Research Report

Health Care Reform and Patients' Trust in Physicians in Urban Beijing*

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Abstract
The Chinese health care system has experienced profound changes in recent decades, including the retrenchment of government financial support. These changes and their subsequent adverse impacts have prompted the Chinese media and some academics to suggest that patients have a relatively low level of trust in physicians in China today. As the first step in exploring the state of patient trust in physicians in public hospitals in urban China, and its determinants, we conducted a survey of 434 patients from 26 public hospitals in urban Beijing between December 2009 and January 2010. Conducted by the Horizon Research Group, our survey asked the patient respondents how they viewed the physicians they were currently seeing, focusing on the following dimensions of trust: physician agency, technical competence, interpersonal competence, and information provided by physicians. Our survey results show a relatively high level of patients' trust in their physicians. Moreover, our in-patient respondents reported a higher level of trust than out-patient respondents with regard to physician agency, interpersonal competence and information provision. Regression analyses also find that patients' self-reported health status, the level of public hospitals from which they received treatment, the duration of their illness, and the frequency of exposure to negative media reports of physicians and hospitals are important determinants of patients' trust in physicians.

Keywords: patient–physician relationship; trust; health care; China

Do patients in China increasingly distrust their physicians? The increasing violence against hospital physicians and other health workers by patients, and the growth in the number of medical malpractice cases may suggest an affirmative answer.[1] As the first step in exploring the situation of patients' trust in physicians in public hospitals in urban China and its determinants, we conducted a survey of 434 patients in urban Beijing between December 2009 and

1 Lafraniere 2010, 1; Harris and Wu 2005.

January 2010. In this research report, trust is defined as the expectation that individuals and institutions will act in everyone's best interests and meet their responsibilities towards their patients. Specifically, it means that patients are confident that their physicians will behave as their true agents and protect their best interests.[2]

The Chinese media periodically report that individual patients and the public at large have increasingly distrusted the motivations of physicians in public hospitals. In 2008, the periodical *China Health Industry* called for the re-establishment of trust between patients and physicians in public hospitals.[3] Some Chinese and Western scholars also claim that patients in China have increasingly lost trust in physicians in public hospitals and the health care system. Li Ling, a health policy expert at Peking University, highlights that patients today generally distrust hospital physicians because they believe that physicians seek to dupe them into paying more.[4] Bloom, Kanjilal and Peters highlight that China is facing a crisis of trust in the health care sector.[5]

The foregoing studies on the decline of patients' trust in physicians in China's public hospitals have two major weaknesses. First, they are largely based on anecdotal evidence rather than empirical data. Unlike much research on patients' trust in physicians in Western democracies,[6] the existing studies of China are neither based on systematic surveys nor on interviews of individual patients or the wider population. Thus, it is difficult to assess the extent and trend of the problem with accuracy. Second, the concept of patient–physician trust is not clearly defined and discussed in the literature on China. Existing studies have not differentiated between various dimensions of patient–physician trust. Mechanic, however, highlighted that patient trust in physicians is a multi-dimensional concept.[7] The absence of a clear and nuanced definition of patient–physician trust may stymie efforts to understand the causes and impacts of changes in patients' trust in physicians in China.

Methods and Data Sources of the Survey

Our survey investigated patients' trust in physicians in public hospitals in urban Beijing. Under the guidance of the author's institution, the Horizon Research Group (a non-governmental public-opinion firm in China) conducted the survey between December 2009 and January 2010. The targeted population of our survey was patients in public hospitals in urban Beijing. We adopted the following procedures so as to get a representative sample.

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2 Thom and Campbell 1997; Mechanic1998.
3 Wang 2008.
4 *Renmin ribao* 2009.
5 Bloom et al. 2008, 952 and 955.
6 Thom and Campbell 1997; Kao et al., 1998a, 1998b; Mechanic and Meyer 2000; Straten et al. 2002; Brownlie et al. 2008.
7 Mechanic 1998.

In 2009 there were eight urban districts in the municipality of Beijing and they had a total of 241 public hospitals. Among all the public hospitals within these eight urban districts, we randomly chose 26 public hospitals as our sampling frame. To ensure the representativeness of our survey, public hospitals at different administrative levels were included in the sampling frame.[8] We randomly selected our patient respondents from these 26 public hospitals. Potential respondents were excluded if they or their family members were working in the health care or marketing industries, or if they were not Beijing residents. Our respondents came from diverse backgrounds in terms of their gender, age, education attainment, income level, employment, the type of treatment they received (in- or out-patient), and their medical insurance. It should be noted that our patient respondents may not follow the actual distribution of the socio-economic background of the patients in urban Beijing's public hospitals. However, official statistical reports like *Beijing Statistical Yearbook* and *China's Health Statistical Yearbook* do not include such data.

Our patient respondents included in-patients and out-patients. For in-patient respondents, the face-to-face interviews were conducted while they were strolling or having their meal outside the wards. For out-patient respondents, they were interviewed after they finished their consultations with their physicians. All the interviews were conducted in the absence of any third party besides the interviewer and interviewee. Professional staff trained and employed by the Horizon Research Group were responsible for conducting the interviews. In total, we successfully interviewed 434 patient respondents, including 243 from level-three hospitals, 98 from level-two hospitals, and 93 from level-one hospitals. 196 of our respondents were in-patients and 238 were out-patients. Table 1 shows the characteristics of the survey respondents.

In our data analysis, we divided our respondents into two groups: in-patients and out-patients. This is because the literature suggests that patients suffering from severe illness tend to have a higher level of vulnerability, which in turn increases the saliency of trust in their relationship with physicians.[9] In this study, we examined the relationship between the severity of illness and the saliency of trust. Given that in-patients tend to suffer from severe illnesses, one may expect that they would have a relatively high level of trust in their physicians than out-patients.

Based on the conceptual approach to patients' trust in physicians suggested by Mechanic and by Straten, Friele and Groenewegen,[10] our survey asked the

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8 In 1990, the Ministry of Health classified public hospitals into three categories: city and provincial hospitals (level three), county hospitals (level two), and hospitals below the county level (level one). Level-three public hospitals possess the best medical resources and generally charge a higher price for their services. In the eight urban districts in Beijing where we conducted our survey, in 2009 there were 67 level-three, 55 level-two, and 119 level-one public hospitals. Except for Chaoyang District, we basically selected one level-three, one level-two, and one level-one public hospital in each urban district. Our sampling frame included ten level-three, eight level-two, and eight level-one public hospitals.

9 Mechanic and Meyer 2000.

10 Mechanic 1998; Straten et al. 2002.

Table 1: **Characteristics of respondents**

	All respondents	In-patients	Out-patients
Mean age SD, years	45 ± 14	51 ± 12	40 ± 14
Male, n (%)	196 (45.2)	88 (44.9)	108 (45.4)
Education, n (%)			
Junior high school or below	77 (17.7)	38 (19.4)	39 (16.4)
Senior high school, vocational school, college	280 (64.5)	126 (64.3)	154 (64.7)
University graduate or above	77 (17.7)	32 (16.3)	45 (18.9)
Personal monthly income (yuan), n (%)			
1,000 or below	5 (1.2)	1 (0.5)	4 (1.7)
1,001–2,000	145 (35.8)	67 (34.2)	78 (32.8)
2,001–3,000	128 (31.6)	66 (33.7)	62 (26.1)
3,001–5,000	73 (18)	25 (12.8)	48 (20.2)
5.000–8,000	47 (11.6)	27 (13.8)	20 (8.4)
8,001 or above	5 (1.2)	1 (0.5)	4 (1.7)
No fixed income or unclear response	2 (0.5)	0	2 (0.8)
Health insurance n (%)			
Government-funded health insurance	47 (10.8)	31 (15.8)	16 (6.7)
Social health insurance	204 (47)	93 (47.4)	111 (46.6)
Commercial health insurance	31 (7.1)	17 (8.7)	14 (5.9)
Both social and commercial health insurances	61 (14.1)	43 (21.9)	18 (7.6)
No health insurance (self-funded)	91 (21)	12 (6.1)	79 (33.2)

patient respondents how they viewed the physicians they were currently seeing, focusing on the following dimensions of trust: physician agency, technical competence, interpersonal competence, and information provided by physicians. In the questionnaire, there were two items related to physician agency, two items related to technical competence, two items on interpersonal competence, and three items on information provision by physicians. These items were presented in a five-point Likert-format, with response options ranging from completely trust (five points) to completely distrust (one point), and always (five points) to never (one point). The items are cited in Table 2. Respondents were also able to state that they "don't know" the answer.

Our research report first reviews China's health care system in order to provide some systemic context for this survey. We then discuss our patient respondents' assessment of trust in their physicians. The next section examines the major factors affecting our respondents' trust in their physicians and is followed by the report's conclusion.

China's Health Care System

The Chinese government nationalized all hospitals in the mid-1950s, so that private practice of medicine was virtually non-existent during the Mao era. The government in those days provided considerable financial support to the hospitals.

Table 2: **Patients' Trust in Physicians**

Dimensions of patient trust and items	All patients			In-patients			Out-patients		
	Mean score	SD	N	Mean score	SD	N	Mean score	SD	N
Physician agency									
Do you trust that your physicians generally put your health and interest as their top priority?	4.08	0.736	432	4.15	0.671	195	4.02	0.781	237
Do you trust that your physicians prescribe only necessary medicines and perform only necessary clinical tests for you?	4.06	0.895	434	4.15	0.873	196	3.98	0.907	238
Technical competence									
Do you trust that your physicians have sufficient expertise and clinical experience to treat your illness?	4.21	0.736	430	4.27	0.727	195	4.17	0.741	235
Do you trust that your physicians can provide an accurate diagnosis and treatment for your illness?	4.18	0.665	430	4.23	0.66	194	4.14	0.669	236
Interpersonal competence									
How often do your physicians give you sufficient time to explain your medical problems or conditions?	4.22	0.727	432	4.37	0.607	195	4.09	0.792	237
How often do your physicians attentively listen to you when you are talking?	4.25	0.697	433	4.36	0.647	195	4.16	0.725	238
Information provision by physicians									
How often do your physicians adequately answer your questions?	4.18	0.724	433	4.24	0.657	195	4.12	0.773	238
How often do your physicians use sufficient patience to answer your questions?	4.15	0.749	433	4.28	0.679	195	4.04	0.787	238
How often do you get as much information as you want from your physicians?	3.62	1.096	430	3.67	1.108	196	3.58	1.086	234

Government funding covered most shortfalls in hospital budgets.[11] In 1980, the Chinese government allowed the return of the private practice of medicine. It was not until the mid-1990s that private capital began to invest in the hospital sector on a large scale. However, public hospitals remain the major force in the hospital sector. They accounted for about 77 per cent of all hospital beds at or above the county level in 2008.[12] In 2000, the government distinguished non-profit from for-profit hospitals. All public hospitals were put in the non-profit category. Most public hospitals have in practice become profit-oriented, however, as the government dramatically reduced its financial support to the health sector since the 1980s.

The retrenchment in government health expenses has profoundly changed the operation of public hospitals and physician incentives as public hospitals have had to become financially self-sufficient. To motivate physicians to generate enough revenues to sustain the operation of the hospitals, starting from the late 1980s, hospital leaders divided physician income into basic salary and bonuses. A physician's bonuses would depend on the amount of revenue he brought in for the hospital. By contrast, before the late 1980s, physicians' remuneration was set by the government and not tied to the revenue that their services generated for the hospital. As their income is now linked to the amount of revenue they bring to the hospital, the new remuneration policy has encouraged many physicians to increase their bonuses by prescribing unnecessary and expensive drugs and tests, and overcharging patients.[13]

This revenue-generation imperative has had adverse consequences including: declining access to health care for more vulnerable groups, deteriorating service quality, and various problems related to the regulation of the health sector.[14] The existing literature, however, has not addressed the impact of urban health reform on a crucial element of any functioning health system – patient–physician relationships, especially patients' trust in physicians. Our survey in Beijing addresses this important issue.

Patients' Trust in Physicians in Urban Beijing

Physician agency

Patients often feel vulnerable when they are sick. Physician agency means that patients believe that their physicians are their loyal agents. They will pursue a patient's best interests and not take advantage of their vulnerability. We asked our patient respondents: "Do you trust that your physicians generally put your health and interest at the top of their priorities?" "Do you trust that your

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11 Henderson and Cohen 1984, 70–72.
12 Ministry of Health 2009, 66–67.
13 Tam, 2010.
14 Tam 2010, and Fang 2008.

physicians only prescribe necessary medicines and perform necessary clinical tests for you?" Table 2 highlights the high level of patients' trust in physician agency.

Physician competence

Physician competence includes both technical and interpersonal competence. The former refers to whether a physician possesses sufficient technical knowledge, skill and experience to produce the best achievable outcomes for the patient. The latter means a physician's interpersonal skills and bedside manners. We asked our respondents two questions concerning their physician technical competence. Table 2 shows that the mean scores of the two questions were over four (out of five).

Our respondents also displayed a substantial level of trust in their physician interpersonal competence. We asked them: "How often do your physicians give you sufficient time to explain your medical problems or conditions?" "How often do your physicians attentively listen to you when you are talking?" In both questions, respondents who answered "always" would be scored five and "never" one. The mean scores of both questions were more than four (see Table 2).

Information provision by physicians

Provision of adequate and clear information regarding patients' medical conditions, the availability of different treatment options and their consequences constitutes another important aspect of patients' trust in physicians.[15] We asked the respondents three questions concerning their assessment of whether their physicians had provided them with sufficient information. Table 2 demonstrates a favourable assessment of the physicians.

Summing up, our survey results show a relatively high level of patients' trust in their physicians. As we can see in Table 2, the scores of the majority of questions are over four (out of five). Moreover, our in-patient respondents reported a higher level of trust in their physicians than out-patient respondents in three out of four dimensions of trust: physician agency: $t(430) = 2.26$, $p = .03$; physician interpersonal competence: $t(429) = 4.04$, $p < .001$; information provision by physicians: $t(427) = 2.54$, $p = .01$. However, the difference in physician technical competence did not reach a significant difference, $t(427) = 1.63$, $p = .10$. The following section examines the major factors affecting patients' assessment of trust in their physicians.

Determinants of Patients' Trust in Physicians

To investigate the major determinants of patients' trust in physicians, we ran both correlation and hierarchical linear regression analyses. Through correlation

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15 Cook et al. 2004, 73–74; Straten et al. 2002, 231.

Table 3: **Patients' Composite Score on Trust in Physicians**

	In-patients			Out-patients		
	Mean score	SD	N	Mean score	SD	N
Physician agency	4.16	0.62	186	4.00	0.72	217
Technical competence	4.25	0.58	185	4.15	0.59	215
Interpersonal competence	4.37	0.5	185	4.14	0.67	217
Information provision by physicians	4.08	0.56	186	3.89	0.68	214

analyses, we examined whether there are any significant relationships between patients' trust in physicians and the following variables: a patient's self-reported health status, duration of illness, type of health insurance that a patient had, the level of public hospital where a patient respondent received his or her treatment, and the frequency of a patient respondent's exposure to negative media reports about physicians and hospitals. We proposed these variables in the light of the literature on patients' trust in physicians in Western democracies and the particular context in China. Control variables included age, education and income.

To simplify our data analyses, we calculated a composite score of each dimension of patients' trust (see Table 3). Each composite score was calculated as the total score divided by the number of items in a particular dimension of patients' trust.

Kao et al[16] and Kao et al[17] suggest that patients who have a more favourable self-assessment of health tend to trust their physicians more. We asked our respondents: "How do you assess your current health condition?" The patients answered this question on a five-point scale (very good = 5; good = 4; fair = 3; poor = 2; very poor = 1). The mean score of in-patients is 3.56 (SD = .83) and out-patients is 3.70 (SD = .84).

Regarding the duration of illness, patients who have been sick for a relatively long period of time may blame their physicians for failing to solve their problems. Thus, these patients may have less trust in their physicians. We asked our respondents: "How long have you had your current illness?" The patients answered this question on a five-point scale (less than one week = 1; less than one month = 2; less than six months = 3; less than a year = 4; more than one year = 5). The mean score of in-patients is 3.92 (SD = 1.55) and out-patients is 2.69 (SD = 1.72).

The level of public hospitals from which patients received their treatment is also likely to affect patients' trust in physicians. Given that level-three public hospitals in China possess better medical resources, patients may have better trust in physicians (especially in their technical competence) at more advanced public hospitals. Finally, research has suggested that exposure to negative media reports about physicians and medical institutions can be an important determinant of

16 Kao et al. 1998a, 1711.
17 Kao et al. 1998b, 683.

patients' trust in physicians.[18] We asked our patient respondents: "How often have you read or watched negative media reports about physicians and hospitals?"

The correlations of all the variables in the in-patient and out-patient respondents are presented in Table 4 and 5 respectively. For in-patient respondents, after controlling age, education and income, their trust in physician agency is positively correlated with self-reported health status and the level of public hospital from which they received treatment; trust in physician technical competence is negatively correlated with the frequency of exposure to negative media reports; trust in physician interpersonal competence is positively correlated with self-reported health status, negatively correlated with duration of illness, and positively correlated with the level of public hospital from which they received treatment; and trust in information provision by physicians is positively correlated with self-reported health status (see Table 4).

For out-patient respondents, after controlling age, education and income, their trust in physician agency is positively correlated with self-reported health status and negatively correlated with the level of public hospital from which they received treatment; trust in physician technical and interpersonal competence is positively correlated with self-reported health status; and trust in information provision is positively correlated with self-reported health status and negatively correlated with the level of public hospitals from which they received treatment.

Overall, for in-patient respondents, simple correlations exist between trust in physicians and self-reported health status, the level of public hospitals from which they received treatment, duration of illness, and exposure to negative media reports. For out-patient respondents, there are simple correlations between trust in physicians and self-reported health status and the level of public hospital from which they received treatment. However, correlation results alone are not sufficient to provide evidence that the aforementioned variables can *predict* the level of patients' trust. Accordingly, we ran hierarchical linear regression analyses so as to determine which variables are significant predictors of patients' trust in physicians.

In our hierarchical linear regression analyses, we considered a series of models. These models are presented in Appendices A, B, C and D in detail. It should be noted that even though we changed the order of the variables entered in the hierarchical models, we still found the same pattern of results as reported below.

Our hierarchical regression models show that two variables were significant independent predictors of patients' trust in their physicians. For both in-patients and out-patients, self-reported health status was a crucial factor contributing to their trust in physician agency, technical and interpersonal competence. For out-patients, their self-reported health status also critically affected their trust in information provision by physicians ($p < .001$). Patients who gave a more favourable assessment of their health status tended to have a higher level of trust in their physicians.

18 Mechanic 1998.

Table 4: **Simple Correlations (Top Half of Diagonal), and Partial Correlations (Age, Education, Income, Bottom Half of Diagonal) (In-patients)**

	Agency	TC	IC	IP	SRHS	DS	THI	LPH	NMR
Agency	—	0.54**	0.61**	0.44**	0.30**	−0.15*	0.12	0.15*	−0.13
TC	0.53**	—	0.44**	0.40**	0.21**	−0.13	0.08	0.1	−0.18*
IC	0.65**	0.41**	—	0.43**	0.19**	−0.16*	0.07	0.14*	−0.11
IP	0.56**	0.44**	0.42**	—	0.06	0.03	0.07	0.03	.002
SRHS	0.21**	0.14	0.17*	0.17*	—	0.31**	0.14	−0.06	−0.15*
DI	−0.11	−0.05	−0.15*	−0.08	0.14	—	−0.17*	0.02	0.13
THI	0.08	0.05	0.06	0.06	−.03	−0.1	—	0.04	−0.03
LPH	0.17*	0.14	0.21*	0.11	0.05	0.06	0.03	—	0.10
NMR	−0.09	−0.15*	−0.07	0.07	0.16*	0.16*	0.04	0.09	—

Note:

TC = technical competence; IC = interpersonal competence; IP = information provision by physicians; SRHS = self-reported health status; DI = duration of illness; THI = type of health insurance; LPH = level of public hospital where the respondent received treatment; NMR = frequency of a respondent's exposure to negative media reports.

*p < .05 **p < .01.

Table 5: **Simple Correlations (Top Half of Diagonal), and Partial Correlations (Age, Education, Income, Bottom Half of Diagonal) (Out-patients)**

	Agency	**TC**	**IC**	**IP**	**SRHS**	**DS**	**THI**	**LPH**	**NMR**
Agency	—	0.61**	0.55**	0.47**	0.13*	−0.008	−0.12	−0.16*	−0.12
TC	0.61**	—	0.29**	0.54**	0.13*	−0.05	0.07	−0.14*	−0.13*
IC	0.57**	0.59**	—	0.61**	0.14*	−0.07	−0.07	−0.12	−0.18**
IP	0.46**	0.52**	0.63**	—	0.25**	−0.1	−0.1	−0.22**	−0.09
SRHS	0.21**	0.21**	0.21**	0.23**	—	0.42**	−0.29**	0.11	0.18**
DI	−0.10	−0.07	−0.12	−0.07	0.30**	—	−0.20*	−0.24**	−0.05
THI	−0.10	−0.06	−0.07	0.08	−0.09	−0.05	—	−0.27**	−0.03
LPH	−0.14*	−0.12	−0.08	−0.21**	0.15*	0.25**	−0.36**	—	0.11
NMR	−0.13	−0.11	−0.12	−0.03	0.14	−0.11	0.02	0.09	—

Note:
Same as Table 4.
*p < .05 **p < .01.

The level of public hospital from which patients received their treatment was also significantly related to their trust in physicians, but this was not always a consistent relationship. Our in-patient respondents were more likely to trust their physician agency ($p < .001$), technical competence ($p < .05$) and interpersonal competence ($p < .001$), when they received their treatment from hospitals at higher administrative levels, such as municipal hospitals. By contrast, out-patient respondents showed a higher degree of trust in their physician agency ($p < .05$) and information provision ($p < .05$), when they received treatment from lower-level hospitals. This difference might be due to the fact that in-patients typically suffer from more complicated and severe illnesses, which require sophisticated medical skills and technology for effective treatment. Given that Beijing's level-three public hospitals possess the best physicians and medical technology in China, in-patients tended to have more trust in physicians there. By contrast, out-patients tend to have minor illnesses. They might believe that public hospitals at lower levels, where physicians generally have a lighter workload, are better places to treat their illnesses. Moreover, out-patient treatment at lower-level hospitals might be more personalized, as the physicians might live in the same district. As we see in Appendix D, out-patient respondents had a higher level of trust that physicians in lower-level public hospitals could provide them with adequate medical information.

Furthermore, duration of illness and the frequency of exposure to negative media reports affected patients' trust in their physicians as well. As can be seen in Appendix C, for in-patient respondents, the longer the duration of their illness, the lower their trust in their physicians' interpersonal competence is ($p < .05$). This finding suggests that in-patient respondents who have been sick for a relatively long period of time might blame their physicians for not paying sufficient attention to them and not taking their concerns seriously. Alternatively, in-patients might think their physicians are not solving their problems, and therefore are less competent.

Our study also confirms previous research that exposure to negative media reports about physicians and hospitals can undercut patients' trust in physicians. As we see in Appendix B, in-patient respondents who have been more frequently exposed to negative media reports about physicians and hospitals were also more likely to have a lower level of trust in their physician technical competence ($p < .05$).

Finally, according to our hierarchical regression analyses, there is no significant difference in the level of trust in physicians among patients with different types of health insurance.

Conclusion

This survey has several limitations. First, it only covered urban Beijing and therefore the findings do not fully represent the nationwide situation of patient–physician trust. Second, the survey did not include migrant labourers living in Beijing and those non-Beijing residents who travelled to Beijing to seek medical services.

Accordingly, we do not know how these two groups perceive physicians in urban Beijing's public hospitals. Third, our survey was conducted when the in-patient respondents were staying in hospitals for treatment. Given that their health was still heavily dependent on their physicians, it is likely that our in-patient respondents might have felt more vulnerable and therefore expressed a higher level of trust in their physicians during the interviews. It is not just that they were more vulnerable – they were deeply invested in their evaluation of their physicians as it affected their own outcomes, and so their responses may have involved a degree of optimism, or wishful thinking. If we had interviewed our in-patient respondents *after* they were discharged, they might have felt less vulnerable and expressed a lower level of trust in their physicians. Further research is required to compare the level of trust in physicians between patients who are staying in hospitals for treatment and patients who have been discharged. However, our survey does allow us to capture the level of patients' trust in physicians when the patients are in the greatest need of the expertise and care from their physicians.

To gain a more comprehensive understanding of the impact of market-oriented health care reforms on patient–physician trust in China, we plan to extend our survey to other regions (especially less-developed areas) and other social groups like rural migrant workers.

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Appendix A. **Hierarchical Analyses for Patient Trust in Physician Agency, Controlling Age, Education and Income**

In-patients

Step and variable	Unstandardized β	SE β	Standardized β	$R^2/\Delta R^2$
Step 1				
Age	0.005	0.004	0.11	
Education	0.25	0.092	0.25*	0.11**
Income	0.11	0.048	0.19*	
Step 2				
Self-reported health status	0.18	0.06	0.24*	0.05**
Step 3				
Duration of illness	−0.04	0.03	−0.11	0.008
Step 4				
Type of health insurance	0.03	0.03	0.05	0.003
Step 5				
Level of public hospital	0.22	0.07	0.23**	0.05**
Step 6				
Negative media report	−0.08	0.07	−0.09	0.007

Out-patients

Step and variable	Unstandardized β	SE β	Standardized β	$R^2/\Delta R^2$
Step 1				
Age	0.005	0.004	0.09	
Education	0.12	0.09	0.10	0.02
Income	−0.01	0.007	−0.10	
Step 2				
Self-reported health status	0.18	0.07	0.21**	0.04**
Step 3				
Duration of illness	0.01	0.03	0.01	0
Step 4				
Type of health insurance	−0.04	0.03	−0.09	0.006
Step 5				
Level of public hospital	−0.14	0.06	−0.18*	0.03*
Step 6				
Negative media report	−0.11	0.06	−0.12	0.01

*p < .05 **p < .001.

Appendix B: **Hierarchical Analyses for Patient Trust in Physician Technical Competence, Controlling Age, Education and Income**

In-patients

Step and variable	Unstandardized β	SE β	Standardized β	$R^2/\Delta R^2$
Step 1				
Age	0	0.004	0.01	
Education	0.07	0.09	0.07	0.02
Income	0.05	0.05	0.09	
Step 2				
Self-reported health status	0.13	0.06	0.18*	0.03*
Step 3				
Duration of illness	−0.03	0.03	−0.07	0.004
Step 4				
Type of health insurance	0.01	0.03	0.03	0.001
Step 5				
Level of public hospital	0.14	0.07	0.15*	0.02*
Step 6				
Negative media report	−0.14	0.07	−0.16*	0.02*

Out-patients

Step and variable	Unstandardized β	SE β	Standardized β	$R^2/\Delta R^2$
Step 1				
Age	−0.004	0.003	−0.09	
Education	−0.07	0.07	−0.07	0.03
Income	−0.01	0.01	−0.16*	
Step 2				
Self-reported health status	0.15	0.06	0.20**	0.03**
Step 3				
Duration of illness	−0.001	0.03	−0.004	0
Step 4				
Type of health insurance	−0.02	0.03	−0.04	0.001
Step 5				
Level of public hospital	−0.07	0.05	−0.1	0.01
Step 6				
Negative media report	−0.08	0.05	−0.11	0.01

*$p < .05$ **$p < .001$.

Appendix C: **Hierarchical Analyses for Patient Trust in Physician Interpersonal Competence, Controlling Age, Education and Income**

In-patients

Step and variable	Unstandardized β	SE β	Standardized β	$R^2/\Delta R^2$
Step 1				
Age	0.001	0.004	0.03	
Education	0.03	0.08	0.03	0.003
Income	0.02	0.04	0.04	
Step 2				
Self-reported health status	0.11	0.05	0.19*	0.03*
Step 3				
Duration of illness	−0.05	0.03	−0.17*	0.02*
Step 4				
Type of health insurance	0.004	0.03	0.01	0
Step 5				
Level of public hospital	0.16	0.06	0.20**	0.04**
Step 6				
Negative media report	−0.07	0.06	−0.08	0.01

Out-patients

Step and variable	Unstandardized β	SE β	Standardized β	$R^2/\Delta R^2$
Step 1				
Age	0.004	0.003	0.08	
Education	0.08	0.09	0.07	0.02
Income	−0.05	0.04	−0.09	
Step 2				
Self-reported health status	0.22	0.06	0.26**	0.06**
Step 3				
Duration of illness	−0.03	0.03	−0.07	0.004
Step 4				
Type of health insurance	−0.02	0.03	−0.06	0.003
Step 5				
Level of public hospital	−0.05	0.06	−0.07	0.003
Step 6				
Negative media report	−0.11	0.06	−0.14	0.02

*p < .05 **p < .001.

Appendix D: **Hierarchical Analyses for Patient Trust in Information Provision by Physicians, Controlling Age, Education and Income**

In-patients

Step and variable	Unstandardized β	SE β	Standardized β	$R^2/\Delta R^2$
Step 1				
Age	−0.001	0.004	−0.02	
Education	−0.07	0.08	−0.08	0.03
Income	−0.07	0.04	−0.13	
Step 2				
Self-reported health status	0.07	0.05	0.11	0.01
Step 3				
Duration of illness	0.01	0.03	0.04	0.001
Step 4				
Type of health insurance	0.004	0.03	0.01	0
Step 5				
Level of public hospital	0.11	0.06	0.14	0.02
Step 6				
Negative media report	−0.01	0.06	−0.02	0

Out-patients

Step and variable	Unstandardized β	SE β	Standardized β	$R^2/\Delta R^2$
Step 1				
Age	0	0.003	−0.001	
Education	0.12	0.08	0.1	0.02
Income	−0.01	0.01	−0.11	
Step 2				
Self-reported health status	0.27	0.06	0.32**	0.09**
Step 3				
Duration of illness	0.01	0.03	0.02	0
Step 4				
Type of health insurance	0.04	0.03	0.1	0.01
Step 5				
Level of public hospital	−0.11	0.06	−0.15*	0.02*
Step 6				
Negative media report	−0.02	0.06	−0.02	0

*$p < .05$ **$p < .001$.