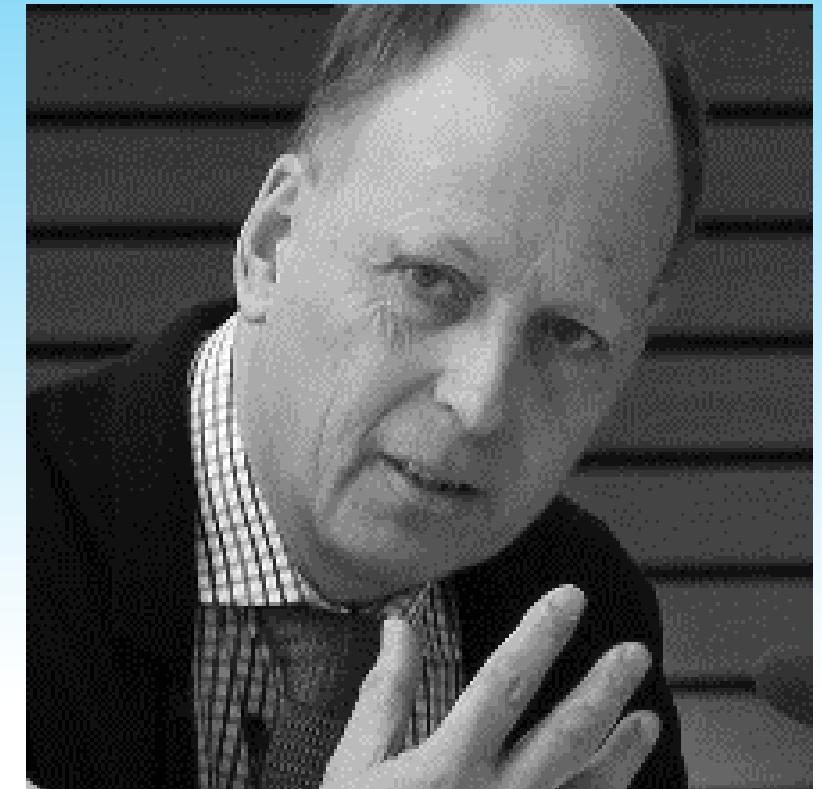


Adam Wagstaff Memorial Lecture



2022
6TH ANNUAL
HEALTH FINANCING
FORUM

June 16th / 8:00 -9:30 EST

Adam Wagstaff Memorial Lecture



Juan Pablo Uribe

Global Director of the Health,
Nutrition and Population
Global Practice



Justice Nonvignon

Head, Health Economics
Programme, Africa Centres for
Disease Control and
Prevention, Ghana



Owen O'Donnell

Professor, Erasmus University
Rotterdam



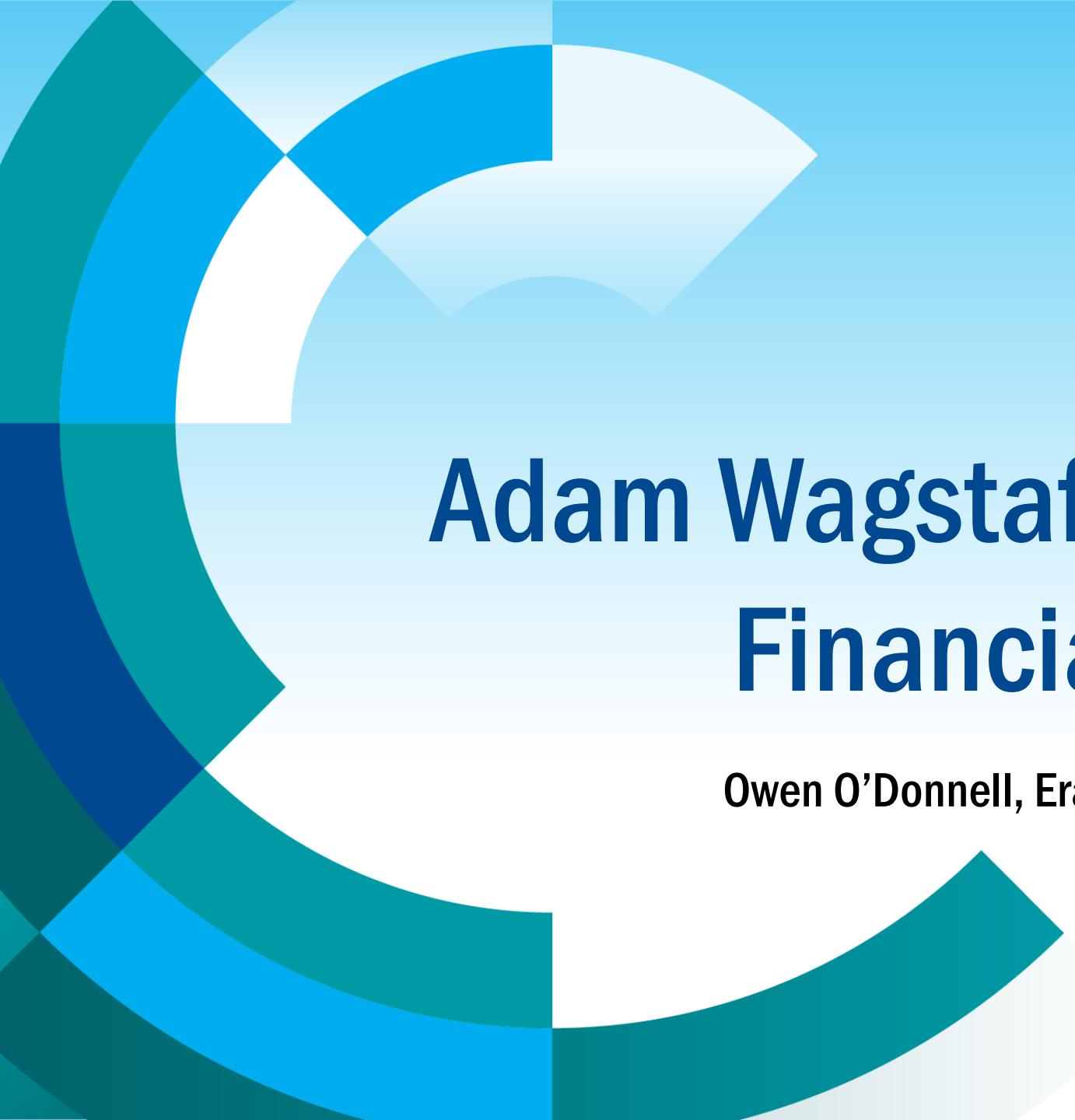
**Marcos
Vera-Hernandez**

Professor of Economics,
University College London



Radhika Jain

Lecturer in Health
Economics, University
College London



Adam Wagstaff Memorial Lecture

Financial Protection

Owen O'Donnell, Erasmus University Rotterdam

Global monitoring report on financial protection in health 2021



World Health
Organization



THE WORLD BANK
IBRD - IDA | WORLD BANK GROUP

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Figure 2. Global financial hardship due to out-of-pocket health spending, 2017

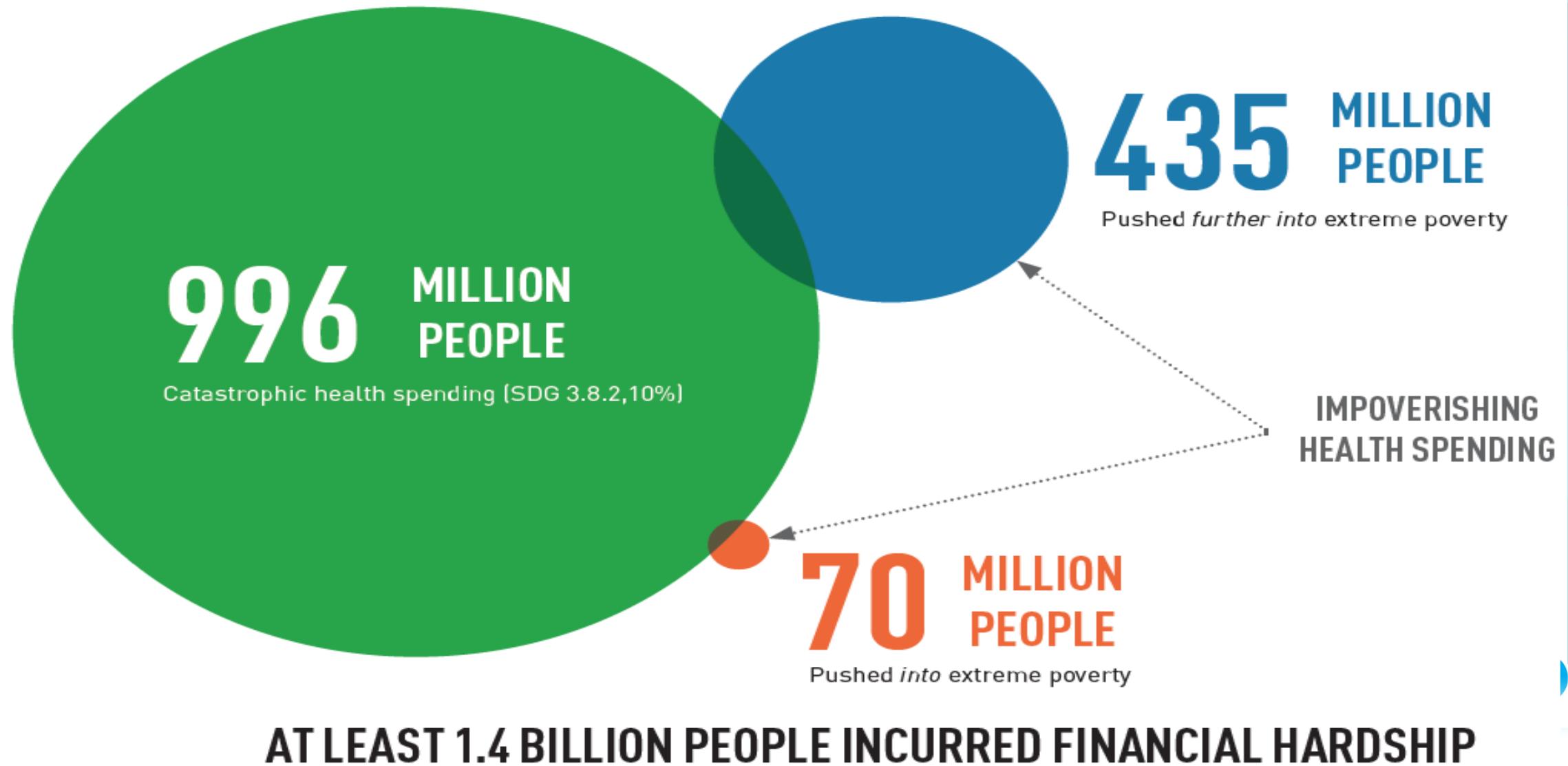
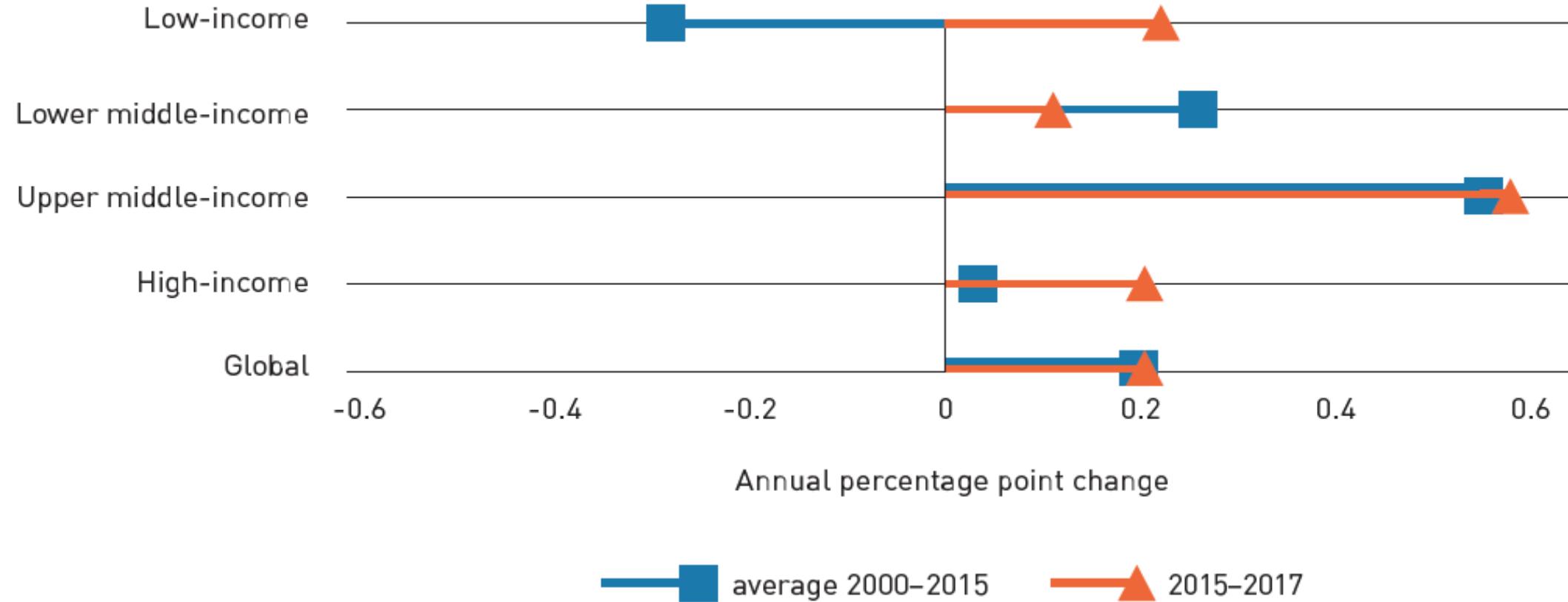
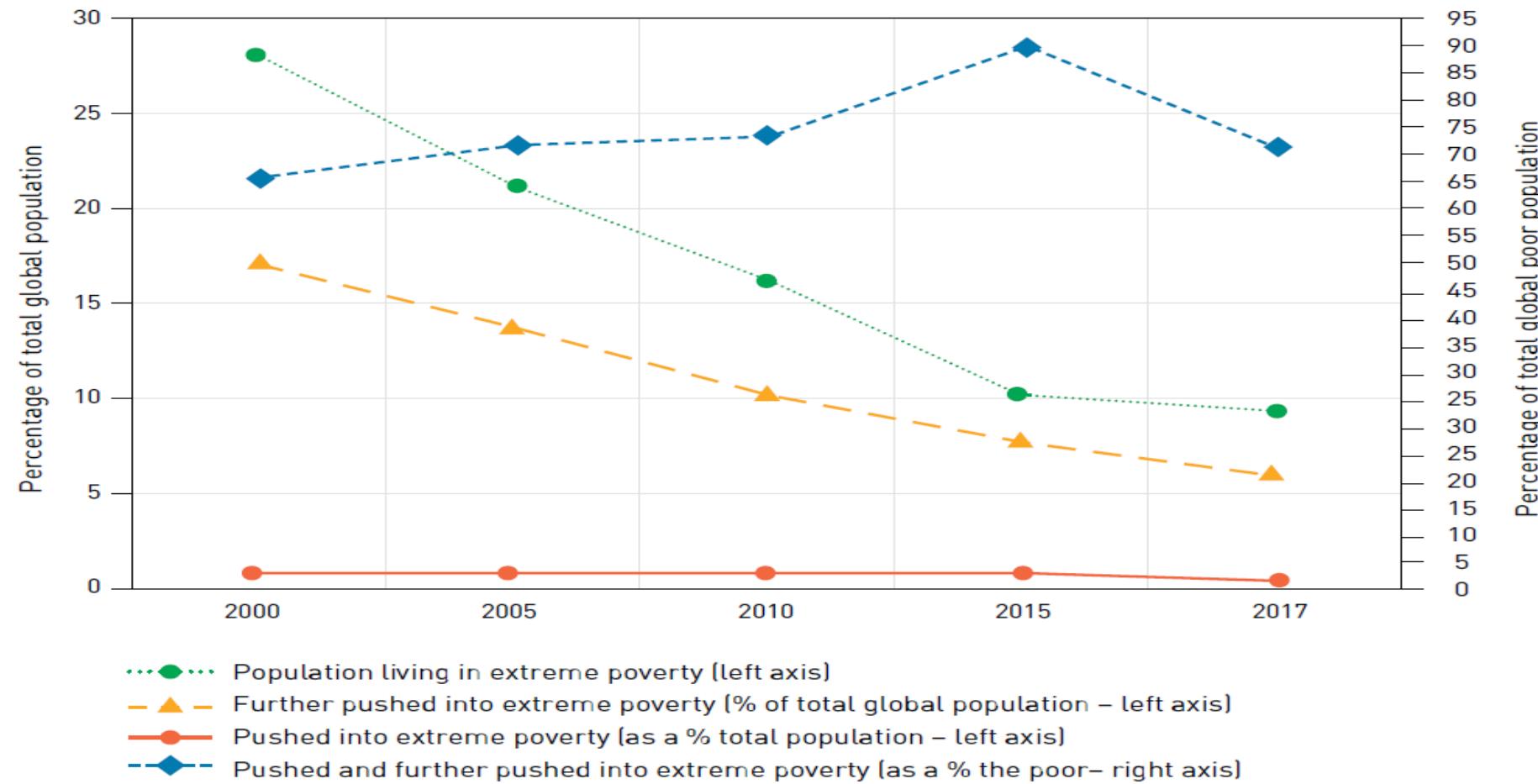


Figure 9. Percentage point change in the incidence of catastrophic health spending as tracked by SDG indicator 3.8.2 at the 10% threshold, by country income groups



Source: Authors calculations using the data from the Global database on financial protection assembled by WHO and the World Bank, 2021 update (27,28).

Figure 11. Trends in the global rates of extreme poverty and global rates of the population pushed and further pushed into extreme poverty (living with less than PPP\$1.90 per day) because of OOP health spending



Sources: Data from the Global database on financial protection assembled by WHO and the World Bank, 2021 update (27,28).

Huge gaps in financial protection

Financial protection is worsening by CATA
improving by IMPOV

Financial protection ≠ CATA & IMPOV

Proxies

Feasible with limited data

Incomplete picture of FP

What do CATA & IMPOV miss?

Financial barrier to healthcare

What do CATA & IMPOV miss?

Financial barrier to healthcare

Coping

CATA assumes no coping

Higher OOP budget share

→ sacrifice consumption only if budget fixed

Households partially smooth consumption over health shocks

Effects of health shocks in Thailand (post UC)

	Health shock	Extreme health shock
CATA (OOP>10% total exp.)	2.1 pp**	9.1 pp**

Effects of health shocks in Thailand (post UC)

	Health shock	Extreme health shock
CATA (OOP>10% total exp.)	2.1 pp**	9.1 pp**
Saving	-10.9%	-49.4%***
Borrowing	33.4%***	92.3%**
Transfers	31.1%**	35.4%

Effects of health shocks in Thailand (post UC)

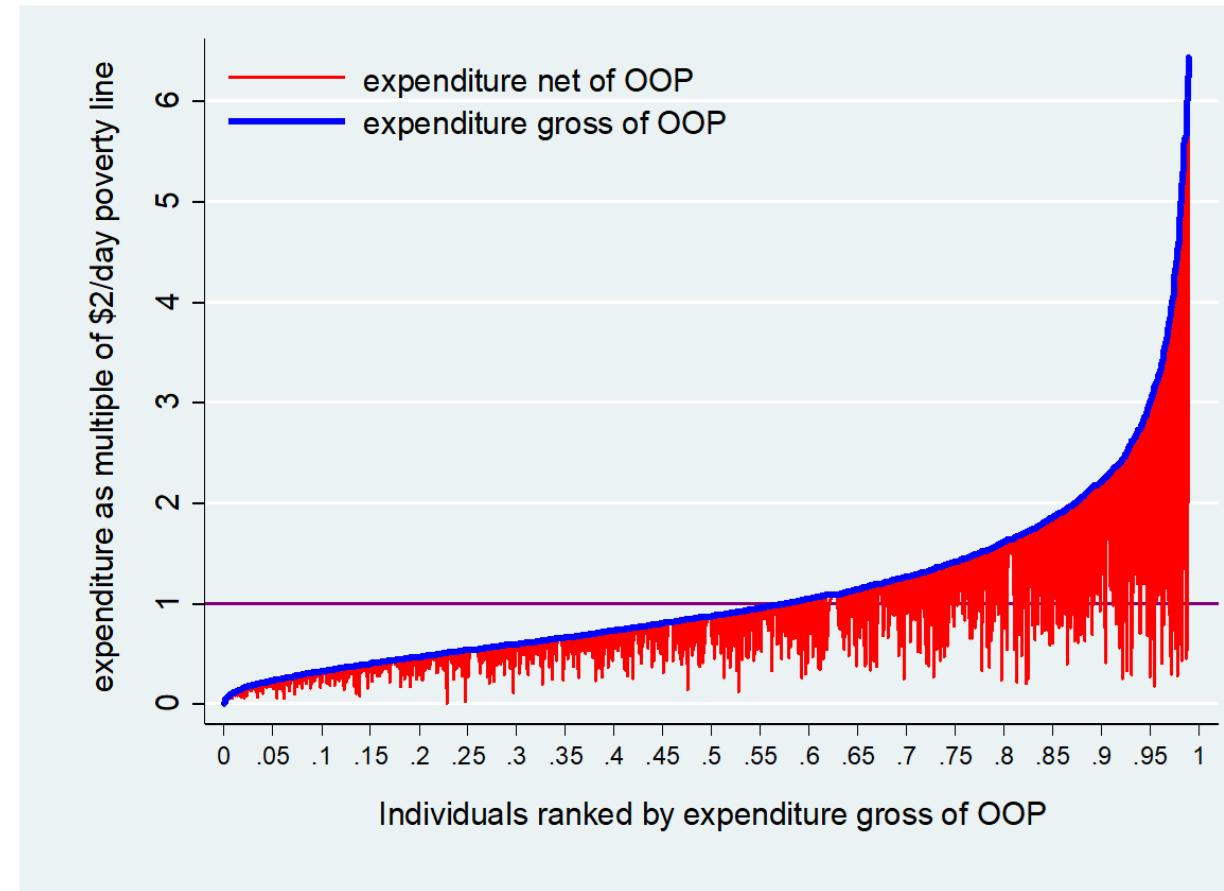
	Health shock	Extreme health shock
CATA (OOP>10% total exp.)	2.1 pp**	9.1 pp**
Saving	-10.9%	-49.4%**
Borrowing	33.4%***	92.3%**
Transfers	31.1%**	35.4%
Consumption (non-medical)	2.0%	-2.5%

IMPOV assumes no coping

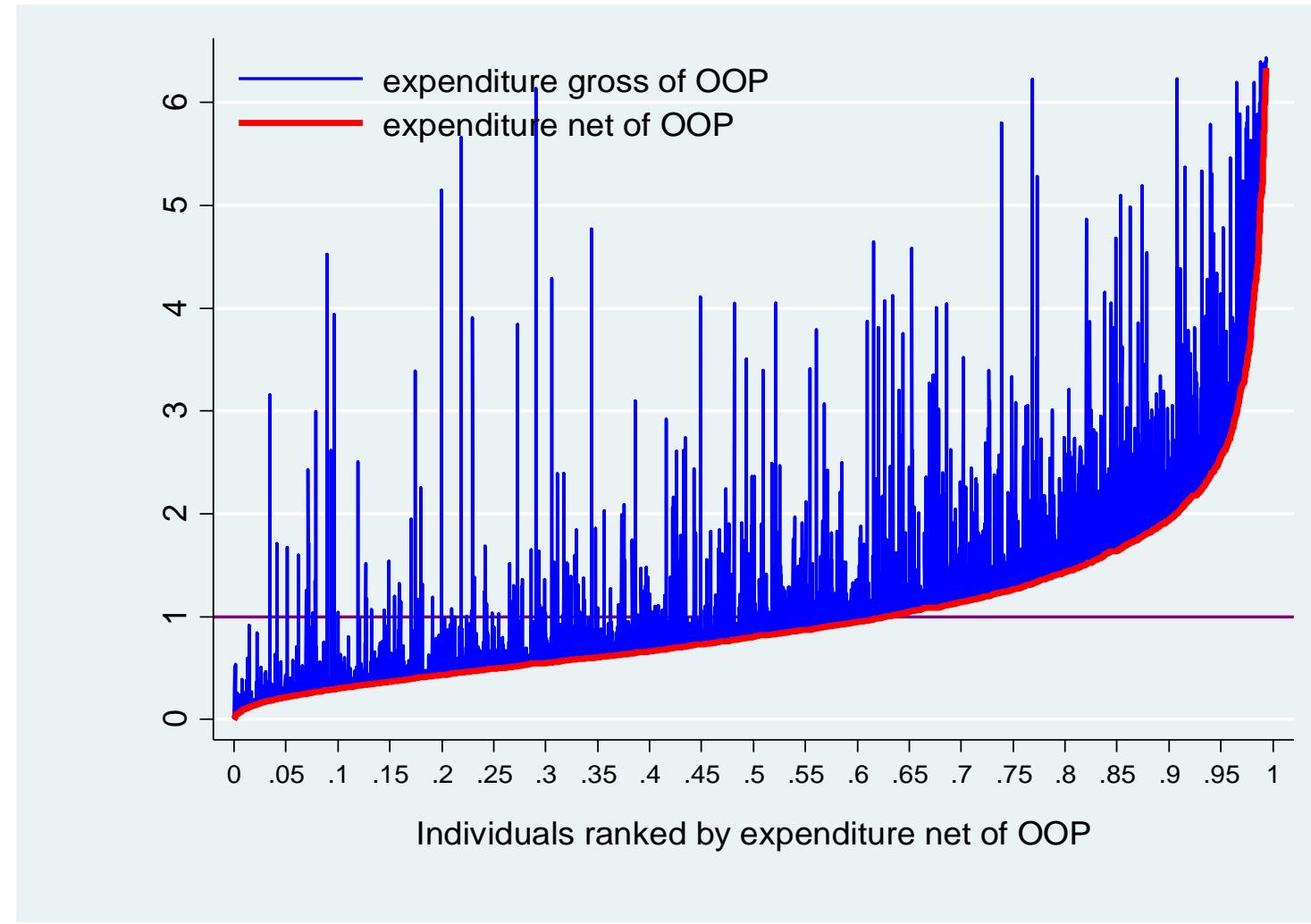
$\text{IMPOV} = \text{poverty}(y-\text{OOP}, PL) - \text{poverty}(y, PL)$

IMPOV assumes no coping

$\text{IMPOV} = \text{poverty}(y-\text{OOP}, \text{PL}) - \text{poverty}(y, \text{PL})$



Another view ...



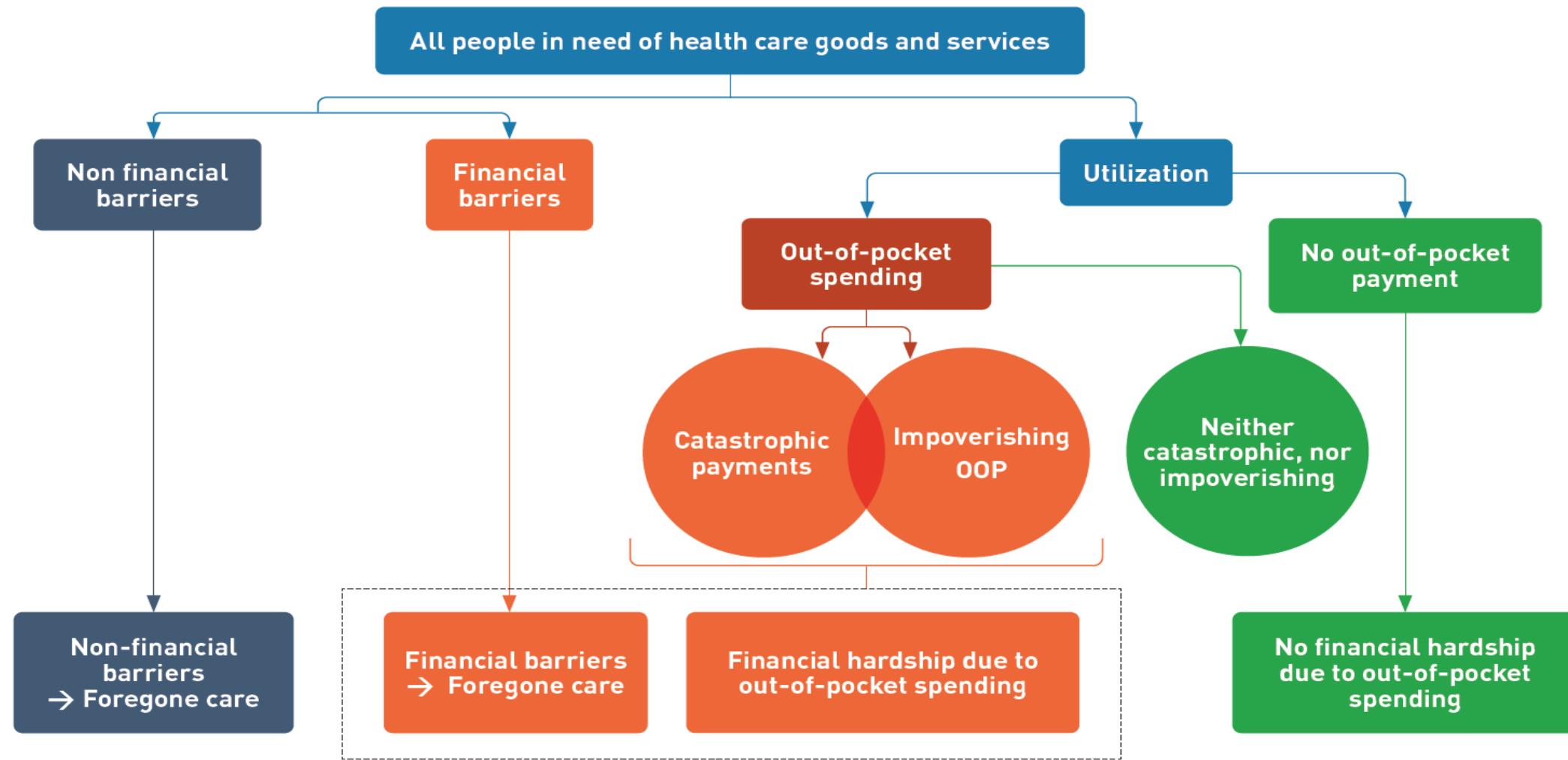
What do CATA & IMPOV miss?

Financial barrier to healthcare

Coping

Risk

Figure 1. Financial hardship due to out-of-pocket health spending



Lack of financial protection

Protection



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No protection



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Protection against *risk* of healthcare cost is valued

Protected?



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Not protected



Beyond financial hardship to financial protection

Risk premium

Catastrophic medical expenditure risk

Thailand Universal Coverage reform

Pre-reform: CATA = 4.2%

UC → welfare gain from risk reduction > 84% cost

CATA mainly due to spending on medicines

Partly bias due to pro rata scaling of monthly spending

Even if bias small,

↓ OOP on medicines need not generate greatest ↑ welfare

Financial protection puzzle

Huge gaps in financial protection

Insurance take up low, even when highly subsidised

Explanations of financial protection puzzle

Misperception of medical expenditure risk

Protected?



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Deluded!



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Explanations of financial protection puzzle

Misperception of medical expenditure risk

Insurance perceived as risky

Insurance benefits underestimated by inexperienced

Hassle costs of enrollment

Upfront premium looms large over future benefits

Evidence from the Philippines

Misperception of medical expenditure risk ✗

Insurance perceived as risky ✓

Insurance benefits underestimated by inexperienced ✓

Hassle costs of enrollment ✓

Upfront premium looms large over future benefits ✓ ✓

What do CATA & IMPOV miss?

Financial barrier to healthcare

Coping

Risk

Sensitivity to health financing policy

Table 2. Marginal effects of macroeconomic characteristics on catastrophic and impoverishing health spending

	Incidence of catastrophic health spending as tracked by SDG 3.8.2 indicators	10% threshold	
GDP per capita (constant 2017 US\$, in thousands)	0.250*** <i>(0.00)</i>		
Current health spending per capita as a % of GDP per capita	0.602*** <i>(0.00)</i>		
Public spending on health per capita as a % of current health spending per capita	-0.094*** <i>(0.00)</i>		
Poverty headcount rate at the PPP\$1.90 per day poverty line			
Poverty headcount rate at the relative poverty line			
No. observations	734		
No. countries	144		

Table 2. Marginal effects of macroeconomic characteristics on catastrophic and impoverishing health spending

	Incidence of catastrophic health spending as tracked by SDG 3.8.2 indicators	Proportion of the population pushed into poverty		Proportion of the population further pushed into poverty
	10% threshold	At the PPP\$190 per day poverty line	At the PPP\$190 per day poverty line	At the PPP\$190 per day poverty line
GDP per capita (constant 2017 US\$, in thousands)	0.250*** (0.00)	0.014 (0.80)		0.011 (0.98)
Current health spending per capita as a % of GDP per capita	0.602*** (0.00)	0.002 (0.92)		0.369** (0.02)
Public spending on health per capita as a % of current health spending per capita	-0.094*** (0.00)	-0.017*** (0.00)		-0.023 (0.40)
Poverty headcount rate at the PPP\$1.90 per day poverty line		0.038*** (0.00)		0.619*** (0.00)
Poverty headcount rate at the relative poverty line				
No. observations	734	506		488
No. countries	144	111		110

Making FP metrics more sensitive to health financing

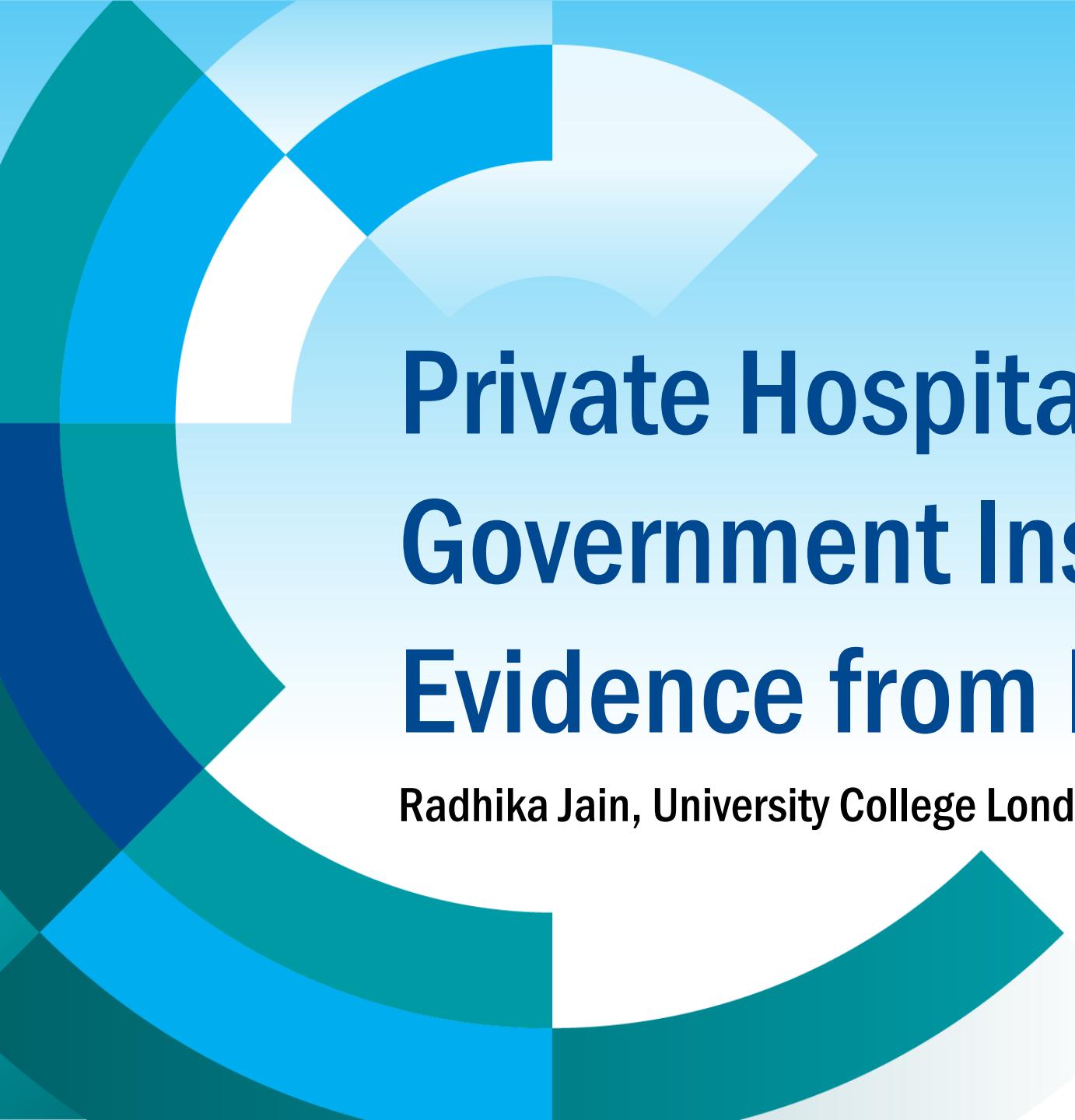
OOP share of total health expenditure

Inequality in distribution of OOP across households

Share of health payments by poor and near-poor households

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Private Hospital Behavior Under Government Insurance: Evidence from India

Radhika Jain, University College London

Shift to private healthcare delivery through public insurance

- Historically, LMIC policy focused on direct public provision of healthcare
- Over last decade, rapid expansion of public health insurance to meet UHC goals
 - Target low-income households
 - Free care at public and private hospitals
 - Bundled prospective payments (hospitals paid fixed prices)
- Major shift from direct public provision to outsourcing to private hospitals
 - Market mechanisms → access, quality, efficiency
 - Profit motivated → over-provision, cream-skimming, overcharging...
- Two key policy levers to align provider incentives: prices, oversight
 - Limited data, fragmented private sector, weak oversight → price-setting, enforcement difficult
- **How do private hospitals behave within government insurance?**

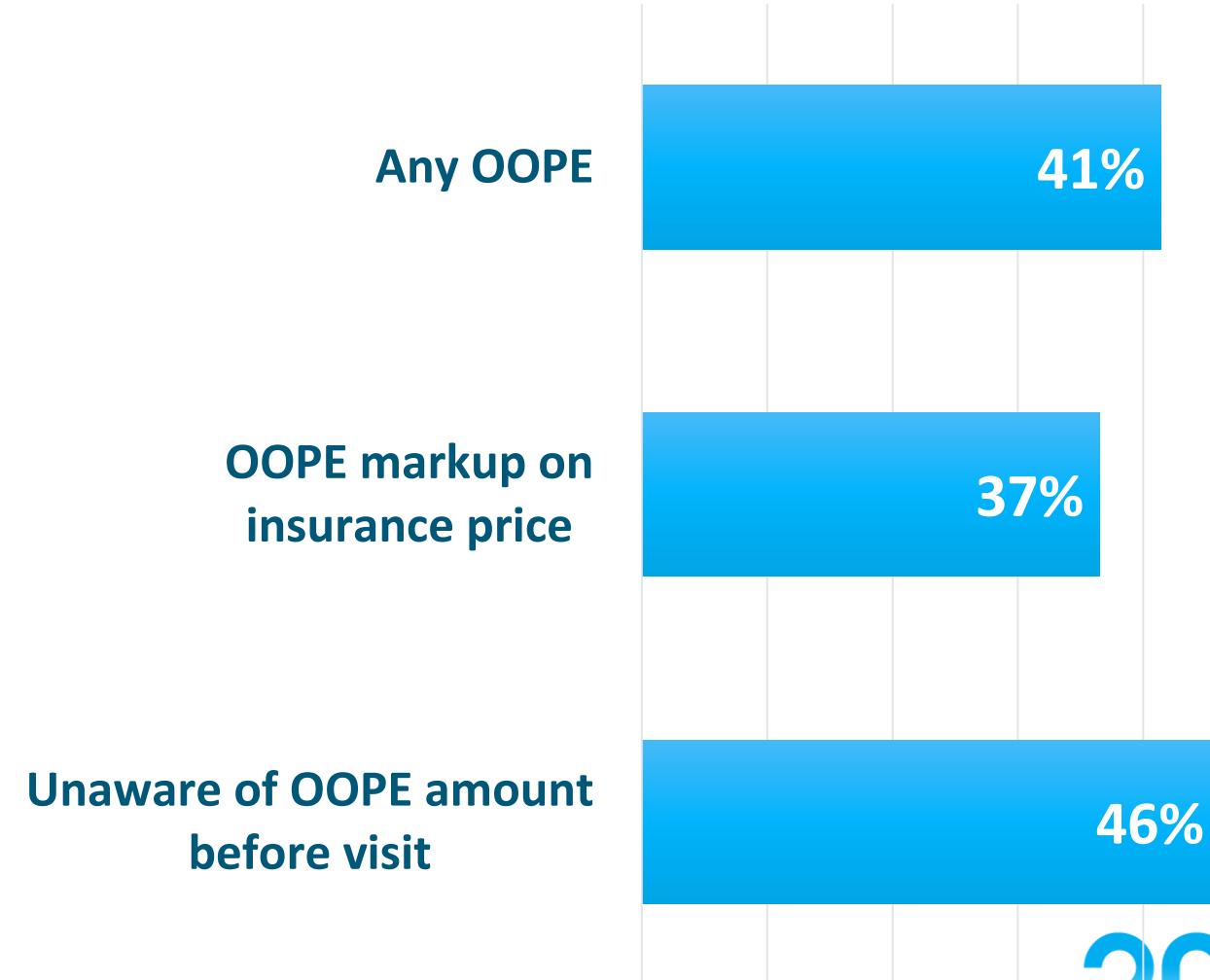
How do private hospitals respond to prices within insurance?

- Rajasthan BSBY health insurance program
 - 46M poor individuals
 - Free coverage of 1400 services
 - Public + empaneled private hospitals (800/1200 private)
 - Hospitals reimbursed at fixed prices per service, unadjusted for costs, health risk
- Policy reform of prices across services → study private hospital responses
 - Data: 1.6M claims + 20K patient surveys (scale + depth)
 - Outcomes: coding manipulation, service volumes, OOPE



Patients continue to face financial risk

Out-of-pocket charges by hospitals are widespread, substantial, unanticipated



Effects of increasing health service prices

- Large, immediate changes in coding manipulation (overbilling)
 - Increases hospital revenue at government expense
- Significant increase in health service volumes
 - Prices affect provider treatment decisions, patient welfare
- Significant decrease in patient OOPE
 - OOPE is partly compensating for low prices (balance billing)
- BUT hospitals capture 50% increase, no reduction in OOPE where monopoly
 - INR 100 price increase → INR 50 decrease in OOPE (50% captured as profit)
 - Hospitals with monopoly power don't reduce OOPE (double billing)

Unique challenges of contracting the private sector

- Reimbursement rates (prices) are key policy lever
 - Shape government spending, treatment decisions, OOPE
- ...but hard to set correctly, enforce
 - Require detailed data on costs, quality, outcomes
 - High prices → transfer public funds to private hospitals
 - Low prices + poor enforcement → transfer financial risk to patients
 - Low prices + high enforcement → drive hospitals out
- Market structure (competition) shapes effectiveness of outsourcing
 - Hospital monopoly → public subsidies captured, don't benefit patients



Cost-Sharing in Medical Care Can Increase Adult Mortality Risk in Lower- Income Countries

Giancarlo Buitrago

Grant Miller

Marcos Vera-Hernández

Research questions

- Does increasing patient cost-sharing in primary care lead to lead to reduce health care use in the short-term?
- What happens in the longer-term?
 - Does it lead to worse health and even higher mortality?
 - If so, does it lead to higher health care use in the long-term?
 - If so, savings in the short-term might be partially compensated with larger costs in the longer-term

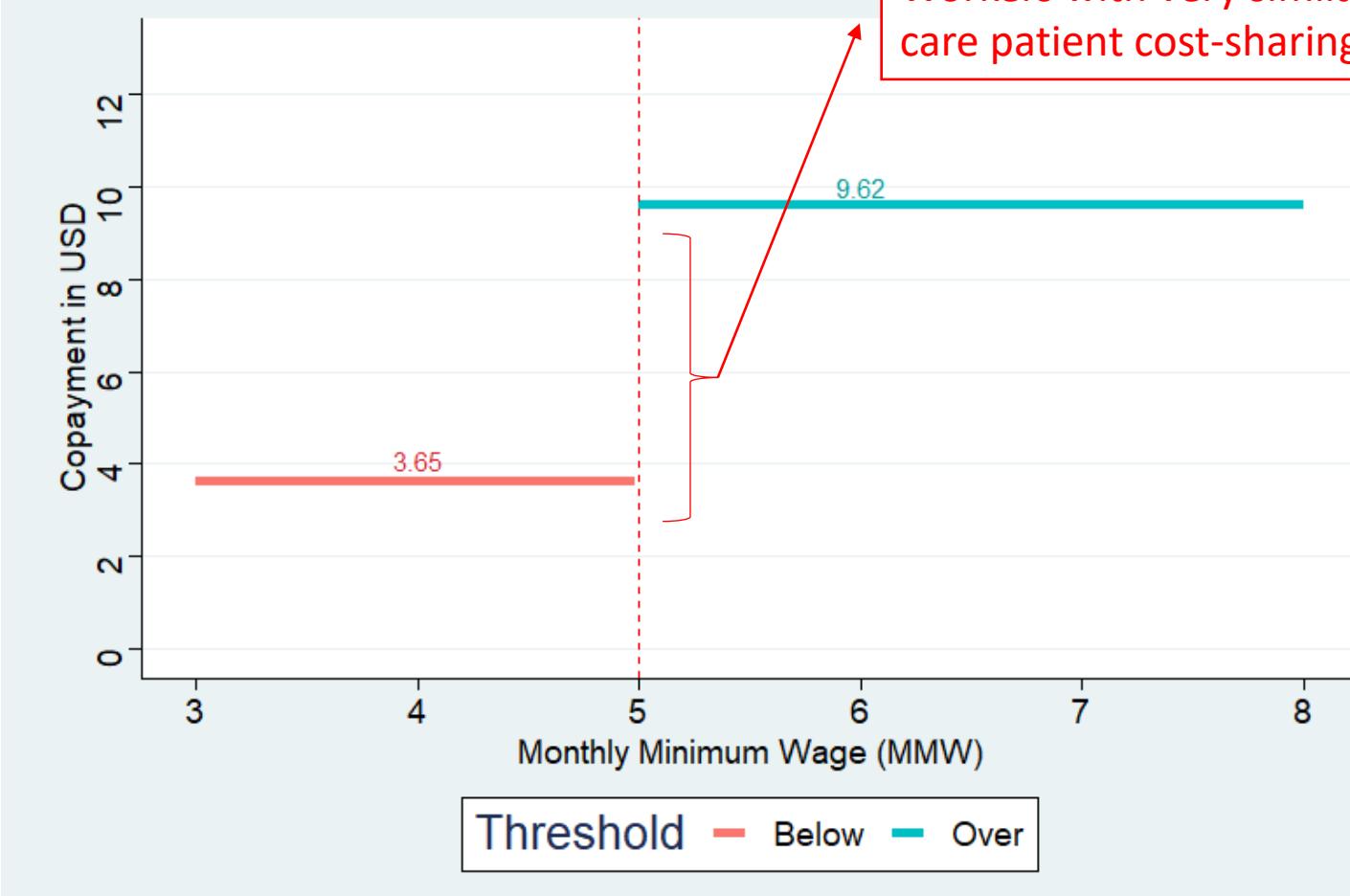
Background

The Colombian Health system and Patient Cost-Sharing

The Colombian Health system

- Social health insurance system offers a benefits package administered by both public and private insurers.
- Two major ‘regimes’ within this system: the ‘Contributory Regime’ (for formal sector workers) and the ‘Subsidized Regime’ (for informal workers who pass a means test)
- This paper is about the ‘Contributory Regime’

Primary care patient cost-sharing



Stark discontinuity in the level of cost sharing at 5 minimum wages

Workers with very similar wages have very different levels of primary care patient cost-sharing

Data

The Colombian Health system and Patient Cost-Sharing

Data

- Administrative health care use data (primary, secondary and tertiary) for all years 2011 to 2019
- All Colombian employees working in the formal sector
 - Exclude individuals who reached the legal retirement age by 2011
 - Number of health care use records: 2.220.546.088
- Linked to payroll data (to obtain the wage)
- Linked to death certificates

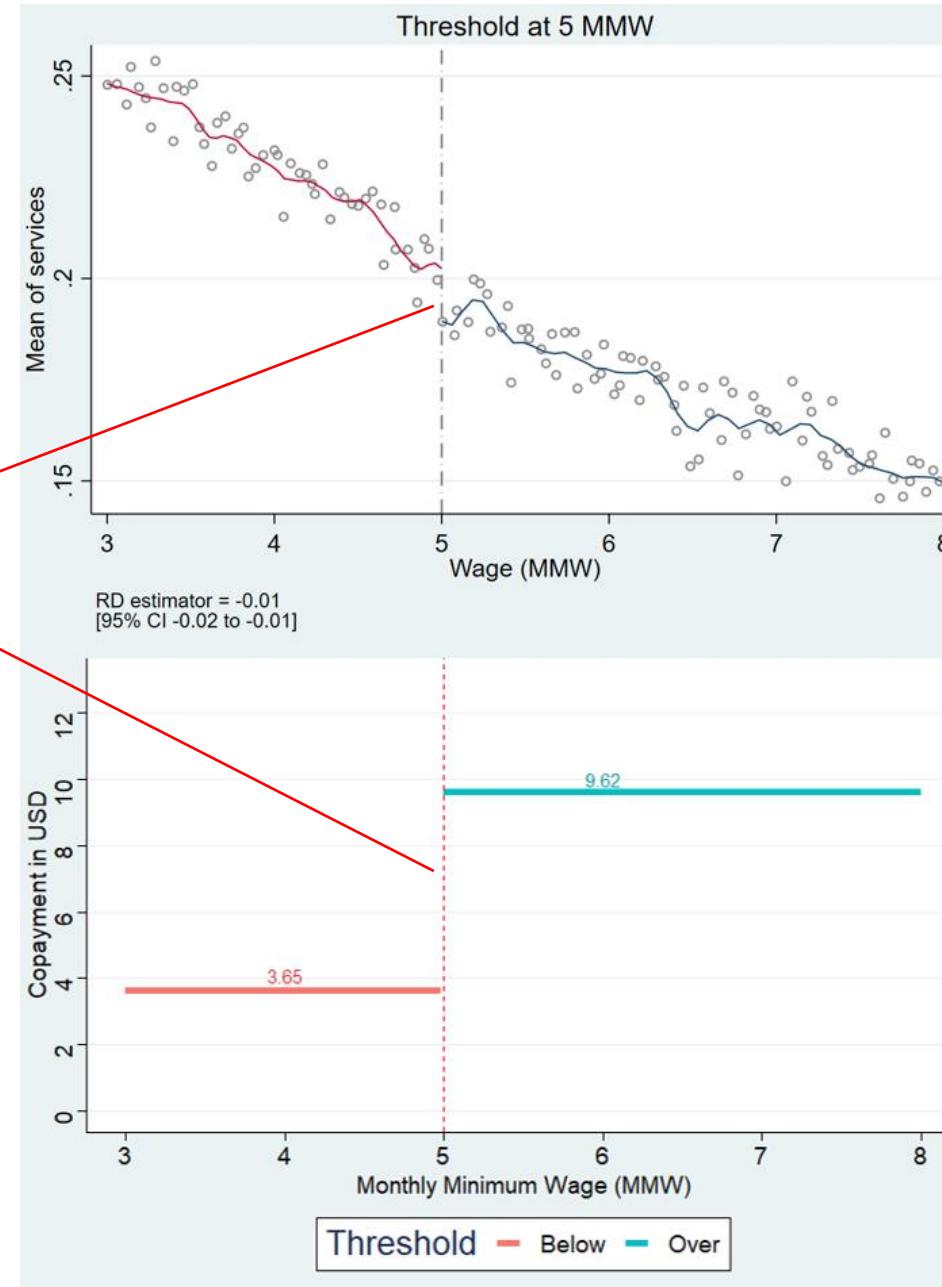


Contemporaneous effects

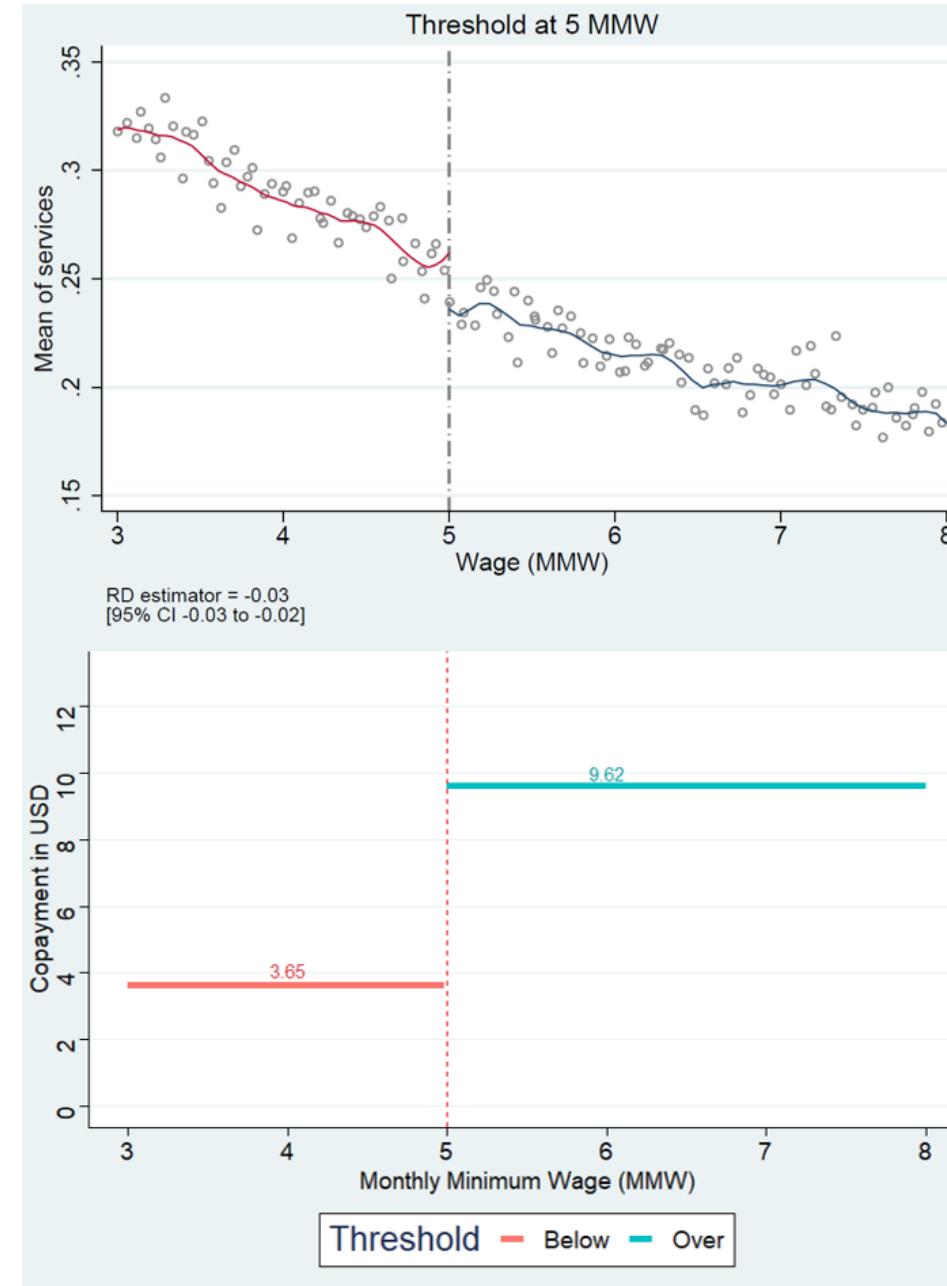
of increasing cost-sharing in primary care

Monthly Outpatient Consultations

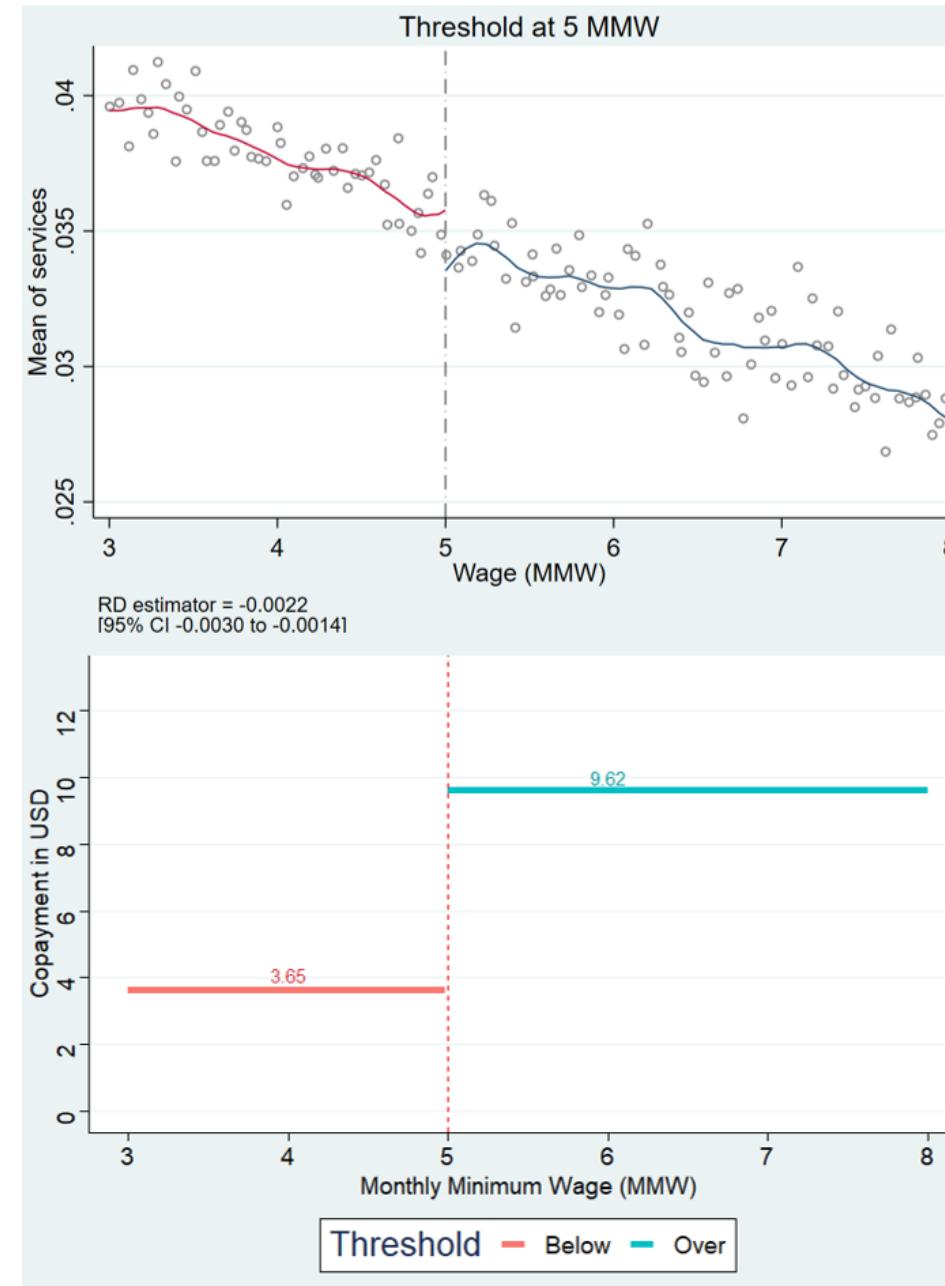
Individuals with very similar wages, but much higher cost-sharing have less outpatient consultations



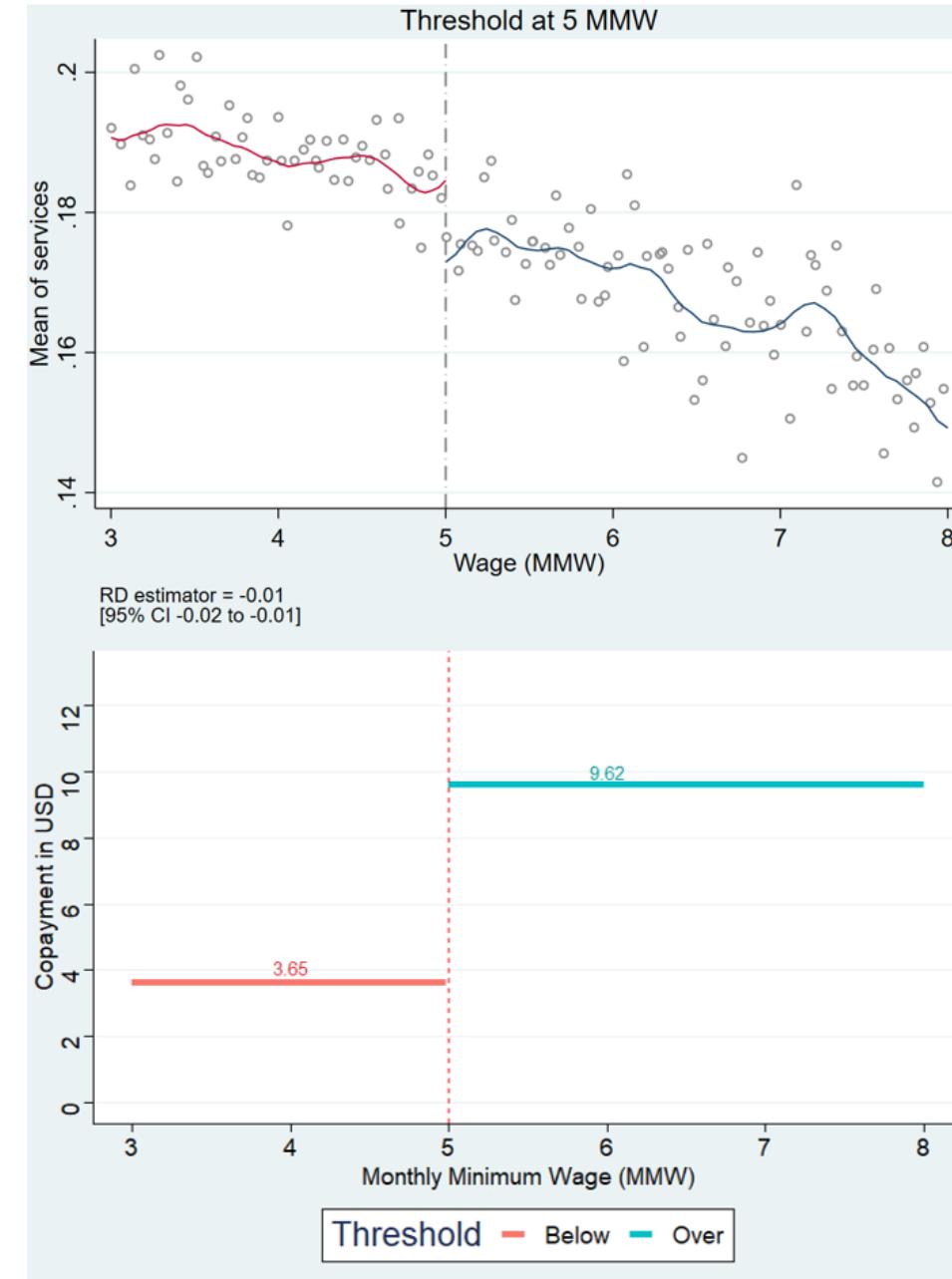
Monthly Outpatient Prescription Drugs



Monthly Outpatient Diagnostic Images



Monthly Outpatient Laboratory Services





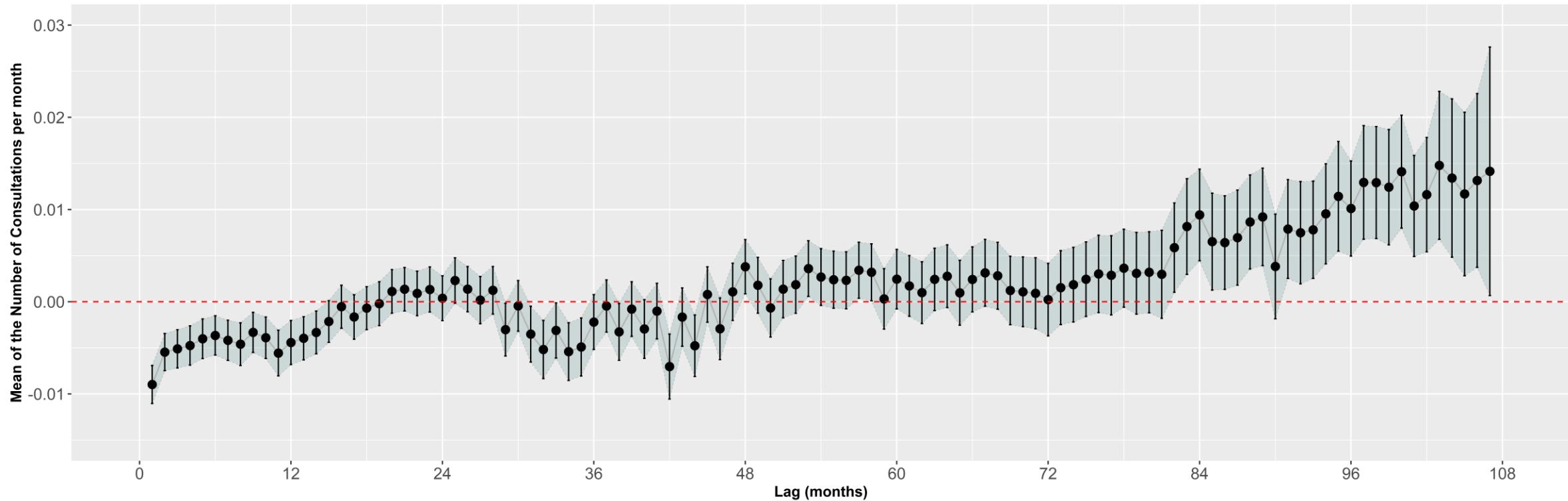
Medium and longer run effects

of increasing cost-sharing in primary care

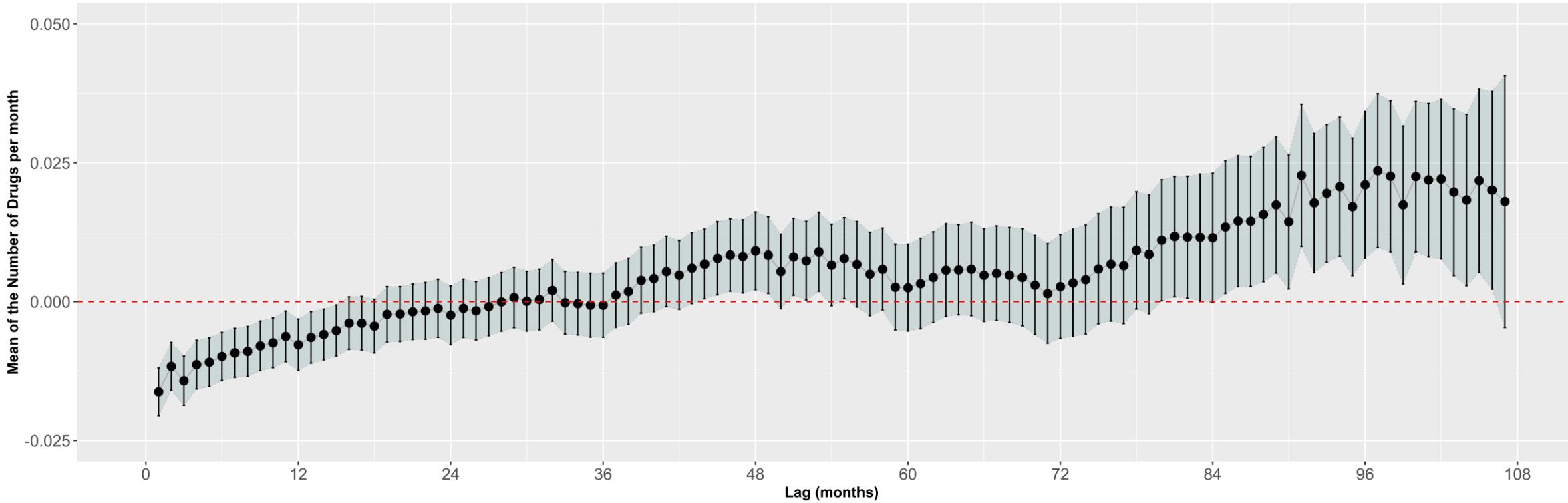
Intention to treat effects

- Direct and indirect effect of higher cost-sharing:
 - Direct: Contemporaneous effect on health care use
 - Indirect: More likely that cost-sharing will be high in future months, which will also impact future health care use

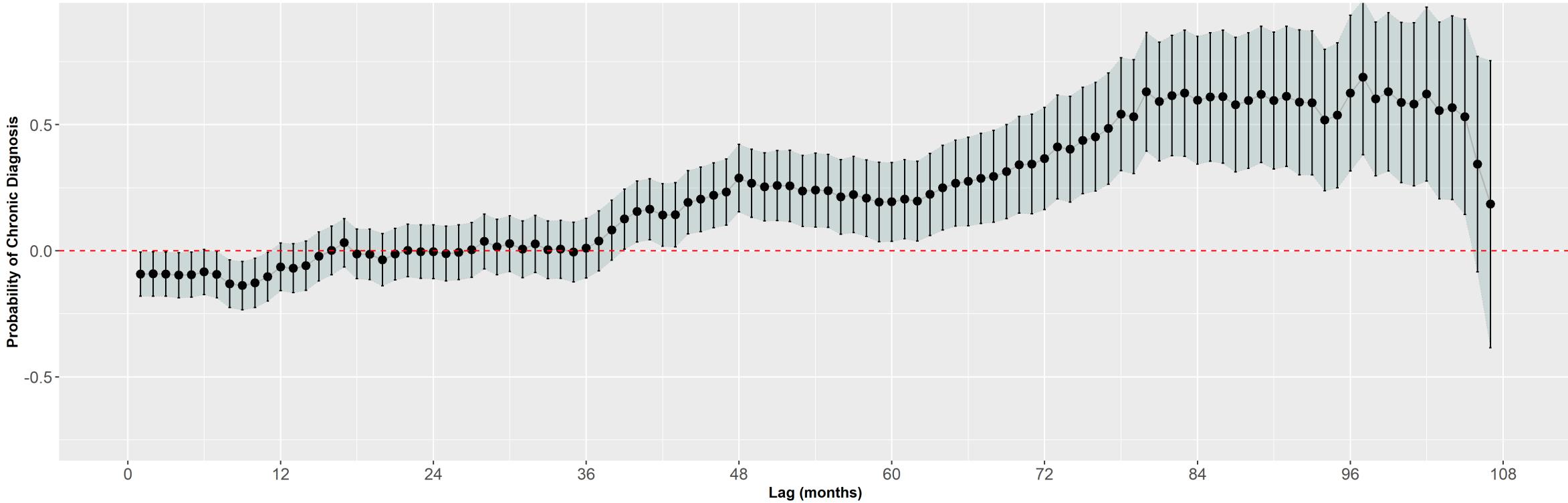
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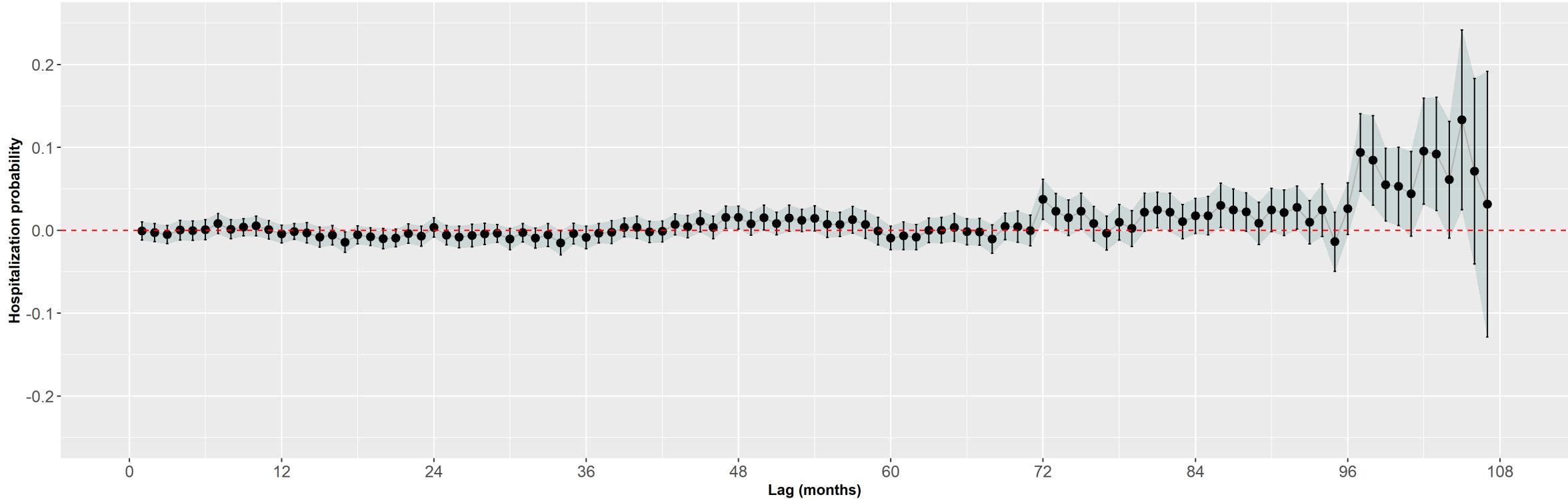
Monthly Outpatient Prescription Drugs



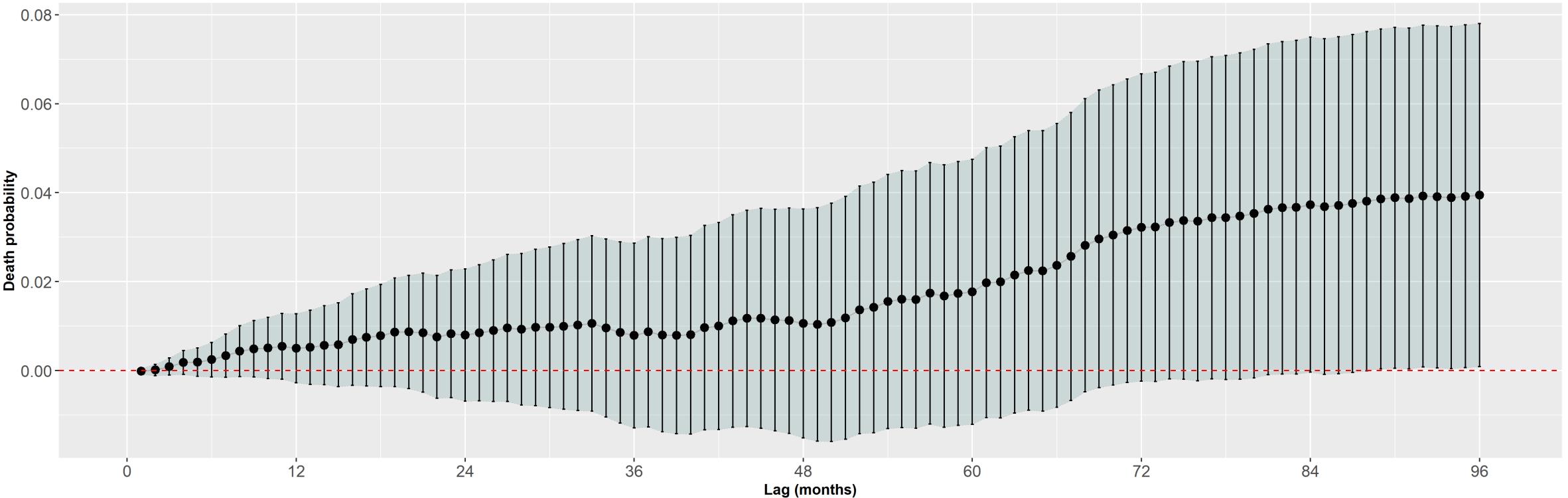
Probability of Chronic Disease Diagnosis



Probability of being hospitalized at least once



Probability of dying over time



Summary

- Increasing primary care cost-sharing reduces the use of outpatient services
- But the detection of new chronic diseases also declines, and potentially avoidable, more expensive hospital services increase in the longer term
- Ultimately, mortality increases as well
- Social welfare evaluations of cost-sharing policy need to incorporate health effects – as well as increase in health care use in the long term

Acknowledgements

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2. School of Medicine – Universidad Nacional de Colombia
3. Office of Technology and Information – Colombian Minister of Health and Social Protection

Thank you!