

Appendix

Table A.1: The comparisons of the basic approach and the *ATP* approach

	The basic approach	The <i>ATP</i> approach
Definition of <i>CHE</i>	Spending for health care exceeds a certain level of a household's entire budget	Health spending exceeds the threshold of a household's ability to pay for health care
Numerator	<i>OOP</i> expenses	<i>OOP</i> expenses
Denominator	Total income Total consumption Total expenditure	Household total expenditure minus actual food spending Household total expenditure minus a standard amount representing subsistence food spending Household total expenditure minus a standard amount representing subsistence spending on food, rent and utilities
Advantage	(1) Easy to understand and calculate. (2) Not depend on household allocation decisions across consumption items.	Distinguish between the rich and poor.
Limitation	(1) Fail to distinguish the poor and the rich. (2) Underestimate the poverty. (3) Ignore financing means.	(1) Fail to tell that how far <i>OOP</i> expenses eat into resources required for necessities. (2) Ignore financing means. (3) Income data is unavailable in low and middle income countries.

Table A.2: Variable definitions

Variable	Description
<i>Hospitalization</i>	Dummy that equals to one if there is a member of a family being hospitalized in the previous year, otherwise it equals to 0
<i>Ln inpatient medical expenses</i>	The logarithm of household inpatient medical expenses
<i>Agency</i>	The number of hospitals in the province
<i>Bed</i>	The number of beds in the hospitals in the province
<i>Urban</i>	Dummy that equals to one if the individual lives in urban areas, otherwise it equals to 0
<i>Family number</i>	The number of family members
<i>Ln income</i>	The logarithm of the household income
<i>Insurance</i>	The number of people in a family with basic social medical insurance
<i>Age</i>	The age of the family financial respondent
<i>Marriage status</i>	The marriage status of the financial respondent was divided into single, divorced, married, widowed and cohabitation
<i>Health condition</i>	The health condition of the financial respondent is self-assessed on a five-point scale, ranging from "The worst" (-2) to "The best" (+2)

Table A.3: Data description (2010)

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>Hospitalization</i>	7,579	0.1735057	0.3787089	0	1
<i>Inpatient medical expenses</i>	7,579	1,642.721	7,109.463	0	200,000
<i>Agency</i>	7,579	874.4276	343.7654	277	1377
<i>Bed (Ten thousands)</i>	7,579	15.30977	5.603493	4.04	25.58
<i>Urban</i>	7,579	0.5515239	0.497371	0	1
<i>Family number</i>	7,579	3.50376	1.569732	1	15
<i>Ln income</i>	7,579	9.958263	1.199798	0	13.60726
<i>Insurance</i>	7,579	1.964903	1.277155	0	10
<i>Age</i>	7,579	50.72714	12.8005	17	97
<i>Marriage status</i>					
Single	171				
Divorced	192				
Married	6,682				
Widowed	504				
Cohabitation	30				
<i>Health condition</i>					
-2	159				
-1	494				
0	643				
1	3,009				
2	3,274				

Table A.4: Data description (2014)

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>Hospitalization</i>	10,080	0.230754	0.4213362	0	1
<i>Inpatient medical expenses</i>	10,080	3,404.887	14,328.4	0	520,000
<i>Ln inpatient medical expenses</i>	2,326	8.828464	1.210692	5.010635	13.16158
<i>Agency</i>	10,080	1,021.303	438.6881	161	1854
<i>Bed (Ten thousands)</i>	10,080	20.90744	9.254966	3	36
<i>Urban</i>	10,080	0.4837302	0.49976	0	1
<i>Family number</i>	10,080	3.768254	1.796432	1	17
<i>Ln income</i>	10,080	10.45733	1.001489	0	15.26726
<i>Insurance</i>	10,080	2.1375	1.182496	0	9
<i>Age</i>	10,080	49.69902	13.97626	16	92
<i>Marriage status</i>					
<i>Single</i>	447				
<i>Divorced</i>	239				
<i>Married</i>	8,680				
<i>Widowed</i>	662				
<i>Cohabitation</i>	52				
<i>Health condition</i>					
<i>-2</i>	1,797				
<i>-1</i>	1,621				
<i>0</i>	3,750				
<i>1</i>	1,712				
<i>2</i>	1,200				

Table A.5: Estimates of the regression models (2014)

	Hospitalization	Ln inpatient medical expenses
Agency		-0.0004446*** (0.0001223)
Bed		0.0182864*** (0.0059627)
Urban	0.1811973 *** (0.0529236)	0.1920981*** (0.0541036)
Family number	0.0277184 (0.0172121)	-0.0362305** (0.0181957)
Ln income	-0.0649381 ** (0.0283993)	0.1207951** (0.0290366)
Insurance	0.3779734 *** (0.0251204)	0.0736707*** (0.0261489)
Age	0.0162383 *** (0.0021592)	0.0111022*** (0.0019725)
Marriage status		
Divorced	0.4853371 ** (0.2226117)	-0.0426169 (0.2411069)
Married	0.1899185 (0.1599719)	-0.0559939 (0.1809888)
Widowed	-0.1830898 (0.191195)	-0.4033614* (0.2123892)
Cohabitation	0.0257 (0.4208557)	-0.3493461 (0.3956593)
Health condition		
2	-0.3068183*** (0.0901855)	-0.0018289 (0.0899121)
1	-0.4184451*** (0.0812338)	0.1342498 (0.0864674)
-1	0.0669768 (0.0723347)	0.1106135 (0.071394)
-2	0.7321299*** (0.0668217)	0.2965411*** (0.0646634)
C	-2.626715*** (0.3429847)	6.886184*** (0.3545954)