



NIGERIA

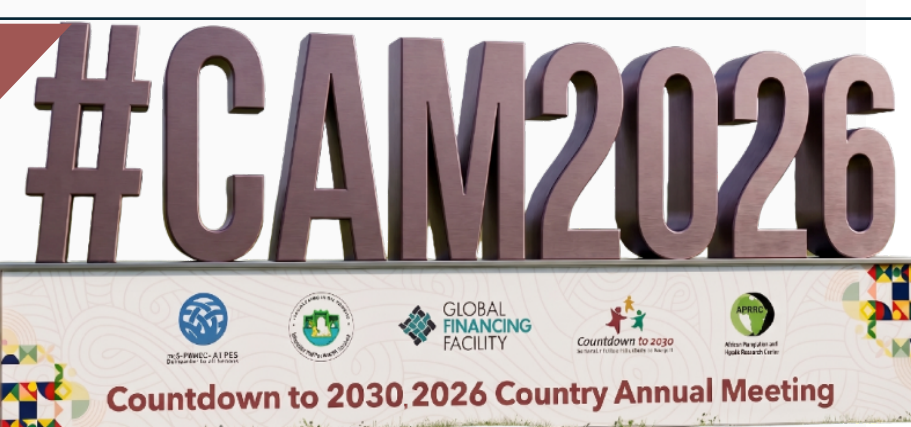
SYNTHESIS

2026

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



Countdown to 2030 in partnership with Federal Ministry of Health and Social Welfare, Nigeria, Global Financing Facility, WHO, WAHO & UNICEF



Team Members

Nigeria Countdown Team

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.

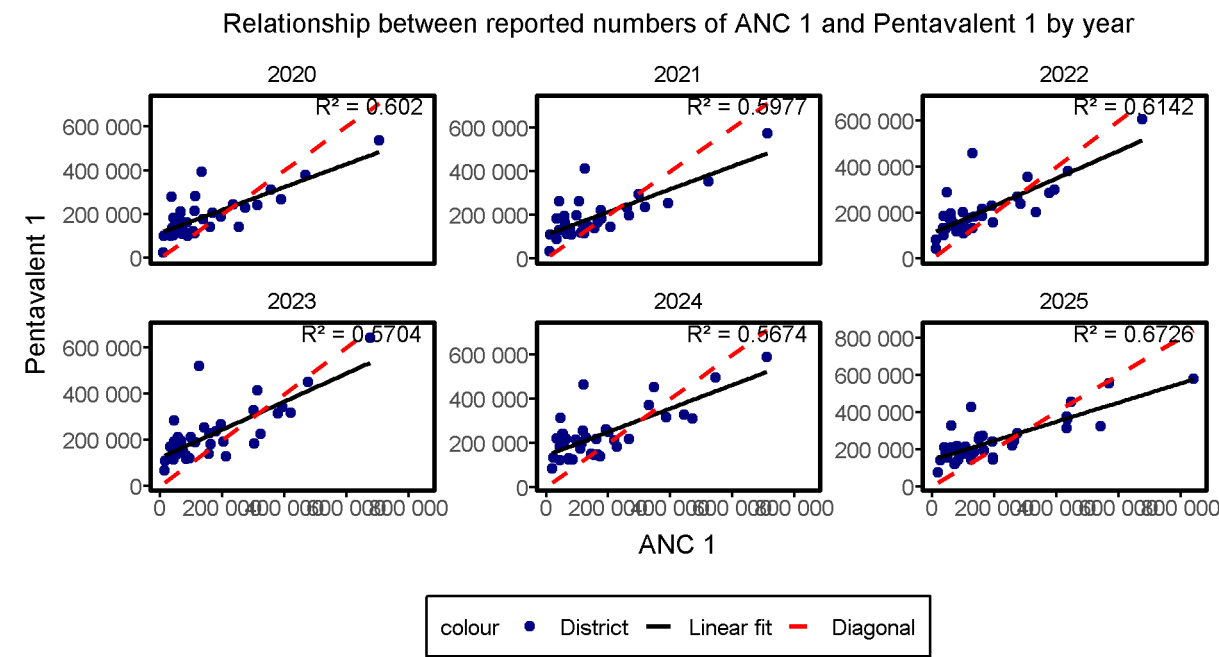
Summary of reported health facility data quality, DHIS2, 2020-2025

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)	76	80	85	91	93	92
1b	% of subnational units with completeness of facility reporting >= 80%	46	51	68	86	89	86
1c	% of subnational units with no missing values for the 4 forms	72	77	78	77	75	97
2. Extreme outliers (mean of ANC, delivery, immunization)							
2a	% of monthly values that are not extreme outliers (national)	77	87	99	100	96	72
2b	% of subnational units with no extreme outliers in the year	67	85	92	92	88	59
3. Consistency of annual reporting							
3a	Ratio ANC1 / Penta1	0.76	0.80	0.76	0.75	0.75	0.80
3b	Ratio Penta1 / Penta3	1.07	1.06	1.07	1.06	1.07	1.05
3c	% subnational units with ANC1/Penta1 in expected range	22	27	19	22	27	24
3d	% subnational units with Penta1/Penta3 in expected range	100	97	97	97	97	92
4	Annual data quality score	66	72	77	81	81	74

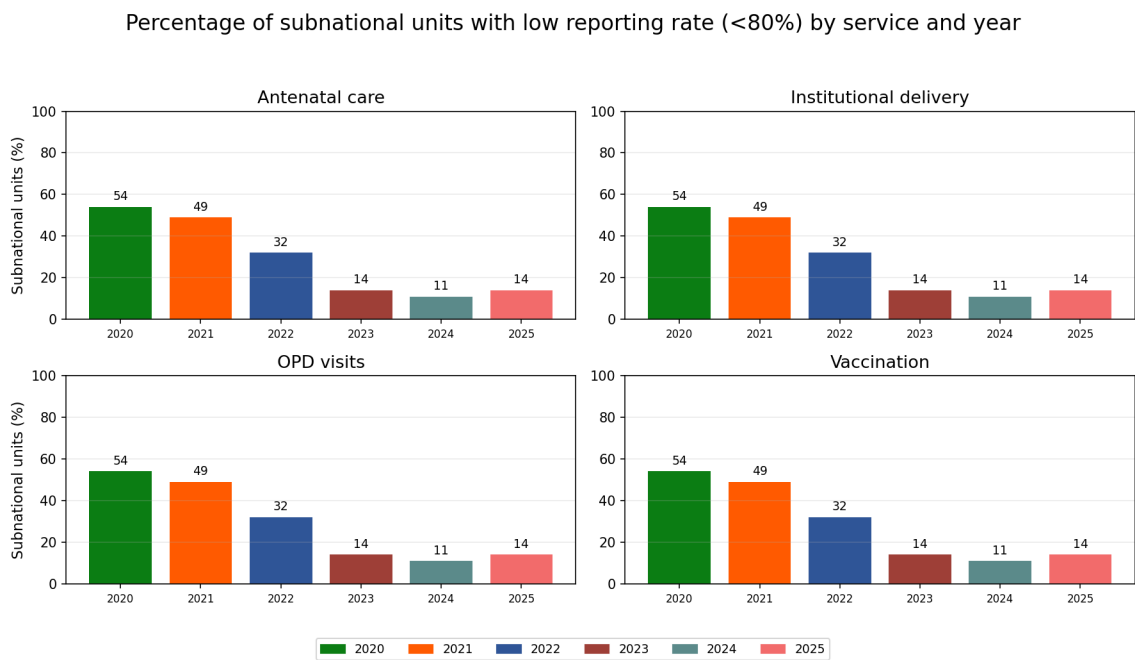
Interpretations

- Overall data quality improved from an annual score of 66 in 2020 to 81 in 2023-2024, then declined to 74 in 2025. The fall in 2025 reflects a marked increase in extreme outliers despite high reporting completeness.
- Reporting completeness improved substantially: the share of subnational units reaching at least 80% completeness rose from 46% in 2020 to 89% in 2024, before easing to 86% in 2025. However, only 72% of monthly values were non-outliers in 2025 and only 59% of subnational units had no extreme outliers.
- State/LGA review should prioritise units with persistent low reporting, extreme outliers, unexpected zeros or ANC1/Penta1 ratios outside the expected range; these are the clearest data-quality warning signals in the current output.
- Incomplete reporting was adjusted using k=0.5, assuming non-reporting facilities provide services at lower volume than reporting facilities. Adjusted values should be used for interpretation, especially in 2025.
- ANC1/Penta1 consistency remains weak: the ratio is 0.75-0.80 and only 19-27% of subnational units fall in the expected range. This may reflect under-captured ANC contacts, incomplete private-sector reporting or cross-facility service use. Penta1/Penta3 is more coherent at 1.05-1.07.

Numerator data quality: ANC1/Penta1 consistency by year

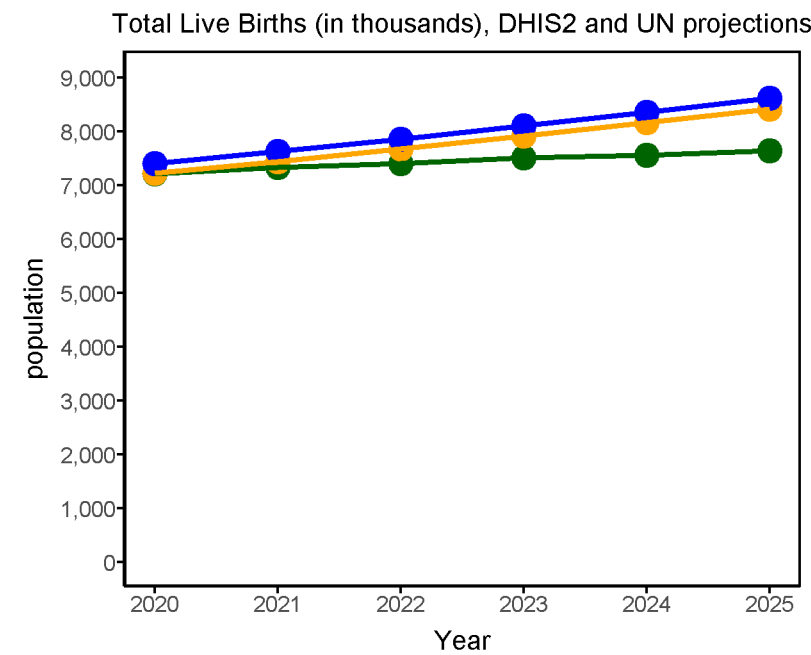


Numerator data quality: low reporting by service and year



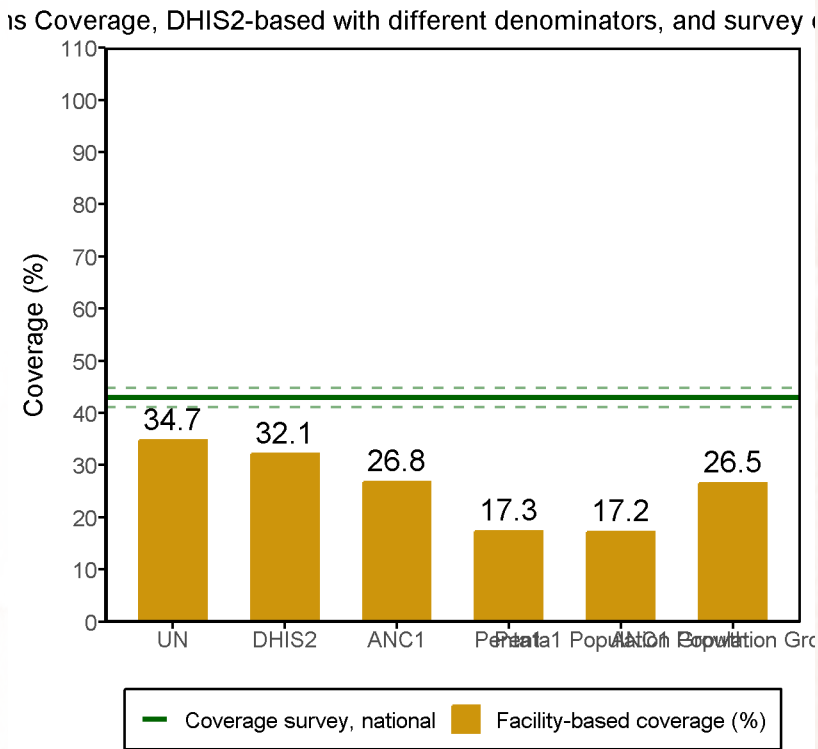
DENOMINATORS: Service coverage is the population receiving a service (numerator) divided by the population needing the service (denominator). Four denominator options were assessed using institutional live births and Penta3 coverage. DHIS2 population projections were evaluated for temporal consistency and compared with UN projections; ANC1- and Penta1-derived denominators were also assessed. The most plausible denominator was selected for each coverage analysis.

Total Livebirths

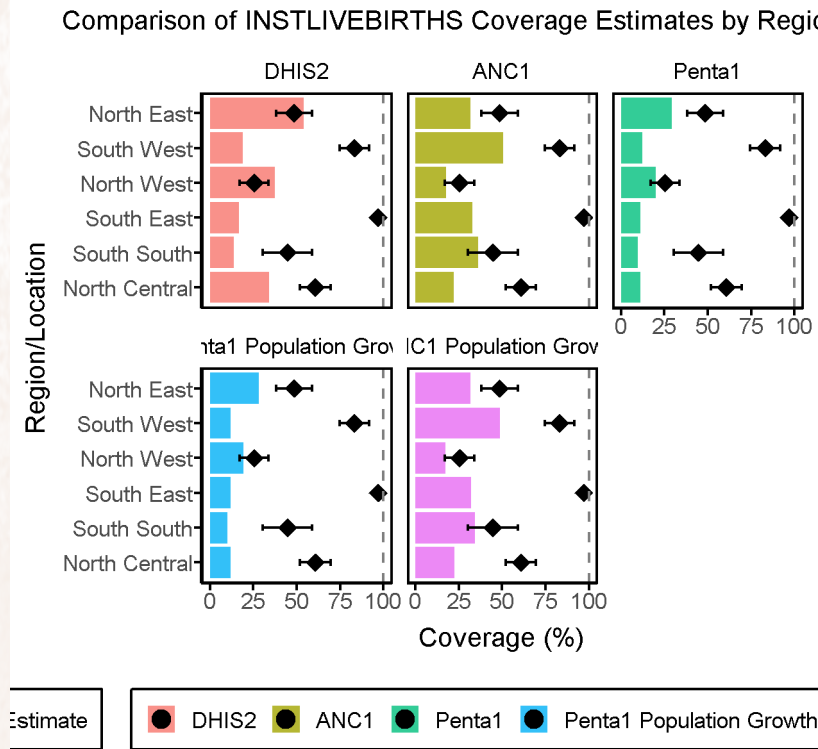


Live Births (in 1000) DHIS-2 Live Births Projection (in 1000) DHIS-2 Total Live Births

National Institutional Live Births



Subnational Institutional Live births



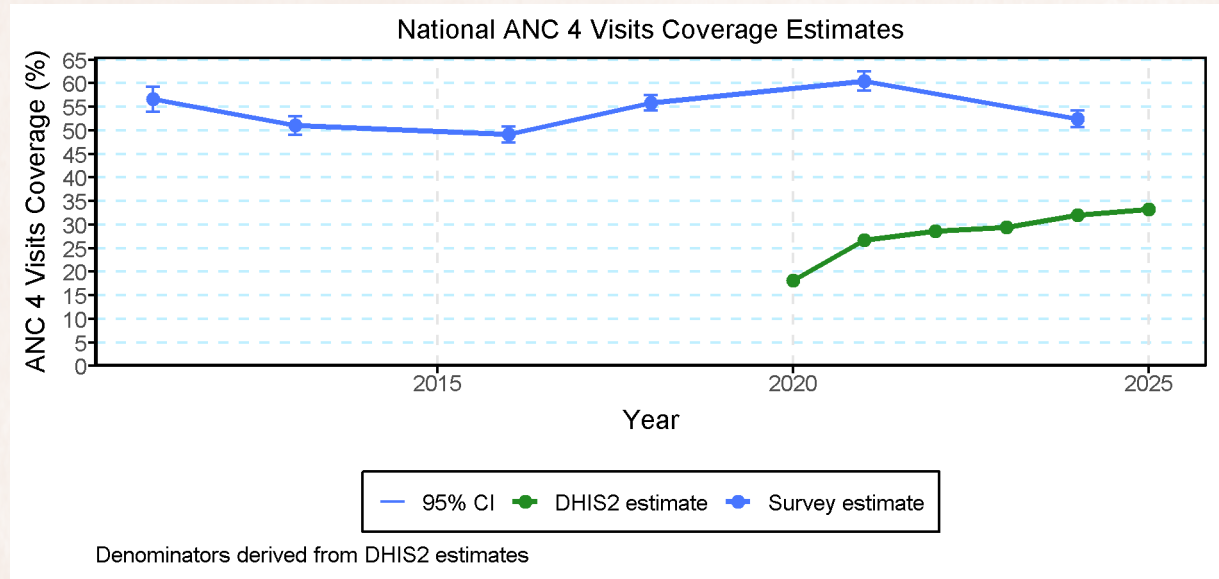
Interpretations

- DHIS2 and UN birth projections move in the same upward direction and are broadly aligned, although DHIS2 is slightly higher; the widening difference by 2025 should be monitored through denominator review.
- For institutional live births, the UN denominator gives the closest national estimate to the survey benchmark, with the DHIS2 denominator next closest. For Penta3, the Penta1-derived denominator is the most coherent with survey and WUENIC patterns.
- Selected denominators: DHIS2 projected live births for routine maternal/institutional-delivery monitoring and the Penta1-derived denominator for vaccination/Penta3. Values above 100% should trigger numerator, denominator and catchment audit rather than be interpreted as true coverage.

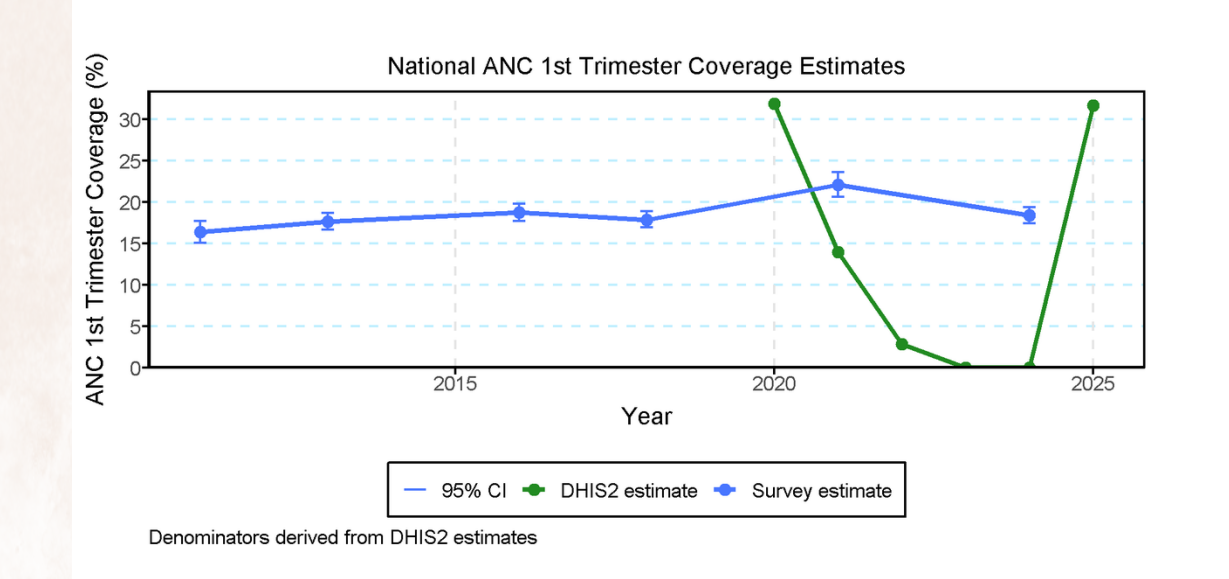
2. National coverage trends: facility data and surveys

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

ANC 4



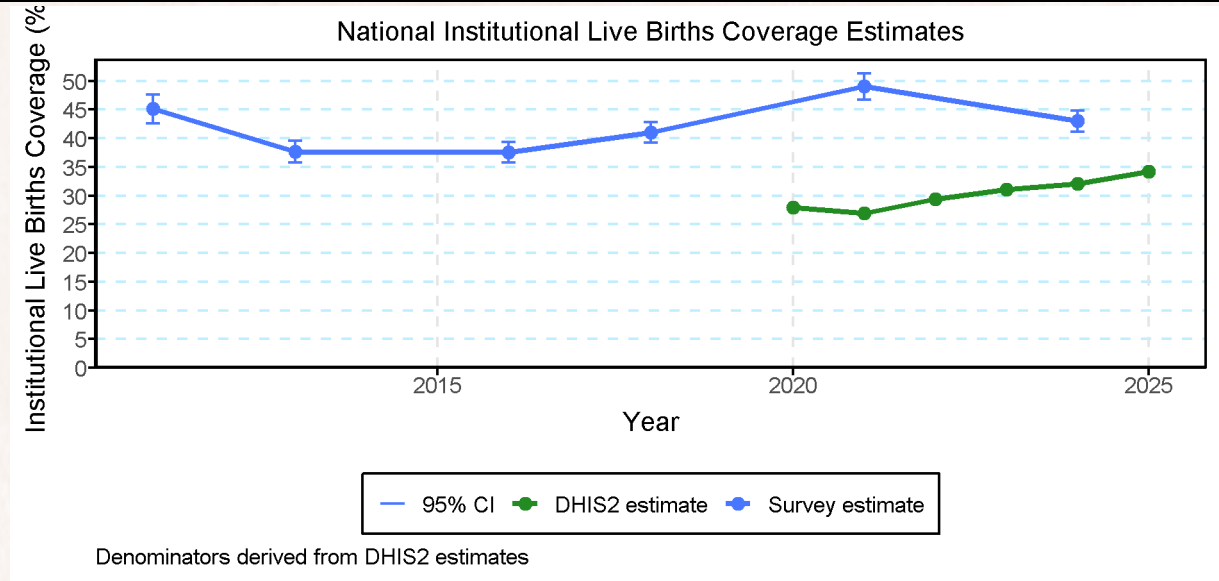
ANC early visit



Interpretations

- ANC4 routine coverage increased from roughly 17% in 2020 to about 33% in 2025 but remains well below survey estimates (approximately 50-60%). First-trimester ANC estimates in DHIS2 are highly unstable, including near-zero values in some years and a rebound in 2025, indicating indicator-mapping or reporting problems that require validation.

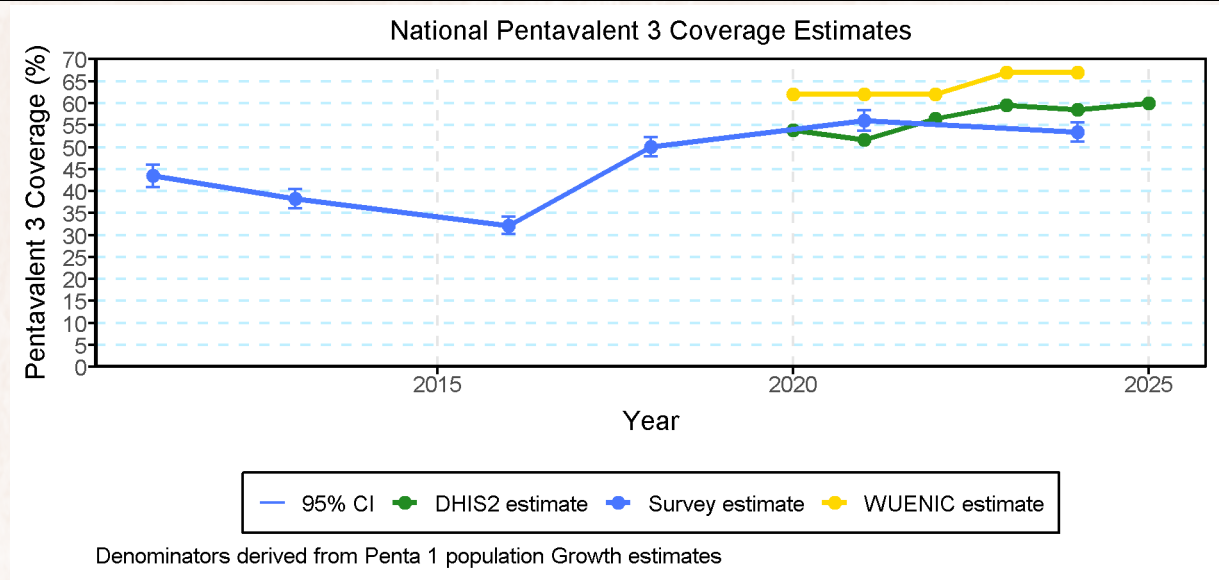
Institutional delivery



Interpretations

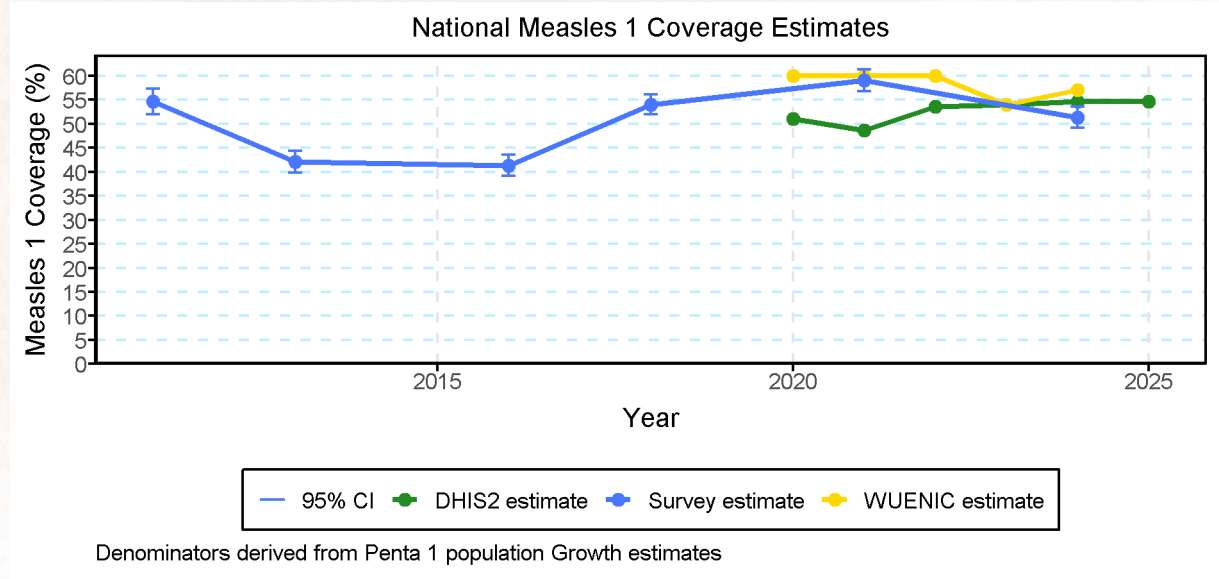
- Institutional live-birth coverage shows a plausible upward DHIS2 trend (about 28% to 34%) but remains below survey estimates. Incomplete capture of private, mission and faith-based facilities, home/traditional deliveries, access barriers and denominator issues may all contribute.
- Coverage remains below 50% and far from universal access. The trend is positive but too slow; State/FCT plans should strengthen 24-hour delivery services, referral, transport and financial access while improving reporting from non-public providers.

Immunisation: Penta3, Measles1



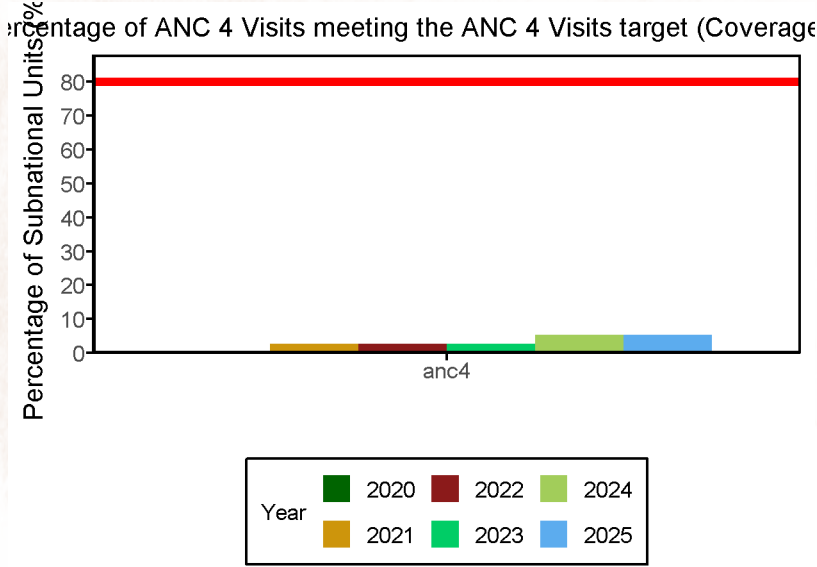
Interpretations

- Penta3 DHIS2 estimates are broadly consistent with survey patterns but remain below WUENIC in recent years; Measles1 aligns somewhat better across DHIS2, surveys and WUENIC. Routine immunisation data are therefore useful for monitoring, but should be triangulated and audited where coverage is implausible.
- Penta3 and Measles1 remain below high-coverage programme goals in many subnational units. Improvement in national averages is not sufficient: zero-dose and under-immunised communities require targeted microplanning, outreach and defaulter tracking.

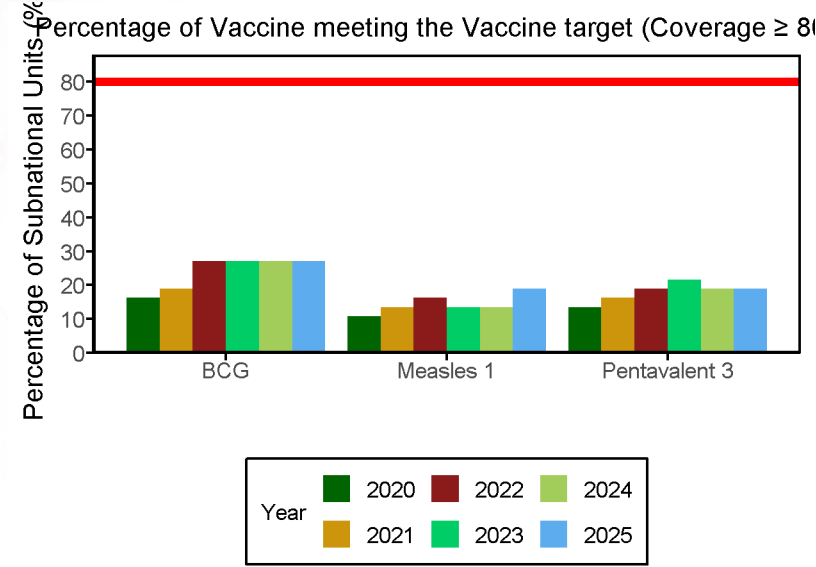


Percentage of subnational units achieving high coverage targets

ANC 4



Child Health Indicators

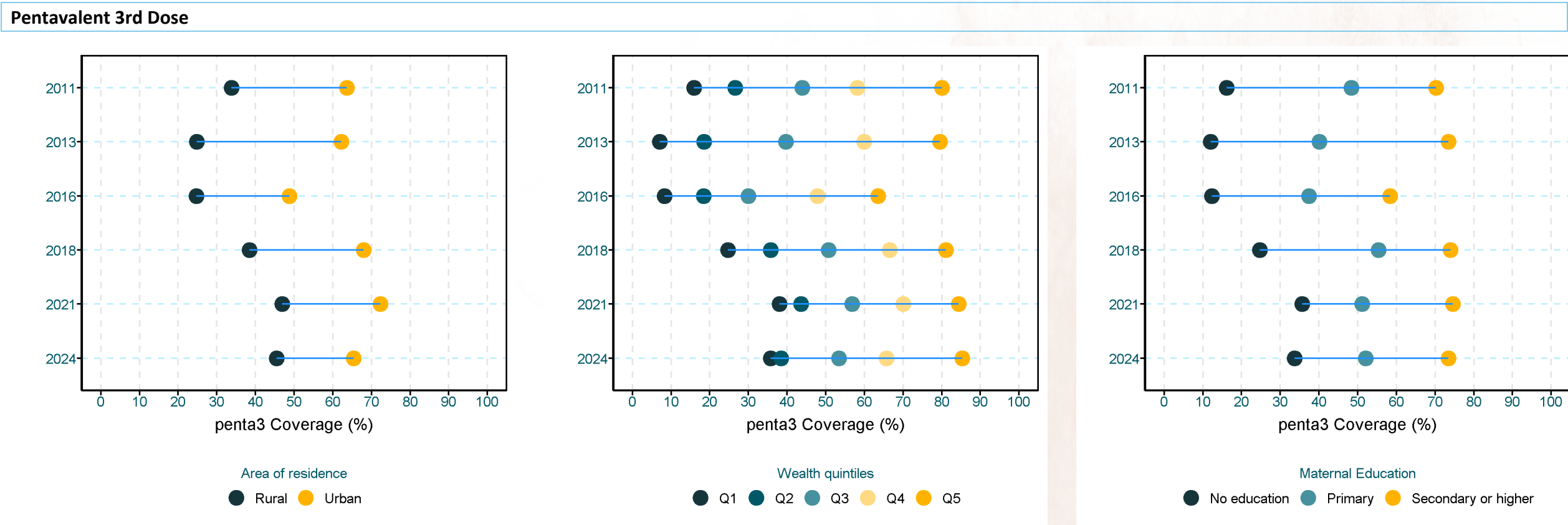
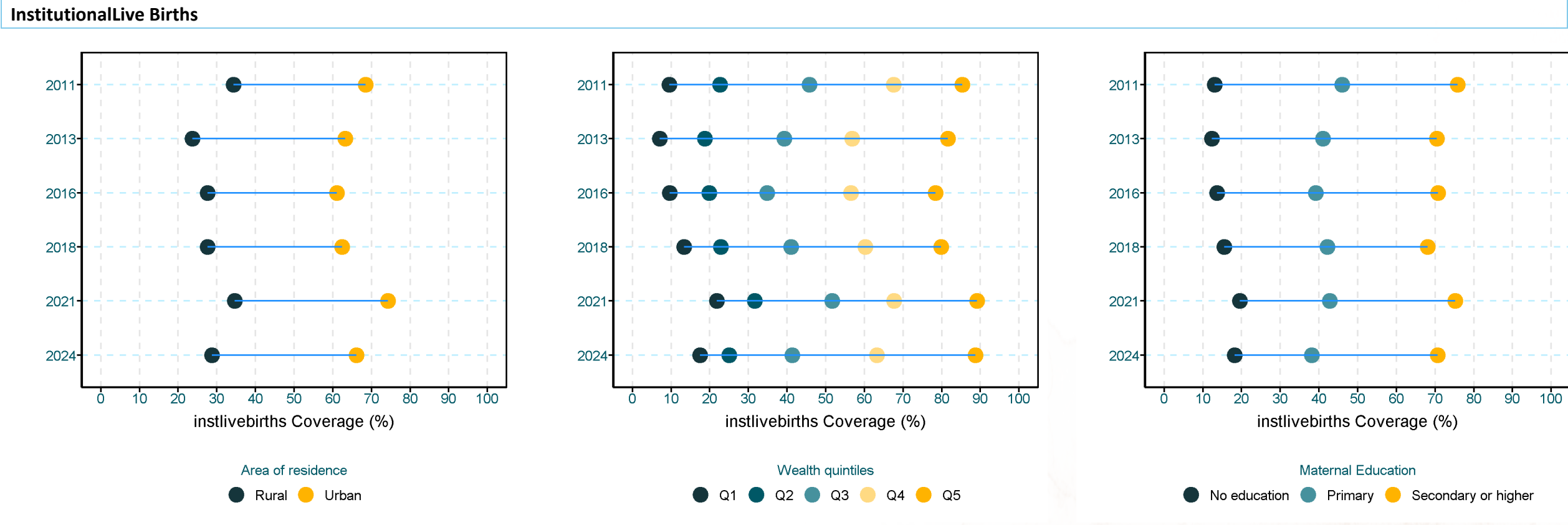


Interpretations

- Target achievement remains low and uneven. ANC4 >=70% is reached by very few subnational units, while vaccination >=80% is achieved by only a minority. BCG performs best; Measles1 and Penta3 show no consistently high and equitable coverage pattern.

3. Equity

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



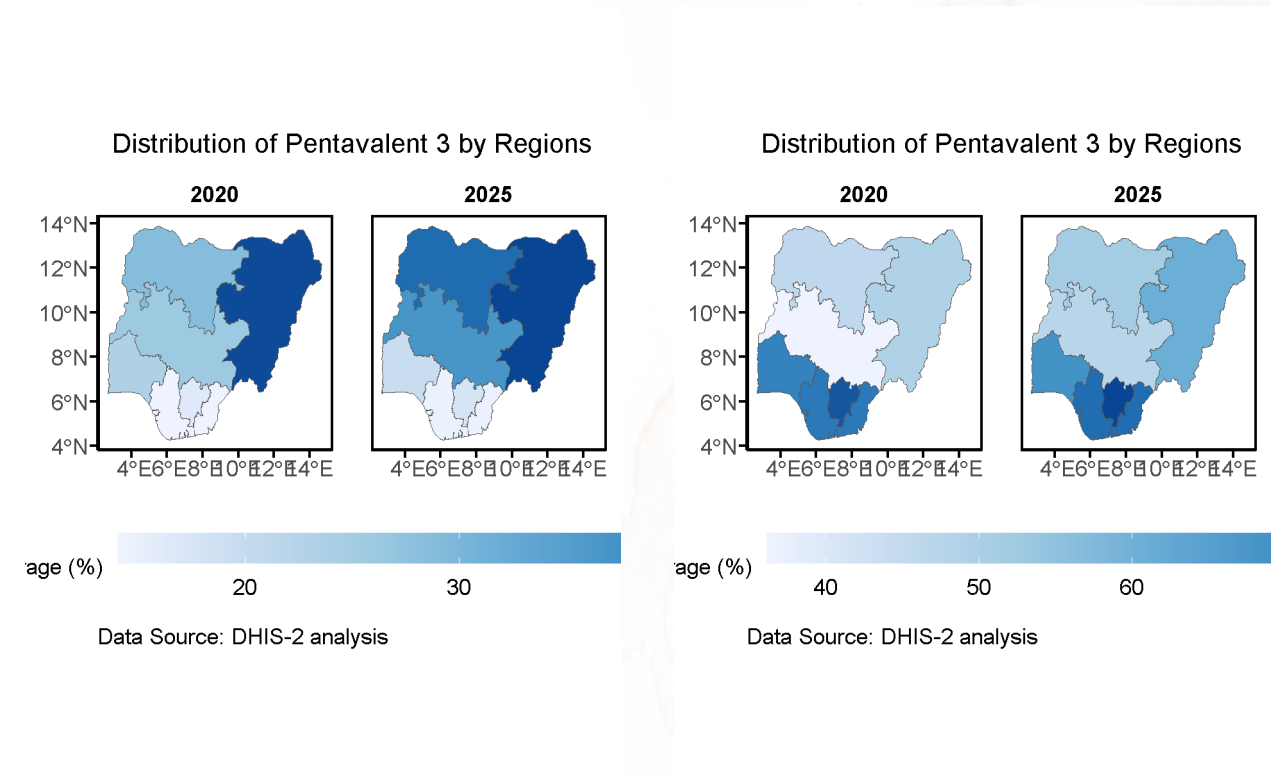
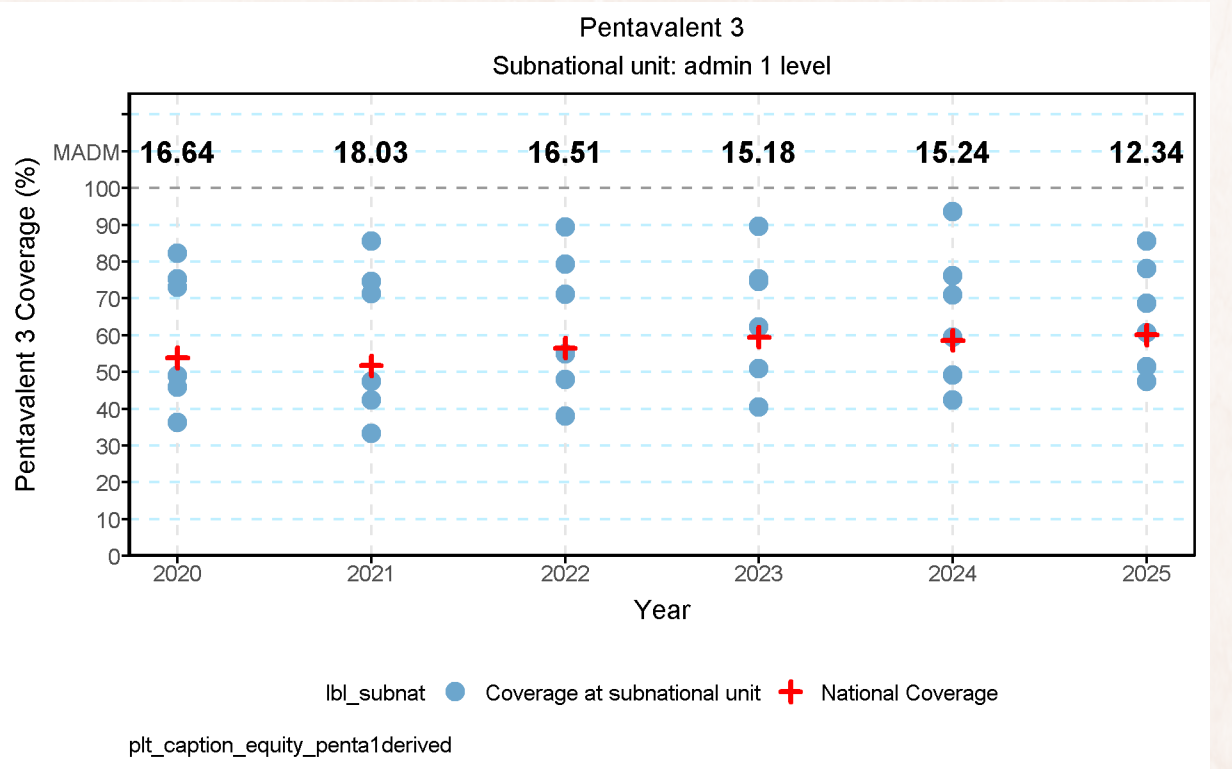
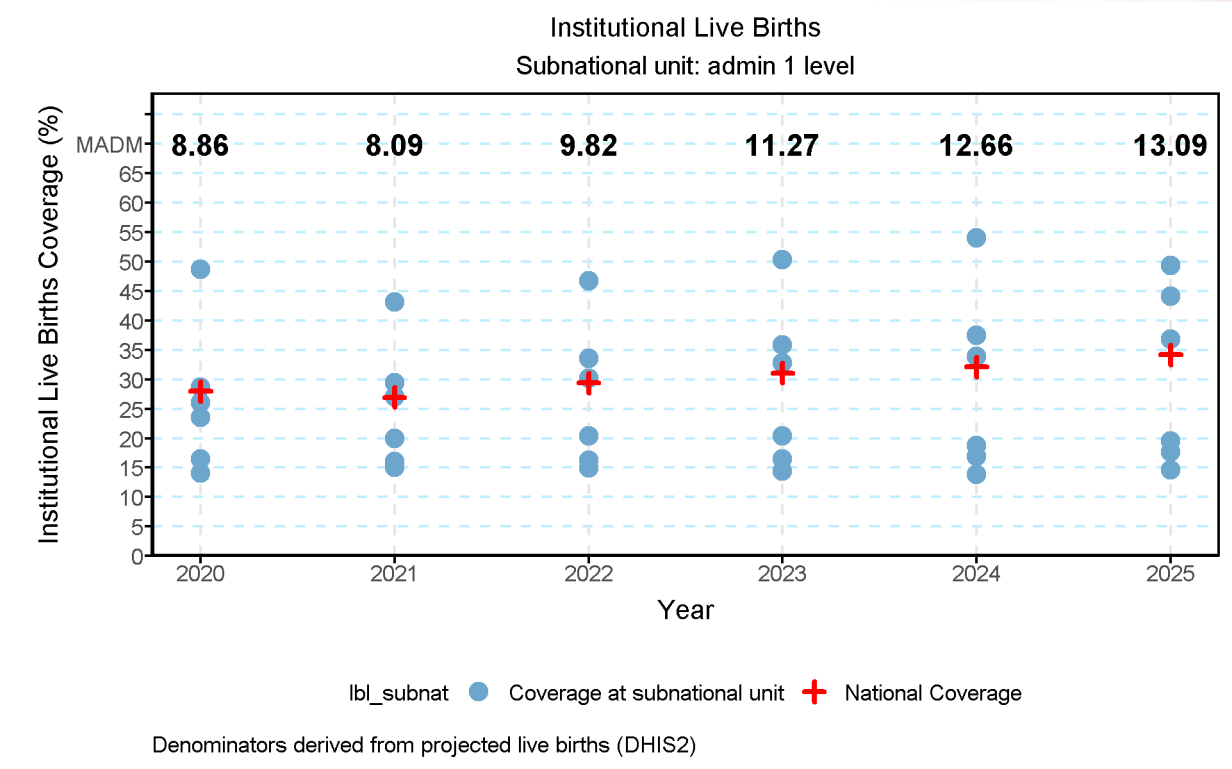
Interpretations

- Rural residents, the poorest households and women with no education are consistently left behind for both institutional delivery and Penta3.
- There is a clear wealth, education and urban-residence gradient. Equity-oriented responses should include pro-poor financing, rural outreach, transport support, stronger PHC and targeted immunisation in underserved communities.
- Advantaged groups remain consistently higher, while disadvantaged groups improve more slowly and retain the largest absolute gaps; national improvement therefore does not imply equitable progress.
- Inequalities persist, especially for institutional delivery. Penta3 gaps have narrowed somewhat but still disadvantage rural, poorer and less-educated groups.

Geographical inequalities: Health facility data

Institutional Live Births

Pentavalent 3rd Dose



Distribution of Pentavalent 3 by Regions

2020

2025

4°E

6°E

8°E

10°E

12°E

14°E

4°N

6°N

8°N

10°N

12°N

14°N

age (%)

40

50

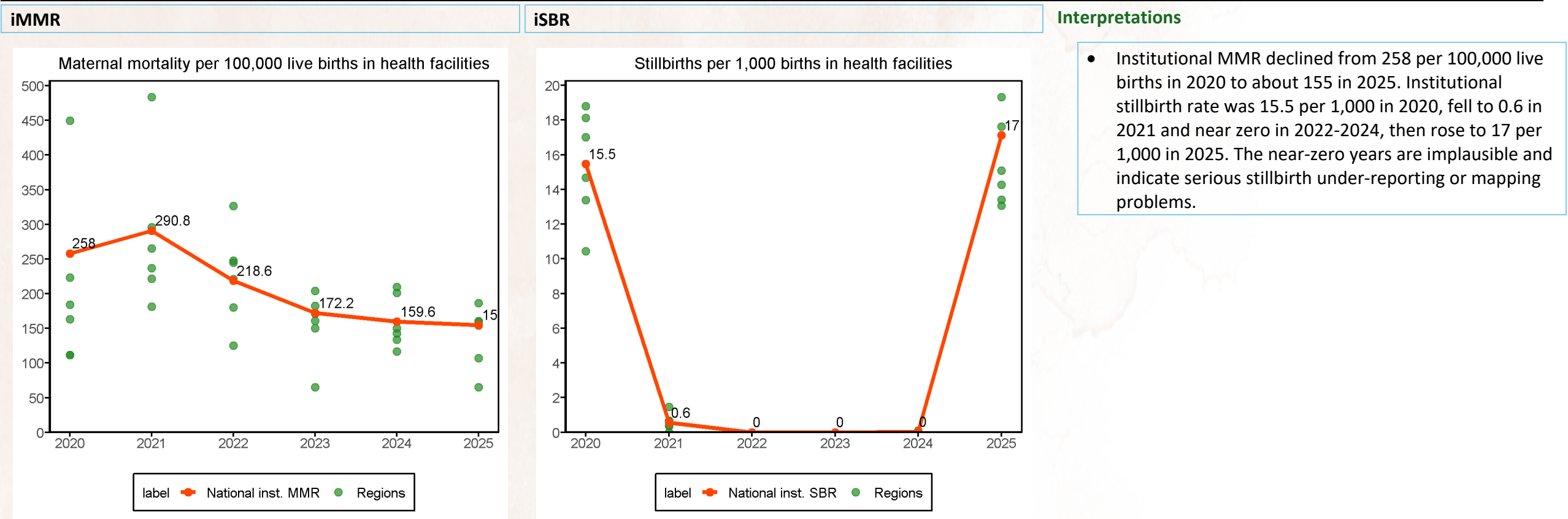
60

Data Source: DHIS-2 analysis

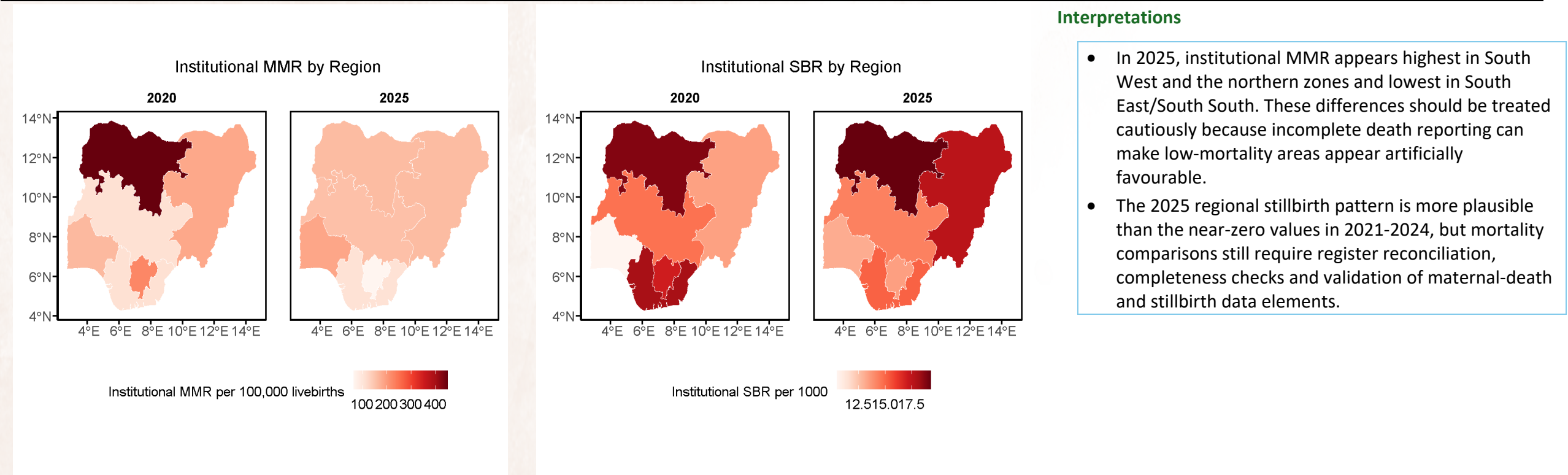
- Interpretations
- Institutional live births increased nationally from about 26-27% in 2020 to 33-34% in 2025; Penta3 rose to the high-50% range and then largely flattened.
 - Geographical inequality widened for institutional live births (MADM 8.86 to 13.09) but narrowed for Penta3 (16.64 to 12.34), indicating different equity trajectories across services.
 - The maps suggest stronger Penta3 coverage in parts of the South, while institutional live-birth coverage varies substantially across zones. State/FCT and LGA validation is needed before using these patterns for ranking or accountability

4. Institutional mortality

Institutional Mortality trends (iMMR, iSBR)

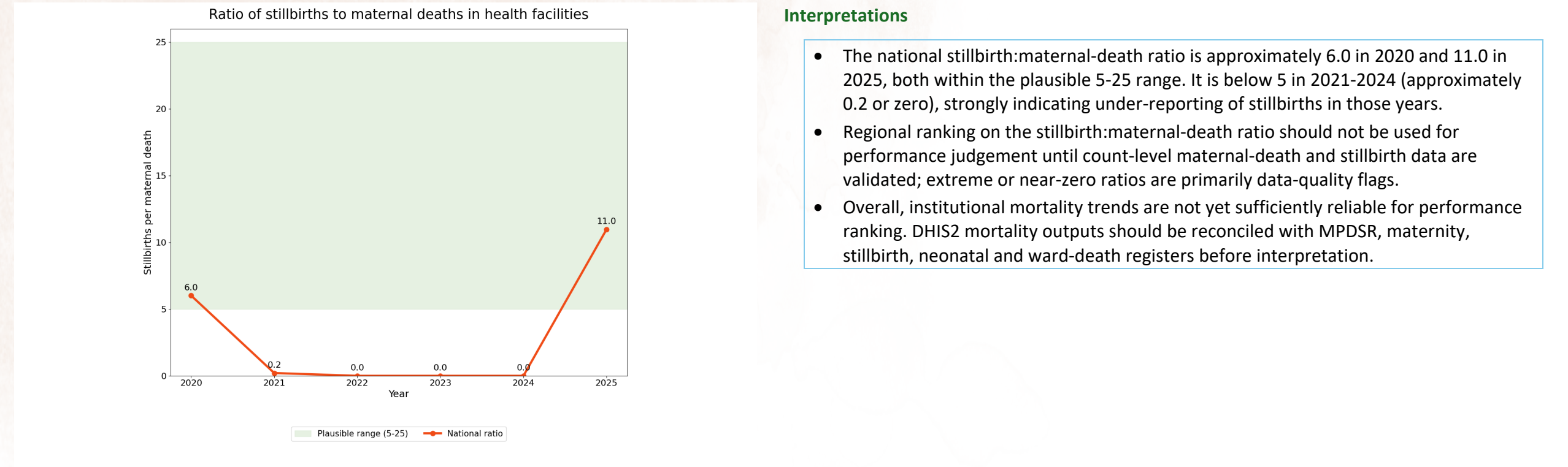


Institutional mortality by geopolitical zone

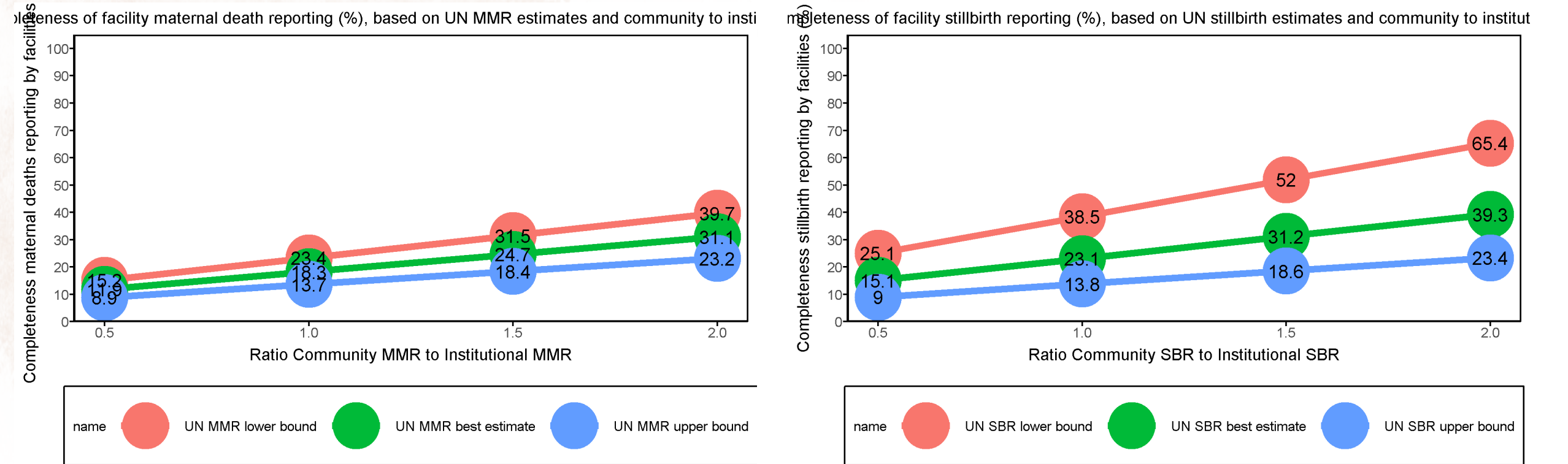


Data quality metrics

Ratio stillbirth to maternal deaths in the health facility data at national level



Estimated completeness of facility maternal death and stillbirth reporting

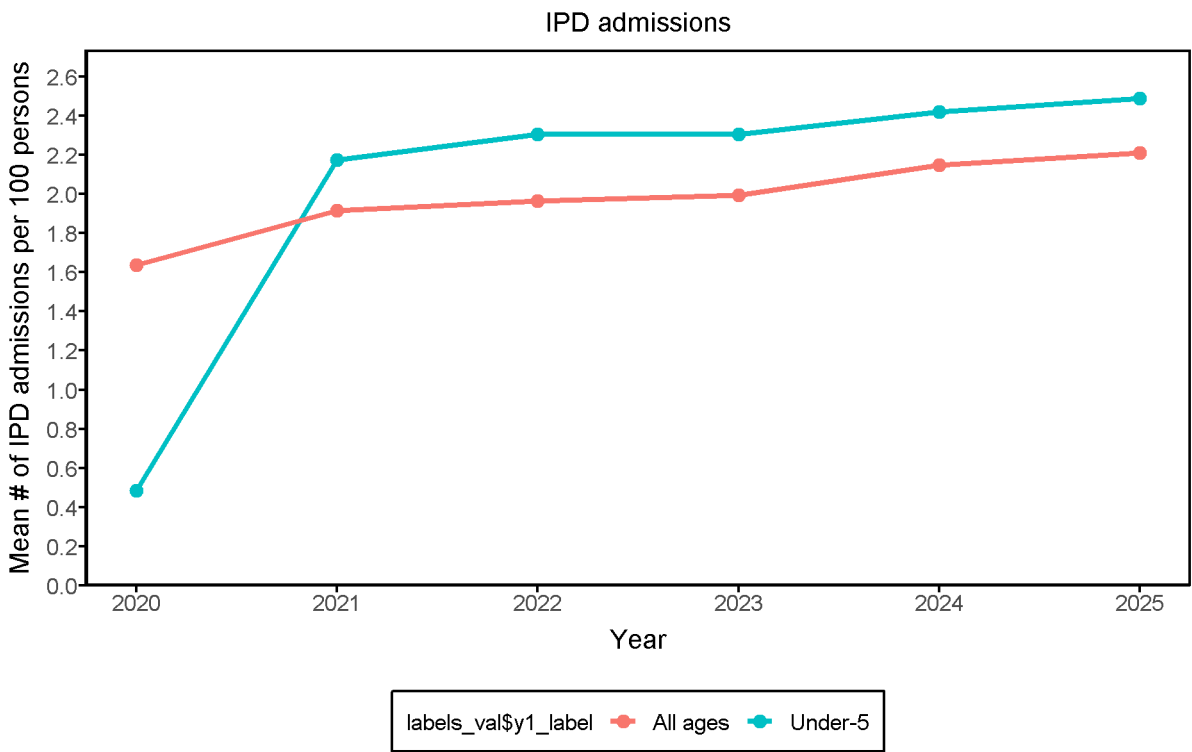
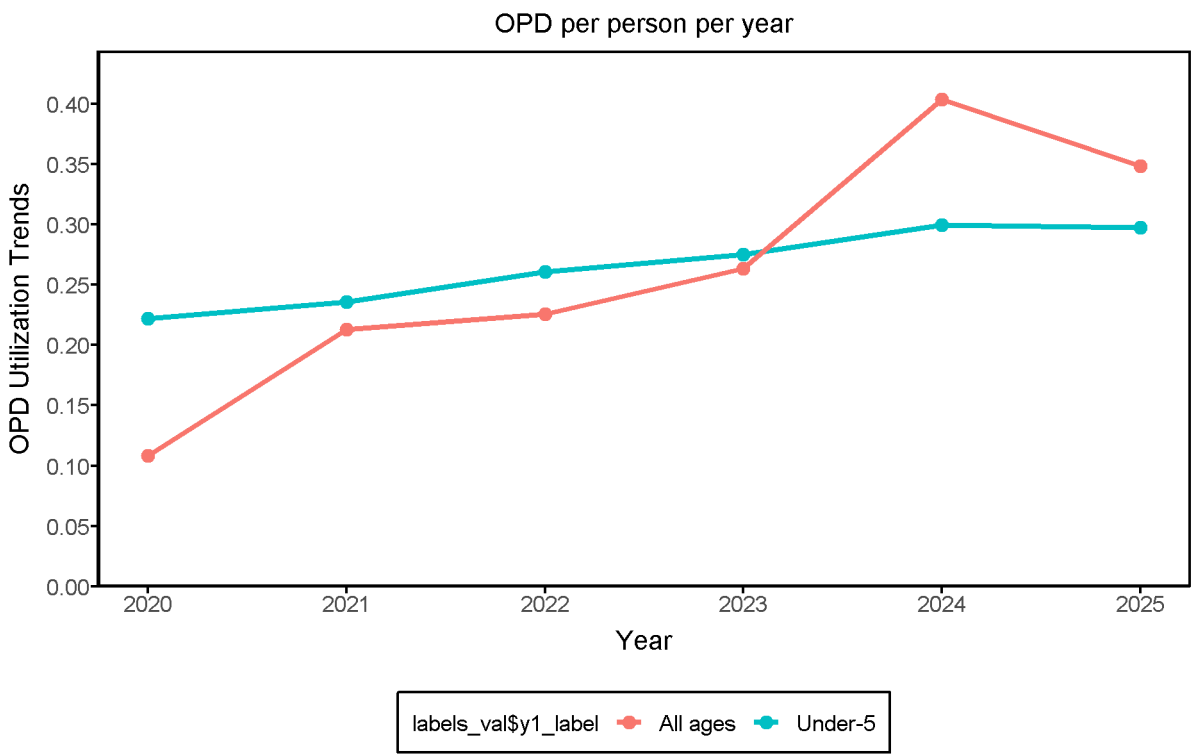


Interpretations

- Reporting completeness remains low. At community-to-institutional ratios of 1.0-1.5 and using UN best estimates, maternal-death reporting is roughly 18-25% complete and stillbirth reporting about 23-31% complete. Both are under-reported, with maternal deaths particularly incomplete.

5. Curative health service utilisation for sick children

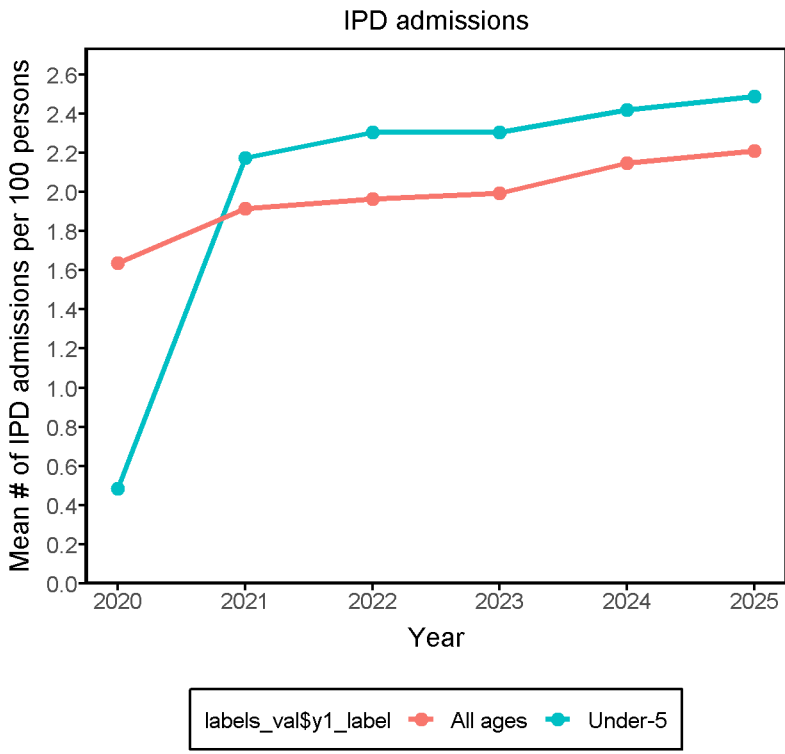
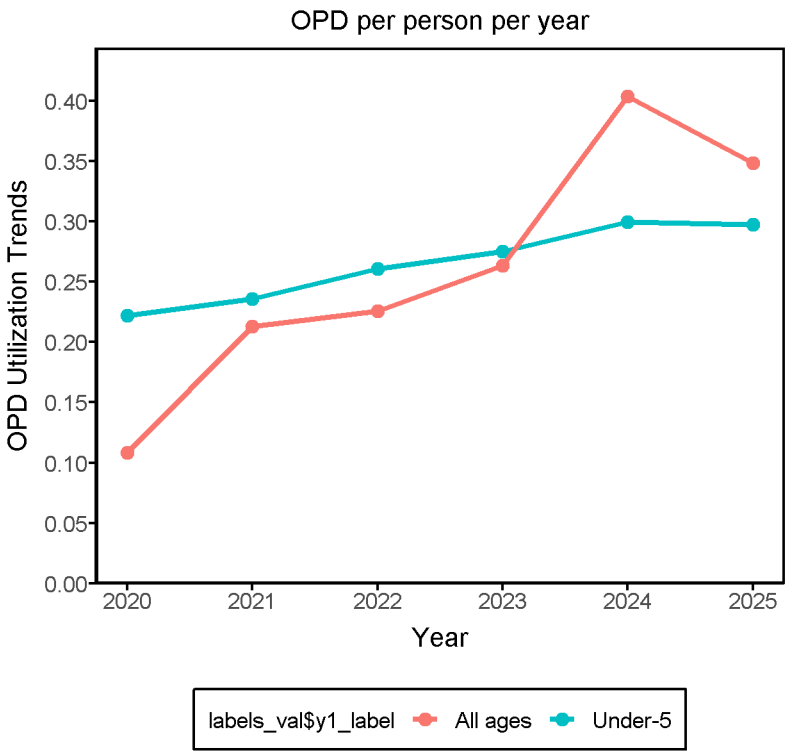
Outpatient and inpatient service utilization



Interpretations

- Under-five OPD utilisation was about 0.30 visits per child-year in 2024 and remained around 0.30 in 2025, up from about 0.22 in 2020. This is far below one visit per child-year and may reflect low access, care outside public facilities or incomplete routine reporting.
- Under-five OPD trends are relatively smooth, but all-age OPD rises sharply in 2024 and falls in 2025. IPD shows a very low 2020 value followed by a jump in 2021, suggesting COVID-19 disruption, incomplete 2020 reporting or improved subsequent capture.
- Under-five IPD admissions increased from about 0.5 per 100 children in 2020 to about 2.4 in 2024 and 2.5 in 2025. The later values exceed the 2 per 100 low-access threshold, but the 2020 value is not credible enough for trend inference.
- Geopolitical-zone routine capture is highly unequal: in 2025, OPD/IPD were highest in North West (0.65 visits; 4.44 admissions) and North East (0.59; 4.36), and lowest in South East (0.12; 0.82) and South South (0.14; 0.92). These are service-capture/utilisation signals, not morbidity rankings.

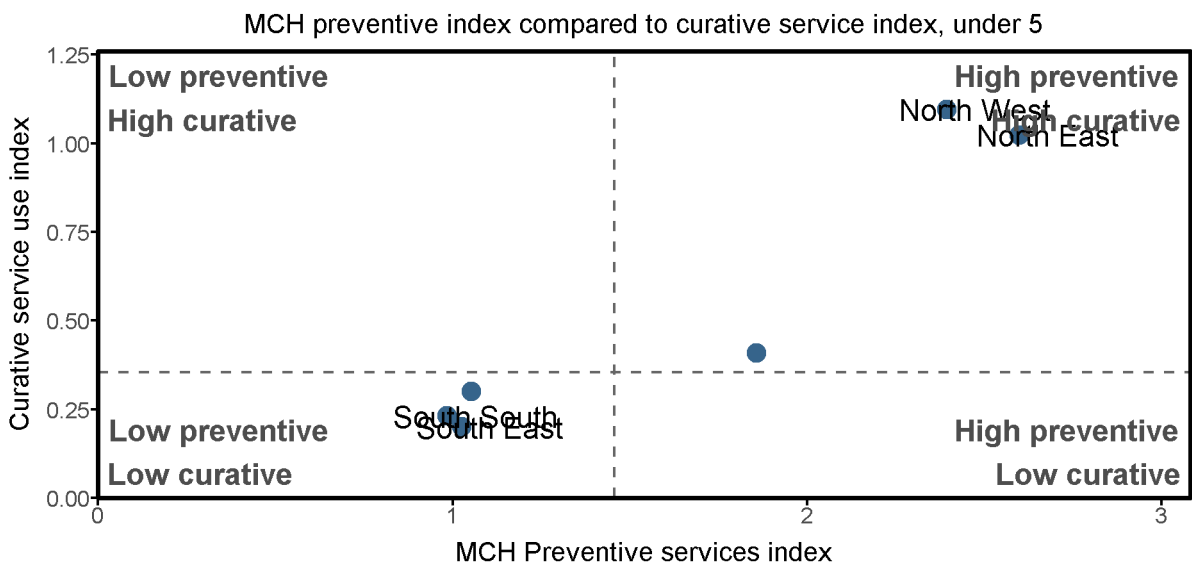
Geopolitical-zone service utilisation



Interpretations

- In 2025, the highest geopolitical-zone OPD rates were North West (0.65), North East (0.59) and North Central (0.24), while the lowest were South East (0.12), South South (0.14) and South West (0.16). IPD showed the same ordering: 4.44, 4.36 and 1.72 versus 0.82, 0.92 and 1.38 admissions per 100 under-five children. Review private-sector use, access, referral and reporting completeness before comparing performance.

MCH Preventive vs Curative Index



Interpretations

- Case fatality cannot be assessed from the displayed outputs because under-five inpatient deaths and the required admission denominators are not shown.
- The preventive-curative index should be used as a programme typology, not a league table. North West and North East show higher captured preventive and curative use, while South East, South South and South West cluster lower; these patterns may reflect public/private care pathways and reporting completeness as much as service performance.

6. Health system progress and performance

Health system inputs

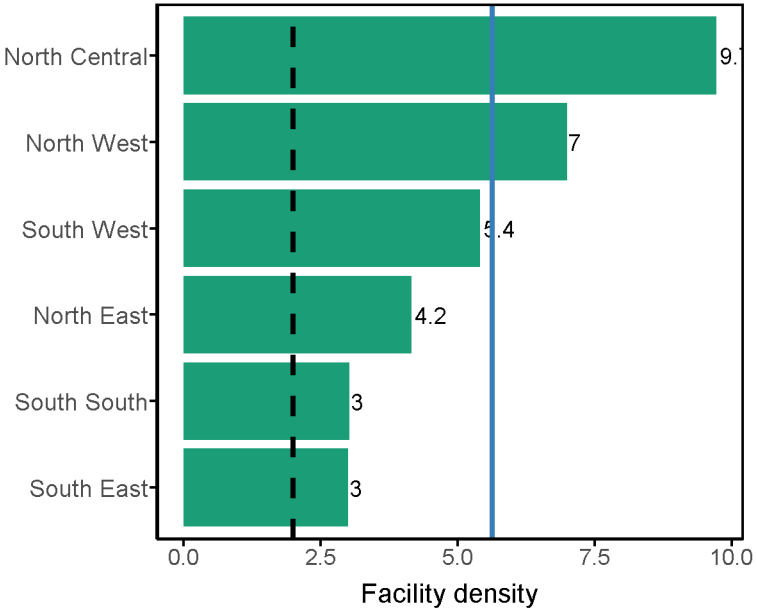
2025		
Indicator	Value	Unit
Health infrastructure		
Health facility density	5.6	per 10,000
Share of facilities that are hospitals	5.4	%
Hospital density	3.0	per 100,000
Inpatient bed density	6.7	per 10,000
Health workforce		
Health workforce density	6.0	per 10,000
Skills mix ratio nurse-midwives per physician	3.4	
Role of private sector		
Share of Private facilities	3.0	%
Share of NGO facilities	0.2	%

Interpretations

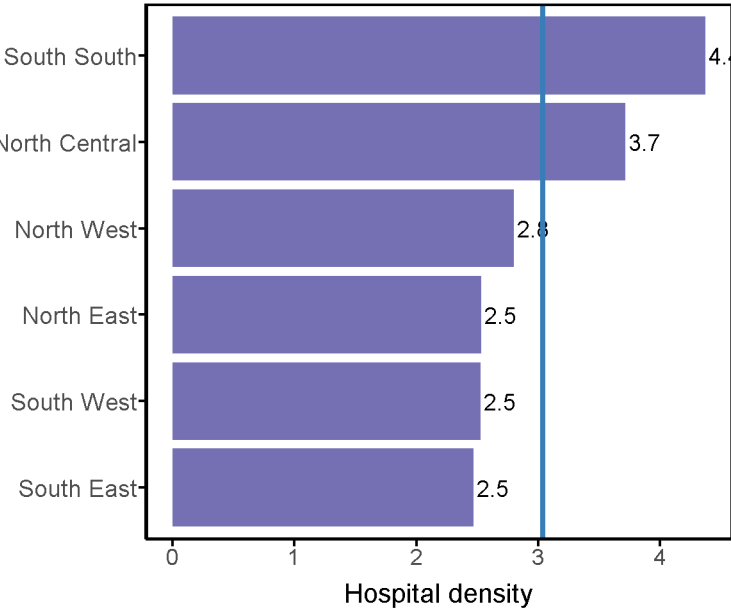
- Private-sector completeness is limited: only 3.0% of registered facilities are classified as private and 0.2% as NGO facilities in this input dataset, which is unlikely to represent Nigeria's full mixed public-private service market. Private-sector reporting therefore requires active strengthening.
- Health-system inputs remain inadequate. Facility density (5.6/10,000) exceeds the simple benchmark of 2, but inpatient bed density (6.7/10,000) and workforce density (6.0/10,000) are far below benchmarks of 25 and 23-44.5; workforce and bed capacity are more binding constraints than facility count alone.

Health system inputs by geopolitical zone

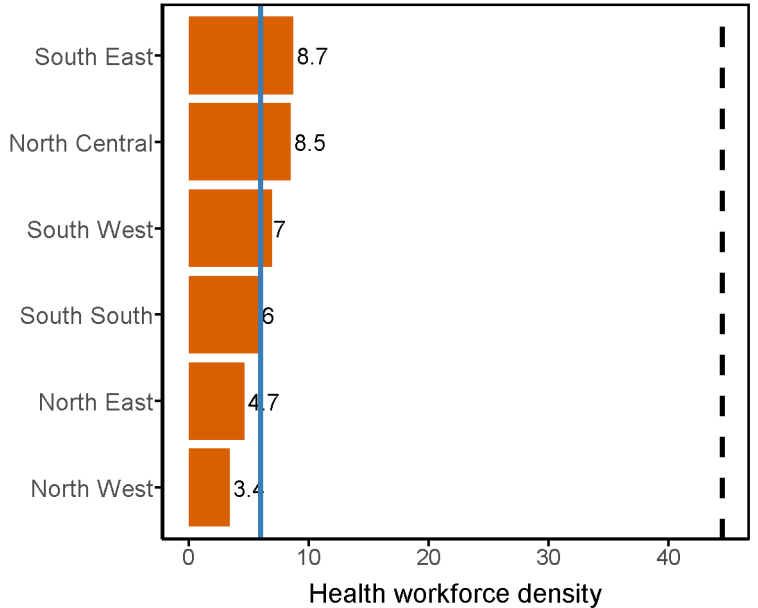
Facility Density per 10,000 population



Hospital Density per 100,000 population



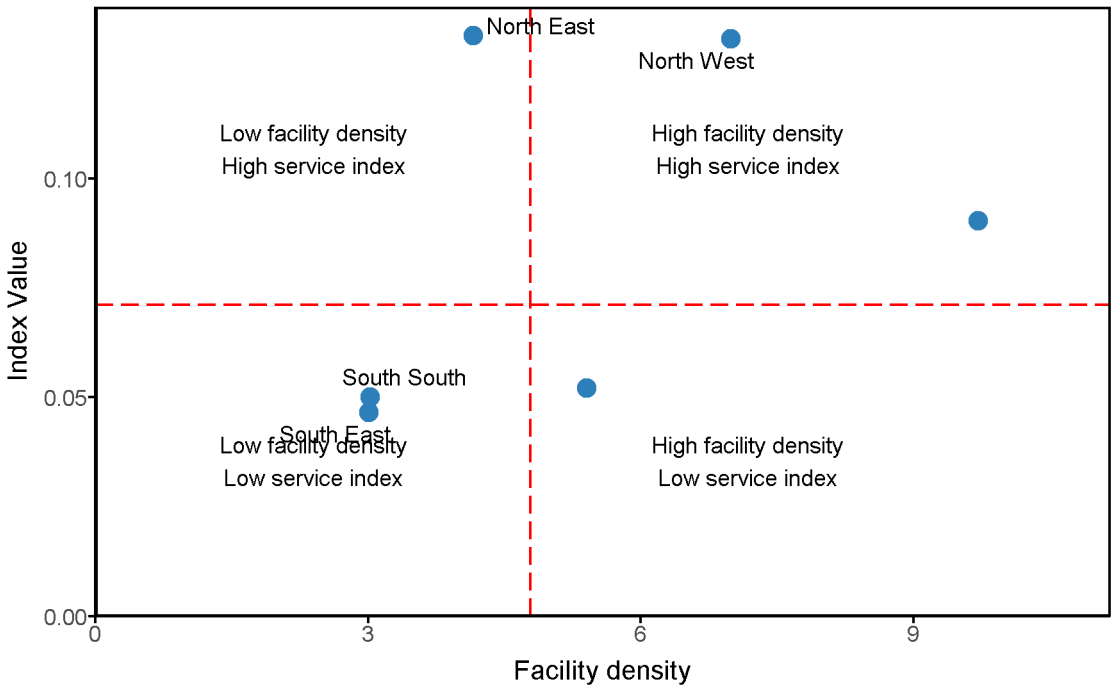
Health workforce density per 10,000 population



- Facility density varies widely: North Central is highest (about 9.5/10,000), followed by North West (about 7.0), while South South and South East are lowest (about 3.0).
- Hospital density is highest in South South (about 4.4/100,000) and North Central (about 3.7), and lowest at about 2.5 in North East, South West and South East.
- Health-workforce density is low in every geopolitical zone: South East (about 8.7/10,000) and North Central (about 8.5) are highest, while North West (about 3.4) and North East (about 4.7) are lowest; all remain below the UHC benchmark.
- Rankings differ by input: North Central is relatively strong for facility and workforce density, South South leads hospital density, while North West combines high facility density with the weakest workforce density.

Health system outputs by inputs at geopolitical-zone level

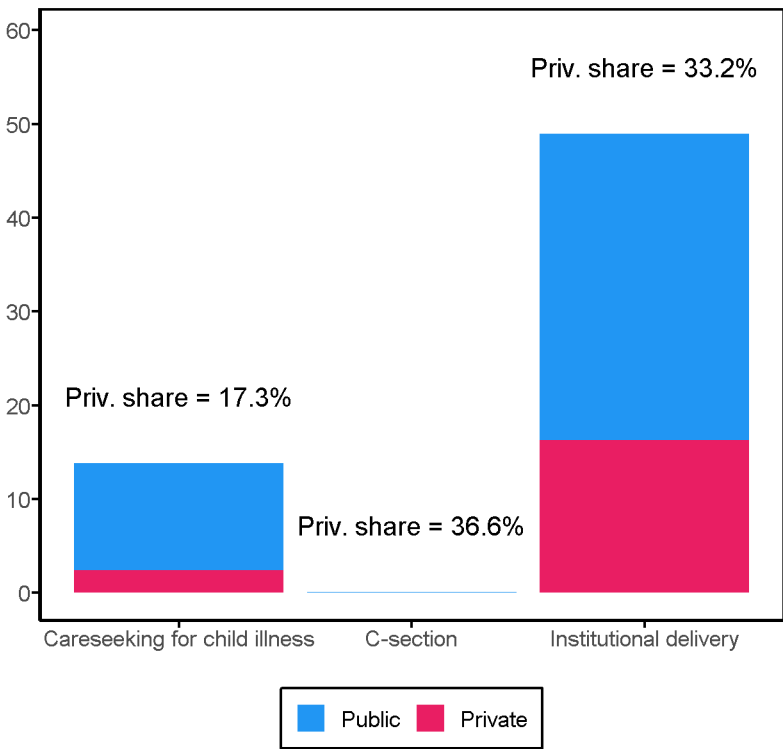
Facility density vs PHC Indices



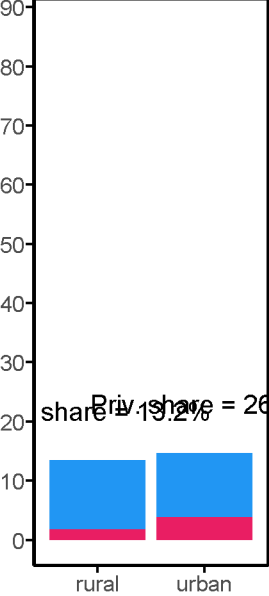
Interpretations

- The input-output picture has partial face validity but should not be read as a performance league table. North East shows high routine service capture despite low facility density, while South East/South South cluster in low-service-capture areas; utilisation and reporting patterns contribute alongside infrastructure.
- Higher routine service-output capture is seen in North East and North West, while South East and South South are lower. The appropriate response is targeted review of access barriers, PHC functionality, care-seeking, referral pathways and private-sector reporting rather than simple ranking.

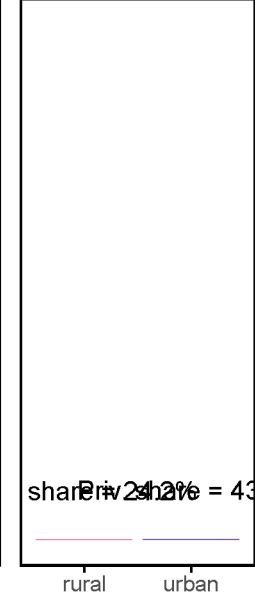
Private sector and RMNCAH services



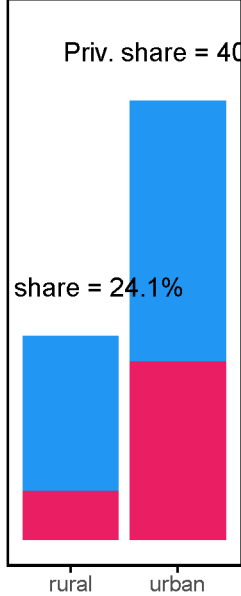
careseeking for child illness



C-section



Institutional delivery



Interpretations

- Private share is highest for C-section (about 36.6%) and institutional delivery (about 33.2%), and lower for care-seeking for child illness (about 17.3%), demonstrating that private-sector capture is particularly important for maternal services.
- Urban private share is higher for institutional delivery (about 40%) than rural (about 24.1%); care-seeking also differs by residence. Rural/urban C-section estimates are too sparse for confident interpretation.

7. Priority recommendations for Nigeria		
The findings support a differentiated, State/FCT- and LGA-specific response that strengthens services and measurement at the same time.		
Priority	Recommended action	Why this matters
1. Data quality and denominator audit	Institutionalise monthly State/FCT and LGA review of missing reports, unexpected zeros, extreme outliers, values above 100%, and ANC1/Penta1 and Penta1/Penta3 consistency. Validate 2025 before accountability use.	Complete reporting is not always valid reporting; 2025 outliers rose sharply and denominator problems remain visible.
2. ANC continuity	Track ANC1-to-ANC4 retention and validate first-trimester ANC indicator mapping. Strengthen follow-up, referral and capture of private/mission ANC services.	ANC4 remains low and first-trimester routine estimates are unstable.
3. Institutional delivery	Prioritise low-coverage States/FCT for 24-hour delivery readiness, referral, transport and financial access; integrate private, mission and faith-based delivery reporting.	Routine institutional delivery remains below survey estimates and large gaps persist.
4. Immunisation	Intensify zero-dose and under-immunised child strategies through microplanning, outreach and defaulter tracking; audit catchments and denominators wherever coverage exceeds 100%.	Penta3 and Measles1 have improved but high and equitable coverage has not been achieved.
5. Equity	Target rural populations, the poorest households and women with little/no education using pro-poor financing, rural outreach, transport support and stronger PHC.	Survey evidence shows persistent socioeconomic and residence-related gaps.
6. Sick-child care and private-sector capture	Use OPD/IPD patterns to tailor review: high-capture areas need quality, referral and mortality review; low-capture areas need access, care-seeking and private-sector reporting assessment.	North West/North East and southern zones show very different routine service-capture patterns.
7. Mortality reporting	Reconcile DHIS2 with MPDSR, maternity, stillbirth, neonatal and ward-death registers before using institutional mortality for ranking or trend claims.	Stillbirth reporting is implausible in several years and estimated reporting completeness remains low.
8. Workforce, readiness and accountability	Prioritise staffing, beds, referral and 24-hour PHC functionality, and make State/FCT evidence part of routine RMNCAH performance review with documented LGA follow-up.	Facility count alone is insufficient; workforce/bed density and accountability for corrective action are major system constraints.
Implementation principle: national averages should not generate a single response for every State/FCT. Review findings jointly with State/FCT and LGA teams, assign corrective actions to named programme/data owners, and follow progress routinely.		