



INSTITUTIONAL DELIVERY AND QUALITY OF SERVICES IN ETHIOPIA: *Policy Brief*

Key Messages

- 1. Significant Increase in Institutional Deliveries, but Disparities Continue.** While Ethiopia has made progress, institutional delivery remains a critical gap—deep inequalities and regional disparities continue to leave the poorest and most remote mothers behind.
- 2. Availabilities of basic services related for safe delivery improved overtime.** To ensure high-quality, comprehensive maternal care nationwide, it is essential to fully equip and strengthen primary-level facilities, addressing existing gaps to achieve safer deliveries for all women.
- 3. Variations in facility readiness by facility type, location, and region.** To ensure equitable and safe deliveries nationwide, it is crucial to focus on strengthening facility readiness—particularly in underserved regions—by investing in workforce capacity, emergency transport, and essential supplies, regardless of where they give birth.

Background

Over the past two decades, Ethiopia has made substantial progress in improving access to reproductive, maternal, newborn, and child health (RMNCH) services. The quality of services during delivery continues to lag, posing a barrier to achieving better health outcomes.

Recognizing this challenge, the Federal Ministry of Health (FMOH) has implemented a range of strategies to improve safe delivery in health facilities, including expanding access through the Health Extension Program, providing free maternal health services, increasing skilled birth attendance, and strengthening referral systems with ambulances and maternity waiting homes. Community engagement, training of midwives, and policy frameworks like the HSTP-II and MDSR system have also played key roles in increasing facility-based deliveries and reducing maternal mortality (1–3).

In addition Ethiopia also has been implanting strategies such as reproductive health strategy, the HSTPI and save motherhood initiatives and the Sustainable Development Goals (SDG) 2030(4) for improving quality maternal health coverage and to address the health inequality gaps (5–7).

In support of these goals, the Ethiopia Countdown to 2030 initiative, led by the Health Systems Research Directorate at EPHI, conducted a study using data from the Ethiopia Demographic and Health Surveys (2000–2019)(8–12), the 2022 National Health Equity Survey(13), and the 2014 and 2021/22 ESPA health facility surveys(14,15) to assess the progress of the country for the last one decade.

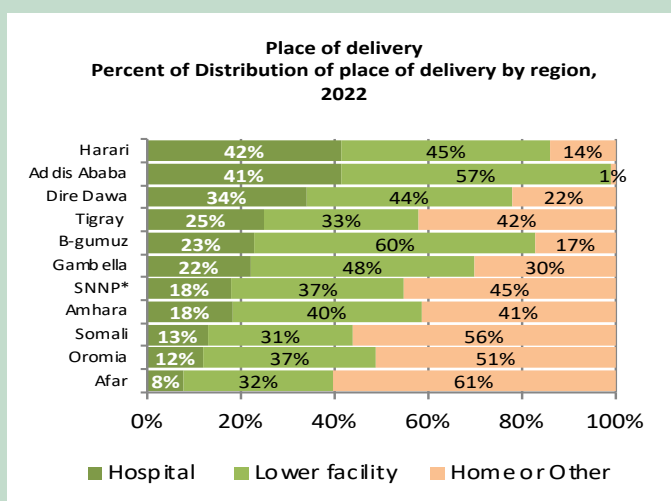
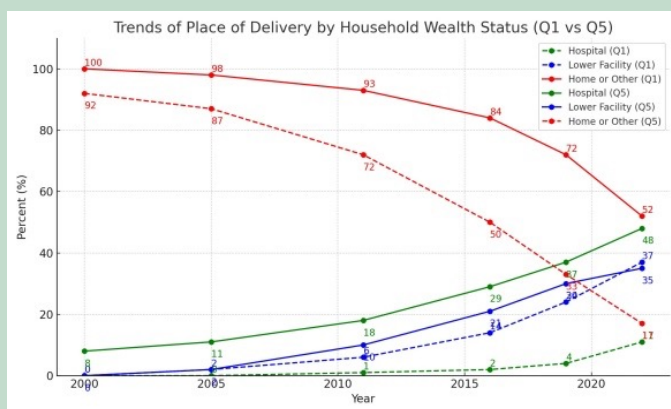
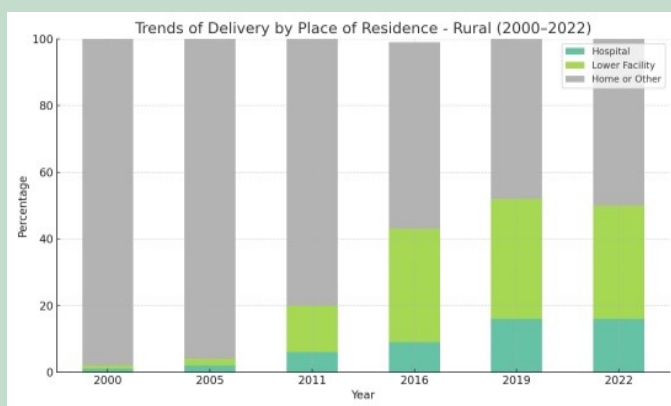
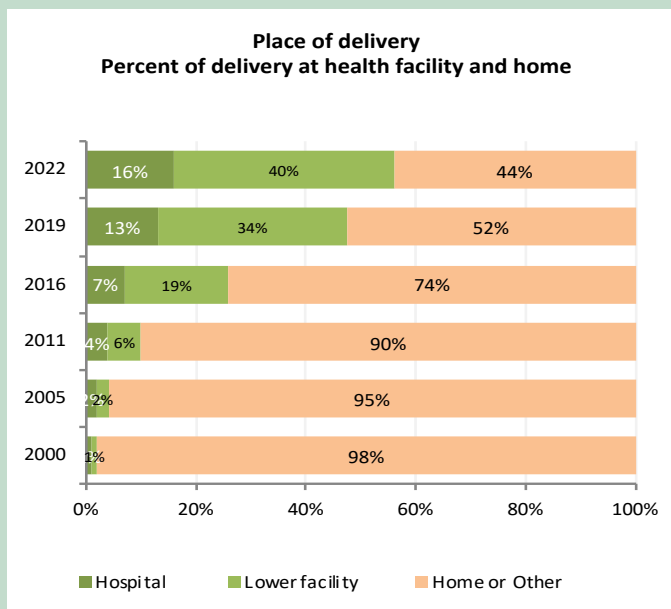
The study analyzed institutional delivery coverage trends, equity across regions and population groups, service readiness, and the quality of care delivered. It evaluates the quality of safe delivery using key indicators aligned with WHO standards and literatures(16,17),and inequalities overtime(18).

Findings from this study offer timely and actionable insights to guide policy, strategic planning, and program improvements in Ethiopia's maternal health sector. More information about the methods found on the report (link for the report).

Key Message 1: Significant Increase in Institutional Deliveries, but Disparities Continue.

While Ethiopia has made progress, institutional delivery remains a critical gap—deep inequalities and regional disparities continue to leave the poorest and most remote mothers behind.

- Significant Progress in Facility Births:** Between 2000 and 2022, the proportion of women delivering in health facilities increased significantly to 56%, while home deliveries decreased to 44%. Additionally, births assisted by skilled health providers rose to 59% from 2011 to 2022. The annual rate of increase (AARC) for skilled birth attendance is 17%, primarily driven by a 24% increase in rural areas and a 4% rise in urban areas, indicating improved access in underserved communities (Figure 1).
- High Volume of Facility Delivery in Lower-Level Health Facilities:** Many recent institutional births take place in health centers, which now account for 40% of deliveries. Hospitals contribute 16%. Although access to these facilities has improved, disparities across regions and communities remain significant. (Figure 1).
- Persistent Inequalities – the Mothers from the Poorest Household and Rural Residence Remained Behind.** In 2022, only 9% of women in rural areas delivered in hospitals, compared to 38% in urban areas. While the proportion of women in the poorest households delivering in health facilities increased from nearly zero in 2000 to 32% in 2022, substantial gaps still exist (Figure 3) and the poorest mothers faces major burden of home deliveries.
- Regional Differences Still a Continued Challenge:** There has been a remarkable progress in institutional deliveries across Ethiopian regions over the past two decades. Regions such as Addis Ababa, Harari, and Dire Dawa now have high rates of hospital deliveries. However, regions like Afar, Somali, Sidama, and Oromia still record over half of births occurring at home, reflecting uneven progress due to differences in healthcare infrastructure, as well as the impacts of the COVID-19 pandemic, conflicts, and security challenges (Figure 2).



Key Message 2: Availabilities of basic services related for safe delivery improved overtime:

Ethiopia has made significant progress in expanding emergency obstetric and newborn care, with notable increases in essential medicines and service coverage since 2014. Despite improvements, critical gaps remain, particularly at health centers where many births occur, as key signal functions like blood transfusion and cesarean sections are still severely limited. To ensure high-quality, comprehensive maternal care nationwide, it is essential to fully equip and strengthen primary-level facilities, addressing existing gaps to achieve safer deliveries for all women.

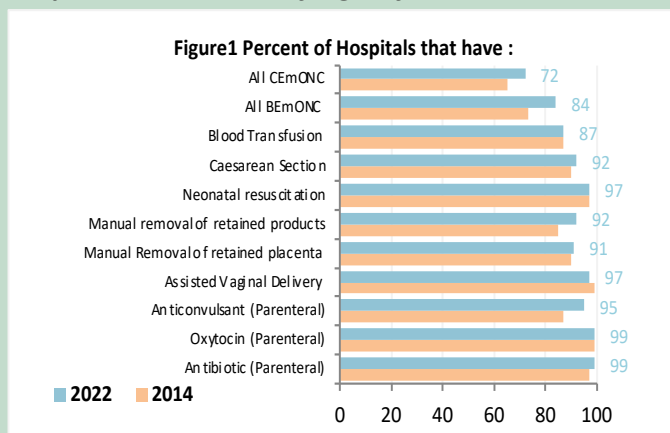
Improvements in Emergency Obstetric and Newborn Care (EmONC): Between 2014 and 2021/22, Ethiopia made significant progress in availing essential emergency services. Among facilities providing, delivery services, the availability of parenteral antibiotics increased from 63% to 89%, and oxytocin availability rose to 94%, and anticonvulsants increased from 20% to 61%. The coverage of all BmONC services nearly tripled, from 12% to 47%, with comprehensive EmONC services more than doubling from 3% to 8%, mainly in hospitals.

Recent assessments demonstrate notable progress in hospital quality of care for maternal health, with the availability of all BEmONC signal functions rising from 73% in 2014 to 84% in 2022, and all EmONC functions increasing from 65% to 72% over the same period. However, critical gaps persist, as blood transfusion and removal of retained products remain the least available signal functions in 2022, indicating the need for further strengthen maternal health services nationwide.

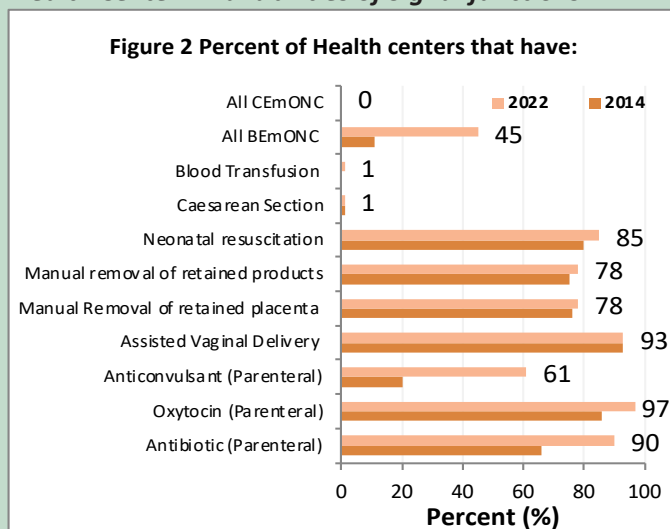
Most deliveries in Ethiopia occur at health centers, where delivery services tend to be of slightly lower quality compared to hospitals. Over time, the availability of essential signal functions has improved significantly; for instance, parenteral anticonvulsants increased from 20% to 61%, and parenteral antibiotics from 66% to 90%. Nine out of ten health centers provide assisted vaginal deliveries, and 78% offer manual removal of retained products or placenta. However, critical services such as blood transfusion and cesarean sections remain very limited, with availability at just 1% each, highlighting ongoing gaps in providing comprehensive emergency obstetric care at the primary level.

Consequently, only 45% of health centers offering delivery services have all the necessary BEmONC signal functions, while none possess the full range of CEmONC functions. This underscores the urgent need to fully equip and strengthen health centers to ensure they can deliver safe, quality maternal and newborn care, thereby closing critical gaps in emergency obstetric services at the primary level specifically the health center.

Hospital: Availabilities of Signal functions



Health Center: Availabilities of Signal functions



Key Message 3: Variations in Facility Readiness by Facility Type, Location, and Region

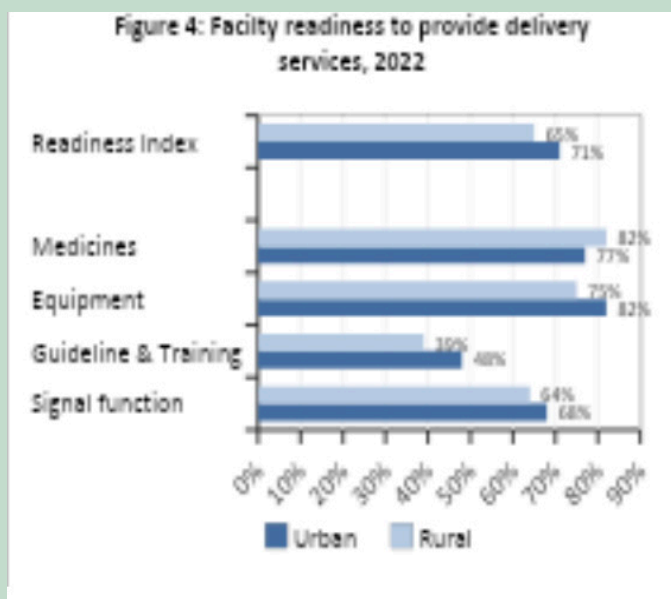
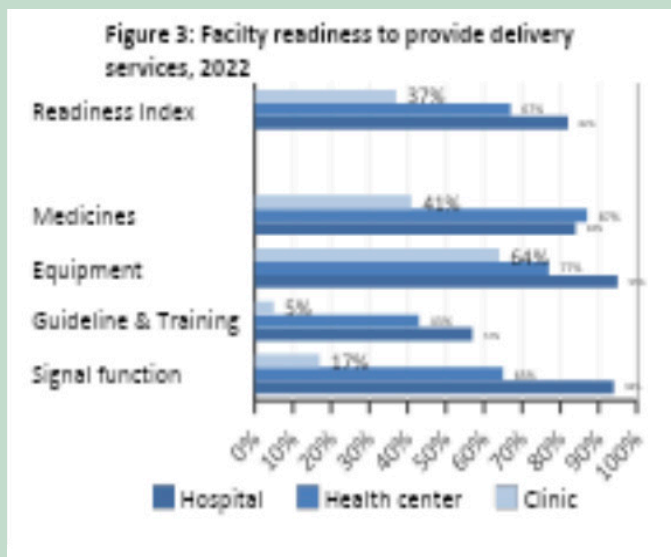
Most deliveries in Ethiopia occur at health centers, yet these facilities remain only moderately prepared—just 45% meet the full criteria for basic emergency obstetric care, and none offer comprehensive services. While overall readiness has improved, especially in public hospitals and health centers, critical gaps in essential supplies, trained staff, and lifesaving services like blood transfusion and C-sections persist, particularly in lower-level and private facilities, rural and low resource areas. To ensure equitable and safe deliveries nationwide, it is crucial to focus on strengthening facility readiness—particularly in underserved regions—by investing in workforce capacity, emergency transport, and essential supplies, regardless of where they give birth.

The critical challenges for providing safe deliveries are the availabilities of readiness domain such as equipment and supplies, medicines, trained staffs, and guidelines on delivery services. Ethiopia made massive progress on improving the delivery services for example sterilization equipment increased by 29%, examination lights by 71%, manual vacuum extractors by 122%, and vacuum aspirators by 106%. The availability of soap with running water or alcohol-based hand rub went up from 66% to 87%. The availability of medicines such as injectable antibiotics and magnesium sulphate increased sharply by 184% and 243%, respectively. However, the distribution of basic items were varied by facility type, managing authority, by urban rural, and by regions.

The availabilities of medicines used during delivery such as Antibiotic eye ointment for newborn Injectable uterotonic Injectable antibiotic Magnesium sulphate (injectable) Skin disinfectant Intravenous solution with infusion set also evaluated. On average, 83% of public facilities have the essential medicines used during delivery, compared to only 52% of private facilities. The availabilities also vary by facility level, 84% in hospital, 87% in health center, and 41% in clinic. Better availabilities of medicines overserved in rural area 82% compared to 77% in urban area.

The availabilities of trained staff and guidelines remained a challenge for providing delivery services. In 2022, only 45% of public facilities and 22% of private facilities have trained staff and the required guidelines, underscoring the critical need for capacity building. The availabilities of trained staff and guidelines were 57% in hospitals and nearly half of the facilities in urban area had trained personnel and guideline while nearly four in ten facilities in rural area had trained personnel and guideline.

Emergency Transport Needs Attention: Despite overall progress, the availability of emergency transport decreased by 10%, highlighting a critical gap that could hinder safe and timely deliveries.



Regional Variations in Readiness: Regional variation in health system readiness reveals significant disparities across Ethiopia, with most regions showing improvements over time. However, challenges remain, particularly in the availability of trained staff, guidelines, and signal functions. Pastoralist regions such as Afar, Somali, Gambella, and Benishangul-Gumuz have made notable gains in medicine availability, but deficiencies in equipment, trained personnel, and guidelines persist. In 2021/22, regions like SNNP, Sidama, and Oromia reported low service readiness, whereas Addis Ababa, Harari, and Benishangul-Gumuz demonstrated higher scores (Table 1). To address these gaps, it is essential to increase investments in emergency transportation, essential medicines, blood transfusion services, and capacity for cesarean sections, ensuring equitable access to quality maternal health services across all regions.

Skilled birth attendance (SBA) coverage has substantially increased nationwide, with an average annual growth of 17% over the past decade. Rural areas experienced even more rapid progress, with annual increases of 24%. In 2022, SBA coverage ranged from 45% in Afar and Somali to nearly universal levels—99% in Addis Ababa and 94%

in Harari. Regions with better service readiness, such as Benishangul-Gumuz (78% readiness and 84% coverage) and Addis Ababa (77% readiness and 99% coverage), demonstrate a strong linkage between infrastructure for delivery care and higher coverage rates. Conversely, regions with lower health system preparedness continue to lag in SBA coverage, emphasizing the urgent need to strengthen facility readiness and ensure equitable access to maternal health services across the country.

Table 1: Distribution of domain score and readiness index of facilities to provide safe delivery by regions 2014 & 2021/22

	Coverage of SBA			Facility readiness, 2022				
	2011	2022	AAR C (%)	Signal Function	Guideline & Training	Equipment	Medicine	Readiness index
Tigray	13	60	16	ND	ND	ND	ND	
Afar	7	45	19	47	60	69	72	62
Amhara	11	62	19	71	48	83	91	73
Oromia	9	51	18	65	34	79	81	66
Somali	8	46	16	65	55	68	78	66
Benishangul-Gumuz	10	84	22	54	88	82	87	78
SNNP	7	58	21	64	44	72	72	63
Gambela	28	77	10	62	62	75	78	70
Harari	33	94	10	66	63	91	74	73
Addis Ababa	84	99	1	63	53	86	69	77
Dire Dawa	41	80	6	61	39	90	86	69
Sidama				64	39	72	73	62
Urban	52	87	4	68	48	82	77	71
Rural	5	48	24	64	39	75	82	65
National	11	59	17	65	43	78	80	67

Call to Action

Accelerate equitable investments and systemic improvements in maternal health services to ensure every woman, regardless of location or socio-economic status, has access to safe, quality delivery care.

- **Enhance healthcare infrastructure and workforce capacity** in underserved regions, focusing on expanding facility readiness, equipping lower-level facilities, and training health personnel.
- **Strengthen referral and emergency transport systems** to facilitate timely access to higher-level care, especially in areas with persistent disparities.
- **Implement targeted policies** to improve the availability of essential medicines, equipment, and clinical guidelines across all facility types and regions, prioritizing underserved and vulnerable populations.
- **Promote community engagement and service utilization** in high home birth areas through education and outreach, reinforcing the importance of facility-based deliveries.

Potential Policy Impacts

- **Reduced Maternal and Neonatal Mortality:** By improving facility readiness, skills, and access, Ethiopia can significantly decrease deaths related to childbirth complications.
- **Health Equity and Universal Coverage:** Addressing regional and socio-economic disparities will ensure that all women benefit from quality maternal health services, supporting Ethiopia's progress toward universal health coverage.
- **Strengthened Health System Resilience:** Investing in infrastructure, supply chains, and workforce capacity will build a more resilient health system capable of managing ongoing challenges like pandemics, conflicts, and climate shocks.
- **Enhanced Data-Driven Decision-Making:** Continuous monitoring and targeted investments based on regional and facility-level data will facilitate more effective resource allocation and strategic planning.

Policy Recommendation and Implications:

- **Strengthen Health System Capacity:** Develop targeted programs to increase the availability of trained personnel, clinical guidelines, and essential medicines across all facility types, ensuring consistent quality of care.
- **Prioritize Health Center Upgrading:** Given the reliance on health centers for delivery services, policies must prioritize upgrading these facilities to meet minimum standards for safe delivery. Health centers, especially those in underserved areas, need tailored support based on their specific needs and resource gaps. This includes infrastructure, equipment, staffing, and essential supplies.
- **Enhance Emergency Referral and Transport Systems:** Expand and improve emergency transportation services to ensure timely access to higher-level facilities, especially in remote and underserved areas.
- **Targeted Resource Allocation:** Regions with consistently low readiness to provide delivery services (e.g., SNNP, Sidama, Oromia) require prioritized resource allocation to address critical gaps in infrastructure, equipment, and training for staffs.
- **Workforce Development:** Addressing the shortage of trained staff and adherence to guidelines, particularly in regions like Oromia, Dire Dawa, Sidama, Amhara, and SNNP, is crucial for improving overall service quality. Implement robust supervision and mentorship programs for health center staff, with regular visits from experienced professionals to provide guidance and support.
- **Infrastructure Investment:** Investment in emergency transportation, essential medications, and access to comprehensive emergency obstetric care (CEmOC) services (blood transfusions, C-sections) is essential for improving readiness in underprepared facilities.
- **Public-Private Partnerships:** Explore public-private partnerships to leverage resources and expertise for improving infrastructure, service delivery, and workforce development in underserved regions.
- **Promote Demand Generation and Service Utilization:** Targeted interventions are needed to promote the utilization of facility-based delivery services in regions with high rates of home births (e.g., Afar, Somali, Oromia, Sidama).
- **Data-Driven Decision Making:** Regular monitoring and evaluation of regional readiness scores are necessary to track progress, identify emerging challenges, and inform evidence-based policy decisions. Establish robust mechanisms for continuous assessment of facility readiness, service quality, and equity to inform adaptive policy interventions.

Box1 Readiness of facility estimation: Four domains used - Domain one obstetric signal functions consists of nine indicators (Antibiotic –parenteral, Oxytocic –parenteral, Anticonvulsant –parenteral, Assisted vaginal delivery, Manual removal of placenta, Manual removal of retained products, Neonatal resuscitation, Caesarean section, Blood transfusion); Domain Two, focusing on staff and guidelines, contains two indicators; Domain Three, which addresses equipment and supplies (Emergency Transport , Sterilization equipment, Examination light, Delivery pack, Suction apparatus, Manual vacuum extractor, Vacuum aspirator or D&C kit, Neonatal mask and bag, Delivery bed, Partograph, Glove, Infant weighting scale, Blood pressure apparatus, Soap & running water or alcohol based hand rub); and Domain Four, related to medicines and commodities (Eye ointment-antibiotic Injectable antibiotic, Injectable urotonic, Magnesium sulphate, Intravenous solution with infusion set, Skin disinfectant, Chlorhexidine (4%)). In 2014, there were 571 facilities, including 200 hospitals, 286 health centers, and 85 clinics. By 2021/22, there were 645 facilities, comprising 366 hospitals, 262 health centers, and only 17 clinics included in this analysis.

References

1. MOH. Health Sector Medium Term Development and Investment Plan. 2023;(June):2016–8.
2. MoH. Health Sector Transformation Plan II: HSTP II (2020/21-2024/25). 2021;
3. MOH. National Health Equity Strategic Plan 2020/21-2024/25. 2020;1–84.
4. UN. The 2030 Agenda for Sustainable Development’s 17 Sustainable Development Goals (SDGs). Available from: [https://unpartnerships.un.org/sites/default/files/publications/2024-01/SDG Briefing Book_2023.pdf](https://unpartnerships.un.org/sites/default/files/publications/2024-01/SDG_Briefing_Book_2023.pdf)
5. Ethiopian Ministry of Health. Reproductive health Strategy (2021-2025). 2021;
6. MOH. National Healthcare Quality and Safety Strategy (NQSS) 2021-2025. 2021;b.
7. Ethiopian Public Health Institute /Ministry of Health (Ethiopia)PHI/MoH. National Health Equity Survey 2022/23. Addis Ababa; 2024.
8. CSA/Macro. Ethiopia Demographic and Health Survey 2000. Addis Ababa, Ethiopia and Calverton, Maryland: Central Statistical Authority and ORC Macro. 2001.
9. Central Statistical Agency [Ethiopia] and ORC Macro. 2006. Ethiopia Demographic and Health Survey 2005. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ORC Macro. Heal San Fr [Internet]. 2006;(September):[446]. Available from: <http://www.measuredhs.com/pubs/pdf/FR179/FR179.pdf>
10. CSA/ICF. Ethiopia Demographic and Health Survey 2016. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ICF International. 2016.
11. EPHI/ICF. Ethiopia Mini Demographic and Health Survey 2019: Final Report. Rockville, Maryland, USA: EPHI and ICF. 2021.
12. Central Statistical Agency [Ethiopia] and ICF International. 2012. Ethiopia Demographic and Health Survey 2011. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ICF International. Vol. 02. 2011.
13. EPHI and MOH. National Health Equity Survey 2022/23: Final Report. [Internet]. Addis Ababa Ethiopia; 2024. Available from: chrome-extension://ehhttps://ephi.gov.et/wp-content/uploads/2025/04/NHES2022_23_ETHfinalreport_I_azHSRDEPHI.pdf
14. EPHI. Ethiopia Service Provision Assessment Plus (SPA+) Survey. 2014;
15. Ethiopian Public Health Institute. Service Provision Assessment 2021–22. retrieved from <https://dhsprogram.com/pubs/pdf/SPA36/SPA36.pdf>. 2023;
16. WHO. Service Availability and Readiness Assessment (SARA): An annual monitoring system for service delivery - Reference Manual, Version 2.2. Heal Stat Inf Syst [Internet]. 2015;175. Available from: https://apps.who.int/iris/bitstream/handle/10665/149025/WHO_HIS_HSI_2014.5_eng.pdf
17. Riese S, Assaf S, Pullum T. Measurement Approaches for Effective Coverage Estimation. DHS Methodological Reports No. 31. 2021.
18. World Health Organization (WHO)(b). Handbook on Health Inequality Monitoring: with a special focus on low- and middle-income countries. World Health Organization. 2013.