

Online Supplementary Document

Table S1: Average absolute annual change in RMNCH indicators in Guyana from 2006 to 2019.

Indicators	Coverage (SE)	SII (SE)
Contraceptive modern methods	-0.4 (0.4)	-0.6 (0.7)
Family planning satisfied-Modern methods	-0.5 (0.3)	-0.5 (0.9)
Antenatal care (4 or visits)	0.7 (0.7)	0.9 (0.9)
Tetanus toxoid in pregnancy	-0.9 (0.6)	-0.5 (0.2)
Institutional delivery	1.1 (0.2)	-1.7 (0.7)
Skilled birth attendance	0.7 (0.4)	-2.3 (1.2)
Early initiation of breastfeeding	-0.1 (0.8)	0.0 (1.6)
Exclusive breastfeeding (0-5 months)	0.4 (0.7)	0.1 (0.9)
Careseeking for pneumonia	1.2 (0.8)	-1.2 (3.6)
Oral rehydration salt	-0.1 (0.5)	-0.6 (3.5)
Composite coverage index	0.2 (0.4)	-0.1 (0.1)
BCG	-0.5 (0.2)	0.4 (0.5)
DPT3	0.5 (0.3)	0.1 (0.6)
Polio	0.1 (1.0)	0.1 (1.1)
Measles	-1.4 (0.6)	0.3 (1.3)
Full immunization	-1.0 (0.8)	0.9 (1.0)
Low birth weight	0.3 (0.3)	0.7 (0.6)
Under-five stunting prevalence	-0.8 (0.1)	-1.3 (0.6)
Under-five mortality rate	-1.8 (0.0)	-1.1 (0.0)

SE: Standard error, SII: Slope index of inequality

Table S2: National trends in slope index of inequality and concentration index of inequality in Guyana (2006-2019).

Indicator	Slope index of inequality (se)				Concentration index of inequality (se)			
	2006	2009	2014	2019	2006	2009	2014	2019
Current use of any contraceptive (modern methods)	2.4 (3.9)	13.9 (4.4)	3.9 (3.4)	-1.4 (3.2)	2.0 (2.0)	6.2 (1.9)	1.8 (1.7)	-1.7 (2.0)
Demand for family planning satisfied (modern methods)	5.7 (5.7)	18.2 (5.5)	15.3 (4.3)	1.3 (4.3)	2.6 (2.0)	5.7 (1.7)	4.9 (1.4)	-0.4 (1.7)
Antenatal care (4 or more visits)		9.1 (4.1)	21.1 (6.6)	11.4 (7.6)		3.3 (1.1)	2.1 (0.8)	3.5 (1.1)
Tetanus toxoid in pregnancy	11.4 (7.6)	5.4 (4.7)	3.2 (4.3)	2.8 (5.5)	5.0 (3.9)	4.9 (4.3)	4.8 (6.0)	5.7 (11.9)
Institutional delivery	31.9 (7.6)	28.9 (4.0)	29.3 (6.3)	7.2 (3.1)	7.2 (1.5)	5.9 (0.7)	5.2 (1.0)	1.4 (0.5)
Skilled attendant at delivery	39.7 (7.8)	22.3 (3.9)	33.8 (6.8)	7.4 (3.1)	9.0 (1.7)	4.3 (0.6)	5.7 (1.1)	1.5 (0.5)
Early initiation of breastfeeding	-8.9 (7.3)	-5.0 (9.2)	-32.0 (5.5)	-4.3 (8.3)	-2.9 (2.8)	-1.5 (2.32)	-11.1 (1.9)	-2.1 (3.0)
Exclusive breastfeeding (0-5 months)	-26.8 (11.6)	-26.2 (14.3)	-13.5 (10.7)	-31.2 (13.0)	-21.1 (9.6)	-15.7 (6.8)	-11.3 (7.9)	-16.7 (8.1)
Immunization – BCG	6.7 (3.7)	12.1 (5.2)	1.1 (3.0)	7.4 (3.0)	0.8 (0.4)	2.0 (0.8)	-0.1 (0.5)	1.9 (1.2)
Immunization - DPT3	8.7 (7.3)	15.3 (9.0)	3.7 (4.3)	11.8 (7.0)	1.4 (1.4)	2.8 (1.6)	0.7 (0.8)	3.0 (1.2)
Immunization – Measles	9.0 (4.1)	25.5 (8.9)	-1.7 (6.6)	10.0 (9.7)	1.3 (0.6)	5.2 (1.5)	-0.0 (1.4)	2.3 (2.0)
Immunization – Polio	10.5 (6.7)	-2.4 (9.8)	-1.4 (4.3)	16.3 (9.2)	1.9 (1.2)	-1.1 (0.8)	-0.2 (0.8)	4.4 (2.0)
Full immunization coverage	13.0 (6.9)	1.3 (9.8)	0.6 (6.8)	16.5 (10.6)	2.6 (1.3)	0.0 (2.3)	0.1 (1.7)	4.5 (2.6)
Care seeking for symptoms of pneumonia	1.6 (18.3)	-29.2 (17.7)	-12.3 (16.0)	-	1.0 (4.8)	-6.1 (5.0)	-4.0 (3.1)	-
Diarrhea treatment: Oral rehydration salts	-2.0 (13.3)	-29.9 (15.5)	-9.9 (13.8)	-	-0.3 (5.1)	-11.1 (4.9)	-6.0 (5.5)	-
Composite coverage index	12.8 (3.9)	1.1 (5.4)	4.8 (3.8)	7.0 (5.3)	67.5 (3.0)	0.2 (1.6)	1.0 (0.8)	1.6 (1.6)
Low birth weight	1.0 (5.5)	1.2 (4.2)	0.1 (4.5)	8.6 (6.0)		-0.2 (5.0)	0.8 (6.1)	8.9 (5.9)
Under-five stunting prevalence	-20.9 (4.2)	-26.2 (4.9)	-20.5 (3.3)	-5.1 (3.0)	-20.6 (3.8)	-24.7 (4.0)	-28.5 (4.7)	-10.2 (5.5)

-Estimated cannot be calculated for the year due to missing data or denominator was too small (<25 individuals).

Figure S1: Inequality time trends in coverage of reproductive and maternal health interventions, by wealth quintiles: Guyana, 2006-2019.

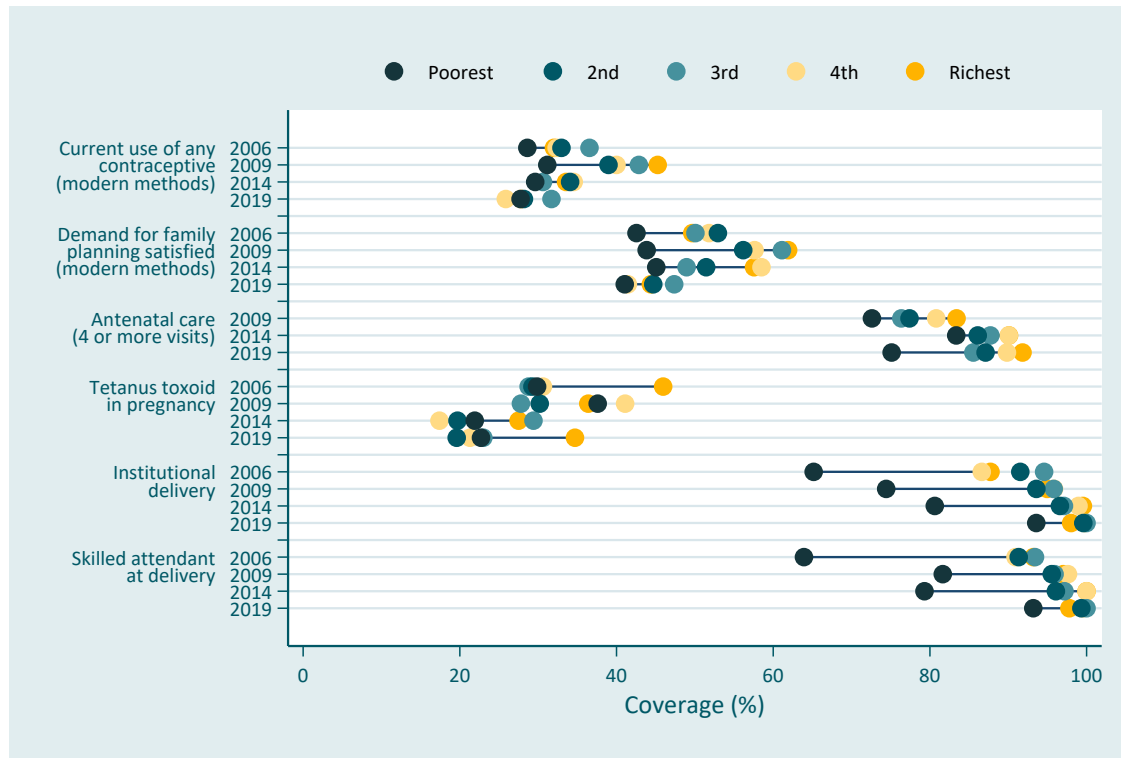


Figure S2: Inequality time trends in coverage of newborn and child health interventions, by wealth quintiles: Guyana, 2006-2019.

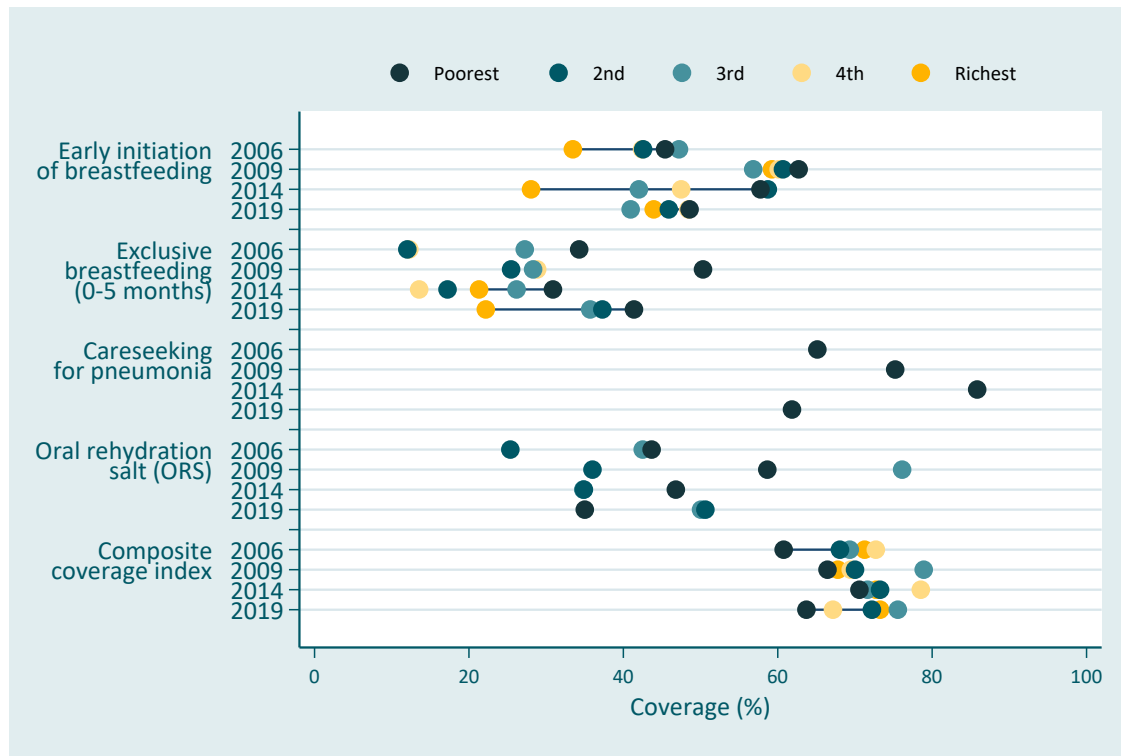


Figure S3: Inequality time trends in immunization coverage, by wealth quintiles: Guyana, 2006-2019.

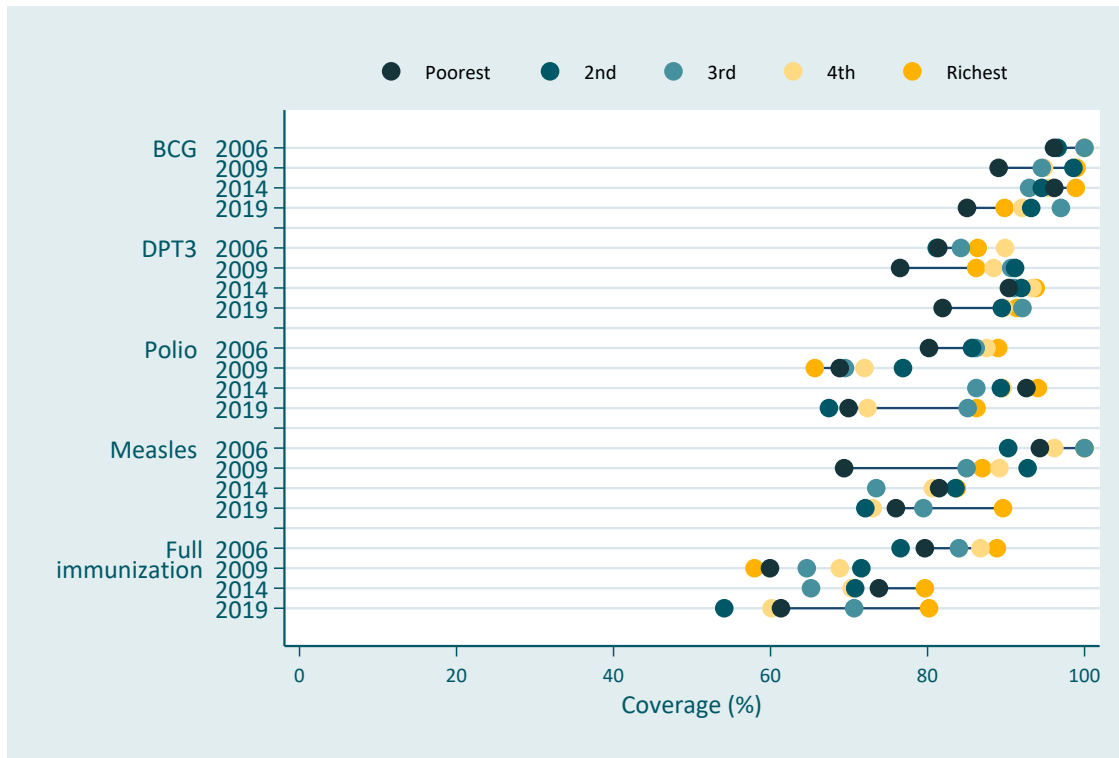


Figure S4: Inequality time trends in prevalence of low birth weight and under-five stunting, by wealth quintiles: Guyana, 2006-2019.

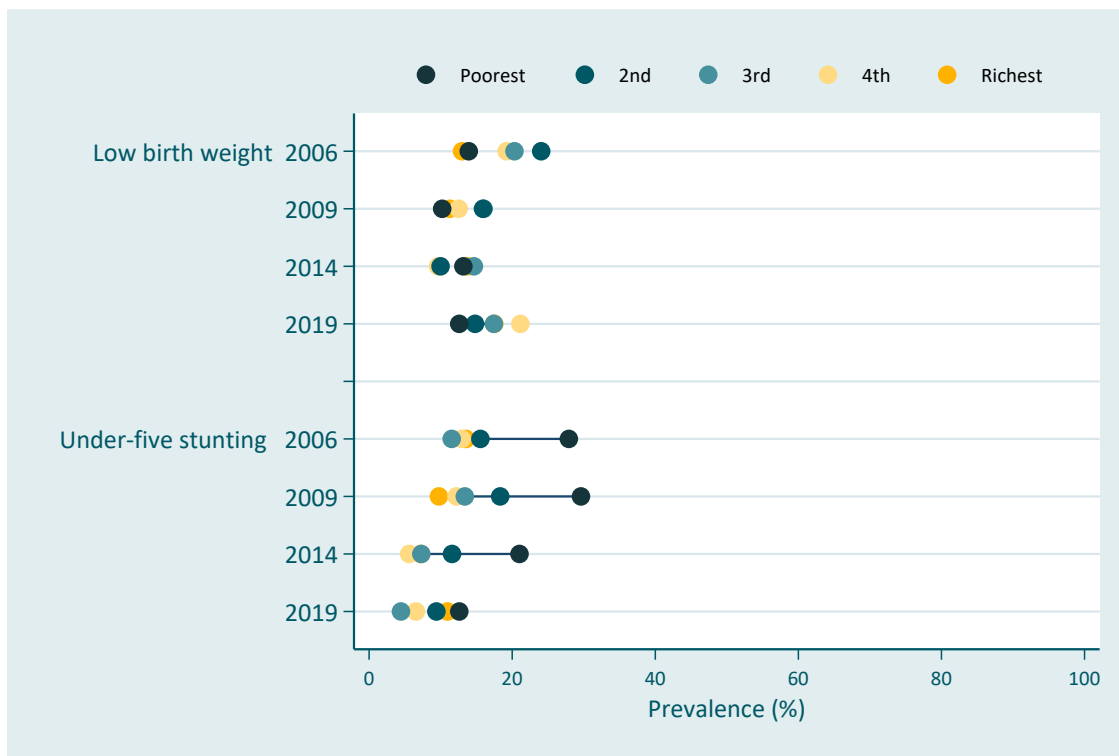
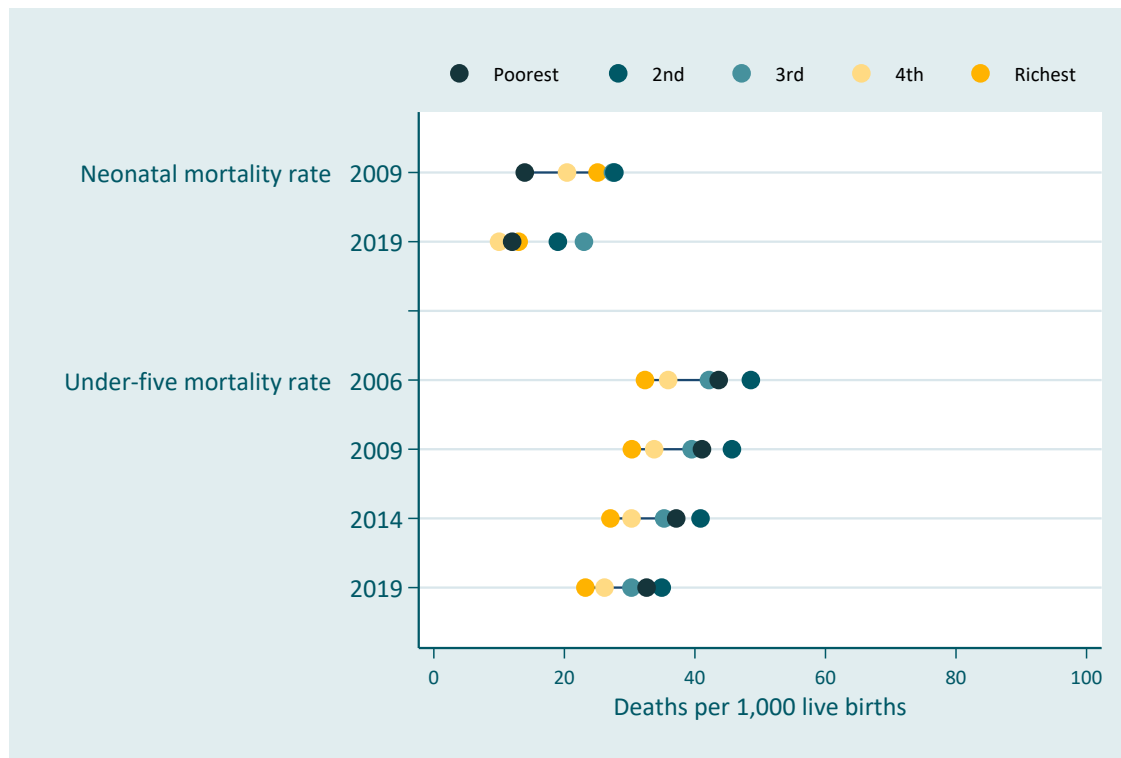


Figure S5: Inequality time trends in neonatal and under-five mortality rate, by wealth quintiles: Guyana, 2006-2019.



Figures S6 to S10 summarize coverages of the indicators according to urban-rural place of residence. Coverage of contraceptive use with modern methods decreased from 33.0% to 29.6% for women living in rural areas and from 31.6% to 23.9% for those in urban areas. Similar decrease was observed for demand for family planning needed satisfied during the same periods. Besides the gaps between rural and urban women seemed to increase overtime for both indicators. Coverage of tetanus toxoid in pregnancy also decreased from 29.6% to 22.4% in rural areas and from 38.4% to 28.9% in urban areas. Coverage of institutional increased from 80.7% to 97.8% in rural areas and from 88.5% to 97.4% in urban areas. Similar increase was observed for SBA at both rural and urban areas during the same periods, and the gaps between urban and rural areas seemed to decrease overtime (Figure S6).

Regarding neonatal and child health interventions, almost no change was observed in the percentage of newborns put to breast within the first hour after birth in rural and urban

areas. The percentage of children under six months who breastfed exclusively increased from 21.6% to 33.8% in rural areas from 2006 to 2019. In contrast, such percentage remained almost unchanged in urban areas (from 20.9% to 21.6%). Similarly, we observed increase in careseeking for pneumonia for children in rural area from 65.8% to 80.2%. An inverse picture was observed for ORS, which decreased from 38.4% to 34.3% in rural areas, and increased from 41.7% to 61.3% in urban areas during the same periods. Besides, it seems the gaps between urban and rural areas tended to increase overtime. The CCI increased slightly in rural areas (from 66.5% to 70.1%), but with decreased in urban areas (from 71.3% to 68.4%) (Figure S7).

Except for DPT3, the vaccination coverage seems to decrease overtime in both urban and rural areas. The percentage of children (12-23 months) fully vaccinated also seemed to decrease overtime from 81.6% to 62.5% in rural area and from 83.0% to 68.0% in urban area. The gap between urban and rural areas remained almost unchanged from 2006 to 2019 (Figure S8).

The prevalence of low birth weight decreased slightly in both rural and urban areas, from 19.1% 17.1% and from 14.9% to 13.8% respectively. Moderate progress was observed in the prevalence of under-five stunting prevalence, which decreased from 17.9% to 8.9% in rural areas and from 18.0% to 10.0% in urban area (Figure S9).

Neonatal mortality rate decreased from 21.1 to 16.0 in rural area and from 25.7 to 11.0 per 1,000 live births in urban area. Likewise, we observed decline in under-five mortality rate, which moved from 38.0 to 22.5 in rural areas and from 46.0 to 20.1 per 1,000 live births in urban areas. There was also reduction in the gap for under-five mortality rate between urban and rural areas (Figure S10).

Figure S6: Inequality time trends in coverage of reproductive and maternal health interventions, by place of residence: Guyana, 2006-2019.

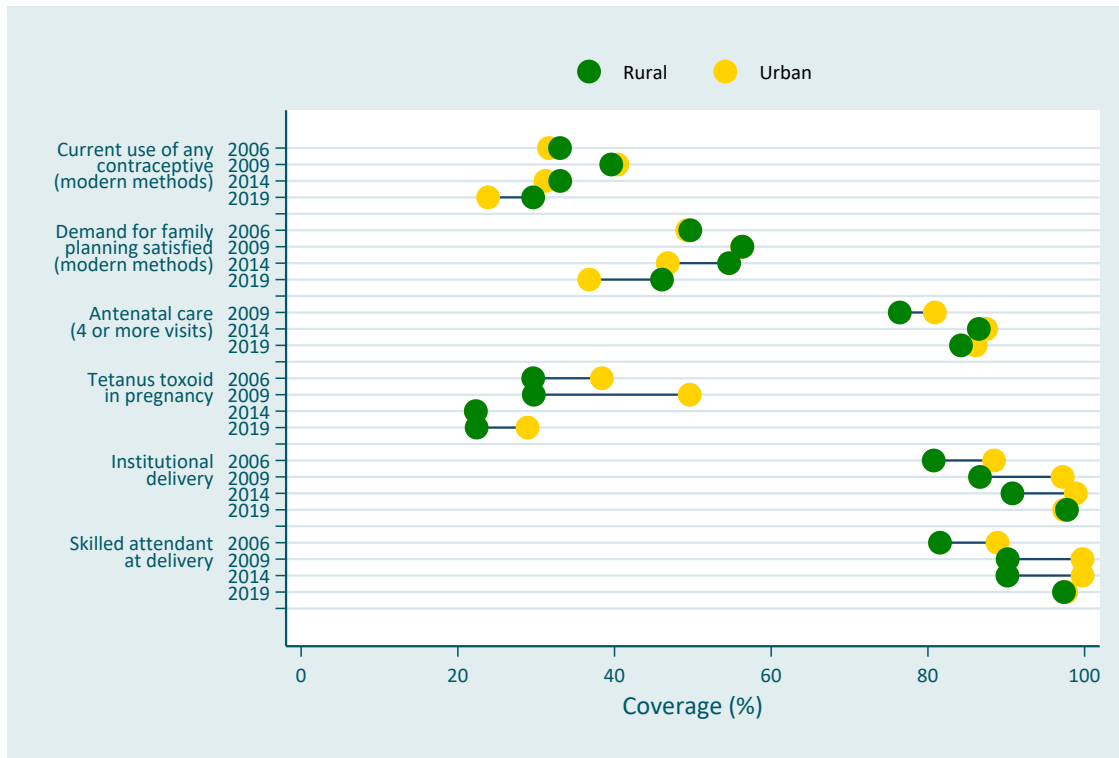


Figure S7: Inequality time trends in coverage of newborn and child health interventions, by place of residence: Guyana, 2006-2019.

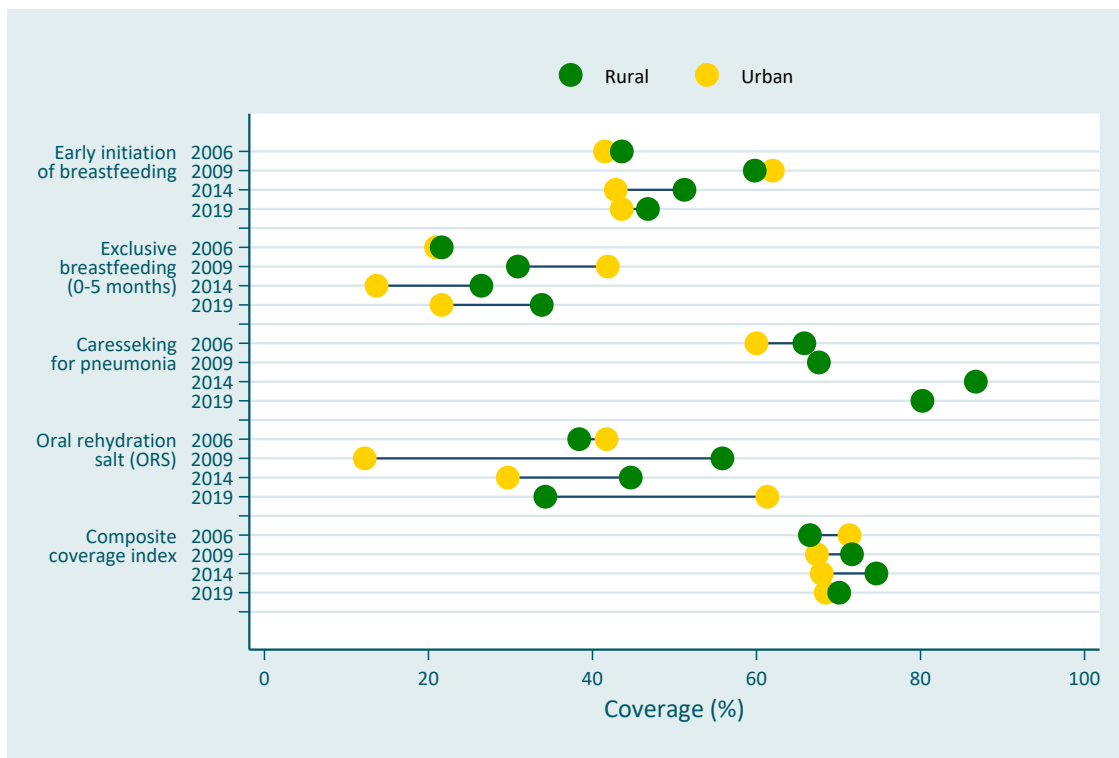


Figure S8: Inequality time trends in immunization coverage, by place of residence: Guyana, 2006-2019.

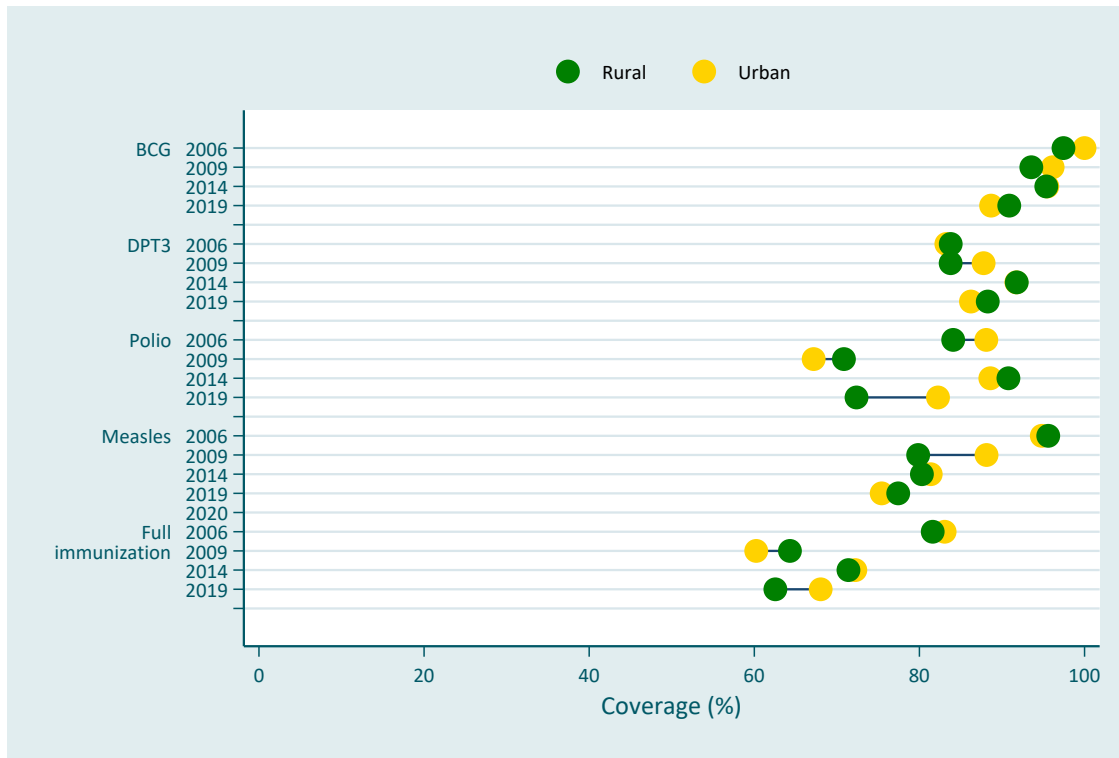


Figure S9: Inequality time trends in prevalence of low birth weight and under-five stunting, by place of residence: Guyana, 2006-2019.

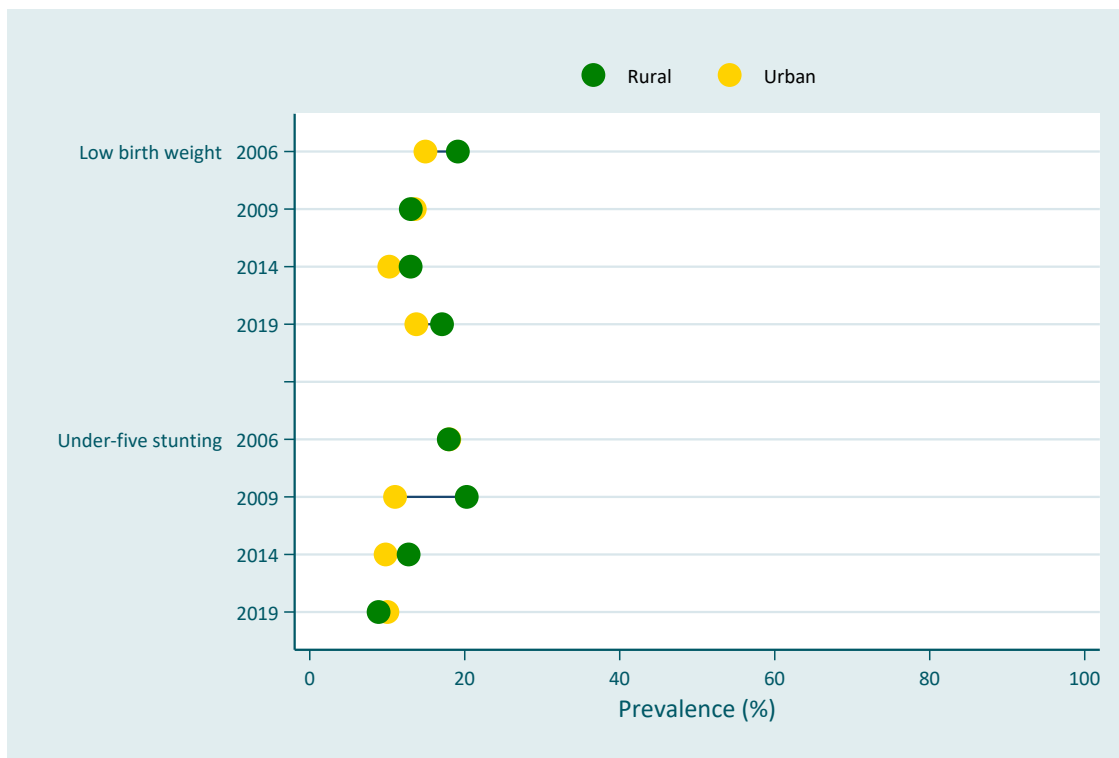


Figure S10: Inequality time trends in neonatal and under-five mortality rate, by place of residence: Guyana, 2006-2019.

