



Statistics Sierra Leone
Stats SL



GLOBAL
FINANCING
FACILITY

Countdown to 2030
Women's Children's & Adolescent's Health



2026

SIERRA LEONE SYNTHESIS REPORT

Analysis of Reproductive, Maternal, Newborn, Child and
Adolescent Health Indicators for 2020-2025



Countdown to 2030 in partnership with Sierra Leone's Ministry of Health, Global Financing Facility,
WHO, WAHO & UNICEF

#CAM2026



Team Members

1. IBRAHIM KOEDOYOMA – STATISTICS SIERRA LEONE (STATS.SL)
2. MOHAMED KANU – MINISTRY OF HEALTH (MOH)
3. KARIM SOLOMON BOCKARIE MOMOH – MINISTRY OF HEALTH (MOH)

KEY FINDINGS

1. Health facility data quality assessment: numerators and denominators

NUMERATORS: Routinely reported health facility data are an important data source for health indicators. The data are reported by health facilities on events such as immunizations given, or live births attended. As with any data, quality is an issue. Data are assessed for completeness of reporting by health facilities, extreme outliers and internal consistency. Appropriate adjustments are made to the data before use to compute statistics.

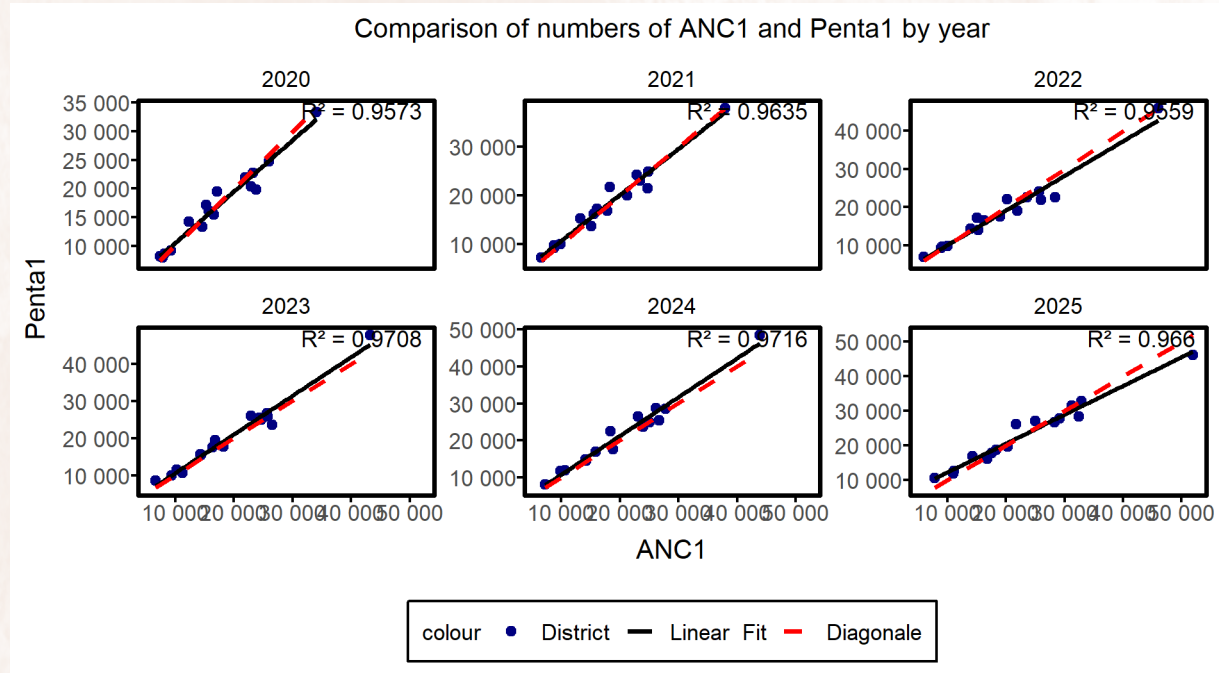
Summary of reported health facility data quality, DHIS2, 2020-2025

Data Quality Metrics		2020	2021	2022	2023	2024	2025
1. Completeness of monthly facility reporting (mean of ANC, delivery, immunization)							
1a	% of expected monthly facility reports (national)	95	95	93	94	98	99
1b	% of districts with completeness of facility reporting >= 90	94	86	75	78	100	100
1c	% of districts with no missing values for the 4 forms	87	97	97	98	99	98
2. Extreme outliers (mean of ANC, delivery, immunization)							
2a	% of monthly values that are not extreme outliers (national)	94	100	100	99	100	98
2b	% of districts with no extreme outliers in the year	91	93	88	90	91	79
3. Consistency of annual reporting							
3a	Ratio anc1/penta1	1.02	0.99	1.04	0.95	0.94	1.00
3b	Ratio penta1/penta3	1.02	1.01	1.01	0.99	1.02	1.02
3c	% district with anc1/penta1 in expected ranged	56	44	56	19	25	44
3d	% district with penta1/penta3 in expected ranged	75	75	56	50	62	75
4	Annual data quality score	85	84	81	75	82	85

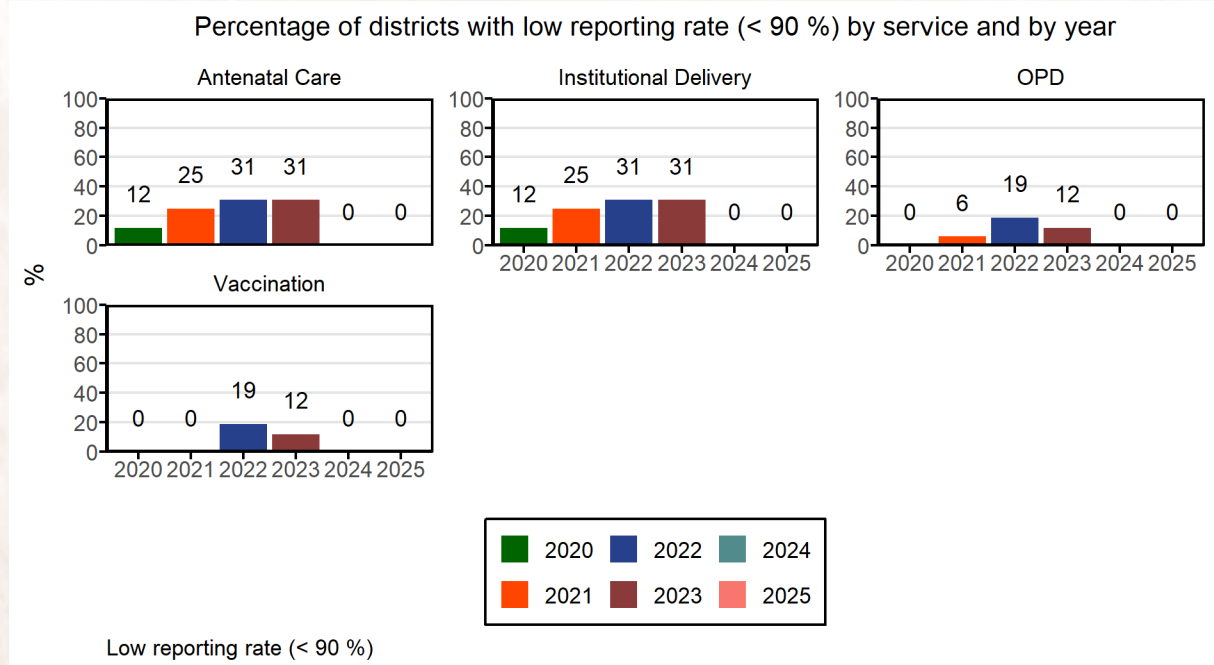
Interpretations

- Overall data quality improved significantly after 2023, with the annual score returning to 85 in 2025.
- The percentage of districts with no missing values in the four reporting forms remained consistently high, ranging from **87% in 2020** to **99% in 2024**, before a slight decline to **98% in 2025**.
- While the national dataset appears stable, the increase in districts experiencing extreme outliers in 2025 may indicate: 1) Data entry errors, 2) Reporting inconsistencies.
- The percentage of districts with a low reporting rate of less than 90% ANC services increases over time from 2019 to 2023. This is reflective of institutional delivery services, while the reverse is noticed in OPD and vaccination services
- There is good consistency between ANC1 and Penta1, as there is strong correlation between the two

Numerator: facility data quality – The data quality is very good and consistent over time

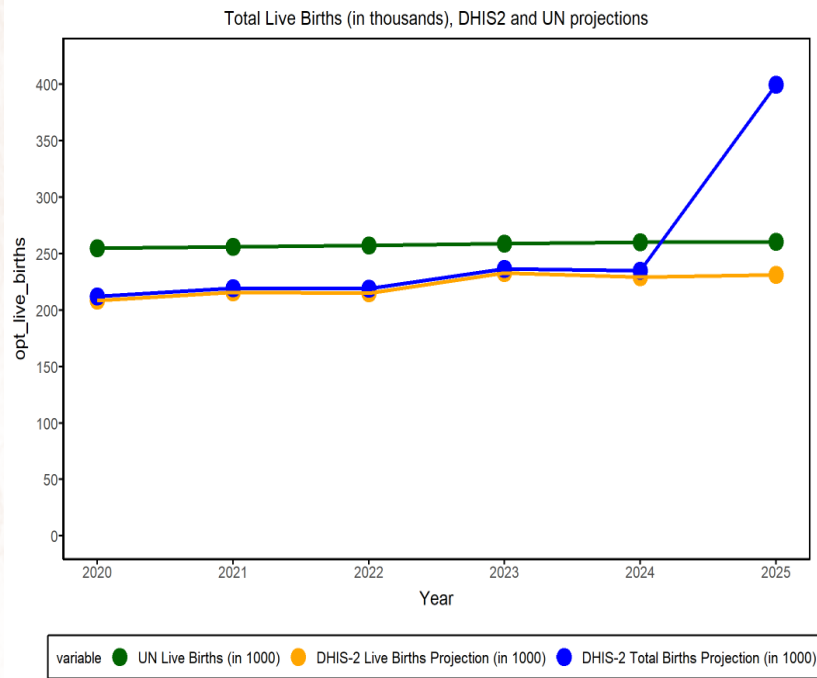


Numerator: facility data quality – The percentage completeness of less than 90% in service delivery increases over time for certain services such as ANC and delivery, which shows the reverse in OPD and immunization

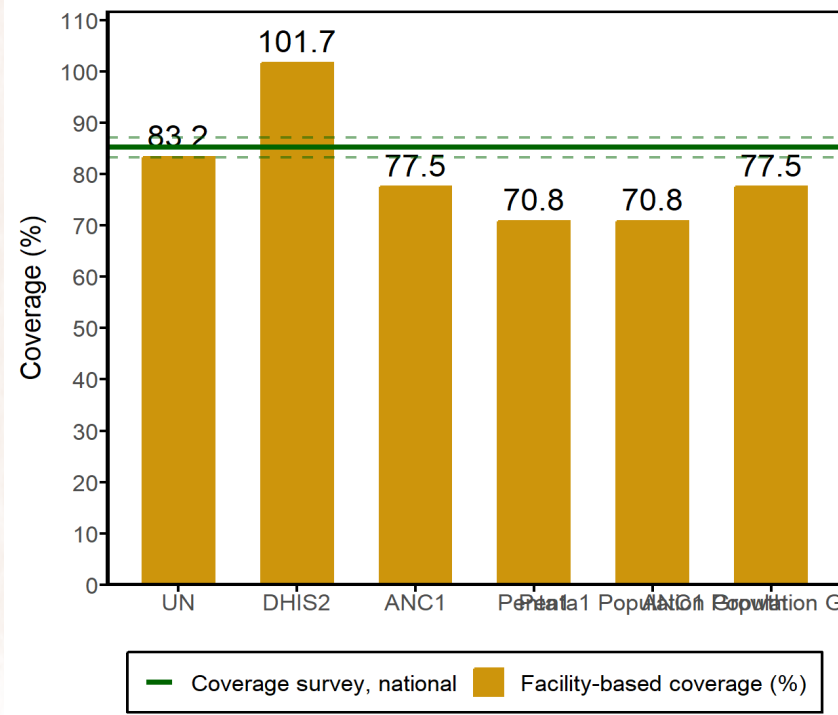


DENOMINATORS: Service coverage is defined as the population who received the service (numerator) divided by the population who need the services: (the denominator). We test four options for denominator measures using institutional live births and Penta-3 immunization coverage (Figures 2c and 2d). The quality of the population projections in DHIS2 is assessed through consistency over time and comparison with the UN projections. Two denominators are also derived using near universal service such as ANC-1 and Penta-1. The most plausible is identified for use to generate other statistics.

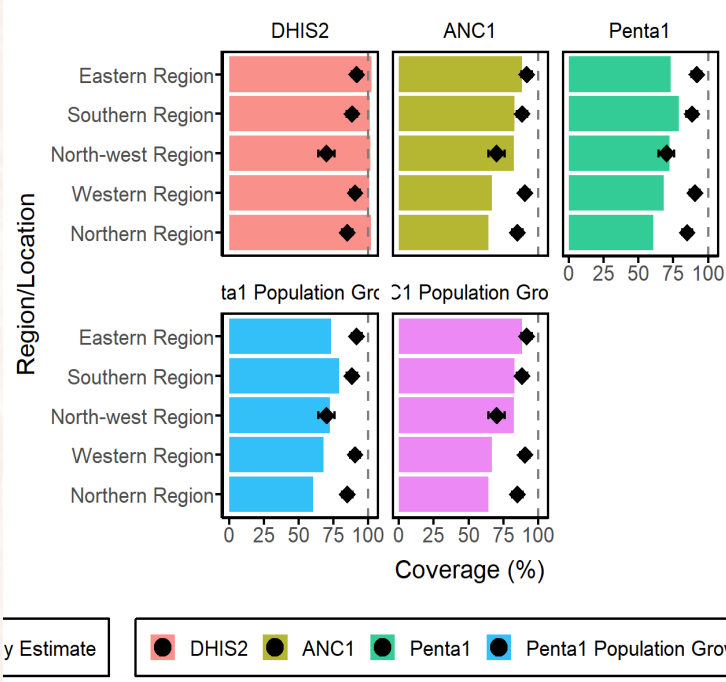
Total Livebirths



is Coverage, DHIS2-based with different denominators, and survey



Comparison of INSTLIVEBIRTHS Coverage Estimates by Re



National Institutional Live Births

Subnational Institutional Live births

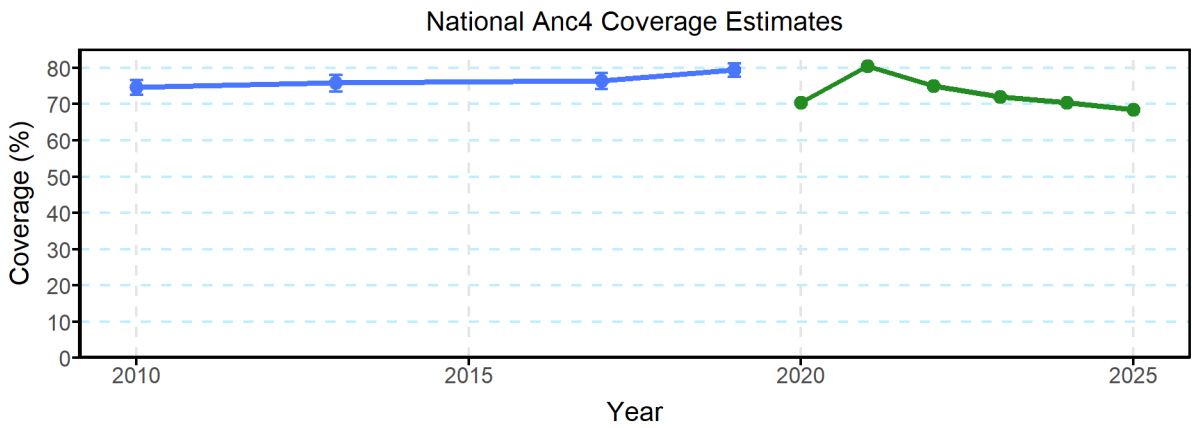
Interpretations

- DHIS2-reported live births closely followed projected live births between 2020 and 2024, suggesting reasonable consistency between reported and expected birth numbers. However, a substantial increase in DHIS2 total births was observed in 2025, which could be attributed to data quality and reporting issues.
- The denominator that performs best at the national level for live births is total births
- The denominator that performs best at the national level for live births is ANC1, and that of Penta3 is Penta1

2. National coverage trends: facility data and surveys

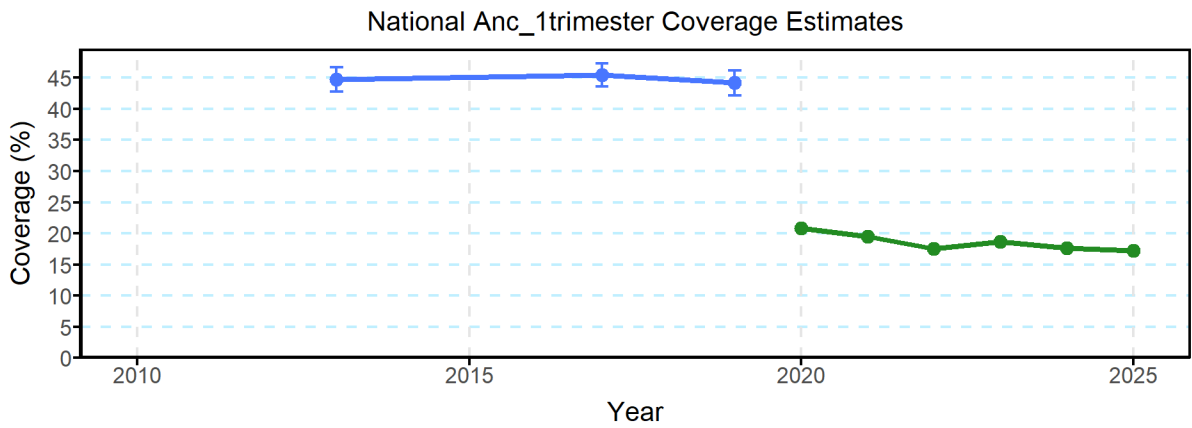
Antenatal care: ANC4, ANC early visit, first trimester of pregnancy

ANC 4



Denominators derived from anc1 estimates

ANC early visit

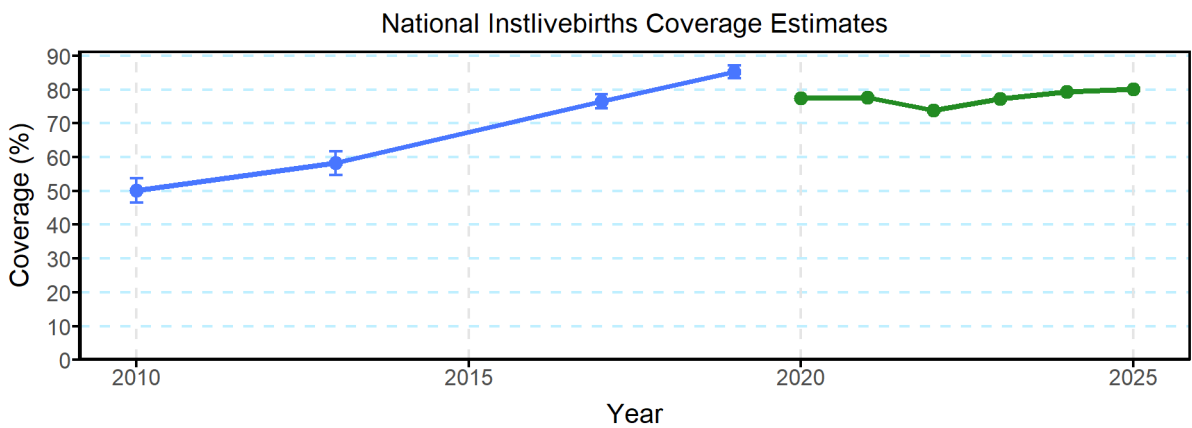


Denominators derived from anc1 estimates

Interpretations

- The levels and trends are plausible since the survey data and the facility data are consistent over time. However, for ANC1 1st trimester coverage, the facility data falls below the survey data, though consistent in reporting over time. The awareness of early accessing of ANC services in the 1st trimester remains a challenge at the community level.

Institutional delivery

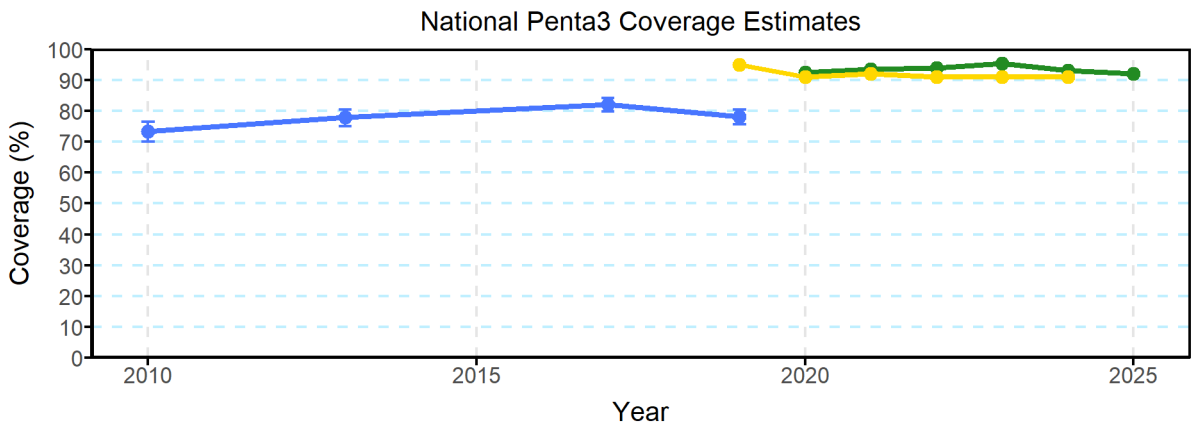


Denominators derived from anc1 estimates

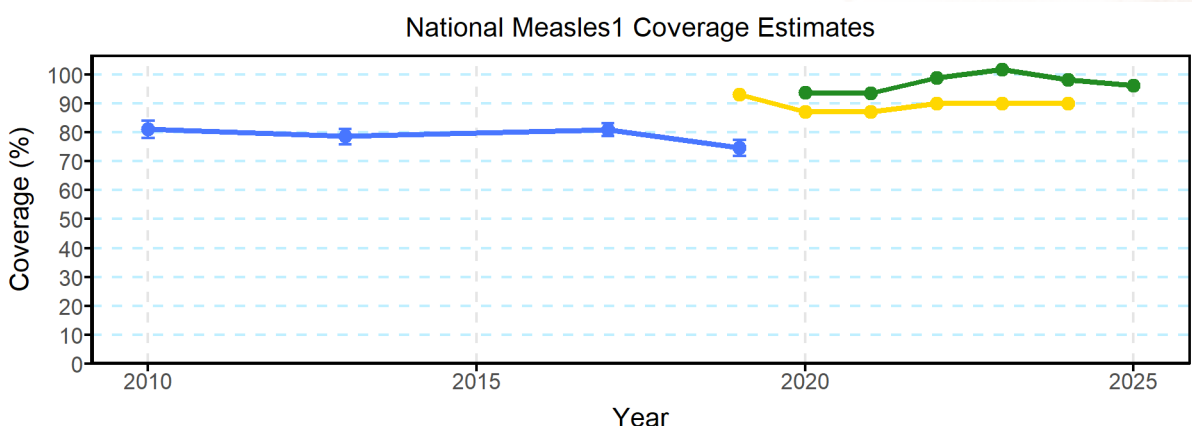
Interpretations

- The levels and trends of national live birth coverage estimates are plausible, as the survey data increase over time, whereas the facility data maintain a consistent level but slightly below the survey data
- The consistency in both data shows an improvement in data quality reporting

Immunization: Penta 3, Measles 1



Denominators derived from penta1 estimates



Denominators derived from penta1 estimates

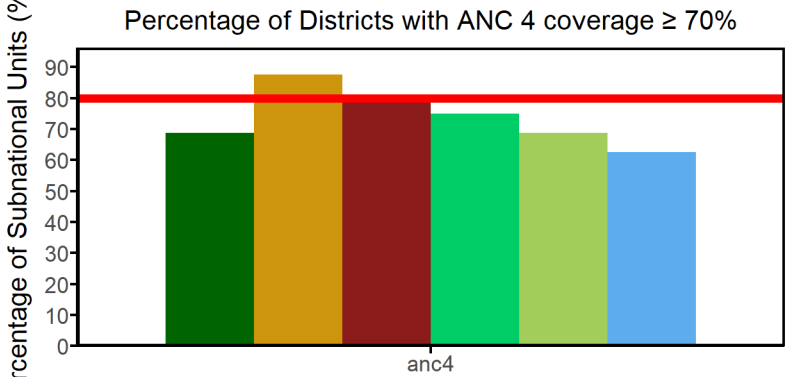
Interpretations

- There is improvement and consistency in the quality of data in Penta 3 and measles immunization. The facility data and that of WUENIC are very close and consistent over time and fall above the survey data.
- The target for immunization is very good, as coverage of Penta3 and measles falls slightly above the national target of 90%

Percent of districts achieving high coverage targets

ANC 4

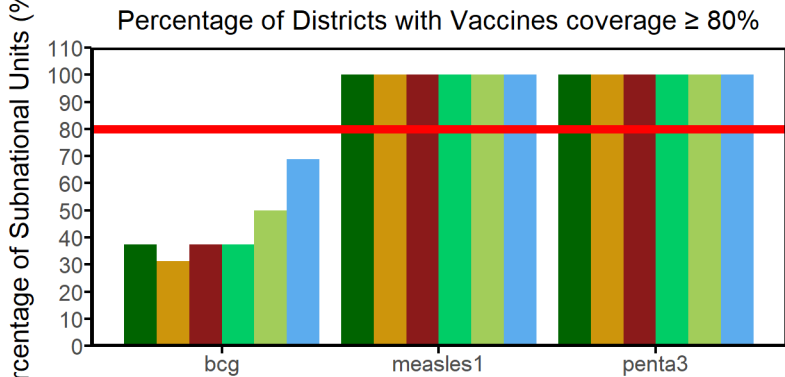
[1] "district"



Year
2020 2021 2022 2023 2024 2025

Child Health Indicators

[1] "district"



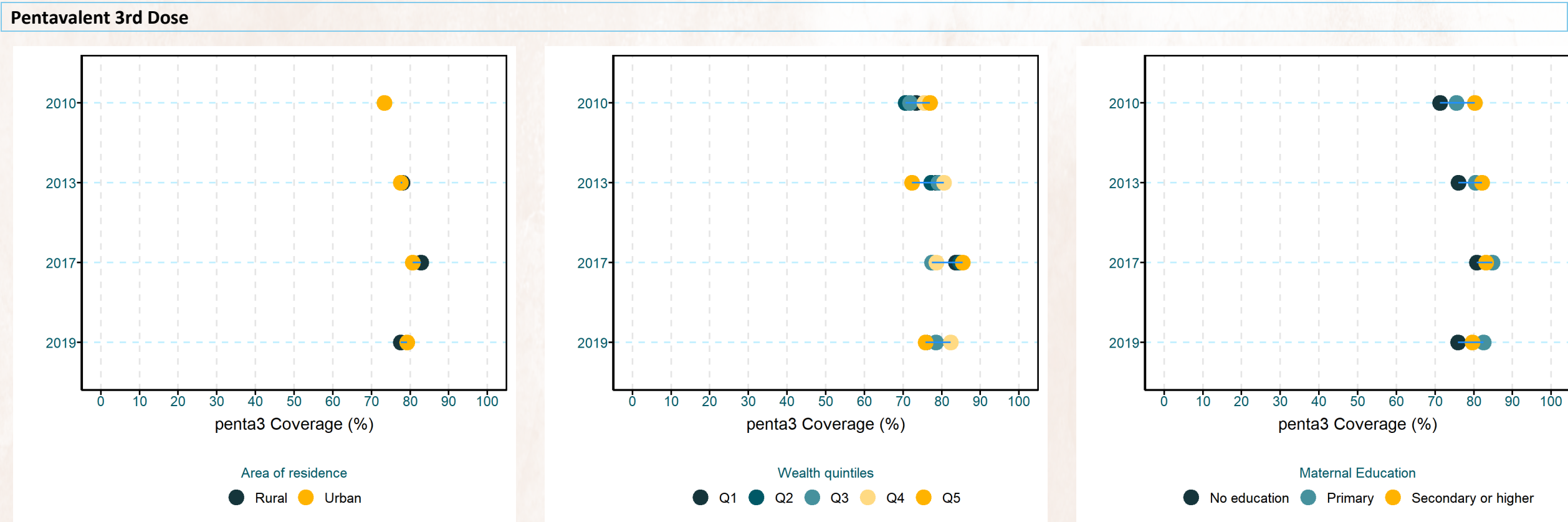
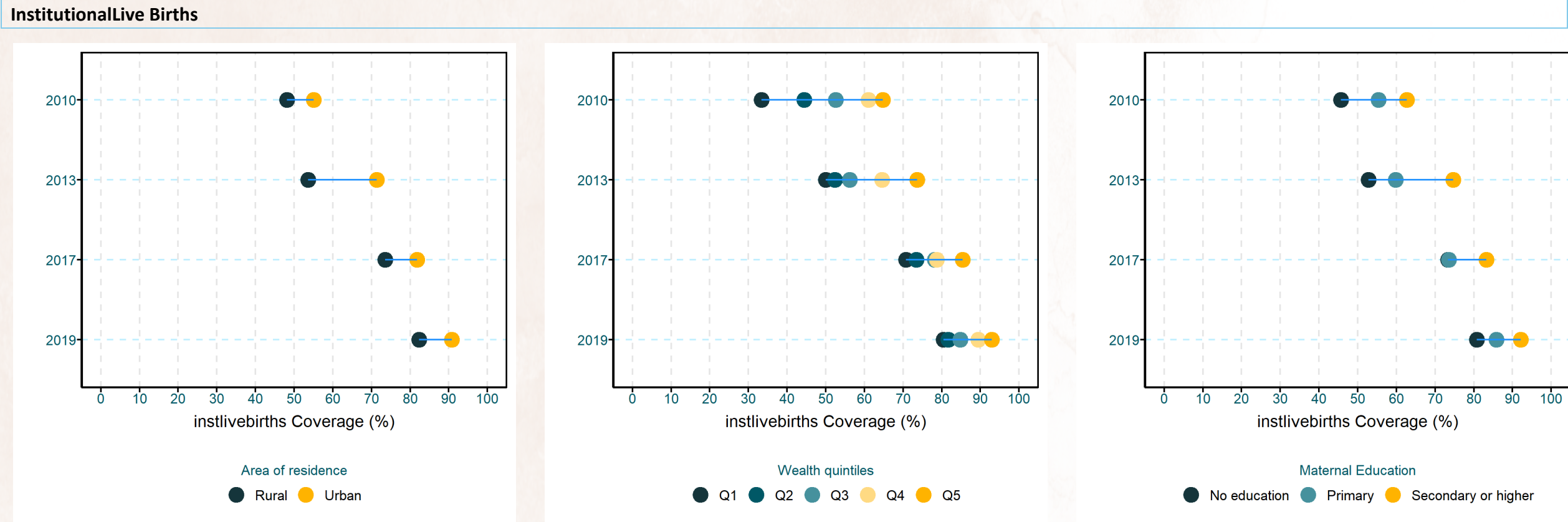
Year
2020 2021 2022 2023 2024 2025

Interpretations

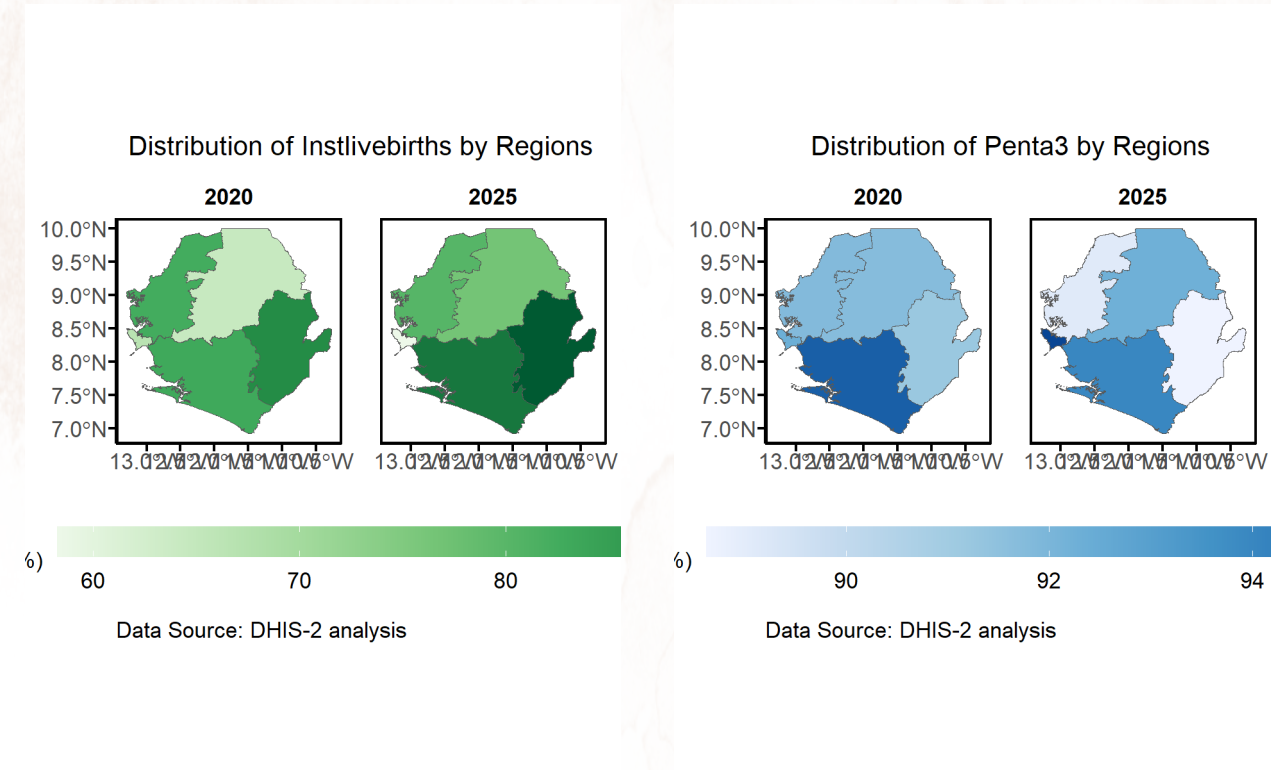
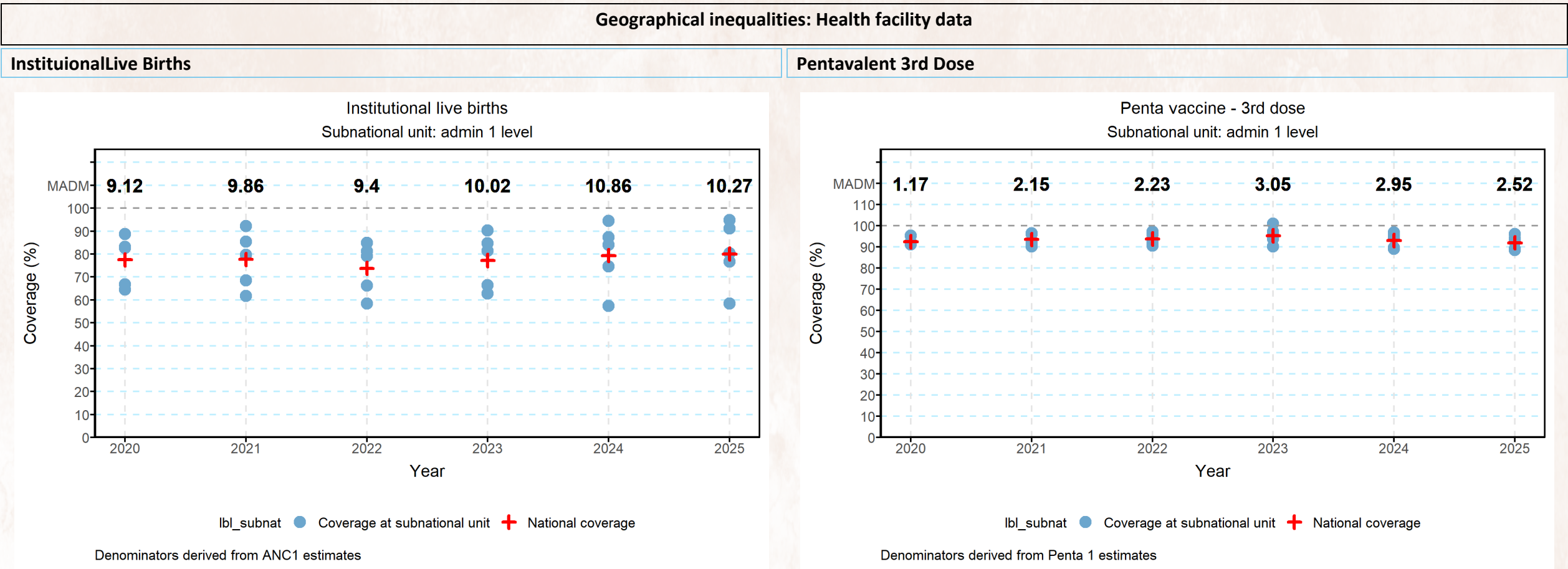
- For ANC4, the proportion of districts meeting their target is consistent over time.
- For vaccination, there is a stable achievement of measles1 and Penta3 over time and are above the national target. While BCG is fluctuating below the national target over time

3. Equity

Equity by wealth, education, rural-urban residence (from surveys)



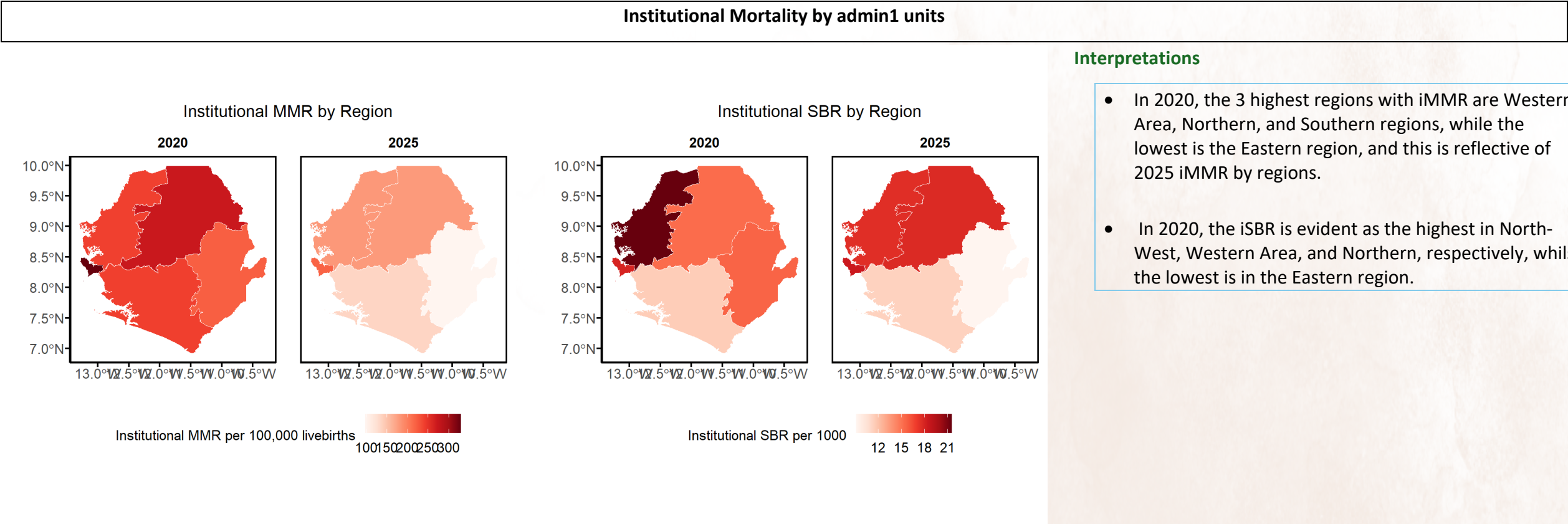
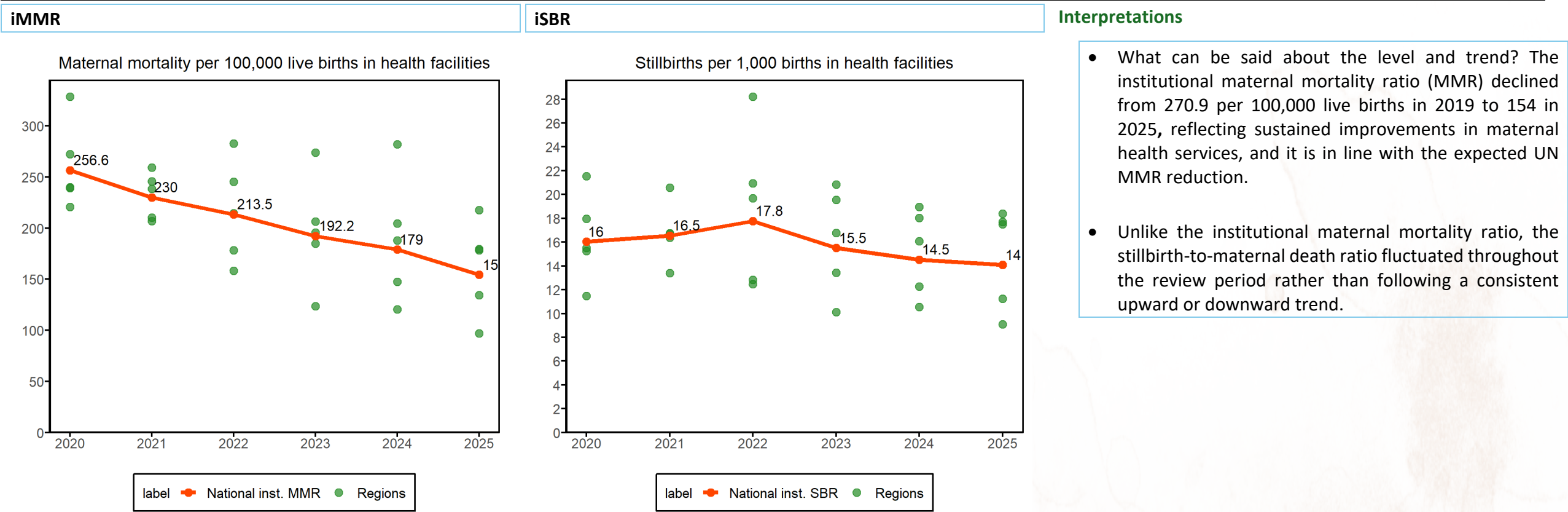
- Interpretations
- There is no clearly observed systematic difference, as the groups are seen more closely fused with improved service coverage over time
 - There is no observable pattern to note, as there is not much disparity between groups in accessing health care services
 - All groups are experiencing an increase in coverage of services with less margin between the poor/rich, educated and non-educated, place of residence.
 - Are inequalities changing over time? There is an equitable improvement in accessing health care services irrespective of status.



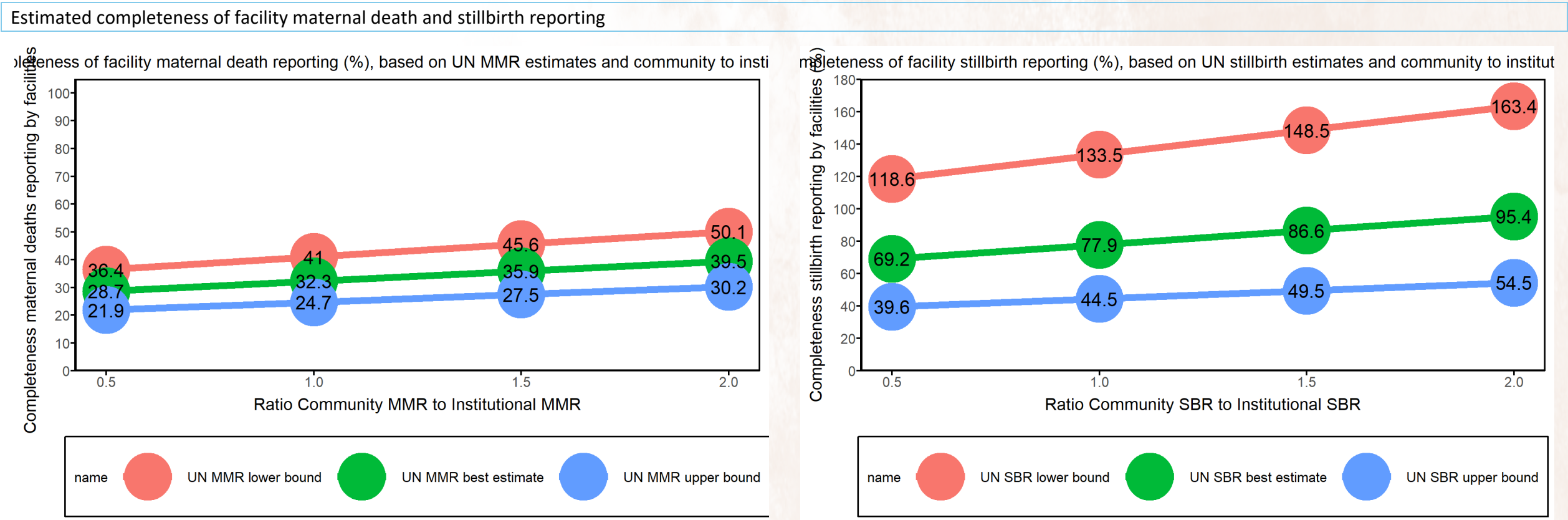
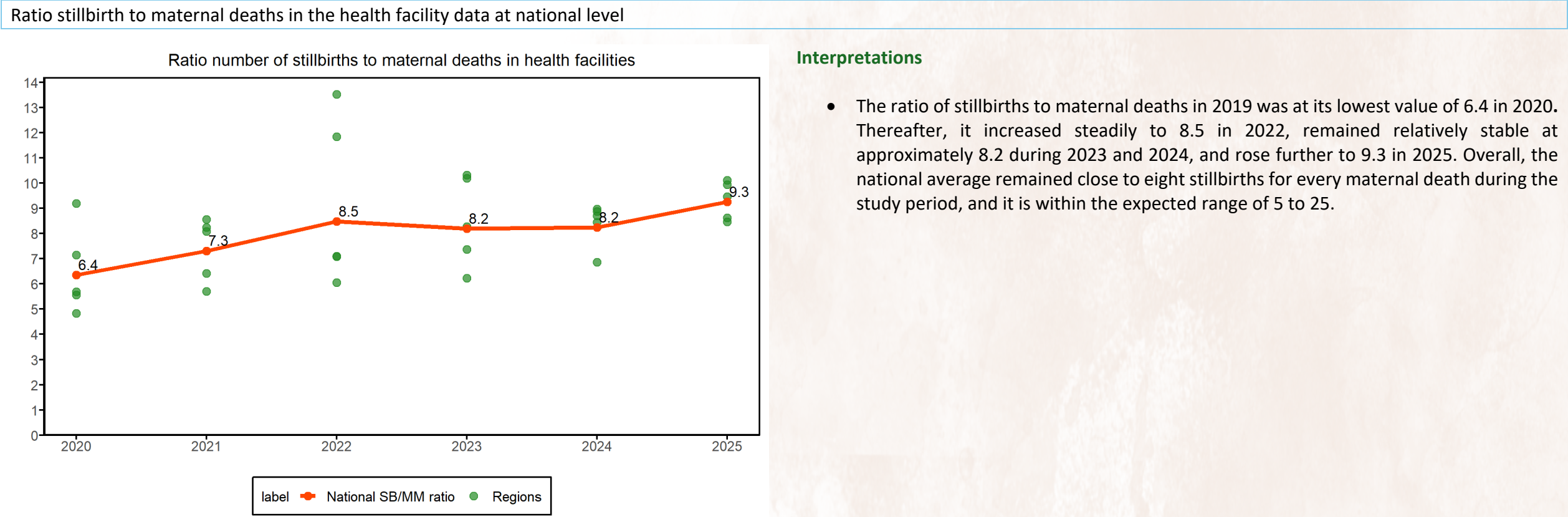
- Interpretations
- The data quality between the national coverage and the sub-national data has a strong correlation, with no district-level inequalities having marginally worsened over time
 - Has there been any change in inequality? There is slight disparity in institutional delivery in 2024 and 2025. The data points are becoming less dispersed over time, with strong correlation in Penta3 uptake.
 - The region that is best in institutional livebirth distribution is the Eastern region, and for Penta3 is the South region and Western area, while the worst-performing region in institutional livebirth is Northern and for Penta3 is the Eastern region and Northwest

4. Institutional mortality

Institutional Mortality trends (iMMR, iSBR)

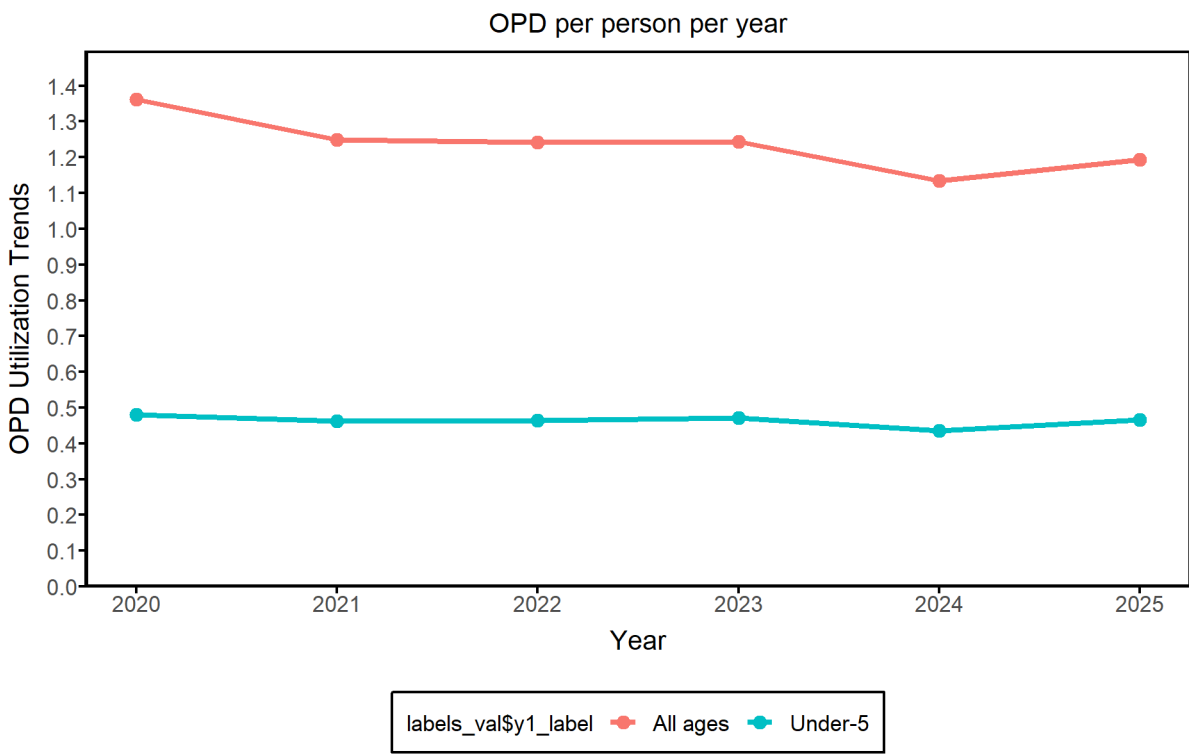


Data quality metrics



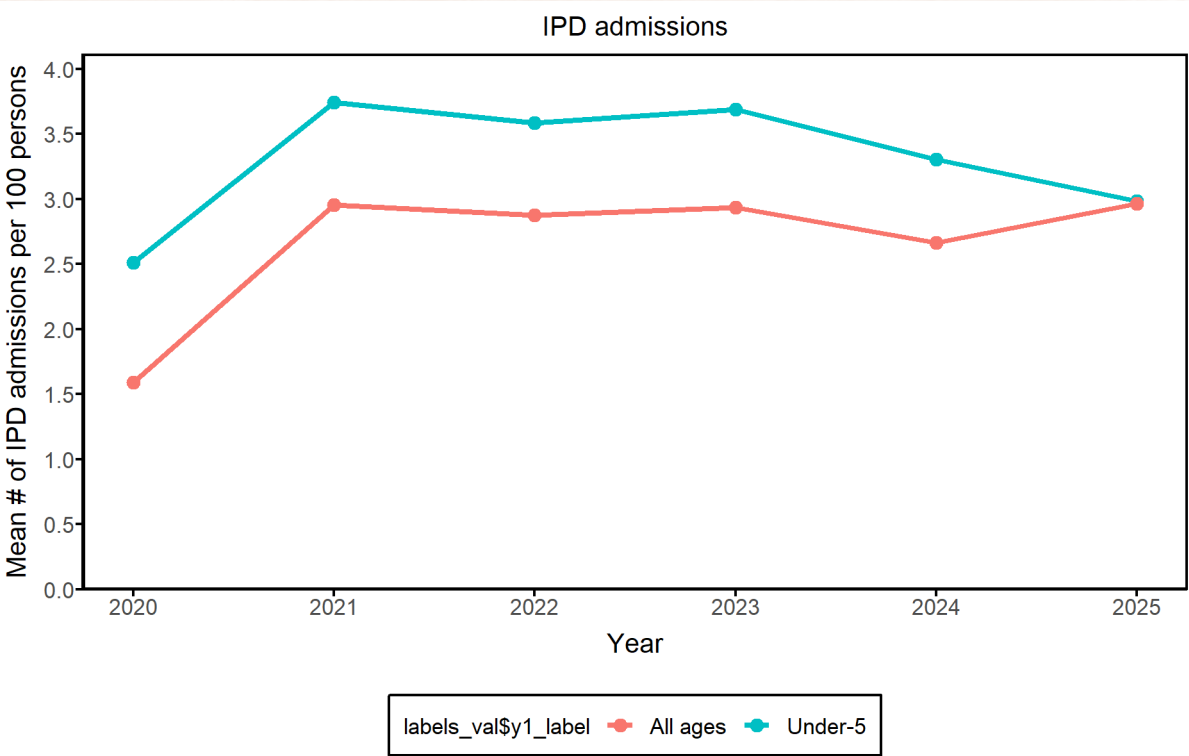
5. Curative health service utilization for sick children

Outpatient and inpatient service utilization

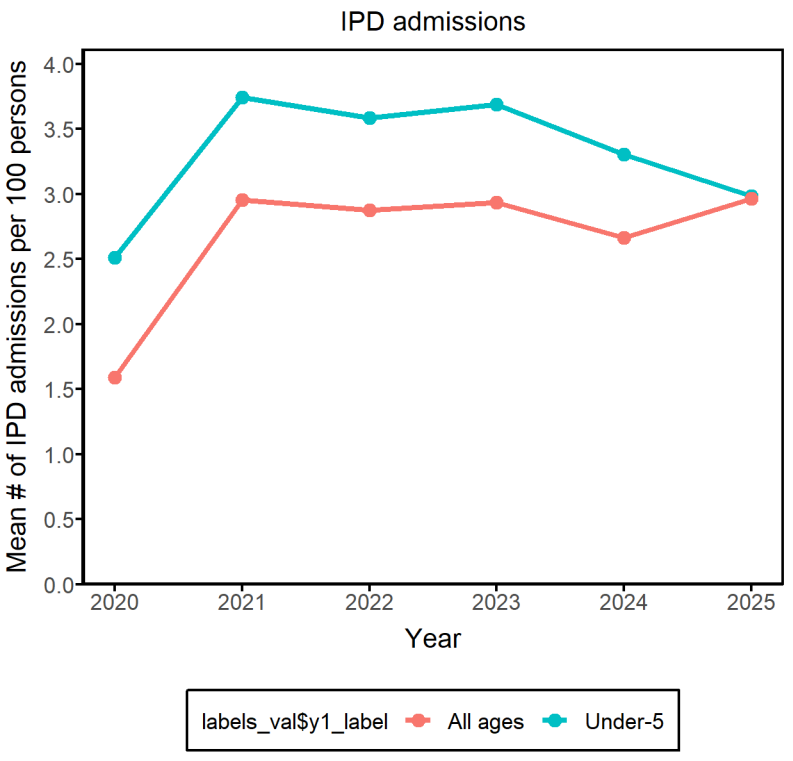
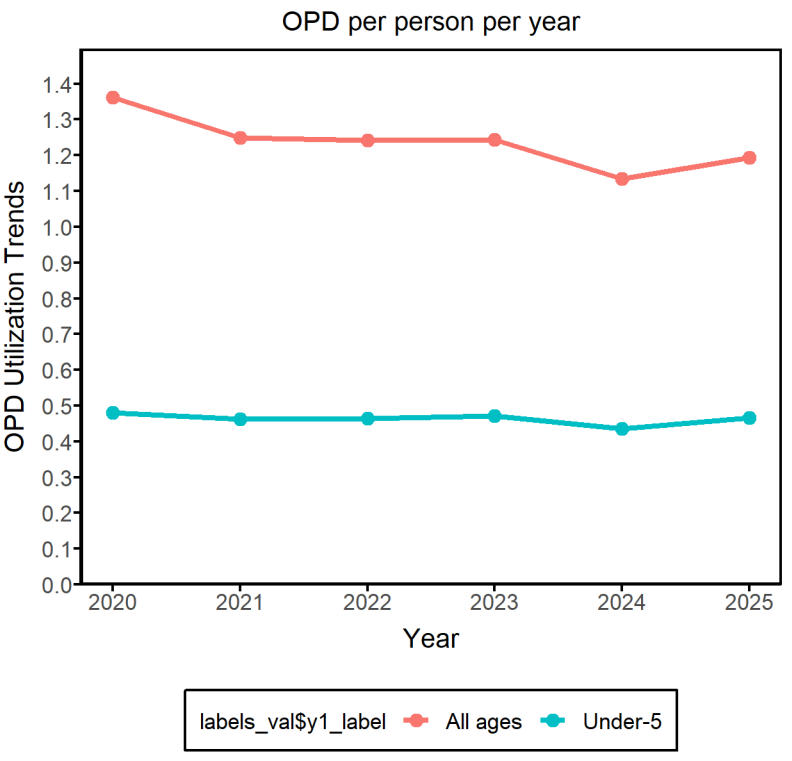


Interpretations

- The number of OPD visits for under-5s in 2025 is 0.5, which is less than 1
- There is consistency in the quality of data reporting over time
- The highest number of IPD visits per 100 children per year during 2020 – 2025 is 3.7, which was observed in 2021 and 2023, and it is higher than 2 per 100 children
- The OPD visits per child per region is less than 1, whereas the IPD is three times the OPD visits



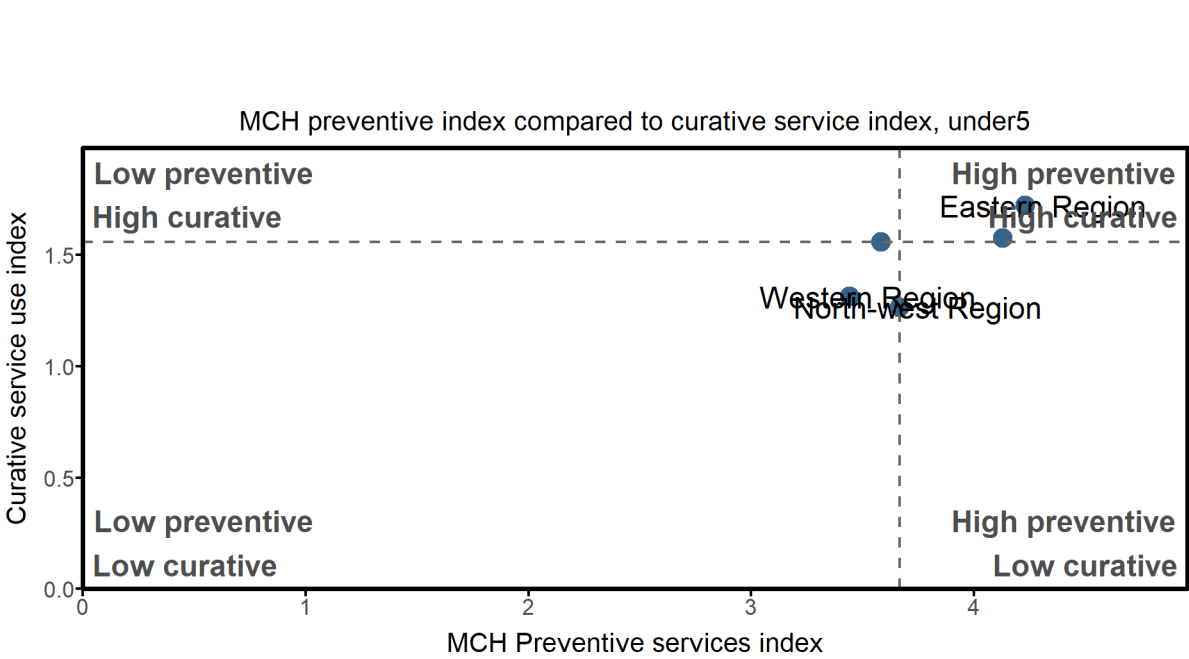
Regional/provincial service utilization



Interpretations

- The highest OPD and IPD are highest in Southern. Northern and North-West, and the lowest is in the Eastern region

MCH Preventive vs Curative Index



Interpretations

- All three regions have relatively high curative service performance, as they lie above the curative service threshold.
- No region falls into the low curative–low preventive quadrant, indicating generally good child health service availability.
- Eastern Region is the best-performing region, with the highest combined preventive and curative service indices.
- Western Region appears to lag somewhat in preventive service performance compared with the other regions.
- Inpatient case fatality stabilized at approximately 8.0 per 1,000 admissions between 2019 and 2020. After a minor dip in 2021, the system faced a sharp spike (+3.0 points) in 2022 before recovering and stabilizing with a net reduction by 2024.

6. Health system progress and performance

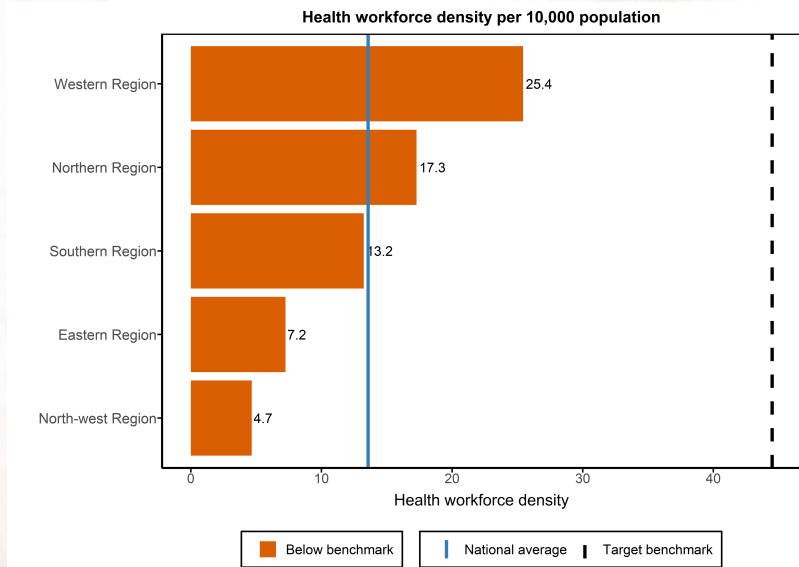
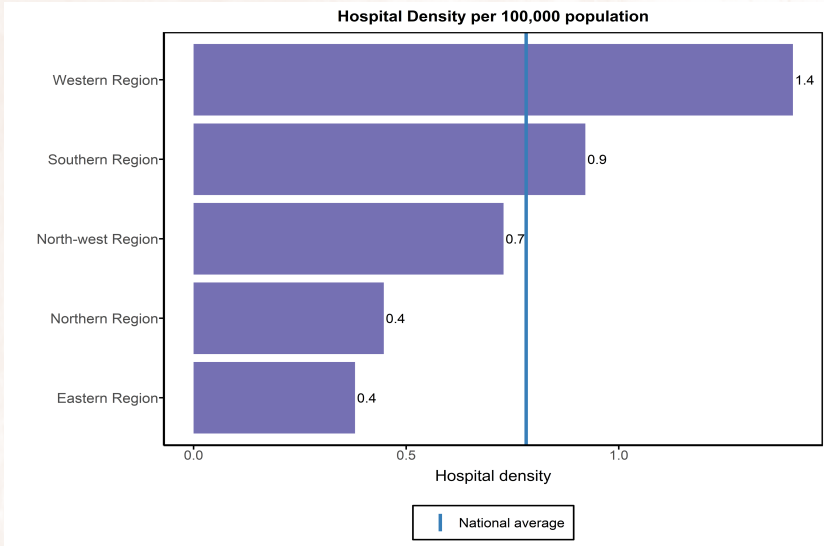
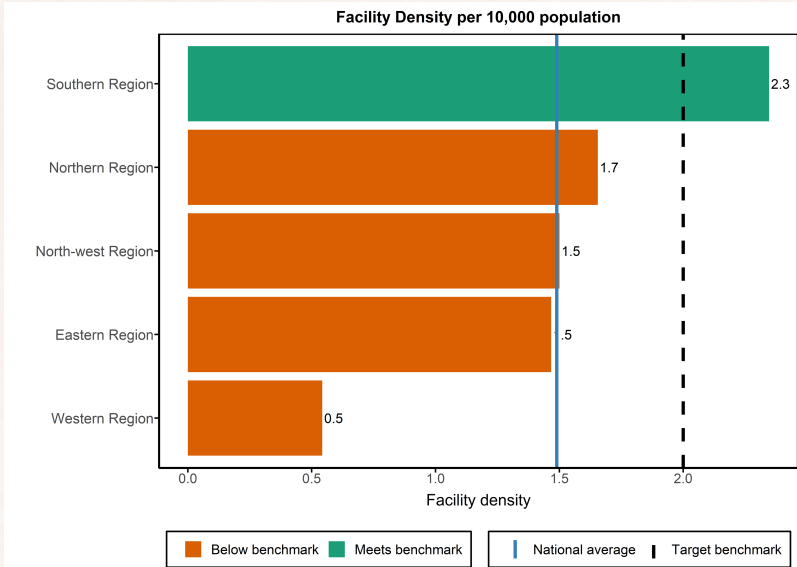
Health system inputs

2024		
Indicator	Value	Unit
Health infrastructure		
Health facility density	1.5	per 10,000
Share of facilities that are hospitals	5.3	%
Hospital density	0.8	per 100,000
Inpatient bed density	3.5	per 10,000
Health workforce		
Health workforce density	0.0	per 10,000
Skills mix ratio nurse-midwives per physician		
Role of private sector		
Share of Private facilities	11.4	%
Share of NGO facilities	5.0	%

Interpretations

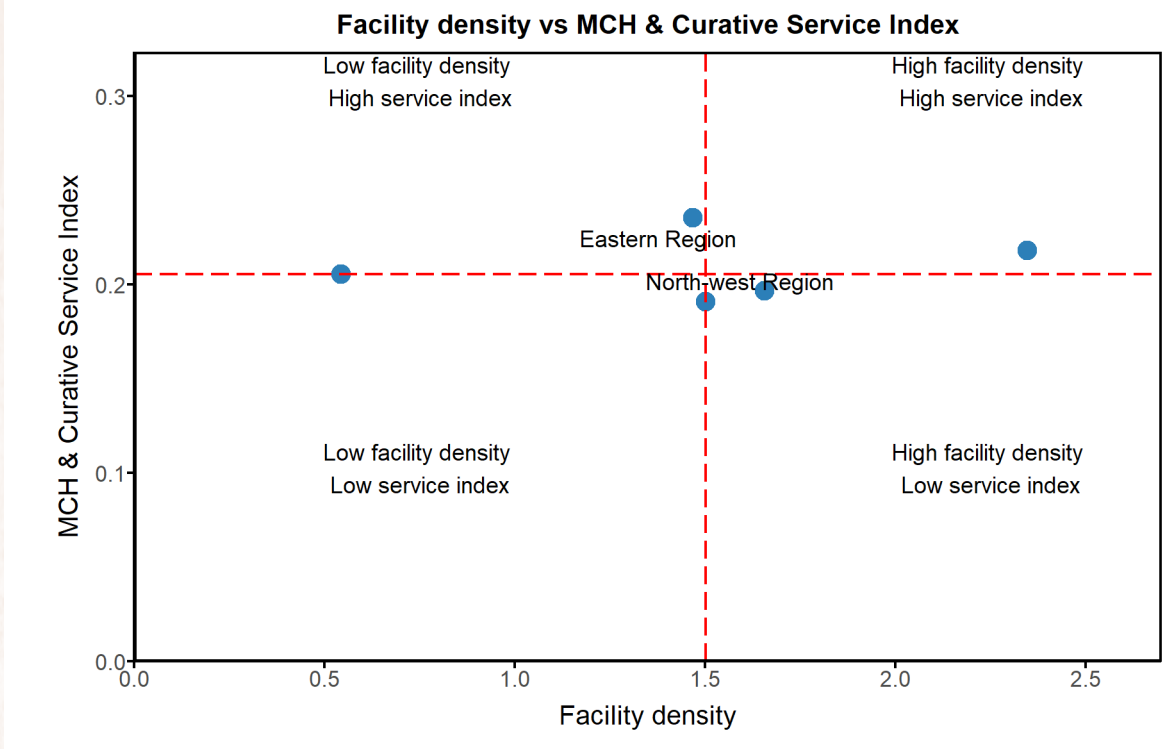
- The private health facilities, which also play a critical role in our health service delivery and are mostly located in urban areas, have a share of 11.4%, while the NGOs cover 5.0%
- The case with specialized care services at the regional level: the Western Region has the highest hospital density (1.4 per 100,000), while the rural areas such as the Northern Region (1.7) and Eastern Region (1.5) have lower densities.

Health system inputs by region/province



- The Southern Region is the only region to meet the target level of 2.0 per 10,000 people, with 2.3 facilities per 10,000 people, whereas the highly populated Urban region (Western Region) has a severe deficit of only 0.5.
- It reveals a clear regional imbalance, with the Western Region taking the lead with 1.4 per 100,000 population. The Southern Region follows as the second-highest area with a density of 0.9, while the North-west Region occupies a middle tier at 0.7 hospitals per 100,000 people.
- The evaluation framework with a vertical line at the target benchmark health workers per 10,000 population indicates that none of the regions listed (Western, Southern and Northern, North-west and Eastern) achieved the target benchmark of 44.5 health workers per 10,000 population

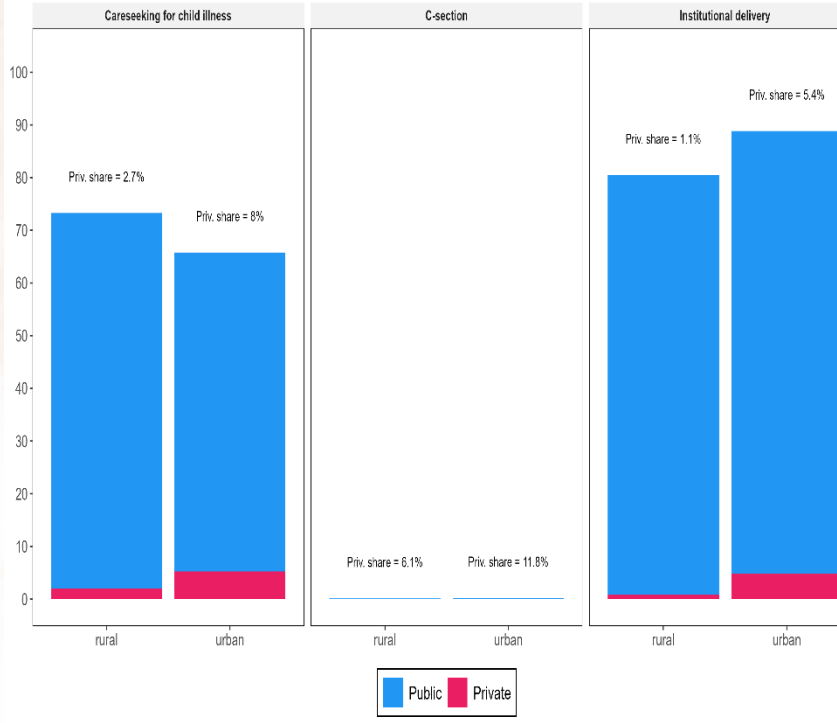
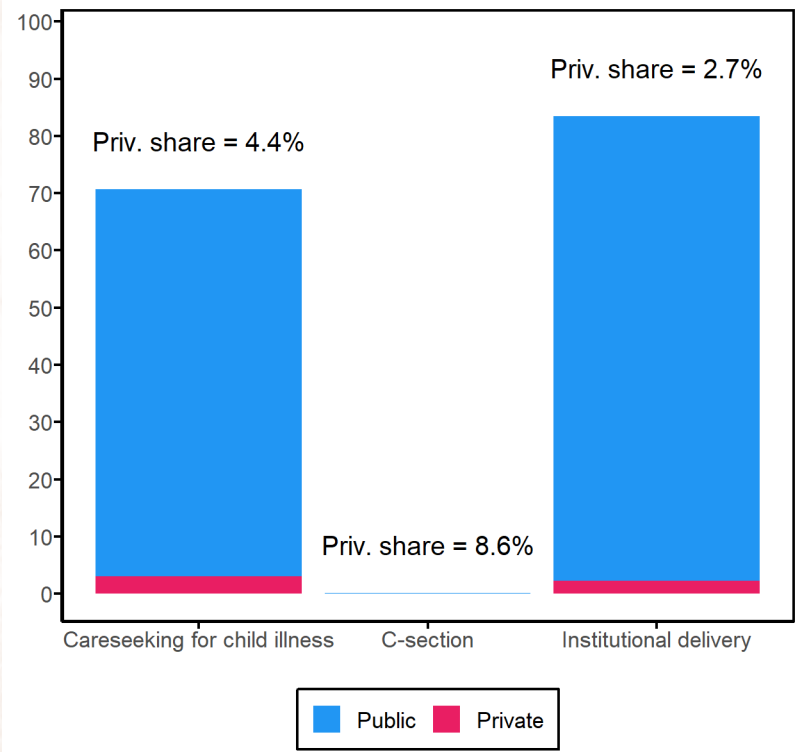
Health system outputs by inputs at the subnational level



Interpretations

- The facility density vs MCH & Curative Service Index for regional health infrastructure inputs against actual maternal, child health, and curative care delivery outputs illustrates the four performance quadrants with two baseline lines of facility density 1.5 and service index of approximately 0.2. The Southern Region, located on the far right at a density of 2.3, demonstrates that strong facility coverage translates into higher clinical performance.
- On the other hand, the Eastern Region, located in the low facility density and high service index, illustrates higher healthcare service outputs despite having fewer physical facilities per capita.
- The remaining regions are situated close to the central boundaries, reflecting a more balanced but stagnant relationship between infrastructure and service delivery.

Private sector and RMNCAH services



Interpretations

- Breaking down service delivery by rural and urban categories, revealing how wealth and urbanization influence healthcare choices. In both pediatric care and institutional deliveries, rural populations rely almost exclusively on the public sector, with private sector shares stifled at just 2.7% and 1.1%, respectively.
- Urban families, benefiting from higher average household incomes and greater clinic density, utilize private providers at significantly higher rates: 8.0% for child illness and 5.4% for deliveries.
- On the other hand, the C-sections further emphasize that emergency surgical care is a luxury largely confined to urban wealth. Total utilization remains critically low in both settings, but the private sector's share of C-sections nearly doubles from 6.1% in rural areas to 11.8% in urban areas.