

TANZANIA

SYNTHESIS REPORT

2026

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



Countdown to 2030 in partnership with Tanzania’s Ministry of Health, Global Financing Facility, WHO, WAHO & UNICEF



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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.

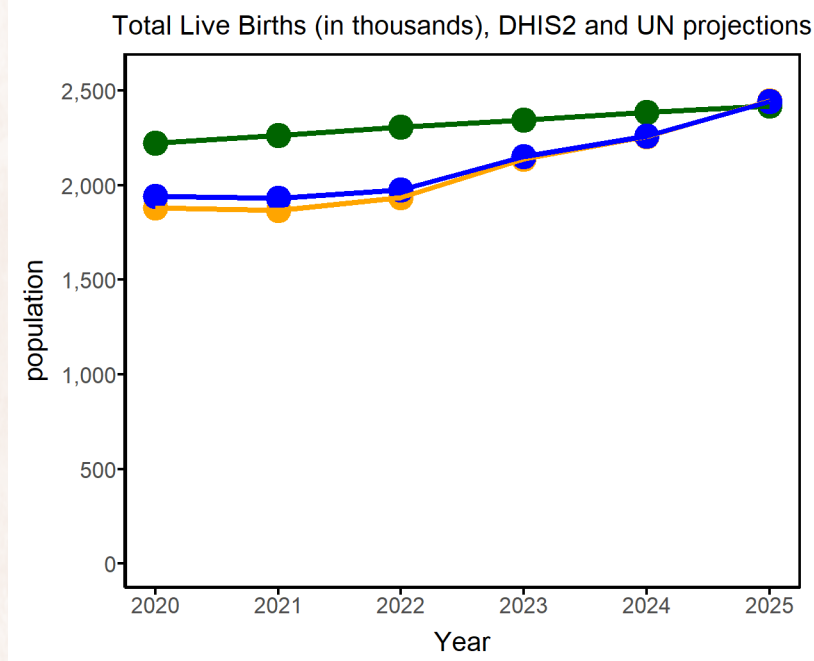
Summary of reported health facility data quality, DHIS2, 2020-2025

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)	92	85	87	87	93	96
1b	% of districts with completeness of facility reporting >= 81	68	34	38	40	75	94
1c	% of districts with no missing values for the 4 forms	89	85	85	85	85	81
2. Extreme outliers (mean of ANC, delivery, immunization)							
2a	% of monthly values that are not extreme outliers (national)	96	98	100	100	100	95
2b	% of districts with no extreme outliers in the year	85	87	91	87	86	84
3. Consistency of annual reporting							
3a	Ratio anc1/penta1	1.10	1.07	1.04	0.97	0.92	0.91
3b	Ratio penta1/penta3	1.05	1.05	1.03	1.01	0.99	1.01
3c	% district with anc1/penta1 in expected ranged	62	58	54	49	30	25
3d	% district with penta1/penta3 in expected ranged	76	82	69	52	41	65
4	Annual data quality score	81	76	75	71	73	77

Interpretations

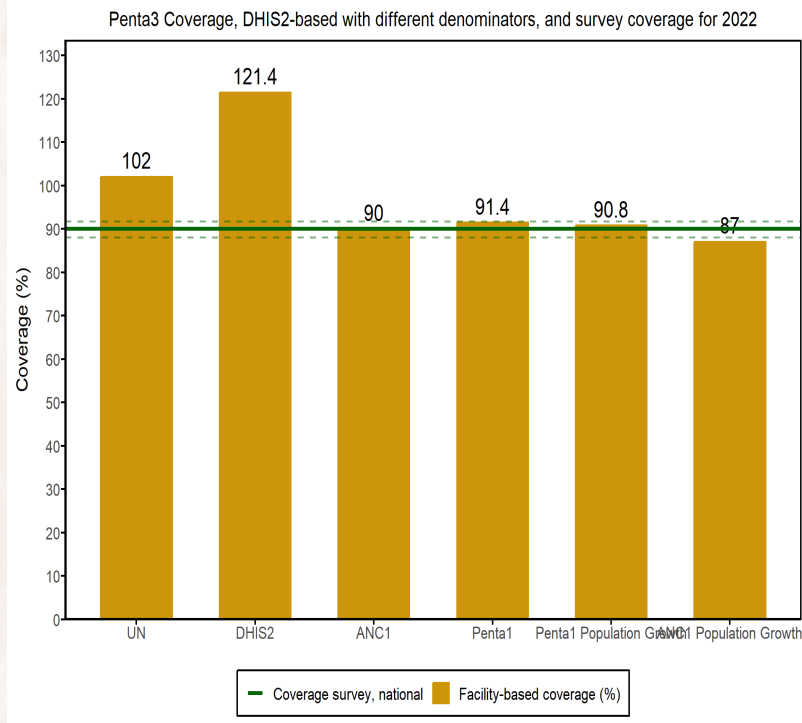
- The overall data quality score shows variations over the years with maximum score of 81% and minimum of 71%. The trends are on average as it does far from the national target of 81%,
- This discrepancy is due the integration of the vaccine Information management system (VIMS) and DHIS2 in 2025 which is at the infancy stage where by there are reporting issue in some facilities
- The percent of districts with facility reporting >=81% is below 50% from 2021 to 2023
- The percent of districts within expected ranges for ANC1/Penta1 decreases over time (up to 25% in 2025), Suggesting a problem in internal consistency between ANC1 and Penta1 numbers? This is attributed by stem from the use of the VIMS system.
- The consistency of the reported data for ANC1 and Penta 1 show some variation with the lowest from the expected range of 1.0 to 1.5 from 2023 to 2025 (0.97,0.92 and 0.91) this is due to the integration between VIMS and DHIS2 which was not fully functional and inaccessibility of new data reporting tool to some of remote facilities.

Total Livebirths

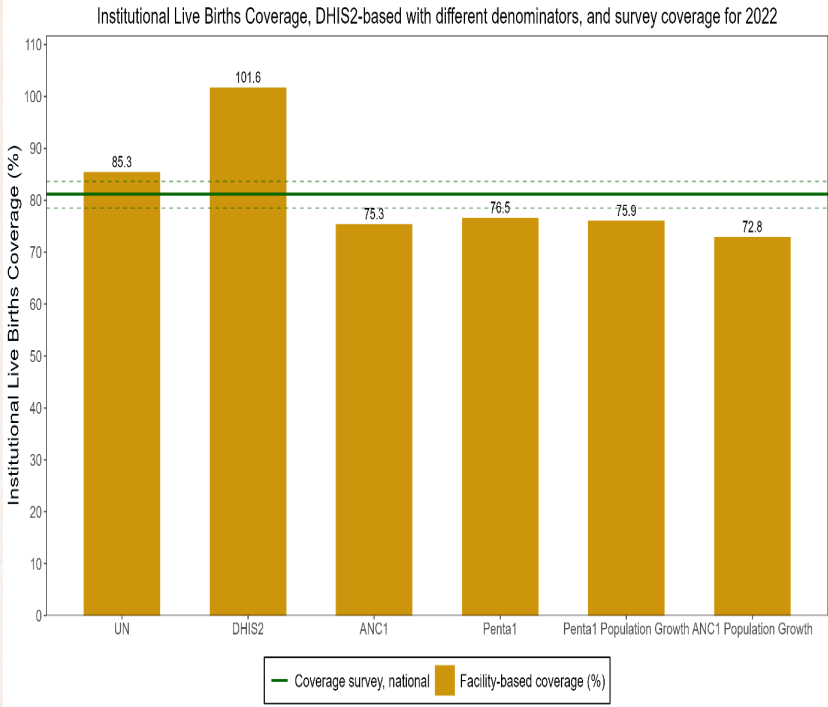


Live Births (in 1000) ● DHIS-2 Live Births Projection (in 1000) ● DHIS-2 Tot

Penta 3

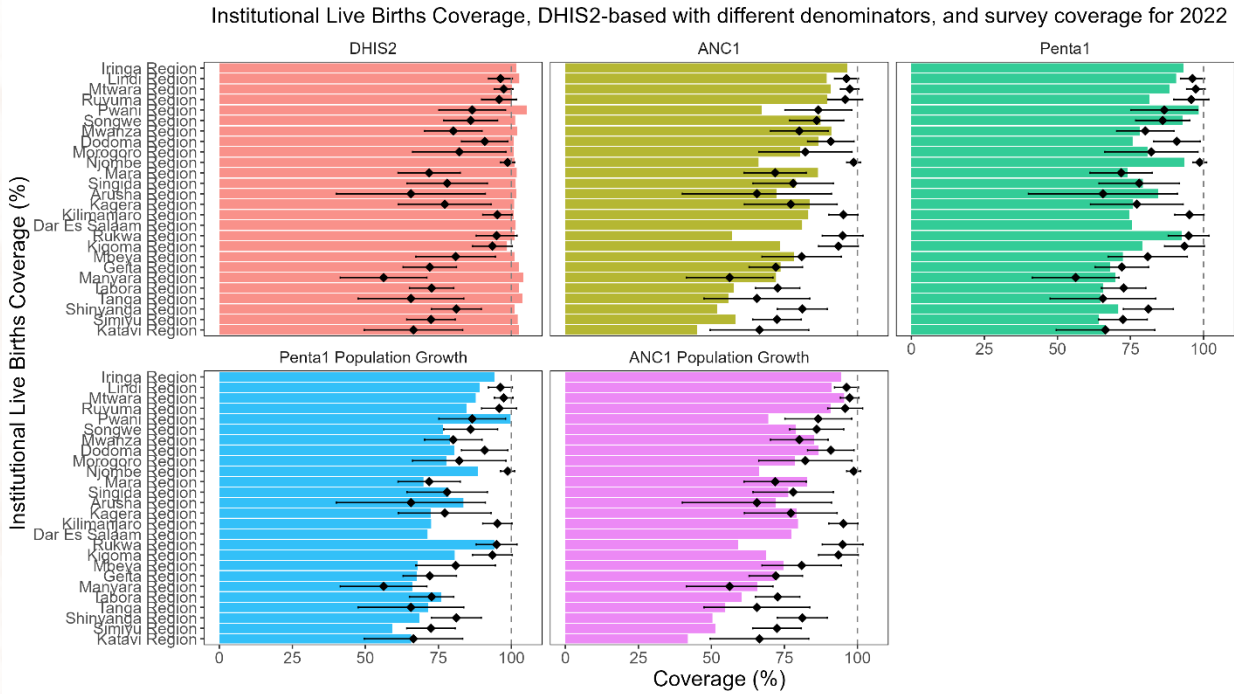
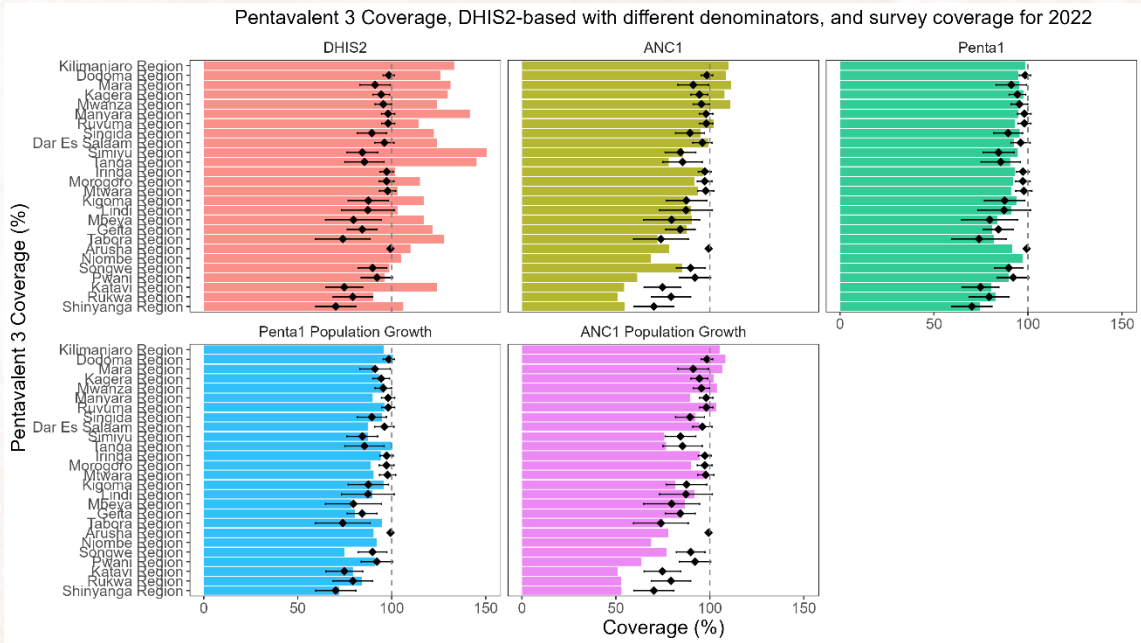


Institutional Live Birth



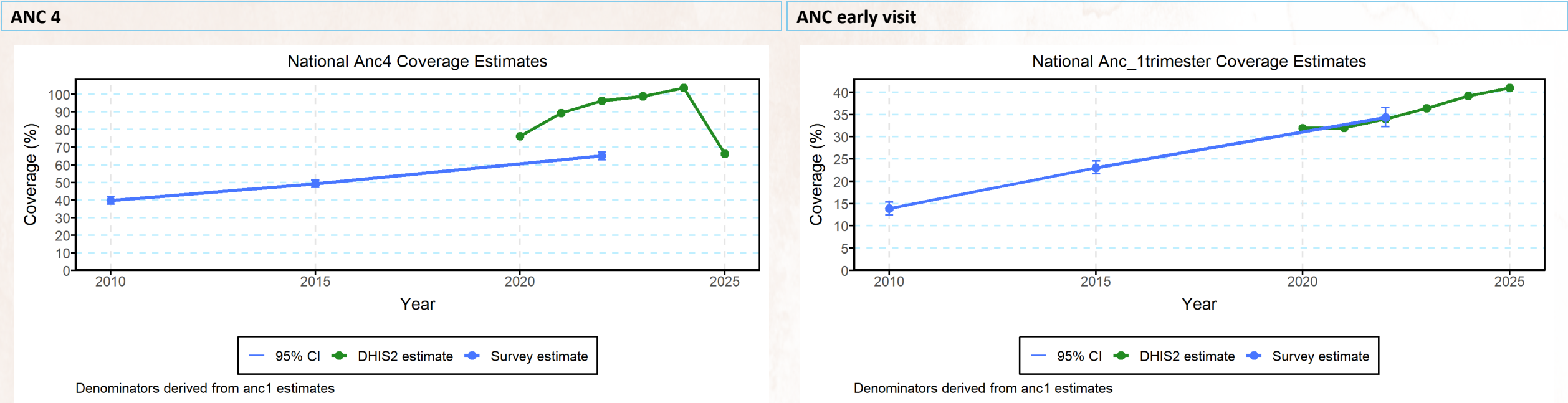
Interpretations

- The UN population projection consistently exceeds the DHIS2 projection across all years in both live birth and total population
- For vaccination coverage, the Penta1-derived denominator was the preferred choice at both national and subnational levels due to its minimal differences and consistency.
- Although the Penta1-derived denominator also performed well for maternal indicators, the ANC1-based denominator was chosen for maternal indicators due to its better alignment with the conceptual framework of maternal indicators. This decision
- Subnational denominator estimation is frequently compromised by unrecorded internal migration. As a result, static census projections often yield mathematically implausible coverage rates that exceed 100%. To mitigate this bias, utilizing programmatic proxy indicators such as ANC1 or Penta1 provides a more robust and real-time estimate of the localized target population compared to outdated census models.



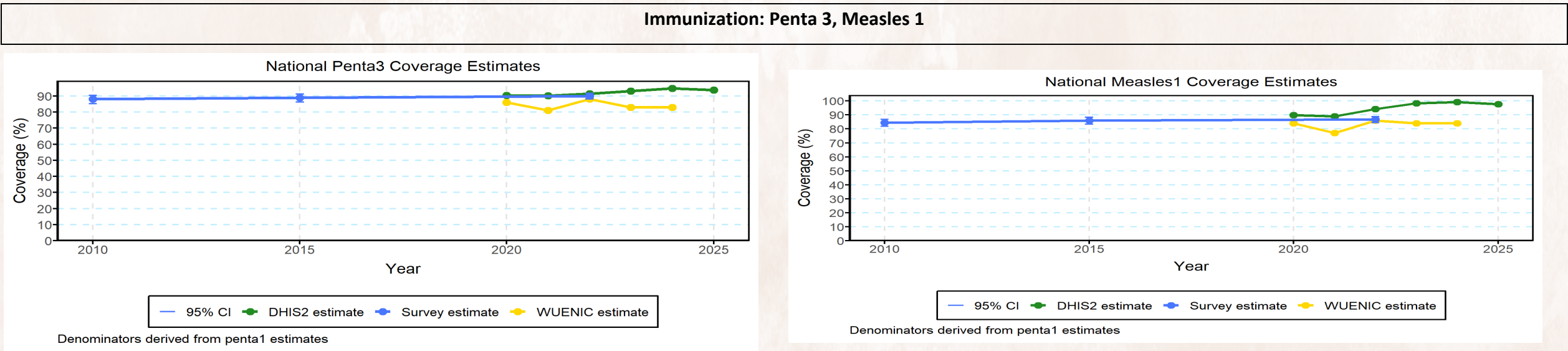
National coverage trends: facility data and surveys

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



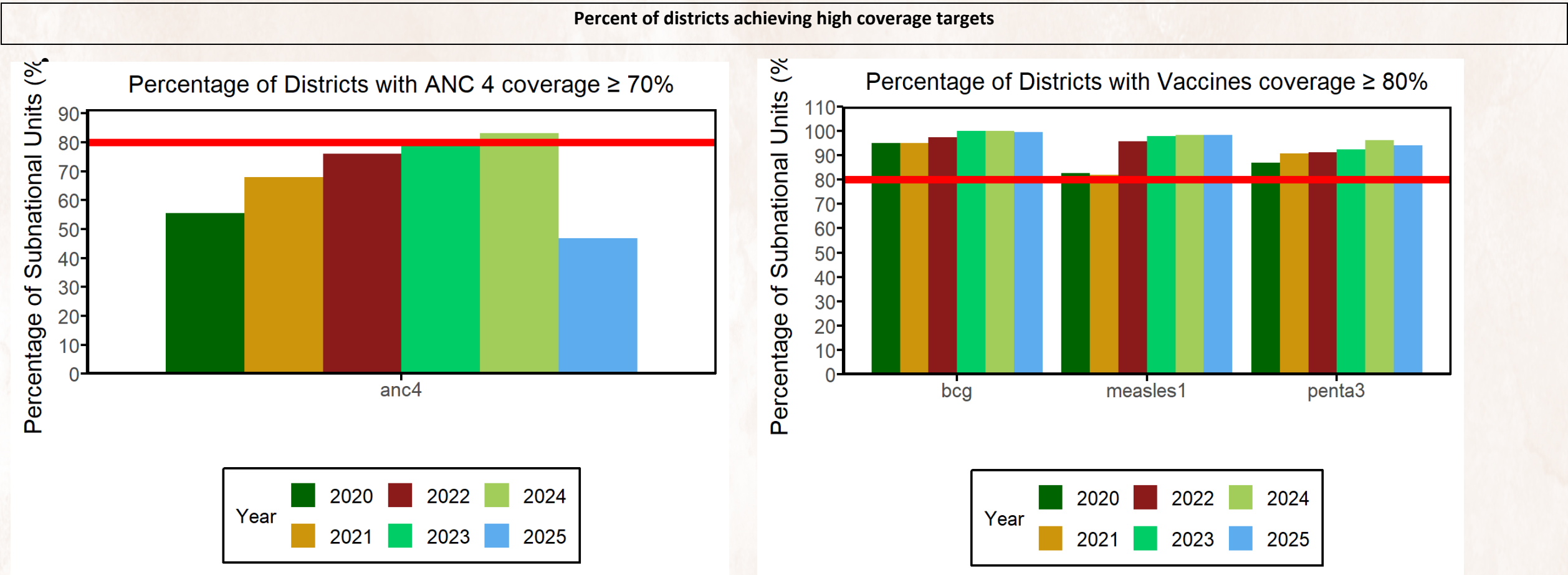
Interpretations

- ANC 1st Trimester: There is strong consistency between the survey and facility (DHIS2) data where they overlap around 2022. While the indicator shows a steady positive trajectory rising from a survey baseline of 14% in 2010 to a DHIS2 estimate of 41% in 2025 the overall coverage remains low, with less than half of pregnant women accessing care in their first trimester.
- ANC 4 Visits: There is a significant discrepancy between routine facility reports and population-based surveys for ANC 4, with facility-derived coverage exceeding 100% in recent years. This large gap strongly indicates that this is a data quality. However, a sharp correction is observed in the
- 2025 DHIS2 estimates, dropping to align more closely with previously survey trends. This sudden shift is attributable to a change in how the data was aggregated, while previous years' coverage was calculated by summing all visits of four or more (ANC 4+), the 2025 calculation strictly captured exactly the fourth visit (ANC 4), excluding any subsequent visits. Notably, survey estimates for ANC 4 exhibit tighter confidence intervals compared to the first trimester, indicating higher precision in the population-level data.
- ANC 1: Both data sources demonstrate high and stable coverage. Survey data shows a slight decline from 98% in 2015 to 89% in 2022, while DHIS2 estimates remain perfectly flat at 90% from 2020 through 2025, indicating near universal initial contact with antenatal care.



Interpretations

- Pentavalent 3: This indicator shows excellent data convergence and high coverage across all reporting. The 2022 survey (90%), recent WUENIC estimates (83% in 2024), and DHIS2 data (93.5% in 2025) are closely aligned and maintain a stable, upward trajectory well above the National target. The extremely narrow confidence intervals in the survey data underscore high statistical precision.
- Measles 1: Discrepancies exist between routine data and WUENIC as well as survey estimates. While survey (87% in 2022) and WUENIC (84% in 2024) while DHIS2 facility data peaks much higher at 99.5% in 2024 before dropping slightly to 97.5% in 2025.

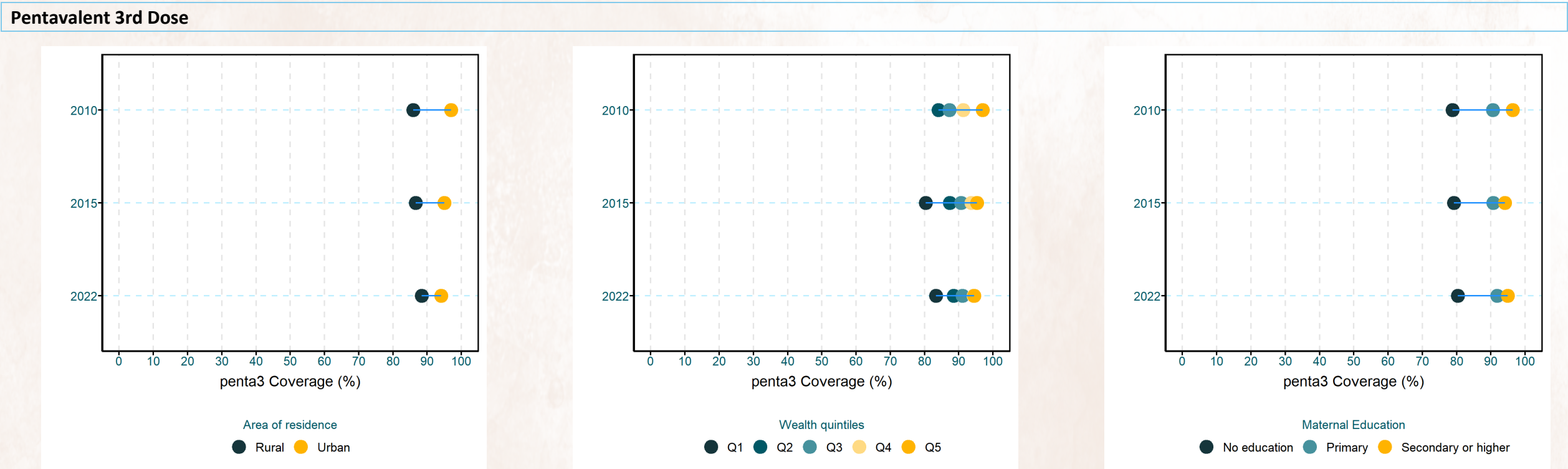
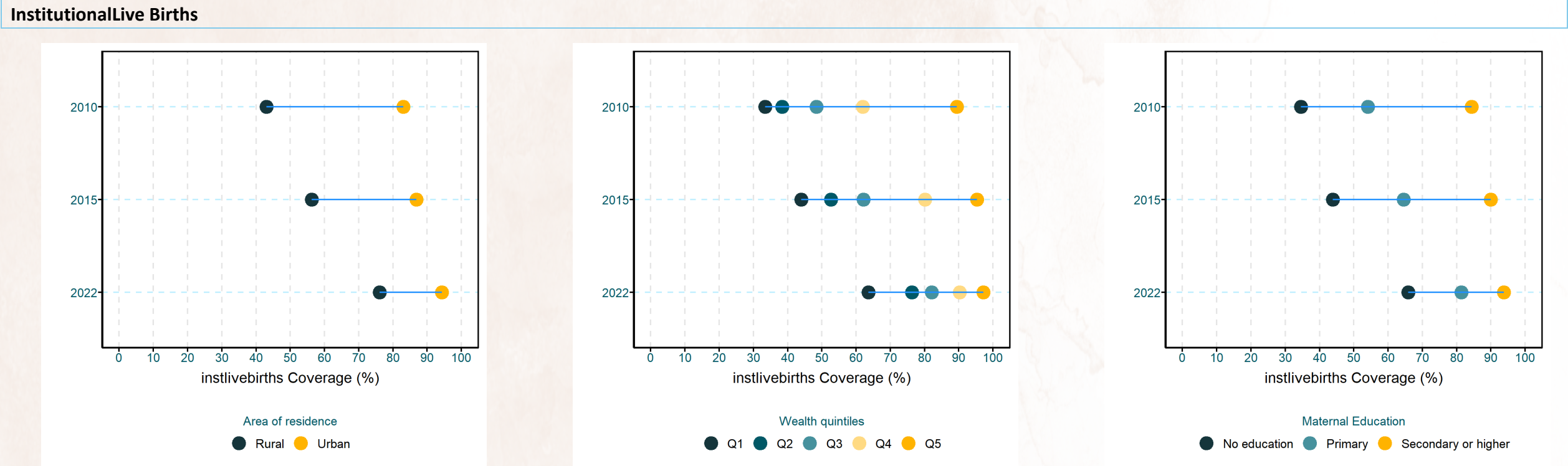


Interpretations

- Subnational target: >70% of subnational units, achieving coverage of $\geq$ 80%
- ANC 4 Visits Target; The percentage of subnational administrative units (Admin 1) achieving the 70% ANC4 threshold improved remarkably from 65% in 2020 to 88% in 2024. However, reflecting the national drop observed in the trend lines, in 2025 the proportion of successful regions declined to 42.5%. This widespread regional decline is driven by This sudden shift is attributable to a change in how the data was aggregated, while previous years' coverage was calculated by summing all visits of four or more (ANC 4+), the 2025 calculation strictly captured exactly the fourth visit (ANC 4), excluding any subsequent visits.
- BCG: with 96% to 100% of regions meeting the target every single year from 2020 to 2025. This is driven by high institutional birth rates
- Measles 1: Shows steady subnational expansion, progressing from 84.5% of regions in 2020 to a full 100% of regions meeting the target in 2024 and 2025.
- Pentavalent 3: Demonstrates a stable and strong subnational coverage, with 96% of regions successfully sustaining the coverage target continuously from 2022 through 2025.

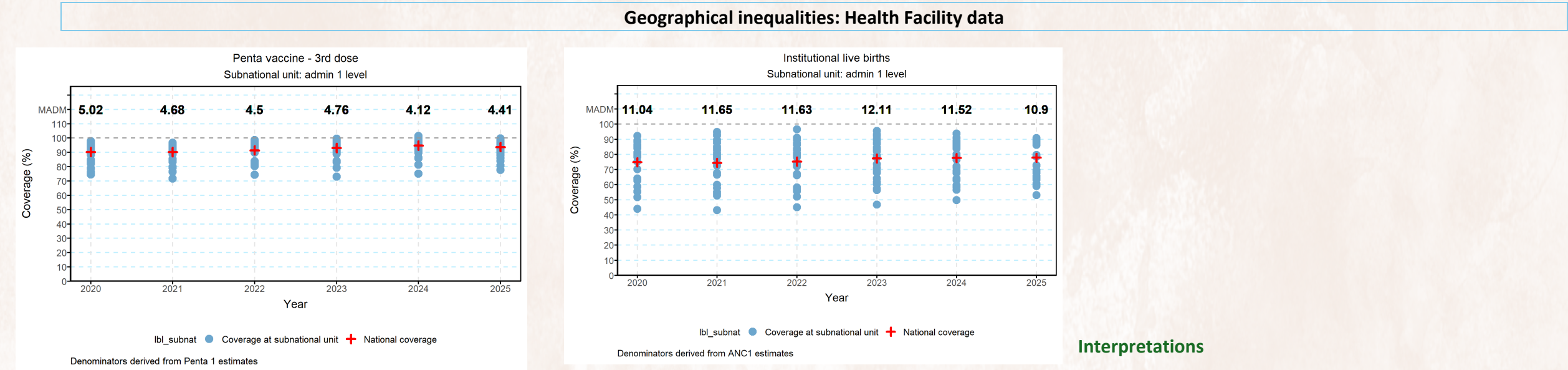
3. Equity

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



Interpretations

- Routine subnational data shows highly concentrated clusters with low regional variance. The MADM for Penta 3 remains low (4.41 in 2025)
- Socioeconomic Stratification: Equity gaps based on demographic factors have narrowed dramatically. By 2022, disparities in Penta 1 coverage based on urban-rural residence, maternal education, and wealth quintiles have decreased, showing a coverage at around 95% coverage. For Penta 3, while children from wealthier quintiles (Q5), urban areas, and mothers with secondary or higher education still maintain a slight advantage, the bottom (rural, no education, and Q1 wealth quintile) have steadily increased, remaining well above the 80% threshold.
- analysis (2010–2022) reveals a significant attenuation of absolute inequalities in institutional delivery coverage as marginalized cohorts demonstrated accelerated proportional growth. Rural coverage expanded from 43% to 76%, substantially compressing the geographic disparity with urban centers (94%). Concurrently, coverage within the lowest wealth quintile (Q1) increased from 33% to 64%, converging toward the highest quintile (Q5), which plateaued near a 97% saturation threshold. A parallel demographic convergence occurred across educational strata, with coverage among mothers lacking formal education rising from 35% to 66% relative to the highly educated cohort (94%), indicating robust national progress toward maternal health equity.



Interpretations

- The stark regional variations in coverage are driven by the structural differences in how these interventions are delivered, which is clearly evidenced by the 2025 subnational data. Institutional Live Births (ILB) rely entirely on stationary infrastructure, resulting in wide geographic disparities, whereas Penta 3 utilizes mobile outreach, yielding much tighter national uniformity.
- Because institutional delivery is a resource-intensive, facility-based intervention, regions with greater health infrastructure density and human resource allocation achieve high coverage, such as Iringa (90.7%), Singida (90.7%), and Mwanza (90.6%). Conversely, regions facing severe geographic barriers and facility scarcity report drastically lower rates, creating a massive 37.6 percentage-point equity gap. Lagging regions like Katavi (53.1%) and Rukwa (59.1%) struggle with physical accessibility, which is reflected in the persistently high regional dispersion (MADM of 10.9 in 2025).
- In contrast, routine immunization relies on community health outreach and mobile service delivery, allowing the health system to bypass fixed-facility barriers. This structural advantage is proven by the data: even the worst-performing regions for Penta 3 maintain robust baselines, such as Katavi at 80.8% and Shinyanga at 77.7%. Consequently, the national gap between these lower performers and near-universal regions like Njombe (99.6%) and Dar es Salaam (99.5%) is significantly narrower at roughly 21.9 percentage points, with a low MADM of 4.41 indicating highly equitable delivery.
- Despite these differing delivery models, the data highlights overlapping systemic vulnerabilities in specific geographic areas. Both Katavi and Shinyanga rank in the bottom three for both ILB and Penta 3 coverage in 2025. This dual underperformance indicates that while mobile outreach can elevate baselines (pushing Katavi to 80.8% for Penta 3 compared to 53.1% for ILB), deep systemic issues such as acute supply chain disruptions, severe shortages in human resources for health, or challenges in tracking hard-to-reach populations continue to disproportionately suppress overall health outcomes in these regions.

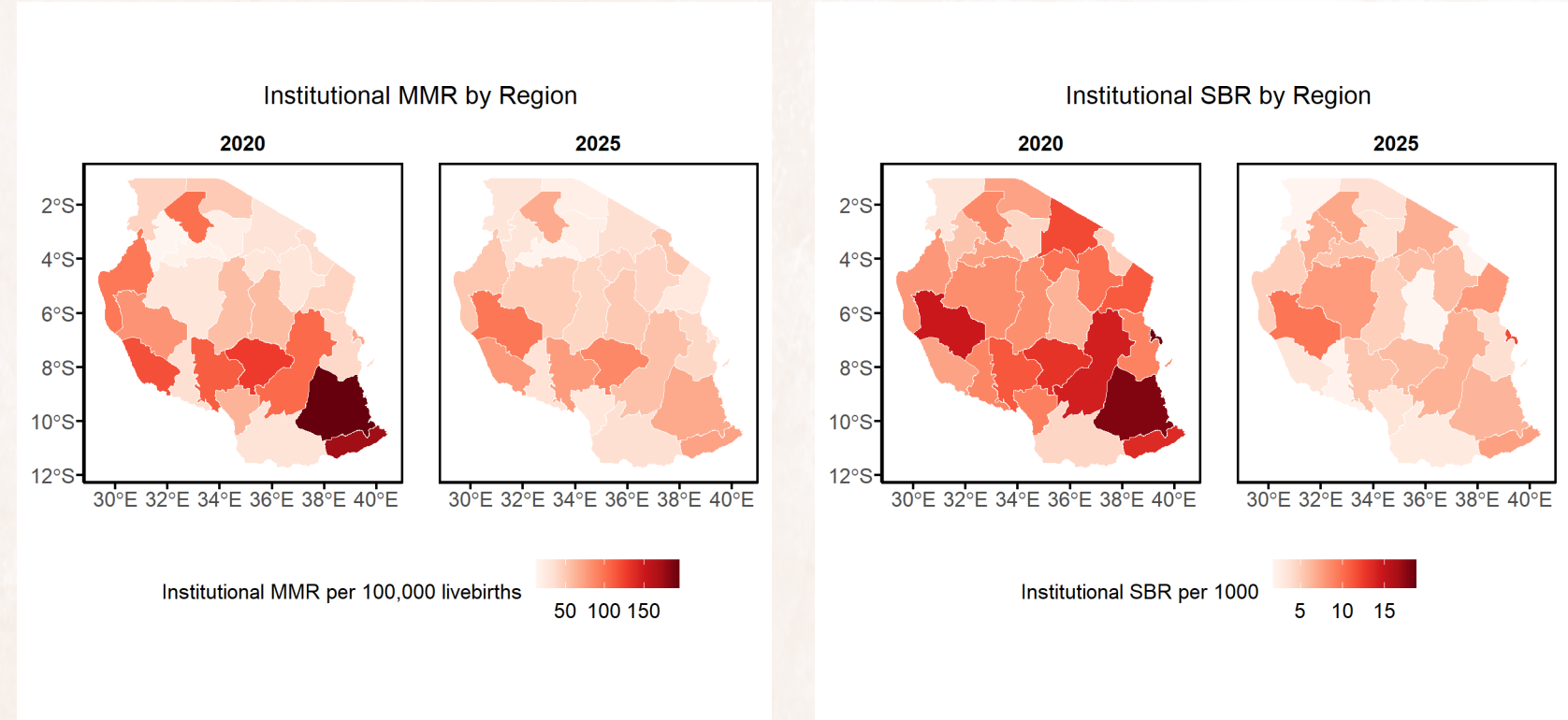
4. Institutional mortality

Institutional Mortality trends (iMMR, iSBR)



The national institutional Maternal Mortality Ratio (iMMR) recorded in DHIS2 shows a downward trend, dropping from 63.3 per 100,000 live births in 2020 to 43.7 in 2025. However, comparisons with UN population models indicate these figures are severely underestimated due to ongoing underreporting. This data gap is largely caused by the use of parallel reporting systems within the Ministry, which leads to maternal deaths occurring outside maternity wards going completely unrecorded. Current estimates suggest that the health facilities are capturing less than half of the actual deaths, with reporting completeness estimated at only 35.4% for maternal deaths and 38.8% for stillbirths.

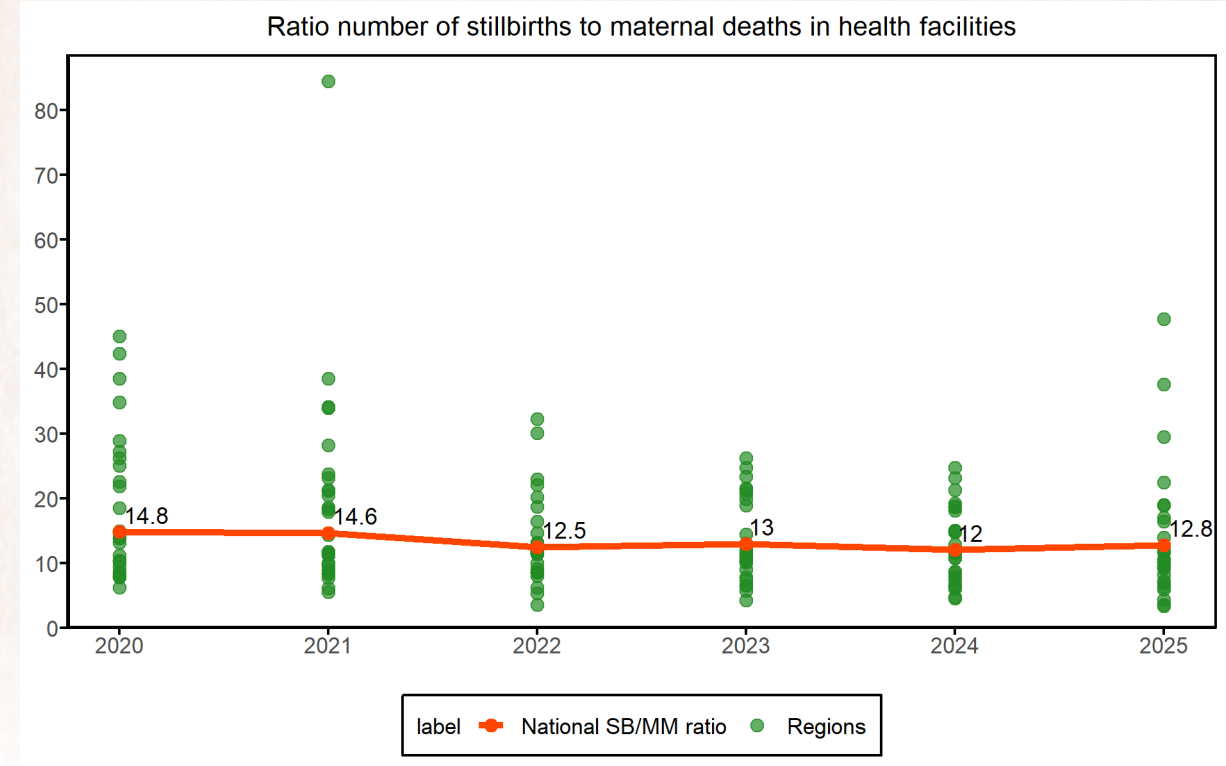
Institutional Mortality by admin1 units



Analysis of regional data reveals extreme and unrealistic variations across the country. In 2024, the highest iMMR estimates were reported in Mtwara (171.2), Iringa (107.9), and Katavi (93.6), while the lowest rates were reported in Ruvuma (13.2) and Simiyu (25.0). Furthermore, by 2025, 11.1% of all regions reported an iMMR below 25 alongside an institutional Stillbirth Rate (iSBR) below 6 per 1,000 births. Rather than showing better healthcare in these areas, these unusually low numbers highlight severe local breakdowns in data collection, where missing records hide the true number of deaths.

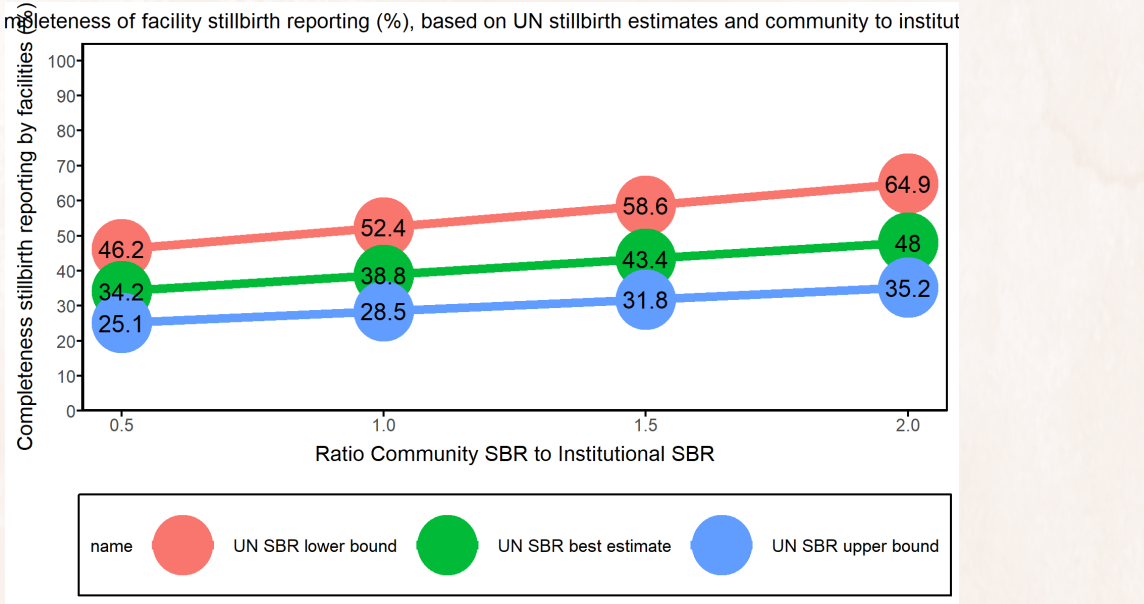
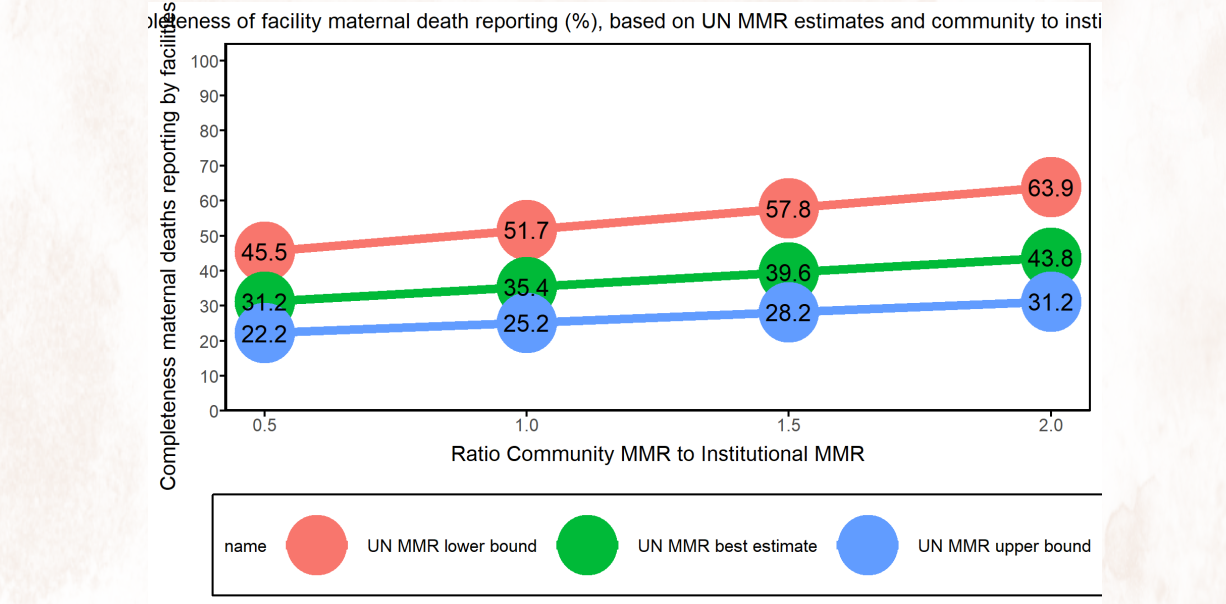
Data quality metrics

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



While the national average SB/MM ratio appears stable within the expected 5–25 range (averaging 12.8 in 2025), the extreme differences between regions point to clear data errors. In 2024, the Dodoma region reported an unusually low ratio of 4.5, suggesting that stillbirths were overreported compared to maternal deaths. Conversely, the Dar es Salaam region recorded a very high ratio of 24.8 in 2024 (rising to 47.7 in 2025), which is well above expected levels. This shows a major failure in urban hospitals to properly record maternal deaths compared to stillbirths.

Estimated completeness of facility maternal death and stillbirth reporting



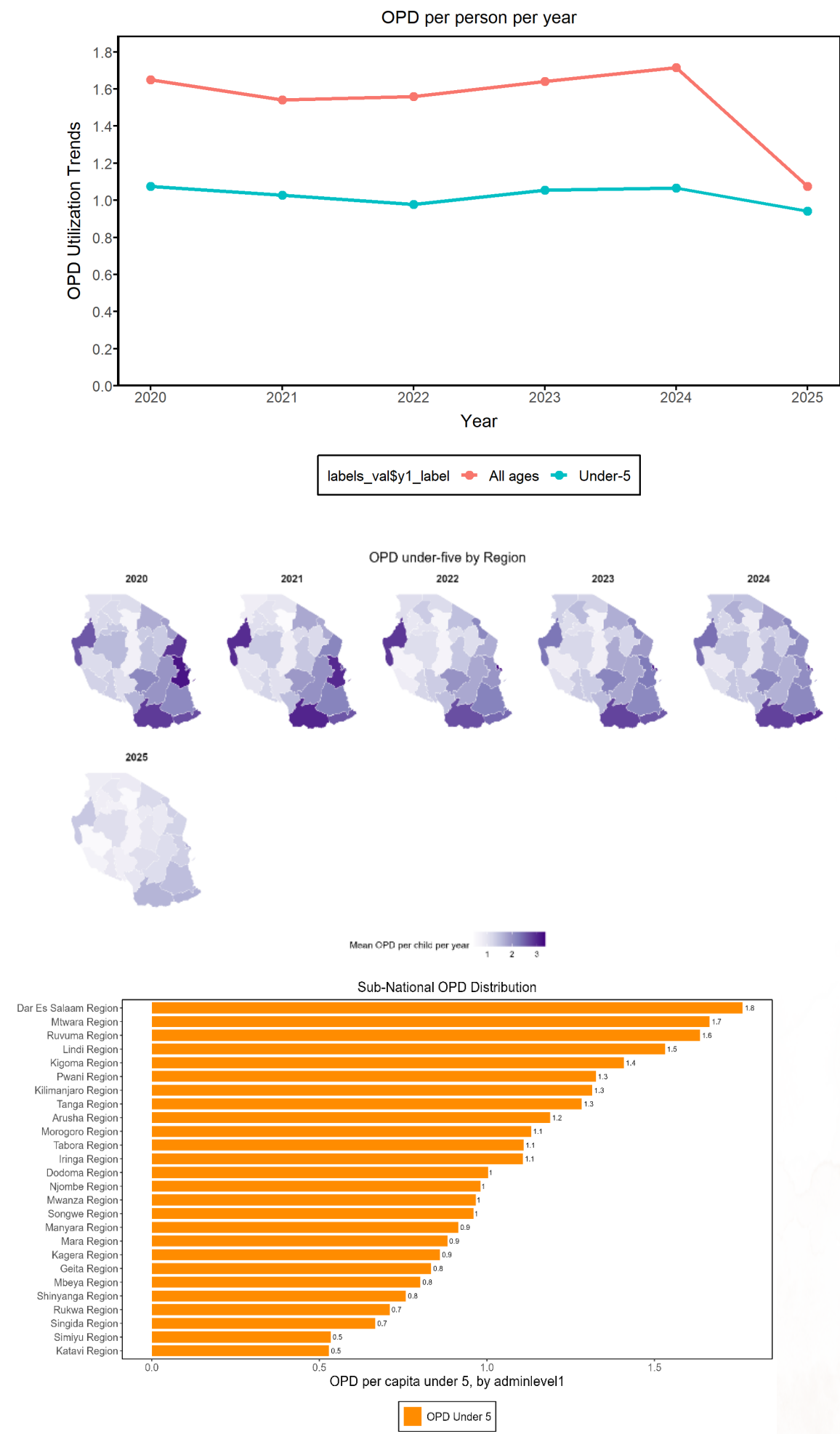
Stillbirths reported by facilities is significantly lower than expected against UN population estimates. The data displays national-level aggregates, making it impossible to determine regional variation, identify specific regions with low stillbirth rates, or assess regional plausibility. Nationally, even under the most favorable conditions (the UN lower bound estimate), facilities are capturing only 51.9% to 52.6% of stillbirths.

The estimated completeness is poor and heavily dependent on the population baseline used: it ranges from a maximum of 51.9% to 52.6% (UN lower bound), to a median of 38.4% to 39.0% (UN best estimate), down to a minimum of 28.2% to 28.6% (UN upper bound). The UN best estimate is the most statistically plausible baseline for evaluation. Conversely, the assumed ratio of community to institutional stillbirths has negligible impact; the chart's flat lines demonstrate that any ratio ranging from 0.5 to 2.0 yields mathematically identical reporting completeness conclusions.

Across the same community to institutional ratios (0.5 to 2.0), MMR reporting completeness spans from 51.2% to 51.9% under the UN lower bound, 35.1% to 35.6% for the UN best estimate, and only 24.9% to 25.3% under the UN upper bound.

5. Curative health service utilization for sick children

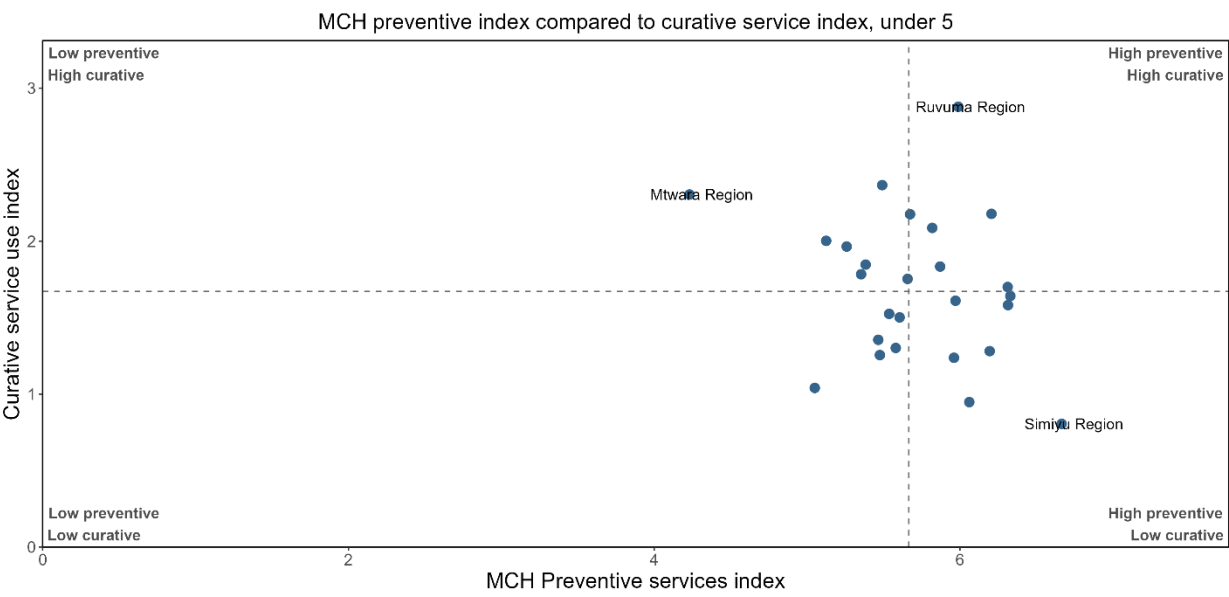
Outpatient and inpatient service utilization



Interpretations

- The data quality for Outpatient Department (OPD) visits shows steady improvement, with the reporting rate increasing from 84.1% in 2020 to 96.3% in 2025. The reported numbers demonstrate reasonable consistency up until 2024, with total OPD visits slightly fluctuating but remaining between 58.5 million and 68.5 million per year, before slightly dropping to 62.1 million in 2025. The percentage of OPD visits for children under 5 remained within the expected 15% to 40% range between 2020 and 2024 (recording 20.38% in 2020, 19.99% in 2021, 19.43% in 2022, 19.98% in 2023, and 20.88% in 2024), but it fell just below the threshold to 14.98% in 2025. This recent decline in reported OPD visits is primarily attributed to the country’s transition to updated data collection tools in 2025. The rollout of these new tools caused several remote areas to experience reporting delays, technical challenges, and temporary data fragmentation as facilities adapted to the updated systems, leading to artificial underreporting.
- The number of OPD visits per child under 5 per year was 1.65 in 2020, 1.54 in 2021, 1.56 in 2022, 1.64 in 2023, 1.72 in 2024, and dropped to 1.07 in 2025. The rate is not increasing; while it grew steadily between 2021 and 2024, it experienced a sharp decline in 2025. However, the national rate has consistently remained above the 1 visit per year threshold across all recorded years, indicating that overall national access does not fall into the "low access" category. Regarding the percentage of OPD visits for children under 5 during this specific window, it hovered around 20% between 2020 and 2024 before dropping to 14.98% in 2025.
- Despite the 2025 data anomaly, the national rate has consistently remained above the 1 visit per year threshold across all recorded years, indicating that overall national access does not fall into the "low access" category. However, the 2025 data highlights significant regional inequality in OPD visits per child per year, with multiple regions dropping below the low access threshold. The top-performing region was Dar Es Salaam with 1.76 visits per child, followed by Mtwara (1.66 visits) and Ruvuma (1.64 visits). Dar Es Salaam’s notably higher access rate is driven by its highly urbanized setting, dense healthcare infrastructure, and a significantly higher volume of facility-based deliveries, which inherently necessitates more frequent routine follow-ups and pediatric OPD utilization.
- Conversely, the bottom regions were Katavi and Simiyu, both at approximately 0.53 visits per child, followed closely by Singida at 0.67 visits. The difference between the top and bottom regions is stark, representing a gap of 1.23 visits per child. This means that children in Dar Es Salaam access OPD services more than three times as often as those in the lowest-performing regions, further emphasizing the profound urban-rural divide in both service utilization and reporting capacity.

MCH Preventive vs Curative Index



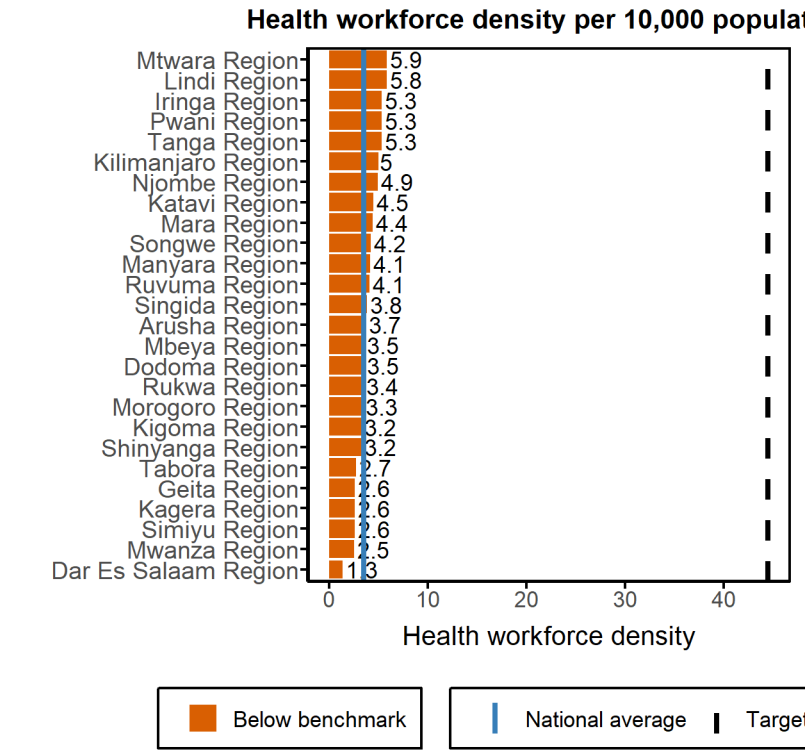
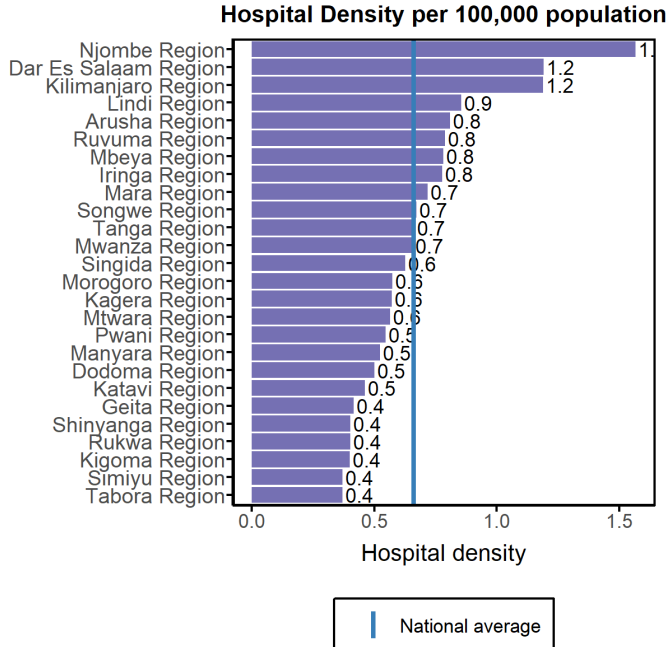
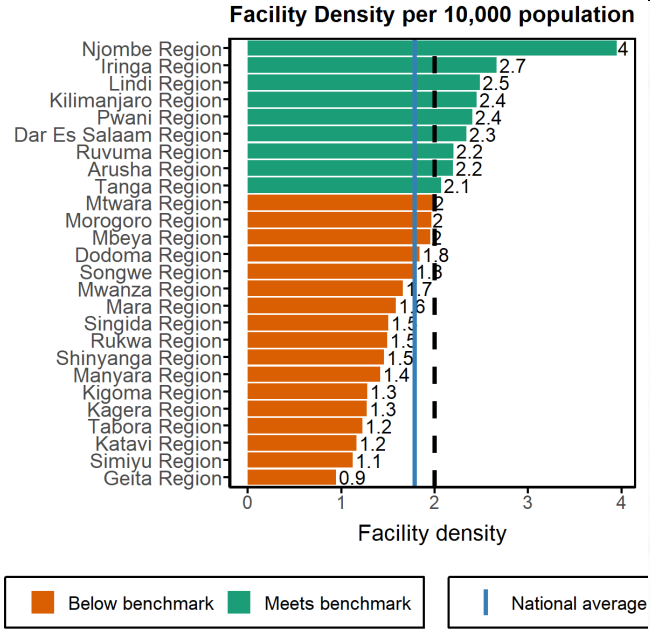
Interpretations

- Regions in the top-right section (above the dashed average lines) show high use of both preventive and curative services. The Ruvuma Region is a prime example, having the highest curative care score alongside strong preventive coverage. About five other regions also fall into this high-performing group. This suggests that health facilities in these areas are working well, and communities are successfully getting comprehensive care for children under five.
- Regions in the bottom-left section fall below average for both types of care, indicating that families likely face barriers to accessing health services. There are also some highly unusual mixed patterns. For instance, the Simiyu Region shows excellent preventive coverage but very low use of curative care. Conversely, the Mtwara Region shows the exact opposite pattern: strong curative access but below-average preventive care.
- Notably, no region has completely low scores for both services; every region scored over 4.0 on the preventive index. Normally, issues like poverty or rural isolation lower access to both preventive and curative care equally. Furthermore, it is highly unlikely for a population like Simiyu to easily access near-perfect preventive care but fail to use basic treatments for sick children. This strongly suggests there are data quality issues, such as preventive services (like vaccines) being over-reported compared to routine sick visits. Further data quality checks are needed to confirm these numbers.

6. Health system progress and performance

Health system inputs

2024		
Indicator	Value	Unit
Health infrastructure		
Health facility density	1.8	per 10,000
Share of facilities that are hospitals	3.7	%
Hospital density	0.7	per 100,000
Inpatient bed density	42.2	per 10,000
Health workforce		
Health workforce density	3.5	per 10,000
Skills mix ratio nurse-midwives per physician	4.1	
Role of private sector		
Share of Private facilities	30.8	%
Share of NGO facilities	9.1	%



Interpretations

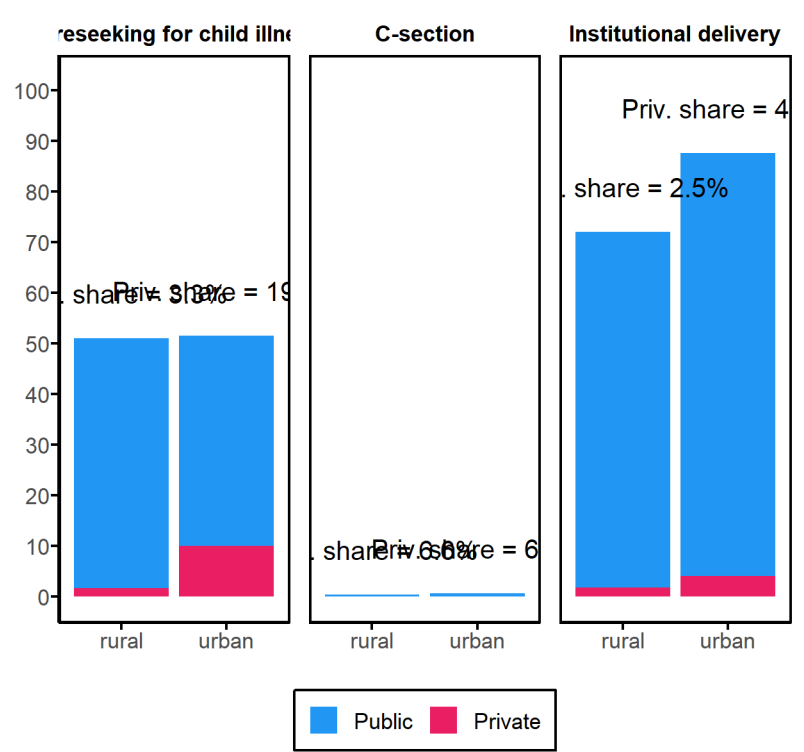
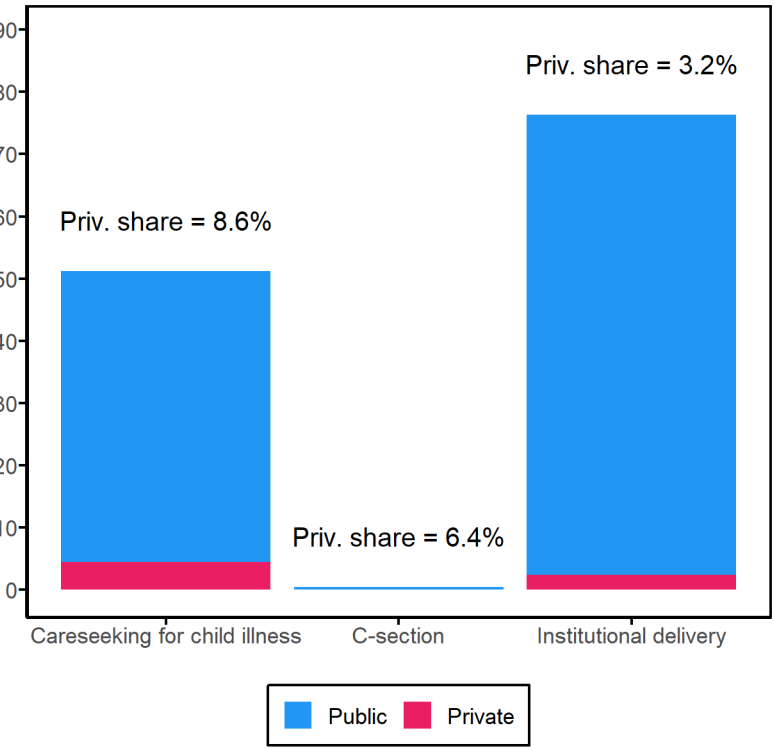
- A health workforce density of 3.6 per 10,000 population represents a critical shortage of healthcare personnel. When compared to the World Health Organization (WHO) benchmark of 23 per 10,000, this indicates that the health system in question is operating with only a small fraction (roughly 15% of benchmark). There is a huge shortage of health workforce to provide essential health services to reduce maternal and child mortality.
- The health facility density shows only 9 regions (equivalent to 34.6%) are above the benchmark value of 2 with Njombe region performing the best and Geita being the lowest with a density of 4 and 0.9 respectively. This data indicates that, there is a challenge in ensuring equitable distribution of health facilities across the nation, with most regions struggling to meet the minimum target.
- The regional health workforce distribution from country showed none of the region met the target benchmark indicating the shortage of health workforce in the country. Mtwara has highest ratio (5.9/10,000) while Dar es Salaam has lowest (1.3/10,000)

Health system outputs by inputs at the subnational level

Interpretations

- The graph shows that most of regions in the country have plausible preventive and curative service indices. Lindi, Kilimanjaro, and Pwani perform well in both categories. Njombe Region sits to the far right, maintaining a relatively low service index despite a very high facility density. Regions like Geita, Katavi, and Rukwa has both low facility and service index performance are below the national average.
- While facility density is a strong driver of service quality, the presence of regions with high service index scores despite low facility density suggests that investment in capacity and quality of care can be as important as the physical number of facilities

Private sector and RMNCAH services



Interpretations

- The country has a large number of public health facilities indicating majority of maternal and child health services are provided by the public sector, with the private sector playing a relatively small role. For care seeking for child illness, about 8.6% of services are accessed through private providers, while the remaining majority is through public facilities. Similarly, for cesarean section (C-section) deliveries, only 6.4% occur in private health facilities. Institutional deliveries are predominantly handled by the public sector, with just 3.2% taking place in private facilities.
- By comparing urban and rural, public sector dominates maternal and child health services in Tanzania, with higher private sector use in urban areas, especially for child illness care with percentage of 19.6%, followed by C-section 6.2% and lastly institutional delivery with 4.7%.

Recommendation

The analysis highlights the need to strengthen both the quality of routine health data and the performance of RMNCAH services in Tanzania. Priority should be given to stabilizing the integration between VIMS and DHIS2, improving data completeness, consistency, and interoperability, and conducting regular data quality assessments and supportive supervision. Efforts are also needed to improve the completeness of maternal death and stillbirth reporting by harmonizing reporting systems and strengthening maternal and perinatal death surveillance. Targeted interventions should focus on increasing early antenatal care attendance, addressing regional disparities in service coverage particularly in low-performing regions such as Katavi, Rukwa, Shinyanga, Simiyu, and Geita and strengthening outreach services for underserved populations. In addition, investments in health workforce recruitment, equitable deployment, and health infrastructure are essential to improve service availability and quality. Finally, routine use of data for planning and decision-making should be strengthened through regular performance reviews, capacity building for health managers, and closer collaboration with private health facilities to improve reporting and expand access to quality RMNCAH services.

