DETAILED EQUITY PROFILES FOR CD COUNTRIES

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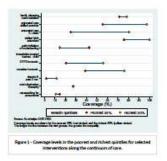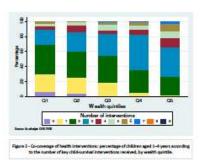# Overview of the full profile
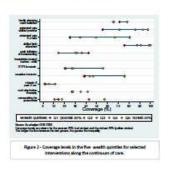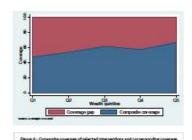

Each country gets

- A big table
- 4 graphs

They sit at
www.countdown2015mnch.org
/reports-and-articles/equity

The table rows

- Stratifiers in the rows
- 5 in total
  - Wealth quintiles
    - 1 to 5
  - Maternal education
    - No education
    - Primary
    - Secondary +
  - Child's sex
  - Urban/rural
  - Geographic region
    - Variable by country

Azerbaijan (DHS 2006)

Table - Coverage of Countdown indicators at

	Family planning needs satisfied	Contraceptive prevalence rate
National	69.4	51.1
Wealth quintiles		
Q1	71.3	55.2
Q2	65.5	48.0
Q3	65.9	47.0
Q4	65.6	48.4
Q5	78.4	57.2
Equity indicators		
Q5/Q1 ratio	1.1	1.0
Q5-Q1 difference	7.1	2.0
Concentration index	2.1	1.3
SII	7.5	2.8
Maternal education		
none	67.6	51.4
primary	39.8	25.0
secondary +	69.6	51.4

The table columns

Table - Coverage of Countdown indicators at national level and by key equity stratifiers.

	Family planning needs satisfied	Contraceptive prevalence rate	Antenatal care (1+ visits, skilled provider)	Antenatal care (4+ visits, any provider)	Skilled attendant at delivery	C-section rate	Early initiation of breastfeeding	Postnatal care for babies born at home	
National	69.4	51.1	76.9	45.2	88.6	4.7	31.9	10.8	
Wealth quintiles									

- Indicators in the columns
  - FPS – family planning need satisfied
  - Contraceptive prevalence
  - ANC1s, ANC4
  - SBA
  - C-section
  - Early BF
  - Postnatal care for babies (born @ home & all)

- BCG, DTP3, Measles
- Vitamin A
- ORT
- Careseek for diarrhea
- ITN by children
- Improved drink water
- Cocoverage
- CCI – composite coverage index

Reading the table

- Each cell shows coverage
- For the whole country
- For wealth quintiles
- And so on…
  - Not getting into the definition of each one

- Oops
  - Not all rows are stratifiers!

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Equity indicators

- Just after the coverage by wealth quintiles
  - Some equity indicators:
  - Richest / poorest ratio
  - Richest – poorest difference
  - Concentration index (CIX)
  - Slope index of inequality (SII)

Equity indicators	FPS	CPR	ANC1s
Q5/Q1 ratio	1.1	1.0	1.8
Q5-Q1 difference	7.1	2.0	42.1
Concentration index	2.1	1.3	11.4
SII	7.5	2.8	53.0

Measures of inequality

- Dozens of measures available
  - Indicates that no one is a clear winner!
- Simplest measures – ratio and difference
  - Do not take into account intermediate groups, only the extremes of distribution, thus insensitive to changes in part of the population
  - Not always the extremes will present lowest/highest coverage
- More complex measures
  - Deal with the whole population
  - Based on several ideas
    - Concentration, variance, statistical models

Flavors of inequalities

- Absolute and relative
  - When comparing two groups one can measure
    - Distance = absolute, by difference
    - Ratio = relative, by division
- Absolute inequality
  - How far one group from the other
  - Tends to decrease when the one group achieved the limit
- Relative inequality
  - How many times one group better than another
  - Behaves strangely when one group close to the limit
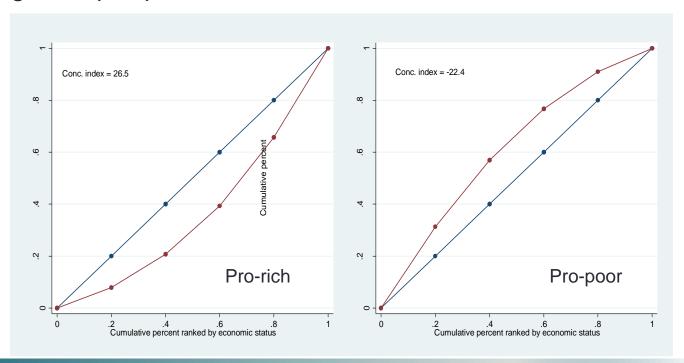   - Especially approaching zero (mortality, for instance)

Concentration index (relative)

- CIX: twice the area of the concentration curve that shows cumulative distribution of outcome for increasing wealth.
  - Positive: pro-rich
  - Negative: pro-poor

Slope index of inequality (absolute)

- SII: the slope of the regression of outcome on midpoints of wealth groups. Interpreted as the difference between the adjusted coverage for the top and bottom of wealth scale.

SII = 72.4 p.p.

Usually estimated by linear regression, best if done with logistic regression

Observed   ———— Fitted

Fractional rank

Not only simple indicators in the columns

- Co-coverage indicator

- Composite coverage index

Co-coverage

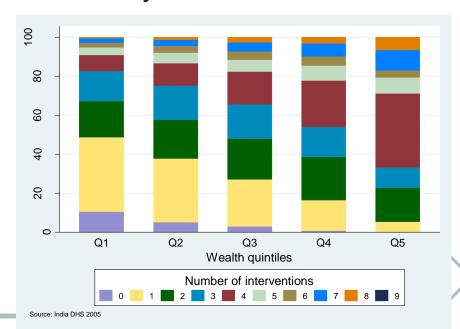- A set of 9 coverage indicators were selected
  - ANC, vitamin A, tetanus vaccine, SBA (mother)
  - BCG, DTP3, measles immunization, ITN (child)
  - Safe water (household)
- The number of interventions received by each mother/child is added
- Proportions of each count presented by wealth quintiles
- In the table, % of children receiving 6+ interventions

Source: India DHS 2005

Composite coverage index

- Originally proposed as the coverage gap
  - Not well received/understood by policy makers
- Weighted average of 8 interventions
  - equal weights to 4 stages in the continuum of care
    - family planning
      - demand satisfied
    - maternal and newborn care
      - skilled birth attendant, 1+ antenatal care by skilled provider
    - Immunization
      - DPT3 x 2, measles, BCG
    - case management of sick children
      - ORT for diarrhea, care for pneumonia

$$\frac{1}{4}\left(FPS + \frac{SBA+ANCS}{2} + \frac{2DPT3+MSL+BCG}{4} + \frac{ORT+CPNM}{2}\right)$$

The dot-plot (or equi-plot)

The five wealth quintiles shown at the same time

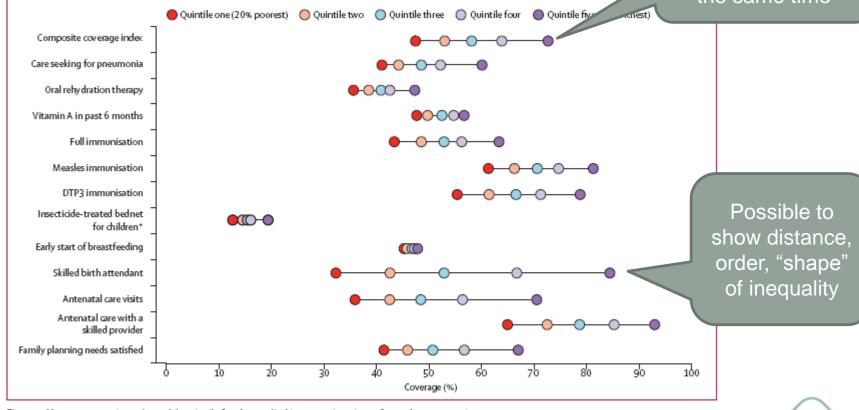Possible to show distance, order, "shape" of inequality

Figure 1: Mean coverage in each wealth quintile for the studied interventions in 54 Countdown countries
Coloured dots show the average coverage in each wealth quintile. Q1 is the 20% poorest wealth quintile; Q5 is the 20% richest. The distance between quintiles 1 and 5 represents absolute inequality. *Appendix p 1 specifies age ranges of children.

Source: Barros AJ et al. Lancet 2012; 379: 1225–33

Finally, CCI by quintile

Source: Azerbaijan DHS 2006