It is not only up to you! The effect of retirement on healthcare utilization: The role of physician incentives

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Research Interest

▶ Primary: Health Economics, Family Economics, Economics of Ageing

▶ Work in Progress

    ✓ Did the Pandemic Change Retirement Trends

    ✓ Health Shocks and Coresidence

    ✓ The Impact of Critical Illness Insurance on Healthcare Utilization among Low-income Populations

    ✓ Sucks in Poverty? The Short and Longer Impacts of Earthquake on Pension Choices and How Government Aids Could Help

Motivation: Context

- ▶ The ageing population will require more health services and healthcare expenditure, thus imposing tremendous pressure on healthcare systems and pension systems

- ▶ China has fast growing ageing population and low statutory retirement age (60 for males, 55 for female white-collar and 50 for female blue-collar)

- ▶ From a policy perspective, raising the statutory retirement age could ease the pressure on pension systems

- ▶ At the individual level, however, the impact of delaying retirement on individual health consequences is inconclusive

Motivation: Literature

Retirement on healthcare utilization

- ▶ Most studies focus on high-income countries and report a reduction in healthcare use due to retirement (Frimmel and Pruckner, 2020; Eibich and Goldzahl, 2021)

- ▶ In contrast to high-income countries, the few recent evidence from China suggests an increase in healthcare utilization (Zhang et al., 2018; Zhou et al., 2021)

- ▶ Changes in the opportunity cost of time, lifestyles, and work-related stress can be potential mechanisms (Frimmel and Pruckner, 2020; Zhang et al., 2018; Eibich, 2015)

- ▶ The impact of retirement on healthcare utilization is heterogeneous by patient characteristics, e.g., gender, occupation, etc.

Motivation: Literature

Physician role in healthcare

▶ Supply-side factors, particularly physicians' incentives, play a critical role in healthcare utilization (Lin et al., 2021; Wu, 2019; Carrera et al., 2018; Lu, 2014)

▶ Recent studies document that financial incentives also drive medical decision making in developing economies, such as China (Wu, 2019; Currie et al., 2014; Lu, 2014)

▶ Physician respond to patients' insurance coverage only if own incentive is involved (Lu, 2014)

Motivation: Literature

To sum up

▶ Relatively limited studies and mixed results on the effect of retirement on healthcare utilization, especially from developing countries

▶ Little is known on how physicians' incentives shape the effect of retirement on healthcare utilization

Research Question

Research question:

- ▶ What is the effect of retirement on healthcare utilization

- ▶ What is the role of physicians' incentives

To do so, we:

- ▶ Use unique administrative data from a tertiary hospital in the provincial capital city in southeastern China

- ▶ Exploit the difference in physicians' incentives that is related to their affiliation with the hospital

Preview of Results

▶ Retirement has a significantly positive impact on outpatient care expenditures

▶ The effect is more pronounced when the physician has more incentives

▶ For the heterogeneous effects of other physicians' characteristics, young and male physicians are more likely to exaggerate the retirement effect on healthcare utilization

Retirement Policy

Retirement policy in China

▶ The current retirement scheme was implemented in 1978

▶ Statuary retirement age:

   √ 60 years old for males; 55 years old for female white-collar worker and 50 years old for female blue-collar worker

   √ Retirement at the SRA applies only to urban sectors and is strictly enforced in the public sector and state-owned companies

▶ Other retirement schemes: in particular circumstances, workers may be eligible to retire early or defer retirement

Health Insurance Scheme

Health insurance scheme in China

▶ Health insurance is organized independently from retirement system

▶ Basic health insurance

✓ **Urban Employee Basic Medical Insurance (UEBMI)** was introduced in 1998 to cover employees in urban sectors. After retirement, retired employees are still covered by the UEBMI but no longer pay any premium contributions

✓ Urban and Rural Residents Basic Medical Insurance (URRBMI) is a residence-based system that provides coverage to everyone else

Healthcare System

Healthcare system in China

▶ Three-tier healthcare system, where patients are free to choose their medical providers

1. Primary care facilitates - preventive care, minimal health care, and rehabilitation services

2. Secondary hospitals - comprehensive health services

3. **Tertiary hospitals** - the most sophisticated care. In addition to providing care, they also undertakes advanced training in clinical specialties

   ✓ **Affiliated physicians** - salaried employees affiliated with hospitals, and their performance pay often depends on the revenues generated in their own hospitals

   ✓ **Visiting physicians** - salary are paid by their original hospital

Data

- ▶ Data - administrative data on outpatient visits in 2015 from one tertiary hospital in a megacity in southeastern China

- ▶ Outpatient records for patients being treated in 2015, including

    - ✓ Treatment information: date of visits, outpatient diagnosis, hospital department, total cost, reimbursed cost, and out-of-pocket amount

    - ✓ Patient information: identifiers, gender, age, health insurance, and patient residence

    - ✓ Physician information: gender, age, department, title, educational attainment, and whether she/he is a visiting physician or affiliated to the hospital

- ▶ Sample - individuals working in urban sectors and covered by UEBMI, males aged 50-70 years old
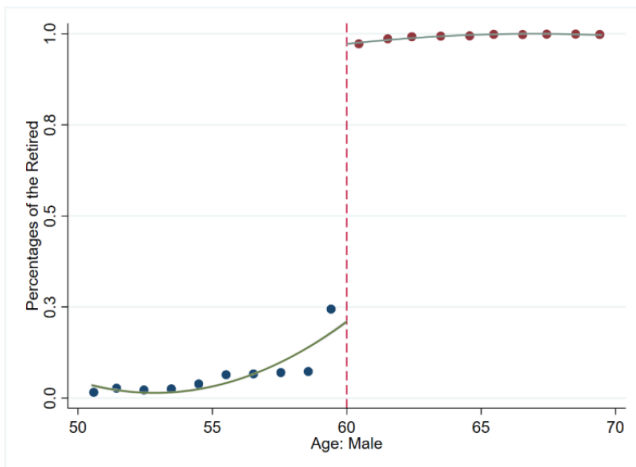
Method: Fuzzy RD

▶ We wish to estimate

$$D_i = \alpha I[\text{ age }_i \geq c_0] + g(\text{ age }_i) + \mathbf{X_i'}\boldsymbol{\theta} + \mu_i$$

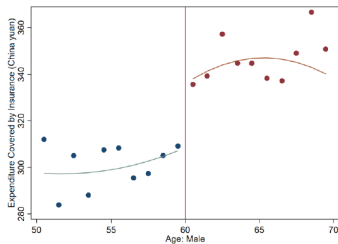$$y_i = \beta I[\text{ age }_i \geq c_0] + f(\text{ age }_i) + \mathbf{X_i'}\lambda + \varepsilon_i$$

✓ y_i is expenditure covered by public insurance per visit or the number of outpatient visits

✓ D_i is an indicator for whether they are covered by the UEBMI for retirees

✓ X_i is a vector of controls such as department fixed effects and patient insurance types. $f(\text{age}_i)$ and $g(\text{age}_i)$ are the functions of age

✓ We instrument D_i using the indicator for being above the statutory retirement age (60 for males)

✓ We conduct a nonparametric estimation to avoid assuming a particular functional form of the assignment variable
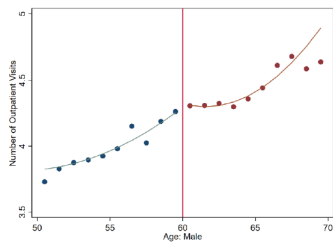
First Stage

Figure 1: First stage: retirement rates across ages

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Data and Method
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Results
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Summary
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Unconditional Effects: Graphs

(a) Male, Expenditure Covered by Insurance
(China yuan)

(b) Male, Number of Outpatient Visits

Figure 2: The effects of retirement on healthcare utilization
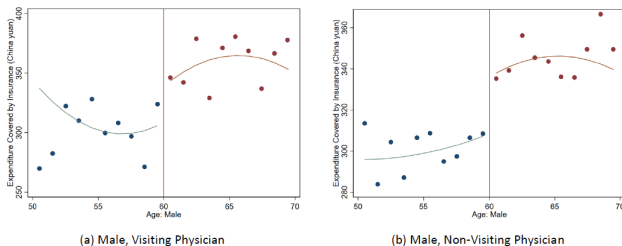
Unconditional Effects: Estimates

Table 3: The effects of retirement on healthcare utilization: Fuzzy RD

Variables	Male Sample	
	Insurance Payments	Outpatient Visits
	(1)	(2)
I(Retirement Age>Statutory Retirement Age)	43.327***	0.24906
	(10.176)	(0.16624)
Effective N	28,748	7,750
Order of Polynomials	2	2
Bandwidth Selection	CER	CER

Notes: Robust standard errors are reported in parentheses. *Significant at 10%; ** at 5%; *** at 1%. Dependent variable *Insurance Payments* means the healthcare expenditure covered by public insurance fund. Effective N is the sample size chosen by the CER-optimal bandwidth which is used to approximate the age polynomials.

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Conditional Effects: by Physicians' Affiliation

(a) Male, Visiting Physician   (b) Male, Non-Visiting Physician
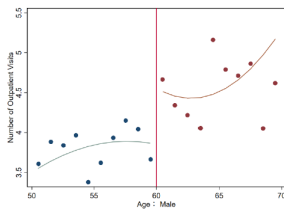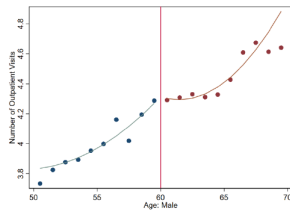
Figure 3: The effects of retirement on expenditure covered by insurance (China yuan)

Conditional Effects: by Physicians' Affiliation

(a) Male, Visiting Physician   (b) Male, Non-Visiting Physician

Figure 4: The effects of retirement on number of outpatient visits

Conditional Effects: by Physicians' Affiliation

Table 4: The effects of retirement on healthcare utilization: Physician Heterogeneity

Variables	Male Sample			
	Insurance Payments		Outpatient Visits	
	Visiting Physician	Non-Visiting Physician	Visiting Physician	Non-Visiting Physician
	(1)	(2)	(3)	(4)
I(Retirement Age>Statutory Retirement Age)	-33.322	43.741***	3.4443*	.22312
	(98.117)	(10.507)	(1.96)	(0.17108)
Effective N	3,452	27,628	988	7,413

Conditional Effects: Other Doctor Characteristics

Table 5: The effects of retirement on healthcare utilization: Physician Heterogeneity

Variables	Male patients			
	Insurance Payments		Outpatient Visits	
	Panel A			
	Senior Physician	Junior Physician	Senior Physician	Junior Physician
I(Retirement Age>SRA)	56.55***	40.815***	0.05458	0.28258
	(25.305)	(11.108)	(0.40247)	(0.18686)
Effective N	4,344	24,404	2,498	6,514
	Panel B			
	Holding a PhD	Not a PhD	Holding a PhD	Not a PhD
I(Retirement Age> SRA)	22.118	57.879***	0.00962	0.4643*
	(16.3)	(13.014)	(0.2416)	(0.26514)
Effective N	11,588	17,060	3,208	9,041
	Panel C			
	Older than 40	Younger than 40	Older than 40	Younger than 40
I(Retirement Age> SRA)	37.761***	60.317***	-0.01096	0.28212
	(10.693)	(25.094)	(0.18527)	(0.38419)
Effective N	21,001	7,677	5,984	4,043
	Panel D			
	Male Physician	Female Physician	Male Physician	Female Physician
I(Retirement Age> SRA)	49.426***	37.094***	0.36435	0.15175
	(14.953)	(13.374)	(0.2418)	(0.19484)
Effective N	15,729	12,982	9,034	10,739
Order of Polynomials	2	2	2	2
Bandwidth Selection	CER	CER	CER	CER

Robustness Checks

Table 5: The effects of retirement on healthcare utilization: Robustness Checks

Variables	Male Sample				Female Sample			
	Dependent Variable							
	Insurance Payments		Outpatient Visits		Insurance Payments		Outpatient Visits	
	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A : First-order Polynomial in Running Variable								
I(Retirement Age>Statutory Retirement Age)	-3.7378	43.741***	1.8283	0.22312	90.855***	61.868***	0.85182	0.71434***
	(62.329)	(10.507)	(1.1784)	(0.17108)	(21.989)	(6.5351)	(0.70419)	(0.00691)
Effective N	2,282	27,628	665	7,413	1,449	32,330	975	10,153
Panel B : MSE Bandwidth								
I(Retirement Age>Statutory Retirement Age)	-45.207	45.084***	1.8557	0.50928	131.86***	63.614***	1.0361	-0.02004
	(71.991)	(12.58)	(1.3955)	(.49626)	(46.582)	(7.6809)	(.82992)	(.35186)
Effective N	4,383	54,760	1,278	21,866	6,034	65,623	1,988	32,531
Panel C : Full Sample (Male: 50-70; Female: 40-60)								
I(Retirement Age>Statutory Retirement Age)	-30.785	44.685***	0.10317	0.13044	61.547***	53.417***	0.33378	0.0727
	(31.816)	(9.4242)	(0.70669)	(0.16276)	(21.442)	(6.5706)	(0.41246)	(0.13074)
Effective N	10,156	238,054	2,876	65,810	14,156	320,601	4,594	99,322

Falsification Tests

Table 6: The effects of retirement on healthcare utilization: Falsification Tests

	Male Sample				Female Sample			
				Dependent Variable				
	Insurance Payments		Outpatient Visits		Insurance Payments		Outpatient Visits	
Variables	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Falsified Statutory Retirement Age (58 for Male and 48 for Female)								
I(Retirement Age>Statutory Retirement Age)	-1001 (1172.5)	1966 (1876)	-5.0533 (38.351)	32.001 (33.236)	200.14 (227.42)	2237 (1857.2)	-2.8481 (4.5211)	0.48511 (17.383)
Effective N	1,148	26,289	629	7,463	3,861	57,975	1,298	18,720
Panel B: No Public Insurance Group								
I(Retirement Age>Statutory Retirement Age)	1.44 (2.758)	-0.9379 (0.61074)	-0.46718 (0.88349)	-0.04427 (0.09494)	-2.1726** (0.98655)	-5.4674*** (0.64533)	0.00061 (0.69115)	0.05022 (0.07151)
Effective N	1,088	12,197	680	11,654	1,640	37,745	1,174	17,921
Panel C: Externally Insured Sample								
I(Retirement Age>Statutory Retirement Age)	-424.54* (240.36)	-36.2 (22.81)	0.97846 (4.2922)	-0.12148 (0.45957)	-164.42 (323.46)	55.208*** (16.1)	3.3245 (2.6307)	0.37105 (0.28483)
Effective N	328	7,390	128	2,688	605	10,284	238	4,404

Summary

- ▶ In China, the increase in healthcare utilization after retirement results from both **patients' healthcare use decisions** and **physicians' incentives** to increase public health insurance payments

- ▶ Retirement has a significantly positive impact on outpatient care expenditures, and the effect is more pronounced when the physician has more incentives

- ▶ We also examine the heterogeneous effects of other physicians' characteristics. For example, young and male physicians are more likely to exaggerate the retirement effect

Descriptive Statistics: Male

Table 1: Descriptive statistics of male sample (age: 50-70)

Variables	(1) N	(2) Mean	(3) SD	(4) Min	(5) Max	(6) P25	(7) P50	(8) P75
				Patient Information				
Patient Age	475,071	59.54	5.600	50.50	69.50	54.50	59.50	64.50
Retired Patient	475,071	0.510	0.500	0	1	0	1	1
Enrolled in Governmental Insurance	475,071	0.001	0.0369	0	1	0	0	0
Enrolled in Public Insurance	475,071	0.604	0.489	0	1	0	1	1
No Insurance	475,071	0.305	0.460	0	1	0	0	1
Covered by Insurance outside the City	475,071	0.090	0.286	0	1	0	0	0
				Healthcare Utilization				
Expenditure by Insurance for Each Visit	392,806	226.4	464.5	0	40,251	0	85.80	305
Total Expenditure for Each Visit	392,805	361.6	608.4	0	40,253	63.30	212	468.3
Annual Number of Outpatient Visits	132,517	3.585	4.485	1	148	1	2	4
				Physician Information				
Physician Age	216,846	40.69	9.899	25	84	33	38	46
Male Physician	474,306	0.572	0.495	0	1	0	1	1
Visiting Physician	475,071	0.038	0.191	0	1	0	0	0
High Physician Level (Professor or Chief Physician)	475,071	0.186	0.389	0	1	0	0	0
Old Physician (above 40)	475,071	0.753	0.432	0	1	1	1	1
Physician with Doctor Degree	475,071	0.412	0.492	0	1	0	0	1

Descriptive Statistics: Female

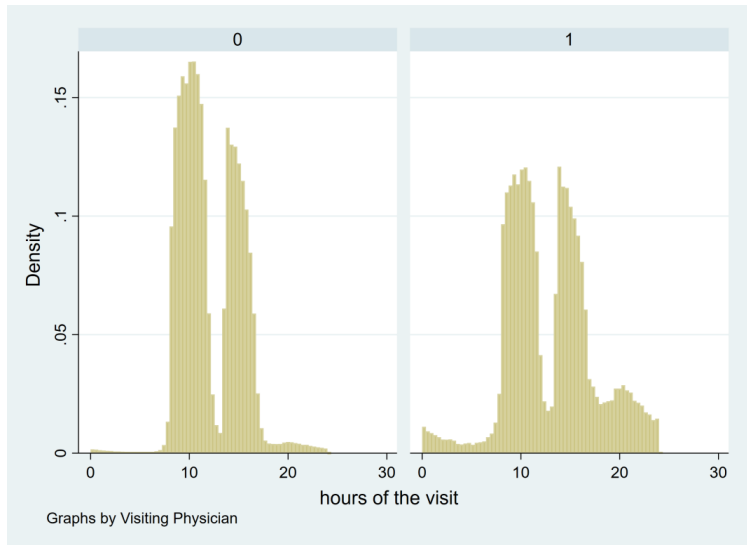**Table 2: Descriptive statistics of female sample (age: 40-60)**

Variables	(1) N	(2) Mean	(3) SD	(4) Min	(5) Max	(6) P25	(7) P50	(8) P75
			Patient Information					
Patient Age	661,433	50.54	5.571	40.50	59.50	45.50	50.50	55.50
Retired Patient	661,433	0.530	0.499	0	1	0	1	1
Enrolled in Governmental Insurance	661,433	0.000 144	0.012	0	1	0	0	0
Enrolled in Public Insurance	661,433	0.591	0.492	0	1	0	1	1
No Insurance	661,433	0.320	0.466	0	1	0	0	1
Covered by Insurance outside the City	661,433	0.089	0.285	0	1	0	0	0
			Healthcare Utilization					
Expenditure by Insurance for Each Visit	548,709	173.8	347.9	0	35,209	0	62.18	230.3
Total Expenditure for Each Visit	548,709	281.2	471.8	0	38,352	48.64	160.7	363.2
Annual Number of Outpatient Visits	203,357	3.252	4.113	1	262	1	2	4
			Physician Information					
Physician Age	302,292	40.24	9.825	25	84	33	38	45
Male Physician	660,218	0.538	0.499	0	1	0	1	1
Visiting Physician	661,433	0.038	0.192	0	1	0	0	0
High Physician Level (Professor or Chief Physician)	661,433	0.173	0.378	0	1	0	0	0
Old Physician (above 40)	661,433	0.739	0.439	0	1	0	1	1
Physician with Doctor Degree	661,433	0.423	0.494	0	1	0	0	1

Table A1: Descriptive statistics of non-visiting physicians and visiting physicians

Variable	Non-visiting physicians			Visiting physicians		
	Obs.	Mean	Std. dev.	Obs.	Mean	Std. dev.
Time of working	2,346,023	12.12	2.999	89,818	12.96	4.430
Female patient incidence	3,131,131	0.55	0.497	119,574	0.56	0.497
Retired patient incidence	3,131,131	0.26	0.436	119,574	0.31	0.464
Age of patients	3,127,605	45.88	19.456	119,515	49.24	19.599
Max. visits	3,131,131	8.36	11.068	119,574	7.78	9.468

Descriptive Statistics: by physician affiliation

Graphs by Visiting Physician

Descriptive Statistics: by department

Table A2: Descriptive statistics of patient visits in non-emergency and emergency department

Variable	Non-emergency department			Emergency department		
	Obs.	Mean	Std. dev.	Obs.	Mean	Std. dev.
Visiting hour	2,339,417	12.05	2.867	98,370	14.46	5,721
Visiting physician incidence	3,123,868	0.03	0.165	126,839	0.26	0.437

Descriptive Statistics: by department
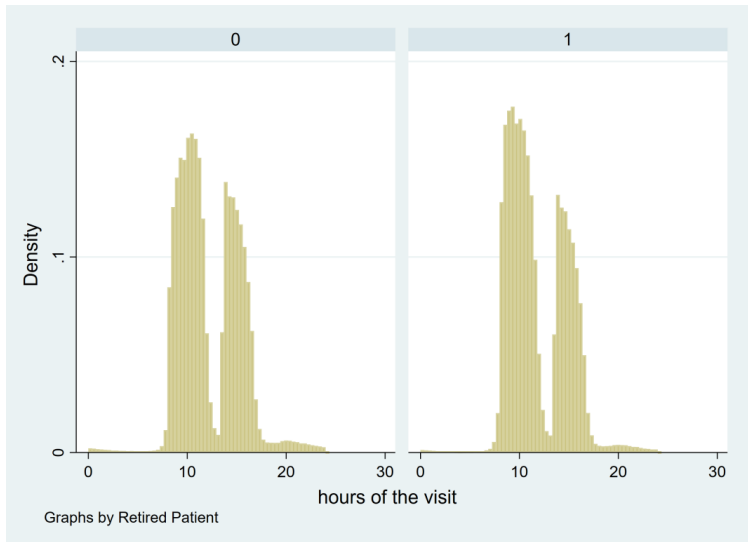
Graphs by Retired Patient

Descriptive Statistics: by patient visiting day and retirement status

Graphs by Retired Patient
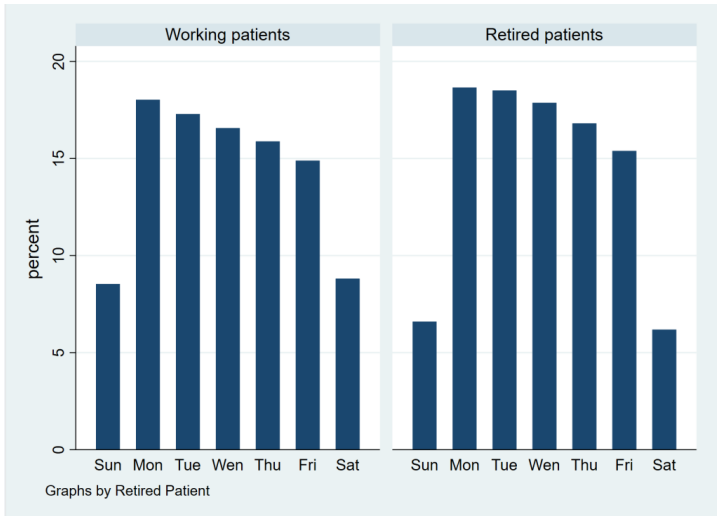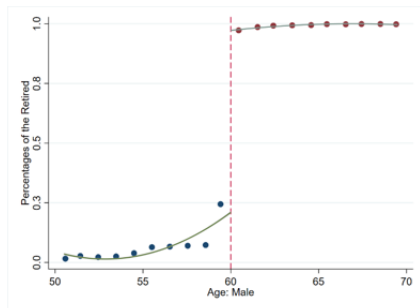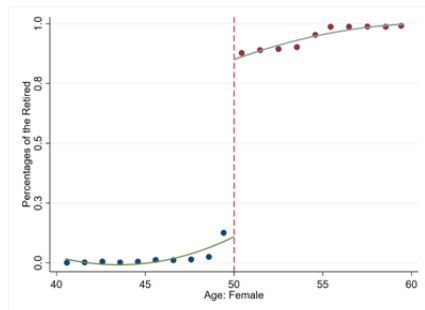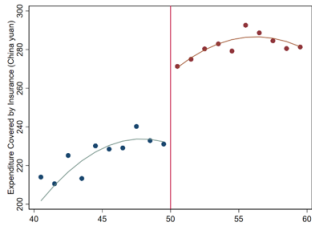
First Stage

(a) Male   (b) Female

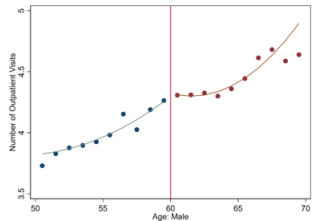**Figure 1: First stage: retirement rates across ages**
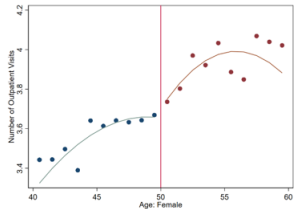
Unconditional Effects: Graphs
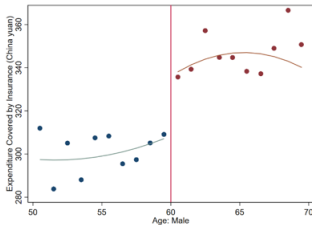
(a) Male, Expenditure Covered by Insurance
(China yuan)

(b) Female, Expenditure Covered by Insurance
(China yuan)

(c) Male, Number of Outpatient Visits

(d) Female, Number of Outpatient Visits

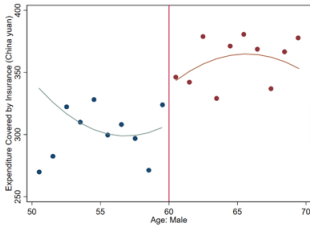Figure 2: The effects of retirement on healthcare utilization

Unconditional Effects: Estimates

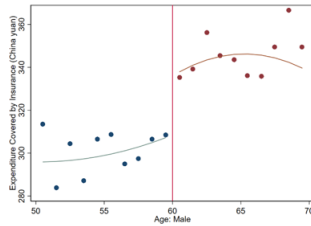**Table 3: The effects of retirement on healthcare utilization: Fuzzy RD**

Variables	Male Sample		Female Sample	
	Dependent Variable			
	Insurance Payments	Outpatient Visits	Insurance Payments	Outpatient Visits
	(1)	(2)	(3)	(4)
I(Retirement Age>Statutory Retirement Age)	43.327***	0.24906	63.37***	0.09787
	(10.176)	(0.16624)	(6.3121)	(0.12751)
Effective N	28,748	7,750	32,779	10,639
Order of Polynomials	2	2	2	2
Bandwidth Selection	CER	CER	CER	CER

Notes: Robust standard errors are reported in parentheses. *Significant at 10%; ** at 5%; *** at 1%. Dependent variable *Insurance Payments* means the healthcare expenditure covered by public insurance fund. Effective N is the sample size chosen by the CER-optimal bandwidth which is used to approximate the age polynomials.

(a) Male, Visiting Physician

(b) Male, Non-Visiting Physician

(c) Female, Visiting Physician

(d) Female, Non-Visiting Physician

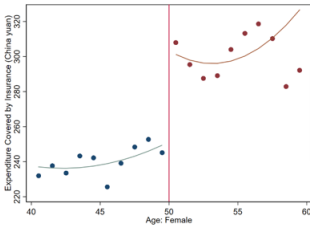Figure 3: The effects of retirement on expenditure covered by insurance (China yuan)

Conditional Effects: by Physicians' Affiliation

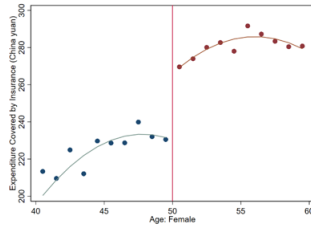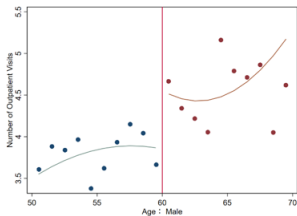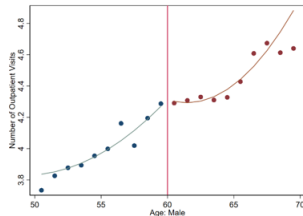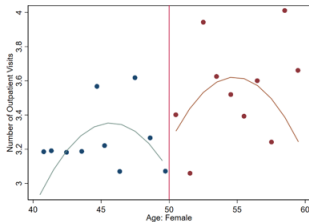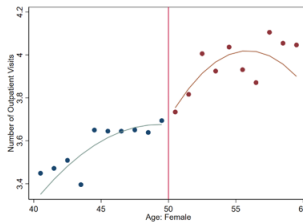

(a) Male, Visiting Physician

(b) Male, Non-Visiting Physician

(c) Female, Visiting Physician

(d) Female, Non-Visiting Physician

Figure 4: The effects of retirement on number of outpatient visits

Conditional Effects: by Physicians' Affiliation

Table 4: The effects of retirement on healthcare utilization: Physician Heterogeneity

Variables	Male Sample				Female Sample			
	Dependent Variable							
	Insurance Payments		Outpatient Visits		Insurance Payments		Outpatient Visits	
	Panel A							
	Visiting Physician	Non-Visiting Physician	Visiting Physician	Non-Visiting Physician	Visiting Physician	Non-Visiting Physician	Visiting Physician	Non-Visiting Physician
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I(Retirement Age>Statutory Retirement Age)	-33.322	43.741***	3.4443*	.22312	97.049***	61.868***	0.5317	0.07825
	(98.117)	(10.507)	(1.96)	(0.17108)	(25.564)	(6.5351)	(0.47291)	(0.1324)
Effective N	3,452	27,628	988	7,413	3,009	32,330	975	10,153
	Panel B							
	Senior Physician	Junior Physician	Senior Physician	Junior Physician	Senior Physician	Junior Physician	Senior Physician	Junior Physician
I(Retirement Age>Statutory Retirement Age)	56.55***	40.815***	0.05458	0.28258	57.528***	64.735***	-0.03086	0.12952
	(25.305)	(11.108)	(0.40247)	(0.18686)	(25.461)	(6.2732)	(0.44089)	(0.13352)
Effective N	4,344	24,404	2,498	6,514	10,103	28,688	3,239	9,023

Conditional Effects: Other Doctor Characteristics

	High Edu Doctor	Low Edu Doctor	High Edu Doctor	Low Edu Doctor	High Edu Doctor	Low Edu Doctor	High Edu Doctor	Low Edu Doctor
				Panel C				
I(Retirement Age>Statutory Retirement Age)	22.118 (16.3)	57.879*** (13.014)	0.00962 (0.2416)	0.4643* (0.26514)	69.898*** (9.0224)	58.435*** (8.6784)	-0.17911 (0.2327)	0.30438 (0.19006)
Effective N	11,588	17,060	3,208	9,041	13,630	20,149	9,451	12,160
				Panel D				
	Old Doctor	Young Doctor	Old Doctor	Young Doctor	Old Doctor	Young Doctor	Old Doctor	Young Doctor
I(Retirement Age>Statutory Retirement Age)	37.761*** (10.693)	60.317*** (25.094)	-0.01096 (0.18527)	0.28212 (0.38419)	59.379*** (7.5388)	73.892*** (11.314)	0.10113 (0.1727)	0.04619 (0.1626)
Effective N	21,001	7,677	5,984	4,043	24,529	9,250	15,539	8,072
				Panel E				
	Male Physician	Female Physician	Male Physician	Female Physician	Male Physician	Female Physician	Male Physician	Female Physician
I(Retirement Age>Statutory Retirement Age)	49.426*** (14.953)	37.094*** (13.374)	0.36435 (0.2418)	0.15175 (0.19484)	81.338*** (9.6373)	42.878*** (8.0098)	0.0743 (0.18807)	0.10037 (0.23646)
Effective N	15,729	12,982	9,034	10,739	17,353	16,357	12,069	9,476
Order of Polynomials	2	2	2	2	2	2	2	2
Bandwidth Selection	CER	CER	CER	CER	CER	CER	CER	CER

Robustness Checks

Table 5: The effects of retirement on healthcare utilization: Robustness Checks

Variables	Male Sample				Female Sample			
	Dependent Variable							
	Insurance Payments		Outpatient Visits		Insurance Payments		Outpatient Visits	
	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A : First-order Polynomial in Running Variable								
I(Retirement Age>Statutory Retirement Age)	-3.7378	43.741***	1.8283	0.22312	90.855***	61.868***	0.85182	0.71434***
	(62.329)	(10.507)	(1.1784)	(0.17108)	(21.989)	(6.5351)	(0 .70419)	(0 .00691)
Effective N	2,282	27,628	665	7,413	1,449	32,330	975	10,153
Panel B : MSE Bandwidth								
I(Retirement Age>Statutory Retirement Age)	-45.207	45.084***	1.8557	0.50928	131.86***	63.614***	1.0361	-0.02004
	(71.991)	(12.58)	(1.3955)	(.49626)	(46.582)	(7.6809)	(.82992)	(.35186)
Effective N	4,383	54,760	1,278	21,866	6,034	65,623	1,988	32,531
Panel C : Full Sample (Male: 50-70; Female: 40-60)								
I(Retirement Age>Statutory Retirement Age)	-30.785	44.685***	0.10317	0.13044	61.547***	53.417***	0.33378	0.0727
	(31.816)	(9.4242)	(0.70669)	(0.16276)	(21.442)	(6.5706)	(0.41246)	(0.13074)
Effective N	10,156	238,054	2,876	65,810	14,156	320,601	4,594	99,322

Falsification Tests

Table 6: The effects of retirement on healthcare utilization: Falsification Tests

	Male Sample				Female Sample			
	Dependent Variable							
	Insurance Payments		Outpatient Visits		Insurance Payments		Outpatient Visits	
Variables	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor	Visiting Doctor	Non-Visiting Doctor
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Falsified Statutory Retirement Age (58 for Male and 48 for Female)								
I(Retirement Age>Statutory Retirement Age)	-1001 (1172.5)	1966 (1876)	-5.0533 (38.351)	32.001 (33.236)	200.14 (227.42)	2237 (1857.2)	-2.8481 (4.5211)	0.48511 (17.383)
Effective N	1,148	26,289	629	7,463	3,861	57,975	1,298	18,720
Panel B: No Public Insurance Group								
I(Retirement Age>Statutory Retirement Age)	1.44 (2.758)	-0.9379 (0.61074)	-0.46718 (0.88349)	-0.04427 (0.09494)	-2.1726** (0.98655)	-5.4674*** (0.64533)	0.00061 (0.69115)	0.05022 (0.07151)
Effective N	1,088	12,197	680	11,654	1,640	37,745	1,174	17,921
Panel C: Externally Insured Sample								
I(Retirement Age>Statutory Retirement Age)	-424.54* (240.36)	-36.2 (22.81)	0.97846 (4.2922)	-0.12148 (0.45957)	-164.42 (323.46)	55.208*** (16.1)	3.3245 (2.6307)	0.37105 (0.28483)
Effective N	328	7,390	128	2,688	605	10,284	238	4,404

Thanks!