

# On the Way to Universal Coverage: Household Financial Burden of Medical Cost and Access to Health Care in Vietnam

Ke Xu, Guy Carrin, Nguyen Thi Kim Phuong,  
Dorjsuren Bayarsaikhan,  
Nguyen Hoang Long, Ana Mylena Aguilar

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## Outline

- Background
- Data and variables
- Methodology
- Results
- Summary

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# Background

- Vietnam is a low income developing country
- Population : 81 million
- Life expectancy f/m: 62.9/59.8
- GDP per capita less than \$500
- Shift from central planned economy to market economy since 1986



# Health System

- Health expenditure
  - Total health expenditure 5.2% of GDP (2002)
  - More than 60% out-of-pocket payments
- Health system financing
  - government revenue
  - social health insurance (1992)
  - Private/community-based insurance
- Health service provision
  - a mix of public and private providers



# Research Questions

- Who uses health services and where?
- What are the factors associated with service-seeking behaviour?
- Who pays how much for health services?
- How those payments impact a household's financial situation?
- What kinds of households are more likely to face catastrophic expenditure?



# Data and Methodology

- Data
  - Vietnam Living Standard Survey (VLSS) 1997/98
  - National representative survey
- Definition of key variables
  - Health service utilization
  - Out-of-pocket payment
  - Catastrophic expenditure
    - 40% of household non-subsistence spending
- Econometric models
  - Multinomial logit model --- utilization
  - Logit model – catastrophic expenditure



# General Results

Self-reported illness	53.0%
Health service Utilization	42.0%
oop as a share of total household expenditure	6.3%
oop as a share of household's capacity to pay	13.7%
Percentage of households with catastrophic expenditure	8.9%



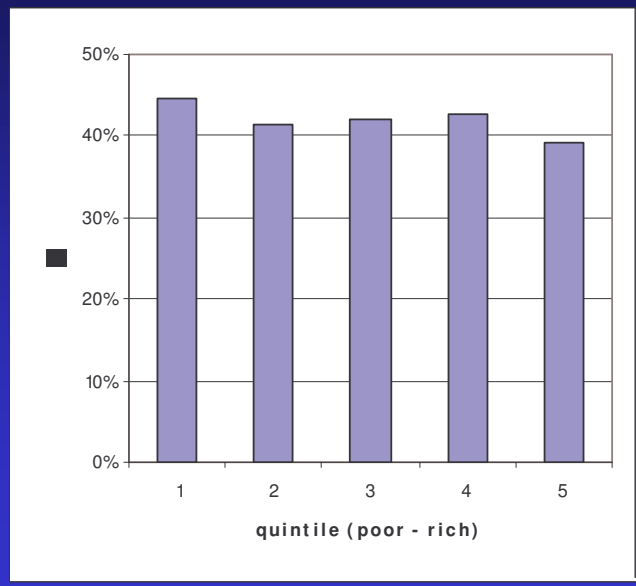
## Results- Part I

# Health Service Needs and Utilization

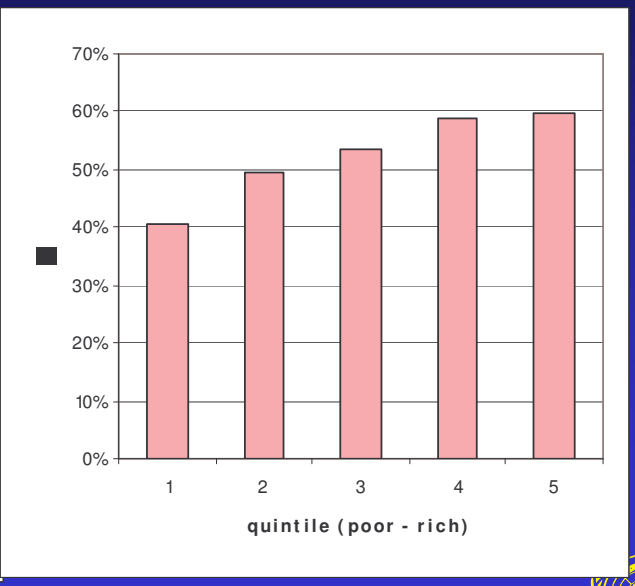


# Who Needs and Who Uses Health Services?

## Illness

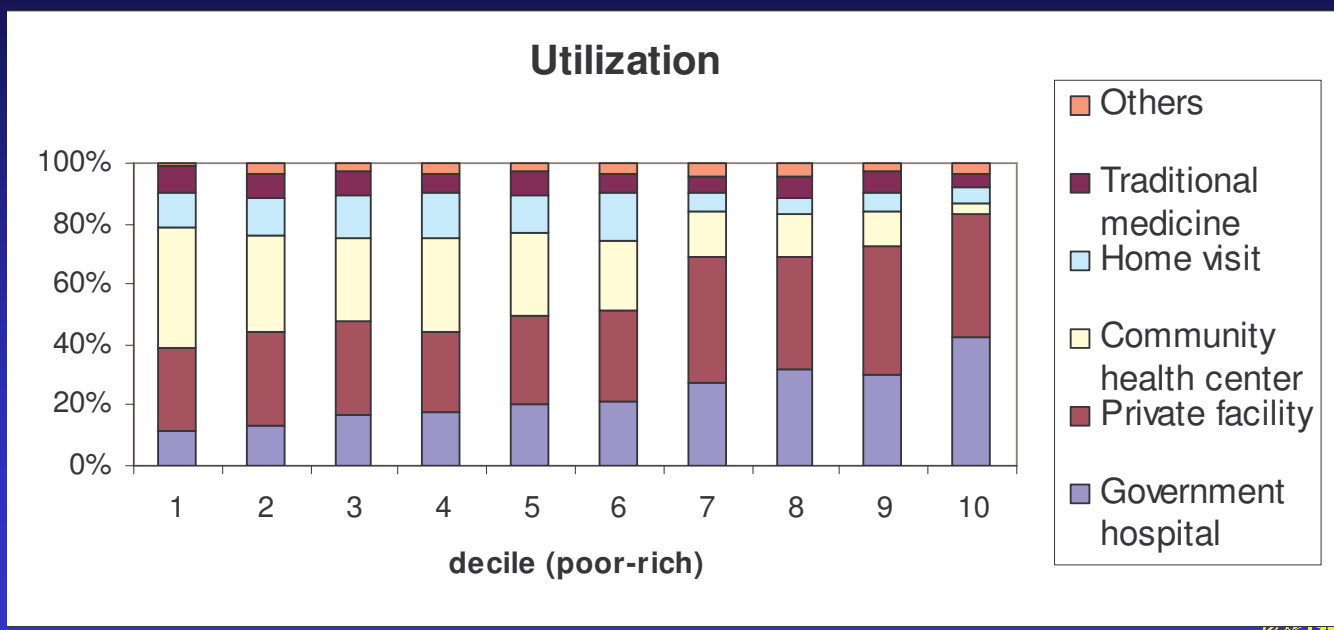


## Utilization



# Health Service Utilization at Different Facilities

## Utilization



# Expenditure on Treatment and Transportation

Facilities	Treatment cost		transportation cost		No. of visits
	per person	per visit	per person	per visit	
Government hospital	58.9	40.7	12.0	8.3	1.4
Private facility	61.5	7.5	3.9	0.5	8.2
Community health center	28.9	18.0	1.2	0.7	1.6
Home visit	30.9	3.6			8.6
Traditional medicine	29.4	7.1	2.9	0.7	4.1



## Regression on Health Service Utilization

	Coef.	Std. Err.	z	P>z
<b>public facilities</b>				
insurance	0.773	0.070	11.080	0.000
age60	0.230	0.080	2.860	0.004
age05	0.258	0.092	2.810	0.005
urban	-0.129	0.068	-1.880	0.060
male	-0.075	0.058	-1.290	0.196
poor	-0.671	0.093	-7.220	0.000
_cons	-1.340	0.050	-27.010	0.000
<b>private facilities</b>				
insurance	-0.415	0.097	-4.260	0.000
age60	0.273	0.087	3.120	0.002
age05	0.582	0.086	6.770	0.000
urban	0.009	0.072	0.130	0.896
male	-0.191	0.062	-3.070	0.002
poor	-1.187	0.115	-10.320	0.000
_cons	-1.268	0.051	-25.100	0.000

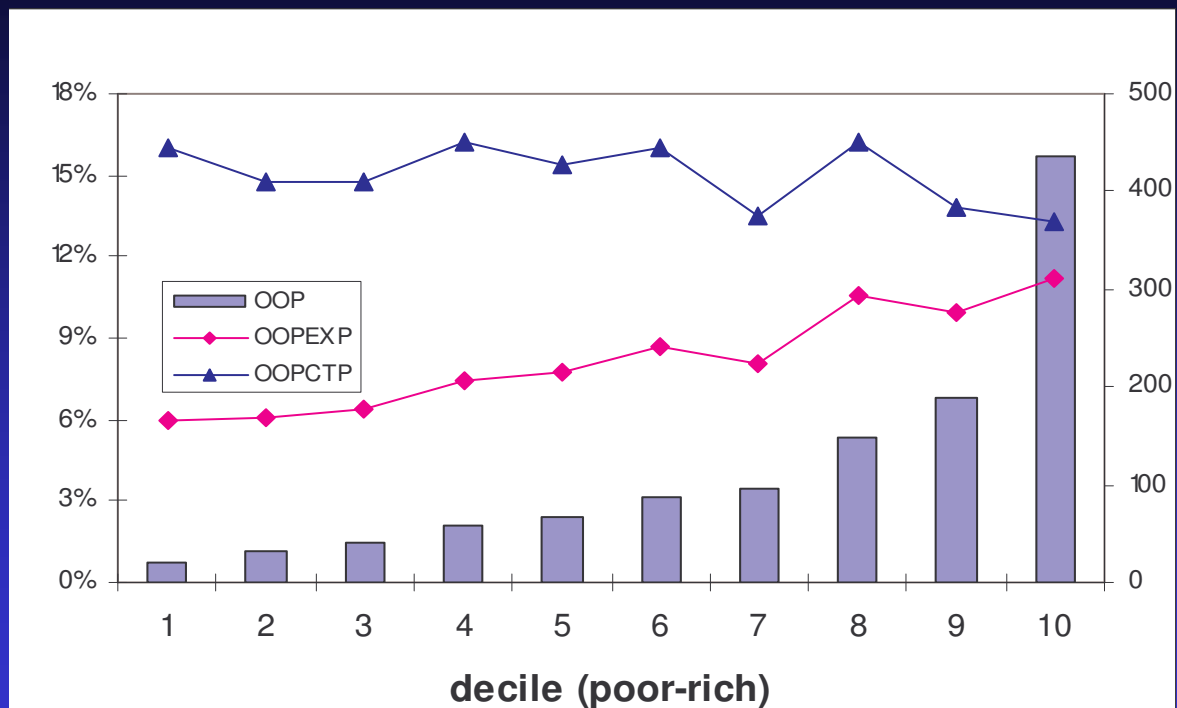


# Results- Part II

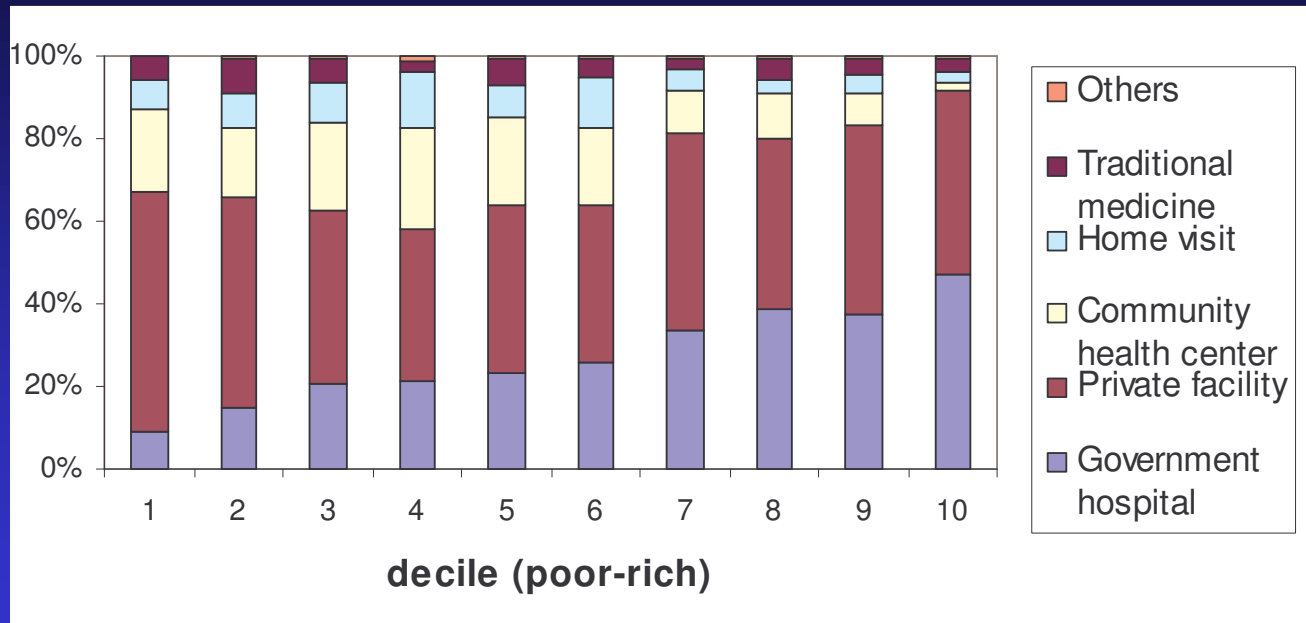
## Out-of-pocket Payment and its Impact on Household's Financial Situation



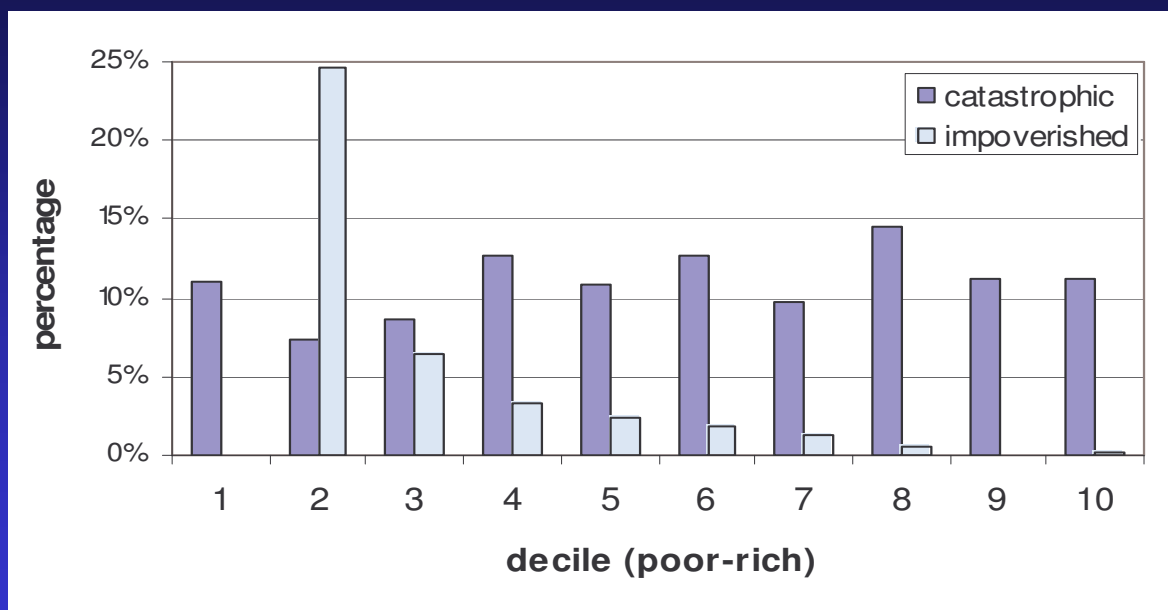
### Out-of-pocket Health Payments Across Income Groups



# Payments Made to Different Facilities



# Percentage of Households with Catastrophic Health Expenditure and Impoverishment



# Regression on Catastrophic Expenditure

<b>cato</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt;z</b>
age60	0.652	0.111	5.900	0.000
age05	0.508	0.123	4.110	0.000
use_pub	1.663	0.117	14.260	0.000
use_prv	1.971	0.118	16.770	0.000
use_oth	1.451	0.198	7.320	0.000
insurance	-0.379	0.129	-2.930	0.003
hhsz	-0.248	0.034	-7.250	0.000
poor	0.626	0.138	4.530	0.000
urban	-1.710	0.209	-8.170	0.000
_cons	-2.660	0.173	-15.340	0.000

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## Summary-1

- Vietnam is a low income developing country. By 1997/98, about 15% of the population was covered by health insurance schemes. Meanwhile over 60% of health expenditure was financed by out-of-pocket health payments.
- Both public and private facilities play an important role in providing health services. Public facilities are relatively cheaper than private facilities, but private facilities seems easier to access geographically.

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## Summary-2

- Utilization of health services is relatively low – less than 50% among those reporting illness.
  - The poor use fewer services than the non-poor.
  - The elderly and children were more likely to use either public or private facilities.
  - Covered by insurance are more likely to use public facility services; while located in urban areas use more private facility services.



## Summary-3

- About 6% of total household expenditure spent on health care services. Nearly 9% of households spend more than 40% of their non-subsistence spending on health (catastrophic expenditure)
  - Catastrophic expenditure occurs in all income groups, but the poor suffer more than the non-poor.
  - Households with senior members or children are more likely to face catastrophic expenditure while the opposite results observed in bigger households or households located in urban areas.
  - Insurance coverage protects households from facing catastrophic expenditure.
  - Catastrophic expenditure result from paying to either public or private facilities.

