

The Strategy to Achieve Universal Health Coverage Membership in Indonesia

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The Strategy to Achieve Universal Health Coverage Membership in Indonesia

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ABSTRACT:

The target of 100 percent Universal Health Coverage (UHC) in Indonesia is expected to be achieved by the end of 2019. However, the socio-demographic conditions of the various regions in Indonesia are very diverse. Willingness To Pay (WTP) premium insurance package positively correlated and statistically significant with distance to outpatient health services and formal sector workers. Multilevel analysis of WTP catastrophic insurance package of individual-family level shown to be affected by the urban-rural differences. Health financing policy should be focused on the community group which has a lower WTP. This is generally those who work in the informal sectors and also live in rural areas.

KEYWORDS: Universal Health Coverage, health insurance, rural, informal worker

INTRODUCTION:

It is widely known that to achieve 100% participation in the national health insurance program is difficult (universal health coverage/UHC in dimension of participation)(1). Some countries do ways to increase voluntary enrollment to pay health insurance premiums. Lack of information, low purchasing power, risk taker, dissatisfied with the quality of service, etc., are the factors that make UHC difficult to achieve (2-8).

At the end of 2016, National Health Insurance (BPJS Kesehatan) membership in Indonesia had reached approximately 70% of the 2019 100% target. However, membership largely comes from public servants, the poor (financed by the Government) and formal workers. While BPJS membership is mandatory, the community's willingness to pay (WTP) is one crucial factor in the policy making process with regard to health financing (9-10).

Indonesia has a land area of two million km², which includes 17,504 islands. It has diversity in its natural wealth and in its income levels among the population. These factors provide a substantial influence on the health financing policy aimed at achieving UHC. This study aims to determine the factors that influence the willingness to pay health insurance. The results of this study are useful to assist government policy in determining appropriate action to achieve UHC in Indonesia.

MATERIALS AND METHODS:

This study is quantitative research with cross-sectional design and using secondary data from Ministry of Health Republik Indonesia research project. The data collection was undertaken using CVM (Contingent Valuation Method) with TIOLI techniques for dependent variable. Each respondent is given a health insurance package scenario with certain values and is asked to state whether they are willing ("yes") or unwilling ("no") to pay the proposed value (11-14). If respondents are not willing to pay the amount of the premium, an open question will be asked to discover the amount each respondent is willing to pay (Figure 2). The analysis was done by bivariate logistic regression and continued by multilevel analysis

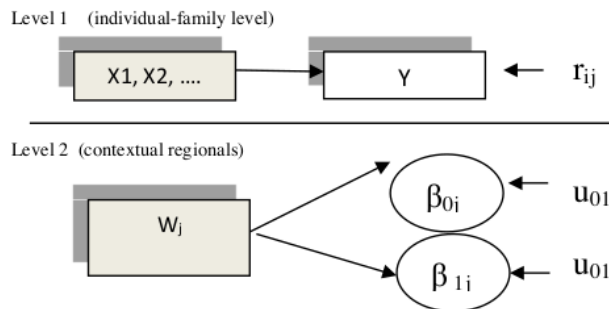


Figure 1 Multilevel model (2 level)

The population for this research is households in Indonesia, with a cluster purposive quota sampling taken from three provinces: high fiscal category (DKI Jakarta: West Jakarta and East Jakarta); medium fiscal category (South Sulawesi: Makassar and Sinjai Regency); and low fiscal category (NTT: Kupang and Kupang Regency). The final sample ($n=1289$) from the population at the level of sub district, chosen through simple random sampling, consists of 32% health insurance members and 68% who are not health insurance members.

The dependent variable for this research is WTP for health insurance package scenario. The independent variable consists of 15 variables: (1) family income level (1=high); (2) education level (1=high); (3) age; (4) employment (1=informal sector worker); (5) toddler in family (1=exists); (6) elder in family (1=exists); (7) number of family members; (8) respondent's health status (1=exists); (9) family members' health status (1=one of them is ill); (10) family members with major medical illnesses (1=exists); (11) record of the annual medical cost; (12) insurance coverage (1=covered); (13) the distance from outpatient health services (1=far in respondent perception); (14) the distance from inpatient health services (1=far); (15) barriers to health care center (1=exist). In addition, there is one multilevel variable that includes six regionals and a contextual variable consisting of Consumer Price Index (CPI), life expectancy, purchasing power, and regional rural percentage. Data analysis was conducted using multilevel logistic regression with the Strata 11SE program.

Contents of the catastrophic insurance package	The premium offered
Outpatient health services: in community health center (government) or private facility	IDR30.000/ person per month
Inpatient health services : in government hospital (above 2 nd class) or private hospital (above 3 rd class)	
Outpatient referral services in government or private facility	
The cost of transport to health care facility is guaranteed (emergency cases or not)	
Cases that are guaranteed:	
All illnesses (include for expensive diseases such as heart surgery, dialysis, malignancy)	
Medicine prescription is not limited (generic or not)	

If you do not agree to pay that much, how much do you want to pay for the package?
 The answers :IDR.....

Figure 2 Health insurance catastrophic package scenario

RESULTS AND DISCUSSION

Respondents were householders with the following study sample characteristics: 30% family with low per capita income, 52% with low educational background, family with an average of four members, 10% respondents or family members who are not physical healthy, 70% have non-fixed income jobs, 35% have a toddler and 1% have elderly people in their family.

WTP Health Insurance Package Premium

Based on the scenarios for health insurance offered to the respondents, 30.8% (397 respondents) are willing to pay for a standard health insurance package (IDR 10,000). The catastrophic insurance package scenario (Figure 1) was offered only to respondents who were willing to pay for a premium standard package worth IDR10,000. Thirty percent of respondents were willing to pay a premium of IDR30,000. The median of the premium amount for the catastrophic health insurance package in all regionals is IDR15,000.

The research discussion focuses on catastrophic insurance packages, as these packages are very similar to the insurance packages offered by the Indonesian government in the national health insurance program, including the package price.

The Influences of Individual-Familial and Regional (Multilevel) Factors on WTP the Premium for the Catastrophic Insurance Package

The result of multivariate logistic regression shows that four of the 15 free variables are correlated with WTP premium insurance package. They are: formal sector worker, higher education, distance to outpatient health services, and a high level of family welfare (Table 1)

Table 1: The correlation of WTP premium insurance package with individual-family variable: multivariable logistic regression

Variable	Regressi coefisien	OR (95% CI) Individual-family level	P
Employment	0,65	1,91 (1,18-3,10)	0,009
Education	0,50	1,65 (0,98-2,78)	0,062
Distance of outpatient health services	0,38	1,46 (0,90-2,36)	0,127
Family income	-0,53	0,59 (0,34-1,02)	0,062
Constanta	-1,21		0,001

Multilevel mixed-effects logistic regression was used to analyze the Level 1 individual-familial factor, which consists of four free variables and the Level 2 rural-urban factor, which consists of one contextual variable (Consumer Price Index/CPI). In Level 1, two free variables have a significant correlation statistically. These are the formal sector worker (OR 2,04, p<0,05) and distance to outpatient health services (OR 1,85, p<0,05). The correlation in each rural-urban cluster with WTP Premium Insurance Package is significantly different in statistics (H0 random effect ≠ 0). In Level 2 (random intercept by rural), the CPI variable is positively correlated (OR 1,09, p<0,05) with WTP premium Insurance. The correlation in each rural-urban factors toward WTP Premium Insurance is significantly different in statistics (H0 random effect ≠ 0) or is heterogeneous among cluster. The value of MOR in Level 2 is at 2.34. The OR value in level 2 is higher than the OR value of all variables in the individual-familial level. It means that factors influencing in level 1 are influenced by rural factors (level 2).

Table 2: Multilevel analysis of WTP premium insurance package with individual-family factors and random rural effect

Variable	OR (95% CI) Level 1	OR (95% CI) Level 2 (<i>random intercept by rural</i>)	OR (95% CI) Level 2 + contextual variable (<i>random intercept by rural</i>)
1	2	3	4
Education	1,91 (1,18-3,10)	-	-
Employment	1,65 (0,98-2,78)*	2,01 (1,27- 3,19)*	2,04 (1,28-3,25)*
Distance of outpatient health services	1,46 (0,90-2,36)	1,90 (1,13-3,21)*	1,85 (1,10-3,12)*
Family income	0,59 (0,34-1,02)	-	-
Consumer Price Index	-	-	1,09 (1,01-1,18)*
Random effect	-	p=0,0001	p=0,025
MOR	-	2,34	1,99

* Significant

Informal sector workers such as entrepreneurs, farmers, and fishermen are a problem when it comes to achieving UHC membership as they have limited access to choosing health insurances (15-18). If they want to have health insurance, they must register individually and not in group. It certainly affects the premium amount that must be paid.

The problem of public access to health services is an important factor that must be considered as it is related to the Government's effort to increase health service equity. In this study, almost 37% of the respondents in rural areas have a problem with distance. Meanwhile, only 10.7% of the respondents in urban areas have this problem. Generally, the results of distance to health services and WTP have a negative correlation. The greater the distance, the lower the WTP (19). This study was undertaken to prove that there will be some increases in WTP health insurance if there is a transportation reimbursement provided in the insurance package.

People who live in rural areas will face more barriers to obtaining health services than those who live in urban areas. The barrier factors are: the distance to health services, inadequate package benefits, difficult transportation, and the limited number of doctors, especially specialists (20-21).

The limited information provided to rural people means that they do not have many health insurance options, so they are more likely to take up the government's program because it can help them to ease the burden of health care costs (22-23). Urban people prefer private health care and the level of average income is higher than rural people (22-23).

However, in the WTP scenario for the health insurance premium package worth IDR30,000/person per month, the urban respondents are more likely to buy in than the rural respondents (31.34% vs. 26.79%). The higher the wealth, the more expenses a person needs on health. Therefore, they need insurances with a better and more complete benefit package (24-26). This is in accordance with the catastrophic insurance package offered in this study. The benefit package offered not only facilitates people to freely choose a public or private health care provider but also guarantees all diseases (including the diseases with catastrophic cost).

CONCLUSIONS AND RECOMMENDATIONS:

This study concludes that the factors that influence WTP a premium for health insurance package are a fixed income job and the distance to outpatient health services. The multilevel analysis on WTP for a catastrophic insurance is influenced by urban-rural differences. This study suggests that the health financing policy for the achievement of UHC should be focused on the groups of people who have a low WTP; that is, people who work in informal sector and also live in rural areas.

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CONFLICT OF INTEREST:

The authors declare no conflict of interest.

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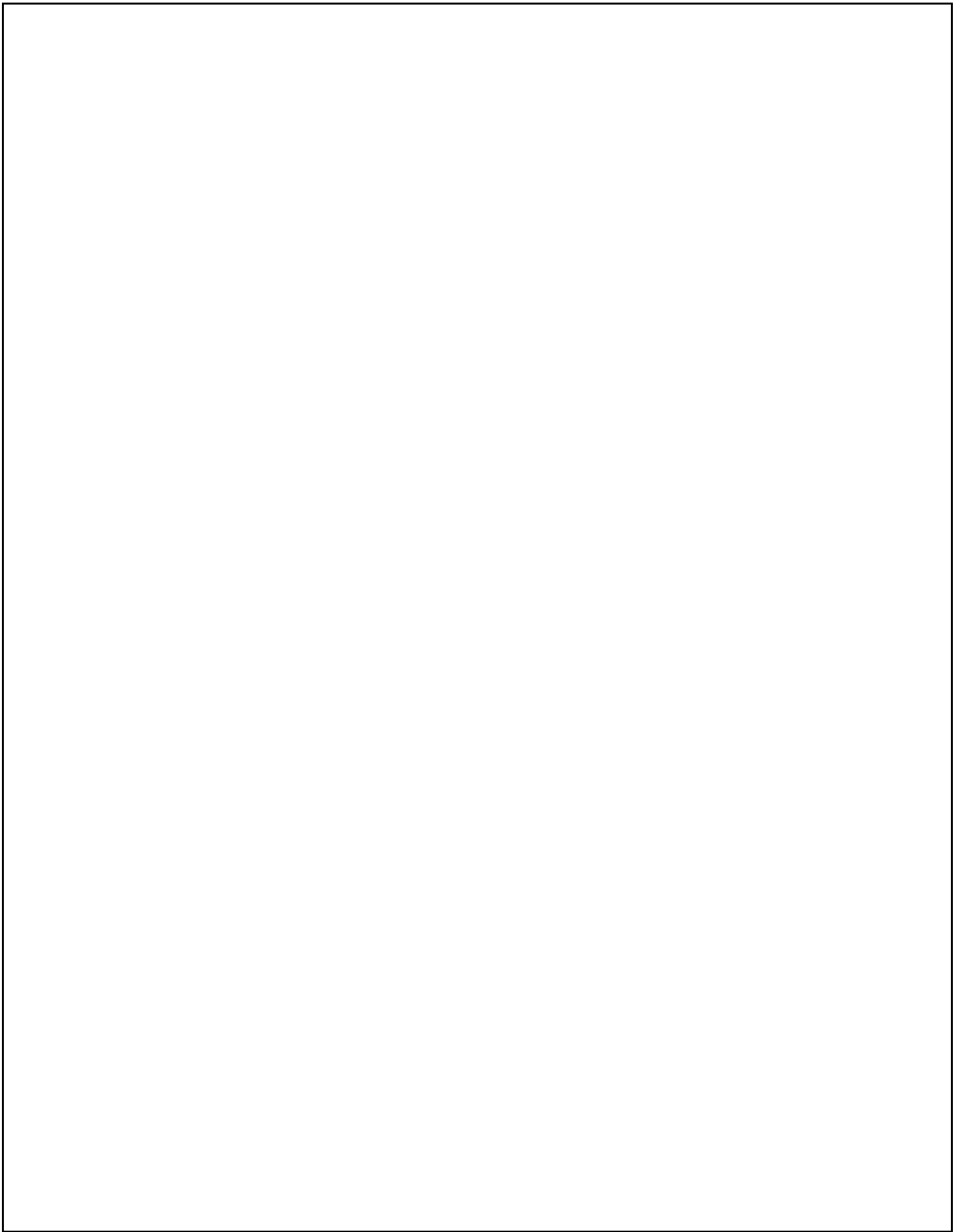
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