



GHANA

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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Team Members

1. Chris Fofie
2. Emmanuel T. Sally
3. George Johnson
4. Kristine Nilsen
5. Seth Afagbedzi
6. Winfred Dotse-Gborgbortsi

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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, 2019-2024

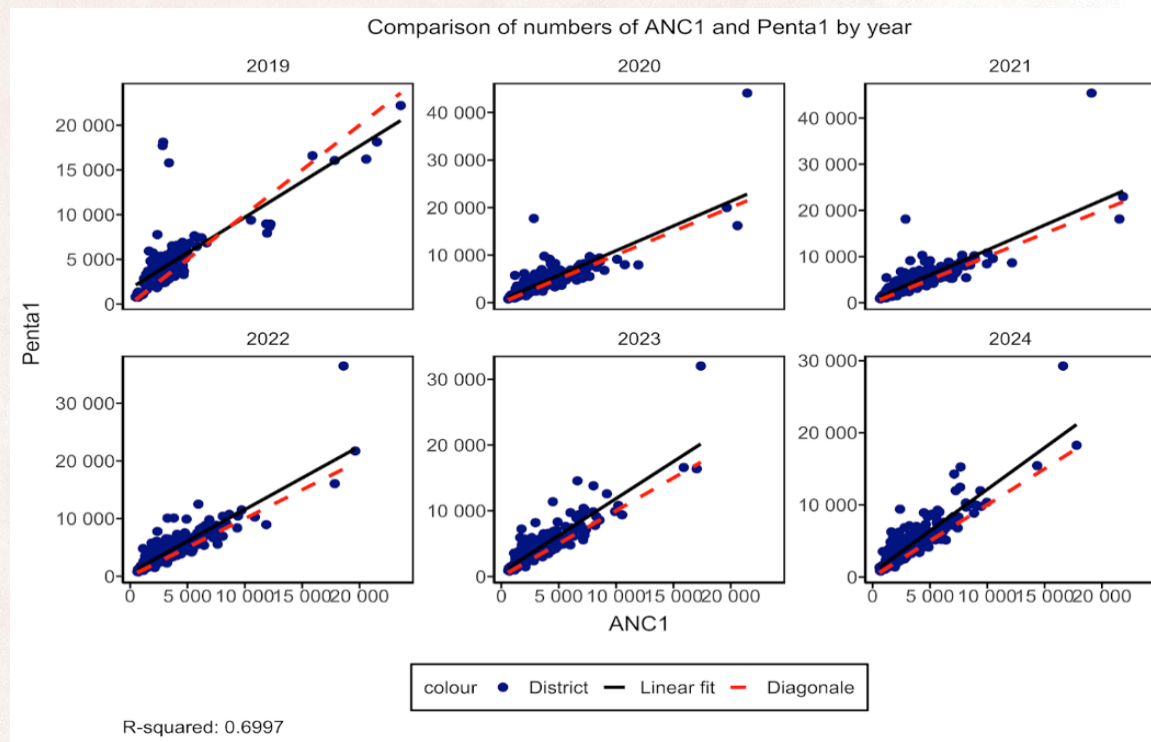
Overall Score

no	Data Quality Metrics	2019	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)	92	92	93	95	96	97
1b	% of districts with completeness of facility reporting >= 90	71	74	77	82	90	94
1c	% of districts with no missing values for the 4 forms	77	100	100	100	100	100
type: 2. Extreme outliers (mean of ANC, delivery, immunization, OPD)							
2a	% of monthly values that are not extreme outliers (national)	90	100	100	100	99	100
2b	% of districts with no extreme outliers in the year	73	90	90	89	88	89
type: 3. Consistency of annual reporting							
3a	Ratio anc1/penta1	0.74	0.86	0.82	0.80	0.77	0.76
3b	Ratio penta1/penta3	0.95	0.99	0.98	0.98	0.97	0.96
3c	% district with anc1/penta1 in expected ranged	10	31	20	15	11	9
3d	% district with penta1/penta3 in expected ranged	33	46	36	39	34	30
4	Annual data quality score	62	72	69	70	70	70

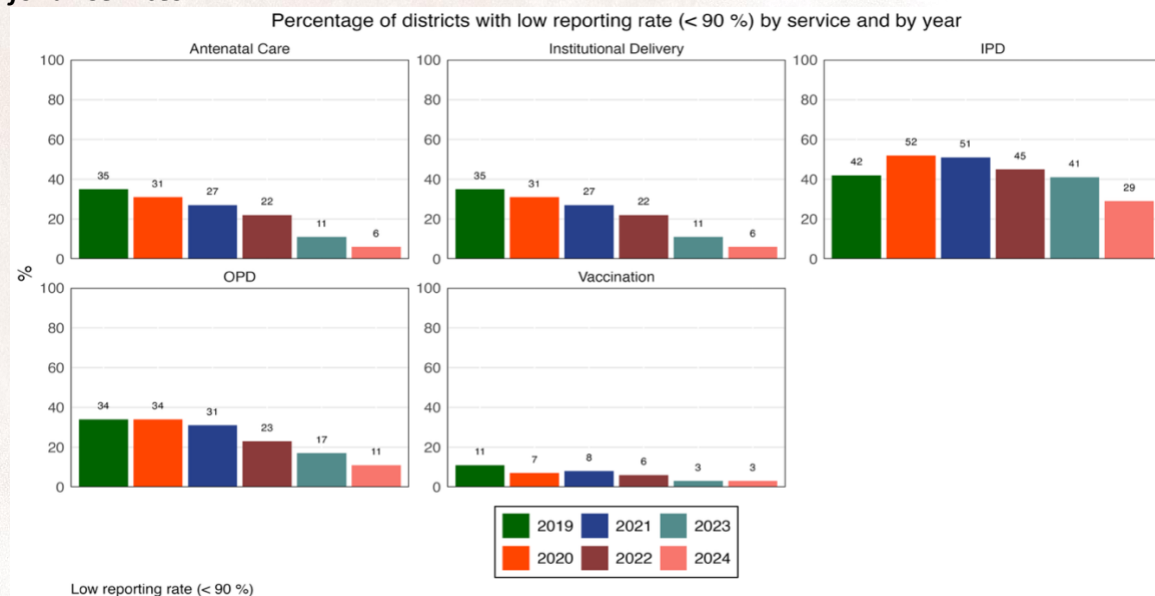
Interpretations

- Data was assessed for completeness, outliers and consistency
- Most health facilities submitted their monthly reports
- Most districts did not have missing values
- The consistency of annual reporting was the poorest domain
- Many districts did not achieve the expected targets for ANC 1 versus pentavalent 1, as well as pentavalent 1 versus pentavalent 3 ratios
- K-factors of 0.5 and 0.25 were applied for ANC and delivery, respectively, to compensate for reporting issues.

The ratio of ANC 1 and Penta 1 was fairly consistent across years. One outlier region (Kumasi) has nearly twice as many Penta 1 as ANC 1 visits in 2021-2024.

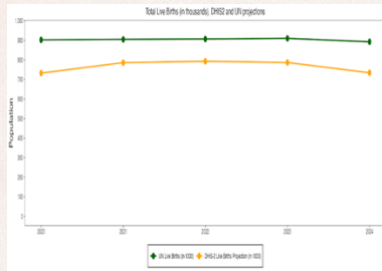


The percentage of districts with low reporting rates (<90%) has consistently declined over the years for all services

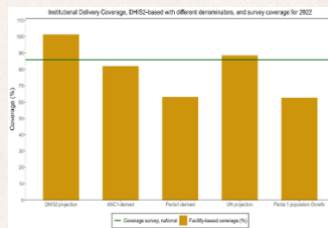


DENOMINATORS: Service coverage is defined as the population who received the service (numerator) divided by the population who need the services: (the denominator). We test four options for denominator measures using institutional live births and Pent-3 immunization coverage (Figures 2c and 2d). The 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.

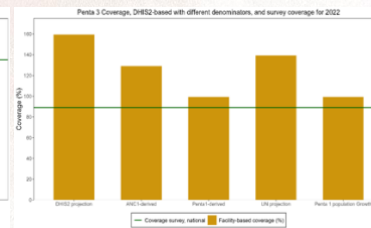
Total live births (in thousands)



Institutional deliveries



Penta3



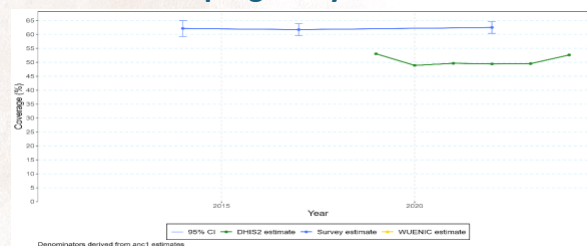
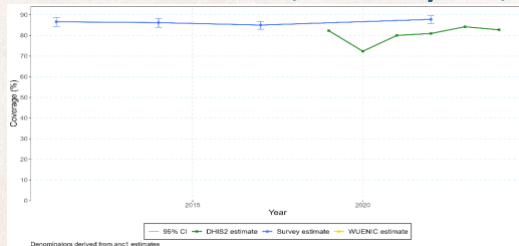
Interpretations

- The national projection of births was consistently lower than the UN projection.
- ANC 1 and Penta 1 were selected as denominators for maternal and vaccination indicators respectively since these provided estimates closest to the latest survey estimates.

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National coverage trends: facility data and surveys

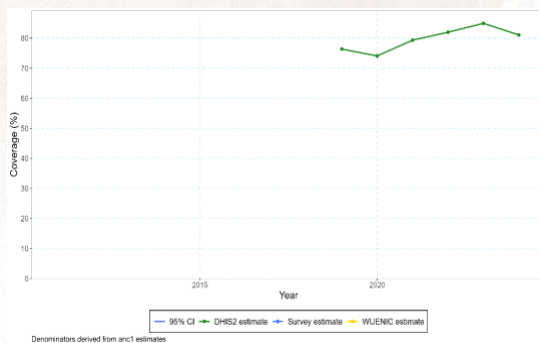
Antenatal care: ANC4, ANC early visit, first trimester of pregnancy



Interpretations

- Both health facility and survey shows high antenatal coverage but health facility coverage estimates are marginally lower.

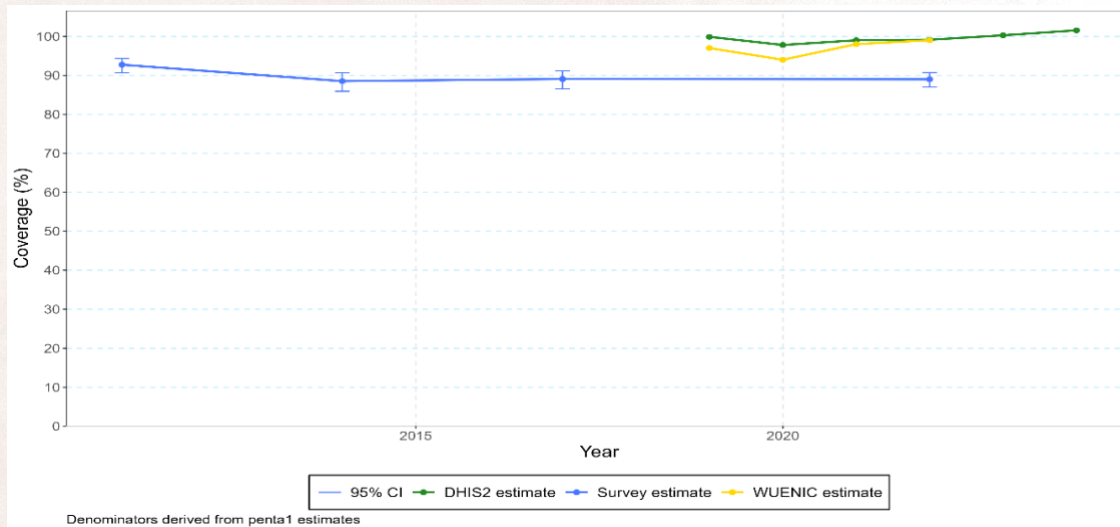
Institutional delivery



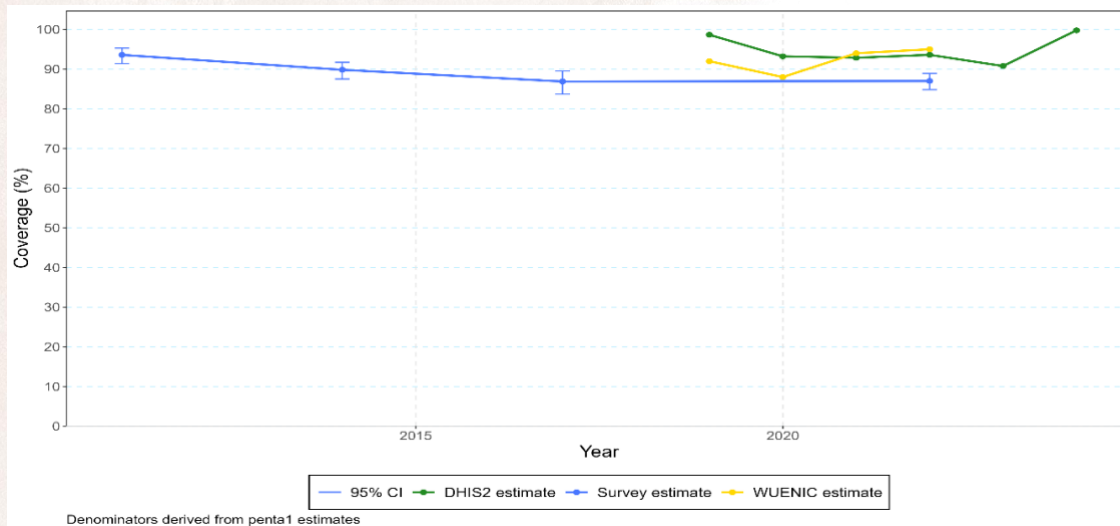
Interpretations

- Coverage levels are plausible (77-83%) with excellent consistency between facility (DHIS2) and survey data, showing nearly identical trends and suggesting reliable reporting systems.
- The upward trend is positive, but at 83%, remains below typical 90%+ universal coverage targets for maternal health services
- Accelerated efforts are needed to achieve optimal levels.

Immunization : Penta 3, Measles 1 Pentavalent vaccine (3rd dose)



Measles 1 vaccine

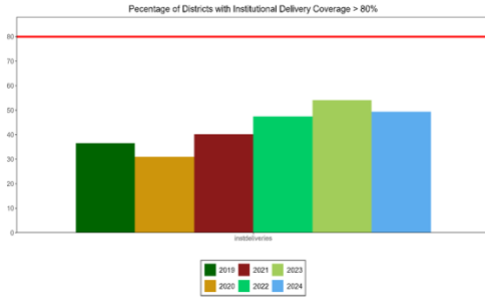


Interpretations

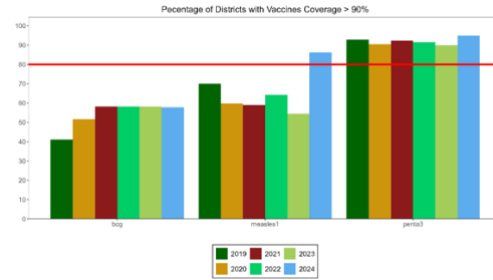
- The trends show mixed consistency - while administrative sources (DHIS2, WUENIC) converge around 95-100% by 2020, the survey estimate declines to ~88%, suggesting potential overestimation in facility-based data.
- The WUENIC estimates align closely with administrative data, indicating good international validation of Ghana's reported coverage.
- Coverage performs excellently against standard immunisation targets (typically 90%+ for routine vaccines), with all sources showing achievement of high coverage levels
- The positive upward trend in administrative data from 2010-2020 demonstrates successful program strengthening, though the survey data decline raises questions about true population-level coverage
- Overall, this represents a positive trajectory toward universal Penta 3 and Measles 1 completion, but the data discrepancies warrant further investigation to ensure accurate program assessment and maintain quality improvements.

Percent of districts achieving high coverage targets

Institutional delivery



Child health indicators



Interpretations

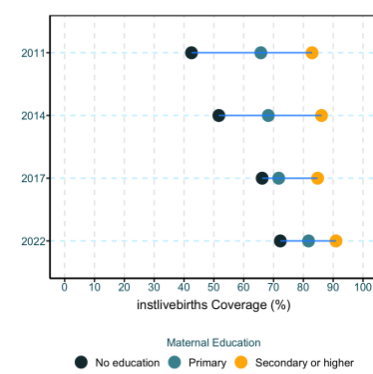
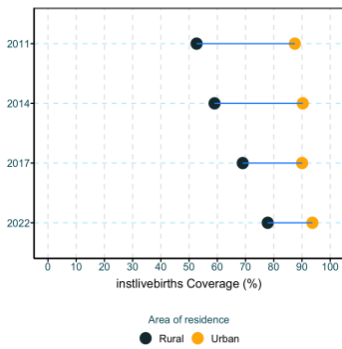
- The proportion of districts achieving >90% vaccine coverage has varied significantly over time
- A steady rise is observed in the proportion of districts with institutional delivery coverage > 80% over the years, except a slight decline in 2024

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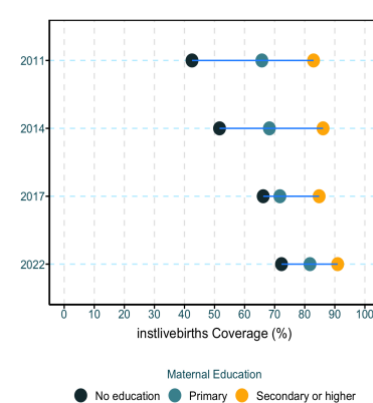
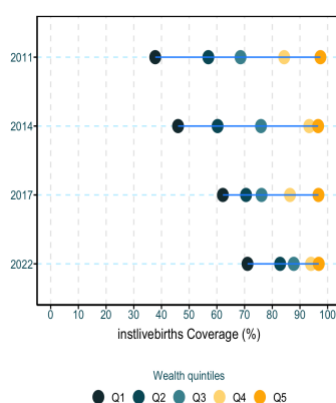
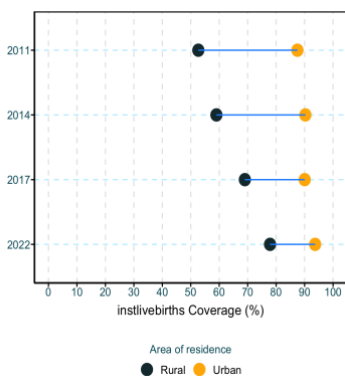
Equity

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

Institutional deliveries



Pentavalent vaccine (3rd dose)

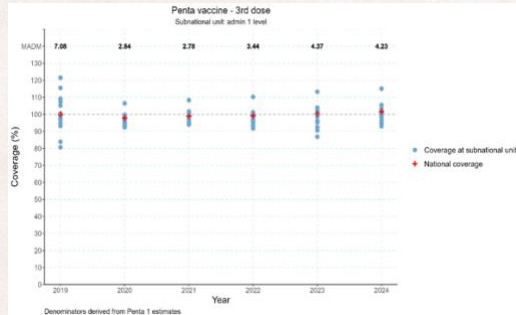


Interpretations

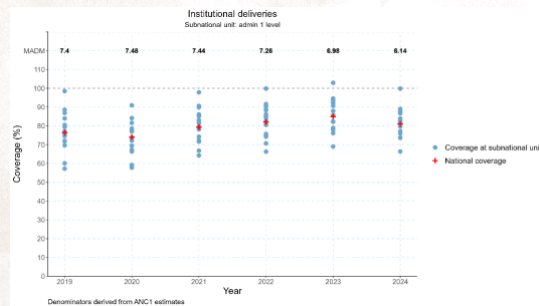
- Rural populations, those with no education, and the poorest quintile (Q1) are consistently left behind across all indicators and timepoints.
- For institutional deliveries, inequalities are widening as urban and educated populations improve more rapidly than rural and uneducated groups. Pentavalent vaccine equity remains stable with minimal disparities across all dimensions, suggesting successful universal coverage for this intervention.

Geographical inequalities: Health facility data

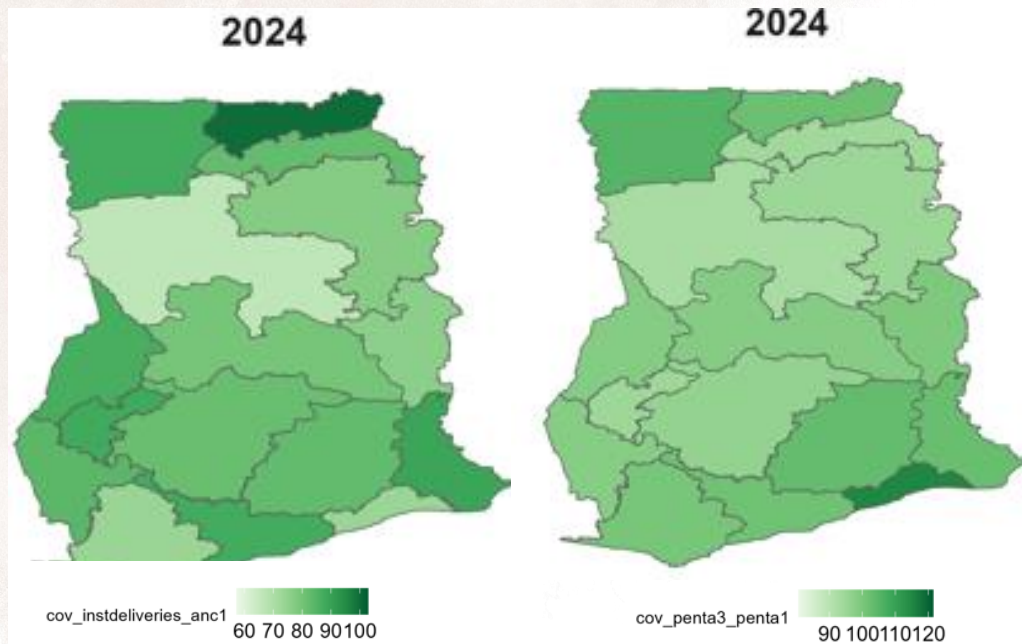
Institutional deliveries



Pentavalent 3rd dose



Institutional deliveries and Penta3

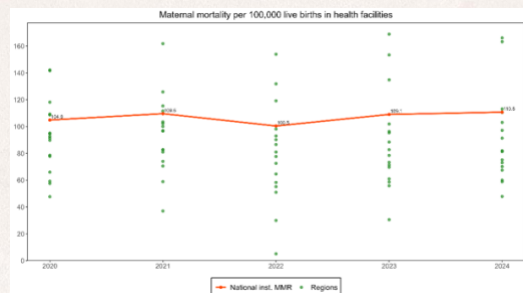


Interpretations

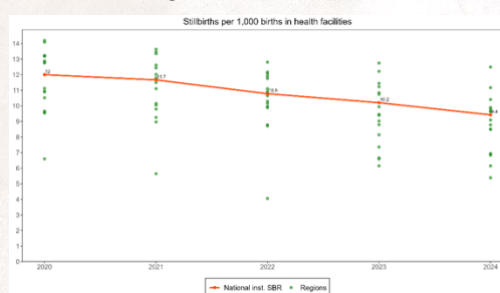
- Institutional deliveries improved dramatically from 74% to 94% (2019-2024) with all subnational units showing upward trends, while pentavalent 3rd dose remained consistently high at 95-100% with minimal variation.
- Institutional delivery inequalities decreased significantly (MADM: 7.4→5.14) as data points converged toward higher coverage levels. Pentavalent inequalities remain minimal and stable (MADM: 2.84-4.37) with tight clustering around high coverage.
- Pentavalent coverage demonstrates near-universal success with minimal geographical variation (90-100%) across virtually all regions, indicating effective immunisation program implementation nationwide.

National maternal mortality levels and regional variation

iMMR



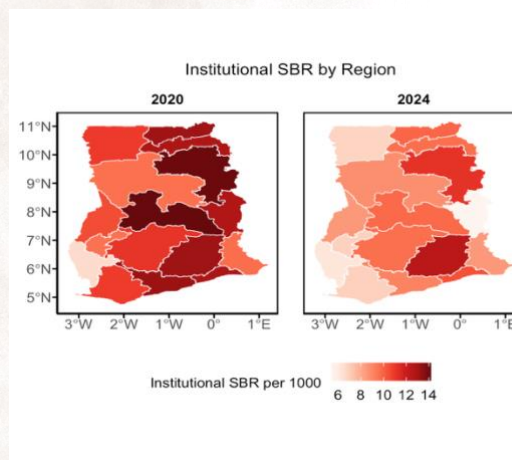
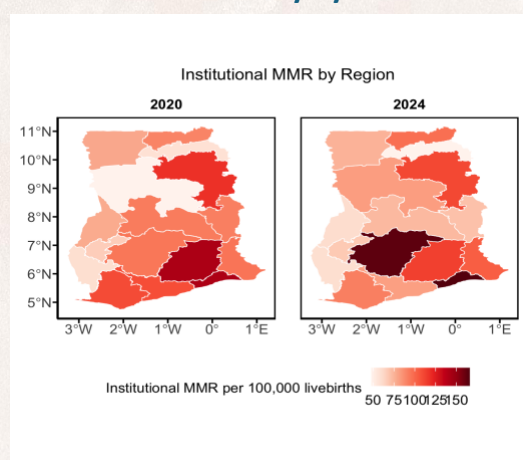
iSBR



Interpretations

- The iMMR has been oscillating between 104-111 deaths/lb between 2020-2024
- The SBR has gradually declined over the years.

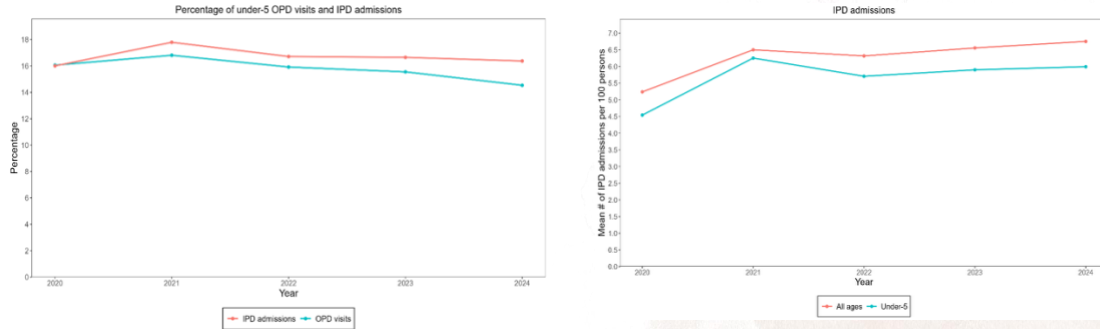
Institutional Mortality by admin1 units



Interpretations

- The most populated regions: Greater Accra, Ashanti, Northern and Central usually recorded ratios above the national figures
- The regional SBR also follows a similar pattern to iMMR.

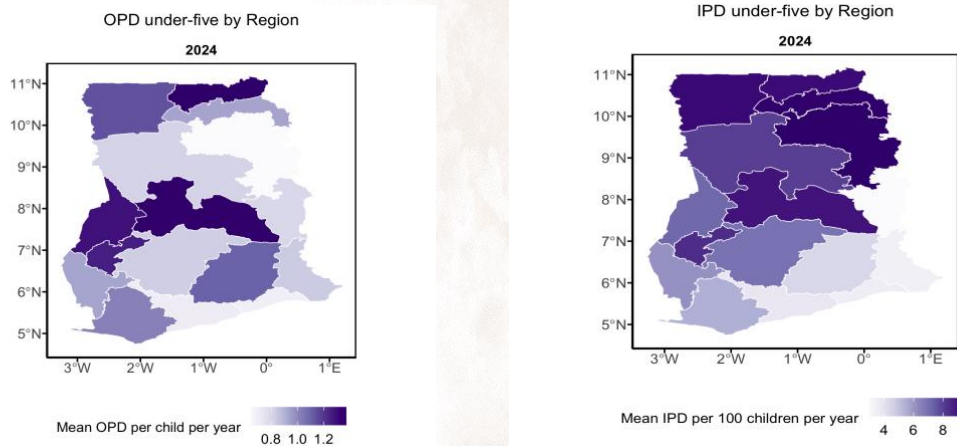
Outpatient services utilization



Interpretations

- About 15% of OPD visits were by children under 5 in 2024
- The proportion of under-5 OPD and IPD visits has been between 14% to 17% from 2020 to 2024
- The mean IPD visit per child under-5 increased sharply from 2020 to 2021, then remained relatively stable afterwards
- OPD attendance was particularly high in the middle belt, while IPD admissions were highest in the Northern Regions

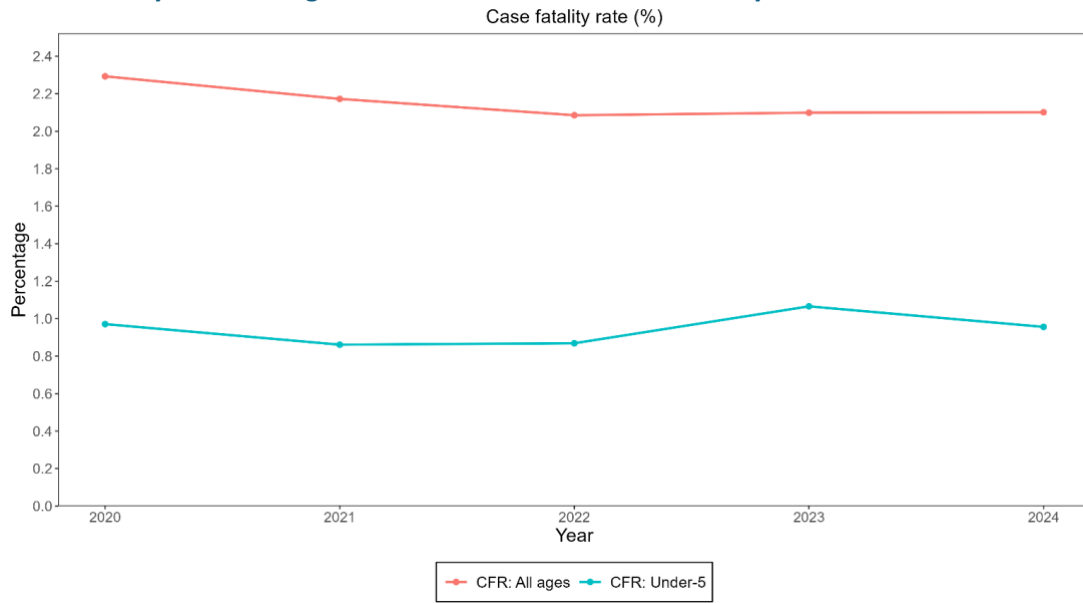
Regional/provincial service utilization



Interpretations

- The Upper East, Bono East and Bono regions had the highest OPD visits while the Greater Accra, Ashanti and Oti Regions had the lowest attendance
- The Northern, North-East and Upper West regions had the highest IPD admissions while the Greater Accra, Volta and Oti Regions had the lowest

Case Fatality Rate among Admissions for Children under five years



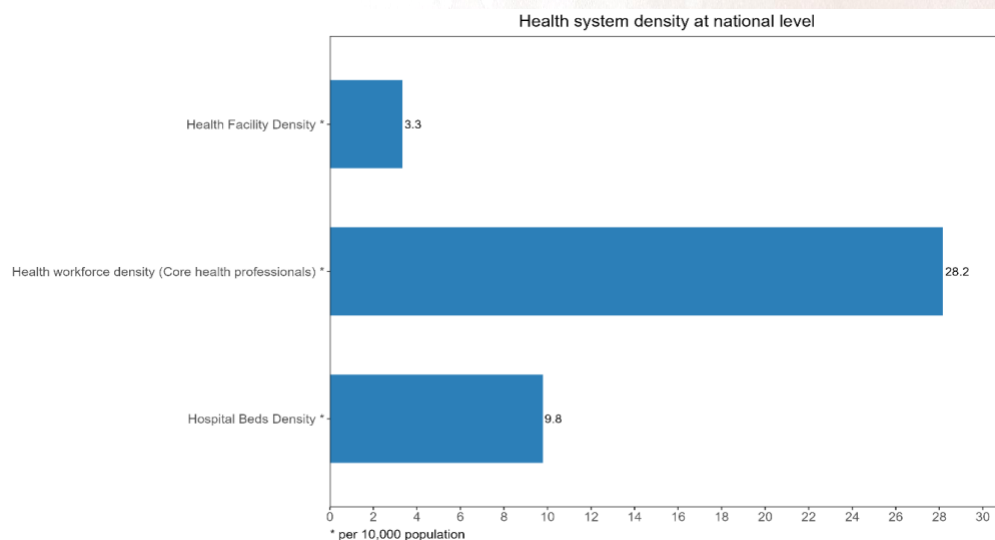
Interpretations

- The case fatality rate among under-5 admissions is about 0.8%
- This figure has stayed between 0.8 and 1.2% between 2020-2024

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Health system progress and performance

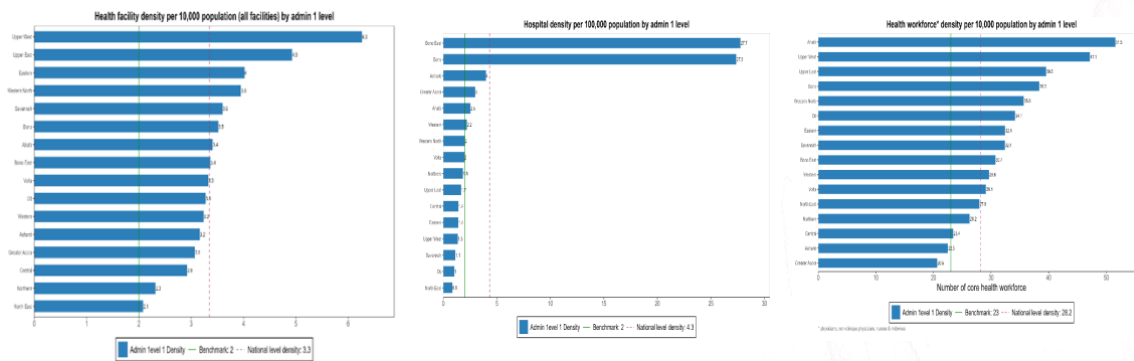
Health system inputs



Interpretations

- Data includes both public and private health facilities
- Health facility density, health workforce density meet the benchmark.
- There are insufficient beds to cater for the population

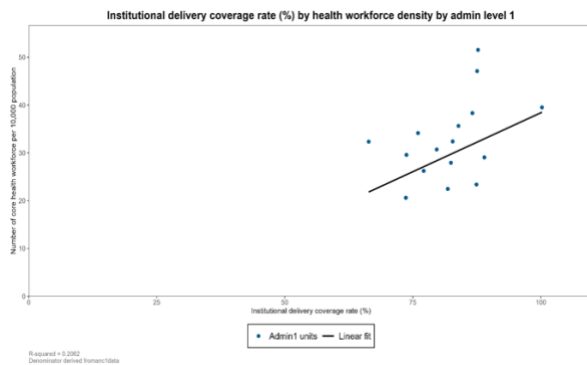
Health system inputs by province



Interpretations

- All regions were below the expected density benchmark with six below the national average. The national capital region is below the national average due to its high population but low service availability.
- All regions were above the population-facility density benchmark, but only 50% of regions met the hospital threshold.
- There is sufficient health workforce availability except in the two most populous regions.

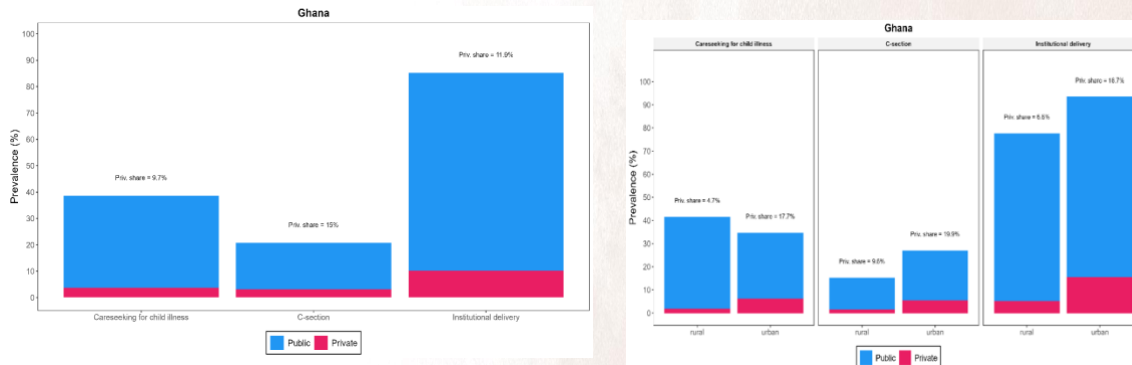
Health system outputs by inputs at the subnational level county



Interpretations

- The most developed and populated regions have the better health workforce which resulted in better outcomes.
- North East and Savannah are among the poor performing regions.

Private sector and RMNCAH service



Interpretations

- Institutional deliveries has the largest private share and careseeking for sick children was the lowest
- For all three indicators, private provision is higher in urban areas

Table of results (National)

	2010	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Antenatal Care indicators											
ANC early visit, first trimester of pregnancy											
Survey											
Facility data											
ANC 4 or more visits											
Survey											
Facility data											
Intermittent preventive therapy second dose (IPT2)											
Survey											
Facility data											
Maternal and newborn health indicators											
Institutional delivery											
Survey											
Facility data											
Caesarean section rate among all live births											
Survey											
Facility data											
Postnatal care within 48 hours											
Survey											
Facility data											
Low birth weight (< 2500 g) among institutional live births											
Survey											
Facility data											
Child Health Indicators - Immunization											
Immunization: three doses of DTP / pentavalent vaccine coverage											
Surveys											
Facility data											
UN estimates											
Measles vaccination (MCV1) coverage											

Surveys											
Facility data											
UN estimates											
Surveys											
Facility data											
UN estimates											
Family Planning											
Demand for modern methods satisfied											
Surveys											
FPET estimate											
Institutional Mortality											
MMR											
SBR											
NMR											
Curative Health service utilization for children under-five *											
N OPD visits per child per year											
N admissions per 100 children per year											

Selected denominator (Health Facility data):

Maternal indicators:

Child health indicators: