

**Appendix 1 Introduction of Jilin**

**Appendix 1 Figure 1 geographical position**



Appendix 1 Table 1 Population and GDP

Provinces	Population <sup>a</sup>					GDP <sup>b</sup>		
	Order	No.	Male	Female	Sex ratio (Female=100)	Order	Per capita GDP(RMB)	Per capita GDP(dollar)
Guangdong	1	104320459	54400538	49919921	109	7	87059	13156
Shandong	2	95792719	48446944	47345775	102	8	76391	11544
Henan	3	94029939	47493063	46536876	102	18	50253	7594
Sichuan	4	80417528	40827834	39589694	103	20	48975	7401
Jiangsu	5	78660941	39626707	39034234	102	4	114541	17309
Hebei	6	71854210	36430286	35423924	103	23	47864	7233
Hunan	7	65700762	33776459	31924303	106	16	53078	8021
Anhui	8	59500468	30245513	29254955	103	21	47950	7246
Hubei	9	57237727	29391247	27846480	106	10	66670	10075
Zhejiang	10	54426891	27965641	26461250	106	5	99301	15006
Guangxi	11	46023761	23924704	22099057	108	28	41643	6293
Yunnan	12	45966766	23856696	22110070	108	30	37461	5661
Jiangxi	13	44567797	23003521	21564276	107	24	47546	7185
Liaoning	14	43746323	22147745	21598578	103	13	57922	8753
Heilongjiang	15	38313991	19426106	18887885	103	27	41954	6340
Shaanxi	16	37327379	19287575	18039804	107	12	63699	9626
Fujian	17	36894217	18981054	17913163	106	6	91512	13829
Shanxi	18	35712101	18338760	17373341	106	25	45409	6862
Guizhou	19	34748556	17905471	16843085	106	29	41332	6246
Chongqing	20	28846170	14608870	14237300	103	11	66194	10003
<b>Jilin</b>	<b>21</b>	<b>27452815</b>	<b>13907218</b>	<b>13545597</b>	<b>103</b>	<b>14</b>	<b>56248</b>	<b>8500</b>
Gansu	22	25575263	13064193	12511070	104	31	23015	3478
Inner Mongolia	23	24706291	12838243	11868048	108	9	69939	10569
Shanghai	24	23019196	11854916	11164280	106	2	135094	20415
Xinjiang	25	21815815	11270147	10545668	107	19	44489	6723
Beijing	26	19612368	10126430	9485938	107	1	139607	21097
Tianjin	27	12938693	6907091	6031602	115	3	120754	18248
Hainan	28	8671485	4592283	4079202	113	17	52158	7882
Ningxia	29	6301350	3227404	3073946	105	15	54302	8206
Qinghai	30	5626723	2913793	2712930	107	22	47890	7237
Tibet	31	3002165	1542652	1459513	106	26	39559	5978

Appendix 1 Table 2 Average out-of-pocket medical costs on outpatient care <sup>c</sup>

Provinces	2008			2013			2018		
	Order	Average out-of-pocket medical costs on outpatient care(RMB)	Average out-of-pocket medical costs on outpatient care(dollars)	Order	Average out-of-pocket medical costs on outpatient care(RMB)	Average out-of-pocket medical costs on outpatient care(dollar)	Order	Average out-of-pocket medical costs on outpatient care(RMB)	Average out-of-pocket medical costs on outpatient care(dollar)
Anhui	18	129.8	19.6	23	180.1	27.2	22	238.9	36.1
Beijing	1	301.9	45.6	1	393.4	59.4	1	544.8	82.3
Fujian	17	130.7	19.7	24	171.0	25.8	13	261.8	39.5
Gansu	30	80.2	12.1	29	146.5	22.1	30	187.8	28.4
Guangdong	21	123.9	18.7	18	188.7	28.5	7	281.7	42.6
Guangxi	28	101.9	15.4	27	154.8	23.4	28	206.2	31.1
Guizhou	11	140.3	21.2	13	199.0	30.1	23	236.2	35.7
Hainan	13	134	20.2	15	194.0	29.3	12	262.6	39.7
Hebei	12	137.2	20.7	16	191.2	28.9	21	239.5	36.2
Henan	27	104.6	15.8	30	146.0	22.1	29	193.8	29.3
Heilongjiang	9	150.8	22.8	7	213.8	32.3	11	264.9	40.0
Hubei	15	133.3	20.1	17	190.0	28.7	19	243.6	36.8
Hunan	6	158.3	23.9	6	223.7	33.8	6	290.7	43.9
<b>Jilin</b>	<b>14</b>	<b>133.6</b>	<b>20.2</b>	<b>11</b>	<b>203.7</b>	<b>30.8</b>	<b>9</b>	<b>275.9</b>	<b>41.7</b>
Jiangsu	7	157.6	23.8	8	211.1	31.9	8	281.2	42.5
Jiangxi	24	117.4	17.7	22	180.4	27.3	14	256.5	38.7
Liaoning	5	164.6	24.9	4	230.2	34.8	5	308.0	46.5
Inner Mongolia	22	122.9	18.6	14	195.8	29.6	18	251.0	37.9
Ningxia	19	126.6	19.1	25	162.0	24.5	25	225.1	34.0
Qinghai	29	88.8	13.4	26	159.8	24.1	26	217.1	32.8
Shandong	8	154.4	23.3	12	199.5	30.1	17	253.8	38.3
Shanxi	16	132.4	20.0	9	206.3	31.2	16	255.7	38.6
Shaanxi	20	124.4	18.8	19	185.7	28.1	20	243.4	36.8
Shanghai	2	224.5	33.9	2	283.6	42.8	2	378.8	57.2
Sichuan	25	112.8	17.0	20	182.7	27.6	15	256.4	38.7
Tianjin	3	193.1	29.2	3	260.0	39.3	3	339.3	51.3
Tibet	31	49.1	7.4	31	117.6	17.8	31	183.1	27.7
Xinjiang	23	122.3	18.5	21	181.4	27.4	24	231.8	35.0
Yunnan	26	106.7	16.1	28	152.5	23.0	27	214.1	32.3
Zhejiang	4	168.2	25.4	10	205.8	31.1	10	265.3	40.1
Chongqing	10	150.3	22.7	5	229.7	34.7	4	320.1	48.4

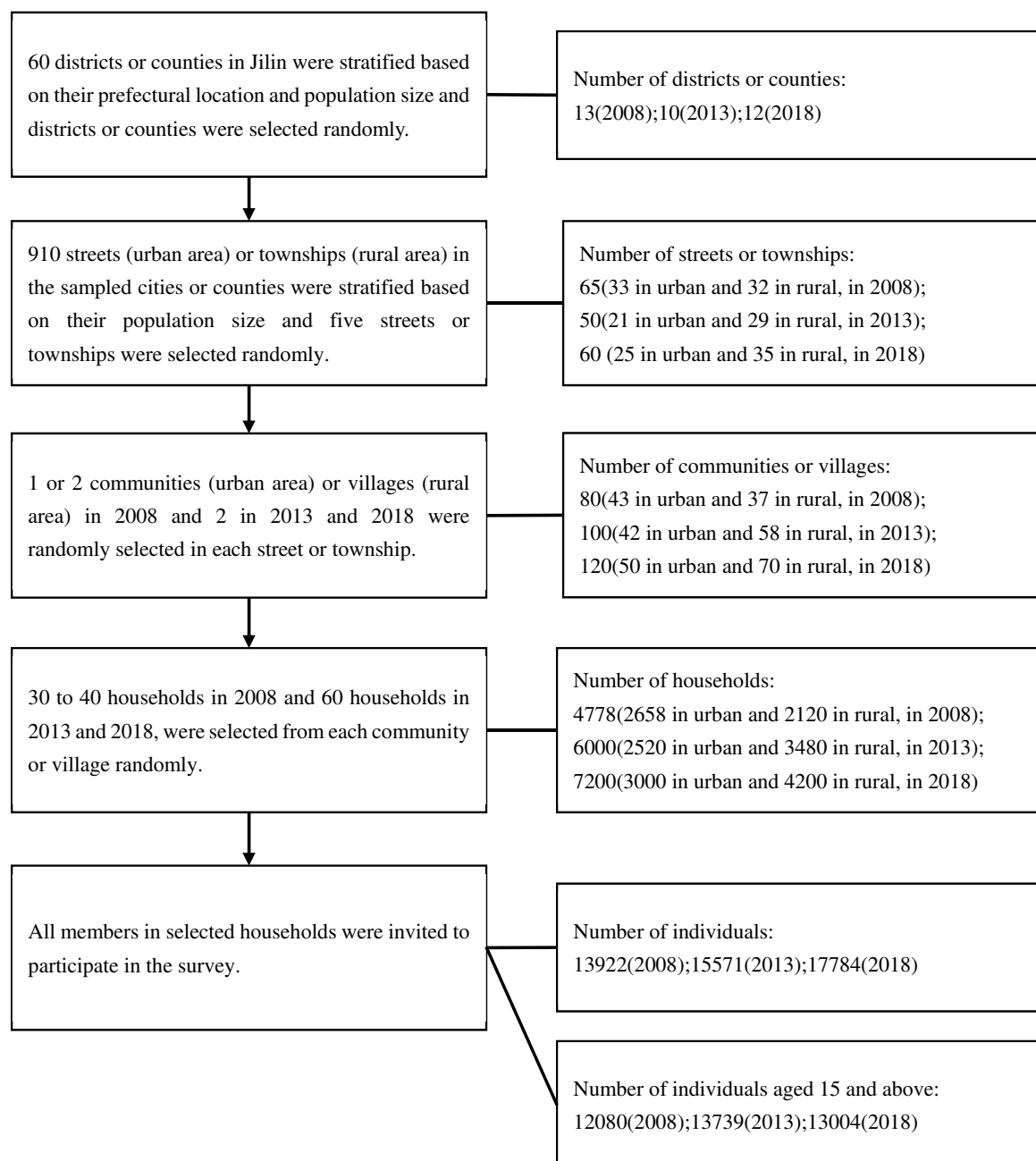
**Notes:**

† Data source: a, Sixth nationwide population census in 2010; b, Provincial statistical offices in 2018; c,

Statistical yearbook of health and family planning in China.

‡ Exchange rate: 1\$ = 6.62RMB in 2018.

### Appendix 2 Sampling procedure



**Appendix 3 Types of hospitals health care users' first contact of for outpatient care, in Jilin, 2008-2018**

<b>Types of hospitals</b>	<b>Group</b>	<b>N</b>	<b>%</b>
Village clinics and township hospitals		1,556	47.12
Community stations	PHC facilities	68	2.06
Community health centers		577	17.47
County/district level hospitals and health centers		700	21.20
Province level hospitals and health centers	Secondary or tertiary hospitals	261	7.90
Private health clinics		70	2.12
Others		70	2.12

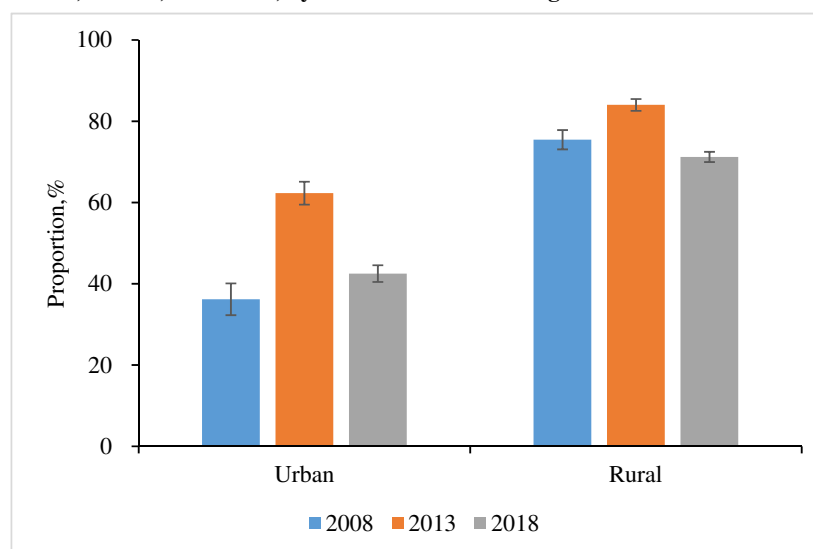
**Appendix 4 Table 1 Prevalence of different types of diseases, in Jilin, 2008-2018**

Type of diseases	2008		2013		2018	
	n	%	n	%	n	%
Hypertensions and/or diabetes	133	1.10	2,124	15.46	2,767	21.28
Acute upper respiratory tract infections	201	1.66	349	2.54	913	7.02
Diseases recommended to PHC facilities	356	2.95	521	3.79	2,204	16.95
Other ailments	411	3.40	554	4.03	2,799	21.52

**Appendix 4 Table 2 Percentage of the total survey who report having different types of diseases seeking for outpatient care in Jilin, 2008-2018**

Type of diseases	2008		2013		2018	
	n	%	n	%	n	%
Hypertensions and/or diabetes	51	0.42	352	2.56	385	2.96
Acute upper respiratory tract infections	65	0.54	196	1.43	250	1.92
Diseases recommended to PHC facilities	169	1.40	175	1.27	537	4.13
Other ailments	197	1.63	212	1.54	713	5.48

**Appendix 5 Trends in health care users' first contact with primary health care facilities for outpatient care, in Jilin, 2008-2018, by urban and rural settings**



**Notes:**

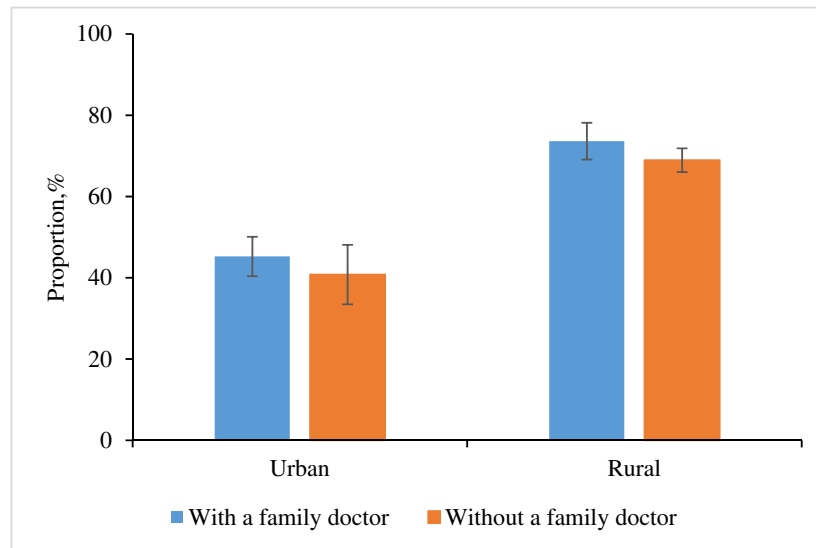
† For each episode of illness, the survey asked type of the first contacted health facilities. First contact for chronic conditions were asked about the most frequent consulted provider.

‡ Proportions were weighted to yield provincially representative estimates. 95% confidence intervals were shown.

§ Primary health care (PHC) facilities included community health centers and stations, township hospitals, village health centers, and clinics.



**Appendix 6 First contact with primary health care facilities for outpatient care by health care users with and without a contract family doctor, in Jilin, in 2018, by urban and rural settings**



**Notes:**

† Whether the health care users had a contracted family doctor, defined as whether he/she had a formal contract with any PHC doctor within a government program that provides regular consultation and health management services.

‡ The questions about family doctors were only asked in the 2018 survey. 95% confidence intervals were shown.

§ Adjusting for sampling, and sex, age, diseases, social health insurance, household income per capita, educational achievement and ethnicity.

**Appendix 7 Table 1 Trend of first contact of primary health care facilities for outpatient care amongst health care users answering questions personally in Jilin, 2008-2018, by urban and rural settings**

Characteristic	Urban				Rural			
	N	Choice of PHC facilities, %	Crude RR(95% CI)	Adjusting RR(95% CI)	N	Choice of PHC facilities, %	Crude RR(95% CI)	Adjusting RR(95% CI)
<b>Year</b>								
2008	112	40.87	0.66(0.50,0.86)**	0.79(0.59,1.04)	264	76.10	0.87(0.80,0.96)*	0.94(0.86,1.03)
2013	260	62.39	ref	ref	535	87.03	ref	ref
2018	519	43.10	0.69(0.60,0.80)**	0.90(0.76,1.06)	1,181	73.07	0.84(0.80,0.88)*	0.89(0.85,0.94)*

† Adjusting for sampling, and sex, age, diseases, social health insurance, household income per capita, educational achievement and ethnicity.

**Appendix 7 Table 2 Trend of first contact of primary health care facilities for outpatient care amongst health care users answering questions not personally in Jilin, 2008-2018, by urban and rural settings**

Characteristic	Urban				Rural			
	N	Choice of PHC facilities, %	Crude RR(95% CI)	Adjusting RR(95% CI)	N	Choice of PHC facilities, %	Crude RR(95% CI)	Adjusting RR(95% CI)
<b>Year</b>								
2008	40	31.21	0.46(0.26,0.81)*	0.57(0.28,1.16)	66	75.34	0.88(0.73,1.06)	0.99(0.83,1.19)
2013	37	67.58	ref	ref	103	85.75	ref	ref
2018	60	33.88	0.50(0.32,0.78)*	0.43(0.25,0.75)*	125	64.73	0.75(0.64,0.89)*	0.80(0.67,0.95)*

† Adjusting for sampling, and sex, age, diseases, social health insurance, household income per capita, educational achievement and ethnicity.