School of Public Health and Community Medicine

HEALTH FINANCING EQUITY AND UNIVERSAL COVERAGE IN CAMBODIA: PROGRESS AND CHALLENGES

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Two research questions

1. Who benefits from (government) health spending in Cambodia – the poor or the rich?
2. How is the burden of financing the Cambodian health-care system distributed across the population?

Part 1

Who benefits from (government) health spending in Cambodia – the poor or the rich?

METHODS - Benefit incidence analysis (BIA)

BIA measures the extent to which different SEGs benefit from public subsidy for health through their use of health services.

The basic idea:

- Govts seem to want their health spending (subsidies to the health sector) to disproportionately benefit the poor - or at least not to disproportionately benefit the better-off.
- BIA tries to allocate GHE across households to see whether it is the poor or better-off who benefit disproportionately from GHE.
- The benefits are expressed in monetary terms, across different types of health service for each SEG.

Key steps in BIA

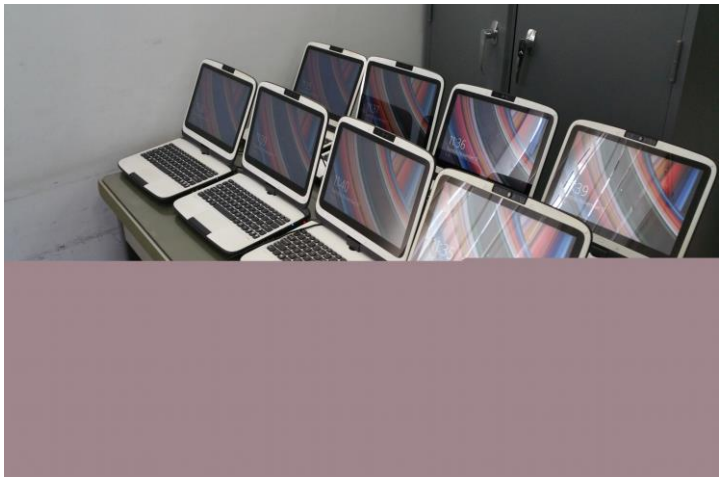
- BIA involves a number of steps:
  - Ranking the study population by a living standard measure;
  - Assessing the rate of utilisation of different types of health services;
  - Estimating the unit cost of each type of service;
  - Multiplying the utilisation rate by unit cost to determine the amount of benefit/subsidy.
  - Subtracting direct user fees to arrive at the final amount of gov't subsidy.
  - Comparing the distribution of benefit with some ideal distribution such as distribution on the basis of need.

Data requirements

- BIA requires data on utilisation of different types of health services from household surveys. Ideally, the dataset should also have information about fees or expenses incurred for using health services.
- BIA also requires information about unit cost of services or unit subsidy.
- Household surveys don't record GHE at the household level. Unit cost is often calculated using NHA data or government data on:
  - Utilisation and GHE at the aggregate level
- Note that different unit cost assumptions require different data

CHEF Household survey

- Involves a nationally representative cross-sectional survey of 5000 randomly selected households across rural and urban Cambodia.
- Covers the following key areas:
  - Household living standard and asset ownership
  - Basic demographic and socio-economic data
  - Health service utilisation, incl. utilisation of preventive health care
  - Out-of-pocket payments incurred for using health care
  - Households health care payment and coping strategies
  - Satisfaction from health service use



CHEF Enumerators

Results

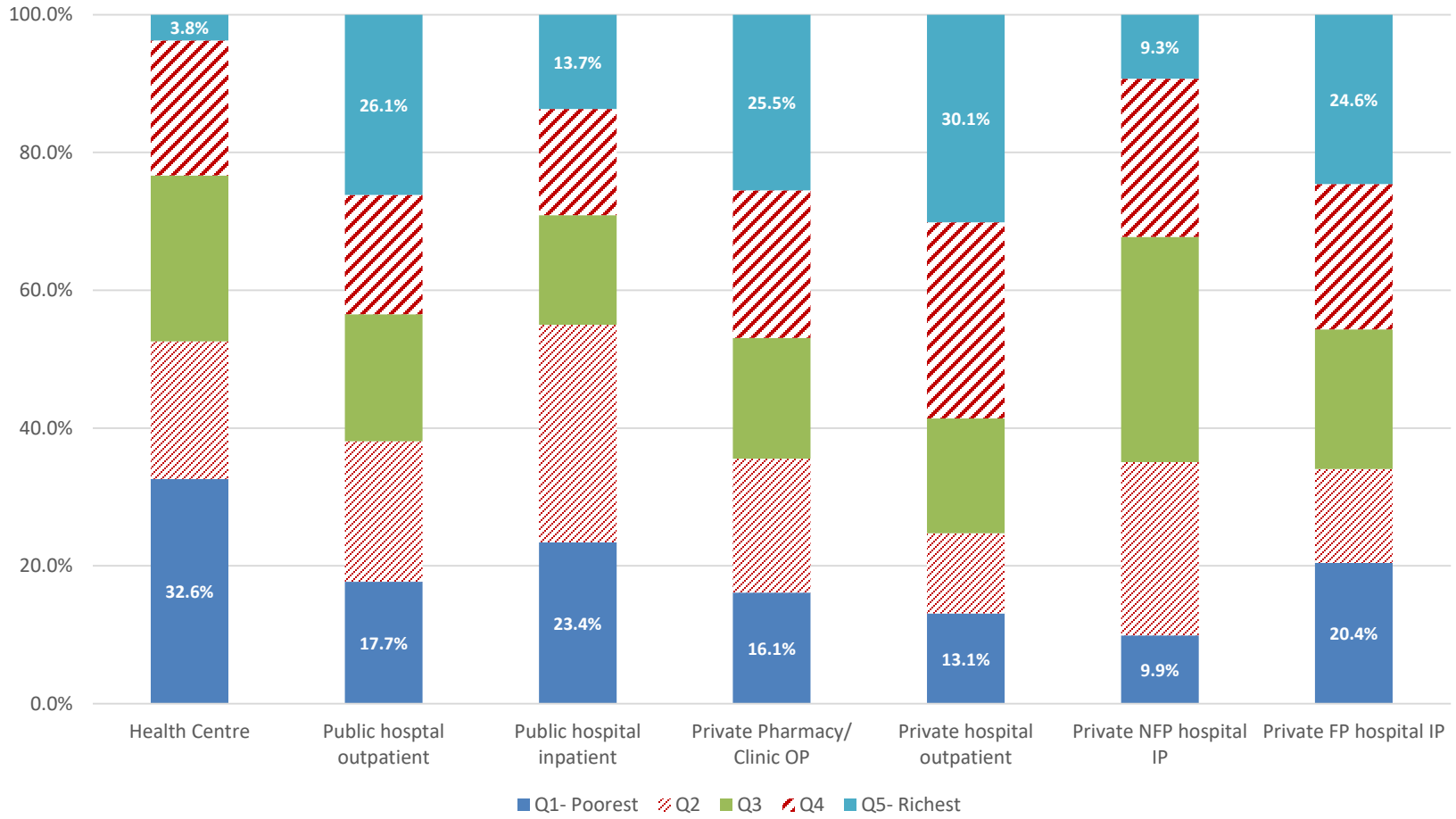
Selected descriptive statistics from household survey

Data label	Number	(%)
Number of households surveyed:		
• Rural Cambodia	4,000	(80.0)
• Urban Cambodia	1,000	(20.0)
Total number of persons:		
• Male	11,879	(47.8)
• Female	12,996	(52.2)
Persons reportedly injured or sick in the last month	8,918	(35.9)
Persons hospitalised in the last 12 months	1,391	(5.6)
Persons seeking preventive care in the last month	1,957	(7.9)
Persons not seeking care when sick in the last 12 months and the sickness got worse	227	(0.9)

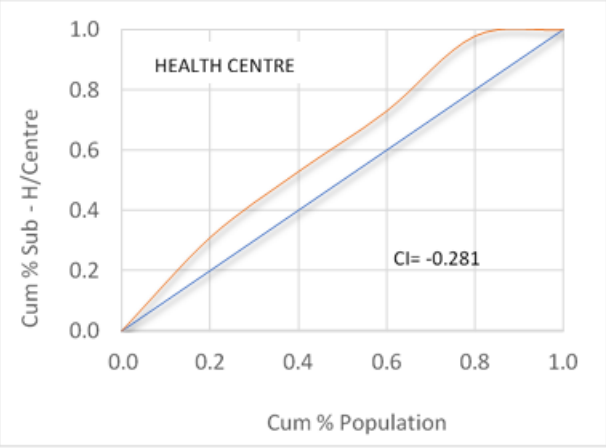
Unit cost of health service by type of facility (US$)

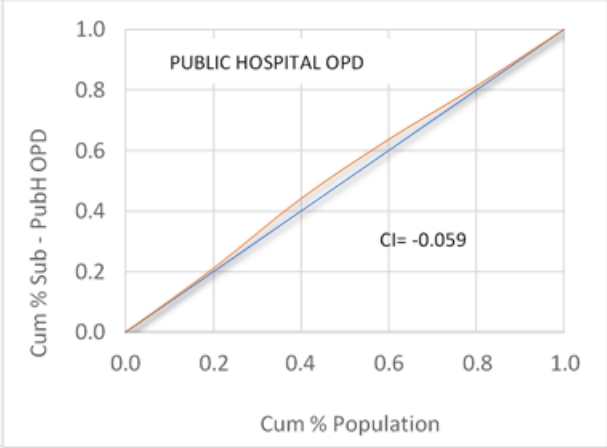
	Cambodia	Thailand	Fiji
Public facilities			
Health Centre	2.87	3.00	13.28
Hospital OP	35.16	20.00	28.25
Hospital IP	195.90	347.65	411.51
Private facilities			
Private clinics & pharmacies	4.86	-	11.13
Hospital OP	16.16	-	78.62
Private not-for-profit hospital IP	17.45	-	N/A
Private for-profit hospital IP	162.74	-	568.90

Utilisation of health services by wealth quintile and facility type



Distribution of health care benefits (subsidy) by facility type)



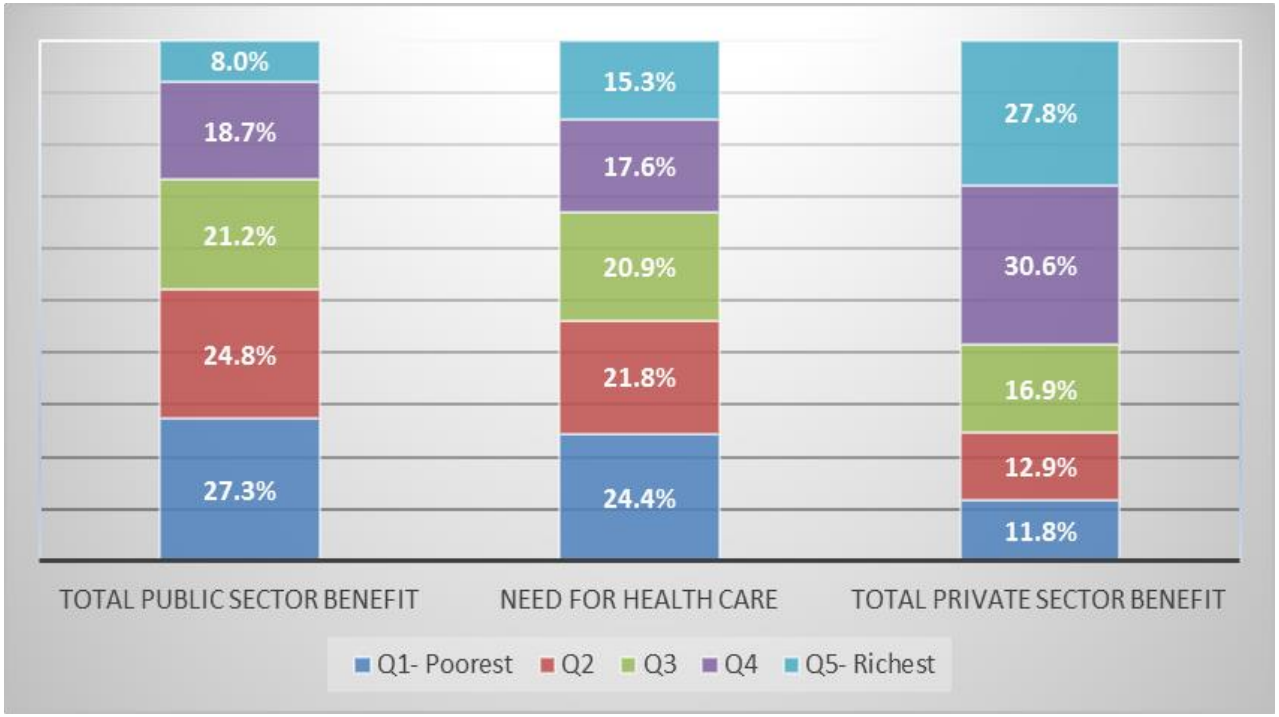


Note:

Concentration curve plots the cumulative percentage of individuals ranked in ascending order of standards of living against the cumulative percentage of total health care utilization, health-care payment, or whatever variable whose distribution is being investigated.

CI = Concentration index. It shows the size of inequalities in the distribution of health subsidy between the poor and better-off. The index ranges from -1.0 to +1.0; a negative index means the distribution is *pro-poor* and vice versa. A zero CI index means the distribution is proportional.

Distribution of benefits relative to need for health care



Take home message

- Benefits from health spending in the public sector are generally distributed in favour of the poor and the distribution reflects the need for health services.
- Over 50% of total health expenditure and health care delivery remains in the private sector which distributes health care benefits in favour of the rich.
- Crucially, a significant proportion of poor Cambodians use private providers - a challenge that must be addressed if the country's UHC dream is to become a reality.

Questions

Part 2

How is the burden of financing the Cambodian health-care system distributed across the population?

Financing incidence analysis (FIA)

- FIA (or progressivity analysis) measures how the burden of financing the health system is distributed across socio-economic groups relative to their ability-to-pay for health care.
- The key question FIA asks is - across all sources of finance for health-care (taxes, insurance, OOP spending, etc.) who pays a higher share of their income towards health-care (the poor or rich?)

Data sources

- Cambodia Socio-Economic Survey (CSES) 2014. The 2014 CSES micro-data captures economic activities occurred in 12,090 nationally representative households (HHs).
- The 2014 Cambodia National Health Accounts (NHA)
- Tax rates and actual tax revenue from Ministry of Economy and Finance.

Health financing mix in Cambodia

Source	Proportion	Proportion (redistribution after excluding donor funding)
Government (direct & indirect taxes)	20%	24%
Donors	20%	-
Households (Out-of-pocket spending)	60%	76%
Total	**100%**	**100%**

Results

Household *per adult equivalent* consumption expenditure by quintiles

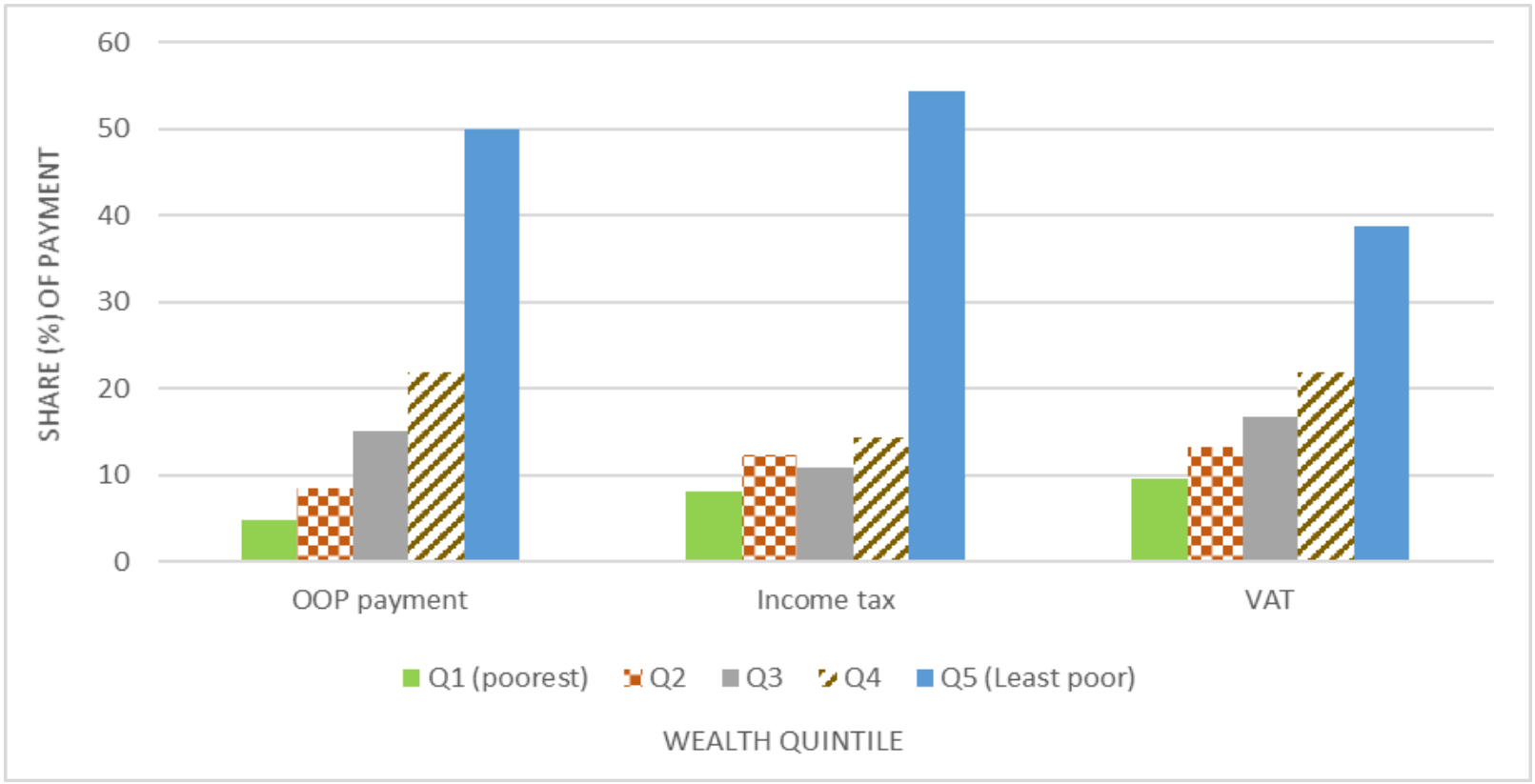
Quintile	No. of households ('000)	Monthly consumption expenditure (in '000 Reils)
Q1- poorest	652.4	277.0
Q2	652.4	374.1
Q3	652.4	481.5
Q4	652.2	646.1
Q5- richest	652.1	1,089.6
Overall	**3,261.3**	**481.4**

Monthly average health-care payment and household consumption expenditures

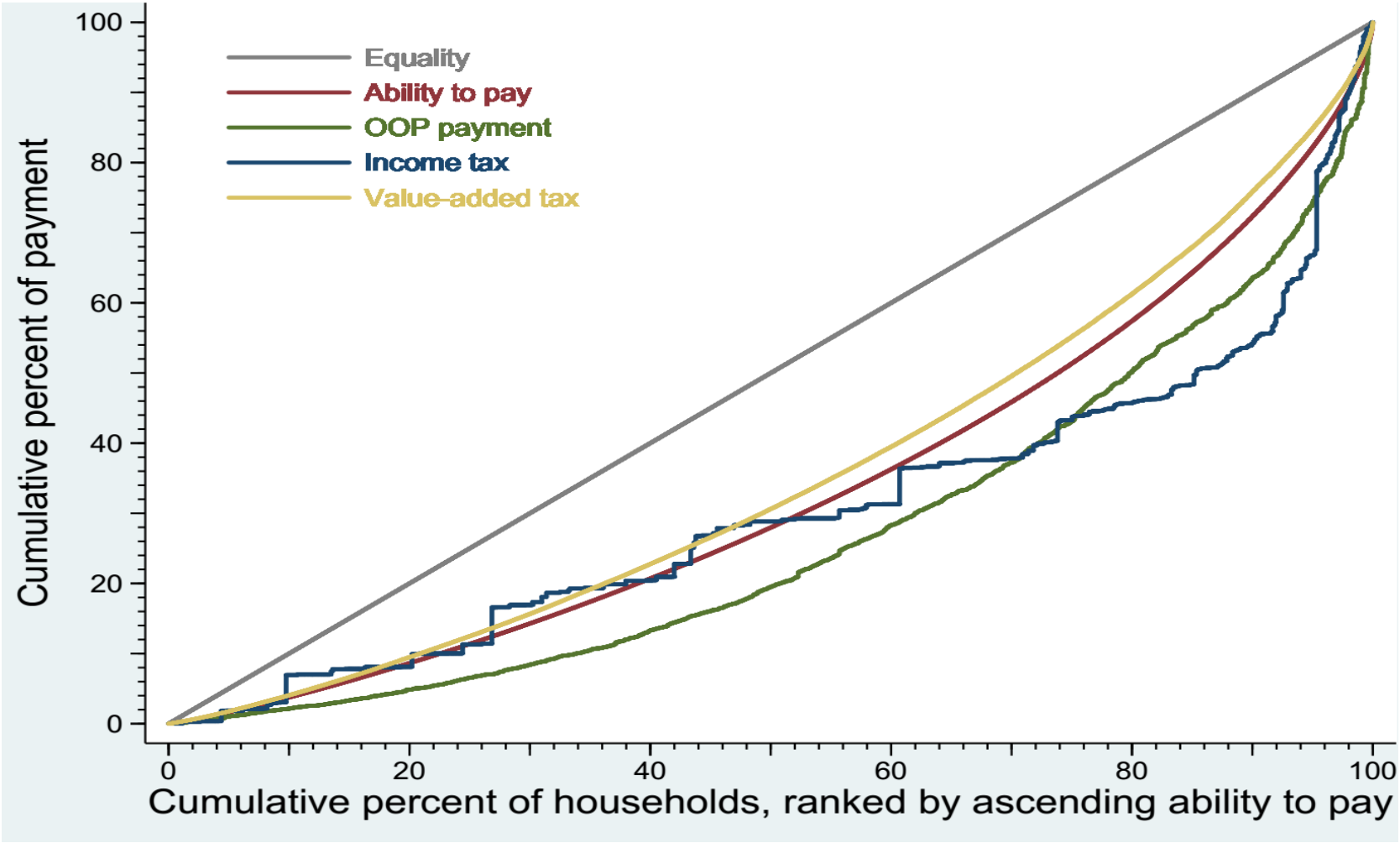
Quintile	Av monthly household health payment (000' riels)	Av monthly household consumption exp (000' riels)	Health % household consumption
Q1- poorest	4.7	154.0	3.1
Q2	8.1	217.2	3.8
Q3	14.4	281.9	5.2
Q4	20.9	384.9	5.4
Q5- richest	47.9	787.1	6.1
Overall	**19.2**	**365.0**	**5.3**

Distribution of health-care payment by ATP

OOP = 76% THE	*Income tax = 9.6% THE*	*VAT = 14.4% THE*



Concentration and ATP curves



Kakwani index of various health financing sources

Financing source	THE Share (%)	Concentration index (CI)	Kakwani index (KI)
Direct taxes (income tax)	9.6	0.403	0.069
Indirect taxes (VAT)	14.4	0.290	-0.044
Out-of-pocket spending	76.0	0.460	0.126
Overall	**100**	**0.430**	**0.096**

Take home message

- Although VAT is slightly regressive, the overall burden of financing the health system in Cambodia is disproportionately borne by the rich through a strongly progressive OOP payment.
- A progressive OOP spending is desirable in as much as the poor can still access the health services they need.
- Poorer households in Cambodia still incur considerable costs in accessing health care, especially from the private sector.

CHEF team visit to a health centre near Siem Reap


Thank you!