



MOZAMBIQUE

Analysis of Reproductive, Maternal, Newborn, Child and Adolescent Health Indicators for 2019-2024: Synthesis Report

ANALYSIS

REPORT

2025



Countdown to 2030 in Partnership with Ministry of Health-Kenya, Global Financing Facility, WHO, WAHO, UNICEF
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KEY FINDINGS

1. HEALTH FACILITY DATA QUALITY ASSESSMENT

Table 1: Summary of reported health facility data quality, DHIS2, 2020-2024

no	Data Quality Metrics	2020	2021	2022	2023	2024
type: 1. Completeness of monthly facility reporting (mean of ANC, delivery, immunization, OPD)						
1a	% of expected monthly facility reports (national)	91	91	92	93	95
1b	% of districts with completeness of facility reporting ≥ 90	75	78	81	84	85
1c	% of districts with no missing values for the 4 forms	84	84	85	86	84
type: 2. Extreme outliers (mean of ANC, delivery, immunization, OPD)						
2a	% of monthly values that are not extreme outliers (national)	99	99	99	100	98
2b	% of districts with no extreme outliers in the year	87	85	86	86	81
type: 3. Consistency of annual reporting						
3a	Ratio anc1/penta1	1.41	1.79	1.73	1.51	1.43
3b	Ratio penta1/penta3	1.09	1.18	1.24	1.08	1.03
3c	% district with anc1/penta1 in expected ranged	76	53	45	56	69
3d	% district with penta1/penta3 in expected ranged	91	81	78	86	78
4	Annual data quality score	87	81	80	84	84

Interpretation

a) Completeness of Reporting

- National completeness improved from 91% (2020) to 95% (2024).
- Districts with $\geq 90\%$ completeness increased from 75% to 85%.

b) Extreme Outliers

- 98–100% of monthly values were not extreme outliers nationally.
- Slight decline in districts with no outliers in 2024, indicating emerging subnational data quality concerns.

c) Consistency of Annual Reporting

National Level:

- ANC1/Penta1 ratio peaked at 1.79 (2021), declined to 1.43 (2024), showing improved consistency.
- Penta1/Penta3 ratio stayed close to 1.0, indicating strong internal consistency.

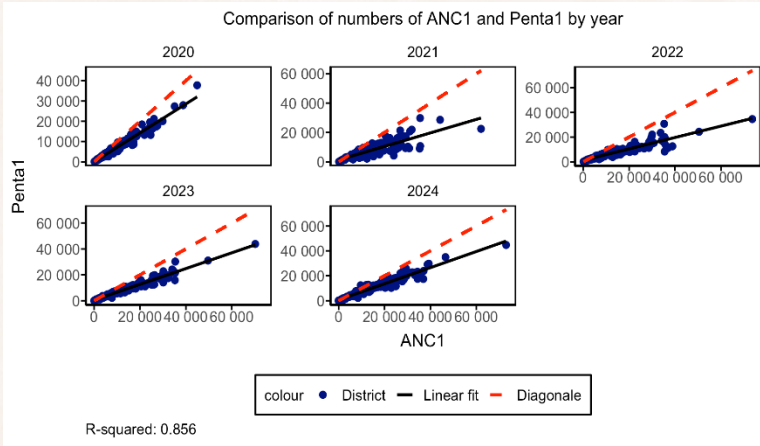
District Level:

- Districts with ANC1/Penta1 in expected range: dropped from 76% (2020) to 45% (2022), then recovered to 69% (2024).
- Districts with Penta1/Penta3 in expected range: declined from 91% (2020) to 78% (2024) — moderate but stable consistency.

d) Annual Data Quality Score

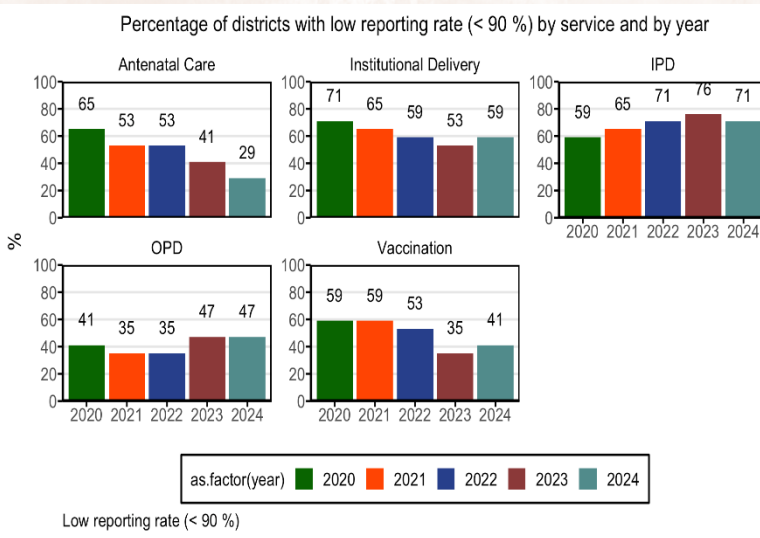
- National-level consistency improved, especially in immunization reporting.
- District-level consistency was more variable but showed notable recovery.
- Sustained improvement depends on training, supervision, and data validation.

1.1. FACILITY DATA QUALITY: NUMERATOR



Interpretations

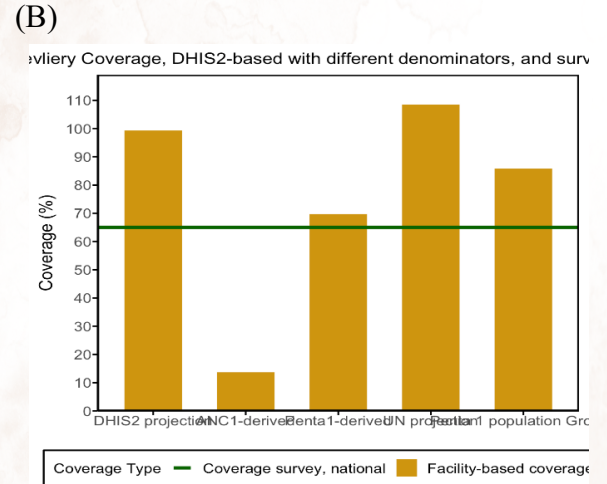
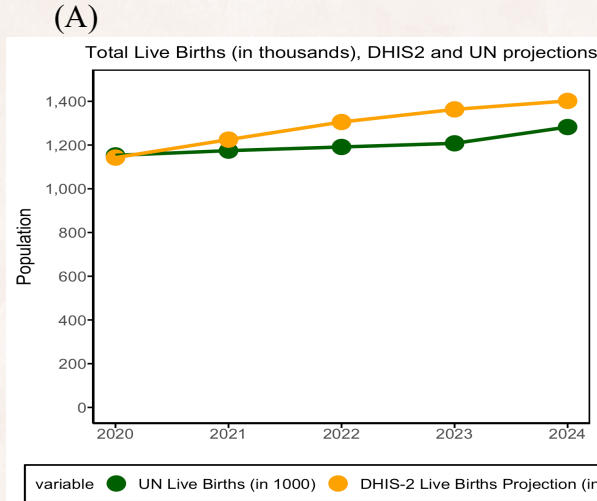
Despite some relative inconsistencies observed during the years 2021 and 2022, generally the indicators for Penta 1 and ANC1 demonstrated good consistency across the reporting periods. This pattern indicates a sustained stability in health-seeking behavior, with caregivers continuing to bring children for immunization and pregnant women consistently accessing antenatal care services.



Interpretation

- High percentage of districts with low reporting rates suggests challenges in data accuracy and completeness.
- Some services consistently report lower rates, indicating potential monitoring or system inefficiencies.
- Yearly fluctuations may reflect policy changes, resource availability, or external disruptions

1.2. SELECTION OF DENOMINATOR



Interpretation

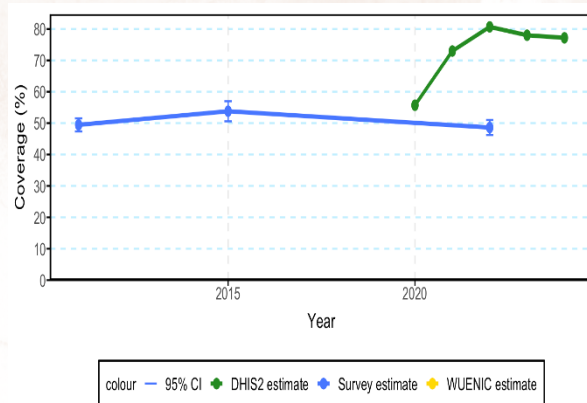
A. Live birth projections based on DHIS2 population exhibit steady, coherent growth trends that closely align with UN estimates, with only slight discrepancies.

B. Institutional delivery coverage was evaluated using different denominators. Among those assessed, the denominator derived from the Penta 1 showed the better performance, as it was close to the value estimated by the survey.

2. National coverage trends: facility data and surveys

Antenatal care: ANC4, ANC early visit, Institutional delivery and Penta 3

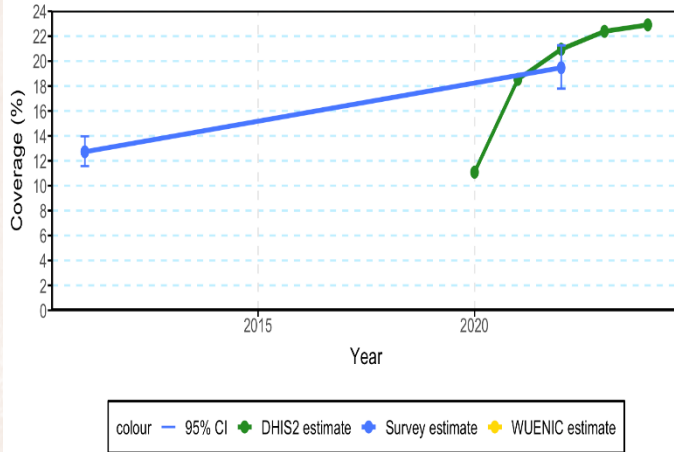
ANC4



Denominators derived from penta1 estimates

The national coverage trends of ANC4, as estimated using facility data, was higher compared to survey estimates.

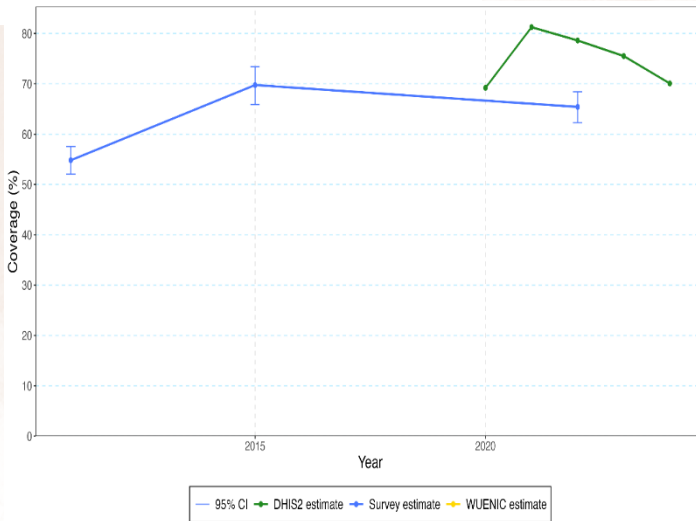
ANC early visit



Denominators derived from penta1 estimates

The national coverage trends of ANC early visits, based on facility data, were lower in 2020 and 2021 but have been higher than survey estimates since 2022.

Institutional delivery

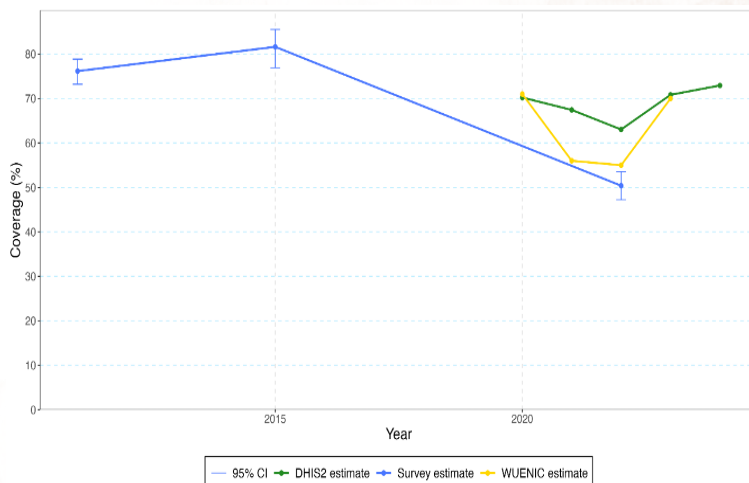


Denominators derived from penta1 estimates

DHIS2 estimates for Institutional delivery have consistently been higher than survey estimate.

The DHIS2 Institutional delivery coverage estimate increased from 70% in 2020 to 80% in 2021. However, from 2021 onward, it showed a steady decline, eventually aligning with survey estimates.

Immunization: Penta 3



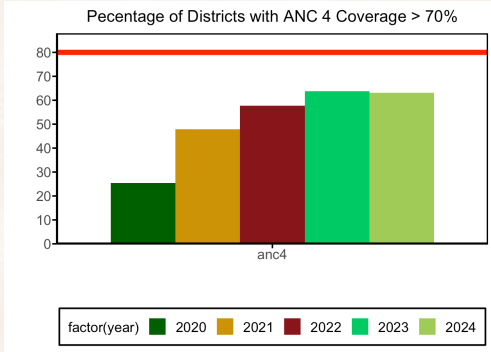
Denominators derived from penta1 estimates

DHIS2 estimates for Penta 3 have consistently been higher than survey estimates.

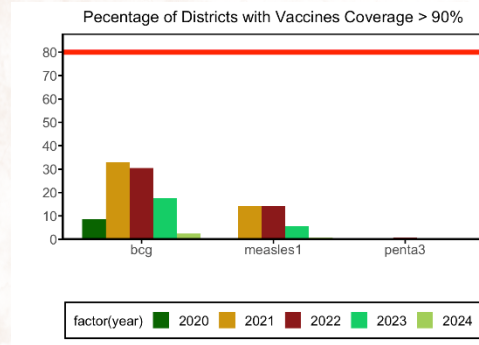
The DHIS2 Penta 3 coverage estimate decreased from 70% in 2020 to around 62% in 2022, which was consistent with both survey and WUENIC estimates. From 2022 onward, the trend began to rise, following WUENIC estimates but diverging from survey data.

Percent of districts achieving high coverage targets

A)

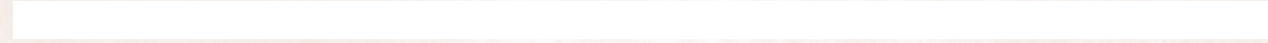


B)



Interpretations

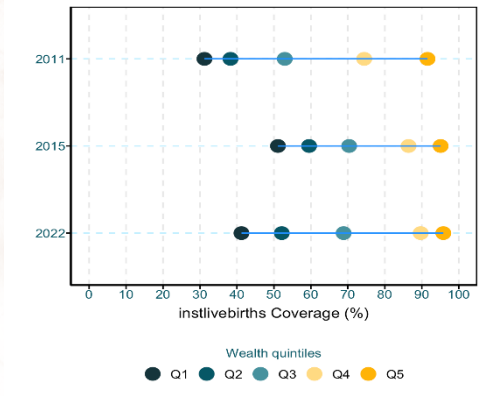
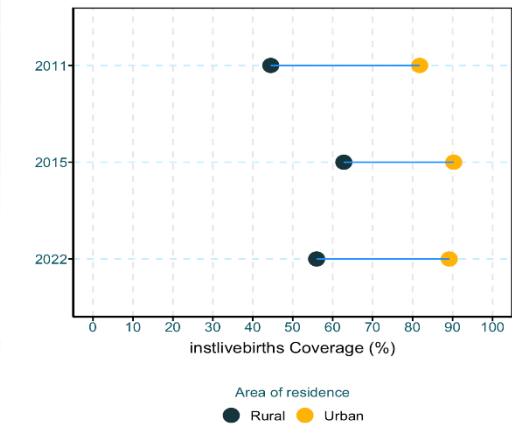
- A) The percentage of districts achieving the target coverage for ANC4 (> 70%) increased from less than 30% in 2020 to 60% in 2024.
- B) Regarding vaccines, only a few districts met the target coverage (> 90%) for BCG and Measles 1. The highest percentage of districts reaching the target occurred in 2021 and 2022, at 30% for BCG and 15% for Measles 1. No districts achieved the target coverage for Penta 3 in any of the years.



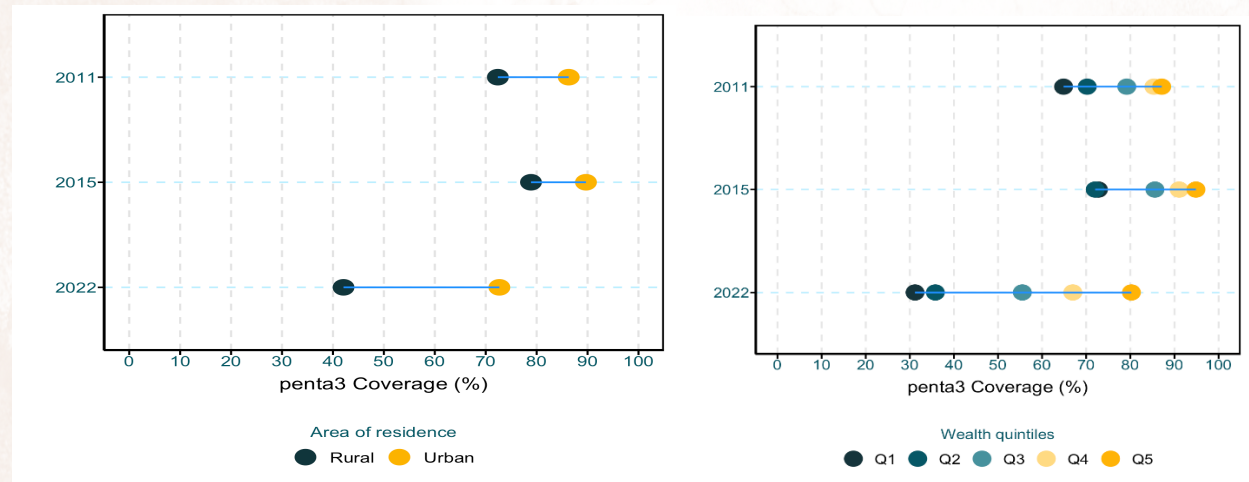
3. Equity

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

Institutional Deliveries



Pentavalent 3rd Dose



Interpretations

- Groups from rural areas, children of non-educated mothers and the poorest are consistently being left behind on both the indicators.

Penta3 Coverage by Wealth Quintile

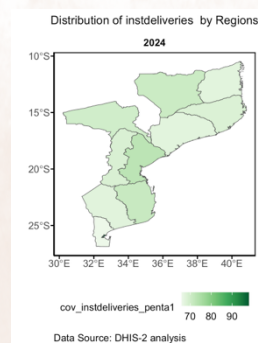
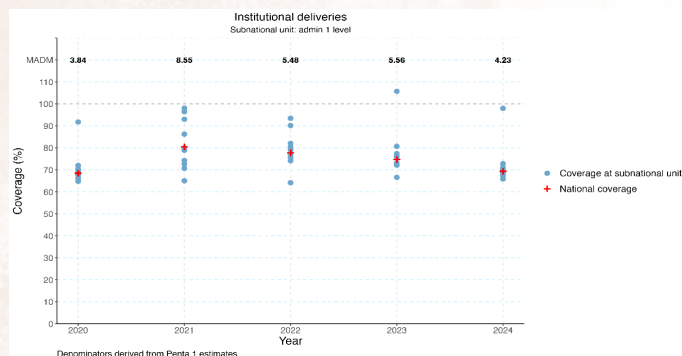
- The data shows a clear gradient: children from wealthier households are significantly more likely to receive the third dose of the pentavalent vaccine. Over time, the gap between the richest and poorest has shown modest improvement, but remains substantial.
- Pattern of Inequality: The inequality follows a bottom pattern, where the poorest are disproportionately left behind, rather than a linear or top-heavy distribution.

Penta3 Coverage by Maternal Education

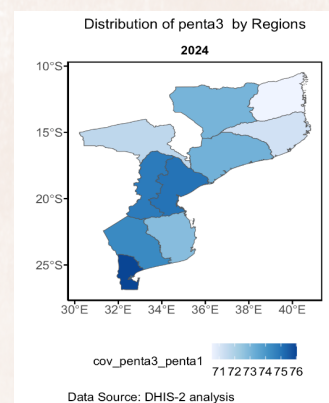
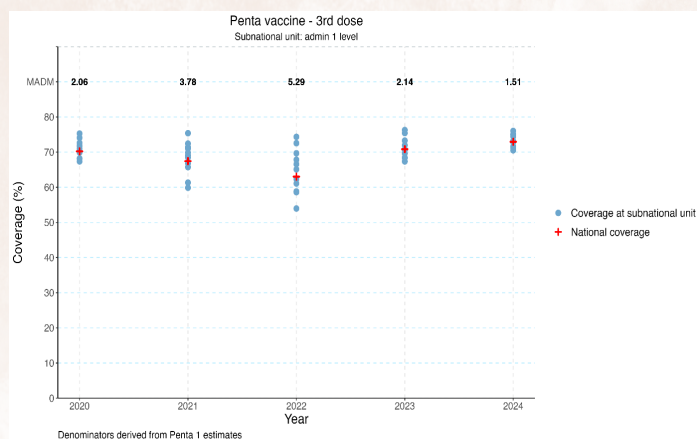
- Children of mothers with higher education levels consistently show higher coverage rates. As female education levels rise nationally, this gap is expected to narrow—but the current data suggests that education-based disparities remain entrenched.
- The persistent gap underscores the need to integrate education and health strategies, ensuring that gains in schooling translate into equitable health outcomes.
- Mozambique has made notable progress in expanding health coverage, but inequality remains a major challenge.
- The data reveals that Wealth and education continue to be strong determinants of access to essential health services.
- Regional and district disparities highlight the need for localized strategies.
- To achieve universal health coverage, Mozambique must go beyond improving national averages and focus on closing the equity gap—ensuring that no child or mother is left behind, regardless of where they live, how much they earn, or their level of education.

Geographical inequalities: Health facility data

Institutional Deliveries



Pentavalent 3rd Dose



Institutional Delivery Coverage Inequality (2020–2024)

- Provincial disparities are wide: Some provinces exceeded 90% coverage, while others remained below 60%, despite national-level progress.
- Inequality peaked in 2021 (MADM: 8.55), likely due to external disruptions, but declined to 4.23 by 2024, indicating gradual improvement in equity.
- High-performing provinces in 2024: Inhambane, Sofala, Tete, and Niassa.
- Low-performing province: Maputo Province.
- The data underscores the need to shift policy focus to underperforming provinces to ensure universal access to safe childbirth services.

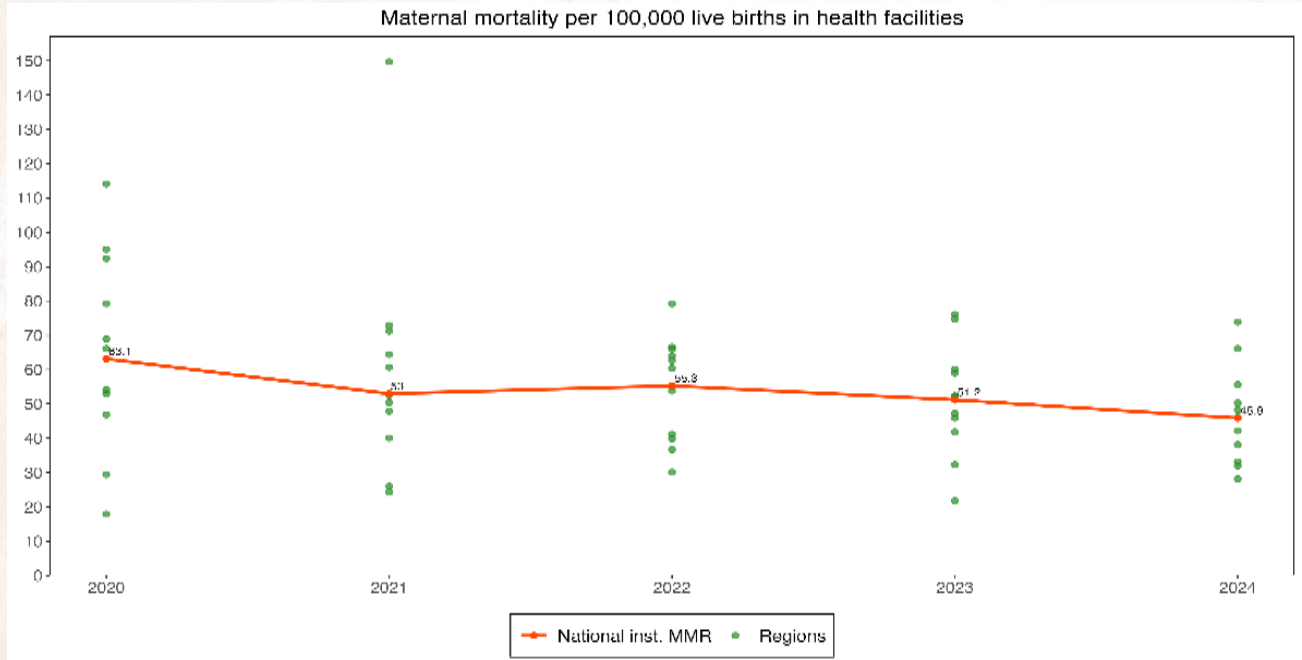
Penta3 Coverage Inequality Across Provinces (2020–2024)

- Overall provincial coverage is high, but variation persisted, especially in earlier years.
- National coverage remained stable, but some provinces consistently underperformed, revealing subtle but important disparities.
- Inequality trends (MADM values):
 - 2020: 2.06 (low inequality),
 - 2021–2022: 3.78 → 5.29 (inequality increased)
 - 2023–2024: 2.14 → 1.51 (sharp decline, strong convergence)
 - High-performing provinces in 2024: Maputo Province, Sofala, Manica, and Niassa.
 - The sharp drop in inequality by 2024 reflects successful efforts to strengthen routine immunization systems, especially in previously underperforming regions.

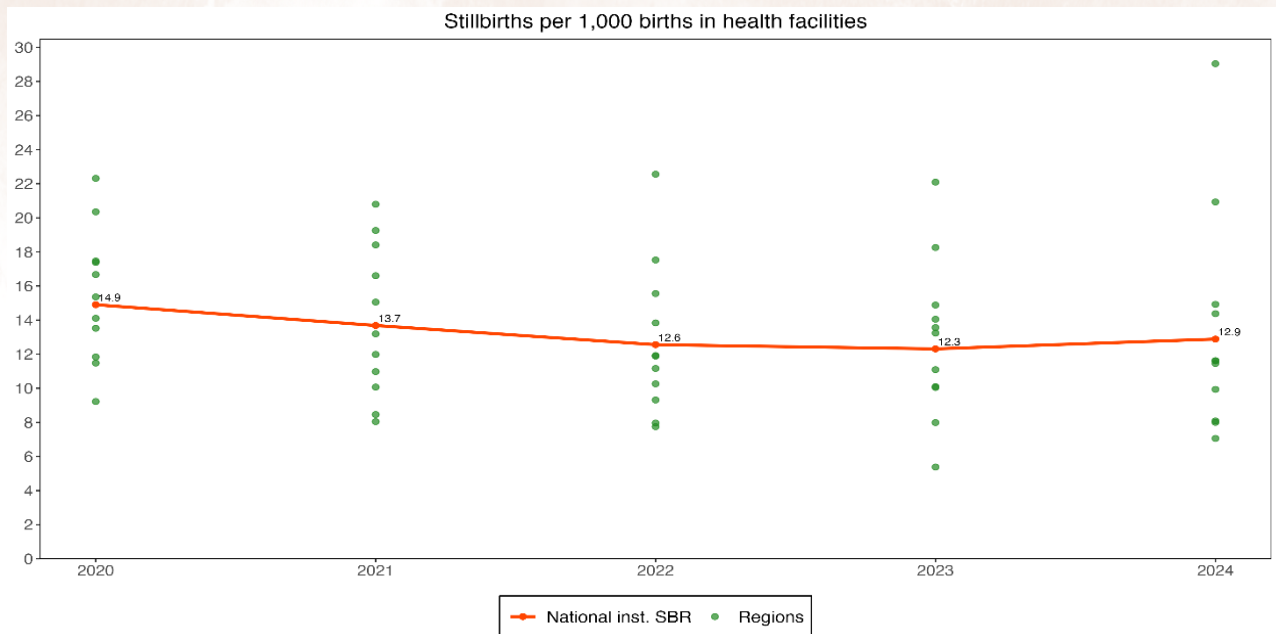
4. Institutional mortality

Institutional Mortality trends (iMMR, iSBR)

iMMR



iSBR



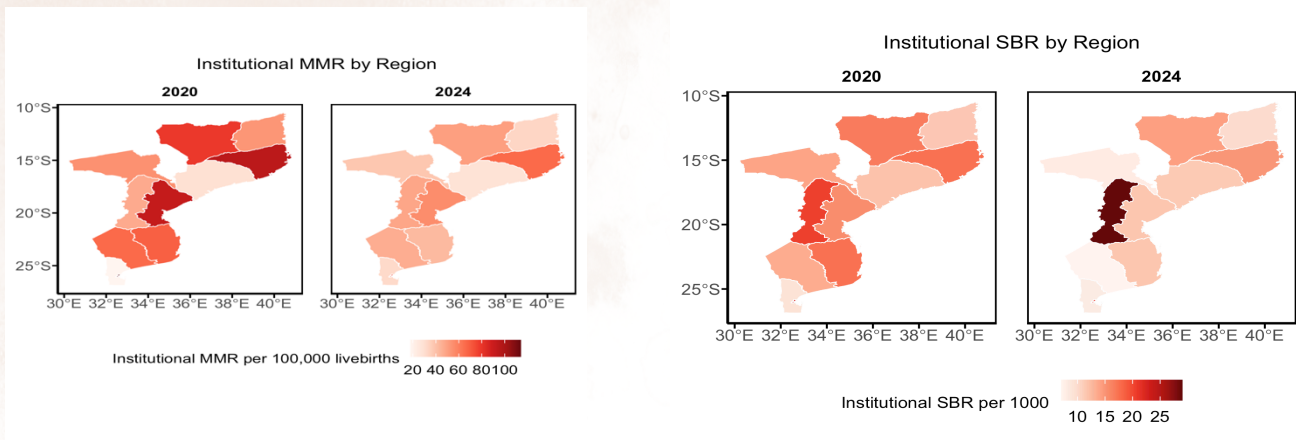
Institutional Maternal Mortality (iMMR) Trends and Inequality

- National iMMR improved from 2020 to 2024, with a decline in regional disparities, indicating progress in maternal health outcomes.
- Significant regional variation persists—some provinces consistently report much higher maternal mortality than the national average, reflecting inequitable access to quality care.
- A notable spike in 2022 may reflect health system strain, likely due to pandemic aftershocks, staffing shortages, or gaps in emergency obstetric care.
- Call to action: Improve quality of care, especially in high-burden provinces, by investing in emergency transport, skilled birth attendants, and blood supply systems, and use real-time data to prevent avoidable deaths.

Stillbirths in Health Facilities: Trends and Inequities

- National stillbirth rate (SBR) declined from 14.9 in 2020 to 12.6 in 2022, showing modest gains in intrapartum care.
- However, the rate rose again to 13.3 in 2023, and slightly declined to 12.9 in early 2024, indicating stagnation and possible setbacks.
- Persistent regional disparities suggest that some provinces face systemic barriers to timely and effective obstetric care.
- Despite national-level progress, quality and equity in childbirth services remain critical challenges that require targeted interventions.

Institutional Mortality by admin1 units

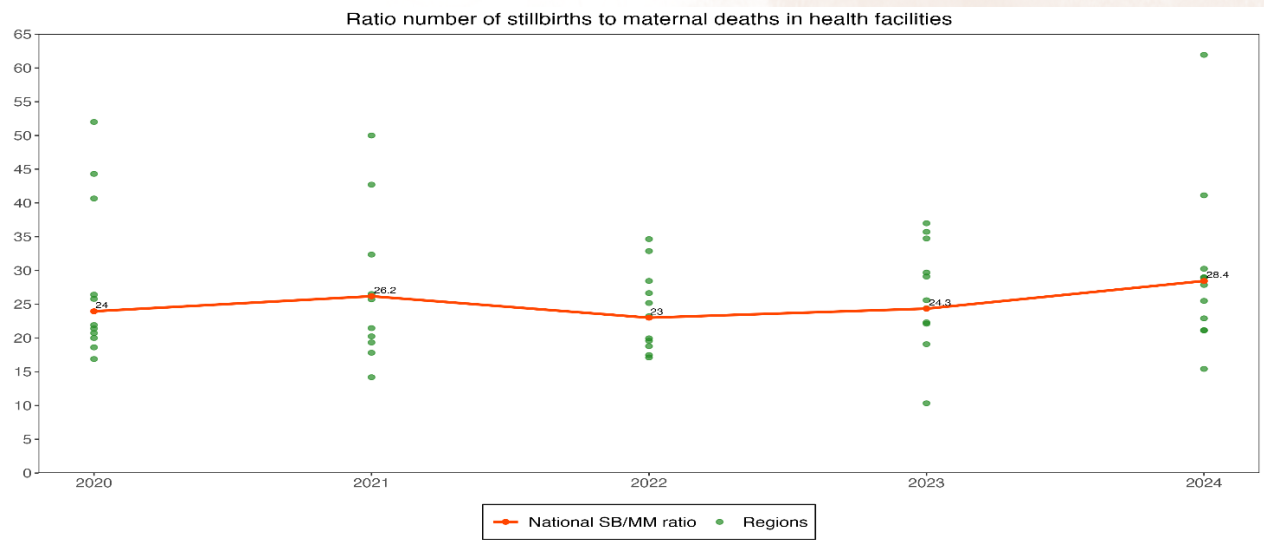


Interpretations

- Nampula and Sofala had the highest iMMR, followed by Niassa, while Maputo, Zambezia, and Cabo Delgado had the lowest. The overall trend from 2020 to 2024 showed a decrease, reflecting improvements in maternal health.
- For iSBR, most regions saw a decline, but Manica worsened, which raised the national average.

Data quality metrics

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

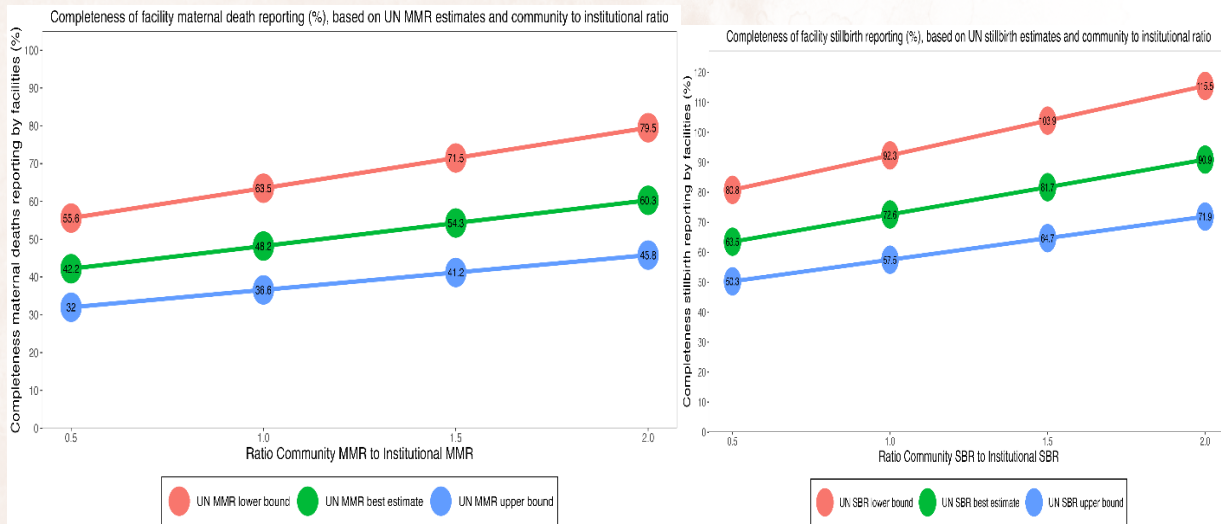


Interpretations

Stillbirths-to-Maternal Deaths Ratio: A Window into Facility-Based Care Quality

- The national ratio of stillbirths to maternal deaths in health facilities fluctuated between 24 and 28 over the five-year period, with no clear downward trend, suggesting limited progress in improving outcomes for mothers and newborns simultaneously.
- The regional data points (green dots) show significant variation across provinces, indicating uneven quality of care and inconsistent emergency response capacity in health facilities.
- A higher ratio may indicate better maternal survival, but if stillbirths remain high, it also signals gaps in intrapartum monitoring, fetal distress management, and timely interventions
- The ratio of stillbirths per maternal death was above 25 in 2024, that means that maternal deaths are more underreported than stillbirths.

Estimated completeness of facility maternal death and stillbirth reporting



Interpretation

Completeness of Maternal Death Reporting: A Critical Gap in Facility Data

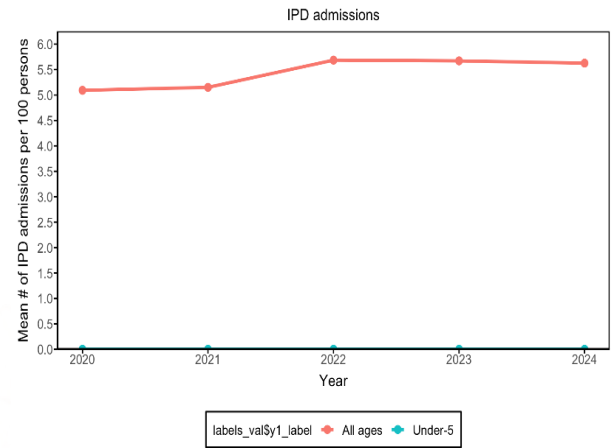
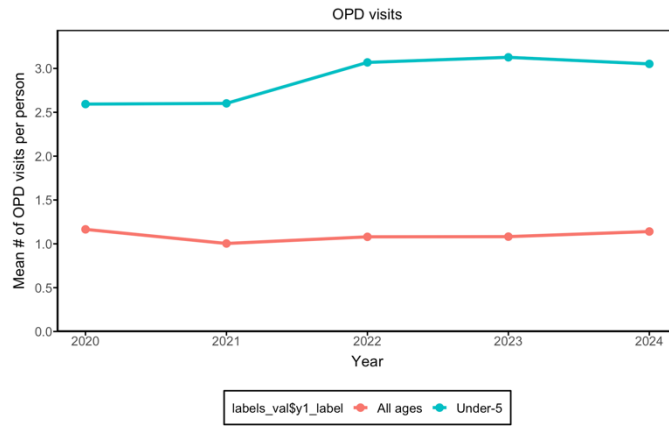
- Reporting completeness increases as the community-to-institutional maternal mortality ratio (MMR) rises, reflecting the assumption that more deaths occur outside facilities in higher-ratio settings.
- Under the UN MMR best estimate, completeness ranges from 42.2% (at a 0.5 ratio) to 60% (at a 2.0 ratio)—indicating that at least 40% of maternal deaths may be missing from facility data.
- Even under the most optimistic scenario (UN lower bound), completeness only reaches 79.5%, showing that no scenario achieves full reporting coverage.
- The graph reveals a systemic underreporting of maternal deaths in health facilities, even under favorable assumptions.

Stillbirth Reporting Completeness: A Hidden Gap in Facility Data

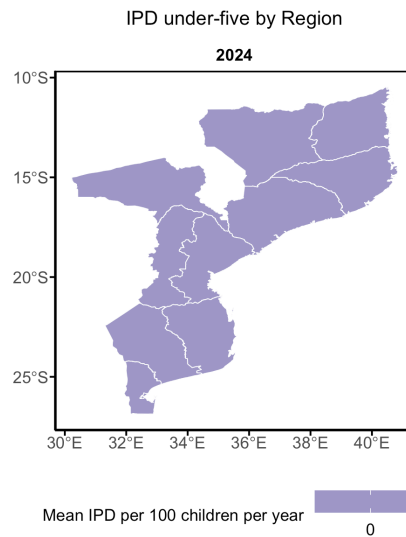
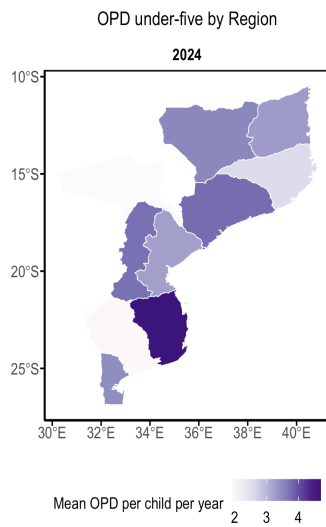
- Under the UN best estimate scenario (green line), completeness ranges from 63.5% at a 0.5 ratio to 90% at a 2.0 ratio, meaning that 10–35% of stillbirths may not be captured in facility data.
- In the most optimistic scenario (lower bound, red line), completeness exceeds 100% at higher ratios, suggesting possible overreporting in facilities or underestimation of community-level stillbirths.
- The upper bound scenario (blue line) shows the lowest completeness, peaking at only 71%, reinforcing concerns about systematic underreporting of stillbirths in health facilities.

5. Curative health service utilization for sick children

Outpatient and inpatient service utilization



Regional/provincial service utilization



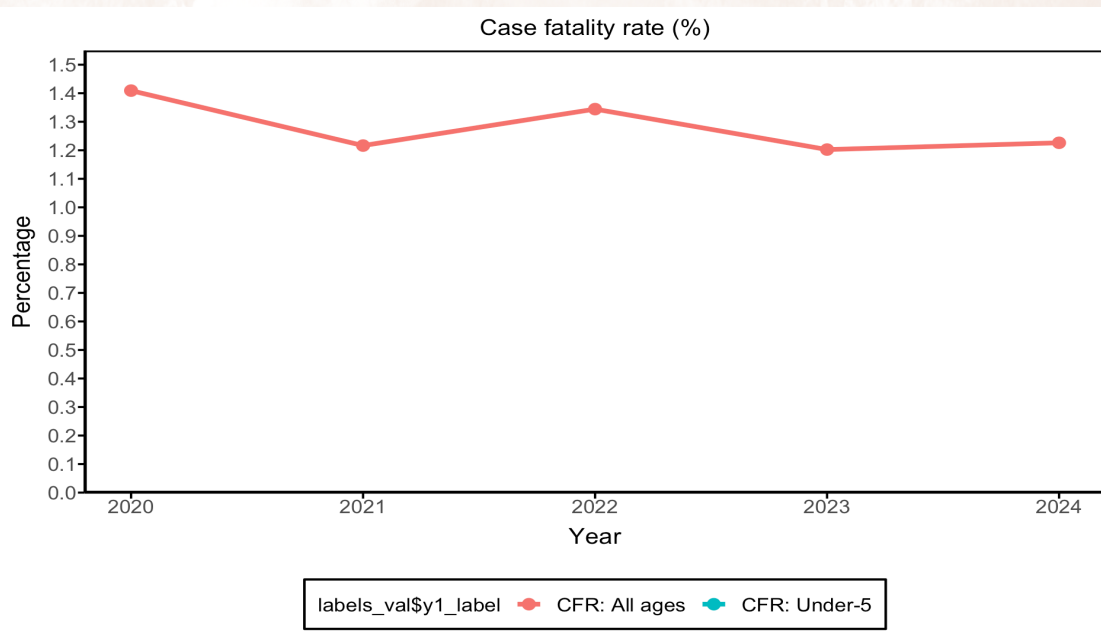
Outpatient Service Utilization (OPD)

- General OPD visits (all ages) declined slightly in 2021 but showed a steady recovery through 2024, reflecting a gradual restoration of health service use post-pandemic.
- Under-5 OPD visits peaked in 2022, likely due to increased care-seeking during or after the pandemic, followed by a modest decline, possibly linked to improved child health or emerging access barriers.
- Regional disparities in 2024:
 - Inhambane, Zambezia, and Manica reported strong OPD visit and admission rates, indicating better service utilization.
 - Gaza, Tete, and Nampula showed poor outcomes, suggesting access or system performance challenges.
- These trends highlight the need for age-specific and region-specific monitoring to ensure equitable access and sustained demand across all population groups.

Inpatient Service Utilization (IPD)

- IPD admissions for all ages increased gradually from 5.2 to 5.8 per 100 persons, indicating stable and growing use of inpatient services.
- Under-5 IPD admissions remained at zero, pointing to serious data gaps or underreporting, and raising concerns about visibility of pediatric inpatient care in national health data.

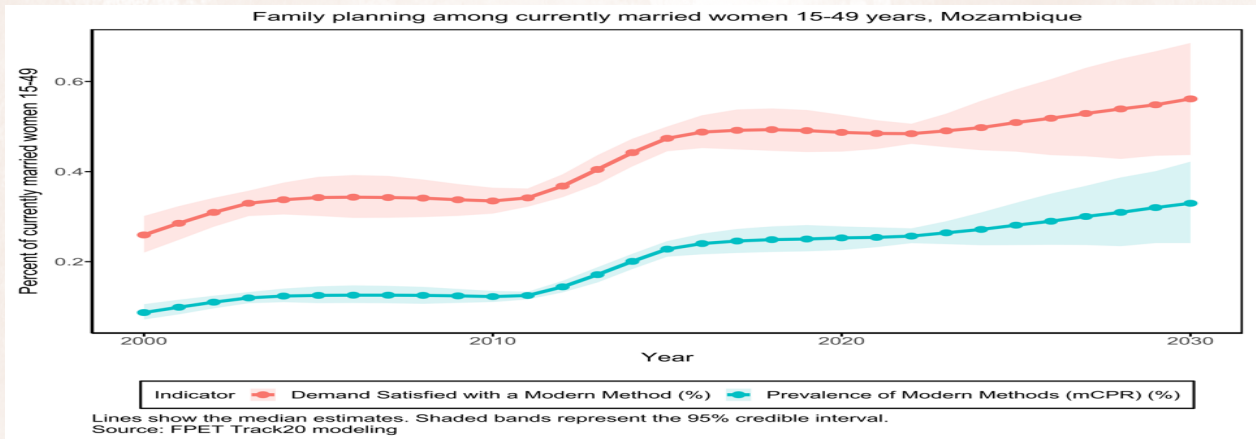
• Case Fatality Rate among admissions Under 5



Interpretations

- The case fatality among admissions under-five was 1.3 in 2024 and it variety over the last 5 years which shows inconsistency in the quality of care.

National coverage trends: family planning

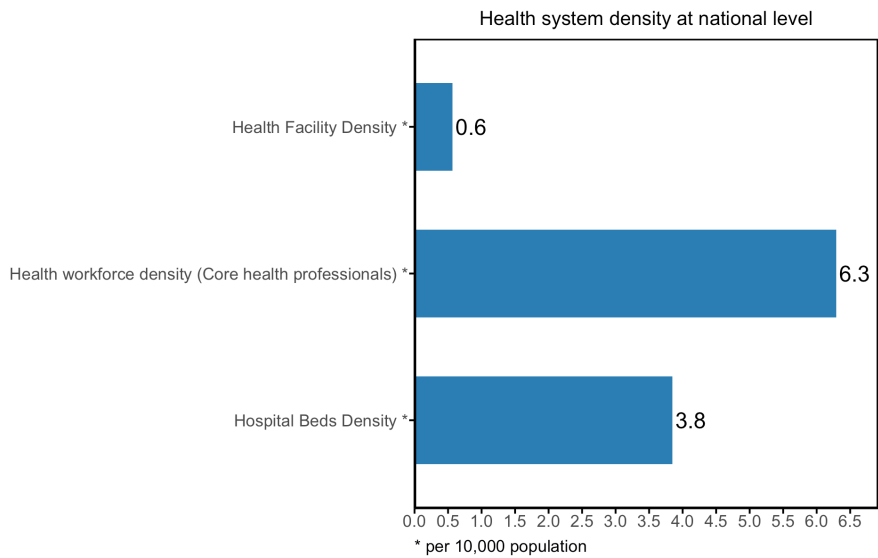


Interpretations

The case fatality among admissions under-five was 1.3 in 2024 and it variety over the last 5 years which

6. Health system progress and performance

Health system inputs

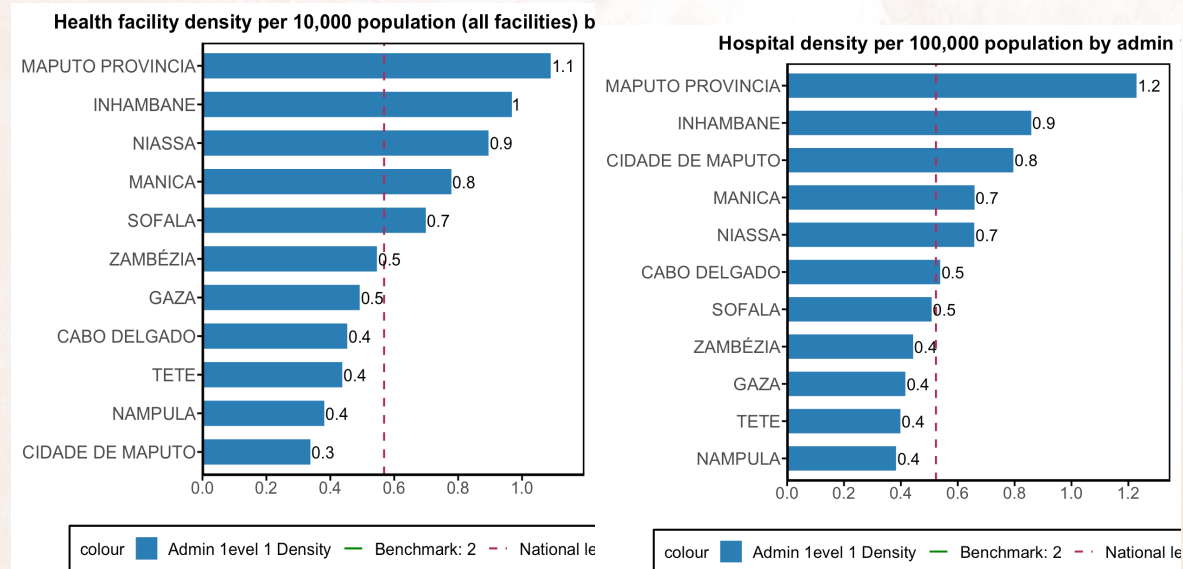


Interpretations

Mozambique's Health System Capacity: Critically Low Infrastructure and Workforce

- Health facility density (0.6 per 10,000) is extremely low, indicating limited physical access points for care across the country.
- Health workforce density (6.3 per 10,000) falls well below global benchmarks, reflecting a shortage of core health professionals needed to deliver essential services.
- Hospital bed density (3.8 per 10,000) suggests limited inpatient capacity, which can constrain emergency and long-term care
- The private sector is not included on the completeness of the data.

Health system inputs by region/province

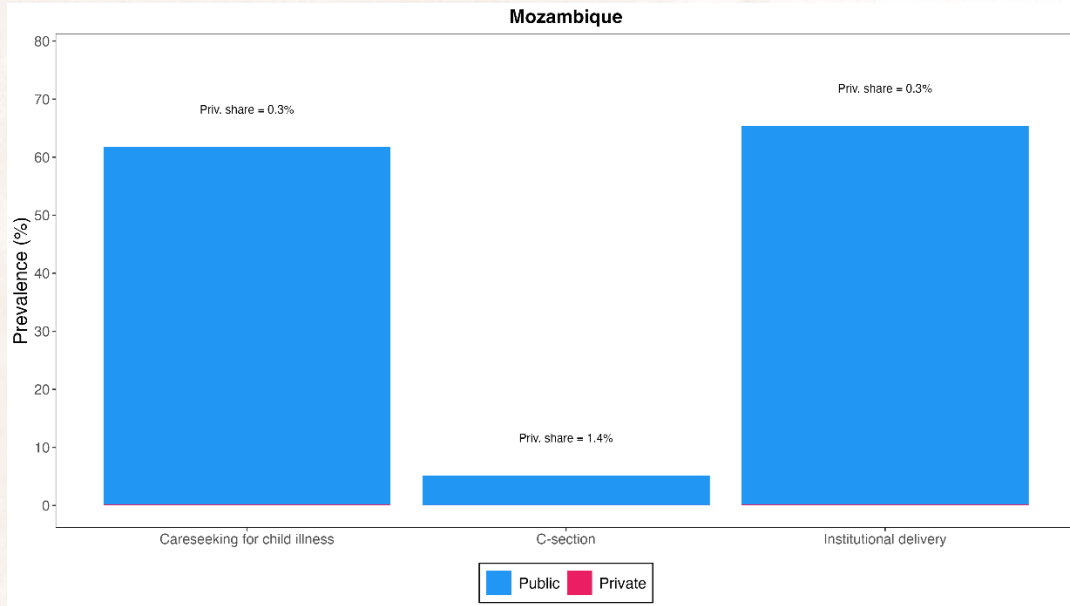


Interpretations

- Regarding health facility, more than 50% of the provinces have a density below the national average.
- The provinces of the southern region (Maputo province, Inhambane, and Maputo city) have higher densities and above the national average.
- The provinces of Manica, Inhambane, Maputo Province, and Maputo City have the highest workforce.
- Overall, the provinces with the highest densities are those with the largest population.
- This uneven distribution reflects geographic inequities in access to care, particularly in populous provinces like Nampula and Zambézia, which have some of the lowest densities

Health system outputs by inputs at the subnational level

Private sector and RMNCAH services



Public Sector Dominates Maternal and Child Health Services

- Over 60% of care seeking for child illness and institutional deliveries occur in the public sector, with negligible private sector involvement.
- C-section services are almost exclusively public, with only 1.4% coverage—highlighting limited access to surgical obstetric care overall