



# TRENDS IN EQUITY HEALTH INTERVENTIONS AND STATUS

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# We already know this!

- Inequality is the measurable dimension of health inequity studies
  - Differences, gaps, variation
  - Of health status, exposure to risk factors, access to and utilization of health care services
  - Across several dimensions (or stratifiers)
    - Wealth, ethnicity, gender, education, age
- Absolute and relative
  - When comparing groups one can measure
    - Distance = absolute, by difference
    - Ratio = relative, by division

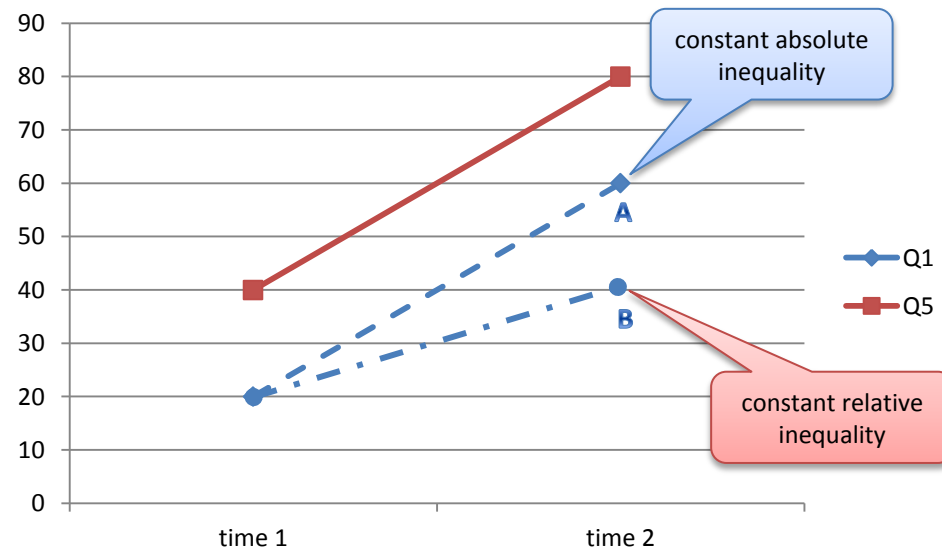


# Inequality – absolute and relative

- Absolute inequality
  - Remains constant when all groups increase or decrease by the same amount (+ or – Y)
- Relative inequality
  - Remains constant when all groups increase or decrease by the same factor ( $\times$  Y)

Will use the slope index of inequality (SII):  
a regression-based estimate of the difference between the two groups

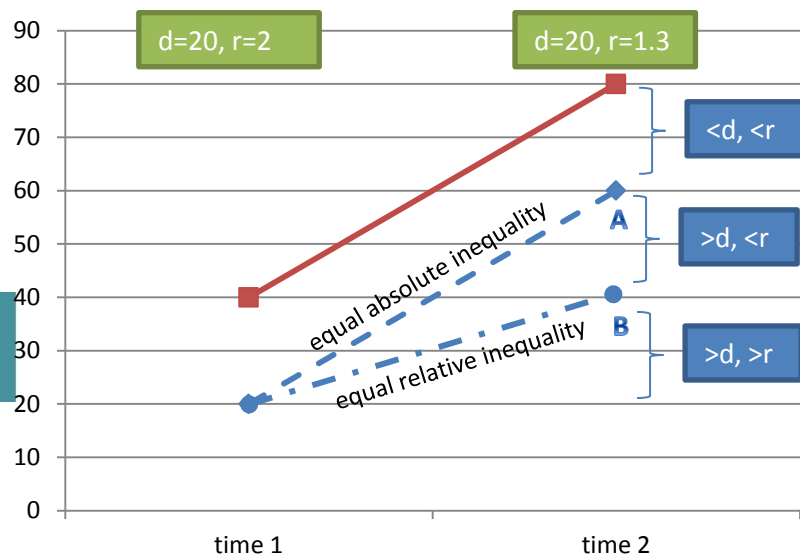
Will use the concentration index (CIX):  
a Gini-like measure of concentration of intervention coverage across the population



# Trends in inequalities

- How to assess change in inequalities?
- Frequently, decreasing absolute and increasing relative inequality seen as contradictory
- We show that there is pattern
  - Both indicators must be used together to check what is happening
- The overall trend of the outcome
  - Increasing or decreasing
  - Makes a difference here

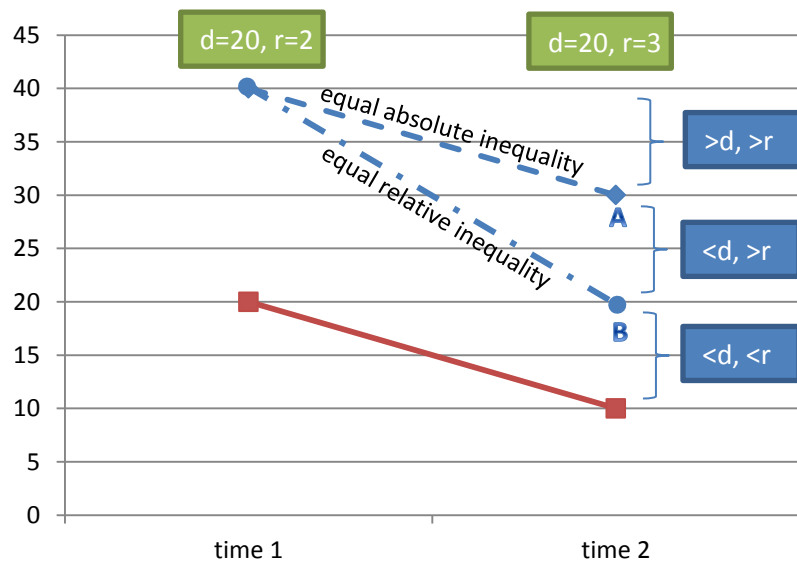




Increasing trend: intervention

Best case: decreasing inequality

Worst case: increasing inequality

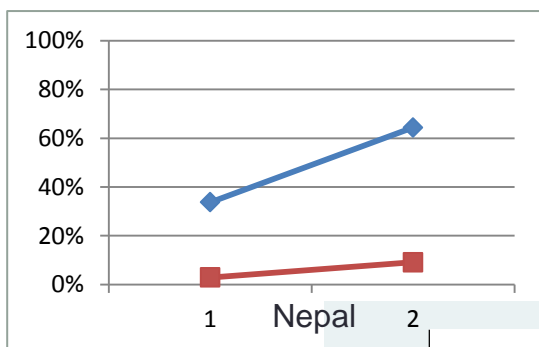


Decreasing trend: mortality/morbidity

Worst case: increasing inequality

Best case: decreasing inequality

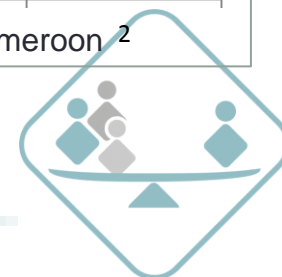
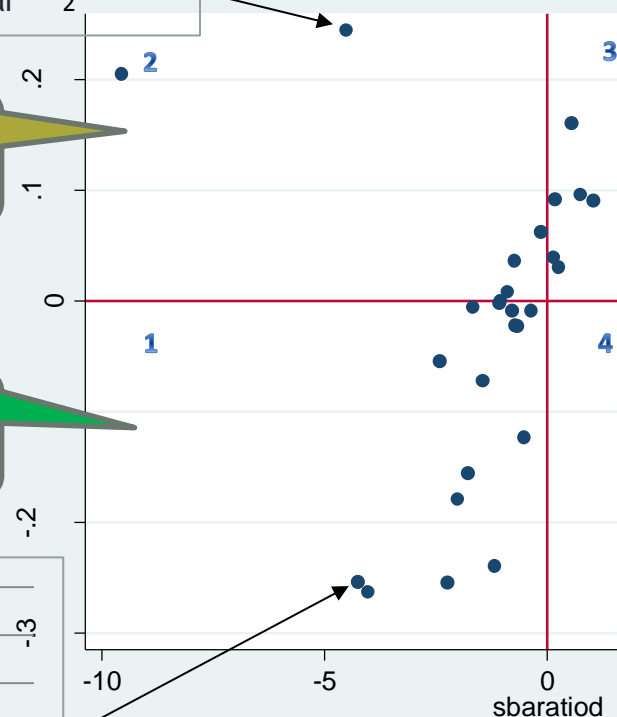
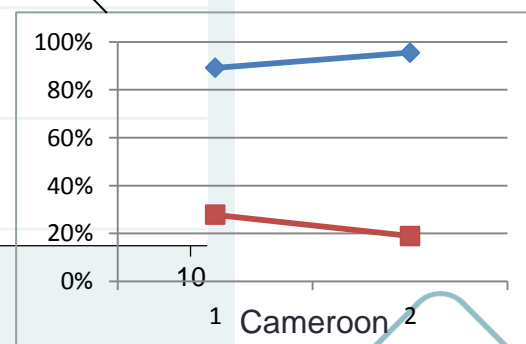
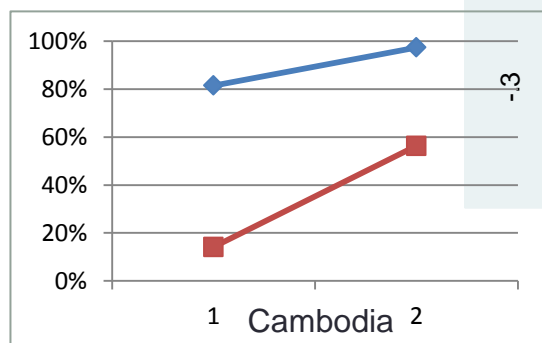




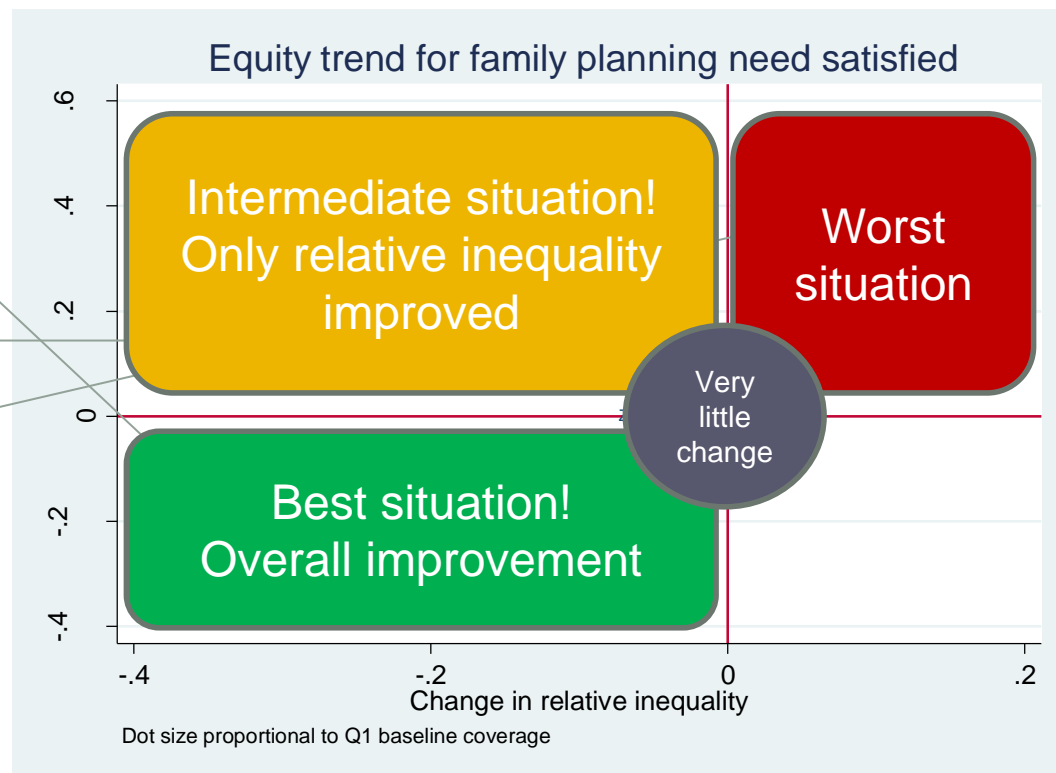
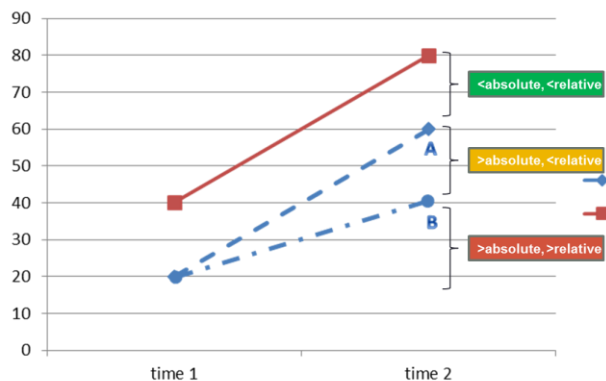
Absolute inequality increased,  
relative inequality decreased  
– intermediate scenario

Both relative and absolute  
inequalities decreased – best  
scenario

Both relative and absolute  
inequalities increased –  
worst scenario

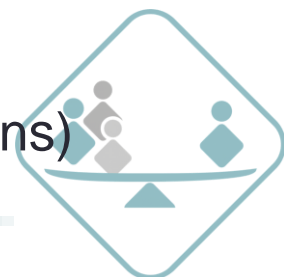


# Trend plot – how to interpret?



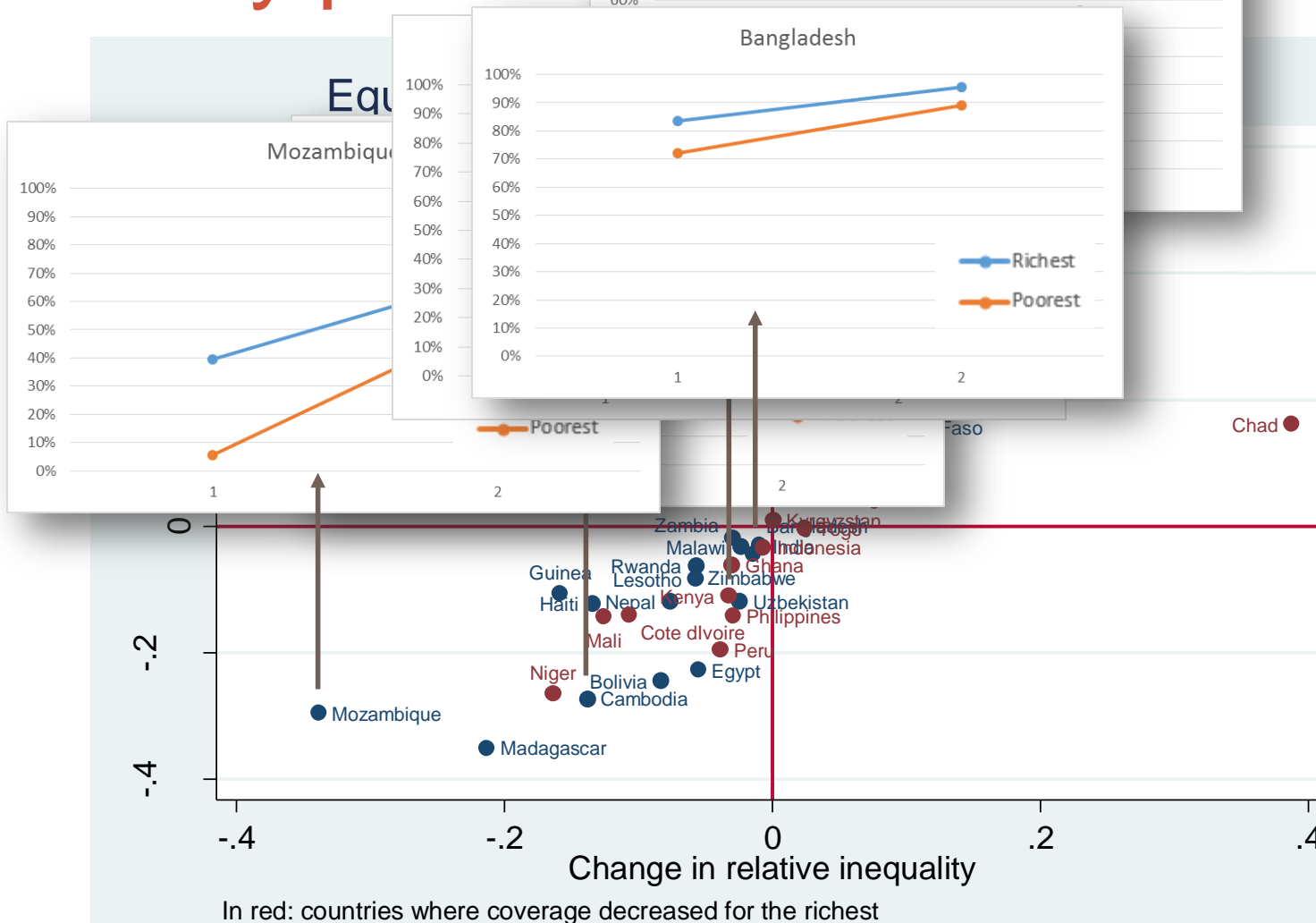
# Equity trend analysis

- Results for 36 countries
  - With two surveys about 10 years apart
- Family planning need satisfied
  - % women using contraception among those in need
  - Complex indicator based on many variables, some very subjective
  - Difficult to calculate
  - Makes more sense than contraceptive prevalence
- Antenatal care 1+ visit with skilled provider
  - At least 1 consultation with skilled provider during pregnancy
- Skilled birth attendant
  - Skilled attendant at child birth
  - Skilled = doctor, nurse or midwife (with some local adaptations)





# Family planning



# Let's see the details

country	year	cov. all	cov. Q5	CIX	SII
Benin	1996	38.9%	46.9%	0.090	0.214
	2006	36.3%	55.9%	0.198	0.417
Ethiopia	2000	18.7%	48.3%	0.431	0.472
	2005	30.6%	60.8%	0.333	0.571
Mozambique	1997	20.0%	39.7%	0.388	0.464
	2003	58.1%	69.2%	0.049	0.169

Both CIX & SII  
increased

CIX decrease,  
SII increased

Both CIX & SII  
decreased

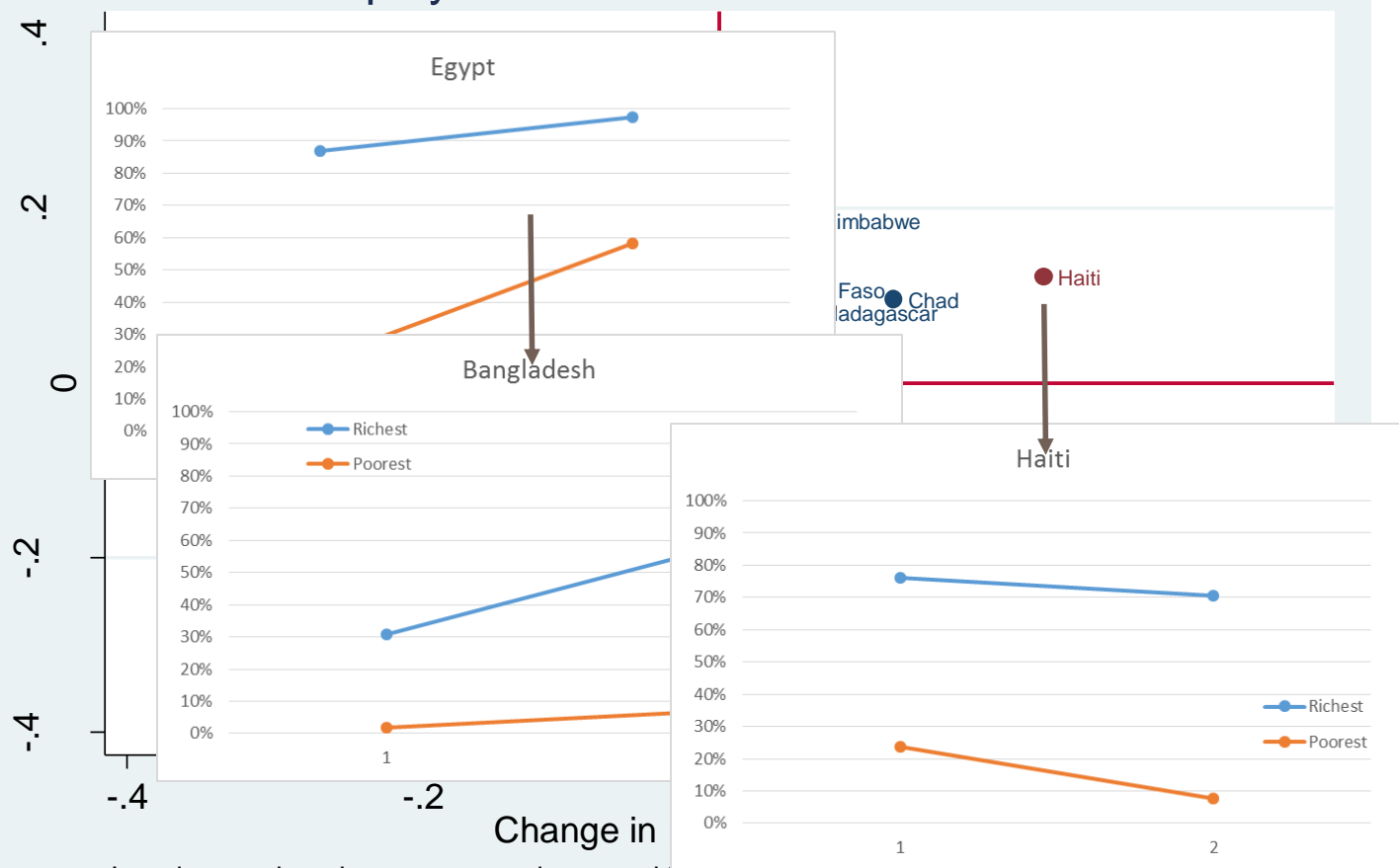


# Antenatal care (1+ skilled)



# Skilled birth attendant

## Equity trend for skilled birth attendant



In red: countries where coverage decreased for the richest



# Best performing countries in terms of improving equity for six RM interventions

FPS	CPMT*	CPMO*	ANC1	SBA
				Benin
Bolivia	Bolivia	Bolivia	Bolivia	
Cambodia	Cambodia	Cambodia	Cambodia	
	Egypt	Egypt	Egypt	Egypt
	Haiti			
Madagascar	Madagascar	Madagascar		
Mozambique				
Niger				
			Peru	Peru
		Zambia		

\* Not presented in the graphs



# A few conclusions

- Equity may seem complicated to assess
  - But it is not, if you understand the concept and the measures
- Most countries studied managed to improve overall coverage
  - Around 80% of them
- In contrast, only a handful of countries showed improvement in equity for each indicator
  - No more than 5 countries with very good improvement
  - No more than 10 countries with some improvement
- SBA was clearly the intervention that improved less in terms of equity

