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eTable 1 The detailed explanation of attributes and levels

Attributes	Explanations
Service type	Medical services type provided by the family doctor to the elderly, including 2 levels: 1= Clinic visit 2= Home visit
Service package	Medical services were provided by family doctor such as diagnosis and treatment of common and frequently-occurring diseases, as well as treatment of chronic diseases and traditional Chinese medicine (TCM) with a definite diagnosis, including 4 levels: 1= Basic service 2= Basic service +Chronic diseases service 3= Basic service +Traditional Chinese medicine (TCM) service 4= Basic service +Personalized service
Physician's reputation	The residents' evaluation of the quality of physicians. More specifically, this attribute describes different levels of medical training experience and expertise, service attitude and care quality from the family doctor team, including 3 levels: 1= Relatively Good 2= Average 3= Relatively Poor
Annual contract costs ^a	Annual contract costs is the contracted fees per year paid by the contracted residents out-of-pocket to the family doctor team. The levels of contract cost attribute were determined according to actual cost standard in rural Anhui, including 4 levels: 1= CNY 20 (US\$3) 2= CNY 40(US\$6) 3= CNY 60 (US\$9) 4= CNY 80 (US\$12)

^a: The average annual exchange rate between USD and CNY in 2019 was: USD 1 = CNY 6.908(Organisation for Economic Co-operation and Development data. Available online: <https://data.oecd.org/conversion/exchange-rates.htm>. Accessed March 30, 2021)

eTable 2 The content of family doctor service package

Service package	Content	
Basic service	<p>Basic health service:</p> <ul style="list-style-type: none"> • The treatment of common and frequent occurring diseases, nursing care, and the treatment of chronic diseases with a clear diagnosis • First aid care • Home medical and referral services such as home visits, home nursing, home beds, etc. • Rehabilitation medical services • Traditional Chinese medicine services <p>Public health service:</p> <ul style="list-style-type: none"> • Resident health records, health guidance, health education • One physical exam per year for people over 65 years old • Follow up guidance and one physical examination for patients with severe mental illness 	
Basic service +Chronic diseases service	<p>Physical exam (height, weight, vision, blood pressure, body temperature, electrocardiogram, color doppler ultrasound (limited to one site), blood glucose/blood lipid, liver and kidney function, hematuria routine)</p> <p>Whole-course standardized services (mainly for patients with chronic diseases such as hypertension and diabetes)</p> <p>Long-term prescription service (continuation of the prescription and medication service of the higher level hospital)</p> <p>One time expert diagnosis and treatment per year</p>	
Basic service +Traditional Chinese medicine (TCM) service	<p>Annual cupping therapy</p> <p>Annual treatment of winter diseases in summer</p> <p>Annual fumigation</p> <p>Annual cervical, shoulder, and lumbar traction</p> <p>Annual physical therapy</p>	A maximum of three choices
Basic service +Personalized service	<p>According to their own health needs, residents are free to choose the combination of chronic disease services offered and TCM services offered, with a maximum of three choices. Examples of combinations include:</p> <ul style="list-style-type: none"> • Annual diagnosis and treatment of chronic disease by expert + Annual TCM cupping + Annual TCM fumigation • Annual diagnosis and treatment of chronic disease by expert + Annual TCM treatment of winter diseases in summer • Annual physical examination of chronic diseases + Annual TCM fumigation • Long-term prescription of chronic disease + Annual TCM cupping + Annual TCM cervical, shoulder, and lumbar traction • Whole-course standardized services of chronic disease + Annual TCM cervical, shoulder, and lumbar traction + Annual TCM physical therapy • Annual diagnosis and treatment of chronic disease by expert + Annual TCM cupping + Annual TCM physical therapy • Annual chronic disease long-term prescription + Annual TCM fumigation 	

eTable 3 Covariates in the membership function

Variables	Variable assignment
Age	0= ≤ 65 * 1= > 65
Gender	0= Male* 1= Female
Education	0= No school education* 1= Primary school or above
Self-reported health statu ^a	0= Unhealthy* 1= Healthy
Number of chronic diseases	0= ≤ 1 * 1= ≥ 2

^a: Self- reported health statu is the physical health status of the respondents on the day of the survey. Likert scale was used to measure their physical health status. 1-5 is very unhealthy, unhealthy, moderately healthy, healthy, and very healthy respectively. Unhealth includes very unhealthy and unhealthy, healthy includes moderately healthy, healthy, and very healthy.

*: reference

eTable 4 Preference estimates based on the conditional logit model

		Est	SE
ASC1		2.378***	0.185
ASC2		2.254***	0.178
Service type	Clinic visit ^a		
	Home visit	0.608***	0.060
Service package	Basic service ^a		
	Basic service + Chronic disease service	1.105***	0.076
	Basic service + Traditional Chinese medicine service	0.463***	0.086
	Basic service + Personalized service	0.559***	0.104
Physician's reputation	Relatively poor ^a		
	Average	0.376**	0.164
	Relatively good	1.609***	0.151
Annual contract costs		-0.026***	0.002
Number of observations			9810
Log pseudolikelihood			-2656.7801

ASC: Alternative specific constant; Est: Estimate; SE: Standard error

*** p<0.01; ** p<0.05; * p<0.1

^a: reference

eTable 5 Class membership: average marginal effects

	Class1		Class2	
	Est	SE	Est	SE
Age: >65	0.035***	0.009	-0.035***	0.009
Gender: Female	-0.030***	0.008	0.030***	0.008
Education: Primary school or above	-0.100***	0.007	0.100***	0.007
Self-reported health statu: Healthy	0.028***	0.009	-0.028***	0.009
Number of chronic diseases: ≥ 2	-0.031***	0.009	0.031***	0.009

Est: Estimate; SE: Standard error

Reference: Age ≤ 65 ; Gender=male; Education=no school education; Self-reported health statu=unhealth; Number of chronic diseases ≤ 1

*** p<0.01;** p<0.05;* p<0.1

Questionnaire

Dear residents:

In order to improve the quality and efficiency of family doctor contract services, and to understand the elderly residents' choices for the use of family doctor contract services, this study hopes to generate knowledge regarding your service needs. Each of your choices is very important. We ensure that your answers are kept confidential. Thank you very much for your cooperation!

If you are willing to help us complete the question and answer, please sign your name! Thank you very much!

一、 Demographic characteristics

1. Gender: ①Male; ②Female

2. Date of birth: _____ Year _____ Month

3. Education:

①No school education; ②Primary school; ③Junior high school; ④High school/ technical secondary school; ⑤ College; ⑥Bachelor degree and above

4. Your marital status:

①Unmarried; ②Married; ③Widowed; ④Divorced; ⑤Other

5. Who do you live with now?

①Living alone; ②Living with spouse; ③Living with children; ④Living with spouse and children; ⑤Other

6. What is your main source of income?

①Labor income; ②Retirement pension; ③Minimum living allowance; ④Support by relatives; ⑤Property income (renting/selling a house/land, etc.); ⑥Others (career insurance, laid-off living expenses, retired living expenses, etc.)

7. In 2018, how much is your own economic income (including various sources) (excluding other family members)?

①<6500 CNY; ②6500-14999 CNY; ③15000-24999 CNY; ④25000-75000 CNY; ⑤>75000 CNY

8. In 2018, how much did you spend on medical treatment (personal payment) in total?

①<500 CNY; ②500-999 CNY; ③1000-1999 CNY; ④2000-4999 CNY; ⑤5000-9999 CNY; ⑥>10000 CNY

9. Have you participated in the following medical insurance? (Multiple choice)

①Not insured; ②Urban employees' basic medical insurance; ③Urban residents' basic medical insurance; ④New rural cooperative medical care; ⑤Medical insurance for urban and rural residents

10. Have you purchased commercial medical insurance?

①Yes; ②No

11. What is your evaluation of your health in the past year?

① Very unhealthy; ②Unhealthy; ③Moderately healthy; ④Healthy; ⑤Very healthy

12. If you give a score to your health status, from 0 to 100 (0 represents the worst status, 100 represents the best status), would you score your health status now? _____
13. Do you suffer from the following chronic diseases diagnosed by medical institutions at the county level and above (please mark × if not; multiple choices are allowed)?
①Type 1 or 2 diabetes; ②High blood pressure; ③High blood lipids; ④Chronic hepatitis; ⑤Heart disease (coronary heart disease/angina pectoris, etc.); ⑥Malignant tumor, location; ⑦Chronic lung disease (tuberculosis, chronic obstructive pulmonary disease, etc.); ⑧Others
14. What do you think of the severity of your chronic disease?
①Almost effect; ②Slight degree; ③Generally serious; ④Seriously; ⑤Very serious
15. How do you evaluate the effect of diagnosed chronic diseases on your life?
① Almost impact; ②Slight impact; ③General impact; ④Comparative impact; ⑤Serious impact
16. Have you taken medicines on time and in quantity for a long period of time in the past year?
①Yes; ②No

二、 Family doctor contract service knowledge and willingness to sign

1. How many minutes does it take from your home to the nearest village clinic?

- ① <15; ②15-30; ③>30

2. Are you willing to conduct the first diagnosis at a village clinic?

- ① Unwilling; ②It doesn't matter; ③Yes

3. What is the longest time (minutes) you are willing to wait for a clinic visit in the village?

- ① <5; ②5-10; ③11-20; ④21-30; ⑤>30

4. Have you ever had a referral experience from a village clinic to a higher-level institution?

- ① Yes; ②No

5. Are you satisfied with the services of village doctors?

- ① Very dissatisfied; ②Not satisfied; ③General; ④Satisfied; ⑤Very satisfied

6. Are you aware of Family Doctor Contract Services?

- ① Yes; ②No

7. Are you willing to sign a contract with a regular family doctor team? (Select "①" to jump to 10)

- ① Unwilling; ②Yes but worries; ③Yes

8. Have you signed up for Family Doctor Contract Services? (Choose "①" to continue to answer 9, choose "②" to skip to 10)

- ① Yes; ②No;

9. What is the main reason you signed the family doctor team?

①The community doctor is fixed and understands the patient's condition; ②Convenient service (short distance for treatment/short waiting time/easy to make an appointment); ③Low price and low cost; ④Good service attitude; ⑤Other, please specify

10. What is the main reason for you not to sign a family doctor team?

① I don't understand the policy of Family Doctor Contract Services; ②Do not trust the family doctor who may delay the process of my recovery; ③Difficulty in referral; ④The level of diagnosis and treatment in village clinic is low; ⑤Medical equipment in the village clinic is out of date; ⑥Insufficient medicines are provided; ⑦Worry that the free choice of medical treatment will be affected after signing the contract; ⑧Others, please specify

三、 Preference measure

Suppose you now have two Family Doctor Contract Services plans to choose from, plan 1 and plan 2. There are differences between the two plans in terms of service type, service package, doctor's reputation, and annual contract costs. It is assumed that, except for the four attributes listed, the other conditions of plan 1 and plan 2 are the same. Please choose one plan that you prefer based on your personal preferences. Each of your choices will affect the formulation of policies related to family doctor contract service. Please consider your choices carefully.

◇Warm -up choice set

Attributes	Plan1	Plan 2
Service type	Home visit	Clinic visit
Service package	Basic service	Basic service
Physician's reputation	Average	Relatively poor
Annual contract costs	CNY 80 (US\$ 12)	CNY 40 (US\$ 6)
Which would you choose?	()	()
Now suppose you can also choose not to sign up with a family doctor, noting that your diseases would not get better, what would you prefer?		
1. I Would still prefer the plan I choose above ()		
2. I Would choose neither ()		

1. Choice set 1

Attributes	Plan1	Plan 2
Service type	Clinic visit	Clinic visit
Service package	Basic service + Personalized service	Basic service + Traditional Chinese medicine (TCM) service
Physician's reputation	Relatively poor	Relatively poor
Annual contract costs	CNY 20 (US\$ 3)	CNY 40 (US\$ 6)
Which would you choose?	()	()
Now suppose you can also choose not to sign up with a family doctor, noting that your diseases would not get better, what would you prefer?		
1. I Would still prefer the plan I choose above ()		
2. I Would choose neither ()		

2. Choice set 2

Attributes	Plan1	Plan 2
Service type	Home visit	Clinic visit
Service package	Basic service	Basic service + Chronic disease service
Physician's reputation	Relatively poor	Relatively poor
Annual contract costs	CNY 80 (US\$ 12)	CNY 80 (US\$ 12)
Which would you choose?	()	()
Now suppose you can also choose not to sign up with a family doctor, noting that your diseases would not get better, what would you prefer?		
1. I Would still prefer the plan I choose above ()		
2. I Would choose neither ()		

3. Choice set 3

Attributes	Plan1	Plan 2
Service type	Home visit	Home visit
Service package	Basic service + Chronic disease service	Basic service + Personalized service
Physician's reputation	Relatively good	Average
Annual contract costs	CNY 40 (US\$ 6)	CNY 80 (US\$ 12)
Which would you choose?	()	()
Now suppose you can also choose not to sign up with a family doctor, noting that your diseases would not get better, what would you prefer?		
1. I Would still prefer the plan I choose above ()		
2. I Would choose neither ()		

4. Choice set 4 (test choice set)

Attributes	Plan1	Plan 2
Service type	Home visit	Home visit
Service package	Basic service	Basic service
Physician's reputation	Relatively good	Relatively good
Annual contract costs	CNY 40 (US\$ 6)	CNY 80(US\$ 12)
Which would you choose?	()	()
Now suppose you can also choose not to sign up with a family doctor, noting that your diseases would not get better, what would you prefer?		
1. I Would still prefer the plan I choose above ()		
2. I Would choose neither ()		

5. Choice set 5

Attributes	Plan1	Plan 2
Service type	Clinic visit	Home visit

Service package	Basic service + Personalized service	Basic service + Personalized service
Physician's reputation	Average	Relatively good
Annual contract costs	CNY 60 (US\$ 9)	CNY 60 (US\$ 9)
Which would you choose?	()	()
Now suppose you can also choose not to sign up with a family doctor, noting that your diseases would not get better, what would you prefer?		
1. I Would still prefer the plan I choose above ()		
2. I Would choose neither ()		

6. Choice set 6

Attributes	Plan1	Plan 2
Service type	Clinic visit	Home visit
Service package	Basic service + Traditional Chinese medicine (TCM) service	Basic service + Traditional Chinese medicine (TCM) service
Physician's reputation	Relatively good	Average
Annual contract costs	CNY 80 (US\$ 12)	CNY 20 (US\$ 3)
Which would you choose?	()	()
Now suppose you can also choose not to sign up with a family doctor, noting that your diseases would not get better, what would you prefer?		
1. I Would still prefer the plan I choose above ()		
2. I Would choose neither ()		

7. Choice set 7

Attributes	Plan1	Plan 2
Service type	Home visit	Clinic visit
Service package	Basic service + Traditional Chinese medicine (TCM) service	Basic service
Physician's reputation	Average	Relatively good
Annual contract costs	CNY 60 (US\$ 9)	CNY 60 (US\$ 9)
Which would you choose?	()	()
Now suppose you can also choose not to sign up with a family doctor, noting that your diseases would not get better, what would you prefer?		
1. I Would still prefer the plan I choose above ()		
2. I Would choose neither ()		

8. You have completed all the choice tasks, are you clear about the decision making process? (If you choose ①/②, skip to 10)

① Very unclear; ②Unclear; ③General; ④Clear; ⑤Very clear

9. Do you find these choice tasks difficult? (If you choose ①/② to continue to answer 10, choose ③/④/⑤ to skip to 11)

①Very difficult; ②Difficult; ③General; ④Easy; ⑤Very easy

10. Why do you feel that the selection process is unclear/difficult? _____.

11. Which of the following criteria did you choose when you made your choice?

①Look at each option carefully; ②Look only at the most important option for me, please explain _____; ③
The options you care about are different each time; ④Others, please specify _____.

12. Please rate the four attributes in the plan according to their importance (tick \checkmark in the corresponding box)

Attribute	Very unimportant	Unimportant	General	Important	Very Important
Service type					
Service package					
Doctor's reputation					
Annual contract costs					

13. Is the survey subject certain when making the choices? (Filled by investigator)

① Very uncertain; ②Uncertain; ③Neither; ④Certain; ⑤Very certain

Thank you again for participating in our survey!

Interviewer: _____ Survey date: ____ year ____ month ____ day

Quality control officer: _____ Audit date: ____ year ____ month ____ day