, so that they are more comprehensive and clearer. This model is extremely effective as a model because it creates a clear set of options for all stakeholders in an organization for growth.

### Arena Element of Strategy

In this element, HOSPON must define the markets in which it will fight. Specificity is key here. HOSPON's areas of activity are defined as follows:

**Table 4 HOSPON Arena Element of Strategy**

Arena	Description
What	Focus on pre- and post-care services; Health Preventive and Health Maintenance Services; Post-Acute Care Services.
Who	Patients with upper middle and upper income; Patients with private insurance access; and patients who are aware of their medical needs.
Where	Geographical areas with high mobility such as Greater Jakarta and 4 other big cities; Areas that can be integrated with Hospital services; Have a large number of health workers.
When	2nd Quarter 2023
How	Providing connection between patients and health workers through a platform; Integrate as a third-party care at home provider in a hospital or clinic; Provide health workers with special training and understand manners.
How Much	Invest in technology mobile platforms; Portable & durable medical devices; Health worker training; Education of potential users; Satisfying the stakeholders.

<b>Arena</b>	<b>Description</b>
Why	<ol style="list-style-type: none"> <li>1. Partnering with hospitals or clinics, HOSPON can solve; Ensuring the patient can use insurance as payment; patient protection problems; rely on government regulations on hospitals; ensuring patients have confidence in their medical treatment and understand the risks involved.</li> <li>2. Integrating with the platform, providing more value creation by recording patient data, remote monitoring and health prevention capabilities.</li> <li>3. Targeting a niche market with high income in large cities aims to acquire patients with awareness of personal health issues.</li> <li>4. Focus on service above aimed at maximizing current capabilities.</li> </ol>

### Vehicle Element of Strategy

The element where HOSPON decide the company win the battles in the chosen arenas is about choosing the weapons to focus and commitment. Some of the options are:

**Table 5 HOSPON Vehicle Element of Strategy Option**

<b>Vehicle</b>	<b>Description</b>
Option 1 Partnership	The strategic objective of the partnership is to create a home healthcare services provider with hospitals and clinics, who are third parties in providing post-acute care services. This partnership enables HOSPON to focus on its core competency of post-acute care, facilitate client acquisition and reduce overhead costs.
Option 2 Joint Ventures	Strategically building a new health care provider that focuses on the delivery of home healthcare, facilitated by the target hospital in order to provide preventive and post-acute care. This can help to streamline business operations, create a solid foundation for customer relationships, and ensure transparency and safety for patients, and quality assurance from insurance companies.
Option 3 Acquisition	Acquired by health technology startup, as a provider of home healthcare services. This strategy aims to make processes more efficient through the use of existing databases and support from partners who have been involved in developing the platform for users and health care providers.
Option 4 Internal Development	Build a clinic or hospital as a way to ensure that patients get proper medical care, regulation, and treatment. However, this option has high investment due to double costs in facilities and home equipment, not effective to growth exponentially.

The best strategy is to acquire a client base through Option 1, partnerships with hospitals and clinics within which to offer home healthcare. This strategy ensures the company can acquire patients by offering both better delivered health care services, as well as considering factors such in patient adoption. Instead of making competition to acquire patient from the facility based, it will be more effective in business by partnering with health facility care in providing services.

### Differentiator Element of Strategy

The Differentiators element of the strategy diamond model involves a deep analysis of the organization's facets that make it unique and ensures that the strategy is tailored to company needs and capabilities.

**Table 6 HOSPON Differentiator Element of Strategy**

<b>End to End Experience by Enabling Technology and Partnership</b>	
Facility-Based Integration	HOSPON's integration with facility-based care allows it to ensure the needs of patients are met through the payment of third parties; patient

Better Delivered Care	security; qualified personnel; and comprehensive health-care services for patients. Provides high-quality healthcare to its patients with an emphasis on patient awareness. The company has invested in developing skills within its staff to improve patient care. Incorporating the needs, preferences, and living circumstances of each patient into its services to increase satisfaction and adherence at lower cost.
Online Integration	With a mobile platform that connects patients and health care providers, the technology can assist patients in developing trust and safety within the system. By integrating data collected from patients with remote monitoring technology, it creates recommendations for preventative care and treatment of illnesses.
Enabling Technology	Technology-enabled services to enhance patient care and improve efficiency. This includes collaborating with payers and providers to improve the relationship between actions and results, engaging with consumers, and providing real-time and simple access to health information.

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### **Staging and Pacing Element of Strategy**

The Indonesian home healthcare market is new so demand for home healthcare services is growing rapidly. This presents an opportunity for HOSPON to expand its product range and increase sales. To grow exponentially, HOSPON partners with facilities-based care providers to ease the acquisition of patients and educate them about health. This creates an end-to-end healthcare system that offers comprehensive, high-quality services and medications.

To carry out high speed growth, HOSON leveraging network effects to increase growth, acquire customers, and open services in new geographical areas in Indonesia by creating a large and interconnected network of users that benefit from each other's interactions. This network effect includes the need for more demand, more partnerships in facility-based care, more geographic cover, and more integration to technology. With increasing demand for home healthcare in the market, HOSPON can increase its partnerships with facilities offering comprehensive care. By partnering with more facilities, HOSPON can integrate patients or new users into an online system for easier exchange between HOSPON and operators of facilities offering including database. Then HOSPON will expand into new geographical areas in order to take advantage of the new demand for home healthcare services, which then returns to the early stages of the network.

### **Economic Logic Element of Strategy**

HOSPON healthcare economic logic is to compete on premium prices with other providers because we invest heavily in equipment, technology, and the abilities of our health care professionals to make sure patients receive the best care possible and are more efficient based on value-based care. Our focus on preventative and post-acute care supported by remote monitoring and access to patient medical data ensures that the right care is delivered at the right time. When consumers are just starting to become aware of their own health, individuals who are concerned about preventative or wellness services will be willing to pay a higher price for the value they receive for healthy living.

The higher price of this service offers value-based care and ensures that every adoption factor of a healthcare patient's concern is met such as third-party reimbursement through insurance, regulations which assure patient safety and security, better delivered care, and capable health worker who are trained in providing home care. HOSPON is targeting its strategic partnership to facility-based care which is integrated with technology that connects all stakeholders, including patients, professional, providers, payers and policymakers. This was done to quickly scale up to acquire patients and create services in new, untapped geographic areas.

### **Discussion**

Currently, four main stakeholders are involved in home healthcare: patients, providers, policymakers, and payers. However, the low adoption rate of these services in Indonesia is mainly due to unsupportive regulations and economic feasibility. An analytical hierarchical process model (AHP)

was used to identify the factors influencing adoption, resulting in four criteria and 16 sub-criteria. The top five influential sub-criteria were identified as Third Party Reimbursement Payment, Patient Protection, Better and Efficient Care Delivered, Comprehensive Healthcare, and Clear Regulation. The recommended generic HOSPON business strategy to increase the adoption rate and improve service quality is to use a Differentiation Strategy, focusing on health prevention services and value proposition as an integrated facility home care service to capture a competitive advantage and penetrate the market. The economic logic of HOSPON Healthcare is to compete at a premium price with other providers as we invest heavily in equipment, technology, and the capabilities of our healthcare professionals to ensure patients receive the best and most efficient care based on value-based care. So this research is in line with a study conducted by Vina, which states that the strategy for developing and marketing home care services is more adapted to economic considerations, namely by maximizing patient quality but still providing low prices so that patients do not feel reluctant to do home care. This study recommends a differentiation strategy focusing on preventive care, health maintenance, and post-acute care, targeting the premium market with technology-based solutions.

## CONCLUSION

Based on the results and discussion above, it can be concluded that four main stakeholders are involved in home health care: patients, providers, policymakers, and payers. However, the low adoption rate of these services in Indonesia is mainly due to unsupportive regulations and economic feasibility. An analytical hierarchical process model (AHP) was used to identify the factors influencing adoption, resulting in four criteria and 16 sub-criteria. The top five influential sub-criteria were identified as Third Party Reimbursement Payment, Patient Protection, Better and Efficient Care Delivered, Comprehensive Healthcare, and Clear Regulation. The recommended generic HOSPON business strategy to increase the adoption rate and improve service quality is to use a Differentiation Strategy, focusing on health prevention services and value proposition as an integrated facility home care service to capture a competitive advantage and penetrate the market.

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