



Countdown to 2030

Maternal, Newborn & Child Survival

The Countdown Equity Country Profile: Assessing Progress in Reaching the Underserved

Progress towards universal health coverage for women's, children's and adolescents' health must be assessed not only in terms of national averages, but also on how well such gains benefit all subgroups living in a country. National averages can hide persistent inequalities that need to be addressed.

In recognition of the importance of equity for overall country progress, the Sustainable Development Goal target 17.18 calls for the disaggregation of national statistics according to income, gender, place of residence, ethnicity and other relevant variables.

Disaggregated analyses of intervention coverage are important for ethical and practical reasons. Such analyses help identify which women, children, and adolescents are being left behind – information that countries can use to design better and more inclusive policies and programs.

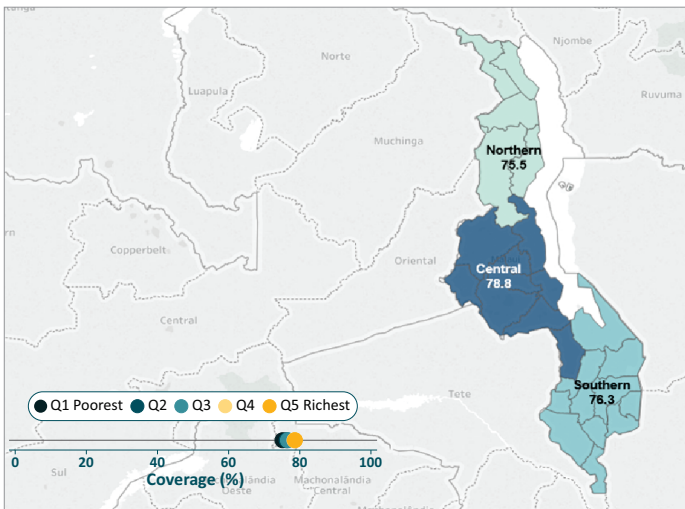
Countdown to 2030 has prepared equity profiles that show the magnitude and trends in health disparities in each of the 81 countries. The four page Malawi equity profile is showcased here. The first page includes a set of graphs showing coverage levels of effective interventions across the continuum of care for reproductive, maternal, newborn, child and adolescent health and nutrition disaggregated by subnational region, wealth quintiles, and urban/rural areas of residence. The second page includes a detailed table showing simple measures of wealth inequality (absolute differences between sub-groups and ratios) and complex measures including the slope index of inequality and the concentration index. This is followed by another table showing data for key interventions along the continuum of care for each of the three main regions in Malawi. The final page includes detailed notes on all of the indicators, the different equity measures used, and an explanation on how to interpret the graphs.

Like the national Countdown country profile, the equity profile is meant to equip country decision makers with a tool to help them monitor progress and for programming and planning purposes.

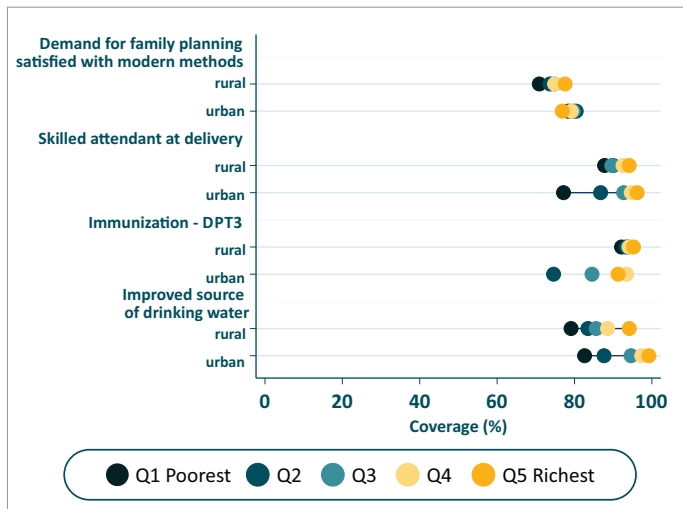
The equity country profiles are prepared by the equity technical working group of Countdown and the team at the International Center for Equity in Health, Federal University of Pelotas, Brazil.

Coverage by essential RMNCH interventions

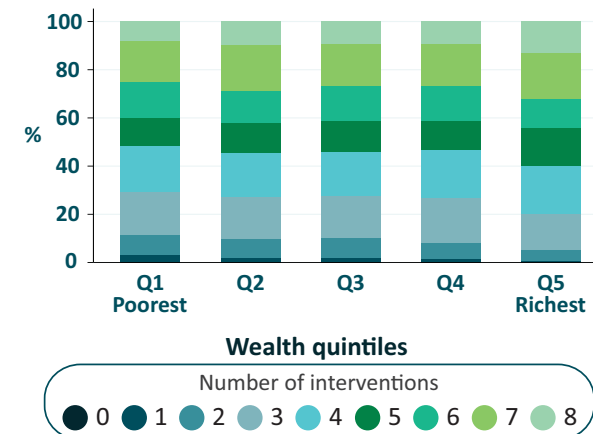
Composite coverage index - subnational coverage



Wealth and area of residence

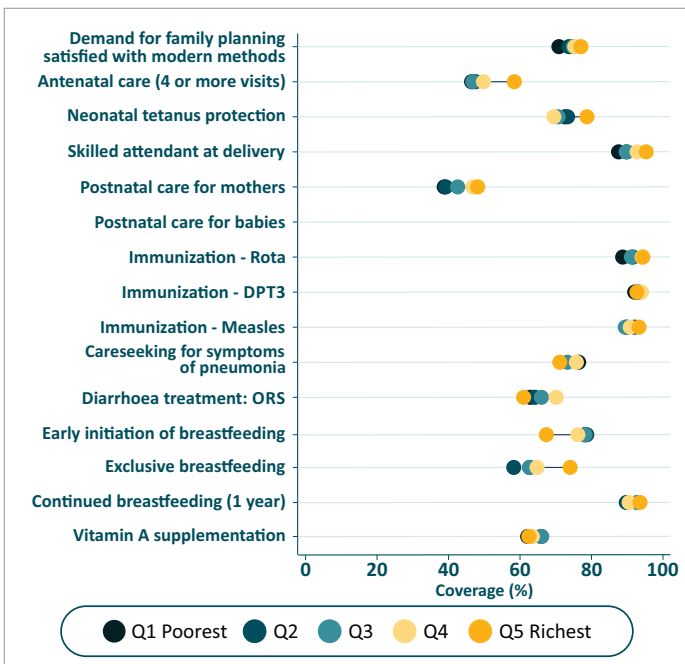


Co-coverage with essential interventions

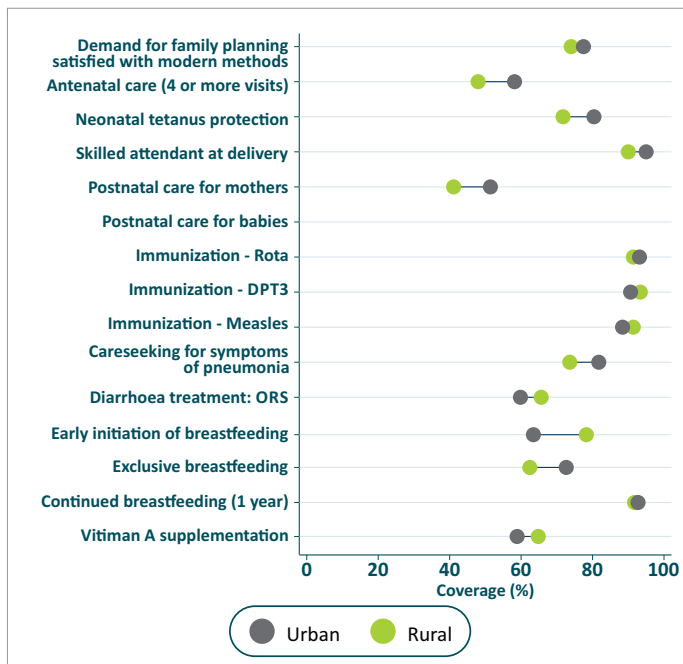


- antenatal care (4+ visits)
- tetanus toxoid during pregnancy
- skilled attendant at delivery
- child received vitamin A supplementation
- BCG (tuberculosis) vaccination
- DPT3 (diphtheria-tetanus-pertussis) vaccination
- measles vaccination
- improved drinking water source

Wealth Quintiles

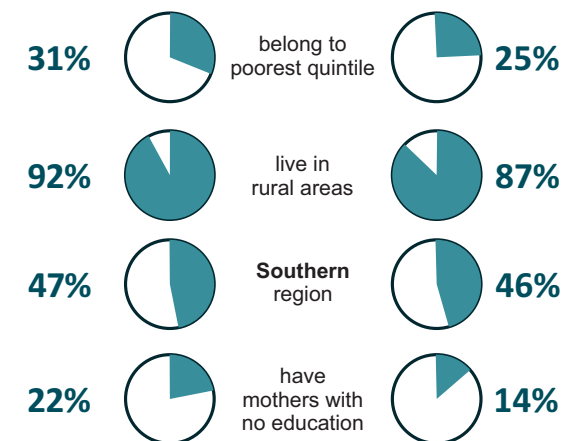


Urban | rural areas of residence



Mothers & Children 9.2% received less than 3 interventions

Mothers & children with <3 interventions X All mothers & children



Indicators	National	Wealth quintiles					Wealth-related equity indicators				Woman's education			Child's sex		Area of residence	
		Q1	Q2	Q3	Q4	Q5	Ratio Q5/Q1	Difference Q5-Q1	CIX	SII	None	Primary	Secondary+	Male	Female	Rural	Urban
Demand for family planning satisfied with modern methods	74.6	71.0	73.8	75.1	75.5	77.2	1.1	6.1	1.4	6.8	72.6	74.8	75.2	-	-	74.0	77.5
Antenatal care (4 or more visits)	49.4	46.6	47.7	46.9	49.9	58.5	1.3	12.0	4.2	11.2	45.2	48.3	55.2	49.8	49.0	48.0	58.2
Neonatal tetanus protection	73.0	72.7	73.4	70.8	69.6	78.8	1.1	6.2	0.8	3.3	70.4	71.9	77.9	73.1	72.8	71.7	80.4
Skilled attendant at delivery	90.7	87.7	89.9	89.8	92.8	95.4	1.1	7.7	1.7	8.8	85.9	90.2	95.2	90.9	90.5	90.0	95.0
Postnatal care for mothers	42.5	38.9	39.3	42.6	46.9	48.2	1.2	9.4	5.2	12.8	37.2	40.9	50.7	43.3	41.8	41.1	51.4
Postnatal care for babies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Immunization - Rota	91.7	88.8	91.7	91.2	94.2	94.4	1.1	5.6	1.2	7.0	87.5	91.4	95.0	92.3	91.1	91.4	93.2
Immunization - DPT3	93.0	92.1	93.0	93.6	94.0	92.8	1.0	0.6	0.3	1.5	87.8	93.6	94.2	92.8	93.2	93.4	90.7
Immunization - Measles	91.0	89.9	92.1	89.5	90.9	93.4	1.0	3.5	0.4	2.6	84.6	91.3	93.7	91.2	90.8	91.4	88.4
Careseeking for symptoms of pneumonia	74.4	76.5	73.3	73.3	75.8	71.2	0.9	-5.3	-0.5	-3.5	75.8	74.7	72.2	72.7	76.2	73.6	81.8
Diarrhoea treatment: ORS	64.7	62.9	64.2	66.0	70.1	61.0	1.0	-1.9	0.8	2.5	60.7	65.5	64.5	64.5	65.0	65.7	59.8
Early initiation of breastfeeding	76.2	78.1	78.7	78.2	76.2	67.4	0.9	-10.7	-2.2	-10.0	78.7	77.2	71.7	77.0	75.5	78.3	63.5
Exclusive breastfeeding	63.9	62.7	58.3	62.7	64.8	74.0	1.2	11.3	3.2	12.3	62.5	60.9	74.2	62.3	65.5	62.4	72.7
Continued breastfeeding (1 year)	91.9	93.0	89.7	92.8	90.5	93.6	1.0	0.6	0.0	0.3	92.8	90.8	95.2	93.2	90.6	91.8	92.7
Vitamin A supplementation	64.0	62.1	65.9	66.1	63.5	62.5	1.0	0.3	0.1	0.1	59.6	65.1	63.3	63.5	64.5	64.8	58.9

Indicator coverage by country region

Indicators	Northern	Central	Southern
Demand for family planning satisfied with modern methods	68.6	79.0	71.9
Antenatal care (4 or more visits)	50.2	50.5	48.1
Neonatal tetanus protection	69.6	75.8	71.3
Skilled attendant at delivery	91.9	90.2	90.9
Postnatal care for mothers	56.0	43.3	38.5
Postnatal care for babies	-	-	-
Immunization - Rota	91.7	92.4	91.0
Immunization - DPT3	93.6	94.5	91.4
Immunization - Measles	91.6	92.0	90.0
Careseeking for symptoms of pneumonia	69.2	76.2	73.8
Diarrhoea treatment: ORS	61.2	63.7	66.6
Early initiation of breastfeeding	79.9	71.6	79.6
Exclusive breastfeeding	56.7	67.8	62.4
Continued breastfeeding (1 year)	86.0	93.9	91.4
Vitamin A supplementation	64.1	62.9	65.1

Interventions and inequality measures

To monitor progress towards the Sustainable Development Goals, it is essential to monitor the coverage of health interventions in subgroups of the population because national averages can hide important inequalities. Here, we selected 15 interventions representing the continuum of care of reproductive, maternal, neonatal and child health (RMNCH) to show how countries are faring in terms of coverage by regions of the country, by wealth quintiles (5 equal sized groups), urban or rural area of residence and both wealth and area. In the table presented in page 2, we also present results by woman's education and child's sex.

We also present simple measures of wealth inequality (difference and ratio) and complex measures. These are the slope index of inequality (SII), for absolute inequality, and the concentration index (CIX), for relative inequality. The SII can be interpreted as the difference in coverage between the two extremes of the wealth distribution. The CIX is similar to the Gini index and gives an idea of how concentrated the coverage of each indicator is, towards the rich (positive value) or the poor (negative value). The CIX can vary from zero (no inequality) to 100 (maximum concentration), but in practice values above 30 already represent a fairly high level of inequality.

A short description of the interventions is presented below. The full definition of the interventions tracked by Countdown can be found in the annexes of the main report.

- **Demand for family planning satisfied with modern methods:**
the percentage of women using modern contraceptives among those who are fertile and do not want a child in the next two years, at least.
- **Antenatal care, 4 or more visits:**
proportion of women who had at least 4 visits of antenatal care during pregnancy.
- **Neonatal tetanus protection:**
proportion of women who got tetanus injections during pregnancy.
- **Skilled attendant at delivery:**
proportion of women who had delivery attended by a doctor, a nurse, or an auxiliary nurse or trained midwife. The specific titles and cadres can vary between countries.
- **Postnatal care for mothers and for babies:**
proportion of mothers and of babies who went through a health check within 48 hours after the delivery.
- **Immunization for rotavirus, DPT3 and measles:**
percentage of children aged 12-23 months who received these vaccines.

- **Careseeking for pneumonia:**
proportion of children who presented symptoms of pneumonia and were taken to see a doctor.
- **Treatment for diarrhea with ORS:**
proportion of children with diarrhea who received oral rehydration salts.
- **Early initiation of breastfeeding:**
proportion of children who were put to breastfeed in the first two hours of life.
- **Exclusive breastfeeding:**
proportion of children less than six months of age who are being exclusively breastfed (receiving only breastmilk, not even water or tea).
- **Continued breastfeeding at one year:**
proportion of children aged 12 to 15 months of age who are still being breastfed.
- **Vitamin A supplementation:**
proportion of children who received vitamin A in the six months preceding the interview (in countries where there is a supplementation program).

Combined coverage indicators

Composite coverage index – CCI

We present a map of each country with the CCI by region. The CCI is a neat way to summarize coverage by health interventions using a single number, in place of several of them. It is calculated as the weighted mean of eight selected interventions – demand for family planning satisfied, antenatal care (4+ visits), skilled attendant at birth, BCG, DPT and measles vaccines, and finally careseeking for pneumonia and ORS for diarrhea.

Co-coverage

Co-coverage is a count of how many, out of 7 or 8 interventions offered in the country, the pair of mother and child received. Ideally, they will receive all interventions available, but in practice we observe very different situations. The interventions considered here are antenatal care (4+ visits), tetanus toxoid during pregnancy, skilled attendant at delivery, BCG, DPT and measles vaccines, vitamin A supplementation and improved source of drinking water. The count goes from zero, to the maximum of 7 or 8 interventions, depending on the country.

Interpreting the graphs

We extensively use equiplots, those graphs with aligned dots. Each dot represents the coverage of a given intervention for a subgroup. It can be area or residence, or wealth quintiles (the first quintile includes the poorest 20% of the sample, and so on). The quintiles are labelled Q1 to Q5. The distance between the dots is the difference in coverage between the relevant groups. The larger the difference, the bigger the absolute inequalities in the country. Ideally, in this type of graph, we would like to see all the dots close together on the right side, where coverage approaches 100%.

The map shows the regions of each country, and CCI coverage using colors to highlight differences across the regions. The darker the color, the higher the coverage. The actual values (%) are presented below the names of the regions. At the bottom, we also present an equiplot of the CCI by wealth quintiles. Not to be confused with a map scale!

Co-coverage is presented in two ways. The top graph displays how many mothers and children in each of the five wealth quintiles receive zero, one, two, up to eight of the interventions included in the co-coverage measure. We typically see that the high-count sections increase and are much bigger towards the richer quintiles. The bottom section shows differences in key characteristics of mothers and children that received less than 3 of these interventions in comparison to all mothers and children living in the country. Comparisons presented include likelihood to belong to the poorest quintile, to live in rural areas or specific geographical regions, and for the mother to have received no education. For instance, compared to the 20% of the mothers and children in the poorest quintile, we often see that a much higher proportion (30-40%) of those receiving less than three interventions belong to that quintile.