

# A Study on the Satisfaction Degree of Farmers Participating in Basic Medical Insurance for Urban and Rural Residents and Influencing Factors——Empirical Analysis Based on Five Cities of H Province

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**Abstract:** In 2016, China implemented the urban-rural coordination of basic medical insurance. In order to judge whether farmers are satisfied with the basic medical insurance system for urban and rural residents. In this paper, Logistic regression model was used to study the satisfaction degree of urban and rural residents with basic medical insurance and its influencing factors among 513 insured farmers in 15 administrative villages in H province. The study found that five variables, including the personal characteristics of the insured farmers, the rationality of the payment and reimbursement system of medical insurance, and the perception of the insured farmers on the service of designated hospitals and pharmacies, have a significant impact on the satisfaction of the insured farmers' medical insurance system. This study has practical value in constructing and perfecting the basic medical insurance system for urban and rural residents in China.

**Keywords:** Insured farmers, Urban and rural resident medical insurance schem, Satisfaction

## 1. Introduction

On January 12, 2016, the State Council issued the Opinions on Integrating the Basic Medical Insurance System for Urban and Rural Residents, calling for the integration of basic medical insurance for urban residents and new rural cooperative medical insurance scheme, and the establishment of a unified basic medical insurance system for urban and rural residents to achieve the integration of coverage, financing policies, guaranteed benefits, medical insurance catalogs, designated management and fund management [1]. Since the promulgation of this policy, residents in urban and rural areas with medical insurance scheme can pay the bills as the same standards and enjoy the same treatment, so as to achieve an equal distribution of medical resources. However, according to the author's investigation, the basic medical insurance policy for urban and rural residents did not reach the expected results in the specific implementation process, especially for rural residents. After the new rural cooperative medical system was transformed into the urban and rural medical insurance system, with the rapid increase in the amount of contributions, some farmers' willingness to participate in insurance has significantly decreased, and some areas even "forced farmers to participate in insurance" due to their are unwilling to participate in insurance, frequently causing conflicts between rural cadres and insured farmers, and motivating farmers' rebellious psychology. The author believes the reason is that the basic medical insurance system for urban and rural residents pays too much attention to the supply-side reform of medical insurance and ignores the demand-side problem of medical insurance.

The government needs to attach great importance to and promote the demand side reform of basic medical insurance of urban and rural residents while carrying out the supply side reform of basic medical insurance of urban and rural residents, in order to promote the basic medical insurance system of urban and rural residents in an all-round way and ensure its ideal practical effect in overcoming the medical risks of urban and rural residents and ensuring the health of urban and rural residents. As an important indicator of the demand side of farmers' medical insurance, medical insurance satisfaction not only reflects the implementation effect of the basic medical insurance system of urban and rural residents, but also plays an important role in improving the willingness of farmers to participate in the basic medical insurance system of urban and rural residents and promoting the sustainable development of the basic medical insurance system of urban and rural residents. Therefore, it is of great practical value to study

the farmers' satisfaction with the basic medical insurance system of urban and rural residents and its influencing factors.

At present, there are few researches on the satisfaction of urban and rural residents' basic medical insurance system, which mainly focus on the two aspects of satisfaction level and influencing factors of satisfaction degree. The research on the level of satisfaction reveals the actual effect of the implementation of the basic medical insurance system for urban and rural residents; the study of the factors affecting satisfaction focuses on exploring the restraining factors for the further implementation of the basic medical insurance system for urban and rural residents; Judging from research results and conclusions, there are still major differences. At the level of satisfaction level research, there are currently two major perspectives. Some scholars' research results show that insured residents have higher satisfaction with urban and rural residents' medical insurance [2-5], while some scholars' research results show that the insured residents have relatively low satisfaction with the urban and rural residents' medical insurance, which are mostly average and even below average [6-9]. As for the influencing factors of satisfaction, different scholars have also explored from different perspectives. The influencing factors, influence directions, and degree of influence revealed are all quite different, but there also exist consensus that there are two dimensions of designated medical institutions and reimbursement systems, which will have a significant impact on the satisfaction of urban and rural residents' medical insurance coverage for insured residents [4, 6, 9].

In general, there are still some shortcomings in the academic research on the satisfaction of the basic medical insurance system for urban and rural residents: (1) Most studies have not conducted a reasonable analysis of the selected variables which are not quite related to the farmers' medical insurance needs and satisfaction. (2) The dimensions of farmers' satisfaction indicators for urban and rural residents' basic medical insurance system determined by most studies are too narrow. Some important indicators are not included in the evaluation of farmers' satisfaction with the basic medical insurance system of urban and rural residents resulting from only one or two dimensions selected for satisfaction indicators. (3) When researching the satisfaction of the basic medical insurance system for urban and rural residents of medical service institutions affecting farmers, all medical insurance service subjects such as hospitals, doctors, and pharmacies have been treated uniformly, completely ignoring the differences of the three main medical insurance service subjects for farmers on the satisfaction of basic medical insurance system of rural and urban residents.

Based on this, this article starts from demand side of the rural residents' medical insurance service after the implementation of the basic medical insurance system for urban and rural residents, and takes five prefecture-level cities in H province as cases to carry out evaluation of farmers' satisfaction with urban and rural residents' basic medical insurance system and their service. The research strategies of this paper are as follows: (1) The research hypotheses of this paper are proposed based on the "Four Parties in triangle structure" medical insurance behavior relationship theory and "cost-benefit" theory of social medical insurance, managing to make up for the shortcomings of existing research theoretical hypotheses and overcome the randomness of variable selection and then to accurately select the effective variable indicators that affect the satisfaction of farmers participating in urban and rural residents' basic medical insurance. (2) Select variables from multiple dimensions such as personal characteristics, payment mechanism, rationality of reimbursement mechanism, designated hospital, designated pharmacy and medical service perception, etc., to build a scientific evaluation index system for the satisfaction of insured farmers, in order to enhance the scientificity and practical value of the research conclusions. (3) Explore the path to further improve the basic medical insurance system for urban and rural residents, from the level of reimbursement of medical insurance agencies and the level of medical services provided by hospitals and pharmacies.

## 2. Field Survey and Satisfaction Statistics

### 2.1. Selection of Sample Site

In order to accurately measure the satisfaction of farmers in participating in basic medical insurance for urban and rural residents, and to determine the key factors affecting their satisfaction, the author chose 5 regions in H province as the study sample area. There are two reasons for this: First, H province has the sample size needed to measure the satisfaction of farmers in participating in basic medical insurance for urban and rural residents. Province H is a large agricultural province in China with a large rural population base and a high proportion of farmers, whose urbanization rate has always been lower than the national average, with more than 2 million poor people and low level of overall farmers' income.

There are strong demographic characteristics for studying the satisfaction of farmers in participating in basic medical insurance for urban and rural residents by selecting this province as the research object. Secondly, H province has a typical characteristic of measuring the satisfaction of farmers in participating in urban and rural residents' basic medical insurance. In July 2016, in response to a national call, it has issued the "Implementation Opinions on the Integration of the Basic Medical Insurance System for Urban and Rural Residents", which integrates the two systems of basic medical insurance for urban residents in the province and the new rural cooperative medical system, and uniformly implemented the new urban and rural residents' medical insurance policy from January 1st. In just one year, it has gained great effect: the number of urban and rural residents' medical insurance enrollment in H province has reached 60,391,200, the fund collection income and expenditure reached 35.952 billion yuan and 31.896 billion yuan, and the subsidy standard was increased to 450 yuan per person per year [10]. However, as of the end of 2018, the number of people participating in the basic medical insurance for urban and rural residents in H province was only 59.349 million. Compared with 2017, the number of people participating in the insurance decreased by 1.0422 million [11]. It is reflected that it is typical to select H province to evaluate the satisfaction of rural and urban residents with basic medical insurance.

## 2.2. Selection of Survey Samples

The author formed a survey team of farmers in H province to participate in the basic medical insurance satisfaction survey of urban and rural residents in order to collect the necessary empirical data. From July to August in 2019, the investigation team selected 15 administrative villages under the jurisdiction of 5 prefecture-level cities in H province to conduct field surveys on the satisfaction of farmers in participating in basic medical insurance for urban and rural residents. The survey uses a combination method of stratified sampling and random sampling. First, the 14 prefecture-level cities in H province are divided into five levels according to the economic development level of H province, and then conduct investigations in prefecture-level cities A, B, C, D, E which are selected in each level of these cities; Second, select 3 counties in each city that can represent the city's economic development level, randomly select 1 administrative village in each county, and randomly select 38 households in each administrative village; Finally, the investigator conducts a household structured questionnaire with a total of 570 questionnaires distributed and 513 valid questionnaires were recovered after eliminating invalid questionnaires, reaching an effective recovery rate at 90%.

## 2.3. Sample characteristics

In order to show that the sample selection is representative, it is necessary to analyze the basic characteristics of the sample. According to the questionnaire sample, the author describes its basic characteristics as shown in Table 1.

Table 1: Basic characteristics of the sample

Items	Categories	Frequency (number)	Percent (%)
Age	under 20 years old	41	8
	21-35 years old	124	24.2
	36-50 years old	236	46
	51-65 years old	96	18.7
	over 65 years old	16	3.1
Physical conditions	Very unhealthy	14	2.7
	Relatively unhealthy	43	8.4
	General	168	32.7
	Relatively healthy	205	40
	Very healthy	83	16.2
Marital status	Unmarried	107	20.9
	Married	406	79.1
Regions	City A	108	21.1
	City B	104	20.3
	City C	102	19.9
	City D	101	19.7
	City E	98	19.1

Table 1 shows that in the survey sample, farmers under 20, 21-35, 36-50, 51-65, and over 65 years old accounted for 8%, 24.2%, 46%, 18.7%, and 3.1%, respectively. The age structure shows a reasonable distribution. In terms of physical condition, 56.2% of farmers think they are in good health (very healthy or relatively healthy), while only 11.1% of them think that they are in poor health (very unhealthy or

relatively unhealthy), and another 32.7% think they are in general physical condition, which indicates that farmers have a higher assessment of their own health. In terms of marital status, 79.1% of the surveyed farmers are married, and 20.9% of the surveyed farmers are unmarried, which is also consistent with the relatively stable situation of rural marriage. Considering the surveyed area, there were 108 people (21.1%) in city A, 104 people (20.3%) in city B, 102 people (19.9%) in city C, and 101 people (19.7%) in city D, 98 people (19.1%) in City E, so their distribution is relatively balanced. As mentioned above, it can be seen that the survey sample is quite representative.

#### 2.4. Satisfaction Statistics

The author has collected 513 valid questionnaires, and use spss23.0 to make statistics on the questionnaire data, forming the satisfaction statistical table of farmers' participation in basic medical insurance for urban and rural residents in H Province.

Table 2: Satisfaction of insured residents to medical insurance of urban and rural residents

	Very dissatisfied	Relatively dissatisfied	General	Relatively satisfied	Very Satisfied	Satisfactory ratio
Comprehensive satisfaction	6.6	13.6	50.9	23.2	5.7	28.9
Satisfaction of Payment	10.1	14.6	44.4	21.8	9	30.8
Satisfaction of Reimbursement	8	12.5	51.9	21.4	6.2	27.6
Satisfaction of Hospital	8.4	10.9	54.2	21.6	4.9	26.9
Satisfaction of Pharmacy	4.5	14	56.9	19.7	4.9	24.6

Table 2 shows the overall satisfaction of farmers in H province for participating in the basic medical insurance for urban and rural residents: 5.7% of them are very satisfied and 23.2% of them are relatively satisfied, reaching 28.9%, which means that those who are satisfied are less than 30%; the proportion of those who are relatively satisfied, relatively dissatisfied, and very dissatisfied are 50.9%, 13.6%, and 6.6%, respectively, reaching 71.1%, which means that more than 70% of those are relatively satisfied and dissatisfied. From the perspectives of the satisfaction of the insured farmers' satisfaction of payment, satisfaction of reimbursement, satisfaction of designated hospitals, and satisfaction of designated pharmacies, the insured farmers in H province's satisfaction rates of medical insurance payment system, reimbursement system, designated hospitals and health service provided by designated pharmacies for urban and rural residents are 30.8%, 27.6%, 26.9%, and 24.6%, which were roughly the same as the comprehensive satisfaction rate, and the satisfaction rate basically fluctuated around 28%. This situation shows that although the basic medical insurance system for urban and rural residents in H province has been greatly improved compared to the new rural cooperative medical system, the implementation of the basic medical insurance system for urban and rural residents in the past two years has not been satisfactory. There are still some unsatisfactory problems that need to be improved and perfected.

### 3. Research Hypotheses, Model Building and Variable Selection

#### 3.1. Theoretical Basis and Research Hypothesis

The satisfaction of farmers participating in the basic medical insurance system for urban and rural residents is based on the government's medical insurance policies, payment and reimbursement services of medical insurance institutions, medical services at designated hospitals and drug stores; whether farmers are satisfied with the basic medical insurance system for urban and rural residents, and satisfaction level is determined by the insured farmers based on the comparison of insured costs and insured benefits. Therefore, this article will use "Four Parties in triangle structure" medical insurance behavior relationship theory to explain the interactive relationship between farmers participating in urban and rural residents 'basic medical insurance; and the "cost-benefit" theory to explain the degree of satisfaction of insured farmers to the urban and rural residents' basic medical insurance system.

China's basic medical insurance system for urban and rural residents is a typical "Four Parties in triangle structure" interactive relationship composed of insured parties (service demanders), insurers (insurance agencies), medical service providers (including designated hospitals and pharmacies), and governments [12-14]. The main subjects are around social medical insurance business, which are interconnected and interact to form an organic medical insurance behavior system (Figure 1).

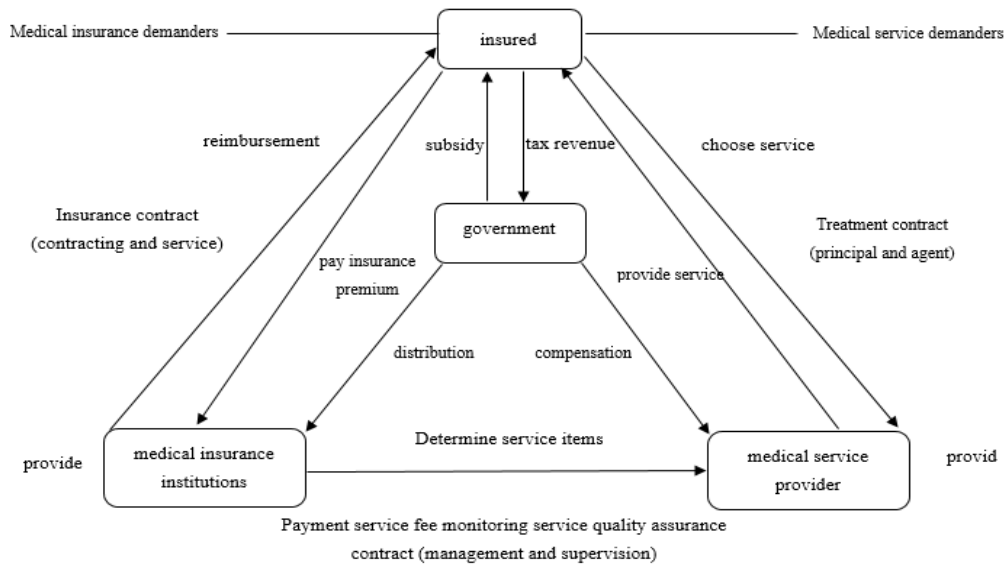


Figure 1: Social health insurance "Four Parties in triangle structure" medical insurance behavior relationship diagram

Among them, the government, as the core subject, mainly plays the role of organization, management, and supervision of the other three parties; the other three parties, the "medicine, patients, and insurance" are major parties across the two major markets of medical insurance and medical services, showing a typical triangular influence relationship, in which they are related mutually and affect each other, forming an equivalent exchange relationship between "doctors and patients", a reimbursement relationship between "patient insurance" and a medical service relationship between "medical insurance" relationship [15-17]. In the "Four Parties in triangle structure" medical insurance behavior relationship, when the government's medical insurance policy is determined, the insurer (medical insurance institution) and the medical service provider (medical service provider) have a direct impact on the insured (insured farmers) [17].

According to the "cost-benefit" theory, the expectation that farmers' medical insurance benefits are greater than the cost of participating insurance is the choice basis for farmers to decide to participate in the basic medical insurance for urban and rural residents. The main purpose of farmers in the government-designed basic medical insurance system for urban and rural residents is physical health, medical benefits, and elimination of disease. Farmers choose to participate in the government's medical insurance for urban and rural residents and pay medical insurance premiums, in order to obtain higher medical service benefits than cost from the government's medical insurance system. Therefore, whether the insured farmers are satisfied with the government's medical insurance system, the medical services provided by designated hospitals and pharmacies, and the level of satisfaction, depends entirely on the comparison of the payment of participating in medical insurance and the gain of service [18], which shows that typical behavior characteristics of rational economic man [19-21]. Generally speaking, if the insured farmer believes that the actual medical service income is greater than the cost of participating in medical insurance; and the larger the difference, the higher his satisfaction with the government's medical insurance policy for urban and rural residents and medical insurance service; adversely, the lower his satisfaction with the government's medical insurance policy for urban and rural residents and medical insurance service. Therefore, it can be seen that the satisfaction of the insured farmers participating in the urban and rural residents' medical insurance mainly depends on the actual costs and benefits when they supply and demand transactions with the insurer and the medical insurance service provider. The actual payment and reimbursement of farmers' individual contributions in the medical insurance market, and the cost of medical services for farmers and the effect of obtaining medical services in the medical service market, will directly affect the satisfaction of the insured farmers to varying degrees. In addition, satisfaction, as a subjective feeling, will undoubtedly also be affected by factors of personal characteristics of farmers, such as physical health and age [2,18,22-23]. Therefore, this paper mainly selects variables from the three aspects of the insurer, the medical insurance service provider and the personal characteristics. Among them, the variables selected by the insurer and the medical service provider are used as the main explanatory variables, and the personal characteristics are used as the control variables.

### 3.1.1. Personal Characteristic Level

As a subjective feeling, satisfaction will undoubtedly be affected by personal characteristics of farmers. Therefore, in order to control the influence of factors at the level of personal characteristics, this article selected ages<sup>[18, 23-25]</sup>, health status<sup>[2, 26-28]</sup>, marital status<sup>[25, 29]</sup>, and the region<sup>[28, 30]</sup> as personal characteristic variables. In rural areas, generally speaking, the older the peasants, the weaker their resistance, the greater their chances of getting sick, the more opportunities they receive for urban and rural residents' medical insurance compensation, and the better they feel about medical insurance. In addition, the worse the farmers' physical condition, the more they need medical services, and the more likely they are to be satisfied with medical insurance. Compared with unmarried farmers, married farmers need to bear more family responsibilities, so their risk awareness is relatively high, and they are more willing to participate in urban and rural residents' medical insurance. At the same time, when farmers are in remote rural areas, medical equipment and medicines are relatively inadequate, and they have fewer opportunities to receive good medical services, and the less likely they are to be satisfied with medical insurance. Therefore, the author proposes the first research hypothesis of this article: H1: The older the insured farmers are, the worse their physical health is, and they are married in a remote area, then the higher they are satisfied with the medical insurance system for urban and rural residents.

### 3.1.2. Insurer and Insured Farmers

In the medical insurance market, the main participants are the insurer and the insured farmers, which are on the supply side and the demand side of the medical insurance service respectively<sup>[15]</sup>. The insurer, the medical insurance institution, is mainly responsible for the budget, collection, distribution, management, supervision and inspection of medical insurance premiums<sup>[31]</sup>, but the business directly related to the medical insurance benefits of insured farmers is payment and reimbursement. When the government's financial subsidy is fixed, the rationality of the payment and reimbursement system determines the cost and actual income of farmers in the medical insurance market, and directly affects the satisfaction of farmers in participating in the medical insurance system for urban and rural residents.

Whether the medical insurance payment system for urban and rural residents, as a fund collection system is reasonable or not, determines whether the insured farmers pay more or less in the medical insurance market. In this payment system, the payment costs paid by insured farmers generally include direct costs and indirect costs. The direct cost is the amount of individual contributions when the farmer is enrolled. The more the contribution amount, the greater the actual cost paid by the insured farmers, and the smaller the satisfaction of the insured farmers with the medical insurance system; The less the contribution amount, the smaller the actual cost paid by the insured farmers, and the more the satisfaction of the insured farmers with the medical insurance system<sup>[9, 32]</sup>. Indirect costs refer to the time, mental and energy costs of insured farmers<sup>[33]</sup>, which are variables that are affected by factors such as payment procedures, payment methods, and payment service quality. In general, the simpler the payment process, the smaller the time cost spent by the insured farmers, and the greater the satisfaction of the insured farmers with the medical insurance system for urban and rural residents<sup>[17]</sup>; the more convenient the payment method, the less time is spent on payment, the greater the satisfaction of the insured farmers with the medical insurance system; the higher the quality of the paid services, the higher the service efficiency, and the better the service level, the less psychological costs and energy costs, the greater the satisfaction with the medical insurance system. Therefore, the author proposes the second research hypothesis of this article H2: When the medical insurance payment funds for urban and rural residents are more reasonable, the payment process is simpler, the payment methods are more convenient, and the level of institutional services is higher, the higher satisfaction of farmers in participating medical insurance system for urban and rural residents.

The reimbursement requirement for the basic medical insurance system for urban and rural residents is a system for the payment of medical and medical expenses for residents with multiple elements.<sup>[18]</sup> The design of this system determines the actual subsidies that insured farmers can receive when they are sick, and has a significant impact on the degree of satisfaction of the medical insurance system. In general, the medical service insurance reimbursement system involves multiple elements such as the reimbursement threshold, cap line, reimbursement ratio, scope of reimbursement, and convenience of reimbursement. The literature review indicates that the satisfaction degree of the medical service insurance reimbursement system has significant effects on that of medical insurance system, especially in the reimbursement scope<sup>[9, 18, 34]</sup>, the reimbursement ratio<sup>[34-37]</sup>, the reimbursement threshold, the capping line<sup>[9]</sup>, and reimbursement procedures<sup>[6, 34, 36-37]</sup>. More concretely, (1) the scope of reimbursement determines whether the medical service and medical expenses of the insured farmers can be reimbursed. When the scope of reimbursement is fixed, the reimbursement ratio and the reimbursement threshold and capping line are important factors that determine the actual income of the

insured farmers. The more compensation farmers receive for medical insurance service expenditures, the greater the satisfaction of insured farmers with the basic medical insurance system for urban and rural residents. (2) The simpler the reimbursement process and the higher the efficiency of the reimbursement service, the higher the satisfaction of the insured farmers with the basic medical insurance system for urban and rural residents. (3) In the actual reimbursement, the reimbursement period and the timeliness of reimbursement, especially the reimbursement of medical expenses for medical services in other places, have a greater impact on the satisfaction of the insured farmers to the basic medical insurance system for rural and urban residents. If the reimbursement is more in time, the reimbursement of medical service expenses in different places is easier, and the satisfaction of the insured farmers to the medical insurance system of urban and rural residents is greater. Therefore, the author proposes the third research hypothesis of this article H3: If the urban and rural residents' medical insurance reimbursement scope, reimbursement ratio, reimbursement fluctuation line and cap line are set more reasonable, the reimbursement process is simpler, the reimbursement time is more timely, and the medical service expenses reimbursed in different places is more convenient, the higher the satisfaction of the insured farmers with the basic medical insurance system for urban and rural residents.

### **3.1.3. Medical Service Agencies and Insured Farmers**

In China's urban and rural medical insurance service market, medical service institutions and insured farmers are on the supply side and the demand side, respectively. Among them, the medical service organization assigns designated hospitals, doctors, and designated pharmacies. The designated hospital is responsible for providing medical services to the patients; The doctor decides to give medical treatment effects and expenses to the insured patients; And the designated pharmacy establishes a drug purchase and sales relationship with the patients<sup>[31, 38]</sup>. The cost and actual benefits in the process affect the satisfaction of the insured farmers with the basic medical insurance system for urban and rural residents. In detail, (1) when the insured farmers conduct medical service transactions with medical service organizations, the cost is mainly the amount spent for receiving medical services, such as the hospital's hospitalization fees, inspection fees, and doctor's consultation fees and expenses for pharmacies, etc.; and the revenue mainly refers to the medical services provided by medical institutions for insured patients, such as the equipment provided by hospitals, the technical level of doctors, and the quality and effectiveness of medicines. (2) When the insured farmers feel that the effect of the medical services they receive is worth the money they spend, the insured farmers are more satisfied with the medical insurance services, and vice versa. The literature review shows that in the study of the influence of medical institutions on the satisfaction of insured farmers, most scholars have unified the three as medical institutions to explore, and have not clearly distinguished the three different effects on the satisfaction of insured farmers. Therefore, in order to further distinguish the different influences of the tripartite subjects on the satisfaction of insured farmers' medical insurance services, this article attempts to study from the tripartite subjects. Considering that the designated hospital and its doctor are a unified entity, the author mainly conducts empirical research on the service costs and service benefits of the insured farmers during the process of seeking medical treatment from the main dimensions of the designated hospital and the designated drug store.

In terms of the medical treatment services provided by the designated hospitals to the insured farmers, the main factors that significantly affect the satisfaction of the insured farmers' medical insurance services are the medical expenses incurred during the medical treatment<sup>[6, 32, 39-40]</sup>, medical facilities<sup>[32 41-42]</sup>, medical service attitude<sup>[6,27,32,35,42]</sup>, and medical technology level<sup>[6,32,39-41]</sup>. Among them, medical expenses are the cost factors of medical treatment, and medical facilities, medical technology, and medical service attitudes are the medical treatment income factors for those who participate in the insurance. In detail, (1) When other factors are certain, the amount of medical expenses directly determines the direct costs paid by the insured farmers to obtain medical services. If the medical expenses paid by the insured farmers are less, the insured farmers pay less for medical treatment, and the higher the satisfaction of the insured farmers with the medical services provided by the medical insurance system. (2) When the cost is fixed, the condition of the medical facilities is a hard service condition that determines the insurance benefits of the insured farmers. The more complete medical facilities, the better the conditions of medical services received by the insured farmers, and the more satisfied the insured farmers are with the medical services provided by the medical insurance system (3) The attitude of medical services and the level of medical technology also reflect the soft conditions of insured farmers in receiving medical services. The higher the level of medical technology, the better the attitude of medical services, the greater the benefits of medical treatment for those who participate in insurance and the greater the satisfaction of medical care providers with the medical services provided by the medical insurance system. Therefore, the author provides the fourth research hypothesis H4: when the designated hospital charges more reasonable prices, the more complete medical service facilities are provided, the

higher the level of medical technology, the better the service attitude of medical staff, and the insured farmers' basic medical treatment for urban and rural residents, then the greater the satisfaction with the medical services provided by the insurance system.

Considering the medical services provided by the designated pharmacies, the relationship between the insured farmers and the designated pharmacies is mainly a drug purchase and sales relationship. In the process of insured farmers' transactions with pharmacies, the cost of purchasing medicines and the benefits of drug effects obtained by insured farmers are mainly reflected in the purchase and sale of medicines. The existing literature research reveals that pharmacies have significant influences on insured farmers mainly including drug prices<sup>[43-47]</sup> and drug types<sup>[44-45, 48-50]</sup>. In detail, (1) When other factors are certain, the price of the drug determines the direct cost paid by the insured farmer to purchase the drug. If the price of the drug is lower, the insured farmer will pay less for the purchase of the drug, and the insured farmer will be more satisfied with the medicinal services provided by the medical insurance system. (2) If more types of medicines are sold at designated pharmacies, it is more possible for insured farmers to choose appropriate medicines, and they are more satisfied with the drug services provided by the medical insurance system. (3) The relevant investigation conducted by the author revealed that the quantity and quality of drugs in designated pharmacies and the service attitude of pharmacy staff have a certain impact on the satisfaction of farmers participating in medical insurance services. If there are fewer medicines, especially for common diseases, the fewer suitable medicines can be selected by the insured farmers, and the less satisfied the insured farmers are with the drug services provided by the medical insurance system; The worse the quality of medicines, the lower the probability that the insured farmers will be cured by taking medicines, and the lower the satisfaction of the insured farmers with the drug services provided by the medical insurance system; the worse the service attitude of the pharmacy staff, the lower the satisfaction level of the insured farmers with the drug services provided by the system, and vice versa. According to the author's survey, insured farmers often have problems with incomplete drug types, low numbers of drugs, expired time limits for drug use, and poor service attitude of pharmacy staff at designated pharmacies in rural communities. Based on these, the author proposes the fifth research hypothesis in this article H5: the more reasonable the drug pricing of the designated pharmacies, the more complete the variety of drugs, the greater the number of drugs, the better the quality of the drugs, and the better the attitude of the pharmacy service staff, then the higher satisfaction with the drug services provided by the residents' basic medical insurance system.

### 3.2. Model Building

In order to verify the above research hypotheses, this article selects Logistic regression model to conduct regression analysis on the influencing factors of farmers' medical insurance satisfaction. Logistic regression model, as a typical model often used for research in social sciences, has a very significant effect on the analysis of categorical variables. For the dependent variable of this paper, there are five options for the satisfaction of medical insurance for farmers and urban and rural residents. Considering the parameter interpretation of the model, based on the two-factor theory of Hesberg, the dependent variable is simplified and its operation is divided into binary classification variables, that is, "satisfied" (very satisfied, relatively satisfied) and "dissatisfied" (general, dissatisfied and very dissatisfied), which are applicable to the binary classification logistic regression model.

The constructed model function form is as follows:

$$P_i = F(y=1|x_k) = \frac{\exp(\alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_i x_i)}{1 + \exp(\alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_i x_i)} \quad (1)$$

In this model,  $y$  represents the satisfaction of rural and urban residents' medical insurance.  $y = 1$  means that farmers are satisfied with the medical insurance for urban and rural residents.  $y = 0$  means that farmers are dissatisfied with urban and rural residents' medical insurance.  $P_i$  indicates the probability that farmers are satisfied with urban and rural residents' medical insurance.  $\alpha$  represents a constant term.  $x_k$  represents the  $k$ -th independent variable that affects farmers' satisfaction with medical insurance for urban and rural residents.  $K$  is the number of independent variables.  $\beta_i$  is the regression coefficient of the independent variable  $x_i$ . The ratio  $\frac{P_i}{1-P_i}$  of the probability that farmers are satisfied with medical insurance for urban and rural residents and the probability that farmers are dissatisfied with that is the event ratio. Take a natural logarithm to get the logistic regression model expression:

$$\ln\left(\frac{P_i}{1-P_i}\right) = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_k x_k \quad (2)$$



### 3.3. Variables Selection

In order to further verify the research hypothesis and measure what factors affect the satisfaction of rural residents with medical insurance, this paper selects five variables or influencing factors: the personal characteristics of insured farmers, the rationality of medical insurance payment system, the rationality of medical insurance reimbursement system, the service perception of designated hospitals for medical insurance, and the service perception of designated drugs for medical insurance store, from the perspectives of two main providers of medical insurance and medical service provider, to further reveal the satisfaction degree of insured farmers to the basic medical insurance system for urban and rural residents. The specific variables selection list is as follows Table 3.

Table 3: Selection of Independent Variables and Statistical Description

Variables		Meaning and assignment of variables	Mean	Std. Deviation
personal characteristics	Age	Under 20 = 1; 21-35 = 2; 36-50 = 3; 51-65 = 4; over 65 = 5	2.85	0.92
	Marital status	Unmarried=1; married=2	1.79	0.4
	Physical condition	Very unhealthy = 1; relatively unhealthy = 2; general = 3; relatively healthy = 4; very healthy = 5	3.58	0.95
	Regions	A=1; B=2; C=3; D=4; E=5	2.96	1.42
Payment mechanism	Funding rationality	Very unreasonable = 1; relatively unreasonable = 2; general = 3; relatively reasonable = 4; very reasonable = 5	2.88	1.11
	Program convenience	Very complex = 1; complex = 2; general = 3; convenient = 4; very convenient = 5	3.54	1.09
	Method satisfaction	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	3.34	1.33
	Service quality	Very bad = 1; relatively bad = 2; general = 3; relatively good = 4; very good = 5	3.22	1.13
Reimbursement mechanism	Proportion satisfaction	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	2.91	0.92
	upper limit, lower limit	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	2.83	1.08
	Reimbursement range	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	2.65	1.06
	Reimbursement procedure	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	2.85	1.04
	Timeliness	Very untimely = 1; relatively untimely = 2; generally = 3; relatively timely = 4; very timely = 5	2.93	0.9
	Off-site reimbursement	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	2.92	1.06
Designated hospital	Service facilities	Very incomplete = 1; relatively incomplete = 2; general = 3; relatively complete = 4; very complete = 5	3.19	0.86
	Technical level	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	3.11	0.87
	Service attitude	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	3.23	0.88
	Charging rationality	Very unreasonable = 1; relatively unreasonable = 2; general = 3; relatively reasonable = 4; very reasonable = 5	2.72	0.99
Designated pharmacy	Number of drugs	Very little = 1; relatively little = 2; general = 3; relatively much = 4; very much = 5	3.08	0.85
	Types of drugs	Very single = 1; relatively single = 2; general = 3; relatively rich = 4; very rich = 5	2.95	0.93
	Drug price	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	2.76	0.95
	Drug quality	Very bad = 1; relatively bad = 2; general = 3; relatively good = 4; very good = 5	3.04	0.82
	Service attitude	Very dissatisfied = 1; relatively dissatisfied = 2; general = 3; relatively satisfied = 4; very satisfied = 5	3.2	0.83

## 4. Analysis of the Influencing Factors on the Satisfaction of the Basic Medical Insurance System for Urban and Rural Residents

### 4.1. Collinearity Test

In order to avoid the occurrence of multicollinearity caused by the correlation between the selected variables, this paper also uses the variance inflation factor (VIF) to conduct collinearity test for the above variables before regression analysis, and the test results are shown in Table 4. In general, if the tolerance is less than or equal to 0.1, or the variance inflation factor (VIF) is greater than or equal to 10, then there

is a more serious problem of collinearity between independent variables. However, as shown in Table 4, the correlation between the variables is small and there is no serious collinearity problem.

Table 4: Test Result of Multicollinearity

Variable	Tolerance	VIF	Variable	Tolerance	VIF
Age	0.53	1.887	Timeliness	0.495	2.019
Marital Status	0.57	1.755	Remote reimbursement	0.572	1.749
Physical Condition	0.854	1.17	Service facility	0.344	2.911
Area	0.912	1.097	Technical level	0.411	2.435
Rationalization of funds	0.54	1.851	Service attitude	0.325	3.079
Program convenience	0.669	1.494	Rationality of fees	0.363	2.755
Mode satisfaction	0.689	1.451	Number of medicines	0.396	2.525
Quality of service	0.614	1.628	Type of medicines	0.525	1.903
Proportion satisfaction	0.463	2.158	Medicine price	0.345	2.901
Upper and lower limits	0.407	2.459	Quality of medicine	0.372	2.689
Scope of reimbursement	0.387	2.581	Service attitude	0.435	2.299
Reimbursement procedure	0.675	1.483			

#### 4.2. Model Estimation and Results

Table 5: Binary logistic regression analysis of influencing factors of medical insurance satisfaction of urban and rural residents

Variable name		Model 1		Model 2	
		B	OR	B	OR
Personal Characteristics	Age	0.404*	1.498	0.413**	1.512
	Marital Status	-0.785*	0.456	-0.693*	0.5
	Physical Condition	-0.315*	0.73	-0.322**	0.725
	Area	-0.126	0.881		
Payment mechanism	Rationalization of funds	0.716***	2.047	0.687***	1.988
	Program convenience	0.308*	1.36	0.295**	1.343
	Mode satisfaction	-0.086	0.918		
	Quality of service	-0.071	0.931		
Reimbursement mechanism	Proportion satisfaction	0.094	1.098		
	Upper and lower limits	-0.076	0.927		
	Scope of reimbursement	-0.114	0.892		
	Reimbursement procedure	0.053	1.054		
	Timeliness	0.166	1.181		
	Remote reimbursement	0.333*	1.395	0.301*	1.351
Designated hospital	Service facility	0.236	1.266		
	Technical level	0.966***	2.628	1.072***	2.923
	Service attitude	0.175	1.191		
	Rationality of fees	-0.017	0.983		
Designated drugstores	Number of medicines	0.665**	1.944	0.89***	2.434
	Type of medicines	0.265	1.303		
	Medicine price	0.626**	1.87	0.673***	1.961
	Quality of medicine	0.254	1.289		
	Service attitude	0.843***	2.322	0.954***	2.595
Prediction accuracy%		86.7		85.6	
-2 log Likelihood value		314.859		322.877	
Cox&Snell R <sup>2</sup>		0.444		0.436	
Nagelkerke R <sup>2</sup>		0.636		0.623	
Likelihood ratio chi-square value		301.56		293.55	
Sig		0		0	

Note:\*,\*\*,\*\*\* indicates that the variables are statistically significant at 10%, 5%,1% respectively.

After eliminating the multi-collinearity of variables, this paper constructs two models for comparative analysis in order to reveal more comprehensive and effective factors that have significant effect on the satisfaction of insured farmers' with medical insurance. Model 1 adopts the forced regression method to carry on the logical regression. The best advantage of the forced regression method is that all the variables can be included in the regression model to make a comprehensive analysis. Therefore, Model 1 includes the variables of personal characteristics, the rationality of payment mechanism and reimbursement mechanism, and the service perception of insured farmers to designated hospitals and drugstores in the analysis. Model 2 adopts the stepwise regression method for logical regression. There are six commonly

used stepwise regression methods, that is, Forward, Conditional; Forward, LR; Forward, Wald; Backward, Conditional; Backward, LR and Backward, Wald, among which the most reliable is Backward, Conditional, which can explain the variation of dependent variables to the greatest extent. The model imitative effect and regression results are shown in Table 5.

As shown in Table 5, the P values of both models are less than 0.1, which is statistically significant, indicating that the independent variables selected by the model have a linear relationship with the dependent variables as a whole. At the same time, by comparing model 1 with model 2, it can be found that the two results are similar, the variables of the significance test are consistent, and the influence direction, influence size and significance of these variables on the dependent variables are not significantly different, which also reflects to some extent that the constructed model has good robustness and the results have strong credibility. From the perspective of log-2 likelihood value, Cox & Snell  $R^2$  and Nagelkerke  $R^2$ , and likelihood ratio chi-square value, all the indexes of model 1 are better than that of model 2, indicating that model 1 has better imitative effect. In addition, the prediction accuracy of Model 1 is 86.7%, and that of Model 2 is 85.6%, indicating that the prediction effect of Model 1 is better than Model 2. Therefore, in the case of similar results, this paper mainly conducts analysis based on Model 1.

### 4.3. Model Results Analysis

In terms of Model 1, the satisfaction of the insured farmers to the urban and rural residents medical insurance scheme is comprehensively affected by the following five kinds of variables, such as the personal characteristics of the insured farmers, the rationality of the medical insurance payment system, the rationality of the medical insurance reimbursement system, the perception of the insured farmers to the designated hospital service, and the perception of the insured farmers to the designated drugstore service. In logistic regression, the total of 10 variables including age, marriage, physical condition, rationalization of payment funds, convenience of payment procedure, satisfaction with epidemic reimbursement, satisfaction with hospital technical level, quantity of medicine, satisfaction with drug price, and satisfaction with pharmacy service personnel have a significant impact on the satisfaction of rural residents to the urban and rural residents medical insurance scheme. Among them, in addition to marital status and physical condition, which have negative effects on the satisfaction to urban and rural residents medical insurance scheme, other variables have a significant positive effect on the satisfaction to urban and rural residents medical insurance scheme. Excluding personal characteristic variables, from the OR value, the influence of the remaining variables on the satisfaction degree of urban and rural residents medical insurance scheme, from big to small, is the satisfaction on hospital technical level, the satisfaction on drugstore service personnel, the rationality of payment funds, the quantity of medicine, the satisfaction of drug price, the satisfaction of epidemic reimbursement, and the convenience of payment procedure. Among them, the satisfaction on hospital technical level, the satisfaction on drugstore service personnel and the influence of drug quantity on farmers' medical insurance satisfaction reflect the farmers' actual income degree; the rationality of payment funds and the satisfaction of drug price reflect the direct cost paid by farmers; and the satisfaction on epidemic reimbursement and the convenience of payment procedure reflect the indirect cost paid by residents.

During the investigation on the influence of personal characteristic variables on the satisfaction of insured farmers on medical insurance system, the author found that only age, marital status, physical condition and other variables passed the significant test. This shows that the satisfaction of the insured farmers of different ages, marital status and physical condition to the urban and rural residents medical insurance scheme is different. Among them, age has a positive effect on the satisfaction of the insured farmers on medical insurance system. The older the insured farmers are, the higher their satisfaction with the urban and rural residents basic medical insurance scheme. For each increase in the age of one unit, the occurrence ratio of higher satisfaction with the urban and rural residents basic medical insurance scheme of insured farmers would increase by 49.8%. The physical condition and marital status of the insured farmers have negative effect. The better the physical condition, the lower the satisfaction of the insured farmers with the urban and rural residents basic medical insurance scheme. For each level increase in the physical condition, the occurrence ratio of dissatisfaction with the urban and rural residents basic medical insurance scheme of insured farmers would increase by 27%, which is consistent with the study hypothesis H1. However, unmarried insured farmers are more satisfied with the urban and rural residents basic medical insurance scheme than married insured farmers. The probability that married insured peasants are satisfied with the urban and rural residents basic medical insurance scheme is only 45.6% of the probability of unmarried insured farmers, which is contrary to the hypothesis H1. The possible explanation for this situation is that rural unmarried insured farmers can almost only take

care of themselves, so unmarried insured farmers pay more attention to their own health, have a relatively high sense of risk, and are more willing to participate in urban and rural residents medical insurance. In addition, the independent variable of "area" has not passed the significant test, showing that there is no significant difference in the satisfaction of insured farmers to the urban and rural residents medical insurance scheme among different regions, which reflects to a certain extent that the allocation of medical resources has achieved some results in the implementation of the urban and rural residents medical insurance scheme in the past two years.

During the investigation of the impact of rationality of medical insurance payment system designed on the insured farmers' satisfaction with medical insurance, the author found that only the rationality of medical insurance payment amount determination, the convenient degree of payment procedures passed the significance test. These two independent variables have a significant positive effect on the satisfaction of insured farmers on medical insurance. The more reasonable the payment amount is, the higher the farmers' satisfaction with the urban and rural residents medical insurance scheme. When the rationalization of the amount of contributions is increased by one level, the probability of insured farmers expressing higher satisfaction with the urban and rural residents medical insurance scheme will increase by 1.047 times. The more convenient the payment procedure, the higher the satisfaction of insured farmers to the urban and rural residents medical insurance scheme. When the convenience of the payment procedure is increased by one level, the probability of insured farmers expressing higher satisfaction with the urban and rural residents medical insurance scheme will increase by 36%. Such test results are consistent with the study hypothesis H2. However, the way of medical insurance payment and the quality of medical insurance service have not passed the significant test, the possible reason is that the probability of insured farmers' dissatisfaction with the way of medical insurance payment and the quality of medical insurance service is generally low. In the sample, the probability of insured farmers expressing great dissatisfaction with the way of medical insurance payment and the quality of medical insurance service was 12.3% and 11.1%, respectively. In this case, the slight change of the way of medical insurance payment and the quality of medical insurance service cannot make the satisfaction of the insured farmers to the urban and rural residents basic medical insurance scheme change significantly.

During the investigation on the rationality of the medical insurance payment reimbursement system to the satisfaction of the insured farmers with medical insurance, the author found that only the satisfaction of the medical expenses ecdemic reimbursement passed the significant test, which has a positive impact on the satisfaction to urban and rural residents medical insurance scheme. Farmers are satisfied with the ecdemic reimbursement of medical expenses, and the more likely they are to express their satisfaction to the urban and rural residents medical insurance scheme. When the satisfaction of ecdemic reimbursement of medical expenses is increased by one level, the probability of insured farmers expressing satisfaction with the urban and rural residents medical insurance scheme will increase by 39.5%. This test is consistent with the research hypothesis H3. However, the independent variables such as reimbursement ratio, upper limit, lower limit, reimbursement scope, reimbursement procedure and timeliness of reimbursement did not pass the significance test, which is contrary to the research hypothesis H3. According to the author's investigation, the possible explanation is that the basic medical insurance treatment level of urban and rural residents has been improved to different degrees than in the past, and reimbursement ratio, upper limit, lower limit, reimbursement scope, reimbursement procedure and timeliness of reimbursement have been optimized to a certain extent. In 2019, taking reimbursement ratio as example, when insured farmers were admitted to hospitals at the township level, the county level, the municipal level, the third level, the provincial level hospital or at the hospital outside the province, the proportion of reimbursement could reach 90%,70-80%,70%,55%,55% and 55% respectively. But based on the law of diminishing marginal effect, when the welfare of these indexes reaches a higher degree, the subtle changes can no longer have a relative significant impact on the insured farmers. In addition, in the reimbursement level, only ecdemic reimbursement of medical expenses passed the significant test, which also reflects that after the overall plan of medical insurance, the insured farmers pay attention to the change of the content of reimbursement system from the scope of reimbursement, reimbursement ratio and other concerns gradually to ecdemic reimbursement convenience. Due to imbalance among urbanization, aging of population and the health resources in different regions, it has become a common phenomenon for insured farmers to seek medical treatment in different places<sup>[51]</sup>. Whether or not to make ecdemic reimbursement for medical expenses, and how to make ecdemic reimbursement for medical expenses have become key factors to improve the satisfaction of the insured farmers with the urban and rural residents basic medical insurance scheme.

During the investigation on the impact of designated hospital service perception on the satisfaction of the insured farmers on medical insurance, the author found that only the farmers' satisfaction with the technical level of the hospital passed the significant test, which has a positive impact on the satisfaction

to urban and rural residents medical insurance scheme. From the OR value, this variable has the greatest influence on the satisfaction to the urban and rural residents medical insurance scheme. If the insured farmers are more satisfied with the technical level of the hospital, the more satisfied they are with the urban and rural residents medical insurance scheme. When the satisfaction of insured farmer on the technical level of hospital is increased by one level, the probability of insured farmers expressing satisfaction with the urban and rural residents medical insurance scheme will increase by 1.628 times, which is consistent to hypothesis H4. However, the independent variables, such as hospital service facilities, service attitude and reasonableness of price, did not pass the significance test, which was contrary to study hypothesis H4. The possible explanation is that the fundamental goal of farmers' participation in medical insurance is to maximize the benefits of insurance with minimal cost of medical insurance contributions. Therefore, as long as the insured farmers can achieve good therapeutic effect in the treatment, even if the conditions are poor, service attitude is poor with a certain medical service charge, they also think that the benefits of health care services is greater than the cost of health care payment, which is a completely acceptable cost price.

During the investigation on the impact of designated drugstore service perception on the satisfaction of the insured farmers on medical insurance, the author found that only independent variables such as drug quantity, drug price, drugstore service attitude and so on passed the significant test, which has a positive impact on the satisfaction to urban and rural residents medical insurance scheme. When the satisfaction of insured farmer on drug quantity is increased by one level, the probability of insured farmers expressing satisfaction with the urban and rural residents medical insurance scheme will increase by 0.944 times; When the satisfaction of insured farmer on drug price is increased by one level, the probability of insured farmers expressing satisfaction with the urban and rural residents medical insurance scheme will increase by 0.87 times; When the satisfaction of insured farmer on drugstore service attitude is increased by one level, the probability of insured farmers expressing satisfaction with the urban and rural residents medical insurance scheme will increase by 1.322 times. All of these are consistent with study hypothesis H5. At the same time, the OR values of the three ranked fourth, fifth and second in the order of influence, respectively. And in the later field investigation, it is also found that compared with other levels, the designated drugstores were the most accessible institutions for rural residents. The law of rural residents to see a doctor is like a "production line", one link after another. When the initial illness, farmers rely on their own immunity to recover, when the illness is serious, they will go to the drugstore to buy medicine, when the medicine is ineffective, they will go to the hospital. In this process, there is only a small number of people going to the hospital, and drugstores are the most accessible institutions for rural residents. Therefore, the construction of designated drugstores will be an important way to improve the satisfaction of farmers on medical insurance in the later stage. However, the type of drugs, the quality of drugs did not pass the significant test, which is contrary to the study hypothesis H5. Through the investigation, the author finds that the possible reasons are: (1) because of the information asymmetry, the insured farmers are in a weak position of information, and the drugs they buy are almost sold by the drugstore service personnel by the comprehensive weighing of the drug purchase farmers' own condition and the actual drug ownership of the drugstores. Drug-buyers don't know the exact type of medicine at the designated drugstore. (2) With the development of the "fight against counterfeiting" of medicines, the quality of medicines has been guaranteed to a certain extent, and most of the insured farmers have been unable to distinguish the quality of medicines because of their lack of professional knowledge, and have even never paid attention to the quality of medicines.

## 5. Research Conclusion and Improvement Strategy

### 5.1. Research Conclusion

Using the logistic regression model, the author analyzed the survey data of the influencing factors on the satisfaction of farmers participating in the urban and rural medical insurance in 15 administrative villages in H province, and got the following basic conclusions about the satisfaction of farmers participating in the urban and rural residents basic medical insurance. The satisfaction of the insured farmers to the urban and rural residents medical insurance scheme is comprehensively affected by the following five significant variables, such as the personal characteristics of the insured farmers, the rationality of the medical insurance payment system, the rationality of the medical insurance reimbursement system, the perception of the insured farmers to the designated hospital service, and the perception of the insured farmers to the designated drugstore service. In terms of personal characteristics, the age, marital status and physical condition of the insured farmers directly affect the satisfaction of the insured farmers to the urban and rural residents basic medical insurance scheme, especially the unmarried

farmers are more willing to participate in the urban and rural residents basic medical insurance scheme. The residence location of insured farmers does not affect the satisfaction of insured farmers to the urban and rural residents basic medical insurance scheme. As far as the rationality of the medical insurance payment system is concerned, the secondary indexes such as rationality of the medical insurance payment amount and the convenience of the payment procedure directly affect the satisfaction of the insured farmers to the urban and rural residents basic medical insurance scheme. The way of medical insurance payment and the quality of medical insurance service will not directly affect the satisfaction of the insured farmers to the urban and rural residents basic medical insurance scheme. As far as the rationality of medical insurance reimbursement system is concerned, the secondary index of epidemic reimbursement of medical expenses directly affects the satisfaction of insured farmers to the urban and rural residents basic medical insurance scheme. Reimbursement ratio, upper limit, lower limit, reimbursement scope, reimbursement procedure and timeliness of reimbursement and other secondary indexes do not directly affect the satisfaction of insured farmers to the urban and rural residents basic medical insurance scheme. As far as the perception of hospital service is concerned, the perception of treatment technology directly affects the satisfaction of the insured farmers to the urban and rural residents basic medical insurance scheme. Hospital service facilities, service attitude, service charges and other secondary indexes do not directly affect the satisfaction of insured farmers to the urban and rural residents basic medical insurance scheme. As for the perception of designated drugstore service, secondary indexes such as the quantity of drugs, the price of drugs and the attitude of drugstore service directly affect the satisfaction of the insured farmers to the urban and rural residents basic medical insurance scheme. The secondary indexes such as type of drugs, and quality of drugs do not directly affect the satisfaction of insured farmers to the urban and rural residents basic medical insurance scheme.

## 5.2. Improvement Strategy

According to the findings of this study on the influencing factors of farmers' satisfaction with urban and rural residents basic medical insurance scheme, the author puts forward the following improvement strategies for the improvement of urban and rural residents basic medical insurance scheme of governments and social medical insurance management institutions: (1) Designing the urban and rural residents basic medical insurance scheme with the characteristics of the difference of the insured subjects according to the age, marital status and physical condition of the peasants. (2) Designing a more reasonable medical insurance payment system and medical payment procedures; (3) Designing a scientific epidemic reimbursement system for medical expenses which is convenient for farmers to seek medical treatment in different places; (4) Selecting the hospitals with high medical technology as the designated medical service institutions of the urban and rural residents basic medical insurance scheme, and urging the designated hospitals to continuously improve the medical technology level and establish the medical skill improvement management system of the designated hospitals; (5) Selecting large drugstore with abundant quantity of drugs, fair price and good service attitude as the designated drugstore service institution of urban and rural residents basic medical insurance scheme, setting up designated drugstore brand, urging designated drugstores to improve service attitude and establishing designated drugstore drug inspection system, evaluation system, elimination through competition system, etc.

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