

# *Measuring Financial Protection in Health*

*Concepts, global perspective and measurement tools*

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*Global Practice on Health, Population, Nutrition, World Bank*

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# 1- CONCEPTS

# UHC is a 2030 Sustainable Development Goal (SDG)

**SDG 3:** 'ensure *healthy lives* and promote well-being for all ages'

UHC is a policy commitment that all people can use promotive, preventive, curative, rehabilitative, and palliative *health services* they need, of sufficient *quality* to be effective, while also ensuring the use of these services does not expose the individual to *financial hardship*.



**Target 3.8:**  
Achieve UHC

**Indicator 3.8.1:**  
Coverage of essential health services

**Indicator 3.8.2:**  
Financial protection when seeking care

The way a health system is *organized* and *financed* is critical for making progress towards UHC: moving away from reliance on user fees and *out-of-pocket (OOP) financing* at the time and place of seeking care towards higher *public financing* and 'negative user fees' (e.g., conditional cash transfers for incentivizing preventing and promotive care) are core elements, especially for enhancing access for the poor.

# UHC is a 2030 Sustainable Development Goal (SDG)

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UHC is a policy commitment that all people can use promotive, preventive, curative, rehabilitative, and palliative *health services* they need, of sufficient *quality* to be effective, while also ensuring the use of these services does not expose the individual to *financial hardship*.



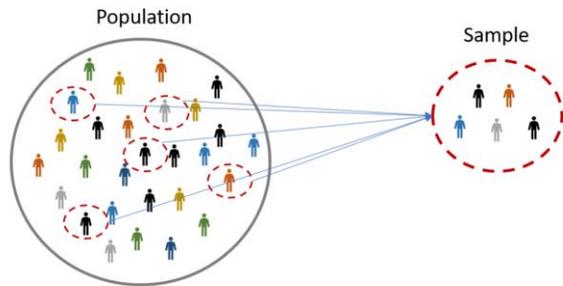
**Target 3.8:**  
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Coverage of essential health services

**Indicator 3.8.2:**  
Financial protection when seeking care

UHC is directly embedded in **SDG goal #3 (better health)**, but UHC promoting policies also matter for **SDG goal #1 (no poverty)** and **SDG goal #10 (reducing inequalities)**.

# Measurement relies on household expenditure surveys



To measure financial protection indicators, we typically need:

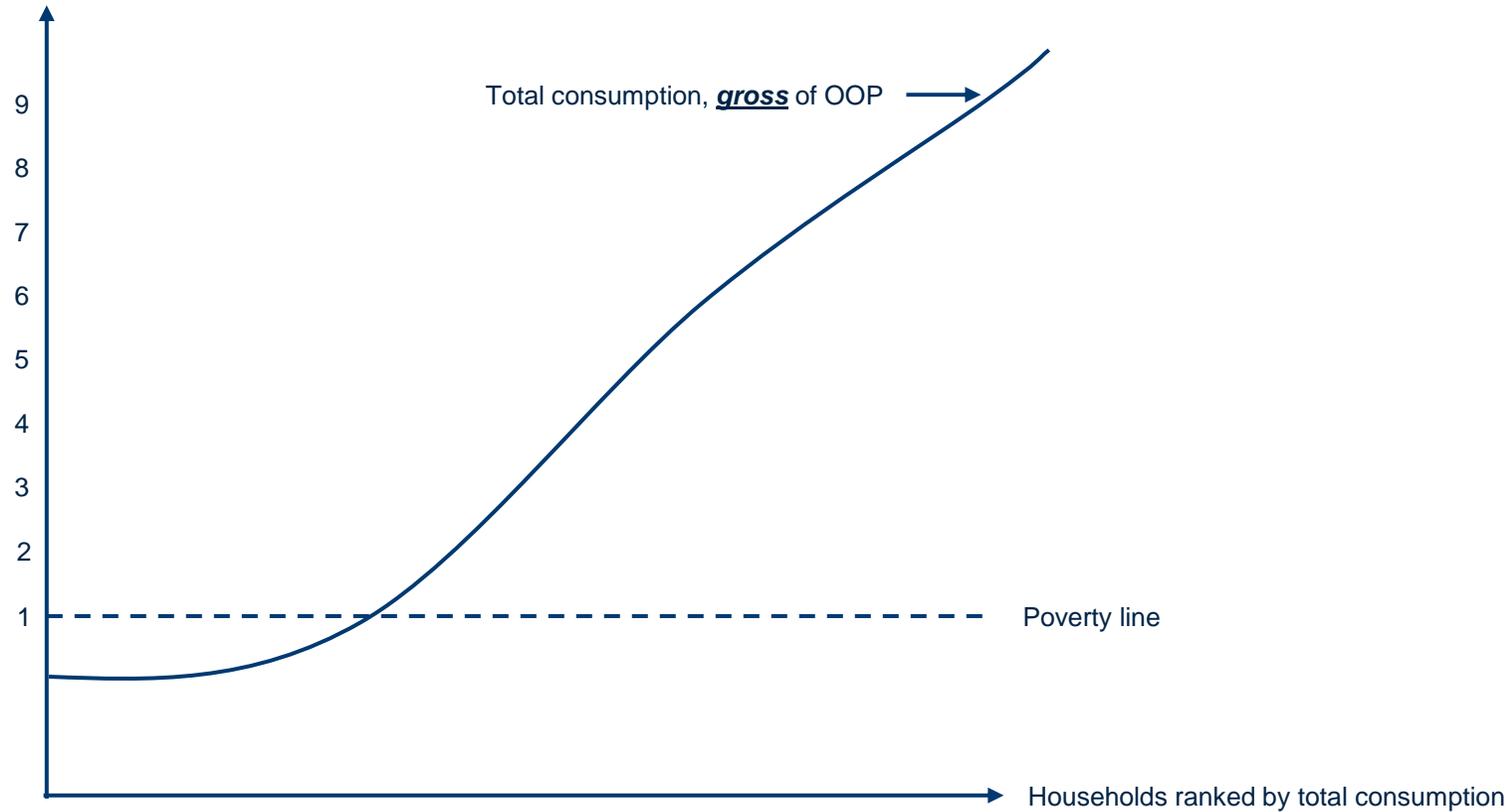
1. Nationally representative **household surveys**
  - Clustered sampling based on most recent census data
2. Information on **Out-of-Pocket Payments (OOP) for health**
  - Household level
  - Inpatient care
  - Outpatient and preventive services
3. Information on **total consumption expenditure**
  - Household level
  - Annualized
  - Poverty line

PART A: HEALTH - TO BE ASKED OF EACH HOUSEHOLD MEMBER

1	2	3	4	5	6	7	8	9
Have you witnessed or participated in a violent act during the past 4 weeks?	Have you had any injury during the past 4 weeks? For example due to an accident at your workplace, gunshot, stab wound, fall or other injury?	Have you had any illness, other than that due to injury? For example, cold, diabetes, asthma attack, hypertension, diabetes or any other illness?	Is this a recurring illness that due to asthma, diabetes, hypertension, diabetes or any other illness?	How long did this illness last?	For how long were you unable to carry out normal activities?	Has a doctor, nurse, pharmacist, midwife, or any other health practitioner been visited?	How many visits did you make to health practice (clinics)?	Where did the visit(s) take place? In a ...
YES...1 NO...2	YES...1 NO...2	YES...1 NO...2	YES...1 NO...2	DAYS	DAYS	YES...1 NO...2	NUMBER OF VISITS	Public Hospital? YES...1 NO...2 Private Hospital? YES...1 NO...2 Public Health/Maternity Centre? YES...1 NO...2 Private Health/Maternity Centre/Doctor's Office? YES...1 NO...2 Other? (SPECIFY) YES...1 NO...2
INDIVIDUAL								
01								
02								
03								

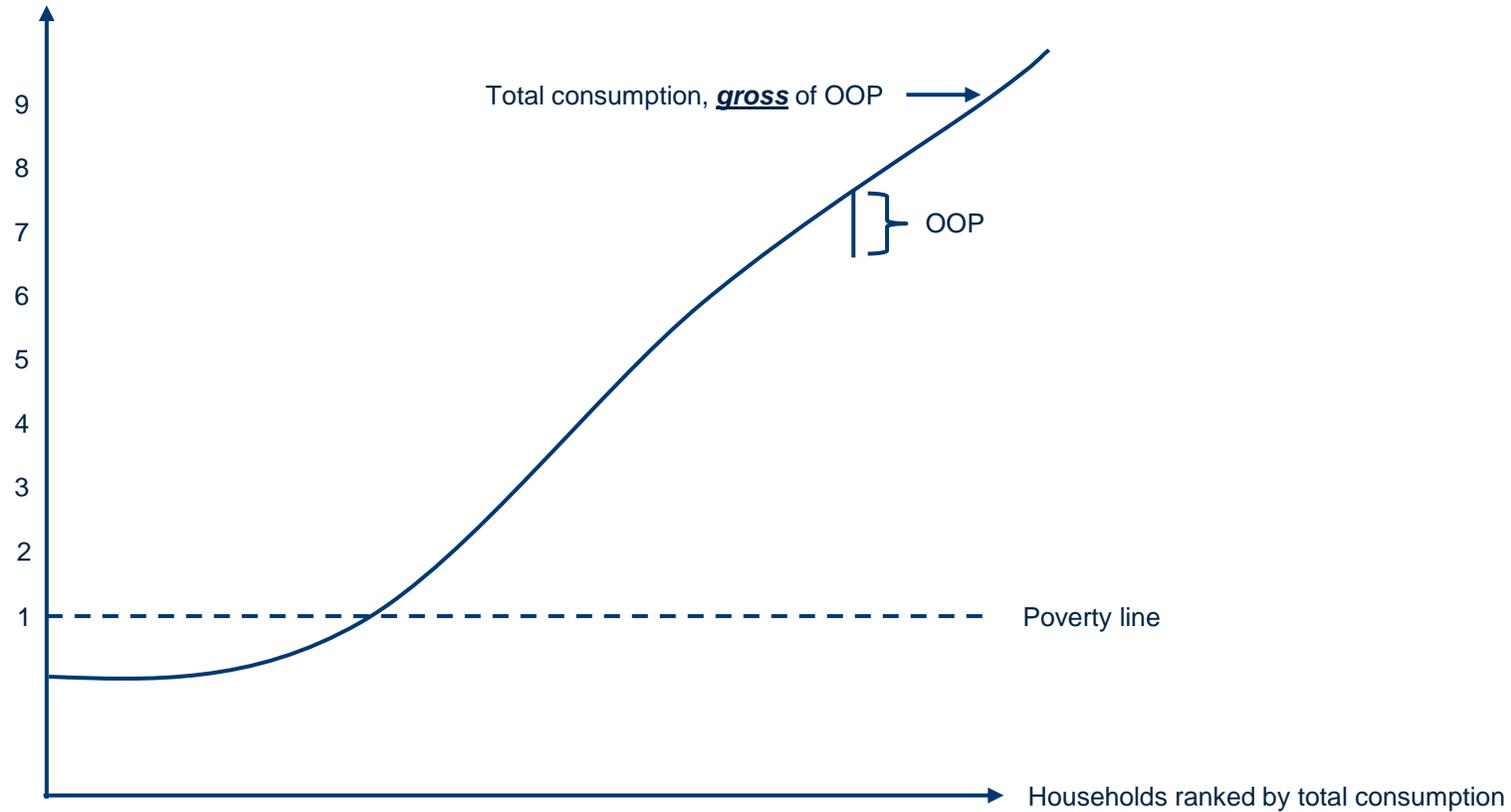
# Financial protection indicators

Consumption in multiple of poverty line



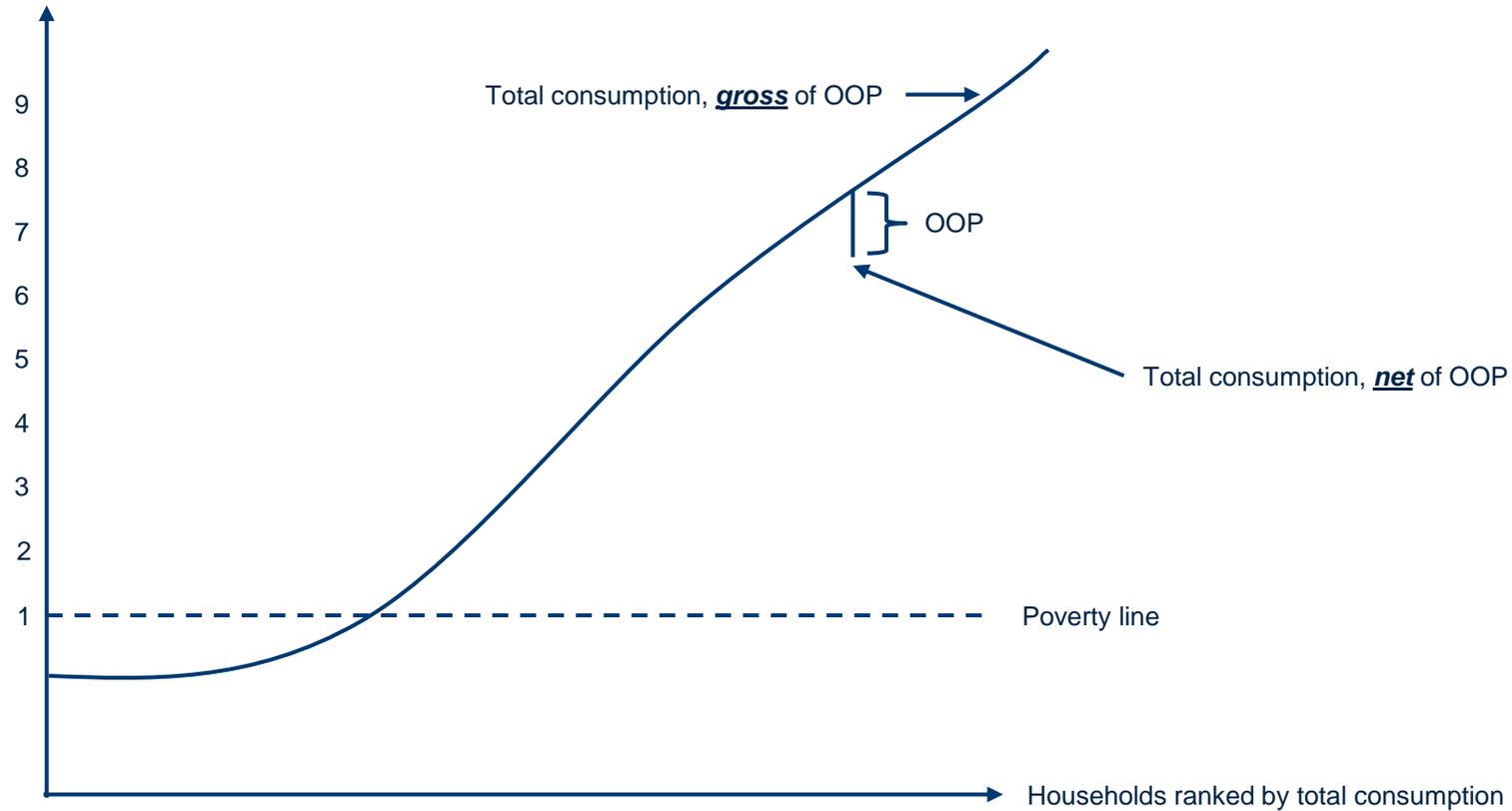
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Consumption in multiple of poverty line



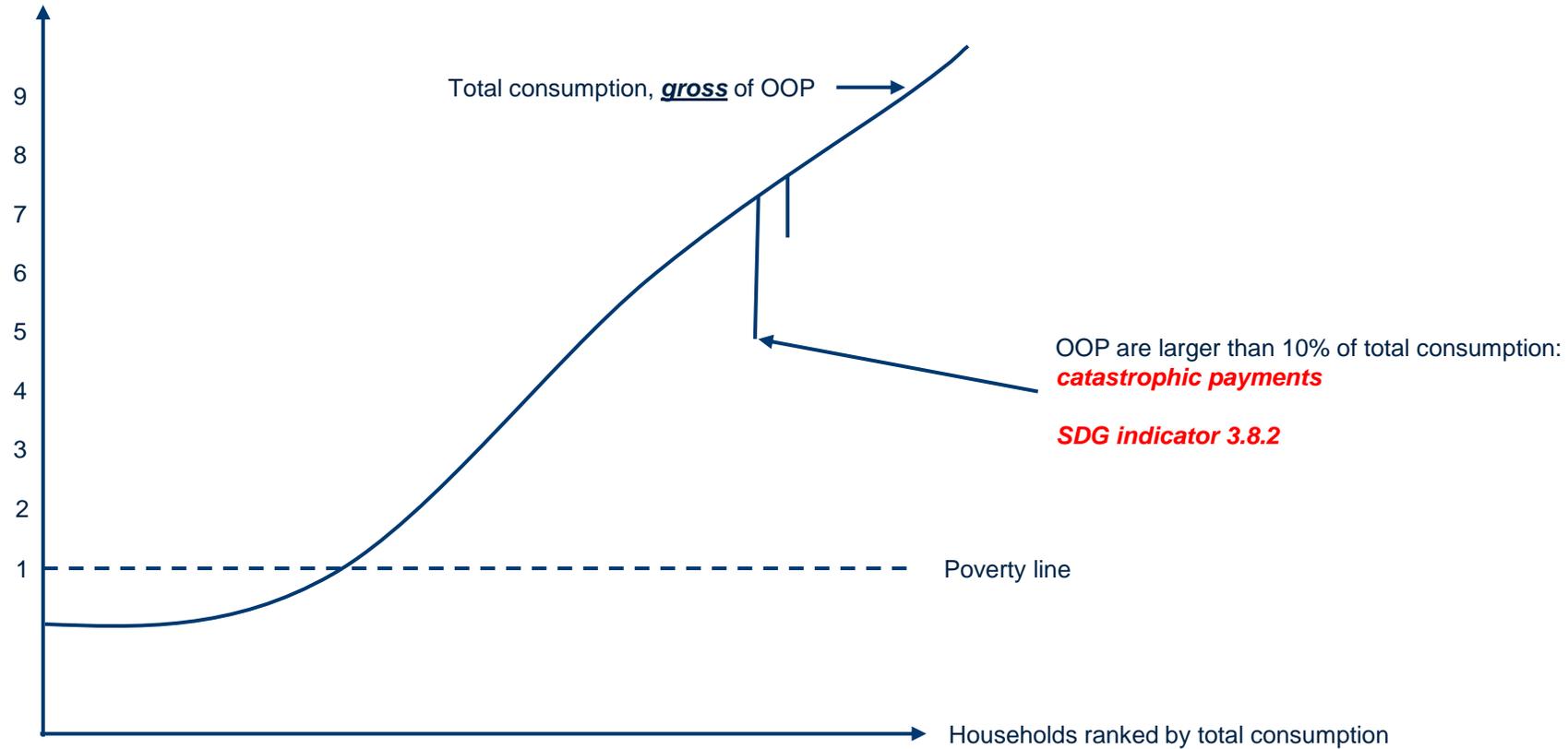
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Consumption in multiple of poverty line



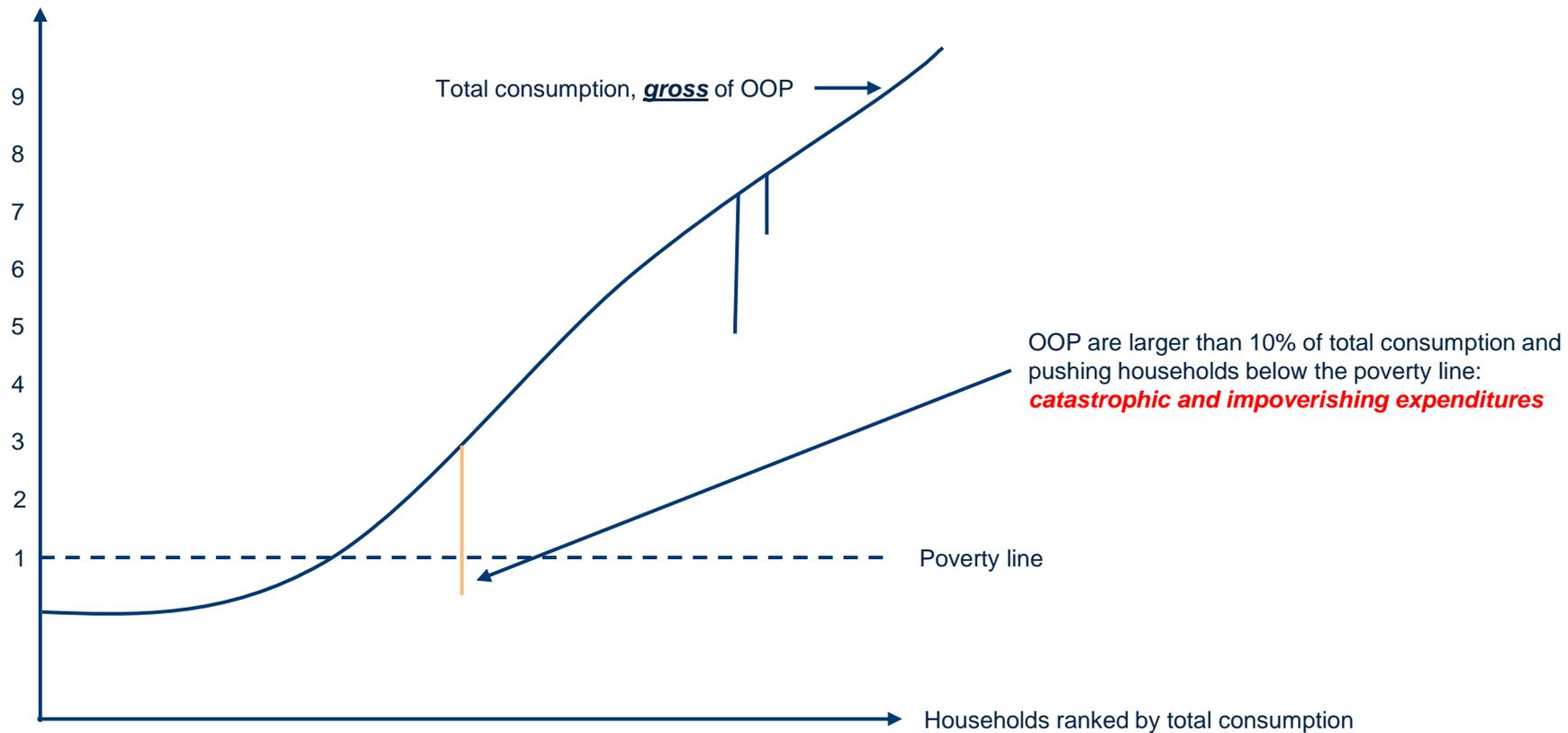
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Consumption in multiple of poverty line



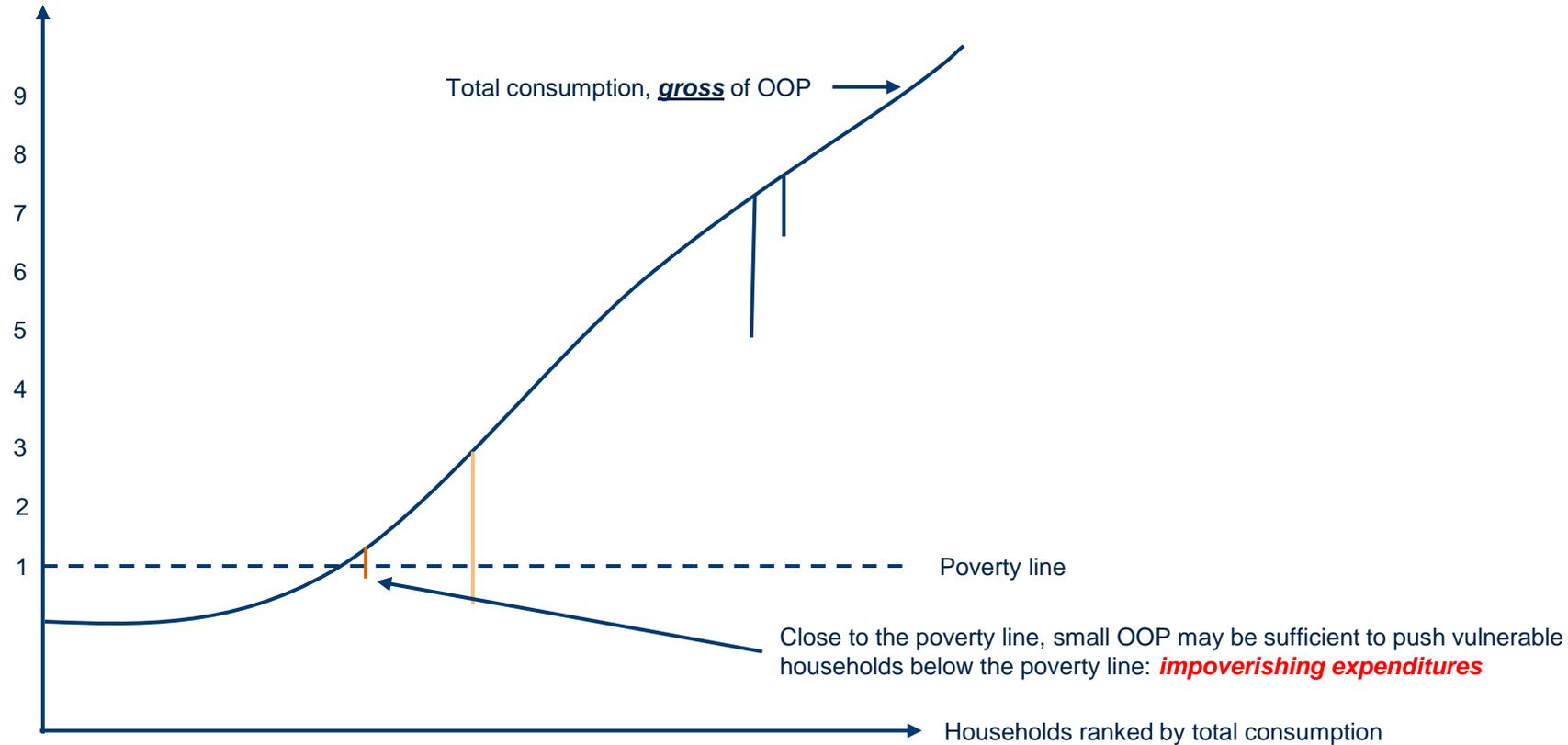
# Financial protection indicators

Consumption in multiple of poverty line



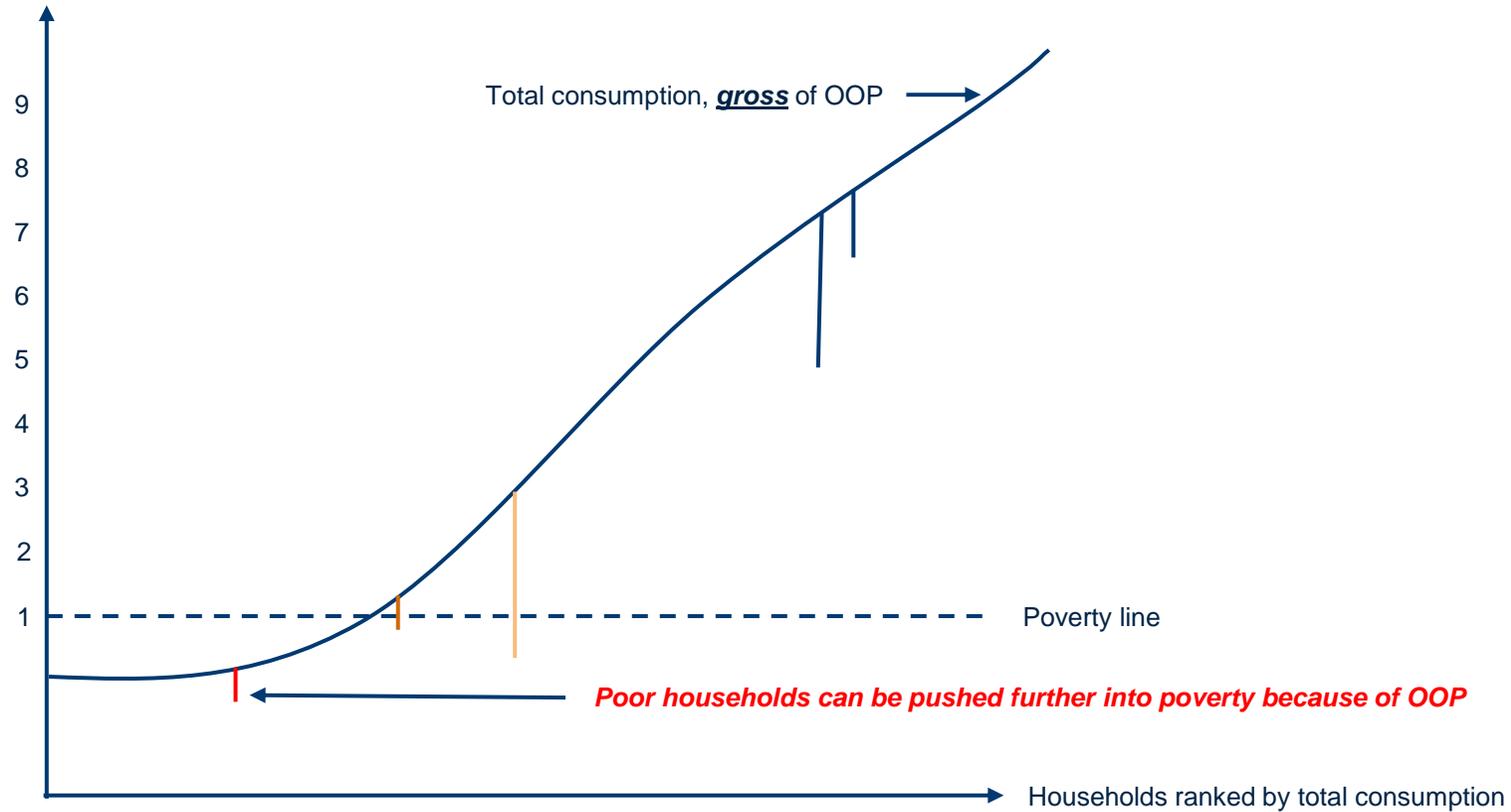
# Financial protection indicators

Consumption in multiple of poverty line



# Financial protection indicators

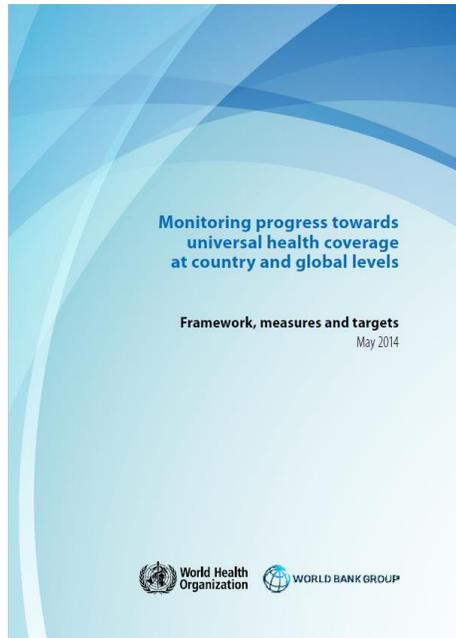
Consumption in multiple of poverty line



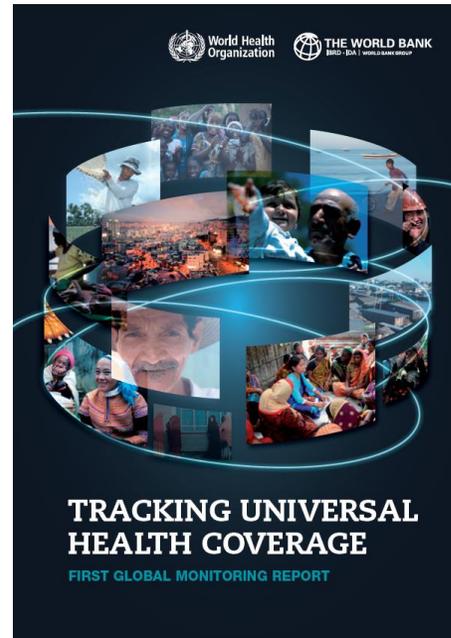
# 2- GLOBAL PERSPECTIVE

# Monitoring of financial protection at the global level (joint WHO and WB)

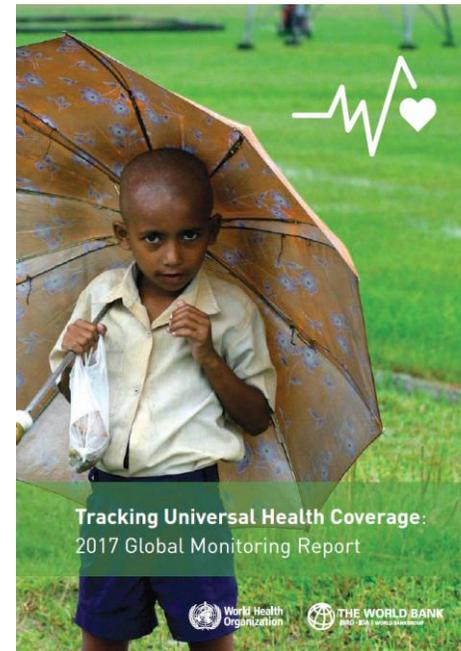
2014



2015



2017

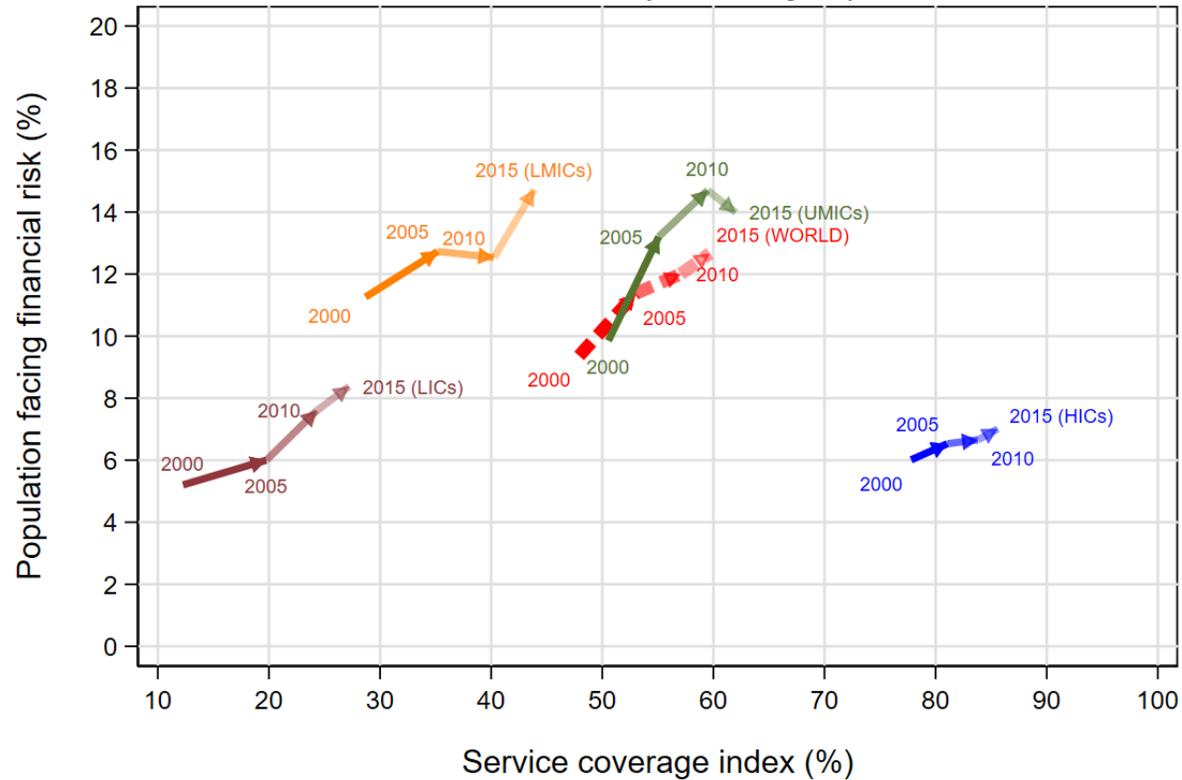


2019

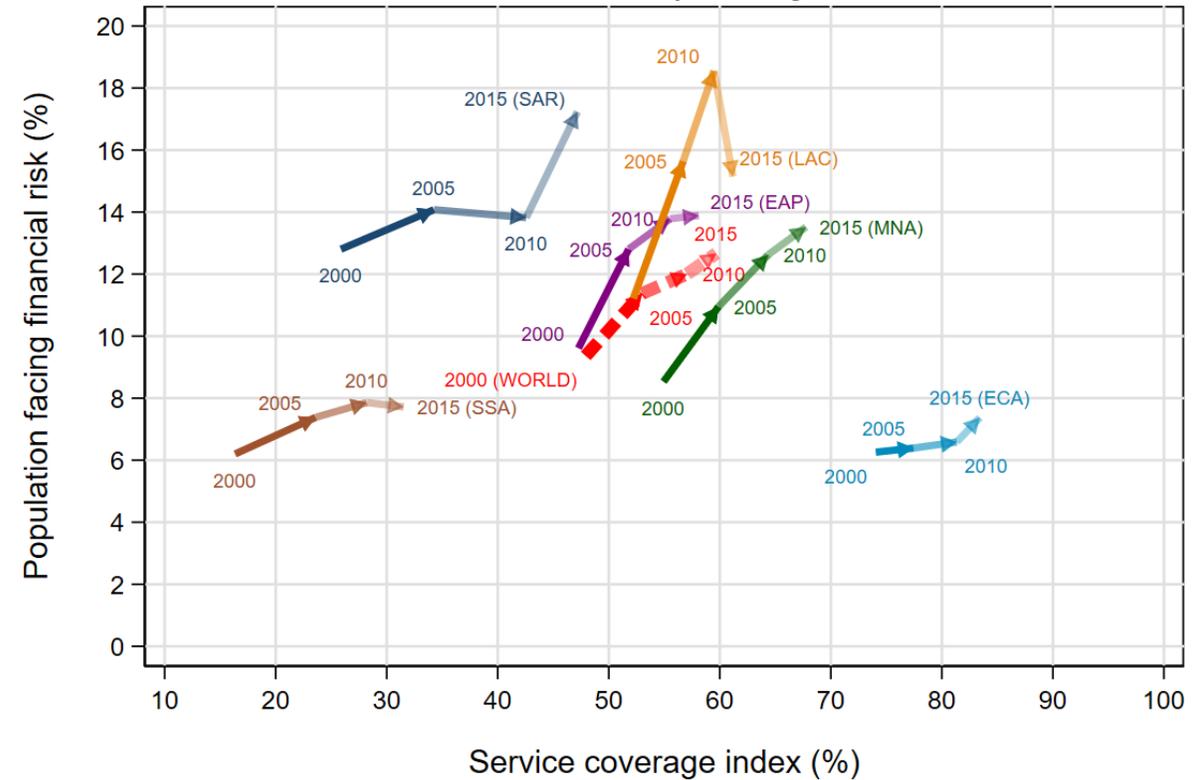


# Monitoring of financial protection at the global level

UHC trends by income group

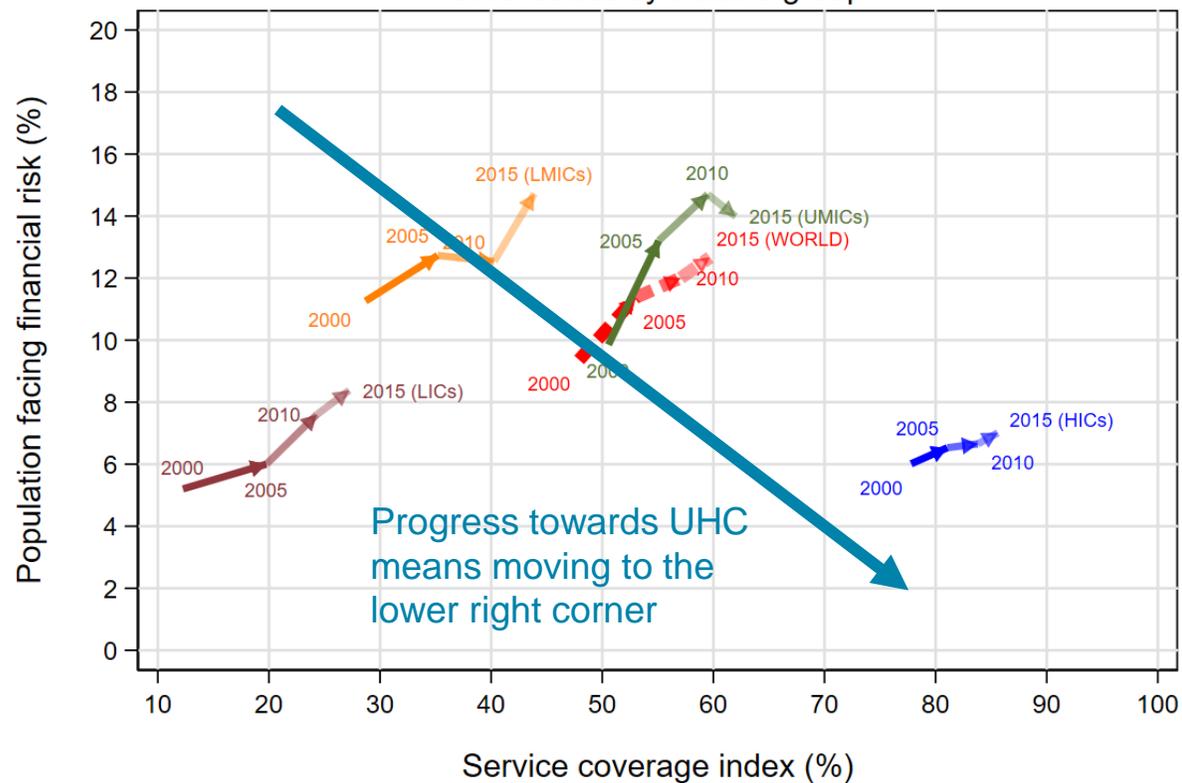


UHC trends by WB region

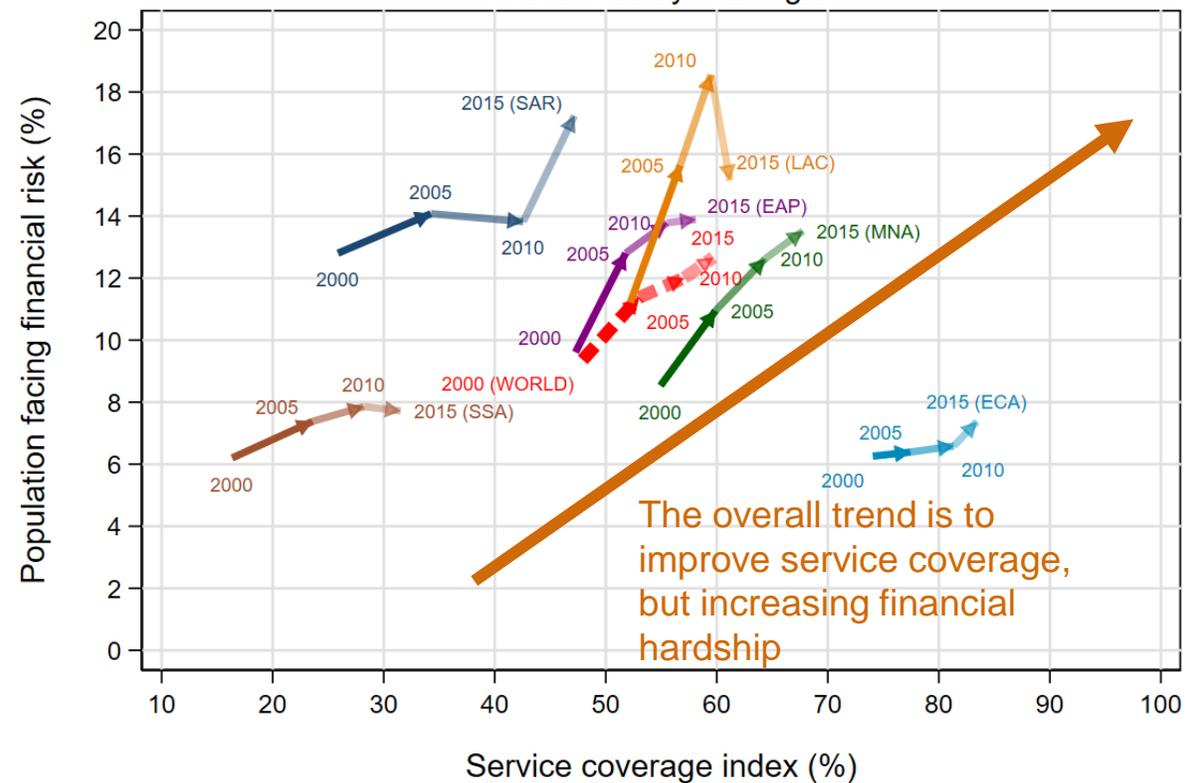


# Monitoring of financial protection at the global level

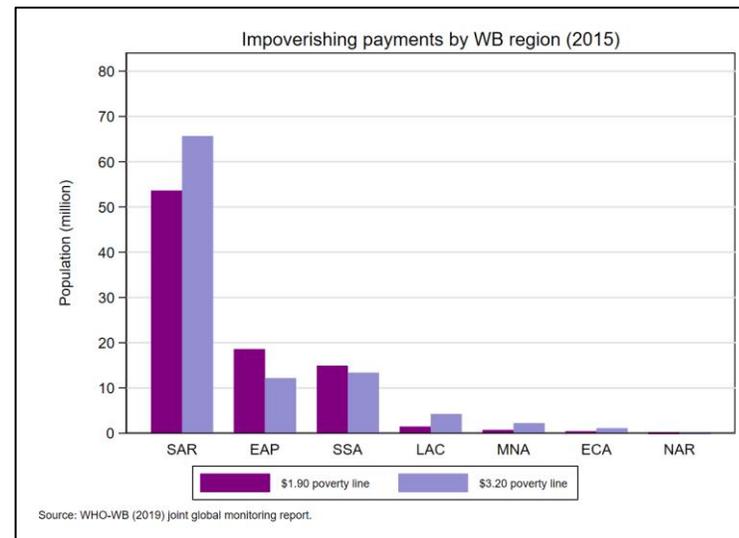
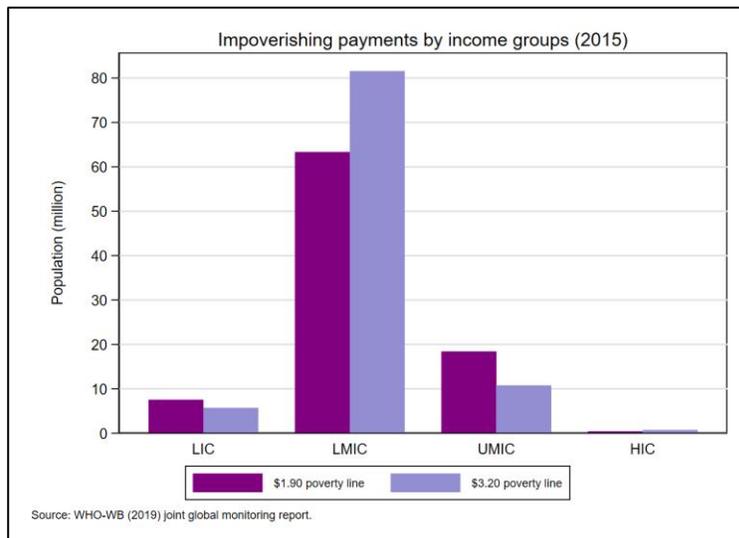
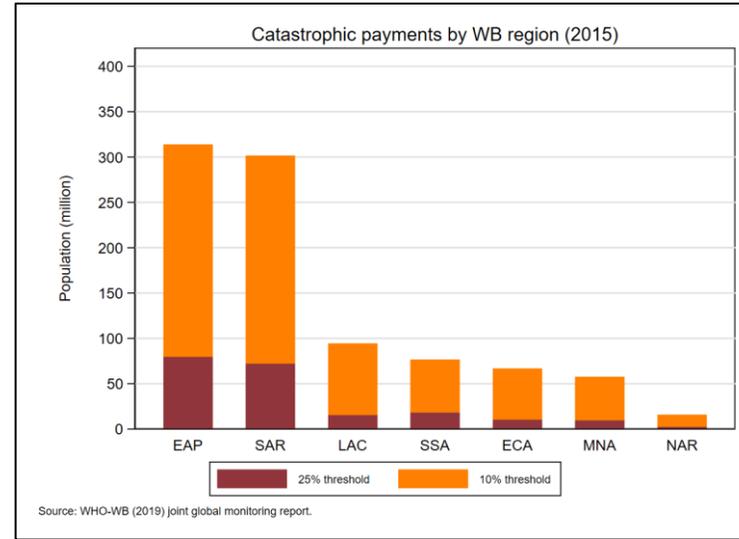
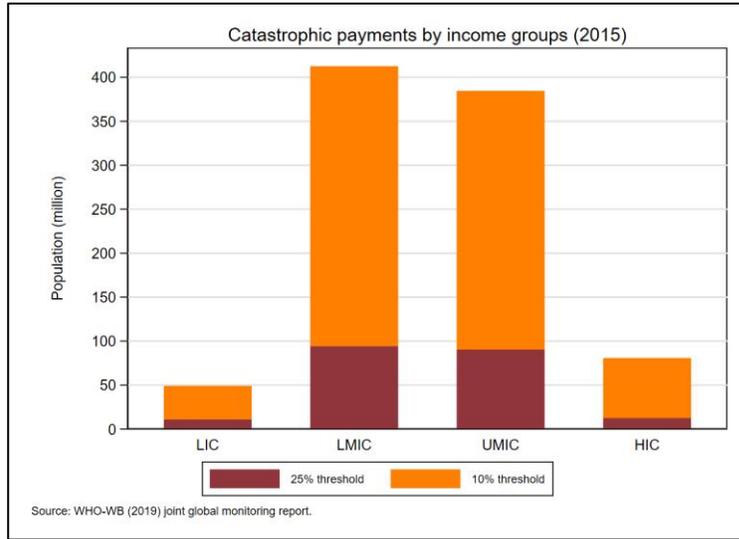
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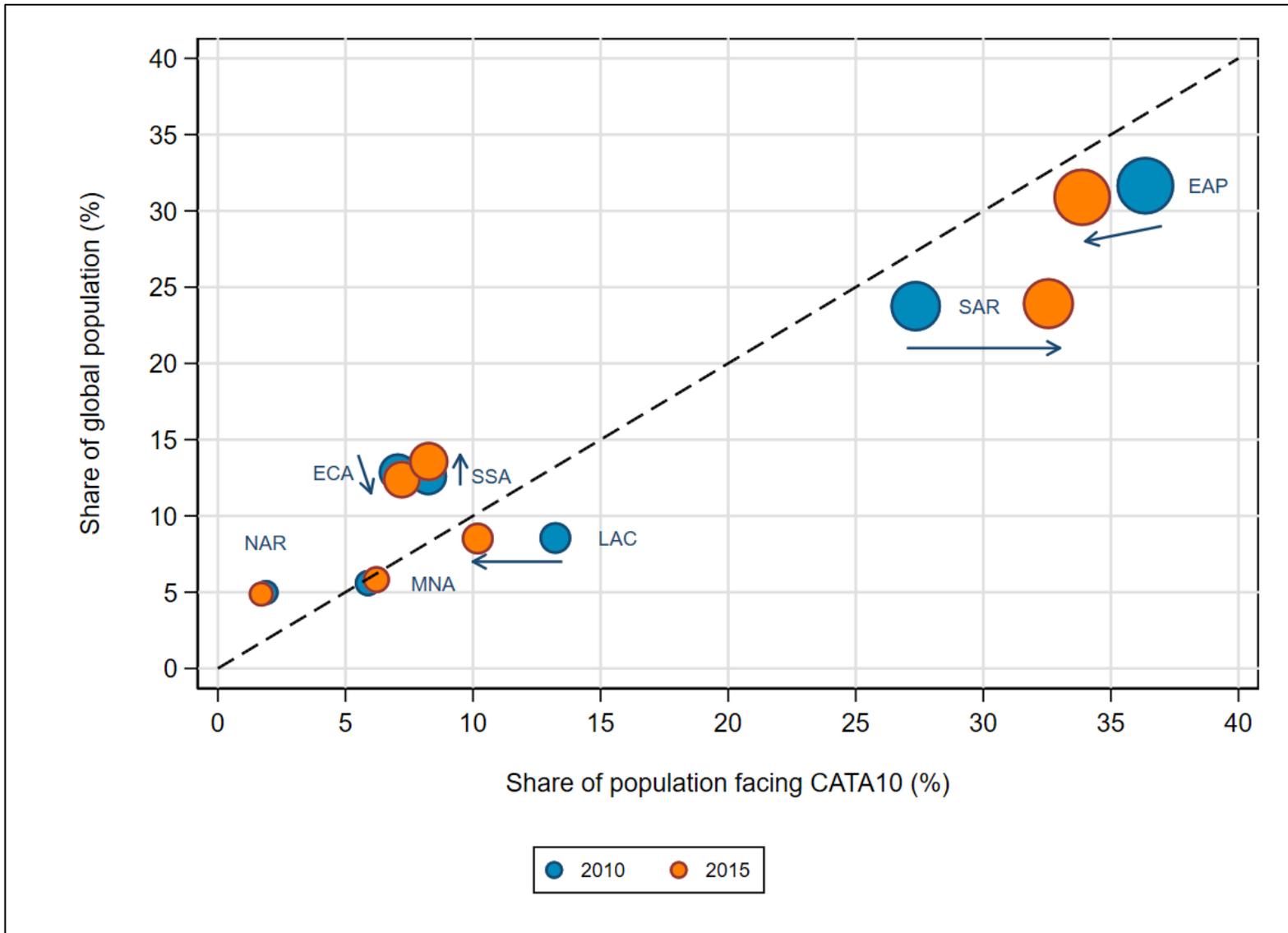
UHC trends by WB region



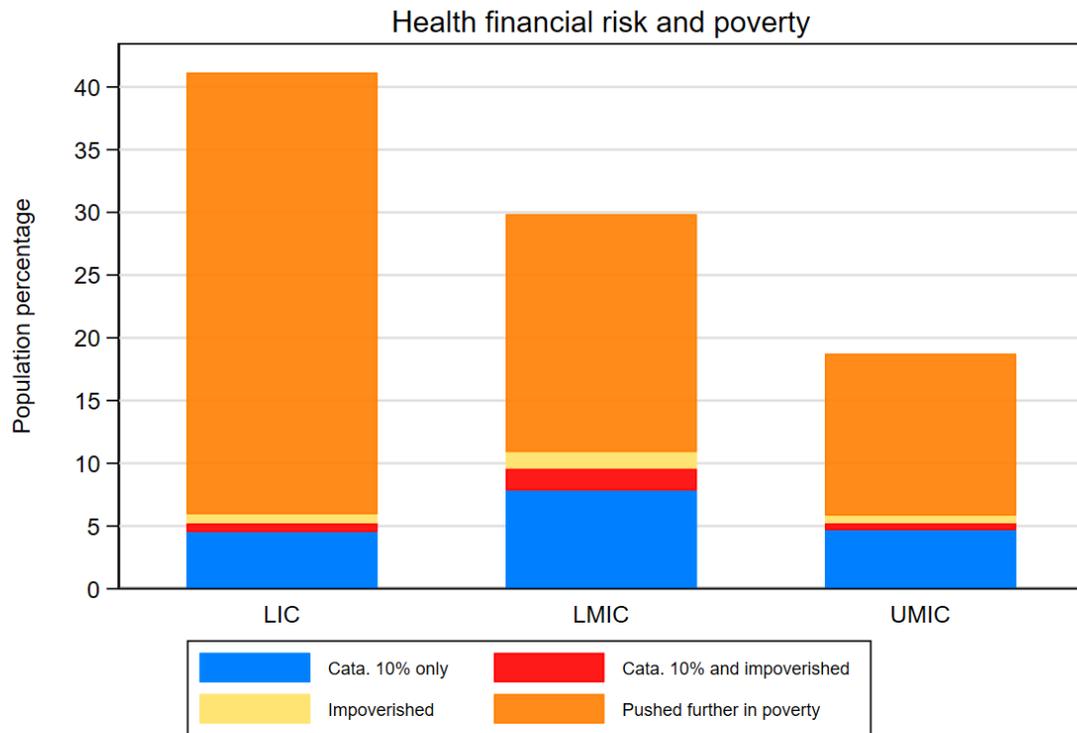
# About 930 millions spend more than 10% on health and 90 millions are pushed into poverty



# High concentration of financial risk in Asian countries

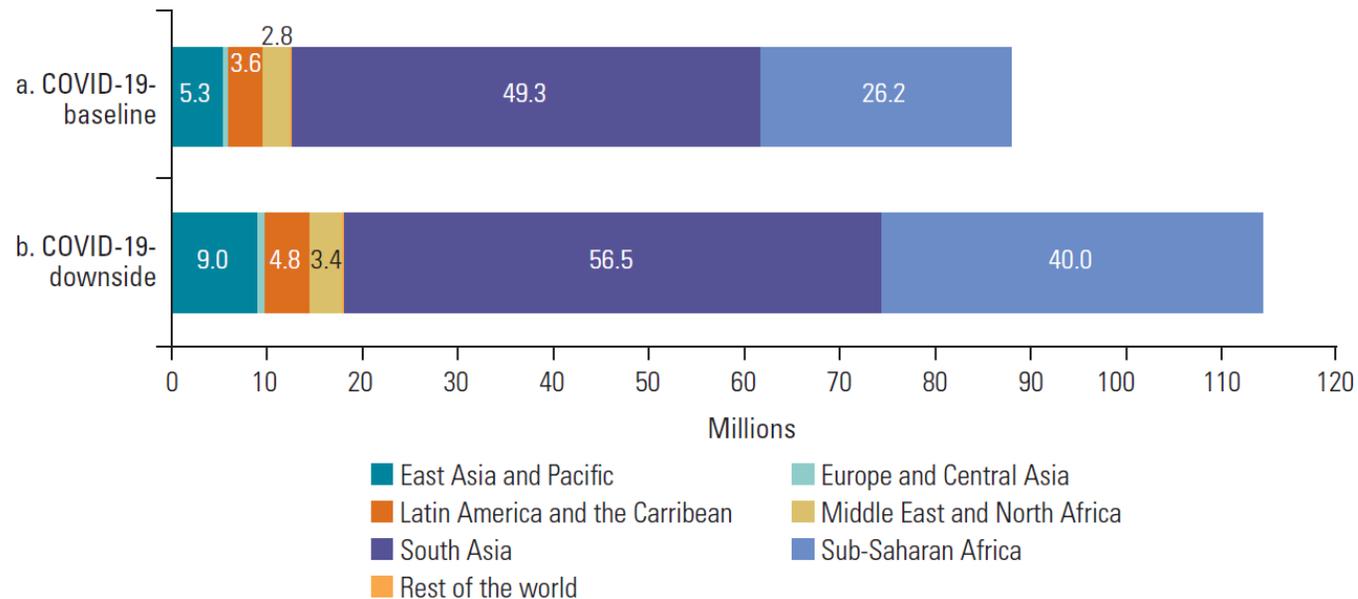


# Impoverishment due to OOP Likely to Increase



Source: Health Equity and Financial Protection Indicators (HEFPI, 2020).  
Note: 490 household surveys / 110 countries.

**FIGURE 0.4 Additional Poor at the US\$1.90-a-Day Poverty Line in 2020, per the COVID-19-Baseline and COVID-19-Downside Scenarios**



- A large proportion of the population facing financial risk due to OOP are **the poor incurring OOP and pushed further below into extreme poverty.**
- The population pushed further below the poverty line due to OOP is likely to increase with the projected increase in extreme poverty.

# 3 – DATA AND MEASUREMENT TOOLS

## THE HEALTH EQUITY AND FINANCIAL PROTECTION INDICATORS – HEFPI – PROJECT

# Why HEFPI for UHC measurement?

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- Financial protection AND service coverage data in one place
- Real household survey data
- Indicators harmonized across different sources with comprehensive quality checks
- Includes different measures of inequality
- Regularly updated

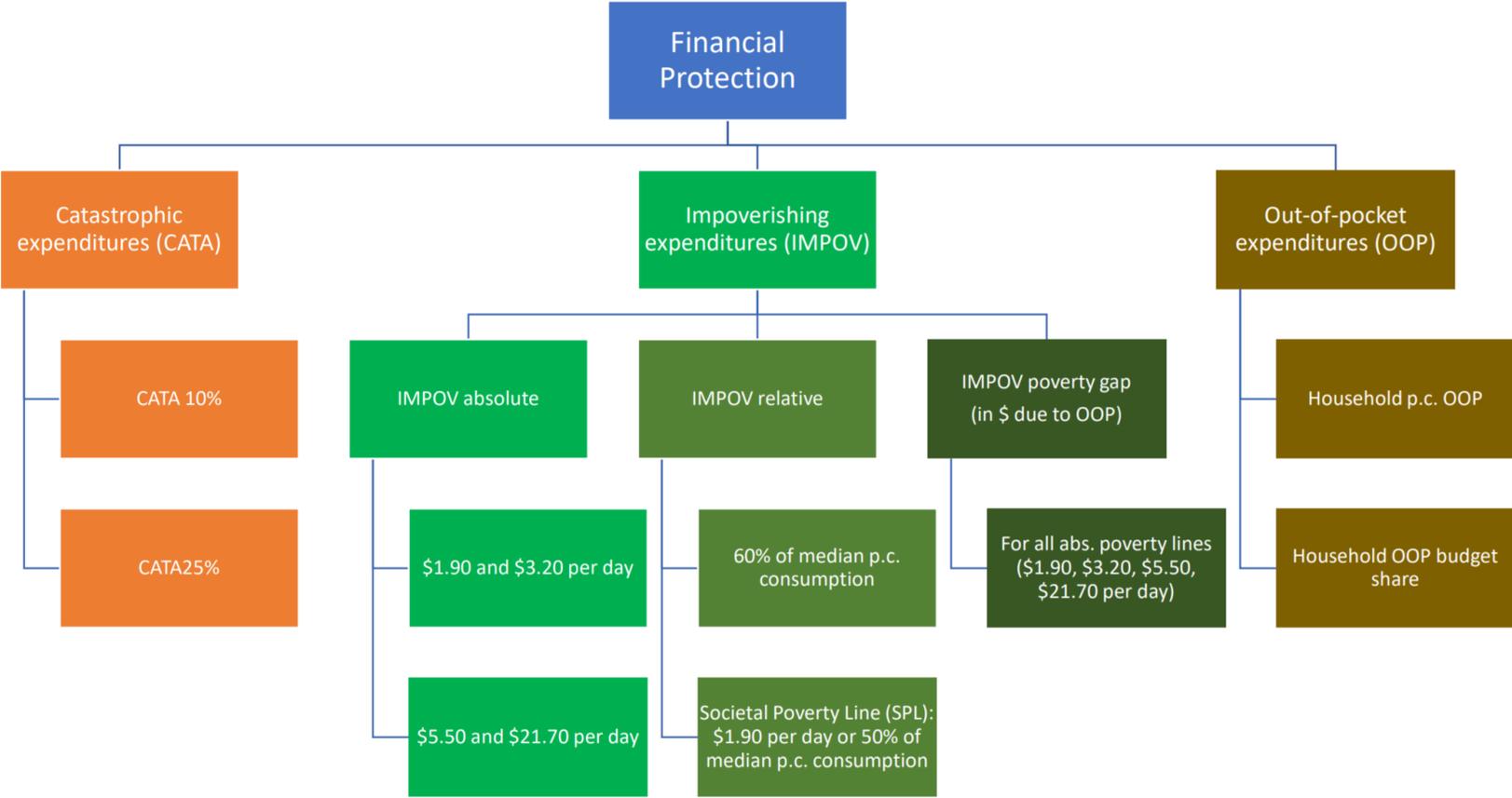


# Some key HEFPI numbers

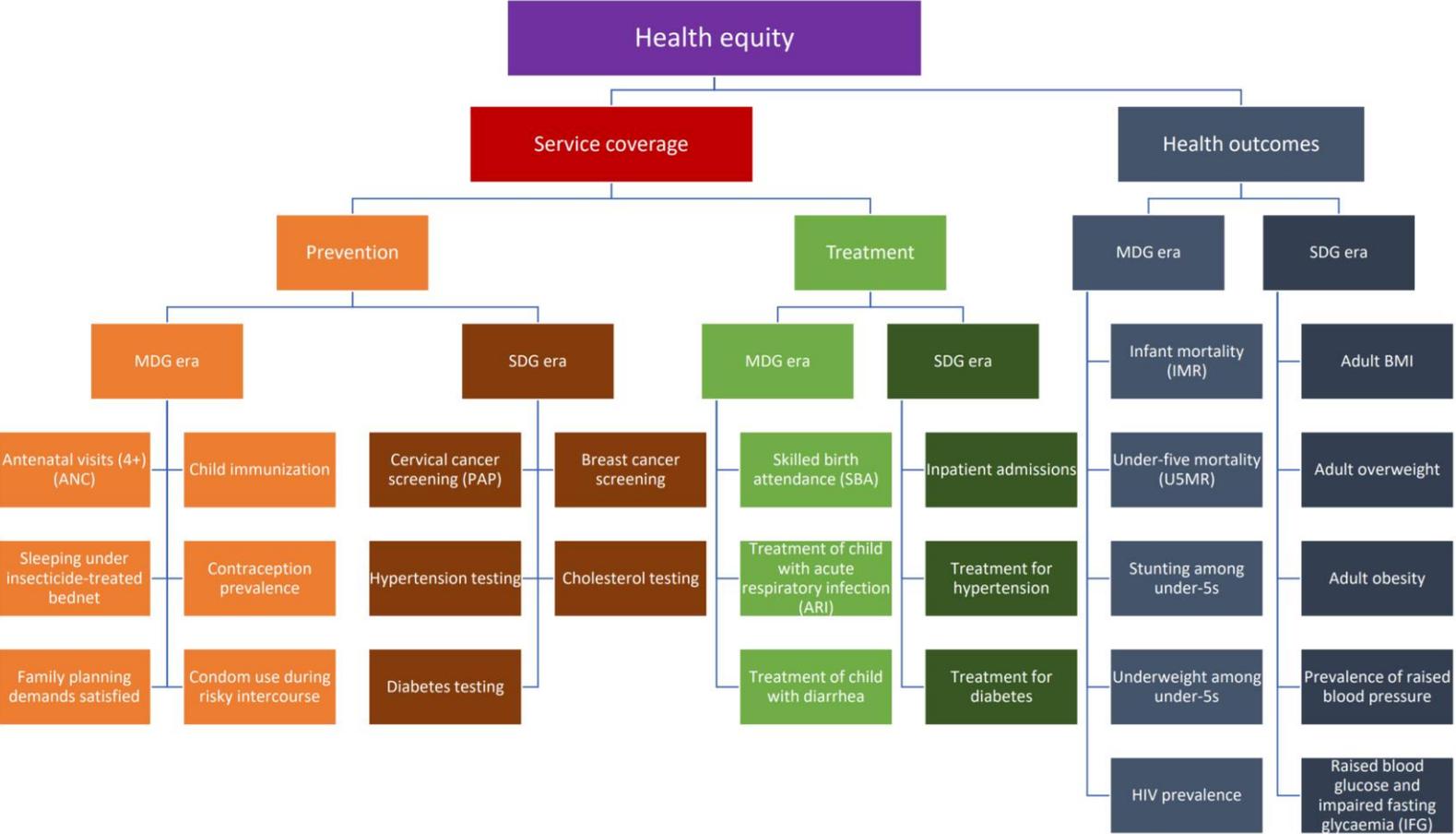
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- 19,030 datapoints at the population level across 197 countries
- 8,205 available at the (wealth) quintile level and 8,649 with Concentration Index (and its standard error)
- Spans 1982-2018, with 16,503 datapoints since 2000
- 60 indicators commonly used in int'l goals like MDGs, SDGs, NCD targets,...
  - 14 financial protection
  - 18 service coverage
  - 28 health outcomes

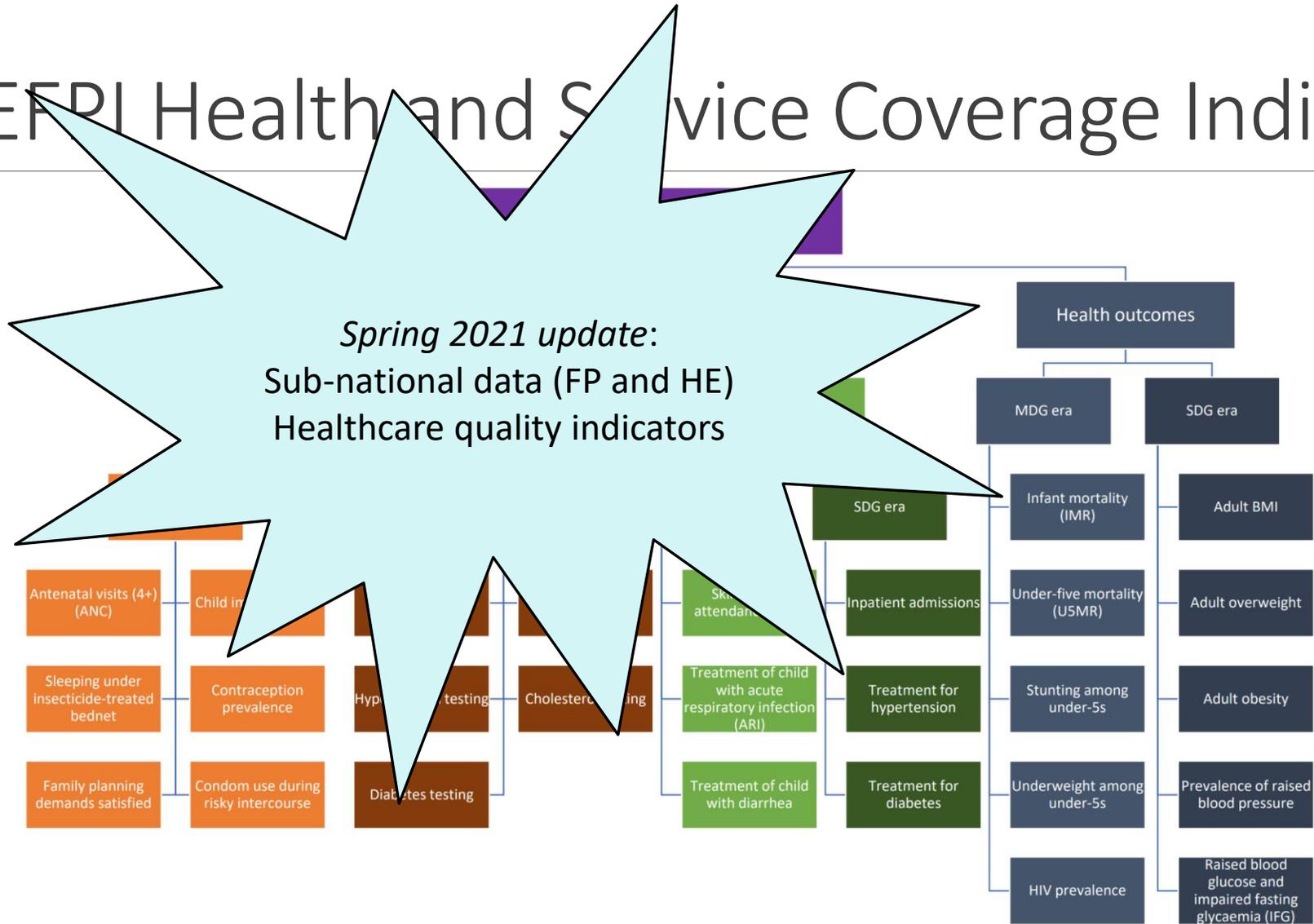
# HEFPI Financial Protection Indicators



# HEFPI Health and Service Coverage Indicators



# HEFPI Health and Service Coverage Indicators



# From household survey to HEFPI data

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- Datapoints derive from almost 1,800 **nationally representative household surveys from countries of all income levels** – no administrative or modeled data
  - LSMS, HBS
  - DHS, MICS, RHS, STEPS, ...
  - National household surveys
- We analyze the microdata to **maximize consistency in indicators definitions** across countries and over time
- Transparency – Stata code applied to micro-data publicly available
- **Comprehensive quality checks** – logical, mathematical, trend view, external verification...
- New data are constantly added, public dataset updated every 1-2 years



# Data access and resources

- **HEFPI:** <https://datacatalog.worldbank.org/dataset/hefpi>
- **WHO Portal:** <https://www.who.int/data/gho/data/major-themes/universal-health-coverage-major>
- **Paper:**  
[https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(18\)30437-6/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(18)30437-6/fulltext)  
<https://blogs.worldbank.org/opendata/massive-new-dataset-help-promote-health-equity-and-financial-protection-health>
- **Detailed documentation:**  
<https://openknowledge.worldbank.org/handle/10986/30598>  
<https://openknowledge.worldbank.org/handle/10986/31869>
- **Applications:**  
<https://academic.oup.com/wbro/article/35/2/123/5734986>  
[https://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(19\)30463-2/fulltext](https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(19)30463-2/fulltext)
- **STATA command FPRO:**  
<https://ideas.repec.org/c/boc/bocode/s458457.html>

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## Health Equity And Financial Protection

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Acronym: HEFPI  
 Type: Time Series  
 Topics: Health, Nutrition and Population  
 Economy Coverage: High Income, IBRD, IDA, Low Income, Lower Mic  
 Working Unit VPU: GHN  
 Languages Supported: English  
 TTL Name or UPI: Patrick Hoang-Vu Eozenou, GHN  
 Collaborator Name(s): Sven Neelsen, GHN; Robert Adam Stephen Wagstaff, DEC  
 Geographical Coverage: World, East Asia & Pacific, American Samoa, Au  
 China [More...](#)

**Out-of-Pocket Expenditures on Health: A Global Stocktake**  
 Adam Wagstaff ✉, Patrick Eozenou ✉, Marc Smitz ✉  
 The World Bank Research Observer, Volume 35, Issue 2, August 2020, Pages 123–157,  
<https://doi.org/10.1093/wbro/lkz009>  
 Published: 12 February 2020



## THE LANCET Global Health

A comprehensive assessment of universal health coverage in 111 countries: a retrospective observational study

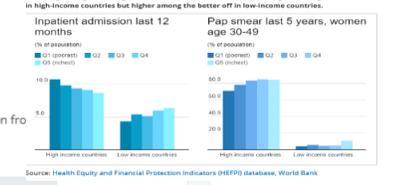
Adam Wagstaff, DPhil, Sven Neelsen, PhD, Show footnotes

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A massive new dataset to help promote health equity and financial protection in health

HEFPI  
Health Equity and Financial



POLICY RESEARCH WORKING PAPER 8879

The 2019 Update of the Health Equity and Financial Protection Indicators Database

An Overview

Adam Wagstaff  
 Patrick Eozenou  
 Sven Neelsen  
 Marc Smitz

WORLD BANK GROUP  
 Development Economics  
 Development Research Group  
 &  
 Health, Nutrition and Population Global Practice  
 June 2019

# Data visualization – The HEFPI portal

<http://datatopics.worldbank.org/hefpi>



**A History of the World Bank's Health Equity and Financial Protection Indicators**

This project - a collaboration between the Bank's research group, data group, and health, nutrition and population global - stretches back to 2000.

[Read More](#)

**Did the Poor Get Left Behind by the Health MDGs?**

One question that is often asked is whether the focus on population averages in the MDGs resulted in the poor being left behind. The HEFPI dataset allows us to answer this with some precision.

[Read More](#)

**Tracking Progress Towards UHC Using the HEFPI Database**

The idea underlying Universal Health Coverage (UHC) is that everyone, irrespective of their means, receives the health services they need, without suffering financial hardship in the process.

[Read More](#)

health systems aspire to deliver health services to people who need them, without causing financial hardship for the families. How close do health systems around the world come to achieving this goal of universal health coverage?

percentage of children and women in different countries get key preventive health interventions such as antenatal care and cervical cancer screening? How does this percentage differ between the poor and less poor? What percentage of adults in different countries receive inpatient care, and how does this percentage compare to the WHO benchmark? What does the gradient across economic groups look like, and does it look different in low-, middle- and high-income countries? What are the gaps between the rich and the less poor in health outcomes, such as childhood stunting and adult obesity?

fraction of households spend more than 10% of their income or out-of-pocket consumption on health care? Is the fraction higher for the poor? What fraction of households are impoverished by out-of-pocket health expenses? How do these numbers vary across countries? How have they changed over time?

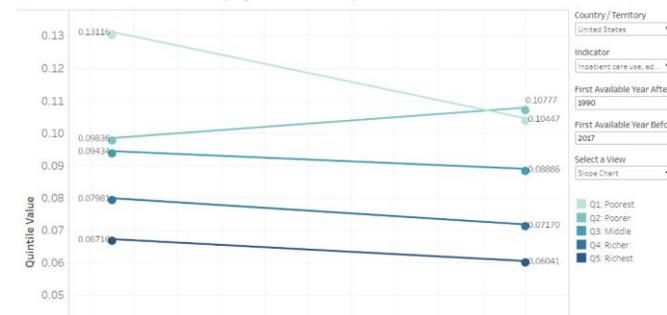
The Health Equity and Financial Protection Indicators (HEFPI) dataset allows you to answer these questions. The dataset has grown over time from the first dataset published in 2000 which pulled data from 42 surveys and one type of survey, covered just 42 countries, and included just 34 indicators, which all concerned maternal and child health. In 2013, for the first time, the database included household out-of-pocket health expenditures, noncommunicable disease indicators (NCD), and data from high-income countries. The 2018 update follows this trend by employing over 1,600 surveys, covering 183 countries, and encompassing multiple years of data, richer data, and more extensive data on household out-of-pocket expenditures.

- [DOWNLOAD DATA](#)
- [READ PUBLICATION](#)
- [PORTAL EXPLAINED](#)

## Health Equity and Financial Protection

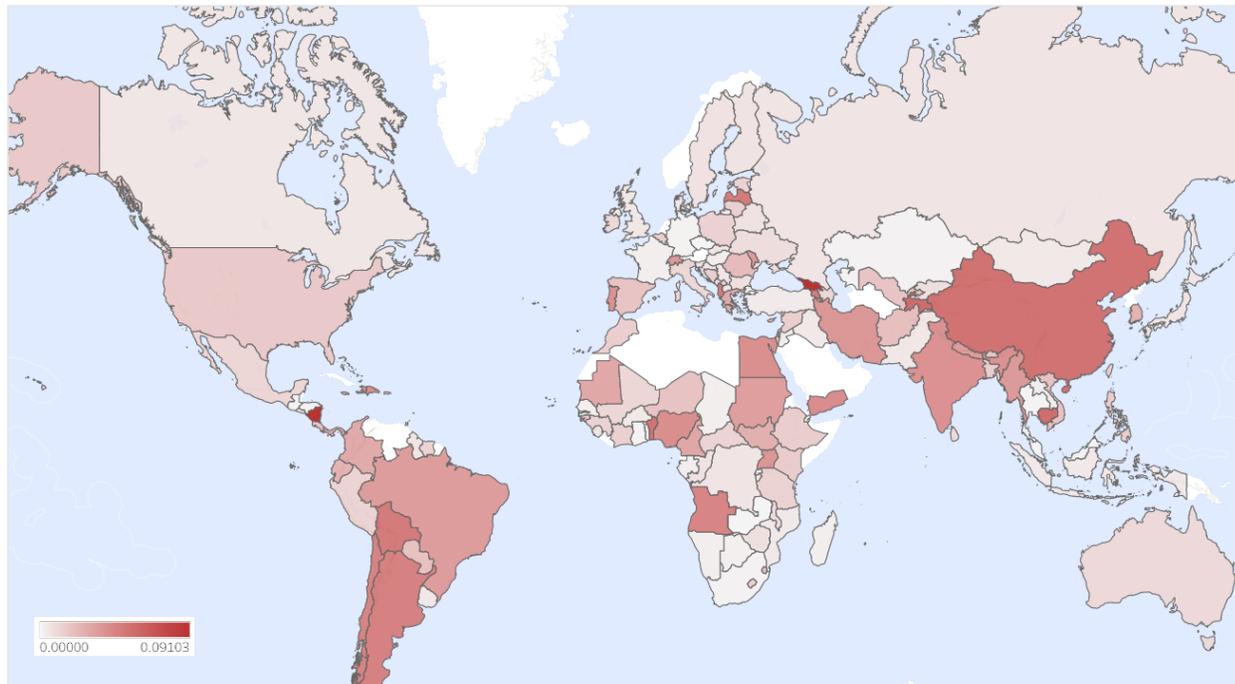
[Most recent value - Population mean](#)
[Trends - Population mean](#)
[Quintile Trends](#)
[Quintile Dotplot for Countries](#)
[Quintile Dotplot for Indicators](#)
[Most recent value - Concentration Index](#)
[Trends - Concentration Index](#)

Quintile Trends - United States, Inpatient care use, adults

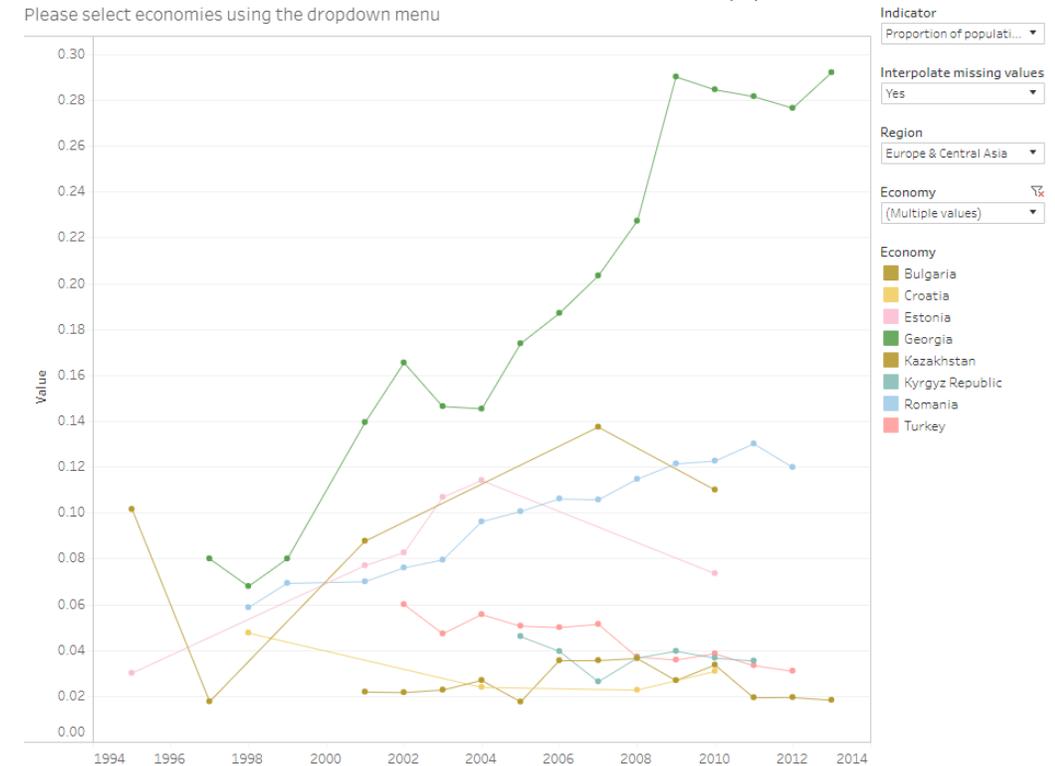


# Customizable charts – maps and trends

**Most recent value - Population mean - Catastrophic health spending, 25%**  
From 1982 to 2017



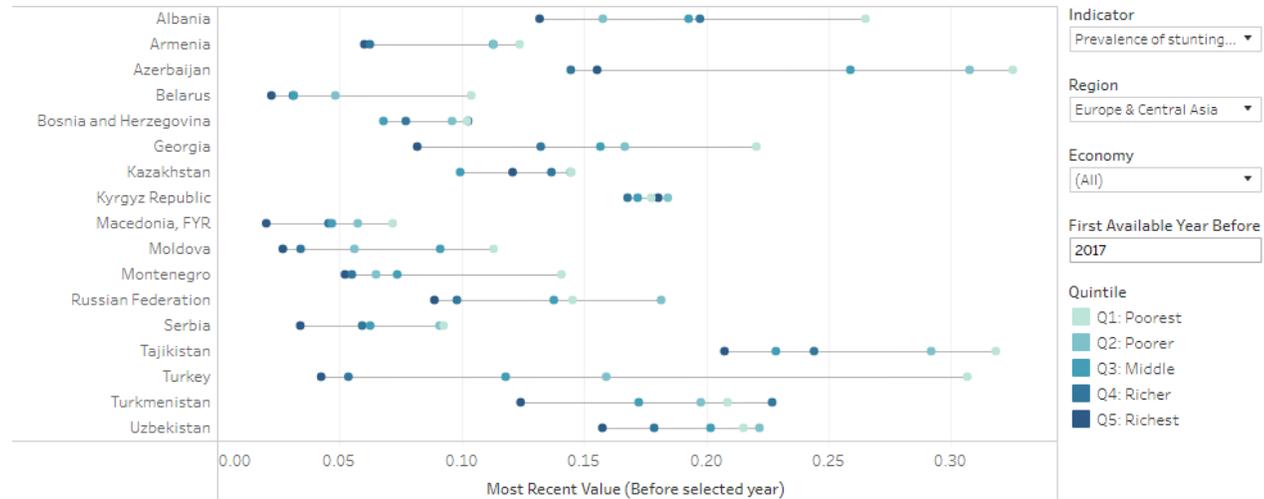
**Trends - Proportion of population spending more than 10% of household consumption or income on out-of-pocket health care expenditure (%)**  
Please select economies using the dropdown menu



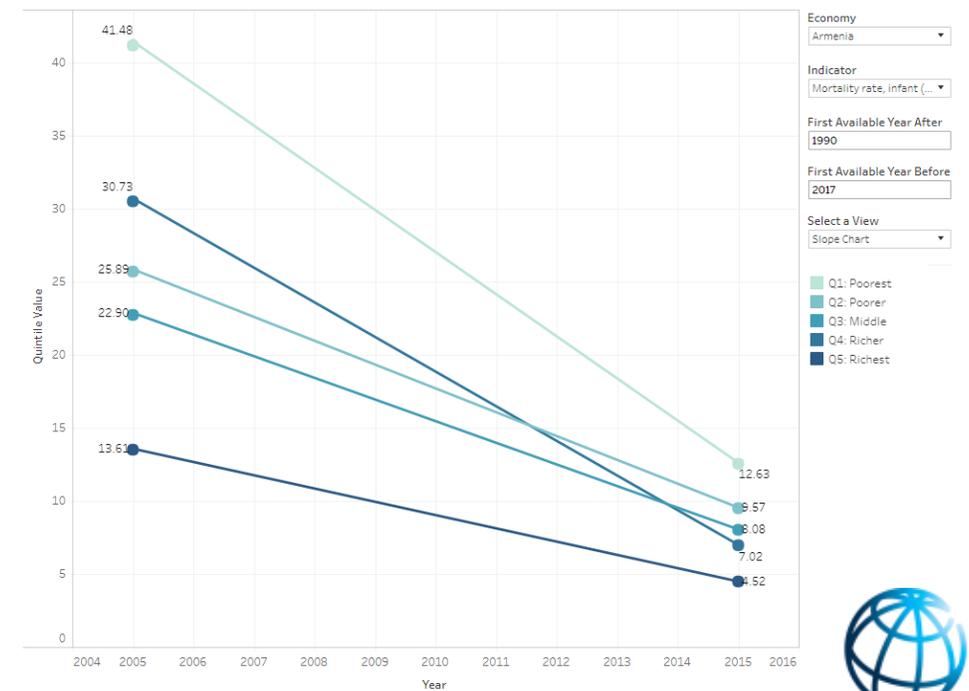
# Customizable charts – inequality

## Quintile Dot Plot for Economies - Prevalence of stunting, height for age (% of children under 5)

Please select the economies in the dropdown menu



## Quintile Trends - Armenia, Mortality rate, infant (per 1,000 live births)



# Interested in learning more? We offer trainings!

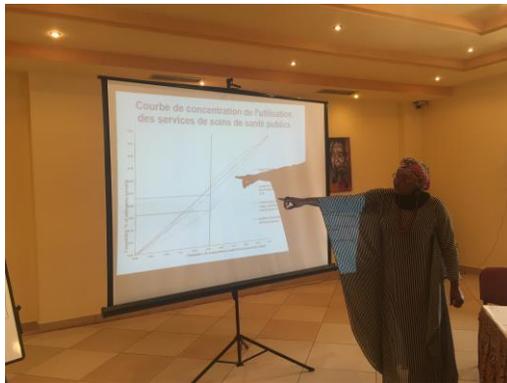
We provide customizable modular one or multi-day trainings

## HEFPI dataset

- Visualizing and interpreting HEFPI data
- Computing UHC achievement indices

## Household micro-data analysis using ADePT

- Inequalities in health and healthcare access, including standardization and decomposition
- Financial protection
- Benefit incidence analysis
- Progressivity analysis



# Conclusion points

**Financial protection** is an integral part of **UHC** and is a key **SDG** indicator which relates to **SDG target #3** (better health health), **target #1** (no poverty), and **target #10** (inequality reduction).

**Joint monitoring** of service coverage and financial protection is essential.

Monitoring financial protection at country level requires investments in **regular, nationally representative, household survey data**.

At the global level, monitoring of financial protection is conducted **jointly with WHO**.

Next monitoring report: **2021**

Globally, progress towards **UHC** between 2000 and 2015 was characterized by **improvements in service coverage**, together with an **increase in financial risk**.

Financial risk is currently concentrated in **middle income countries** and in **Asia**.

**Forgone care** due to financial barriers is important to monitor too (Africa).

**Measurement tools** and data visualization platform are available through WB or WHO.

In-country **measurement workshops** provide a good opportunity to translate measurement into policy assessment and recommendation.



# Thank you

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