

Endline Evaluation of Optimizing Care for Newborns and Children in Afar and Benishangul- Gumuz, Ethiopia Project January 2022 - June 2025



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Final Evaluation Report

UNICEF Ethiopia

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Acronyms

ACT	Artemisinin-based Combination Therapy
AMTSL	Active Management of the Third Stage of Labour
ANC	Antenatal Care
ANC4+	Antenatal Care, 4 or more visits
BEmONC	Basic Emergency Obstetric and Newborn Care
CBCM	Catchment-Based Clinical Mentorship
CBNC	Community-Based Newborn Care
CEA	Cost-Effectiveness Analysis
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CEI	Client Exit Interview
CEmONC	Comprehensive Emergency Obstetric and Newborn Care
CHIS	Community Health Information System
CPAP	Continuous Positive Airway Pressure
CPD	Country Programme Document
CRPD	Convention on the Rights of Persons with Disabilities
CRVS	Civil Registration and Vital Statistics
DHIS2	District Health Information System
DHS	Demographic and Health Survey
DIPAS	Disability Inclusion Policy and Strategy
DSS	Demographic Surveillance Sites
eCHIS	Electronic Community Health Information System
EDHS	Ethiopian Demographic and Health Survey
EMDHS	Ethiopia Mini Demographic and Health Survey
ENAP	Every Newborn Action Plan
ENC	Essential Newborn Care
EQ	Evaluation Question
EPSA	Ethiopian Pharmaceutical Supply Agency
ERG	Evaluation Reference Group
FGD	Focus Group Discussion
FMoH	Federal Ministry of Health
GBV	Gender-Based Violence
GEROS	Global Evaluation Report Oversight System
GoE	Government of Ethiopia
HCW	Health Care Worker
HEP	Health Extension Programme
HEW	Health Extension Worker
HFA	Health Facility Assessment
HIV	Human Immunodeficiency Virus
HML IRB	Health Media Lab Institutional Review Board
HR	Human Resource
HRBA	Human Rights-Based Approach
HRH	Human Resources for Health
HSDIP	Health System Development and Investment Plan
HSTP-II	Health Sector Transformation Plan II
iCCM	Integrated Community Case Management
ICER	Incremental Cost-Effectiveness Ratio
IDP	Internally Displaced Person
IMNCI	Integrated Management of Neonatal and Childhood Illness
IMR	Infant Mortality Rate

IPC	Infection Prevention and Control
IPLS	Integrated Pharmaceutical Logistics System
IPTp	Intermittent Preventative Treatment of Malaria in Pregnancy
KAP	Knowledge, Attitudes and Practices
KII	Key Informant Interview
KMC	Kangaroo Mother Care
KOICA	Korea International Cooperation Agency
LNOB	Leave No One Behind
LQAS	Lot Quality Assurance Sampling
MHNT	Mobile Health and Nutrition Team
MMR	Maternal Mortality Rate
MNCH	Maternal, Newborn and Child Health
MoFH	Ministry of Federal Health
MoWSA	Ministry of Women and Social Affairs
MPDSR	Maternal and Perinatal Death Surveillance and Response
NASG	Non-Pneumatic Anti-Shock Garment
NBC	Newborn Corners
NGO	Non-Governmental Organizations
NICU	Neonatal Intensive Care Unit
NMR	Neonatal Mortality Rate
O&M	Operation and Maintenance
OECD-DAC	Organization for Economic Co-operation and Development-Development Assistance Committee
PHCU	Primary Health Care Unit
PNC	Postnatal Care
PPE	Personal Protective Equipment
PPH	Post-Partum Hemorrhage
PRCMM	Performance Review and Clinical Mentoring Meeting
PSEA	Prevention of Sexual Exploitation and Abuse
QI	Quality Improvement
RFW	Results Framework
RHB	Regional Health Bureau
RMNCH	Reproductive Maternal, Newborn and Child Health
RWP	Rolling Work Plan
SBA	Skilled Birth Attendance
SBC	Social and Behaviour Change
SDG	Sustainable Development Goal
SGBV	Sexual and Gender-Based Violence
SOS	Special Outreach Services
SRH	Sexual and Reproductive Health
TAC	Technical Advisory Committee
ToC	Theory of Change
TWG	Technical Working Group
U5	Under-Five
U5MR	U5 Mortality Rate
UNDIS	United Nations Disability Inclusion Strategy
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation and Hygiene
WDA	Women's Development Army
WDG	Women's Development Group

WFP	World Food Programme
WHO	World Health Organization

Glossary of Key Terms

Term	Description
Accountability	The obligation of implementing agencies and government partners to demonstrate results, transparency and responsible use of resources to KOICA, UNICEF, national authorities and affected communities.
Antenatal Care (ANC)	Routine care provided to pregnant women to monitor health, identify risks and promote safe delivery; ANC4+ refers to four or more visits during pregnancy.
Baseline	The initial status or value of indicators at the start of the project, used as a reference point to measure progress or change.
Basic Emergency Obstetric and Newborn Care (BEmONC)	A package of seven life-saving clinical functions provided at the health centre level, including labour management, assisted delivery and newborn resuscitation.
Catchment-Based Clinical Mentorship (CBCM)	A structured, on-site support system in which higher-level clinicians mentor providers in peripheral facilities to improve quality of care and protocol adherence.
Comprehensive Emergency Obstetric and Newborn Care (CEmONC)	A package of nine life-saving clinical functions provided at hospital level, encompassing all BEmONC signal functions in addition to surgical obstetric care (caesarean section) and safe blood transfusion, to manage severe maternal and newborn complications and reduce mortality.
Client Exit Interview (CEI)	A quantitative method that captures client experience, satisfaction, access barriers and perceived quality immediately after service use.
Clinical Readiness	The extent to which facilities have the required staff, medicines, equipment, space and protocols to deliver maternal, newborn and child health (MNCH) services safely and effectively.
Community Health Information System (CHIS)	A community-level system, led by health extension workers (HEWs), for tracking pregnancies, births, referrals and health behaviours within kebeles.
Continuum of Care	A framework linking pregnancy, childbirth, postnatal and child health services across home, community, primary and referral levels.
Coherence	An OECD-DAC criterion assessing alignment and complementarity with government policies, partners and other interventions in the same context.
Color-Coded Referral Vouchers	A standardised referral tool using different colours to categorise urgency and type of referral, enabling rapid identification, prioritisation, and tracking of maternal, newborn, and child health cases across levels of care, particularly in low-literacy and emergency settings.
Cost-Effectiveness Analysis (CEA)	A method comparing the relative costs and results of different delivery modalities (e.g., off-site training vs. on-site mentorship; outreach vs. mobile health and nutrition teams (MHNTs)).
Disability Inclusion	Ensuring persons with disabilities have equitable access to maternal, newborn and child health (MNCH) services through adapted infrastructure, communication and monitoring systems.
Effectiveness	The extent to which the project achieved its intended outputs, outcomes and contributions to improved maternal, newborn and child health (MNCH) practices and survival.

Efficiency	The degree to which financial, human and operational resources were converted into outputs and results with minimal waste.
Emergency Obstetric and Newborn Care (EmONC)	A package of life-saving interventions required to manage obstetric and newborn emergencies; includes emergency obstetric and newborn care (BEmONC) and comprehensive emergency obstetric and newborn care (CEmONC).
Evaluation Reference Group (ERG)	A multi-stakeholder group providing oversight, technical guidance and quality assurance throughout the evaluation process.
Focus Group Discussion (FGD)	A qualitative data collection method engaging groups of participants (e.g., women, health extension workers (HEWs), Women's Development Army (WDAs) to explore views and experiences.
Health Extension Programme (HEP)	Ethiopia's community health system delivered by trained health extension workers (HEWs) to improve access to essential services.
Health Facility Assessment (HFA)	A structured assessment of service readiness, clinical quality, infrastructure, supplies and workforce capability.
Human Resources for Health (HRH)	The workforce required to deliver maternal, newborn and child health (MNCH) services, including midwives, nurses, health extension workers (HEWs), clinicians and mentors.
Impact	Long-term and broader changes, intended or unintended, to which the project plausibly contributed, such as improved survival and strengthened systems.
Inclusiveness/Equity	The principle that all population groups (e.g., pastoralist communities, women, adolescents and persons with disabilities) should benefit from services without discrimination.
Infant Mortality Raate	It refers to the number of deaths of infants under one year of age per 1,000 live births in a given year and is a key indicator of population health and health system performance.
Integrated Management of Newborn and Childhood Illness (IMNCI)	A clinical approach for managing under-five (U5) illnesses at health centres and health posts.
Kangaroo Mother Care (KMC)	A high-impact newborn care practice involving skin-to-skin contact and breastfeeding support to stabilize low-birthweight babies.
Key Informant Interview (KII)	An in-depth, semi-structured interview with individuals who have expert knowledge of programme implementation or context.
Leave No One Behind (LNOB)	A commitment to ensuring equitable access for the most marginalized groups, central to maternal, newborn and child health (MNCH) programming.
Maternal, Newborn and Child Health (MNCH)	Services supporting safe pregnancy, childbirth, postnatal care and newborn survival.
Mentorship	A structured, facility-based coaching approach designed to improve clinical skills, quality of care and adherence to protocols.
Mobile Health and Nutrition Team (MHNT)	Mobile outreach teams providing maternal, newborn and child health (MNCH) and child health services in remote pastoralist areas lacking fixed facilities.
Neonatal Intensive Care Unit (NICU)	A specialized hospital unit providing critical care for newborns with complications.
Outcome	Medium-term changes in behaviour, practice or system performance resulting from project outputs.
Output	Immediate products or services delivered by the project, such as trained staff, equipped facilities or mentorship sessions.
Pastoralist Communities	Mobile or semi-nomadic populations in Afar with unique health-access challenges requiring adaptive outreach models.

Postnatal Care (PNC)	Essential care provided to mothers and newborns in the first 48 hours after birth, a critical period for survival.
Quality Improvement (QI)	A structured process using data, mentorship and problem-solving to improve clinical practices and service delivery.
Referral System	A coordinated mechanism linking community, primary and hospital services to ensure timely management of maternal and newborn emergencies.
Relevance	The degree to which an intervention responds to the needs of target communities and aligns with national maternal, newborn and child Health (MNCH) priorities.
Resilience	The ability of systems, facilities and communities to maintain maternal, newborn and child health (MNCH) services during shocks such as conflict, displacement and climate extremes.
Rolling Work Plan (RWP)	UNICEF's annual operational plan with the government, outlining activities, budgets and responsibilities.
Sustainability	The likelihood that project benefits and strengthened systems will continue after external funding ends.
Theory of Change (ToC)	A model describing how project interventions are expected to produce outputs, outcomes and impact under defined assumptions.
United Nations Evaluation Group (UNEG) Standards	UNEG principles guiding credible, ethical and methodologically sound evaluation practice.
Woreda, Kebele and Kililoch	Woreda: An administrative district in Ethiopia, responsible for planning, supervision and delivery of primary health services. Kebele: The lowest administrative unit in Ethiopia, equivalent to a ward or village, responsible for local administration and community-level service delivery. Kililoch: The plural of kilil, referring to regional states in Ethiopia. Kililoch constitute the highest sub-national administrative level, each with its own regional government.

Executive Summary

Overview and Key Messages

This endline evaluation report presents the findings, conclusions and lessons learned from the independent summative evaluation of the Korea International Cooperation Agency (KOICA)-funded UNICEF Ethiopia project, Optimizing Care for Newborns and Children in Afar and Benishangul-Gumuz, implemented from May 2020 to June 2025. The evaluation was commissioned by UNICEF and found that the project substantially improved maternal, newborn and child health (MNCH) service readiness, quality and utilization, particularly at hospitals and better-functioning health centres. Gains were strongest where staffing stability, supply availability and supervision were reliable. However, equity, sustainability and last-mile service continuity remain fragile in remote pastoralist and conflict-affected areas. To sustain and scale results, MNCH investments must prioritize operational financing, referral systems, risk-informed planning and the institutionalization of inclusion within government systems.

Introduction

The KOICA-funded Optimising Care for Newborns and Children in Afar and Benishangul-Gumuz, Ethiopia project, was implemented by UNICEF Ethiopia in partnership with the Federal Ministry of Health (FMoH), regional health bureaus (RHBs), Emory University and woreda administrations. The project addressed persistently high neonatal and under-five (U5) mortality in two underserved regions (Afar and Benishangul-Gumuz) by strengthening service readiness, provider capability, referral performance, governance and community engagement across hospitals, health centres and health posts. Five interlinked components shaped the intervention: clinical mentoring and in-service training; community engagement through health extension platforms; improved availability of essential MNCH commodities and equipment; strengthened woreda-level planning, supervision and monitoring; and reinforced data, reporting and review mechanisms. Implementation required continuous adaptation to insecurity, population mobility, displacement and workforce shortages. This endline evaluation was commissioned by UNICEF Ethiopia to inform decisions on sustainability, scale-up and future MNCH system-strengthening investments, while ensuring accountability to KOICA, government partners and affected communities. The evaluation took place from May to October 2025 and assesses performance against Organization for Economic Co-operation and Development-Development Assistance Committee (OECD-DAC) criteria and United Nations Evaluation Group (UNEG) standards, with attention to equity, gender, disability inclusion and human rights-based approaches (HRBA).

Purpose, Objectives, Scope and Usage

The evaluation assessed project performance across OECD-DAC criteria (i.e., relevance, coherence, effectiveness, efficiency, sustainability and impact) while integrating cross-cutting dimensions of gender equality, disability inclusion, equity and climate vulnerability. The evaluation's primary purpose was to provide accountability to KOICA, UNICEF and the Government of Ethiopia (GoE), and to inform decisions on continuation, adaptation and future design of MNCH system-strengthening interventions in fragile and pastoralist contexts. The evaluation covered the full implementation period (May 2020-June 2025) across thirty-four woredas in Afar and Benishangul-Gumuz, including remote and conflict-affected areas, and aimed to inform policy, programming and delivery models within Ethiopia's health sector transformation agenda. Evaluation findings will guide KOICA's strategic investment decisions and UNICEF Ethiopia's senior management in refining MNCH

programming. Federal, regional and woreda authorities will use the results to strengthen planning, supervision, financing and accountability mechanisms. Implementing partners, including Emory University, will apply lessons to improve mentorship and capacity-building models. The evaluation also contributes to broader learning on equitable MNCH system strengthening in high-vulnerability settings.

Design, Methodology, Limitations and Ethical Considerations

A theory-based mixed-methods approach, grounded in a reconstructed Theory of Change (ToC), guided the evaluation. Quantitative evidence was drawn from facility assessments and client exit interviews (CEIs), complemented by qualitative key informant interviews (KIIs), focus group discussions (FGDs), case studies and cost-effectiveness analysis. Extensive document review supported triangulation across service readiness, quality, utilization and system performance. Ethical standards aligned with UNEG requirements were applied throughout, including informed consent, safeguarding and quality assurance procedures. Incomplete baseline data, insecurity-related access constraints, and high staff turnover limited measurement of quantitative change and reduce certainty around attribution and population-level impact. The findings should therefore be interpreted with caution, despite mitigation measures including adaptive sampling, triangulation and use of standardized national data sources. The evaluation was conducted in full compliance with UNICEF's Ethical Standards by applying transparency, confidentiality and anonymity and disclosing limitations openly. Also, the principles of integrity, respect, beneficence and accountability guided all stages of the process. Ethical approval was received from the Health and Media Lab (an independent IRB) through their certificate 2980.

Key Findings

Relevance: The project demonstrated strong alignment with Ethiopia's national MNCH priorities and responded directly to documented service gaps and vulnerability profiles in Afar and Benishangul-Gumuz. High levels of client satisfaction indicate that services were perceived as appropriate and responsive to community needs. The ToC was appropriate though dependent on assumptions (i.e., staff stability) and consistent supplies and reliable access were only partly realized. However, gaps in baseline data and limited disaggregation of routine monitoring constrained adaptive management, particularly for equity-focused decision-making. Integration of equity considerations for pastoralist households, persons with disabilities and residents of remote settlements was uneven across implementation areas.

Coherence: Strategic coherence with government policies, sector strategies and UNICEF's systems-strengthening approach was strong, enabling harmonized planning, supervision and review processes across levels of the health system. Coordination mechanisms functioned more effectively in Benishangul-Gumuz, where partner stability and staffing continuity supported alignment. In Afar, insecurity, population mobility and high staff turnover constrained operational coherence and continuity. Cross-sectoral collaboration with water, sanitation and hygiene (WASH), nutrition and sexual and gender-based violence (SGBV) services remained limited, reducing the project's ability to address structural determinants of MNCH outcomes.

Efficiency: The project used resources efficiently under highly challenging conditions, supported by adaptive reprogramming in response to COVID-19, insecurity and implementation delays. Cost-effective modalities such as off-site training and health centre outreach enabled scale and continuity, while more resource-intensive approaches were essential for reaching hard-to-access populations. Nonetheless, persistent underfunding of transport, operation and maintenance (O&M) budgets, and recurrent supply disruptions increased unit costs and introduced equity risks, particularly at the health post level. Output-focused monitoring further limited real-time efficiency analysis.

Effectiveness: The project demonstrated strong effectiveness in improving MNCH service availability, quality and utilization across Afar and Benishangul-Gumuz. By endline, 100 per cent of supported hospitals provided comprehensive emergency obstetric and newborn care (CEmONC),

with functional neonatal intensive care units (NICUs) upgraded, while nearly 80 per cent of health centres delivered the full basic emergency obstetric and newborn care (BEmONC) signal functions, compared with very low baseline coverage. Newborn corners (NBC) became universal in hospitals and expanded substantially in health centres. Service utilization improved, with skilled birth attendance (SBA) increasing to approximately 73 per cent, exceeding the target of 60 per cent, and high client-reported access and acceptability (95 per cent received intended services and 98 per cent reported satisfaction). Quality gains were driven by training and mentorship, with strong protocol adherence at hospital level (100 per cent in NICUs) and health centres (around 79 per cent for delivery care). Effectiveness was highest where staffing, infrastructure and supplies were stable, particularly in Benishangul-Gumuz and Afar Zone 1, but remained uneven for remote and mobile populations due to stock-outs, transport gaps, weak WASH and workforce turnover, highlighting persistent equity and last-mile constraints. Infection prevention and control (IPC) was also weak in some areas however, IPC was not part of project interventions.

Sustainability: The project strengthened institutional foundations at hospitals and better-functioning health centres, embedding quality improvement processes, mentorship routines and data-use practices within government systems. Community platforms also contributed to local ownership. However, sustainability at lower service levels remains fragile due to unfunded recurrent costs, weak supply-chain resilience and persistent frontline staff turnover. Outreach continuity in pastoralist areas is particularly vulnerable following the scaling down of externally supported modalities. Without predictable operational financing and strengthened last-mile systems, sustainability risks remain high, especially in remote and high-vulnerability settings.

Impact: The project plausibly contributed to improved maternal and newborn outcomes, including reductions in NICU mortality and improved stabilization and referral of high-risk cases. These gains are consistent with strengthened service readiness, clinical capacity and increased facility-based care. However, population-level impact could not be verified due to the absence of recent Ethiopian Demographic and Health Survey (EDHS) data or complete civil registration and vital statistics (CRVS) data. Beyond health outcomes, the project contributed to strengthened system capacities in workforce skills, quality improvement, data use and community-facility linkages. The evaluation demonstrates credible contribution to outcomes, but population-level impact cannot be conclusively established.

Cross-Cutting Issues: Gender-responsive practices improved service experience, including respectful maternity care, enhanced counselling and engagement of female community volunteers. Some disability-inclusive adaptations and adolescent-friendly approaches were introduced, but these were not systematic. Inclusion of adolescents, persons with disabilities and survivors of SGBV remained inconsistent across locations. A HRBA, gender and equity considerations were partially integrated but not fully institutionalized in design, monitoring or accountability mechanisms. Equity and inclusion therefore remain critical.

Conclusions

The project delivered a coherent MNCH package that improved service availability, readiness and utilization across two high-vulnerability regions, with measurable gains in antenatal care (ANC), delivery, newborn care and referral performance, particularly at hospitals and better-functioning health centres. However, results were inconsistent and fragile due to stock-outs, transport gaps, weak frontline infrastructure, staffing turnover and incomplete inclusion measures; findings should therefore be interpreted with caution given data and access limitations. From a human rights and equity perspective, the project improved availability and acceptability of MNCH services for women, newborns, and pastoralist and displaced populations. Nevertheless, a HRBA, gender equality, disability inclusion and Leave No One Behind (LNOB) commitments were only partially institutionalised, resulting in inconsistent reach to adolescents, persons with disabilities and survivors of SGBV, and variable equity outcomes. Sustainability risks are highest in remote pastoralist areas due to unfunded recurrent costs. Without institutionalising inclusive planning, equity-sensitive monitoring and rights-based accountability within government systems, disparities

are likely to persist after external support ends. The MNCH programmes need to prioritise predictable operational financing, risk-informed planning, and inclusive delivery and governance models.

Lessons Learned

1. Embedding systems improved continuity, but resilience remained limited. Institutionalising supervision, mentorship, quality improvement and data-use within RHB and woreda systems strengthened service consistency; however, weak multisectoral integration and leadership turnover reduced resilience in fragile contexts.
2. Operational financing determined equitable outcomes. Where transport, fuel, supervision budgets, materials and staffing were reliable, gains were stronger and more equitable, their absence constrained reach to marginalised populations despite sound technical design.
3. Outreach effectiveness required an explicit equity-efficiency balance. Health centre outreach was more cost-effective, while mobile health and nutrition teams (MHNTs) were essential for pastoralist and remote communities, underscoring the need for risk- and equity-informed deployment.
4. Quality improvement depended on aligned systems. Mentorship strengthened skills, but inconsistent supplies, staff turnover and weak supervision at lower tiers limited routine practice, demonstrating that quality improvement (QI) requires synchronised skills, inputs and accountability.
5. Referral reliability required institutionalised operational support. Standard tools improved referral initiation, but gaps in transport, communication and feedback documentation constrained completion, highlighting the need for predictable financing and routine data use.
6. Equity and inclusion were not fully institutionalised. While access improved for pastoralist and displaced populations, adolescents, persons with disabilities and survivors of violence were inconsistently reached, reflecting design-stage omissions and weak inclusion monitoring.

Recommendations

The recommendations below are intended to support immediate and medium-term decision-making by KOICA, UNICEF and government partners. Recommendations distinguish between high-priority actions required to secure continuity, quality and safety of MNCH services in high-risk and remote settings, and medium-priority actions needed to strengthen systems, equity and resilience within government structures.

High Priority Recommendations: These three actions are critical to safeguard service continuity, quality of care and lifesaving MNCH outcomes, particularly in remote, pastoralist and conflict-affected areas.

1. Strengthen facility readiness and supply-chain reliability to ensure uninterrupted availability of essential MNCH commodities, functional equipment and IPC/WASH services at all levels of care, particularly in remote and lower-tier facilities. This includes strengthening monitoring, reducing stock interruptions, institutionalizing preventive maintenance and securing predictable operating budgets.
2. Reinforce referral and emergency transport systems to ensure timely continuity of care for obstetric, neonatal and paediatric emergencies. Apply standard referral denominators, systematically track referral completion and feedback, and ensure predictable access to fuel, communication tools and transport.
3. Strengthen frontline MNCH service quality and continuity by integrating human resource development, supervision, and quality assurance systems. This includes standardising blended learning and mentorship within routine supervisory cycles, addressing retention challenges in hardship and remote postings, and ensuring consistent newborn care practices, diagnostic capacity, and adherence to quality improvement routines across facility-based and outreach platforms. Health centre led outreach should serve as the primary delivery model,

complemented by MHNTs only where fixed services are not feasible to reach high-risk and underserved populations.

Medium Priority Recommendations: These five actions are required to consolidate institutional capacity, system resilience, equity and sustainable integration within government-led MNCH systems.

4. Strengthen MNCH results, data quality and performance monitoring systems by operationalizing a refined results framework (RFW) with clear indicators and denominators, improving the District Health Information System (DHIS2) and Electronic Community Health Information System (eCHIS) verification at primary levels, and institutionalizing routine data review and feedback processes.
5. Integrate risk-informed and shock-responsive approaches into MNCH planning and delivery by embedding contingency micro-plans, adapting supervision and outreach to seasonality and access constraints, and linking operational adjustments to defined risk triggers.
6. Deepen equity, gender and inclusion in MNCH delivery by introducing disability- and adolescent-responsive adaptations, strengthening SGBV referral pathways and tailoring outreach to pastoralist mobility. Institutionalize periodic inclusion reviews within quality improvement and supervision systems.
7. Strengthen governance and sustainable financing mechanisms by developing costed woreda MNCH micro-plans, formalizing coordination platforms, strengthening leadership continuity and improving multisectoral alignment with the WASH, nutrition and protection sectors.
8. Institutionalize community engagement and accountability mechanisms by integrating structured feedback tools, ensuring inclusive participation of women, adolescents, persons with disabilities and gender-based violence (GBV) survivors, and providing predictable support to sustain health extension workers (HEWs), Women's Development Army (WDAs) members and community structures.

Figure 1: Administrative Map of Ethiopia



1 INTRODUCTION, CONTEXT AND OBJECT OF EVALUATION

This final evaluation report presents the findings, conclusions and lessons learned from the independent summative evaluation of Korea International Cooperation Agency (KOICA)-funded project Optimizing Care for Newborns and Children in Afar and Benishangul-Gumuz, implemented from May 2020 to June 2025. The evaluation was commissioned by UNICEF with financial support from the European Union (UN) and was independently conducted by the Economic Policy Research Institute (EPRI) in technical partnership with AWF (Pvt) Ltd, in collaboration with Federal Ministry of Health (FMoH), regional health bureaus (RHBs) and local partners. The evaluation took place from May to October 2025.

The KOICA maternal, newborn and child health (MNCH) project is a targeted health systems strengthening initiative aimed at improving equitable access, quality and uptake of MNCH services in two of Ethiopia's most underserved regions, Afar and Benishangul-Gumuz. The project seeks to reduce neonatal and under-five (U5) mortality by strengthening essential service delivery platforms, building frontline health worker capacity, improving referral pathways, expanding community-based outreach, and enhancing district-level governance and coordination.

The purpose of this evaluation is to assess the project's relevance, coherence, effectiveness, efficiency and sustainability, with a particular focus on equity, gender, disability inclusion and contextual resilience in fragile and pastoralist settings. The evaluation examines progress against intended outcomes, identifies systemic and operational bottlenecks, and generates lessons to inform future MNCH programming in remote and underserved areas of Ethiopia. Evidence was triangulated from health facility assessments (HFAs), client exit interviews (CEIs), key informant interviews (KIIs), focus group discussions (FGDs), case studies, and relevant secondary data sources including national surveys and health information systems.

This report is structured into five main sections: (i) Introduction and background; (ii) Evaluation purpose, objectives, scope and framework; (iii) Design and methodology; (iv) Key findings under each Organization for Economic Co-operation and Development-Development Assistance Committee (OECD-DAC)/United Nations Evaluation Group (UNEG) evaluation criterion including cross-cutting issues (i.e., gender, disability and climate resilience); and (v) Conclusions, lessons learned and recommendations for future programming.

The evaluation was conducted in accordance with UNEG Norms and Standards (2016), UNEG Ethical Guidelines (2020) and the UNICEF Global Evaluation Reports Oversight System (GEROS) Quality Review Standards (2020), ensuring methodological rigour, independence and accountability in line with international evaluation principles.

1.1 Intervention Context

1.1.1 Geography and Administrative Structure

Ethiopia, located in the Horn of Africa, is a landlocked country with a landmass of over 1.1 million square kilometres and a population exceeding 128 million people (World Bank, 2025b). Its terrain is dominated by vast highland plateaus, deep river gorges and expansive lowland plains. Ethiopia follows a federal system based on ethnic federalism, established by the 1995 Constitution, which grants regional states the right to self-determination and even secession (Mehari, 2018). The country is divided into 12 regional states and two chartered cities, Addis Ababa and Dire Dawa, each with its own constitution and government (Vértesy & Lemango, 2022). The administrative hierarchy consists

of *kililoch* (regions), zones, *woredas* (districts) and *kebeles* (wards or villages) (see the administrative map in Figure 1). While this federal structure is designed to facilitate decentralized governance and local service delivery, its implementation varies in effectiveness across regions due to disparities in institutional maturity, conflict exposure and public investment (CSA, 2013) (Relief Web, 2024). The KOICA MNCH project operates in two distinct contexts:

Benishangul-Gumuz Regional State: Benishangul-Gumuz Regional State is located in western Ethiopia, covers approximately 50,380 square kilometres and shares borders with Sudan, as well as Amhara, Oromia and Gambella regions (CSA, 2022). Benishangul-Gumuz Regional State had a population of 1.27 million in 2023. There are 6 hospitals, 59 health centres and 493 health posts in the Benishangul-Gumuz region. Although region-specific data on women of reproductive age (15-49 years) is not available, based on the national estimate that 24.4 per cent of the total population are women in this age group, it is inferred that there are about 310,000 women aged 15-49 years in the region (UNICEF, 2017). Governance is decentralized, with *woreda*-level administrations playing a key role in implementing social services (Atnafu, 2017). The region is ethnically diverse, home to groups such as the Berta, Gumuz, Mao, Komo and Shinasha, and practices a mix of subsistence agriculture and shifting cultivation (Food Security Strategy, 2004; Flatie et al., 2009).

Afar Regional State: The Afar Regional State, located in northeastern Ethiopia, spans approximately 94,760 square kilometres (Ethiopian Environmental Protection Authority, 2024). As of 2023, the population of Afar is estimated at just over 2 million. Although region-specific data on women of reproductive age (15-49 years) is not available, based on the national estimate that 24.4 per cent of the total population are women in this age group, it is inferred that there are about 488,000 women aged 15-49 years in the region. There are 4 hospitals, 45 health centres and 140 health posts in the Afar region. The region shares borders with Eritrea to the north, Djibouti to the east, and the Somali, Amhara and Tigray regions within Ethiopia. The population is largely Muslim and predominantly rural, with dispersed settlements and mobility shaped by seasonal access to water and grazing areas (UNICEF, 2019).

1.1.2 Socio-Economic Context

Ethiopia is one of the fastest-growing economies in Africa, with significant progress made in poverty reduction and infrastructure development over the past two decades. Despite this progress, the country continues to face complex socio-economic challenges. As of 2023, over 20 per cent of the population lives below the national poverty line, and a large proportion remains dependent on subsistence agriculture, which is highly vulnerable to climate shocks (World Bank, 2025a). Ethiopia's socio-economic landscape is further challenged by limited industrialization, high youth unemployment and strained public service systems, prompting both the government and international partners to focus on resilience building, social protection and inclusive development strategies (UNDP, 2025).

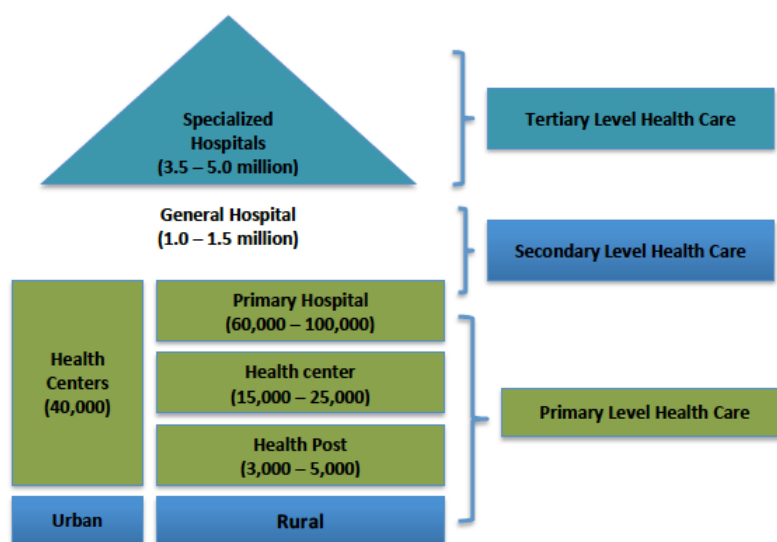
Benishangul-Gumuz Regional State: Benishangul-Gumuz Regional State remains one of Ethiopia's most rural and underserved regions, with over 85 per cent of its population dependent on subsistence farming, livestock rearing and shifting cultivation (Ethiopian Statistics Service, 2022). Despite considerable natural resources, development is constrained by low agricultural productivity, limited market integration and weak infrastructure, including roads, electricity and communication networks (World Bank, 2020). High poverty, food insecurity, low school enrolment—especially for girls, and poor maternal and child health outcomes persist, alongside chronic shortages of skilled health workers, essential medicines and functioning facilities in remote areas (Ministry of Health Ethiopia, 2023). Recurrent inter-communal tensions and displacement in Metekel Zone further undermine service delivery and socio-economic stability. Its proximity to the Sudanese border has also resulted in large refugee inflows and the presence of internally displaced persons (IDPs), placing additional pressure on an already overstretched health system (UN OCHA, 2024b); (UNHCR, 2022). These structural and humanitarian challenges call for targeted, equity-driven interventions to strengthen essential services and improve outcomes for the region's most vulnerable populations.

Afar Regional State: Afar's socio-economic landscape is shaped by its arid geography, sparse settlement patterns, and continued dependence on subsistence pastoralism. The regional economy is predominantly based on livestock rearing, with limited diversification into formal wage employment or small-scale trade (Ethiopian Environmental Protection Authority, 2024). Over 85 per cent of the population resides in rural areas with minimal access to markets, banking or reliable transportation networks (UNICEF, 2019). Poverty levels remain high, with multidimensional indicators highlighting chronic deprivations in health, education and living standards (UNDP, 2021). Infrastructure is severely underdeveloped and road coverage is among the lowest in the country, while access to electricity, schools and health services is highly constrained, especially outside of urban centres (World Bank Group, 2020).

1.1.3 Institutional Arrangement

Ethiopia's rural health care delivery system operates through a decentralized three-tier structure designed to ensure progressive access to services based on population size and care complexity (Figure 2). The primary level comprises health posts, health centres and primary hospitals. Health posts, staffed by health extension workers (HEWs), serve approximately 3,000 to 5,000 people and provide first-contact preventive and promotive care. Five health posts are linked to a health centre, which serves 15,000 to 25,000 people and delivers basic curative MNCH services. Primary hospitals serve catchment populations of approximately 60,000 to 100,000 people and provide emergency obstetric, newborn and referral care. The secondary level consists of general hospitals serving populations of approximately 1 to 1.5 million people, while the tertiary level includes tertiary and specialized hospitals, each serving an estimated 3.5 to 5 million people and delivering advanced referral services.

Figure 2: Three-Tiers Health Care Delivery System in Ethiopia (Source: Ministry of Health, Ethiopia)



MNCH services are delivered through a decentralized governance system involving the FMOH, RHBs, zonal health departments, woreda health offices and community platforms. At the national level, the Maternal, Child and Adolescent Health Service Lead Executive Office provides strategic oversight, supported by thematic technical working groups (TWGs). Regional and woreda authorities adapt national policies, coordinate primary health care units (PHCUs) and oversee implementation of MNCH programmes, including the Health Extension Programme, Integrated Community Case Management and Community-Based Newborn Care.

At the community level, the Women's Development Army (WDA) supports household mobilization, promotes essential MNCH practices and facilitates timely referral, playing a critical role in extending service reach in remote and underserved areas. Coordination across government and development

partners is reinforced through the “One Plan, One Budget, One Report” approach, which promotes harmonization, reduces duplication and strengthens system ownership.

1.1.4 MNCH Services and Regional Disparities

Ethiopia Mini Demographic and Health Survey (EMDHS) (2019) highlight key gaps in MNCH, with pronounced rural-urban inequalities. While 73.6 per cent of women received at least one antenatal care (ANC) visit, only 43 per cent completed four or more visits, and this fell to 37.4 per cent in rural areas (DHS, 2019). Skilled birth attendance (SBA) remained limited at 49.8 per cent nationally, dropping to 42.5 per cent in rural settings, and postnatal care (PNC) coverage was low overall, with just 33.8 per cent of women receiving a check within two days of delivery (DHS, 2019). Child survival indicators reflected similar vulnerabilities. In 2019, neonatal, infant and U5 mortality rates stood at 33, 47 and 59 deaths per 1,000 live births respectively, with rural areas consistently worse off than urban populations (DHS, 2019).

As of the 2019 survey, only 44 per cent of children aged 12-23 months had received all basic vaccinations. Urban children had considerably better coverage, at 62.2 per cent, compared to only 36.1 per cent in rural areas. Child nutrition remained a critical area of concern and a key determinant of child survival and development. Nationally, 36.8 per cent of children under five were moderately stunted (height-for-age below -2SD), while 12.4 per cent were severely stunted (DHS, 2019). Additionally, 7 per cent of children were moderately wasted, and 21.3 per cent were moderately underweight. These rates were higher in rural areas, where food insecurity, poor dietary diversity and limited access to nutrition education further undermined child health. Exclusive breastfeeding among children under six months was low at 58.8 per cent. Among children aged 6-23 months, only 14.4 per cent met the minimum dietary diversity standard, 11.9 per cent received a minimum acceptable diet and 55.9 per cent met the minimum meal frequency, indicating broad deficiencies in infant and young child feeding practices (DHS, 2019).

Afar Region demonstrated some of the lowest MNCH service utilization rates nationwide. Only 62.7 per cent of women received at least one ANC visit, 31.1 per cent completed four or more visits and just 30.6 per cent of births were attended by skilled providers. PNC reached only 23.5 per cent of mothers. The U5 mortality rate in Afar was 58 deaths per 1,000 live births, with neonatal and infant mortality rates at 22 and 46 per 1,000 live births, respectively (DHS, 2019).

Immunization coverage was critically low, with just 19.7 per cent of children fully vaccinated, and high dropout rates between doses. Approximately 42.2 per cent of children under five were moderately stunted (height-for-age below -2SD), and 20.6 per cent were severely stunted. In addition, 13.5 per cent were moderately wasted, and 31.1 per cent were underweight. Among children aged 6-23 months, only 3.7 per cent met the minimum dietary diversity standard, the same percentage received a minimum acceptable diet, and just 52.1 per cent achieved the minimum meal frequency (DHS, 2019).

Benishangul-Gumuz had comparatively better on maternal health indicators, with 83.3 per cent of women receiving at least one ANC visit and 55.9 per cent completing four or more. SBA reached 65 per cent, and 45 per cent of mothers received a postnatal check within two days (DHS, 2019). However, child mortality remained alarmingly high: U5 mortality reached 90 per 1,000 live births, far above the national level. Despite stronger immunization performance (66.1 per cent fully vaccinated), dropout patterns persisted. According to EMDHS 2019, 40.7 per cent of children under five were moderately stunted, and 19.2 per cent were severely stunted. In addition, 6.4 per cent were moderately wasted and 32 per cent were moderately underweight. Among children aged 6-23 months, 13.5 per cent met the minimum dietary diversity threshold, 11.3 per cent received a minimum acceptable diet and 68.2 per cent met the minimum meal frequency (DHS, 2019).

1.1.5 Policy and Legal Framework

Ethiopia's MNCH service delivery is based on a comprehensive policy and legal framework that affirms the right to health in the constitution and emphasizes equity, decentralization and universal

access. Successive national strategies, including the Health Policy (1993), Health Sector Development Plans and the ongoing Health Sector Transformation Plan II (HSTP-II) (2020/21-2024/25), place MNCH at the centre of national priorities. These are complemented by targeted strategies such as the National Strategy for Newborn and Child Survival (2015/16-2019/20) and its successor (2021/25), which introduced high-impact interventions including Integrated Community Case Management (iCCM), Community-Based Newborn Care (CBNC) and neonatal intensive care unit (NICU) scale-up, while expanding the focus to child development and nurturing care. Ethiopia's commitments are further aligned with the Global Strategy for Women's, Children's and Adolescents' Health, reinforcing principles of human rights, equity, accountability and multisectoral action.

1.1.6 Sector Capacity

Despite these robust frameworks, sector capacity constraints remain a major barrier to effective MNCH service delivery, especially in emerging regions like Afar and Benishangul-Gumuz. Health workforce density is significantly below global standards, with chronic shortages of skilled providers and high workloads for HEWs. In-service training has not kept pace with needs, and essential medicines, equipment and infrastructure are frequently inadequate or non-functional. Fragmented referral systems, limited ambulance availability, difficult terrain and poor communication further hinder timely emergency care. Monitoring and data systems are inconsistently utilized due to resource limitations and weak supervisory structures. While ongoing efforts aim to strengthen training, infrastructure and human resources, substantial investment is required to address persistent inequities and ensure quality MNCH services across all regions.

1.1.7 Gender Inequality and Social Norms

Gender disparities significantly hinder equitable access to MNCH services in Ethiopia. Women, especially those in rural, low-income or marginalized settings, often have limited autonomy in health-related decisions due to restrictive cultural norms, stigma and gender-based violence (GBV), which reduce their ability to seek timely care (Ministry of Health Ethiopia, 2023; Ministry of Health, 2018). These barriers are intensified for women facing additional vulnerabilities such as disability, displacement or geographic isolation. Although the MoH has introduced gender audits, capacity-building initiatives and one-stop GBV support centres, implementation remains uneven due to weak enforcement and limited provider capacity to deliver gender-sensitive care (Ministry of Health, 2018).

1.1.8 Inclusion of Adolescents and Young Mothers

Adolescents face specific challenges in accessing MNCH services. Despite making up a substantial proportion of the population, adolescent girls often have limited knowledge of sexual and reproductive health (SRH), low autonomy in healthcare decision-making and reduced access to youth-friendly services. Only 51 per cent of public health facilities in Ethiopia were reported to offer youth-friendly services as of the most recent assessment (Ministry of Health, 2016). High rates of early marriage and adolescent pregnancy, especially in rural areas, further elevate the risks of maternal complications and neonatal mortality (Ministry of Health Ethiopia, 2023). Adolescent mothers from pastoralist and displaced communities face overlapping challenges, including early marriage, lack of adolescent-friendly services and poor continuity of care.

1.1.9 Disability Inclusion in MNCH

The inclusion of persons with disabilities in MNCH services remains limited. Despite Ethiopia's ratification of the UN Convention on the Rights of Persons with Disabilities (CRPD), infrastructure and institutional barriers persist. Health facilities often lack accessible design, communication tools for persons with hearing or visual impairments, and trained staff capable of providing inclusive care. As a result, children and women with disabilities, particularly in remote and conflict-affected areas, face compounded health risks and systematic exclusion from essential services (Ministry of Health, 2018).

1.1.10 Socioeconomic and Geographic Disparities in MNCH

MNCH service utilization also varies sharply by wealth and education levels. Women from the highest wealth quintile and those with secondary or higher education are significantly more likely to access ANC, deliver at health facilities and receive PNC. Conversely, low income, uneducated women in pastoralist and rural areas face multiple overlapping barriers: distance, transport costs, social exclusion and service unavailability (Ministry of Health, 2021; Ministry of Health, 2018).

These intersecting vulnerabilities including gender, age, disability, geography and socioeconomic status, limit equitable MNCH service utilization. The HSTP-II and the Health Sector Medium-Term Development and Investment Plan (HSDIP) both acknowledge these gaps and call for targeted investments in service expansion, community engagement and inclusive programming (Ministry of Health, 2021; Ministry of Health, 2018).

1.1.11 Alignment with the Sustainable Development Goals (SDGs), Human Rights Instruments and UNICEF Strategic Commitments

The KOICA MNCH project aligns closely with Ethiopia's commitments to the Sustainable Development Goals (SDGs), particularly SDG 3 on ensuring healthy lives and promoting well-being and SDG 5 on achieving gender equality.

Ethiopia has integrated these targets into national policy frameworks such as the Ten-Year Development Plan (2021-2030), the HSTP-II and the National Strategy for Newborn and Child Health and Development (2021-2025) (Ministry of Health, 2021; Ministry of Health, 2022). Ethiopia has also ratified key international human rights instruments that underpin the country's MNCH agenda. These include the Convention on the Rights of the Child (CRC), which guarantees every child's right to survival, development, protection and participation; the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), which obliges equal access to reproductive, maternal and postnatal health services; and the CRPD, which requires equal access to health services for persons with disabilities, including SRH care. Although national policies increasingly reflect disability inclusion, key gaps remain in accessible infrastructure, trained staff and inclusive communication tools.

While the KOICA MNCH project was designed prior to the adoption of UNICEF's Disability Inclusion Policy and Strategy (DIPAS) and the United Nations Disability Inclusion Strategy (UNDIS), the evaluation will assess the extent to which the project benefited women and children with functional limitations and its alignment with core principles such as participation, accessibility and non-discrimination. Progress against Ethiopia's SDG and human rights commitments remains uneven in remote and underserved regions, reinforcing the importance of context-specific, equity-driven approaches in MNCH programming.

1.2 Object of the Evaluation

1.2.1 Overview of the Project

The object of this summative evaluation is the multi-year KOICA-funded health systems strengthening project "Optimizing Care for Newborns and Children in Benishangul-Gumuz and Afar Regions, Ethiopia," implemented between May 2020 and June 2025 by UNICEF Ethiopia in partnership with the FMOH, Emory University and the RHBs of Afar and Benishangul-Gumuz. Designed to reduce neonatal and U5 mortality in two of Ethiopia's most underserved regions, the project aimed to improve the availability, quality and equitable use of MNCH services through system-wide capacity strengthening, community-based solutions and enhanced governance mechanisms. The project's overall goal was to contribute to improved health and reduced mortality among newborns and children by accelerating access to high-quality MNCH services. Its design was based on Ethiopia's broader health sector priorities and commitments to equitable access in fragile, pastoralist and geographically isolated areas. The intervention combined facility-level quality

improvement, community engagement, referral system strengthening, supply availability and evidence-driven governance reforms.

1.2.2 Core Intervention Components

The KOICA MNCH project was structured around five interconnected components aimed at strengthening Ethiopia's MNCH service ecosystem in fragile settings:

Improving quality of MNCH care and treatment: Enhancing clinical readiness and quality of care at hospitals, health centres and health posts, with a focus on ENC, newborn corners (NBC), NICU-related competencies, facility-level quality improvement and standardized protocols.

Increasing community-level demand and utilization of MNCH services: Strengthening community-based platforms to promote timely care-seeking, improve awareness and empower caregivers in remote and pastoralist areas.

Ensuring availability of essential MNCH supplies and equipment: Supporting procurement and supply chain reliability while leveraging government and donor resources to sustain essential drugs, equipment and commodities.

Strengthening governance, ownership and sustainability: Building woreda and zonal capacity for MNCH planning, supervision and coordination while improving local accountability for service delivery.

Enhancing data systems and monitoring: Supporting woreda and zonal health offices to improve data quality, use of evidence and performance tracking.

1.2.3 Beneficiaries

The project targeted newborns and children under five, pregnant and lactating women, caregivers and hard-to-reach communities in 34 woredas across Afar and Benishangul-Gumuz. Beneficiaries included populations with limited access to essential MNCH services due to distance, insecurity, mobility constraints and supply shortages. Health workers, HEWs and woreda health officers also formed a major beneficiary group through capacity-building and improved supervision systems. The project further supported regional and woreda health administrations by strengthening governance structures, referral mechanisms and data systems. Below is summary of key achievements on a yearly basis. A breakdown of each key indicator with its core activities and achievements is provided in Annex 21 in Volume-II.

Table 1: Summary of Key Targets and Achievements 2022-2024

Key Indicators	2021		2022		2023		2024		Total	
	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.
No. of health posts that provide iCCM service	93	234	212	212	50	239	0	239	355	924
No. of health centres, hospitals and health posts supported with quality improvement (QI)	94	239	345	391			239	239	678	869
No. of health workers who completed training course(s) on basic emergency obstetric and newborn care (BEmONC),	131	192	335	162	111	157	86	85	663	596

Key Indicators	2021		2022		2023		2024		Total	
	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.
essential newborn care (ENC), NBC and NICU										
No. of kebeles involved in the multi-sectoral community engagement to improve the MNCH services	100	82	100	392	100	405	0	405	300	1284
No. of sick newborns and children who require a referral and are referred to a receiving health facility	Referral vouchers are being tested, and the referral cases were documented in 2024.							1722		1722
No. of epidemiological surveillance areas developed to demographic	2	2								2
No. of woreda health offices that included key MNCH activities in the woreda annual plan	42	33	42	42	42	42	0	42		159

1.2.4 Stakeholders

The KOICA MNCH project was implemented through a multi-stakeholder partnership framework involving government institutions, health staff, development partners, specialized agencies and community structures. The table below summarizes the key stakeholder categories, their primary roles and responsibilities, levels of engagement, and contributions to project implementation and oversight.

Table 2: List of Key Stakeholders, Roles and Engagement Levels

Category	Stakeholder(s)	Roles and Responsibilities	Engagement/ Contribution
Development Partner	KOICA	Provided financial resources, ensured accountability, reviewed progress, supported adaptive decisions during shocks.	High Continuous involvement in oversight and strategic guidance.
Lead Implementing Agency	UNICEF Ethiopia	Led technical and operational management, coordinated procurement, training, mentorship, community engagement and monitoring; aligned intervention with national frameworks.	High Core leadership across all implementation domains.
Implementing Partner	Emory University	Delivered technical expertise for capacity building, mentorship and QI; contributed to monitoring and review processes.	High Key contributor to technical strengthening.

Category	Stakeholder(s)	Roles and Responsibilities	Engagement/ Contribution
Government Institutions	FMoH	Provided national policy direction, oversight and integration of MNCH interventions into health strategies and standards.	High Strategic stewardship at national level.
	RHBs (Afar, Benishangul-Gumuz)	Led sub-national planning, supervision and partner coordination; oversaw data use, review meetings and referral strengthening.	High Principal drivers of regional implementation.
	Zonal Health Departments and Woreda Health Offices	Operationalized activities; supervised health centres and posts; monitored performance and supported community platforms.	Moderate to High Daily operational support, variable by woreda.
Community Structures and Beneficiaries	WDA	Mobilized households; promoted MNCH behaviours; supported early referral and community feedback.	High Vital community outreach and accountability function.
	Women and Caregivers	Utilized MNCH services; provided feedback; participated in awareness and mobilization activities.	High Primary service users and core feedback providers.
	Persons with Disabilities	Benefited from MNCH services but faced access constraints due to limited inclusive design.	Moderate Engagement present but not comprehensive.

1.2.5 Budget and Expenditures of the Project

The KOICA-funded project Optimising Care for Newborns and Children in Afar and Benishangul-Gumuz Regions was implemented from May 2020 to June 2025, with a total budget of USD 9.12 million. The project's financial design prioritised investment in service delivery while maintaining adequate provision for programme oversight and coordination, consistent with its scale and geographic reach.

Of the total budget, USD 7.89 million (86.5 per cent) was allocated to programmable costs supporting interventions across the two target regions, while USD 1.23 million (13.5 per cent) covered UNICEF programme support costs and coordination. Within the programmable envelope, USD 3.29 million (42 per cent) was allocated to Benishangul-Gumuz, reflecting its wider geographic coverage (23 woredas) and larger service delivery footprint. Afar Region received USD 2.50 million (32 per cent), covering 11 woredas and reflecting the additional operational complexities of pastoralist mobility and workforce retention. A further USD 2.09 million (27 per cent) supported cross-cutting programme management and system-strengthening functions, including technical assistance, coordination, assessments, monitoring, and communication.

Annual budget allocations were sequenced to align with the project life cycle, with higher investments during the middle years to support scale-up, intensive capacity building, infrastructure upgrades, and service integration. Following the extension of the implementation period to June 2025, the financial plan was revised to accommodate final-year operational, transition, and closure requirements, without any change to the overall budget envelope.

Below table provides yearly break-up of the budget.

Table 3: Project Budget and Key Focus Areas

Fiscal Year	Annual Budget Allocation (USD)	Key Focus Areas
2020	883,388	Start-up, orientation, and baseline

2021	2,615,063	Facility upgrades, capacity building
2022	2,076,171	Expansion of MNCH services
2023	2,100,376	Supervision, community engagement
2024	1,445,002	Strengthening sustainability, Project evaluation
Total	9,120,000	

1.2.6 Implementation Arrangements and Framework

The implementation of the project involved a collaborative effort between government institutions, technical agencies and community-level structures. The project was funded by KOICA and implemented by UNICEF Ethiopia in close partnership with the FMOH and RHBs of Afar and Benishangul-Gumuz. Emory University was the implementing partner of UNICEF Ethiopia for this project.

UNICEF Ethiopia provided overall technical and operational leadership, including procurement, capacity building, coordination and quality assurance. Its role was also central in aligning the project with national priorities and ensuring integration with other MNCH initiatives under the Health Sector Transformation Plan.

The FMOH offered policy direction, oversight and integration of project interventions into broader national health systems. The RHBs were responsible for leading implementation at the sub-national level, coordinating with zonal and woreda health offices, and ensuring timely supervision and reporting.

At the woreda level, health offices provided direct support to implementation and oversight of service delivery, including through health centres and health posts. Health workers at these facilities were the primary providers of care and beneficiaries of the project's training, mentorship and quality improvement (QI) systems. Community QI teams, composed predominantly of women, were established in both regions to enhance demand generation, promote positive health behaviours and strengthen local accountability mechanisms. HEWs served as key facilitators between communities and the formal health system.

Other development actors and non-governmental organizations (NGOs) active in the two regions contributed indirectly by participating in joint coordination platforms, sharing resources and experiences, and supporting health system functions that complemented project investments.

The evaluation will assess the effectiveness of these implementation arrangements, including the clarity of roles, quality of coordination, and extent of local ownership and institutionalization. Special attention will be given to the collaboration between UNICEF, Emory University and government partners, and to how this partnership model supported the delivery and sustainability of project results.

1.2.7 Why This Evaluation Matters Now

This evaluation is particularly timely as the project approaches completion and key decisions are required regarding sustainability, scale-up and institutionalization of MNCH system-strengthening investments. The findings inform transition planning from externally supported modalities to government-led service delivery, including decisions related to operational financing, outreach models and integration within routine health-system structures. Lessons generated are also relevant beyond Ethiopia, offering evidence on MNCH programming in fragile, pastoralist, and conflict-affected contexts where service continuity and equity remain persistent challenges.



2 PURPOSE, OBJECTIVES, SCOPE AND USES OF EVALUATION

This chapter outlines the overall intent, scope and parameters of the summative evaluation of the KOICA-funded MNCH project. It explains why the evaluation was undertaken, what specific objectives it sought to achieve, and how its findings will be used by KOICA, UNICEF, the Government of Ethiopia (GoE) and implementing partners. The chapter also defines the temporal, geographic and thematic boundaries of the assessment and clarifies the primary users and intended applications of the results. Finally, it presents the constructed Theory of Change (ToC) that guided evaluation design and analysis, linking the project's logic model to OECD-DAC criteria and the overarching objectives of learning, accountability and future programme improvement.

2.1 Evaluation Purpose

This endline evaluation, undertaken during the final phase of the Optimizing Care for Newborns and Children in Afar and Benishangul-Gumuz (2020-2025) project, aims to assess the project's achievements, challenges and overall contribution to strengthening MNCH services in two underserved regions. Guided by OECD-DAC criteria, it examines the relevance, coherence, effectiveness, efficiency and sustainability of interventions implemented by UNICEF with KOICA support and government partners. The evaluation reviews improvements in quality of care, reductions in U5 morbidity and mortality, performance of community-based approaches and functionality of systems such as drug supply, referral and quality monitoring. It also validates the

project's constructed ToC to determine whether intended causal pathways operated effectively under the contextual realities of Afar and Benishangul-Gumuz, generating actionable evidence to inform future programme design and support accountability and learning for UNICEF, KOICA and government stakeholders.

2.2 Intended Users and Use of the Evaluation

The evaluation balances accountability and learning by assessing performance against agreed objectives and OECD-DAC criteria, while also generating forward-looking lessons to inform adaptive MNCH programming in fragile and pastoralist settings. This dual focus supports both donor accountability and continuous improvement within government and partner systems. The table below presents a summary of the intended users and intended use of the evaluation.

Table 4: Intended Users and Intended Use of Evaluation

Intended Users	Intended Use
UNICEF	Utilize evaluation findings to refine CBNC programming, adapt strategies to regional challenges, and strengthen advocacy efforts focused on improving newborn and U5 survival in underserved regions.
KOICA	Review results to assess efficiency, effectiveness and achievement of outcomes, feeding into KOICA's donor accountability, learning and resource-allocation frameworks.
Duty-bearers: Government entities (MoH and RHBs of Afar and Benishangul-Gumuz)	Use evidence to strengthen governance, planning and MNCH service delivery mechanisms, ensuring improved quality, equity and oversight within regional health systems.
Implementing partners (Emory University and local programme actors)	Apply findings to enhance future intervention design, supportive supervision approaches and community outreach models.
Rights-holders: Communities, caregivers, women of reproductive age, service users	Benefit from strengthened MNCH services shaped by evaluation insights, ensuring improved quality, accessibility and responsiveness of care.
Wider development and global public health community	Draw on evidence to advance global efforts on newborn and U5 survival, particularly in fragile and underserved contexts, supporting the second wave of the child survival revolution.

2.3 Evaluation Objectives

The evaluation updated and made alignment in the original ToR as given in Annex 24 (check in Volume-II), based on discussions with the UNICEF health section and Evaluation Reference Group (ERG). The overall objective of this final evaluation was to examine the project, to assess its relevance, coherence, effectiveness, efficiency, orientation to impact and sustainability. Cross-cutting issues included equity-related concerns such as gender equality and the empowerment of women and girls, the protection of child rights, the rights of persons with disabilities, and the reduction of disparities affecting disadvantaged groups (e.g., based on geography or socio-economic status). The goal of this evaluation was to assess intended and unintended results to identify lessons learned and provide concrete recommendations. Assessment of intended and unintended results also identified best practice, programmatic challenges and mitigation strategies to inform future design, and support advocacy efforts for scale-up. The specific objectives of this evaluation include:

1. To examine the Optimizing Care for Newborns and Children in Afar and Benishangul-Gumuz project for its outcomes and effectiveness, including:

- i) Measure the achievement of its objectives and intended outcomes. The evaluation shall provide insights into whether and to what extent the intended goals and objectives of the project have been achieved.
 - ii) Evaluate the results in the accessibility, quality and utilization of health services for newborns and children.
 - iii) Assess improvements in the referral systems and staff capacity to provide life-saving support to newborns, infants and children.
 - iv) Measure the contribution of the project to the achievement of results in reducing morbidity and mortality rates for children U5 in target regions.
2. Assess the relevance of implemented strategies in improving newborn and child health services in targeted woredas. To assess the design and implementation of the project and propose improvements, by examining what worked well, what did not work well and why.
3. Assess the extent to which the intervention converts inputs (funds, expertise, resources, time, etc.) into outputs, outcomes and impact in the most cost-effective way possible (Efficiency). This includes the cost-effectiveness of the mobile health services in Afar and cost-effectiveness of off-site training for improving provider performance and service delivery outcomes.
4. Assess the sustainability of net benefits post project support and the effectiveness and scalability across diverse contexts.
5. To assess how well the project fits within the UNICEF and country contexts (Coherence).
6. To assess what overall difference the intervention makes? What significant higher-level effects have been generated or are expected to be generated, whether positive or negative, intended or unintended (Orientation to Impact).
7. To produce actionable recommendations to inform UNICEF Ethiopia, KOICA, the GoE and other relevant stakeholders in their current and future intervention planning.

Table 5: Linking Evaluation Objectives to Decision-Making

Evaluation Objective	Primary Decision Informed
Assess relevance and coherence	Alignment with national MNCH priorities and partner strategies
Assess effectiveness	Decisions on continuation, scale-up or redesign of MNCH interventions
Assess efficiency	Optimization of delivery models and resource allocation
Assess sustainability	Government ownership, financing and institutionalization
Assess equity and inclusion	Targeting strategies and Leave No One Behind (LNOB) commitments

2.4 Evaluation Scope

Timeframe: Covers the full project period from May 2020 to June 2025 including inception, core implementation and extension phases.

Geographic Coverage: The project was implemented in 44 woredas, comprising 23 woredas in Benishangul-Gumuz and 11 woredas in Afar. Implementation was channelled through existing health system structures: in Benishangul-Gumuz, 6 hospitals, 59 health centres and 493 health posts; in Afar, 4 hospitals, 45 health centres and 140 health posts. In addition to direct service users, an estimated 2.3 million people were reached indirectly through strengthened referral systems, community mobilization, QI initiatives and clinical mentorship. The project primarily targeted pregnant women, newborns and children U5 living in pastoralist zones, remote rural areas and fragile settings, where preventable mortality and morbidity are highest, in alignment with national strategic priorities.

Thematic Scope: The evaluation examines improvements in the quality of MNCH services at both community and facility levels, including adherence to newborn care protocols such as kangaroo mother care (KMC), thermal regulation and infection prevention. It also assesses how effectively the project strengthened demand and increased service utilization through community-based

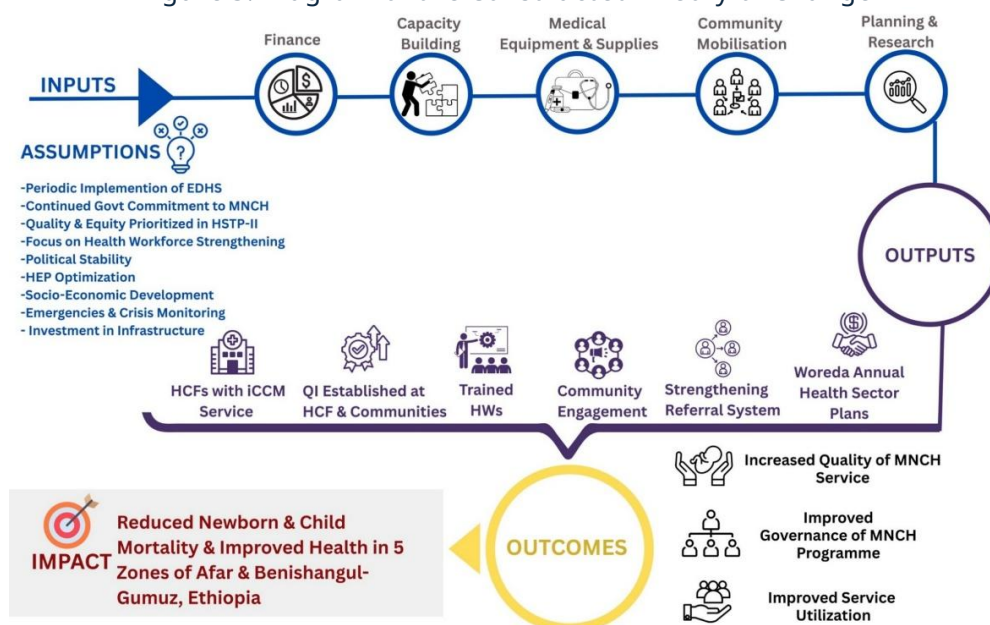
approaches and social and behaviour change (SBC) initiatives. In addition, the evaluation reviews the availability of essential MNCH drugs, supplies and equipment, and the functioning of referral and supply chain systems supporting continuity and quality of care.

2.5 ToC/Results Framework

2.5.1 Construction of the ToC

Although this project was underpinned by a detailed results framework (RFW), it did not include an explicit ToC at the design stage. For the purposes of this evaluation, a ToC was therefore developed to clearly articulate the project's causal logic in both narrative and visual form. Its construction drew systematically on the RFW, design matrix, annual progress reports, routine monitoring data and consultations with stakeholders at federal, regional and woreda levels. The constructed ToC clarifies how improvements in the quality of service delivery, strengthened health system capacity, and enhanced community engagement were expected to interact to reduce preventable neonatal and U5 mortality. It delineates the pathways through which strengthened clinical competencies, reliable availability of essential medicines and equipment, reinforced referral and mentorship systems, and increased community demand for care were collectively expected to contribute to the project's overarching aim of reducing newborn and child mortality and improving MNCH outcomes in Afar and Benishangul-Gumuz. The visual representation of the constructed ToC is presented in Figure 3, while a detailed narrative version is provided in Annex 1 given in Volume-II.

Figure 3: Diagram of the Constructed Theory of Change



The logical pathways of the ToC are constructed along the building blocks of Ethiopia's health system as given below:

- ⇒ Governance, led by the FMOH, with RHBs and woreda health offices responsible for oversight, coordination and implementation.
- ⇒ Service delivery, spanning primary care (health posts staffed by HEWs linked to health centres and primary hospitals), secondary care (general hospitals) and tertiary care (referral and specialized hospitals), supported by community-based platforms.
- ⇒ Health workforce, including physicians, nurses, midwives, HEWs and allied health cadres.
- ⇒ Health information systems, comprising DHIS2/HMIS at the facility level and eCHIS at the community level.
- ⇒ Access to medicines and technologies, enabled through the Ethiopian Pharmaceutical Supply Agency and regulated by the Ethiopian Food and Drug Authority.

⇒ Health financing, combining government allocations, development partner resources, user fees and the expanding Community-Based Health Insurance scheme.

Accordingly, by examining the logical pathways articulated in the ToC, the evaluation also assessed the extent to which the project contributed to strengthening the broader health system. The constructed ToC set out the causal pathways linking project inputs to intended long-term impact. Key inputs and activities included training health workers in integrated management of newborn and childhood illness (IMNCI), basic emergency obstetric and newborn care (BEmONC), essential newborn care (ENC) and neonatal resuscitation; establishing and equipping neonatal intensive care units and NBC; operationalizing catchment-based clinical mentorship (CBCM); strengthening referral systems; ensuring the availability of essential MNCH medicines and equipment; and mobilizing communities through QI teams and behaviour-change interventions. These activities were expected to generate outputs such as expanded availability of iCCM services, strengthened facility-level QI systems, enhanced community engagement, and increased integration of MNCH priorities into woreda planning processes. At outcome level, the project aimed to improve the quality of MNCH services, increase community utilization of essential MNCH services, and strengthen evidence-informed governance and monitoring systems at woreda and regional levels. The intended long-term impact was a sustained reduction in preventable neonatal and U5 mortality across Afar and Benishangul-Gumuz. The ToC incorporated several critical assumptions, including continued government prioritization of MNCH, effective optimization of the Health Extension Programme (HEP) in pastoralist contexts, political and security stability, and functional emergency preparedness systems, while explicitly recognizing risks such as workforce shortages, supply chain disruptions, data limitations and broader contextual instability.

2.5.2 Validation of the ToC

The ToC was validated through an iterative and triangulated process combining stakeholder consultations at national, regional and woreda levels with field-based evidence from HFAs, referral data, service utilization patterns, community engagement indicators and QI records. This process confirmed that certain pathways, such as improved neonatal survival associated with strengthened NICU capacity, functioned largely as intended. Other pathways, notably improvements in SBA, in Afar region, were less effective due to persistent gaps in socio-cultural norms, geographic barriers and referral constraints.

Assumption testing highlighted additional structural and contextual constraints, including security instability, interruptions in supply chains, workforce turnover and shortages, and the absence of updated national mortality estimates. Insights from stakeholder consultations and field observations were used to refine the ToC and clarify causal linkages. Further analysis of how these pathways materialized in practice is presented in the evaluation findings, ensuring that conclusions and recommendations are grounded in a robust understanding of the contextual enablers, barriers and mechanisms shaping MNCH outcomes in emerging and fragile regions.



3 EVALUATION DESIGN AND METHODOLOGY

This chapter explains how the endline evaluation of the KOICA-supported project Optimizing Care for Newborns and Children in Afar and Benishangul Gumuz was designed and implemented to address the OECD-DAC and UNEG-aligned questions set out in the Terms of Reference (ToR) (provided in Annex 22 in Volume-II) and the Evaluation Matrix. It outlines the criteria and key questions, the theory based, mixed-methods and utilization-focused design, and the specific methods, sampling and analysis used to generate credible, triangulated evidence across Afar and Benishangul-Gumuz. This further describes how gender equality, disability inclusion, equity and human rights principles were integrated throughout the evaluation matrix and tools. It also details quality assurance measures, ethical compliance including Institutional Review Board approval, limitations and mitigation, and the governance and management arrangements and team roles that safeguarded rigour and independence. All these elements establish the methodological foundation linking the evaluation purpose and scope to the findings and conclusions presented in subsequent chapters.

3.1 Evaluation Criteria and Key Questions

The evaluation is guided by the OECD-DAC criteria of relevance, coherence, effectiveness, efficiency and sustainability, in line with UNICEF and UNEG norms and standards. It is summative in nature, assessing the performance of the KOICA-funded project at endline and identifying strategic lessons to inform the design and scale-up of similar MNCH interventions.

The evaluation questions have been structured around the OECD-DAC criteria and aligned with the specific objectives of the KOICA health project and its ToC. The rationale and process used for

revising and merging the evaluation questions are detailed in Annex 2 given in Volume-II. The evaluation address following key questions:

Relevance: To what extent is the project responsive to the needs of the targeted regions, communities and health facilities to bring about change in pertinent health parameters for newborns and children? To what extent did the intervention design continue to remain sensitive to the needs of the target population and to the context of target areas under changing circumstances?

Coherence: To what extent has the project coordinated effectively and aligned with other relevant policies and interventions, including government, UNICEF sectoral programmes, and donor/partner initiatives to enhance complementarity and avoid duplication?

Effectiveness: To what extent has the project achieved intended or unintended outcomes? To what extent has the project improved the availability and utilization of MNCH services in the target woredas? To what extent has the project been successful in improving the quality of health services and strengthening referral systems? Were gender-sensitive approaches utilized in service delivery and community engagement activities? To what extent were the capacity-building activities for healthcare providers successful? In which ways were capacities built and to what extent are they being utilized after the end of the project? How have the project's community awareness and engagement initiatives contributed to the increased utilization of MNCH services?

Efficiency: Has resource use been optimized? Were there inefficiencies related to use of resources that could have been avoided? When comparing the cost and benefit observed in health outcomes, how cost-effective have mobile health services been in Afar?

Sustainability: To what extent are net benefits from the programme likely to continue after programme support ends and under which circumstances? Have health systems been strengthened to ensure the sustainability of gains made by the project? What factors could contribute to or hinder the potential scalability of the CBNC services in various contexts of the country?

Impact (Orientation to Impact): What overall difference does the intervention make? What significant higher-level effects has it generated or is it expected to generate, whether positive or negative, intended or unintended?

3.2 Evaluation Design and Approach

The evaluation adopts a utilization-focused, theory-based, mixed-methods design, appropriate for a complex, multi-component health intervention implemented in underserved and conflict-affected regions where service readiness and population vulnerability vary considerably. The design is explicitly oriented towards generating actionable findings and lessons to inform decision-making by KOICA, UNICEF, and national and regional health authorities, including potential adaptation or scale-up in similar fragile settings. Stakeholder engagement was embedded throughout the process, from inception consultations with federal, regional and woreda actors to participatory fieldwork prioritising the perspectives of women of reproductive age, caregivers of children U5, health workers and community representatives, with particular attention to remote, pastoralist and climate-affected communities.

The evaluation is grounded in the project's RFW and reconstructed ToC, enabling systematic examination of causal pathways from inputs and outputs to intended outcomes. This theory-based approach supported analysis of how and why change occurred, identification of adaptations and unintended effects, and assessment of how contextual factors shaped implementation and results across Afar and Benishangul-Gumuz.

A mixed-methods approach was applied to generate robust and contextually grounded evidence. Primary data were collected through HFAs, CEIs, KIIs, FGDs and case studies, complemented by secondary data from project documentation, DHIS2, routine HMIS reports and monitoring records. Given the absence of experimental or counterfactual designs, the evaluation applied contribution analysis rather than attribution. Plausible contribution was assessed through process tracing,

triangulation of quantitative trends (service readiness, utilization, referral performance), qualitative evidence from providers and communities, and consideration of alternative explanations such as parallel interventions or contextual shocks. Where evidence converged across multiple sources, contribution claims were made cautiously; where evidence was partial or mixed, findings were transparently framed and limitations explicitly acknowledged, in line with UNEG expectations for analytical credibility and transparency.

3.3 Evaluation Methodology, Methods and Data Collection

A comprehensive mixed-methods methodology was applied to capture both quantitative and qualitative evidence on results, processes and perceptions across Afar and Benishangul-Gumuz. The design combined structured facility assessments and CEIs with institutional interviews, FGDs, cost-effectiveness analysis (CEA) and case studies to ensure inclusivity and triangulation across stakeholder levels. Stakeholder engagement was integral, involving national, regional and woreda-level authorities, service providers, community leaders and implementing partners through consultations and validation workshops. This ensured findings reflected local realities and strengthened ownership of recommendations.

3.3.1 Evaluation Matrix

The evaluation was structured around the OECD-DAC criteria of relevance, coherence, effectiveness, efficiency, sustainability and impact with the addition of cross-cutting considerations including gender equality, disability inclusion, equity of access and human rights-based approaches (HRBA). The evaluation matrix was developed in the inception phase, linking each key evaluation question to data sources, methods and indicators, and was consistently applied to guide methodological rigour and analytical depth throughout the assignment. This matrix drew directly from the constructed ToC and project-specific RFW. The detailed evaluation matrix is provided in Annex 3 in Volume-II.

3.3.2 Data Collection Methods

A comprehensive mixed-methods approach was applied to capture both quantitative and qualitative evidence on results, processes and perceptions across the two project regions (i.e., Afar and Benishangul-Gumuz). The design combined structured surveys including HFAs, CEIs and participatory consultations to ensure inclusivity and triangulation across stakeholder levels. All data were collected using varied tools (questionnaires, checklists, interview guides and observation templates) aligned with the evaluation matrix and pre-tested during enumerator training.

Document Review: A systematic review of 45 project and policy documents was conducted, including proposals, RFW, progress reports, monitoring data and national strategies. The review provided the strategic and operational context for the evaluation, informed refinement of the evaluation matrix, and guided the design of data collection tools. Documents were purposively selected to represent the project's full implementation period (2020-2025) and cross-sectoral components. Please see Annex 4 in Volume-II for detailed list of documents reviewed.

Sampling for HFA: A stratified purposive sampling strategy was applied to ensure analytical value, operational feasibility and balanced representation across facility levels and regions. From the 747 facilities supported by the project, 53 sites were selected for the HFA (i.e., three hospitals (30 per cent), 25 health centres (25 per cent), and one linked health post for each sampled health centre (total 25 health posts). Sampling proportions reflected differences in facility functions, catchment size and programmatic relevance. Hospitals were sampled more intensively due to their small population and central role in managing complications; health centres were selected to capture variation across woredas; and one health post per health centre enabled system-level triangulation without overwhelming field logistics. The sample was further stratified by region, accessibility and performance (where data permitted), with adjustments for insecurity and terrain. The final sample in Benishangul-Gumuz comprised two hospitals, 14 health centres and 14 health posts. The final

sample in Afar comprised one hospital, 11 health centres and 11 health posts. Stratification was further informed by accessibility, performance (where data permitted) and prevailing security conditions. Sampling details are provided in Annex 5 given in Volume-II.

HFA: The HFA employed structured interviews and observational verification to document key service delivery domains, including staffing and training, availability of essential medicines and equipment, implementation of clinical protocols, functionality of referral systems, infection prevention and control (IPC) practices, community linkages, and supervision and reporting routines. Enumerators ensured inclusion of female staff and persons with disabilities, consistent with UNICEF's disability-inclusive evaluation guidance. Data were collected digitally using Kobo Toolbox with embedded validation checks to strengthen data quality. Sampling distribution by regions is provided in Annex 5 (check Volume-II). The HFA Questionnaire is provided in Annex 6 (check Volume-II).

CEIs: The CEIs were conducted in all sampled facilities following internationally recognized practice standards, with 9 interviews per hospital, 6 per health centre, and 3 per health post, resulting in 252 interviews. This distribution balanced respondent availability with the need for comparable insights across levels of care. Mothers of infants under twelve months were selected to ensure accurate recall of recent MNCH service use and alignment with core indicators in the RFW. Although not statistically representative, the combined sampling approach is sufficiently diverse to enable credible triangulation across quantitative and qualitative evidence, meeting UNEG expectations for mixed-method, utilization-focused evaluations. Sampling and questionnaires used for the CEIs are provided in Annex 5 and Annex 7 respectively. (please see in Volume-II)

KIIs: A total of 39 KIIs were conducted with 40 individuals comprising government officials, UNICEF staff, implementing partners, service and health providers at federal, regional and woreda levels. Respondents were purposively selected for their technical or managerial roles in health. Interview guides aligned with the evaluation matrix explored relevance, effectiveness and sustainability. KIIs ensured triangulation of quantitative findings with institutional perspectives and lessons learned. List of KIIs held is provided in Annex 8, whereas checklists/questions of the KIIs are provided in Annex 9 in Volume-II.

FGDs: A total of 12 FGDs were conducted across all regions with 76 individuals comprising women, caregivers, HEWs, WDAs and persons with disabilities, using participatory facilitation techniques. Discussions captured perceptions, behaviours and experiences of community members and frontline health workers in relation to MNCH services and to understand community level drivers of care seeking, gender norms, barriers to service utilization and perceived project impact. Female participation in KIIs and FGDs was 52 per cent overall. This is 74 per cent in FGDs and 10 per cent in KIIs. Dedicated FGDs were held with persons with disabilities that represented 17 per cent of overall FGD participants. FGD distribution and composition are detailed in Annex 8 given in Volume-II. Detailed checklist for FGDs is given in Annex 10 (check in Volume-II).

CEA: CEA formed an integral component of the evaluation's assessment of efficiency and provided deeper examination of the relative value of key MNCH delivery modalities. Two comparative analyses were undertaken between 4 and 20 August 2025 to complement the broader efficiency findings. The first analysis compared the costs and outcomes of off-site IMNCI training with on-site CBCM mentorship in Benishangul-Gumuz, while the second examined mobile health and nutrition teams (MHNTs) in Afar relative to health centres delivering services through mobile outreach. A mixed-methods design was applied to capture financial inputs, service outputs and provider perspectives, enabling assessment of how cost structures influence access, quality and sustainability in practice. All quantitative and qualitative material was collected by a team of four trained enumerators (two in Benishangul-Gumuz and two in Afar) with two supervisors i.e. one for each area. The supervisors and enumerators were trained remotely by the evaluation team along with local team experts. This followed by pre-testing of tools at the Afar RHB. The technical and local data collection lead conducted monitoring through surprise calls, follow up and spot checks for quality assurance. The analysis integrated cost and effectiveness data from five primary sources (i.e., MHNTs, health centres with outreach, CBCM mentorship, IMNCI off-site training, and qualitative evidence from KIIs and

FGDs). Average cost per effect and incremental cost-effectiveness ratios were calculated, supported by sensitivity analyses. Full methodological details are provided in Annex 11 as refer to Volume II

Case Studies: Two case studies (one each from Afar and Benishangul-Gumuz) documented good practices for the improvements in health and wellbeing of newborns and children, particularly among marginalized and underserved populations. The cases were selected to demonstrate replicable models, sanitation marketing and community-based protection coalitions, and to illustrate the project's tangible effects on children and families. The case studies explore long term outcomes at individual, household, facility and community levels, focusing on behavioural change, continuity of care, health system resilience and institutional sustainability. Field observations and stakeholder testimonies were triangulated with quantitative findings. These are shared in Annex 12 (see Volume II for details).

An overall summary of data sources and respondents by region is provided below in Table 5, and more details about types of respondents are shared in Annex, contained in Volume II.

Table 6: Summary of Data Sources and Respondents by Region

Method	Respondents / Units	Afar	Benishangul -Gumuz	Federal	Total / Purpose
Health Assessment	53 health facilities	23	30		Quantitative outcome data on health
CEI	254	106	146		Experiences and perceptions of community
KIIs	40 officials and partners	19	17	4	Institutional and policy perspectives
FGDs	12 groups (women, HEWs, WDA, persons with disabilities)	6	6		Perceptions of service quality and inclusion
Cost-Effectiveness Analysis (CEA)	2	1	1		Relative costs and effectiveness of key service-delivery and capacity-building models to assess value for money and stronger system performance
Case Studies	2 communities	1	1		Good practices and learning

3.3.3 Contribution Analysis and Attribution Boundaries

Given the complexity of the operating environment and the presence of multiple concurrent health-sector interventions, the evaluation adopts a contribution-based approach rather than attributing outcomes solely to the project. The evaluation plausibly links observed improvements in service readiness, provider competence, referral performance and selected facility-level outcomes to the project's interventions through triangulated evidence from facility assessments, interviews and routine data. However, the evaluation does not claim attribution for population-level mortality changes due to incomplete baseline data, the absence of recent national survey results and the influence of contextual factors such as insecurity, displacement and health system shocks. Findings related to impact are therefore presented as credible contributions rather than causal effects.

3.3.4 Sampling Rationale, Representativeness and Analytical Implications

The evaluation applied purposeful and stratified sampling across quantitative and qualitative components to maximise analytical depth, contextual variation and learning, rather than statistical representativeness. This approach is consistent with UNEG guidance for utilization-focused and theory-based evaluations, particularly in fragile, resource-constrained and pastoralist settings where population mobility, insecurity and data limitations constrain probabilistic sampling.

To enhance transparency and equity responsiveness, the sampling strategy explicitly prioritised marginalised and hard-to-reach groups as analytically significant sub-populations. These included pastoralist communities, adolescents and young mothers, and persons with disabilities. Pastoralist populations were represented through the purposive selection of remote and mobile woredas where outreach services and MHNTs operated, ensuring coverage of nomadic and semi-nomadic contexts. Young mothers were included through CEIs and FGDs conducted at health centres and health posts offering adolescent-responsive MNCH services. Persons with disabilities were deliberately oversampled within qualitative components through dedicated FGDs (nearly 1/4th of total women participants were women with disabilities) and purposive KIIs, reflecting both UNEG equity principles and UNICEF disability-inclusive evaluation guidance.

While quantitative sample sizes for these sub-groups were constrained by access, security conditions, and the absence of disability-disaggregated routine data, their inclusion was sufficient to support meaningful equity-focused analysis and methodological triangulation across data sources.

For qualitative methods (KIIs, FGDs and case studies), sampling prioritised information-rich cases and stakeholder groups with direct roles in service delivery, governance or service utilization. Key informants were selected based on decision-making authority, implementation responsibility or technical oversight, ensuring that findings captured system-level perspectives on relevance, effectiveness and sustainability. FGDs were deliberately stratified by gender, caregiver role, disability status and community position to enable examination of differentiated experiences, social norms and access barriers across population groups. Out of 77 participants of FGDs, 56 were women and 13 were women with disabilities.

Recognising that purposive sampling does not support statistical generalization, the evaluation applied several measures to strengthen credibility and analytical robustness:

- Ensuring geographic balance across Afar and Benishangul-Gumuz.
- Including multiple respondent categories across community, facility and system levels.
- Applying systematic triangulation with quantitative facility data, CEIs and routine service statistics.

The implications of purposive sampling were explicitly considered during analysis. Findings are therefore presented as analytical generalizations, identifying plausible patterns, mechanisms and contextual drivers rather than population-level prevalence. Divergent views were actively sought and documented, and conclusions were drawn only where convergence across multiple data sources and methods was observed.

3.3.5 Data Analysis

A mixed-methods approach was used to integrate quantitative and qualitative evidence and strengthen credibility through triangulation. Quantitative data from the HFA and CEIs were collected using the Kobo Toolbox and analysed using SPSS (client exit interviews- CEIs) and MS Excel (health facility assessment-HFA). Qualitative data from KIIs, FGDs and case studies were transcribed and thematically coded against the evaluation matrix. Findings were triangulated across methods and respondent groups and, where feasible, benchmarked against project targets and relevant national or regional standards. Analytical choices explicitly accounted for data and access constraints,

including baseline gaps, insecurity and limited disability-disaggregated monitoring. The analysis therefore focused on contribution and plausibility, applying cautious trend interpretation, process tracing and convergence testing across sources. Evidence gaps were transparently reported and informed recommendations for strengthening future monitoring and learning systems. Human rights, gender equality and disability inclusion were embedded within analysis. Data were disaggregated by sex, age, disability status (functional limitation), geography and mobility, where possible. Qualitative analysis examined access, agency, acceptability and discrimination, enabling assessment of whether service improvements translated into equitable outcomes, consistent with a LNOB lens.

3.4 Integration of Human Rights, Gender Equality, Disability Inclusion and Equity

The evaluation applied an explicit HRBA consistent with UNICEF and UNEG standards, integrating principles of participation, non-discrimination, accountability, transparency and empowerment across design, data collection, analysis and interpretation.

Identification of Rights-Holders and Duty-Bearers

- Primary rights-holders include women of reproductive age, newborns and children, caregivers, pastoralist populations and persons with disabilities.
- Duty-bearers include federal and regional health authorities, woreda health offices, facility managers, health workers and implementing partners responsible for ensuring availability, accessibility, acceptability and quality of MNCH services.

Evaluation questions, indicators and analysis explicitly examined how duty-bearers fulfilled obligations and whether rights-holders were able to access services equitably, particularly in remote, conflict-affected and climate-vulnerable contexts.

Gender Equality

Gender analysis moved beyond participation metrics to examine gendered power relations, decision-making authority, unpaid care burdens and sociocultural norms influencing service uptake. Data were analysed to assess whether observed improvements in MNCH services translated into meaningful changes in women's access, agency and quality of care, and whether male engagement strategies contributed to shifts in household and community practices.

Disability Inclusion

Disability inclusion was integrated through the use of the Washington Group Short Set to identify functional limitations in CEIs and purposeful inclusion of persons with disabilities in FGDs. Disability inclusion was not treated solely as a descriptive characteristic but as an evaluative lens. Analytical attention was given to whether service design, outreach modalities and facility readiness addressed structural barriers faced by persons with functional limitations. Where gaps were identified, these were assessed in relation to institutional capacity, resource allocation and accountability mechanisms, rather than individual-level constraints alone.

Equity and LNOB

An explicit LNOB lens was applied by disaggregating findings across geography, facility type, mobility patterns (pastoralist vs settled) and gender status. Differences in access, quality and continuity of care were assessed not only descriptively, but in terms of equity of outcomes and distribution of benefits. The evaluation examined who benefited most, who benefited least and why, linking observed disparities to structural, institutional and contextual drivers.

Ethics as an Analytical Consideration

Ethical principles extended beyond procedural compliance to analytical reflection. The evaluation examined power dynamics, barriers to voice, and the extent to which marginalized groups' perspectives influenced findings and recommendations. The analysis reflects on whose knowledge

was prioritized, where voices may remain underrepresented, and how future evaluations and programmes can better address these gaps.

3.5 Quality Assurance Approach

A multi-layered quality assurance framework was implemented to ensure that all evaluation processes and deliverables adhered to UNICEF-adapted UNEG Evaluation Report Standards and the Global Evaluation Report Oversight System (GEROS) Quality Assessment Criteria. The approach upheld the UNEG principles of credibility, integrity, transparency and accountability, ensuring that data, analysis and reporting met the highest professional and ethical standards. The collected quantitative and qualitative data were subjected to continuous verification and systematic rechecking, with every individual survey question reviewed for internal consistency and logical accuracy. Geographic verification of sampled locations was conducted to confirm that data collection accurately reflected field realities. Peer review of data collection instruments, daily debriefings with field teams, close technical supervision, and rigorous data cleaning and validation procedures ensured methodological consistency and reliability throughout the evaluation cycle.

A two-day enumerator training followed by a one-day pre-test in comparable non-sample sites further strengthened data quality. Training combined virtual sessions led by international evaluation specialists with in-person facilitation by national technical leads, reinforcing understanding of evaluation objectives, tool content, ethical engagement and disability-inclusive approaches. Feedback from the pre-test informed refinements to question wording, sequencing and contextual appropriateness. This blended training model enhanced enumerators' competence in accurate sampling application, data integrity and respondent protection.

Quality assurance was maintained through independent peer review and iterative validation. All deliverables, including tools, datasets and report drafts, underwent structured review by UNICEF and the ERG. Their feedback was systematically incorporated, ensuring alignment with evaluation standards and reinforcing impartiality and accountability. The cleaned dataset and coded transcripts would be submitted to UNICEF, providing a transparent audit trail and supporting future learning and evidence use.

3.6 Compliance with Ethical Considerations, Norms and Standards

The evaluation was conducted in full compliance with UNICEF's Ethical Standards for Research, Evaluation, Data Collection and Analysis (2015). The evaluation adhered to the UNEG Ethical Guidelines (2020) and principles of integrity, respect, beneficence and accountability, which guided all stages of the process. The evaluation applied transparent and systematic criteria for data collection and analysis, ensuring balanced representation of stakeholder perspectives, and disclosing limitations in an open and transparent manner.

1. **Integrity and Impartiality:** The team acted with professional integrity and independence, ensuring objectivity and avoidance of bias or conflict of interest in the collection, interpretation and presentation of evidence. Evaluation findings were derived from verifiable data and subjected to systematic triangulation across sources to preserve credibility.
2. **Ethical Clearance:** The evaluation protocol was submitted by the evaluation team to the Health Media Lab Institutional Review Board (HML IRB), Washington D.C., and formally approved on 22 May 2025. The approval certificate is attached as Annex 13 (as provided in Volume II). In addition, the evaluation team received the letters of support from the RHBs of both regions.
3. **Informed Consent and Respect for Participants:** All participants were informed of the evaluation's purpose, voluntary nature, confidentiality and right to withdraw at any stage. Written or verbal consent (depending on literacy levels) was obtained prior to participation, with additional consent for audio or photographic documentation. Consent forms are provided in Annex 14 as available in Volume 2 of this report.

4. **Beneficence and Protection of Vulnerable Groups:** Consistent with UNEG's principle of beneficence, special measures were implemented to ensure that participation did not cause harm or distress. Safeguards included gender- and age-appropriate facilitation. These ensured respect, safety and inclusion of women, persons with disabilities and other vulnerable participants.
5. **Data Confidentiality and Accountability:** All data were anonymized at source, securely stored and reported only in aggregate form. Accountability mechanisms were built into the process through transparent documentation, peer review of findings and secure data handling consistent with UNICEF's data protection procedures.
6. **Cultural Sensitivity and Local Protocols:** Field teams received orientation in ethical and culturally sensitive engagement, adhering to local approval processes and community protocols. This reinforced mutual respect and trust between evaluators and participants.
7. **Do No Harm Principle and Safeguarding:** The evaluation applied a 'do no harm' approach throughout, with established referral mechanisms for any identified child protection, GBV or safeguarding concerns. Enumerators were trained in procedures for the prevention of sexual exploitation and abuse (PSEA) to ensure immediate reporting and mitigation.

3.7 Evaluation Limitations, Risks and Mitigation Measures

Despite the adoption of stringent quality assurance measures, several limitations were acknowledged. The evaluation team adapted its approach as needed, ensuring that constraints were systematically addressed and transparently reported in the final outputs. Table 6 below presents a summary of key limitations and mitigation measures.

Limitations related to incomplete baseline data most strongly affect the measurement of change in selected outcome and impact indicators, particularly those relying on routine health information systems. To mitigate these constraints, the evaluation employed triangulation across multiple data sources, comparative regional analysis and qualitative validation of trends. While this strengthens confidence in directional findings, conclusions related to magnitude of change and population-level impact should be interpreted with appropriate caution.

Table 7: Limitation and Mitigation Measures for Evaluation

Limitation/ Problem Area	Explanation	Mitigation Measures
Incomplete baseline data	The project lacked baseline data which most strongly affected the measurement of change in selected outcome and impact indicators, particularly those relying on routine health information systems.	The evaluation employed triangulation across multiple data sources, comparative regional analysis and qualitative validation of trends. While this strengthens confidence in directional findings, conclusions related to magnitude of change and population-level impact should be interpreted with appropriate caution.
Missing disability-disaggregated data	The project did not collect disability-tagged monitoring data, limiting quantitative analysis of inclusion. Only a small retrospective disability sample could be captured.	The evaluation used the Washington Group functional limitation module in exit interviews, conducted purposive KIIs/FGDs with women with disabilities, and triangulated qualitative and quantitative data.
Time and data gaps for CEA	Financial records related to the opportunity costs (training vs mentorship) did not easily accessible. There was lack of	The evaluation used triangulation (facility budgets, outreach logs, KIIs), applied proxy estimates and undertook sensitivity analysis to test assumptions.

Limitation/ Problem Area	Explanation	Mitigation Measures
	community perspective (quantitative data; MHNT vs health centres).	
Connectivity and technology challenges	Weak network and power outages delayed Kobo syncing and risked incomplete submissions, especially in remote woredas.	The evaluation enabled offline data collection, provided backup tablets and power banks, built buffer days into the field plan, and ensured daily data quality checks.
Language and dialect diversity	Multiple local dialects risked inconsistent interpretation and miscommunication during interviews and FGDs.	The evaluation recruited local-language enumerators, used back-translation, included cultural sensitivity in training and conducted daily debriefs to resolve inconsistencies.
Inconsistent probing/interview quality	Differences in interviewer technique, transcription quality and probing depth risked uneven qualitative data.	The evaluation delivered structured training, conducted mock interviews, applied close supervision, reviewed sample transcripts and held daily feedback sessions.
Male-skewed enumerator composition	Security restrictions reduced feasibility of deploying female enumerators, potentially limiting disclosure on gender-sensitive topics.	The evaluation ensured private interview spaces, strengthened safeguarding protocols, used gender-sensitive facilitation and triangulated with FGDs led by female staff, where feasible.
Purposive sampling limits generalisability	The sample (facilities, households and client exit interview sites) was purposive and therefore analytically strong, but not statistically representative of all regions.	The evaluation ensured geographic and system-level diversity, applied stratified purposive selection, and strengthened triangulation to validate trends across multiple data sources.

3.8 Evaluation Management and Oversight

3.8.1 Evaluation Timeline

This evaluation took place from May to October 2025. The inception phase (May to June 2025) involved framework development, tool design and ethical approval. Field data collection was carried out from 10 June to 27 June 2025 with final transcriptions by 27th July. Analysis and synthesis were done from first week of July to second week of August 2025, and the first draft was completed by 16 September 2025 for review and feedback by the programme team and members of ERG. Subsequent revised documents were submitted on 12 October 2025, based on integrating feedback received on the draft reports.

3.8.2 ERG

An ERG was established to provide strategic oversight, technical guidance and ensure alignment with UNICEF's Evaluation Policy, UNEG Norms and Standards and national sector priorities. The ERG reviewed and endorsed evaluation tools, facilitated access to key stakeholders and documentation, and provided substantive feedback during data analysis and validation workshops. It was chaired by Dr. Mussarrat Youssuf, Evaluation Manager at UNICEF Ethiopia, with operational and technical support from Ms. Maryamawit Solomon Assefa, Evaluation Officer and other ERG members (see Annex 23 in Volume-II for reference).

3.8.3 Evaluation Team and Role

The external evaluation team was led by Dr. Mzia Turashvili (Team Leader) responsible for overall methodological design, technical leadership, analysis and reporting. Dr. Turashvili was supported by Mr. Niaz Ullah Khan (Deputy Team Leader and Quality Assurance Expert) and Mr. Sajid Zaman (Data Management Expert). Other local experts from Ethiopia included Dr. Mussie Alemayehu (Data Collection Lead), Prof. Haftu Berh (Quantitative Data Coordinator) and Dr. Araya Abrha (Qualitative Data Coordinator). Mr. Khurram Riaz (Value for Money Expert) provided sector-specific technical inputs on cost-benefit analysis case studies. In addition, five young evaluators (see Annex 23 in Volume-II for reference) provided necessary support to senior evaluators and other technical experts in carrying out this assignment. The entire evaluation process was coordinated and received quality-assurance in close consultation with UNICEF Ethiopia.

3.8.4 Dissemination and Communication

After completion of initial data analysis, a virtual preliminary findings meeting was held with UNICEF Ethiopia and federal and regional government stakeholders. An in-person dissemination workshop would be held during January 2026 in Addis Ababa. Participants from government, UN agencies, NGOs and community representatives will review and validate the draft findings. Final deliverables include a comprehensive evaluation report, executive summary, evaluation brief and presentation slides, all disseminated to support learning and inform future projects for Health in Ethiopia.



4 KEY FINDINGS

This chapter presents the core evidence and analytical findings of the summative evaluation of the KOICA-funded health programme. It assesses programme performance against the OECD-DAC and UNEG evaluation criteria (i.e., relevance, coherence, effectiveness, efficiency, impact and sustainability), while systematically integrating cross-cutting dimensions of gender equality, equity, disability inclusion, climate resilience and human rights. Drawing on triangulated quantitative and qualitative evidence from HFAs, CEIs, household surveys, FGDs, KIIs and selected case studies across the targeted regions, this section examines how the health intervention performed in fragile, remote and displacement-affected contexts. It analyses the extent to which the programme strengthened service availability, quality, utilization and system capacity, and identifies factors that enabled or constrained progress at facility, community and system levels. The section highlights the key achievements, implementation challenges, and contextual and institutional influences shaping results. Collectively, these findings provide the empirical foundation for the conclusions, lessons learned and strategic recommendations presented in the subsequent section of the report.

4.1 Relevance

This section assesses the extent to which the project was responsive to the health needs of targeted regions, communities and facilities, and whether its design remained sensitive to evolving contextual conditions in Afar and Benishangul-Gumuz. It examines responsiveness to systemic and community-level MNCH gaps, alignment with national and global priorities, inclusion of vulnerable populations, and the robustness of the reconstructed ToC in linking inputs to intended outputs, outcomes and impact (Evaluation Question 1- Revised-1- EQ1-R1). It further reviews how the intervention adapted to shocks and operational constraints including epidemics, conflict, displacement and economic pressures, in order to remain sensitive to emerging needs (EQ2-R2). The analysis draws on

triangulated evidence from CEIs, FGDs with women, HEWs and community groups, KIIs with federal, regional and woreda officials, as well as secondary data from baseline assessments, national strategies, and project design, monitoring and reporting documents.

4.1.1 Response to Local Needs and Alignment

EQ1: To what extent is the project responsive to the needs of the targeted regions, communities and health facilities to bring about change in pertinent health parameters for newborns and children?

4.1.1.1 Response to Local Needs

Finding 1: The project was highly responsive to documented needs in Afar and Benishangul-Gumuz regions, drawing on structured baseline and feasibility assessments to design a coherent package of system, service and demand-side interventions. However, protection and inclusion needs (disability, sexual and gender-based violence (SGBV), youth) were not mainstreamed in assessment and design.

The evaluation found that the design was grounded in a detailed baseline led by UNICEF, Emory University, the FMOH and RHBs. This assessment identified persistent MNCH challenges (i.e., high neonatal mortality, limited ANC with four or more visits (ANC4+), limited SBA coverage, poor early PNC, fragile readiness, recurrent stockouts, weak referral pathways and low DHIS2 utilization). These findings shaped the integrated response, which focused on clinical mentorship, BEmONC/NICU strengthening, NBC, improved readiness and structured QI processes. For more detailed information about the identified key needs, please view Annex 15 (see Volume II).

Operational priorities were further refined through structured facility assessments, community consultations and capacity appraisals which enabled the project to align interventions with local service-delivery constraints and community-level barriers. These analyses informed targeted solutions such as MHNT and the Sustainable Outreach Strategy for pastoralist and remote populations, while community-based platforms (i.e., HEWs, WDA networks, color-coded referral vouchers and women's forums) addressed behavioural and socio-cultural determinants of care-seeking. Building on this evidence, the project introduced a comprehensive intervention package comprising: (i) capacity development and clinical mentorship in IMNCI, BEmONC, ENC, NICU care and QI; (ii) readiness enhancements through equipment, commodities and NBC; (iii) demand-generation activities using established community structures; (iv) differentiated service-delivery models for hard-to-reach areas; and (v) governance and data-system strengthening through DHIS2, quarterly review meetings, and reinforced woreda and regional ownership. This sequenced, evidence-led approach ensured that interventions directly addressed the systemic and community barriers identified at baseline.

Despite this strong orientation to the needs, disability inclusion and SGBV considerations were not systematically analysed during design. KIIs highlighted that disability-responsive adaptations were ad hoc, and structured referral pathways for survivors of violence varied by locality. Client satisfaction findings from the CEIs further underlined the project's strong relevance. Overall satisfaction reached 98.4 per cent, substantially exceeding the HSTP-II benchmark of 80 per cent. Recommendation rate by the clients to visit health facilities were similarly high at 93.7 per cent, indicating broad acceptance of the intervention's priorities. Satisfaction was strongest for delivery and ANC services, where improvements in provider capability and respectful care were most evident. Moderately high satisfaction with sick-child care and comparatively lower satisfaction with PNC reflected persistent gaps in experience of care, continuity and supply availability at primary-level facilities.

Table 8: Needs-Response Evidence

Baseline need	Project response	Illustrative evidence
High neonatal and U5 mortality, low ANC4+, SBA, PNC coverage	Clinical mentorship in IMNCI, BEmONC, ENC, NICU, NBC, QI teams and MHNTs	The ANC4+ coverage in Afar was 31.1% and in Benishangul-Gumuz it was 55.9% vs the

		national coverage rate which was 43% (DHS, 2019). The U5 mortality rate (U5MR) was 58/1,000 in Afar and 90/1,000 in Benishangul-Gumuz vs the national rate of 59/1,000. The Infant Mortality Rate (IMR) was 46/1,00 in Afar and 74/1,000 in Benishangul-Gumuz vs the national rate was 47/1,000 (FMOH Ethiopia, 2019).
Facility readiness gaps (infrastructure, stock-outs, limited equipment)	Provision of essential equipment and commodities, NICU readiness strengthening	Only 10-17% of facilities had radiant warmers, and any health posts lacked electricity and piped water (Ethiopia, UNICEF, 2021).
Workforce shortages and weak supervision	Structured training and mentorship, QI teams, leadership coaching	Baseline reported “almost no NICU services” in Afar and limited supervision systems (Ministry of Health, 2021).
Fragmented referrals and delayed care-seeking	Referral protocols, colour-coded slips, transport support, community mobilization	Referral (annual) rates were as low as 1.7% in Afar and 5% in Benishangul-Gumuz (Ministry of Health, 2021).
Weak HMIS/DHIS2 use	Training in DHIS2/Community Health Information System (CHIS), performance review meetings, lot quality assurance sampling (LQAS)	Less than half of facilities used data quality tools and many lacked registers or computers (Ministry of Health, 2021).
Equity gaps and access barriers for pastoralist and displaced groups	MHNTs, health centre outreach, women’s forums, HEW/WDA engagement	Afar’s predominantly pastoralist population was prioritized for outreach services (UNICEF, Feb 2020).
Protection and inclusion needs (disability, SGBV, etc.)	Not systematically mainstreamed in assessment and design	The baseline survey, project proposal and Log Frame (Ethiopia, UNICEF, 2021) (UNICEF, Feb 2020).

4.1.1.2 Alignment with National and Development Priorities

Finding 2: The project aligned strongly with national and global MNCH policies and UNICEF’s strategic commitments as it focussed on quality, utilization and governance priorities, although incomplete integration of disability and SGBV reduced full alignment.

The project’s focus on improving quality of care, increasing utilization and strengthening governance aligned with Ethiopia’s HSTP-II (2021-2026), the National Strategy for Newborn and Child Health Development (2022), the National Strategy for Child Survival (2005), and National Health Sector Strategic Plan for Early Childhood Development 2020-2021 and 2024-2025. Key project interventions including mentorship, NICU readiness, supply-chain support, community engagement and DHIS2 strengthening were directly consistent with these frameworks.

The project also reflected the commitment to equity, underserved regions and system strengthening in UNICEF Ethiopia’s Country Programme Document (CPD) 2020-2025. By targeting Afar and

Benishangul-Gumuz, the project operationalized UNICEF's rights-based approach and supported national objectives to reduce preventable maternal and newborn deaths.

At the global level, the project aligned with the Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) (United Nations, 2015), contributing to its three pillars (i.e., "Survive, Thrive, and Transform" pillars). It also reinforced Ethiopia's commitments under Every Newborn Action Plan (ENAP) to end preventable newborn deaths and reduce maternal mortality by 2030 (ENAP, 2014) (World Health Organization, 2014). Furthermore, the project reflected Ethiopia's commitment to the SDGs, particularly SDG 3 (Good Health and Well-Being) and 5 (Gender Equity).

However, two caveats temper this strong alignment. First, disability inclusion was not explicitly built into the project design, despite recognition in national policy frameworks and UNICEF strategies (UNICEF, 2022). Secondly, linkages with the survivor-centred SGBV services were not systematized, even if some implementation sites (e.g., Dubti Hospital) provided a functioning one-stop SGBV service centre.

4.1.1.3 Inclusion of Vulnerable Populations in the Design

Finding 3: The project design was strongly equity-focused, ensuring the inclusion of pastoralist communities, women and children, and IDPs through tailored delivery strategies. However, it lacked explicit measures for disability inclusion and intersection linkages for SGBV services, leaving gaps in otherwise well-aligned equity framework.

The project's geographical focus on Afar and Benishangul-Gumuz reflected an intentional strategy to prioritize underserved regions facing structural barriers to MNCH services. The design incorporated differentiated delivery models MHNTs, special outreach services (SOS), women's forums, pregnant women's groups and HEW-led mobilization which enabled access for pastoralist communities and remote settlements. In Benishangul-Gumuz, the design further integrated outreach to IDPs in conflict-affected locations, drawing on UNICEF's emergency programming mechanisms. These approaches strengthened women's agency through community platforms, expanded the reach of health services to mobile populations and enhanced access for displaced households. They aligned with UNICEF's equity commitments and Ethiopia's aim to address regional disparities in maternal and newborn health outcomes.

Despite these strengths, the design did not systematically incorporate disability inclusion or structured pathways for survivors of SGBV (*discussed under EQ1-R2*). Positive examples existed but were isolated rather than embedded. As a result, while the equity focus was strong for pastoralist, mobile and displaced groups, intersectional inclusion remained partial.

4.1.1.4 Assessment of the Reconstructed ToC

Finding 4: The reconstructed ToC is robust and demonstrates a clear and coherent causal pathway linking project inputs to the identified MNCH burden in Afar and Benishangul-Gumuz. However, several assumptions were under-specified and gaps in the RFW constrained evaluability, particularly for utilization, equity and impact.

A review of the reconstructed ToC and the RFW show strong alignment between health-system gaps, project objectives and result areas. The model adequately captures the three intended domains (i.e., quality, utilization and governance/data) and the outputs plausibly contribute to intermediate outcomes. Nevertheless, gaps in the results architecture weaken evaluability. These include the misplaced SBA indicator (a utilization measure) under Quality; missing indicators for Impact, Outcome 2, and specific objective 3 (SO3); inflated annual reporting for Outputs 1.1 and 1.2; and missing denominators for referral indicators under Output 2.2. An overall assessment is provided in Table 7.

Where the ToC assumptions held most consistently in Benishangul-Gumuz and at hospital and health centre levels the project demonstrated strong progress in NICU performance,

BEmONC/IMNCI capability and referral functionality. Where enabling conditions were only partially met, such as financed operation and maintenance (O&M) budgets, reliable supply chains, measurable referral pathways, verified routine data and equity adaptations for pastoralist settings, the results remained uneven. These gaps were most prominent in Afar Zone 2 and at the health post level, where persistent fragilities in staffing, transport, infrastructure and CHIS weakened continuity and limited equitable benefits.

Table 9: Assessment of Constructed ToC (2020-2024) and Suggestions for Future

ToC Element	Findings	Analysis	Suggestions
Impact: Improved health and reduced neonatal, U5 and maternal mortality	<i>Plausibly achieved, but cannot be verified</i>	Impact indicators are absent from the RFW. Overall health outcomes improved, although more in Benishangul-Gumuz than in Afar. NICU case-fatality declined. Maternal mortality likely decreased (inferred from SBA gains). U5 mortality not reported. Population-level neonatal mortality rate (NMR), U5MR and maternal mortality rate (MMR) estimates are pending release of the next Ethiopian Demographic and Health Survey (EDHS).	Insert clear impact metrics (NMR/U5MR/MMR) to the RFW, verify with EDHS, use robust interim proxies and data triangulation; equity actions on Afar, sustaining the service-quality drivers to reduce mortality.
Outcome 1: Increased quality of maternal, newborn and childcare	<i>Achieved but with equity gaps in Afar</i>	Mortality after admission to NICUs decreased (3/5 achieved the target, 2/5 almost achieved). Proportion of births attended by SBA increased overall (72.6% vs the target 60%). However, Afar has not attained the target and gaps remain in remote and pastoralist communities.	Reduce NICU case-fatality in remaining hospitals. Increase SBA coverage in Afar (remote kebeles). Reconcile routine facility data with HMIS/DHIS2 and triangulate with EDHS. Move SBA coverage to Outcome 2 (Utilization).
Output 1.1: Health facilities providing iCCM/IMNCI services	<i>Achieved</i>	Coverage of health facilities providing iCCM/IMNCI services is near-universal (439 of 446 facilities, 98.4 per cent); however, the reported 207.2 per cent “performance” reflects repeated annual reporting of the same facilities rather than true expansion of coverage.	Report a time-bound proportion (e.g., % of health posts functional this quarter); use unique facility IDs; define “functional iCCM”; Cap the target at 100%.
Output 1.2: QI initiatives	<i>Largely achieved</i>	Supported 84.1% (491/584) facilities; reported 148.8% reflects repeat reporting.	Fix the indicator definition and reporting procedure as above.
Output 1.3: Health workers trained on ENC, NBC and NICU services	<i>Over-achieved</i>	Trained 259% (596/230) on BEmONC/ENC/NBC/NICU due to mop-up rounds to offset turnover/new deployments.	Shift from “trained” to “competent & retained”: e.g., % of trainees who are competent (OSCE ≥80%) and still posted in at 6-12 months.

ToC Element	Findings	Analysis	Suggestions
Outcome 2: Improved MNCH service utilization by communities	<i>Not reported</i>	The indicator and its measurement method lack clear definition. The initial RFW indicator not measured and excluded from the final RFW.	Re-insert a clearly specified utilization indicator. Define numerator/denominator, case definitions and treatment.
Output 2.1: Enhanced multi-sectoral community engagement	<i>Almost fully achieved</i>	Reached 96% (405/421) kebeles.	Close the gap: map the 16 unreached kebeles, identify barriers (remoteness, mobility, security), and micro-plan last-mile strategies.
Output 2.2: Strengthened referral system for sick newborns and children, and PNC	<i>Achievement cannot be assessed</i>	Only numerator (1,772 referrals) reported; denominator (cases requiring referral) missing. Target: $\geq 75\%$ of eligible cases referred (baseline 0%).	Fix the indicators: Define the denominator: # meeting referral criteria per guidelines; document denominators. Track referral completion rate.
Outcome 3: Improved ownership and governance in public health sector	<i>Achieved partially</i>	50% (2/4) epidemiological surveillance areas developed to demographic surveillance sites (DSS) in both regions.	Develop the two remaining DSS sites to strengthen evidence-driven MNCH governance.
Output 3.1: Woreda health offices are including key MNCH activities in annual plans	<i>Achieved</i>	All targeted woredas (42/42) integrated MNCH in annual plans.	Move from “included” to “operationalized”; require each woreda plan to be costed, time-bound and owned (activities, timelines, responsible person).

The validity of ToC external assumptions include:

1. Sustained MNCH prioritization by FMOH/RHBs was largely held as agendas and engagement stayed high, but thin capacity, turnover and shocks slowed follow-through.
2. Regular EDHS cycles did not hold (and these were beyond the project scope) with no full EDHS after 2016 (in 2019 there was a Mini DHS), limiting comparable outcome trends and forcing reliance on HMIS/CHIS and special studies.
3. Continued investment in emerging/pastoralist regions partially held with continued funding but uneven and below need; devaluation, supply issues and gaps in human resources (HR) constrained readiness.
4. Stable political/security environment did not hold as instability in Benishangul-Gumuz (Metekel, Kamashi) and spillovers in Afar disrupted services while adaptations mitigated but did not prevent coverage losses.
5. Effective emergency preparedness partially held with systems mobilized for droughts, outbreaks and displacement, but were overstretched and partner dependent.

4.1.2 Adaptation, Contextualization, Inclusion and Feedback Mechanisms

EQ2: To what extent did the intervention design remain sensitive to the needs of the target population and to the context of target areas under changing circumstances?

4.1.2.1 Adaptation to Evolving Challenges

Finding 5: The project remained responsive to evolving shocks because flexible budgeting, decentralized decision-making and differentiated service-delivery models enabled continuity of MNCH services during epidemics, insecurity, displacement and economic pressures.

The project demonstrated strong adaptation capacity across both regions, which stemmed from its initial design emphasis on risk mitigation and localized planning. The evidence from KIIs, monitoring records and FGDs confirms that COVID-19, cholera, measles and dengue outbreaks prompted immediate adjustments to capacity-building activities. Training sessions were reorganized into smaller groups, personal protective equipment (PPE) was distributed, and COVID-19 protocols were introduced, allowing clinical upskilling to continue without significant interruption.

Where conflict and displacement disrupted access (i.e., Afar Zone 2, parts of Metekel and Kamashi), MHNTs and the SOS provided an alternative service channel. HFA data and KIIs indicate that MHNTs remained the only functional delivery modality in several pastoralist and insecure kebeles. Respondents in Benishangul-Gumuz also described the project's role in reinforcing continuity of essential newborn and child services by supplying hygiene items, supporting WASH infrastructure, and providing IPC materials to IDP sites.

Financial records and KIIs at regional and woreda levels show that flexible budget reallocations were authorized to address inflation, transport challenges and emergency commodity requests. Complementary donor inputs (e.g., Irish Aid support for Afar Zones 1 and 4) enabled the project to expand coverage beyond the original plan during acute crises. Rehabilitation of damaged facilities and repeated mentoring cycles to counter high staff turnover further supported resilience. Although insecurity in Kamashi continued to restrict operations, overall, the adaptive strategies ensured service continuity across the majority of target areas.

4.1.2.2 Contextualization During Implementation

Finding 6: Contextual analysis was updated continuously through joint reviews, supervision and community engagement, enabling ongoing alignment with emerging needs. Therefore, the project stayed aligned with community needs, though with regional variations. The project was more closely connected with communities in Afar, while in Benishangul-Gumuz feedback relied more on indirect reporting mechanisms through health infrastructure.

Continuous contextual analysis played a central role in maintaining the project's sensitivity to changing conditions. KIIs at federal, regional and woreda levels confirmed that quarterly joint review workshops, bi-annual national review platforms, and continuous supervision missions informed revisions to micro-plans and outreach schedules. These reviews made use of HMIS/DHIS2 trends, woreda monitoring reports and direct field observations, ensuring that programme decisions reflected operational realities.

In Afar, KIIs with key stakeholders, FGDs with HEWs, and CEIs insights reveal that supervision systems were closely linked to community dynamics. House-to-house visits, consultations with clan elders, women's forums and the use of community scorecards highlighted that shifting pastoralist movement, seasonal barriers and care-seeking patterns impacted supervision. However, understanding community mechanisms ensured timely adjustments to MHNT deployment and outreach calendars.

In Benishangul-Gumuz, constraints linked to security and access limited face-to-face community engagement. KIIs from regional stakeholders and HEWs indicate that contextual insights from conflict-affected woredas relied heavily on reporting through HEWs and health posts. In one KII, a government stakeholder stated that, *"Feedback came through health posts and HEWs; there was no direct channel for community input"*. As a result, while programme activities remained broadly aligned with local needs, certain contextual subtleties particularly from remote or insecure areas may not have been fully captured. This regional difference underlines the importance of diversified, community-facing monitoring systems for sustained contextual responsiveness.

Box R1: Changes in community and health services, Afar

Fatuma used to whisper her questions at the back of the women's meeting, worried that her neighbour would laugh about "modern" birth plans. Now she walks to the front with her WDA group, referral slip in hand and reminds new mothers about ANC dates and danger signs. She says the change started when HEWs, religious leaders and the RHB came together to teach, again and again, that every woman, every child and every person with a disability belongs has a right to care. The KOICA-UNICEF team made women the first priority and invited them into planning, not just attendance. At the health post, ramps and clearer pathways mean Fatuma's blind cousin no longer waits outside, and the color-coded referral makes it easy for families with low literacy to navigate services. People still worry about paying for medicines when stocks run out, but Fatuma says the biggest difference is that "*the community is more supportive and inclusive*" and the trained staff are still there, using the same protocols they learned during the project.

4.1.2.3 Feedback Loops Established to Refine Interventions

Finding 7: Structured feedback mechanism at system, facility and frontline levels enabled iterative adjustments. However, feedback procedures at community level were inconsistently structured and lacked systematic inclusion of persons with disabilities and SGBV-affected groups.

Evidence from KIIs and project documentation shows that multi-level feedback channels were institutionalized throughout implementation. At the system level, joint supportive supervision, annual planning reviews and routine operational monitoring allowed RHBs, woredas and UNICEF to identify and respond to bottlenecks. Facility-level QI teams and catchment-based mentorship meetings similarly generated structured opportunities to analyse performance and refine clinical and operational practices. Frontline mechanisms, including HEW household visits, WDA networks and regular community discussions, provided additional qualitative insights that informed corrective actions, as reflected in KIIs and FGDs. Community events and mobilization sessions further enabled mothers to articulate service challenges, which were channelled upward through HEWs or facility teams.

However, triangulation with CEI findings reveals low levels of formal feedback provision, only 12.7 per cent of interviewed mothers reported using feedback channels (Benishangul-Gumuz: 20.1 per cent; Afar: 2.8 per cent). The limited reach of reproductive maternal, newborn and child health (RMNCH) scorecards as applied only in selected kebeles further constrained community-level input. FGDs with persons with disabilities and KIIs with woreda authorities highlight additional gaps: disability-specific concerns and SGBV-related feedback were not systematically captured, reflecting both missing tools and limited staff capacity to solicit such information safely. These limitations indicate that while feedback loops contributed meaningfully to adaptive management, inclusivity and coverage require further strengthening.

4.1.2.4 Consideration of Gender, Disability and Equity During Implementation

Finding 8: The project maintained strong gender and equity responsiveness during implementation particularly for women, pastoralist communities, IDPs and remote populations but disability inclusion remained insufficiently operationalized due to limited assessment tools, weak data systems and absence of dedicated outreach adaptations.

Gender and equity considerations were integrated in implementation practices, as evidenced by triangulated KIIs, FGDs with women and CEI data. Female-focused mobilization platforms (women's forums, pregnant women's conferences, WDA groups) helped sustain demand for services and ensured women's perspectives were reflected in local micro-planning. HEWs and community actors actively engaged mobile and remote pastoralist groups, particularly in Afar, through MHNTs and flexible outreach scheduling aligned with migration patterns. In both regions, IDPs benefited from

service extensions, hygiene inputs and IPC support—an adaptation repeatedly mentioned in FGDs and KIIs.

Despite these strengths, disability inclusion lagged. Across KIIs with RHBs and woredas, respondents reported limited visibility of disability-specific needs during planning and monitoring. CEI functional limitation screening showed some reach to households with members with disabilities, but facilities lacked accessible feedback pathways and tailored communication tools. SGBV-sensitive service access improved where one-stop centres already existed (e.g., Dubti Hospital), yet this was not a systematic design feature. Overall, the project upheld equity commitments for most vulnerable groups but did not operationalize disability inclusion or SGBV-responsive pathways with the same level of consistency, reflecting design limitations carried into implementation.

Overall Assessment: Relevance

The project demonstrated high relevance to the health burdens and systemic constraints affecting newborns and children in Afar and Benishangul-Gumuz. Its design was informed by a comprehensive baseline assessment and addressed documented gaps in service readiness, provider competence, referral functionality and inequitable access for pastoralist, remote and displaced communities. Alignment with Ethiopia's national MNCH priorities, UNICEF's equity-focused Country Programme, and global commitments under ENAP and the SDGs ensured strong strategic coherence. The intervention package spanning clinical mentorship, readiness strengthening, differentiated outreach, community mobilization, and governance and data improvements directly targeted the key determinants of preventable neonatal and U5 mortality. Relevance was sustained through continuous contextual analysis and adaptive operational choices during epidemics, displacement, insecurity and economic shock. However, insights from remote or insecure areas were not always captured comprehensively, and design gaps persisted regarding disability inclusion, adolescent needs and systematic SGBV linkages. The reconstructed ToC confirms a coherent causal pathway, though several assumptions particularly around supply chains, referral pathways, data verification and adaptations for pastoralist settings were under-specified. Overall, the intervention was highly relevant, with objectives and delivery modalities closely aligned to regional health priorities and the needs of the most underserved groups.

4.2 Coherence

This section examines the extent to which the KOICA-UNICEF MNCH project coordinated effectively and aligned with other government, partner and UNICEF initiatives to enhance complementarity and avoid duplication (EQ3&4 revised-C). It explores coordination with national, regional and woreda-level MNCH programmes; collaboration mechanisms with donors and implementing partners; integration of UNICEF's sectoral and inter-sectoral priorities; and alignment with national frameworks such as the HSTP-II and HSDIP. Evidence draws on KIIs with federal, regional and woreda health authorities, UNICEF and partner staff, HFAs, and a review of policy/project documents and planning frameworks.

4.2.1 Coordination and Alignment

Revised EQ3 and EQ4: To what extent has the project coordinated effectively and aligned with other relevant policies and interventions, including government, UNICEF sectoral programmes, and donor/partner initiatives to enhance complementarity and avoid duplication?

4.2.1.1 Coordination with Government Institutions

Finding 1: The project achieved strong alignment with government leadership and processes, using joint planning, RHB-chaired platforms, and embedded partner staff to minimize duplication and

reinforce system ownership. Leadership turnover, conflict-related disruptions and dependency in resource-poor woredas remain areas requiring continued attention.

The KOICA-UNICEF MNCH project demonstrated structured and consistent coordination with government systems at all levels. Evidence from KIIs across central, regional and woreda authorities shows that activities were deliberately aligned with national and regional MNCH strategies and integrated into annual plans and Rolling Work Plan (RWP) processes. Technical Advisory Committees (TAC), RMNCH TWGs, and periodic performance reviews supported harmonized planning and monitoring. Embedded UNICEF and Emory staff within RHBs facilitated day-to-day alignment, rapid problem-solving, responsive follow-up on stockouts, mentorship needs and facility gaps.

At the woreda level, technical committees, joint supervision and community mobilization strengthened local ownership. Annual reports (2021-2024) confirm that joint planning, emergency response, and training and coordination were regularly undertaken with RHB leadership. Satisfaction with coordination was consistently high in both regions.

Despite these strengths, high turnover in managerial posts, conflict-related communication gaps and reliance on KOICA-supported inputs in some woredas (particularly in Benishangul-Gumuz) were identified as constraints. These challenges highlight the need to deepen institutionalization and reduce localized dependency risks.

4.2.1.2 Coordination with Development Agencies

Finding 2: The project leveraged government-led coordination platforms (i.e., TACs, TWGs, the RWP process and joint reviews) to align with partner priorities, reduce duplication and ensure timely follow-up. Functionality of RMNCH task forces varied, and insecurity and turnover occasionally disrupted planned coordination.

UNICEF and implementing partners operated through established national and regional coordination mechanisms, ensuring coherence with partner and government priorities. At the national level, the TAC served as the main forum for joint reviews, field visits and action planning. Participation in MNCH TWGs and the annual RWP promoted complementarity and reduced parallel processes.

At the regional level, field evidence confirms that structured TWGs, particularly Afar's bi-weekly RMNCH meetings, enabled partner mapping, geographic demarcation and gap tracking. Joint planning and quarterly review meetings involving UNICEF, Emory and RHB officials reinforced alignment with regional health plans and facilitated rapid response to operational bottlenecks.

At the woreda and kebele levels, technical committees coordinated supervision, training and community engagement, with HEWs and facilities providing real-time input for decision-making. However, RMNCH task forces were unevenly functional, and insecurity and turnover periodically interrupted joint processes, highlighting the need for more durable mechanisms in fragile settings.

4.2.1.3 Coordination with Project Partners and Groups

Finding 3: Coordination with CBNC and MNCH partners was generally strong, supported by structured partner mapping and government-led mechanisms. Duplication risk was low, though integration was uneven across regions and occasional siloing persisted in remote zones where partner presence was limited.

The data from KIIs, annual reports and FGDs indicates that coordination with CBNC and MNCH actors was deliberate and ongoing from project inception. UNICEF and Emory worked closely with the World Health Organization (WHO), the United Nations Population Fund (UNFPA), Save the Children, World Food Programme (WFP) and local NGOs to align training schedules, supervision visits and community-based interventions. Partner mapping exercises, conducted through TWGs, TAC and annual planning forums, helped delineate geographic roles and prevent overlapping investments.

Regional variations were evident. Afar hosted multiple partners, enabling a structured and well-demarcated approach to MHNT coverage, CBNC integration and outreach planning. In contrast, Benishangul-Gumuz's insecurity and fewer partners meant that some woredas depended heavily on the KOICA-supported initiative, while others operated in thematic silos (e.g., HIV, malaria).

Community structures including HEWs, women's development groups (WDGs), women's forums and traditional leaders played an important role in supporting outreach, referral linkages and community feedback. Despite progress, some CBNC activities in pastoralist areas remained partially siloed, and multisectoral collaboration (WASH, MNCH, nutrition, SGBV) was not fully developed.

4.2.1.4 Integration of UNICEF Sectoral and Intersectoral Agencies

Finding 4: The project aligned well with UNICEF's sectoral strategies in health and nutrition, particularly through integrated outreach packages and unified capacity development. Inter-sectoral linkages with WASH, SGBV and nutrition actors existed but were not systematic, with visible gaps in harmonized planning and monitoring.

Evidence from KIIs and project documentation indicates strong integration across UNICEF's health and nutrition priorities. MHNTs in Afar routinely delivered a combined package of ANC, immunization, child health services and nutrition screening, reflecting good practice in frontline integration. Facility-based mentorship and QI processes similarly brought together neonatal care, IMNCI, maternal health and newborn care in a unified manner.

Inter-sectoral integration occurred in practice but remained largely informal and uneven across regions. Coordination with WASH actors was visible in selected facilities such as joint hygiene promotion during ANC, postnatal contact and ad hoc support to improve water availability. The HFA data show that WASH standards remained below expectations across supported sites. Only 40 per cent of assessed facilities had access to clean water (Benishangul-Gumuz: 53 per cent; Afar: 22 per cent), and point-of-care WASH readiness was similarly limited: only 21 per cent of ANC rooms had a basin with soap and 18 per cent had running water, while PNC rooms showed 38 per cent and 23 per cent, respectively. Household survey findings also reflected these gaps, with respondents in both regions citing water shortages in facilities as a persistent barrier to safe delivery and newborn care.

SGBV-related services were integrated only in isolated instances such as Dubti Hospital, without systematic pathways for screening, referral or survivor support. Nutrition linkages were stronger, particularly in Afar, where MHNTs and health centres delivered routine nutrition screening and counselling. However, collaboration with WFP remained limited to information-sharing or referral, with no joint planning, harmonized monitoring or shared accountability mechanisms. As a result, inter-sectoral integration contributed value at an operational level but lacked the structured frameworks needed for consistent and comprehensive multisectoral delivery.

4.2.1.5 Alignment with National Policies and Regional Investment Priorities

Finding 5: The project demonstrated strong alignment with Ethiopia's national MNCH policy frameworks and regional investment priorities, integrating coherence from inception through baseline assessments, joint planning and flexible financing that supported vertical and horizontal alignment across all administrative levels.

Since inception, project interventions were derived from Ethiopia's HSTP-II, the National Strategy for Newborn and Child Survival, and the RMNCAH Investment Case. KIIs at national, regional and woreda levels confirm that the project complemented government priorities on equity, service quality, and resilience in underserved regions.

Regional and woreda authorities co-led planning, supervision and micro-planning processes, ensuring alignment with pastoralist mobility patterns in Afar and service recovery needs in Benishangul-Gumuz. According to project progress reports (UNICEF Jan 2024 and Jan 2025), flexible budget allocations also supported government emergency responses and allowed continuity of outreach during shocks. The project reinforced national tools (i.e., HMIS, QI frameworks, and

community-based platforms) and supported operational coherence from kebele to federal level. Overall, alignment with horizontal and vertical government systems was consistently strong.

Overall Assessment: Coherence

The project demonstrated strong coordination with government systems and sectoral partners, contributing to a coherent MNCH response in Afar and Benishangul-Gumuz. Alignment with national and regional priorities was embedded from inception through joint planning, regular reviews and integration into RWP processes. Coordination platforms such as TACs, TWGs and RHB-chaired mechanisms helped harmonize priorities, minimize duplication and strengthen complementarity with MNCH and CBNC initiatives. Embedded UNICEF and Emory staff enhanced routine communication and operational follow-up with RHBs and woredas, while partner mapping and structured outreach planning were particularly effective in Afar, where broader partner presence supported clearer geographic demarcation. Inter-sectoral collaboration added value, especially through integrated nutrition and outreach services, though inter-sectoral linkages with WASH, SGBV and partially nutrition, were not formally structured and lacked joint planning or harmonized monitoring. Insecurity, leadership turnover and limited partner density in Benishangul-Gumuz at times disrupted coordination and contributed to localized dependency. Overall, coordination and alignment were strong, supporting complementarity and reducing duplication across government and partner-led MNCH efforts.

4.3 Effectiveness

This section assesses the extent to which the KOICA-UNICEF MNCH project delivered its intended outputs and outcomes and contributed to improved MNCH services in Afar and Benishangul-Gumuz. The analysis examines service availability, quality, utilization and continuity under challenging operational conditions, as well as the functionality of referral, capacity-building and community-engagement systems. This section addresses performance across the key domains of effectiveness, including delivery of planned results (EQ5, EQ11-ESS), quality and utilization of MNCH services (EQ6, EQ7-8-ESS), adaptability of service-delivery models (EQ7-8-ESS), capacity strengthening of healthcare providers (EQ9-ESS), and the contribution of community engagement and gender-sensitive approaches to service uptake (EQ10-ESS). The assessment draws on triangulated quantitative and qualitative evidence from HFAs, CEIs, monitoring data, the project RFW, HMIS, research studies, and KIIs and FGDs with government counterparts, UNICEF, KOICA, Emory, implementing partners, facility staff, HEWs, WDAs, women's groups and persons with disabilities. This mixed-methods approach enables a comprehensive appraisal of the project's contribution to improved MNCH service performance and system strengthening.

4.3.1 Access, Outreach, Inclusion and Outcomes

EQ5: To what extent has the project achieved intended or unintended outcomes related to the availability and access to healthcare services for mothers and children?

4.3.1.1 Availability and Accessibility of MNCH Services

Finding 1: The project substantially improved the availability and accessibility of MNCH services because it directly addressed longstanding readiness, workforce and outreach gaps through targeted investments in facility capability, clinical mentoring, equipment, data systems and outreach modalities. However, persistent challenges such as fragile supply chains, WASH and IPC deficits (which fall outside the scope of the KOICA project), transport and referral constraints, and staff turnover continued to limit uniform progress, especially at the health post level and in Afar Zone 2.

Availability of MNCH services improved significantly at hospitals and health centres. HFA data show that all hospitals now provide comprehensive emergency obstetric and newborn care (CEmONC) and NICU functions, rising from a baseline where only 67 per cent had operational NICUs. Upgrades at Dubti Hospital (Level Three NICU) and Asaita Hospital (Level Two) further expanded advanced

newborn care. NBC became universal in hospitals, increasing from 50 to 100 per cent. Health centres likewise improved, as coverage of NBC rose from 58 per cent to 70 per cent in Afar (however, with strong zonal disparity: Zone 2 lagged behind with 25 per cent availability vs 100 per cent in Zone 1) and from 46 per cent to 93 per cent in Benishangul-Gumuz.

BEmONC readiness expanded markedly. Nearly 80 per cent of health centres now deliver the full BEmONC signal functions, compared with baseline coverage of only 16 per cent in Afar and 4 per cent in Benishangul-Gumuz. Delivery services followed a similar trend, rising from 12.5 per cent to 91 per cent in Afar health centres and from 4 per cent to 100 per cent in Benishangul-Gumuz. Additionally, 21 per cent of health posts in Benishangul-Gumuz offered delivery and 44 per cent of Asossa health centres provided c-sections, even if these services are not included in their standard packages. These improvements reflect consistent investments in clinical training, mentorship, standards-based practice and structured supportive supervision, which strengthened provider competence and adherence to protocols.

U5 services achieved near-universal availability across all system levels through strengthened iCCM, CBNC and IMNCI integration, while persistent gaps in inpatient care at health centres particularly in Afar, where fewer than one-third of facilities provide such services, continue to constrain equitable care for infants and young children.

ANC availability increased across both regions, with the strongest gains in Afar health posts, where coverage rose from 56 per cent to 91 per cent. Diagnostic capacity (i.e., haemoglobin testing, blood typing, urine analysis) in health centres also improved, increasing by 13 to 40 per cent in Afar and by 2 to 25 per cent in Benishangul-Gumuz. Interviewees attributed these improvements to better-trained staff providing care according to standards, active HEW/community awareness and referral networks, and expanded access through mobile services (MHNTs) and health centre outreach (emerged from FGDs with HEWs/ persons with disabilities, Case Studies(CSs), KIIs with Afar/Benishangul-Gumuz). However, health posts in both regions remain without diagnostic capacity. Intermittent preventative treatment of Malaria in pregnancy (IPTp) coverage continues to be inconsistent and is entirely absent in Afar Zone 2 (0 per cent). Early PNC availability improved and reached 100 per cent in Benishangul-Gumuz and Afar Zone 2, while Afar Zone 1 reached only 50 per cent. The following reasons were identified for weak ANC in health posts: frequent stock-outs and supply chain breaks (e.g., due to security-related road closures and supply problems); limited diagnostic capacity; referral and transport constraints; infrastructure, power and WASH gaps; staff turnover and the waning of community referral tools.

Accessibility also improved. CEIs indicate that 95 per cent of clients received the services they sought. Benishangul-Gumuz demonstrated more consistent physical accessibility: 75 per cent of clients lived within five kilometres of a facility, waiting times were shorter, and outreach was regular due to better infrastructure, staffing stability and fewer disruptions. In Afar, pastoralist mobility and long distances increased reliance on MHNTs and health centre outreach. The KOICA project strengthened MHNTs by co-financing deployment, improving the service package, capacity building of MHNT staff, and enhancing data quality and monitoring systems. While these mechanisms strengthened reach, their reliability fluctuated due to *"fuel shortages... difficult terrain... fragmented coordination... and insecurity"*, concerns repeatedly noted by community members and woreda staff in FGDs.

Equity gaps persist at the primary level. Some neonatal functions in health centres (thermal protection, resuscitation, KMC) remain inconsistent, Afar lagged behind Benishangul-Gumuz, with weaker thermal protection and KMC in Zone 1 vs Zone evident from HFA. Health posts, especially in Afar Zone 2, faced significant WASH and IPC limitations. Clean water was available in only 40 per cent of all facilities (Benishangul-Gumuz: 53 per cent; Afar: 22 per cent). Hand-washing points were present in 12 per cent of health posts, and running water was available in only 8 per cent. These deficits constrain safe ANC, PNC, IPC and immediate newborn care, and depress utilization in remote communities. Transport and supply barriers compound these challenges: nearly one-third of clients reported purchasing medicines due to stock-outs, and referral services remained unavailable and costly for families during night-time emergencies.

These outcomes align closely with the ToC. Where trained staff, equipped facilities, functional data systems and strong community linkages converged, as in Benishangul-Gumuz and often Afar Zone 1, service availability and access improved markedly. Conversely, where ToC assumptions were only partially realized particularly regarding supply-chain stability, transport, security conditions and workforce retention, gains remained uneven. Afar Zone 2 exemplifies this dynamic: repeated stock-outs, outreach interruptions, limited diagnostics, staff turnover and weak WASH infrastructure restricted equitable access despite system-wide investments.

In summary, the project achieved substantial and meaningful progress in strengthening MNCH service availability and accessibility across both regions. Progress is clear when measured against baseline conditions, and many facilities are now equipped to deliver a comprehensive MNCH package. However, systemic bottlenecks, particularly at the health post level and in remote pastoralist and insecure areas, continue to impede equitable access. Sustaining and deepening effectiveness will require reinforced supply-chain systems, stable human resources, WASH and IPC upgrades (which fall outside the scope of the KOICA project), and reliable transport and outreach functions in the most underserved locations.

4.3.1.2 Facility Readiness: Infrastructure, Transport and IPC

Finding 2: Facility readiness improved significantly at hospital and health centre levels because the project addressed essential infrastructure, equipment and organizational deficits. However, persistent WASH, IPC, utility and space constraints, most acute in Afar Zone 2, continued to restrict safe, equitable service delivery at the primary level and are largely beyond the project's direct scope.

Facility readiness improved across all upper tiers. The HFA revealed an overall functionality reaching to 94 per cent, and electricity became universal in hospitals and reached 96 per cent in health centres, compared to baseline levels of between 71 and 75 per cent at the start of the project. Gender-segregated toilets were available in 83 per cent of facilities. Benishangul-Gumuz's upper-tier health facilities are now largely service-ready, with delivery rooms, postnatal care rooms, newborn corners, maternity waiting homes, under-five outpatient rooms, and fully functional neonatal intensive care units consistently in place.

Improvements in Afar were more uneven, with marked zonal variability. As per the HFA, only 50 per cent of Afar health centres had functional delivery rooms, and Zone 1 remained particularly low at 33 per cent. NBC reached 70 per cent overall but only 25 per cent in Zone 2. Infrastructure at health-post level remains the weakest link in the system. Only 48 per cent of health posts had dedicated MNCH rooms and ensured privacy. WASH conditions were particularly poor, with hand-washing points available in 12 per cent of health posts, running water in 8 per cent, and continuous (24/7) water supply in 12 per cent. Electricity was available in 36 per cent of health posts.

No health post in Afar had water, and Zone 2 showed the lowest overall readiness, with zero privacy and lighting at 20 per cent. Benishangul-Gumuz health posts performed moderately better (MNCH rooms at 50 per cent, privacy at 50 per cent, running water at 14 per cent, 24/7 water at 21 per cent), with Asossa outperforming Metekel. These deficits severely restrict the delivery of safe ANC, PNC and immediate newborn care at first-contact level. In this context, the absence of privacy means that services are frequently delivered in open or shared spaces, which discourages women from seeking care, constrains thorough clinical examination, compromises dignity, and weakens the quality and safety of ANC, PNC, and immediate newborn care, particularly in conservative and pastoralist settings.

Transport availability also improved, especially at health centres (88 per cent) and health posts (60 per cent). Nevertheless, local officials repeatedly noted concerns about sustainability due to limited fuel budgets and vehicle maintenance resources. IPC performance reflected overall readiness. Safe waste disposal was reliably practised (91 per cent reporting "always"), while hand hygiene (45 per cent "always") and equipment cleaning (47 per cent "always"; 25 per cent "never") remained weak, especially in Afar Zone 2 and in parts of Benishangul-Gumuz. Supply shortages drove 93 per cent of IPC lapses, compounded by gaps in protocol uptake and inconsistent supervision.

These trends align with the ToC: improved infrastructure, utilities and equipment translated into improved service delivery, while chronic deficits in space, WASH and transport suppressed gains in remote settings.

4.3.1.3 Equity and Inclusion

Finding 3: The project advanced equity by extending services to pastoralist, remote, and disadvantaged populations and by strengthening women's participation and decision-making, particularly in Benishangul-Gumuz. These gains were observed where outreach mechanisms, trained staff, and community platforms functioned consistently. However, equity outcomes remain uneven due to limited women's autonomy in remote areas of Afar, insufficient disability inclusion, weak engagement with adolescents, limited intersectional inclusion of survivors of sexual and gender-based violence (largely outside the direct scope of the KOICA project), and the fragile sustainability of MHNT operations.

The project achieved meaningful gains in equity, reaching populations traditionally underserved by the health system. The CEIs indicated that in Afar, 78 per cent of MNCH clients were pastoralists and 71 per cent had never attended school. Whereas, In Benishangul-Gumuz, 62 per cent of clients were subsistence farmers with more diverse educational backgrounds. The FGDs reinforced that MHNT in Afar and strengthened PHC outreach in Benishangul-Gumuz extended ANC, PNC, immunization and referral services to remote kebeles, with outreach performing more consistently in Benishangul-Gumuz due to transport availability and staffing stability.

Gender inclusion improved through women-centred service delivery, women-led QI structures and a predominantly female MNCH workforce (55.8 per cent). Women constituted 67 per cent of all staff trained under the project (UNICEF Ethiopia, Jan 2025). Decision-making autonomy reached 96 per cent overall (45 per cent with self-decision and 42 per cent with joint decision). However, deep disparities persist: 63.9 per cent of women in Benishangul-Gumuz made decisions independently compared with 20.4 per cent in Afar. These patterns mirror education differences (in Afar, 71 per cent of women had no schooling and in Benishangul-Gumuz, 25 per cent of women had no schooling) and reflect cultural barriers to autonomy in pastoralist areas.

The CEIs and KIIs indicated that male support was high overall (82 per cent) but varied substantially by location and level of care. Male support reached 89 per cent in Benishangul-Gumuz, compared with 73 per cent in Afar, and declined further to 64 per cent at health-post level in Afar. Patterns of male support closely mirrored service utilisation, with higher support reported for antenatal care (86.5 per cent), immunisation (81.7 per cent), family planning (80 per cent), and sick-child care (77.8 per cent).

Disability inclusion was limited. The CEIs and HFAs showed that persons with disabilities represented 4 per cent of adult clients and 3 per cent of child clients, reflecting persistent barriers such as distance, non-adapted facilities and dependence on caregivers. Further, KIIs and FGDs highlighted that SGBV services were available only in facilities with pre-existing structures (e.g., Dubti Hospital). Youth inclusion was minimal and not systematically addressed. Equity gains aligned with the ToC where outreach systems, community engagement and service readiness were strong. Where enabling conditions were absent particularly in remote Afar, equity improvements remained partial and fragile.

4.3.1.4 Unintended Outcomes

Finding 4: The project generated positive spillover, including wider use of QI tools, stronger community engagement and increased resource mobilization, due to its emphasis on learning, visibility and local problem-solving. At the same time, unintended effects emerged where system constraints persisted, including perceived inequities in non-target kebeles, increased dependence on external inputs and staff workload pressures in understaffed facilities.

Positive unintended effects were observed across both regions, extending beyond the project's original MNCH focus. Facilities increasingly applied QI frameworks, mentorship approaches and scorecards to other service areas, including general outpatient care and WASH education, reflecting institutional learning and spillover. As shared by frontline stakeholders, *"we use the scorecards in*

other programmes now, not just for mothers and children." At the community level, WDGs, HEWs and kebele committees demonstrated strengthened agency and ownership, using community scorecards and referral systems to engage in local health governance and accountability. Community members emphasized this shift, stating that, *"community members now advocate for services and hold providers accountable... even in areas not directly reached by the project."* In addition, the visibility of KOICA-supported interventions catalysed further resource mobilization, with regional authorities and partners leveraging identified gaps to secure complementary financing. As highlighted during discussions, *"after the KOICA project highlighted gaps, we received support from another donor to improve infrastructure,"* while regional officials confirmed that project routines prompted new budget lines and operational top-ups, including support for MHNT maintenance in Afar.

Several unintended negative effects were also identified. In remote and underserved areas, sustained reliance on KOICA-supported inputs, particularly fuel, supervision and logistics contributed to emerging dependency risks and sustainability concerns, with some local administrations reportedly reducing budget allocations on the assumption that partners would continue to finance MNCH functions. As one stakeholder from Benishangul-Gumuz cautioned, *"now people expect external support... it will be hard to continue when funding ends."* Unequal geographic coverage further generated perceptions of exclusion, as communities and health staff in non-targeted kebeles and woredas reported feelings of neglect and inequity in service support. This was reflected in local voices, for example participants in FGDs in Afar described that, *"they work only in selected kebeles... others feel left out."* In addition, the concentration of capacity-building investments on a limited pool of staff increased workloads in already understaffed facilities, contributing to fatigue, frustration and attrition. Woreda-level informants observed that, *"trained staff are asked to do more, and some have already left due to stress,"* highlighting the need to balance training intensity with workforce planning and retention measures.

4.3.2 Quality of MNCH Services and Strengthening of Referral Systems

EQ6: To what extent has the project improved the quality of MNCH services and strengthened referral systems (for all provided services, including for newborn care)?

4.3.2.1 Human Resources for MNCH services

Finding 5: The project significantly strengthened MNCH human resources particularly in Benishangul-Gumuz by investing in targeted clinical training, structured mentorship and QI systems, which improved provider competence and confidence. However, persistent staffing shortages, turnover and weak supervision, especially in Afar Zone 2, limited continuity, protocol adherence and equity of service delivery.

Human resources for MNCH were strengthened considerably during the project period, with significant differences between regions and tiers of care. Hospitals are now generally well-staffed, with an average of 32 personnel and a predominantly female workforce (58 per cent). Staffing patterns reflect a midwifery and nursing-led model, although disparities exist between facilities. Dubti Hospital in Afar had the largest workforce with 37 staff, while Pawe Hospital in Benishangul-Gumuz-Metekel operated with 26 staff and a more male-dominated team, raising concerns regarding continuity of care and client comfort.

At the primary level, staffing constraints remain acute. MNCH services in health centres and health posts are delivered by staff who are shared with other departments. Health centres average 5.1 MNCH staff, and health posts average 2.4, with Benishangul-Gumuz better resourced (6.8 in MNCH and 2.9 health posts respectively) compared with Afar (2.9 in MNCH and 1.8 health posts). Although the PHC workforce is predominantly female (65 per cent), high turnover and multitasking dilute time-on-task and weaken accountability. In Afar Zone 2, frequent turnover, insecurity and inconsistent supervision significantly limited skill retention at the frontline. A HEW from Zone 2 shared, *"we are trained, but many leave or are transferred, so we must start again."*

The project's training investments were extensive and exceeded planned targets. The RFW shows that training targets for HCWs on BEmONC, ENC/NBC and NICU, were exceeded significantly (596 staff trained compared with a target of 230), largely due to repeated mop-up sessions following turnover. HFAs found training coverage and skills strongest in newborn health and emergency obstetrics (BEmONC, NICU) and weakest for preventive, community-based and ANC functions, especially at health posts and in Afar Zone 2. Repeated mentorship rounds reportedly lifted health centre skill adequacy in both regions. Mentorship and supervision were pivotal in Benishangul-Gumuz, where hospital specialists strengthened health centre/health post staff competence (e.g., eclampsia, vacuum delivery, use of non-pneumatic anti-shock garment (NASG), while HEWs gained iCCM and referral capacity. In Benishangul-Gumuz, mentorship from hospitals to health centres was described by providers as transformative. A provider stated during an FGD, *"now we manage complications early; before, we referred almost everything."*

Afar's gains were less consistent. While Zone 1 benefited from mentorship, Zone 2 faced disruptions from insecurity, flooding and staff movement. This led to repeated retraining needs and gaps in protocol adherence, data recording and CBNC/iCCM practice. The KIIs underpinned that MNCH coordinators across both regions were among the most consistently trained cadres; however, gaps in managerial skills including logistics, IPLS and data use were evident, especially in Benishangul-Gumuz and in hard-to-reach areas of Afar. Further, there was a lack of coordination and leadership skills in their regions.

Protocol adherence was strongest at hospitals and health centres but weakest at health posts, where supply shortages, limited skills, and reduced supervision compromised adherence. NICU teams performed exceptionally well, with 100 per cent protocol adherence documented in the HFA. In contrast, frontline ANC, PNC and CBNC practices lagged, particularly in Afar Zone 2, where staff shortages and weak supervision restricted consistent use of clinical guides.

In line with the ToC, improvements were strongest where training, mentorship, supplies and supervision converged most consistently in Benishangul-Gumuz and in Afar's hospitals and Zone 1 health centres. Where assumptions regarding staff stability, security and supervision were unmet, particularly in Afar Zone 2, gains remained fragile. See Annex 16 (as mentioned in Volume II) for more details on HR and training in MNCH.

4.3.2.2 Availability of Essential Drugs, Equipment and Supplies

Finding 6: The availability of essential MNCH medicines and neonatal equipment improved markedly at hospitals and health centres due to targeted procurement and strengthened stock monitoring. However, recurrent shortages, limited local budgets and fragile supply-chain systems, particularly at the health post level and in remote communities, continue to undermine service reliability and reveal gaps in the conditions assumed within the ToC.

Availability of essential medicines improved overall but remained inconsistent, particularly at primary level. The HFA found that hospitals demonstrated strong readiness for ANC, labour and delivery, postnatal care, and under-five commodities. However, supply-chain fragility persisted, with frequent stockouts of ergometrine, intermittent preventive treatment in pregnancy (IPTp), benzylpenicillin, and artemisinin-based combination therapy (ACT). While overall availability of NICU medicines was relatively high (85 per cent), several antibiotics and antifungals showed lower availability at 67 per cent, with clindamycin particularly limited at 33 per cent. Health centres reported good day-of availability overall (88 per cent), with most tracer medicines exceeding 90 per cent; nevertheless, recurrent interruptions were observed for IPTp (44 per cent), ergometrine (33 per cent), and first-line antibiotics (ampicillin and amoxicillin), especially in Afar.

Health posts experienced the most severe shortages. HIV test availability stood at 22 per cent and paediatric antibiotics were inconsistently available (e.g., amoxicillin at 60 per cent and gentamicin at 48 per cent). These gaps undermine the reliability of first-contact care and disproportionately affect remote households. Benishangul-Gumuz region showed slightly lower overall availability at the health post level than Afar, with no significant zonal differences.

CEIs confirm these challenges: only 63.5 per cent of clients reported full availability of medicines, while 32.1 per cent noted partial availability and 1.2 per cent none. Hospitals fared worst, with only 33 per cent of clients indicating full availability. Respondents frequently described the financial strain imposed by purchasing medicines privately. One mother shared, *"once, I had to choose between buying food or medicine for my child."*

Medical equipment readiness was largely strong at hospital level. Most NICU equipment including oxygen sources, continuous positive airway pressure (CPAP) machines, incubators and resuscitation sets was functional across both regions, though some gaps persisted at Benishangul-Gumuz-Asossa General Hospital, where basic monitoring tools were incomplete. Health centres exhibited moderate readiness, with occasional gaps in newborn resuscitation sets, sterilization units and thermometers. Health posts had the most limited equipment and lacked oxygen, sterilization capacity and neonatal monitoring tools entirely.

Comparisons (see Annex 22 for detailed comparison in Volume-II) with baseline data illustrate meaningful gains. The health centres now have near-universal availability of key items such as magnesium sulphate, oxytocin, neonatal resuscitation sets and vacuum extractors. However, some areas deteriorated, such as antiseptic availability at Dubti Hospital (67 per cent to 0 per cent) and suction devices at Benishangul-Gumuz hospitals (67 per cent to 50 per cent). Radiant warmers at health centres improved from 14 per cent to 38 per cent, reflecting significant but incomplete progress. Health posts did not meaningfully improve compared to the baseline.

Overall, the trajectory aligns partially with the ToC: gains materialized where supplies and equipment strengthened, yet persistent supply-chain and logistics weaknesses particularly in remote areas limited the fulfilment of intended outcomes.

4.3.2.3 Referral Pathways and Functionality

Finding 7: MNCH referral systems became institutionalized and largely functional across Afar and Benishangul-Gumuz through strengthened protocols, colour-coded vouchers, phone coordination and community-facility linkages. However, referral performance remained weakest at the health post level, especially in Afar Zone 2 and Benishangul-Gumuz-Asossa, where transport deficits, inconsistent tool use and limited inter-facility feedback restricted timely referral for maternal and newborn emergencies.

The project contributed to a well-defined referral structure spanning community, facility and hospital levels. Referral protocols for maternal health are available in 94 per cent of facilities and for newborn care in 89 per cent. Health centres and hospitals operationalized these protocols most effectively, contributing to a documented shift toward public-sector utilization. Providers in Benishangul-Gumuz noted that, *"referrals are now much quicker because everyone knows their role."*

Operational supports have become routine as HFAs indicated that 70 per cent of facilities use colour-coded referral vouchers, 60 per cent use phone coordination and 74 per cent use ambulances for urgent referrals. Nearly all facilities (95 per cent) prioritize labour referrals, and 87 per cent prioritize sick newborns. Community structures including HEWs, WDGs and kebele committees support referral initiation. Seventy-two per cent of health posts reported holding regular meetings with community groups and 75 per cent of facilities received pregnancy notifications, although this was only 20 per cent in Afar Zone 2. The FGDs highlighted that colour-coded vouchers help families with low literacy.

Weaknesses remain at the primary level. Transport shortages are acute: 40 per cent availability in Afar Zone 2 and 67 per cent in Benishangul-Gumuz-Asossa. Some health posts operate without any transport access, forcing providers to delay or attempt to manage complications locally while delaying the referral of sick newborns, as shared by HEWs and FGDs.

CHIS performance is weak overall (40 per cent classified as "good"), with Afar Zone 2 performing poorest. Inter-facility feedback mechanisms remain limited, with only 13-18 per cent of facilities consistently providing or receiving feedback after referrals, undermining continuity of care.

These patterns correspond with the ToC: the referral system improved where training, protocols and community platforms aligned. However, where enabling conditions such as transport, security and functional CHIS systems were absent, referral performance weakened.

4.3.2.4 Use of QI Tools

Finding 8: QI systems expanded substantially across the programme, with four-fifths of facilities (79 per cent) establishing QI teams and two-thirds implementing QI activities. This progress emerged because the project institutionalized QI structures, strengthened mentorship and embedded data-driven review processes. However, lower-tier facilities, particularly in Afar Zone 2 and Benishangul-Gumuz Asossa, experienced irregular mentorship, weak CBCM coverage and limited follow-through, constraining consistent QI across all MNCH domains.

The project introduced a structured QI architecture that became an integral component of facility management. Evidence from supervision records, HMIS/DHIS2 reviews and KIIs demonstrated that multi-departmental QI teams were established and supported by performance review and clinical mentoring meeting (PRCMM) cycles, coaching visits and catchment-based mentorship. Facilities increasingly used routine data, referral vouchers and MPDSR findings to identify gaps and formulate corrective actions. Benishangul-Gumuz exhibited the most consistent QI performance, supported by stable staffing, stronger managerial capacity and integrated community feedback mechanisms.

QI coverage expanded significantly: 79 per cent of facilities now have functional QI teams. Hospital-level coverage reached 100 per cent, while health centre coverage increased from 50 per cent to 76 per cent. Benishangul-Gumuz achieved 94 per cent coverage compared with 58 per cent in Afar. The health posts have not been evaluated for QIs. Monthly meetings occurred in almost three-quarters of facilities with QI teams, and 68 per cent implemented at least one QI activity during the previous year, most commonly in data quality, IPC and clinical care.

Mentorship played a pivotal role in strengthening quality improvement. Overall, 61 per cent of facilities provided mentorship and 66 per cent received it, with universal participation at hospital level. Mentorship provision by health centres was strongest in Benishangul-Gumuz and Afar Zone 1, while receipt of mentorship was highest in Afar Zone 1 and Benishangul-Gumuz-Metekel. Compared with baseline, both hospitals and health centres increased the supervision they provided, and hospitals and health posts received more supervision, although health centres experienced a slight decline in supervision received. Health posts showed notable gains, with 60 per cent receiving mentorship, compared with 47 per cent at baseline. Mentorship most frequently focused on essential newborn care, data management, and ANC, PNC, and IMNCI practices.

Despite these gains, significant gaps remain. Afar Zone 2 and Benishangul-Gumuz-Asossa faced irregular mentorship, unstable staffing and limited managerial oversight, resulting in weaker QI performance. CBCM coverage was particularly low; only 43 per cent of facilities reported exposure during the past year, with several health centres and health posts in Afar Zone 2 reporting no CBCM activities at all. Furthermore, mentorship topics did not consistently address labour and delivery, community case management or CBNC, limiting the comprehensiveness of QI.

Overall, results indicate partial fulfilment of the ToC. QI mechanisms improved service quality where QI teams, supplies and supervision converged; where these enabling conditions were absent especially in remote pastoralist settings progress remained uneven and fragile.

4.3.3 Utilization of MNCH Services and Gender-Sensitive Approaches

EQ7 and EQ8 (Revised): Improved availability and utilization of MNCH services in the target woredas; utilization of gender-sensitive approaches in service delivery and community engagement activities

4.3.3.1 Trends in ANC, Delivery, PNC and Childcare Service Utilization

Finding 9: MNCH service utilization increased substantially across Afar and Benishangul-Gumuz because the project improved service readiness, strengthened skills and mentorship, expanded

outreach, and established clearer referral processes that made care more reliable, visible and trusted. Gains were strongest in Benishangul-Gumuz driven by stable staffing, transport, community-facility linkages and continuity of outreach, while Afar recorded weaker improvements due to persistent supply shortages, transport constraints, outreach interruptions and high turnover. Overall service receipt remained high at 95.6 per cent, and satisfaction was exceptionally strong at 98.4 per cent, yet significant disparities persist at the health post level and in pastoralist communities of Afar.

Service Utilization and Coverage: Service utilization increased across all MNCH domains as the project strengthened both the supply and demand sides of care. Training, CBCM, PRCMM and facility-based NICU coaching improved provider competence and adherence to standards across delivery, newborn care and IMNCI, building client trust and repeat use. Community structures including WDAs, kebele committees and community QI teams enhanced mobilization and facilitated structured referrals using colour-coded vouchers and phone coordination. The community → health post → health centre → hospital pathway became particularly strong in Benishangul-Gumuz, where respondents described smoother care flow and timely referrals. Outreach was an essential driver of utilization. MHNTs enabled Afar's pastoralist communities to access ANC, PNC and child health services during mobile visits, while Benishangul-Gumuz relied more on structured health centre outreach and stable catchment mentorship.

ANC4+: As per CEI, ANC4+ coverage reached 52.8 per cent across regions (Benishangul-Gumuz: 68.1 per cent; Afar: 32.4 per cent). This reflects improvement over the baseline (41.2 per cent) and EMHDS 2019 (43 per cent). Earlier ANC initiation and fewer dropouts were repeatedly attributed to improved counselling, strengthened referral pathways and outreach. In Afar, MHNTs were crucial, though turnover and stock-outs reduced consistency.

Facility-Based Births: As per CEIs, facility-based births improved to 72.6 per cent (Benishangul-Gumuz: 88.9 per cent; Afar: 50.9 per cent) surpassing both the KOICA logframe target (60 per cent), baseline of 64.4 per cent (Benishangul-Gumuz: 81.4 per cent; Afar: 47.4 per cent) and national SBA benchmarks (76 per cent). The participants of FGDs and KIIs in Benishangul-Gumuz attributed this gain to improved readiness, maternity waiting homes, reliable referral vouchers and better management of labour complications. Whereas, Afar region improved moderately, but night-time transport gaps, long distances and intermittent supply availability especially in Zone 2 continued to depress institutional deliveries.

Early PNC (within 48 hours): As per ECI, early PNC rose to 59.9 per cent (Benishangul-Gumuz: 80.6 per cent; Afar: 32.4 per cent), an improvement from both baseline (24.4 per cent) and EMHDS 2019 levels (33.8 per cent). Benishangul-Gumuz exceeded the national early PNC target of 76 per cent. Afar's low rates reflect pastoralist movement, weather and geographic challenges, cultural norms, and weak linkages between health posts and health centres. As one HEW explained, *"mothers move with their families and livestock, so reaching them early is difficult."*

Newborn and Childcare Utilization: Newborn and childcare utilisation increased as neonatal intensive care services expanded in facilities where units were newly established or upgraded, including Asaita and Menge hospitals, and through Dubti Hospital's advancement to a Level Three neonatal intensive care unit, supported by targeted training, equipment provision, and structured mentorship. These facilities increasingly managed complex neonatal cases locally, cases that previously required referral to Addis Ababa, a shift that hospital staff and UNICEF informants associated with improved survival outcomes and strengthened community trust.

U5 Services: Utilization of U5 services increased, driven by different mechanisms across regions: in Benishangul-Gumuz, PRCMM coaching cycles improved correct classification, treatment and follow-up, while in Afar, MHNTs enabled remote households to access routine child health services. Caregivers reinforced these trends, observing that, *"children are treated properly and recover,"* although service continuity in the most remote Afar kebeles remains fragile due to persistent access and system constraints.

Service Receipt and Satisfaction: As per CEIs, service receipt was high: 95.6 per cent of clients received all needed services (Benishangul-Gumuz: 98.6 per cent; Afar: 91.7 per cent); hospitals performed best (100 per cent), followed by health centres (96 per cent) and health posts (93.3 per cent). Afar health posts recorded the lowest receipt (84.9 per cent). The main reason for missing services (91%) was a lack of supplies/medicines the issues repeatedly linked by interviewees to weak supply chains and security/road closures.

Client satisfaction: Client satisfaction was extremely high as alluded in the section on relevance (98.4 per cent of respondents were satisfied, far exceeding HSTP-II targets of 80 per cent). Similarly, recommendation rates for facilities reached 93.7 per cent. The CEIs showed that satisfaction was strongest for delivery and ANC, moderate for sick-child care, and lowest for PNC reflecting both experience of care and supply availability.

Remaining Gaps: Despite broad gains, the Afar region continues to lag across all utilization indicators particularly early PNC and facility births due to stock-outs, distance, transport barriers, limited diagnostics, night-duty constraints and pastoralist mobility. Voucher inconsistencies, volunteer attrition and turnover further weaken community facility linkages. Please view Annex 17 (as provided in Volume II) for more information about utilization of services.

4.3.3.2 Expansion and Adaptation of Service Delivery Models

Finding 10: Service delivery models were meaningfully expanded and adapted to local contexts, improving early identification, referral and service uptake, especially for women and general households. These improvements occurred because community-linked referral tools, regular PRCMM and mentorship, and MHNT/outreach models aligned with livelihood patterns. However, adaptations for adolescents and persons with disabilities remained limited because they were not included in the project design. Afar Zone 2 showed the weakest performance due to poor CHIS functionality, transport gaps and MHNT operational constraints.

The project expanded and strengthened service delivery models through community-led referral mechanisms, facility-based QI cycles, structured mentorship and tailored outreach. These adaptations enabled more timely identification and transfer of pregnant women and young children, increased ANC, SBA and PNC uptake, and reduced unnecessary referrals. Community leaders and HEWs described this chain, *“skills, tools and mentorship made the facility better, and that made families trust us.”*

Colour-coded vouchers became a widely accepted and functional tool. According to KIIs, more than four thousand referral vouchers were used in pastoralist areas in 2024, while the logframe recorded 1722 completed referrals in Afar region in the same timeframe. These vouchers assisted low-literacy households and facilitated communication between facilities.

Community engagement was extensive, with 89 per cent of facilities reporting community mobilization activities (97 per cent in Benishangul-Gumuz and 78 per cent in Afar). Pregnancy reporting was in place in 75 per cent of facilities overall, but coverage was substantially lower in Afar Zone 2, at only 20 per cent.

MHNTs remained essential in Afar and reached many pastoralist households, although weather, distance and supply shortages periodically limited consistency. Benishangul-Gumuz relied more on structured outreach and strong catchment mentorship.

Women benefited most from these adaptations, particularly through WDA involvement, women-led QI structures and improved birth preparedness counselling. Male participation increased overall (82 per cent) though it was markedly weaker in Afar. However, adolescents and persons with disabilities remained insufficiently included. Youth access was limited to awareness-raising; disability adaptations were ad hoc, largely dependent on family support. In one FGD, a participant noted, *“in health facilities there is no special infrastructure arranged for us [persons with disabilities] ... I always need help from my family.”*

Afar Zone 2 faced substantial gaps. Data collected in KIIs suggests that this was due to weak CHIS performance, lower community engagement activities, low pregnancy reporting and transport shortages. Afar overall experienced inconsistent MHNT operations. Where outreach, mentoring and community linkages functioned, particularly in Benishangul-Gumuz, the ToC pathway was strongly realized. Where transport, supply chains, infrastructure and CHIS systems were weak, progress remained fragile.

4.3.3.3 Implementation of Key Newborn Care Protocols

Finding 11: Newborn care protocols especially early breastfeeding and neonatal resuscitation were widely implemented due to their low-cost, protocolized nature and integration into delivery routines. However, KMC and thermal protection were inconsistently applied outside hospitals due to space, equipment and coaching gaps, particularly in Afar Zone 2. Reliable implementation requires sustained mentoring and basic supplies at the primary level, as well as protocol adaptation at the primary health care level.

KMC was fully implemented at 100 per cent of hospitals across both regions but remained partial at health centres (Benishangul-Gumuz: 79 per cent; Afar: 60 per cent), often limited to counselling-only modalities due to inadequate space and equipment as per HFAs. Similarly, thermal care was the weakest protocol, with 36 per cent coverage in Afar and 75 per cent in Benishangul-Gumuz; health centre performance was notably low in Afar (30 per cent). In KIIs, the service providers described difficulty applying thermal care consistently without warmers and adequate postnatal space.

By contrast, as per HFA, early breastfeeding was reliably practiced (Benishangul-Gumuz: 94 per cent; Afar: 91 per cent), and neonatal resuscitation was strong (Benishangul-Gumuz: 81 per cent; Afar: 82 per cent), supported by BEmONC training and reliable resuscitation sets.

The FGDs, project reports and KIIs underlined that health posts remained the weakest layer largely limited to counselling, with minimal hands-on newborn care. Overall, hospitals performed strongly, health centres moderately and health posts weakest. Benishangul-Gumuz, especially Metekel outperformed Afar, where Zone 2 lagged due to staffing, infrastructure and coaching deficits. Scaling up would require meeting ToC enablers (supplies, space and continuous coaching) and identifying and covering underspecified software enablers, such as protocol adaptation for PHC use.

4.3.3.4 Adoption of Gender-Sensitive Approaches

Finding 4: Gender-sensitive approaches were largely adopted through women-led QI structures, community dialogues, male engagement and culturally appropriate platforms. These adaptations improved women's autonomy and male support especially in Benishangul-Gumuz. Adoption remained uneven in Afar, particularly Zone 2, where mobility constraints, rigid service hours, transport barriers and ingrained norms limited uptake. Youth and disability inclusion remained minimal because these were not embedded in project design.

Gender-sensitive approaches contributed meaningfully to service uptake and earlier care-seeking. The KIIs and FGDs reiterated that women's empowerment forums, pregnant women conferences, and women-led QI committees enabled women to participate in decisions about care quality and to advocate for service improvements. Male engagement increased following structured community dialogues, as CEIs confirmed 82 per cent male support to MNCH care, correlating with higher ANC, PNC and child health utilization.

Moreover, culturally appropriate mechanisms such as involving clan leaders, religious figures and WDA members strengthened community mobilization. Colour-coded referral vouchers enabled low-literacy households to navigate the referral system. The CEIs and FGDs also indicated a movement from male-led to shared decision-making, driven by HEW counselling on danger signs and birth preparedness, community dialogues that normalize facility delivery/immunization, and better experience of care from mentoring/QI.

However, adaptation remained weaker in Afar, where women's autonomy was lower, and men's control over transport, finances and household decisions continued to delay timely care. Health centre schedules remained rigid, MHNTs operated only mornings once per week and night-time emergencies were described as, *"almost impossible to manage"* by Afar communities

Youth and disability inclusion remained limited. Adolescents primarily received awareness-based activities, and disability adaptations lacked standardization. One person with a disability shared that, *"the project was giving trainings for disabled, but I am not sure whether the messages were adapted."*

Gender-sensitive approaches supported the ToC pathway by strengthening demand, improving trust and facilitating earlier service uptake. However, ToC assumptions regarding social norms, transport availability and flexible service hours were only partially met, limiting equitable uptake in remote Afar.

4.3.4 Capacity-Building and Post-Training Performance

EQ9: To what extent were capacity-building activities for healthcare providers successful, and how effectively are skills being utilized after the project?

4.3.4.1 Capacity Gaps and Appropriateness of Training and Mentorship

Finding 12: The project correctly assessed MNCH capacity gaps and delivered training and mentorship that were well aligned with local needs and national tools. These activities exceeded targets and significantly strengthened technical competence, confidence and readiness especially in hospitals and health centres in Benishangul-Gumuz. However, frontline capacities remain uneven at health posts and in remote woredas (Afar Zone 2 and Benishangul-Gumuz-Asossa) due to mentorship gaps, turnover, supply constraints, and weaker data and logistics systems.

Capacity-building was grounded in a clear diagnosis of MNCH system gaps. Baseline assessments identified deficits in KMC, newborn resuscitation, thermal care, BEmONC, IMNCI, CBNC/iCCM, PMTCT, abortion care, and weaknesses in DHIS2 use and data quality. This provided a structured basis for tiered rollout, starting with hospitals and extending to health centres and health posts as evident from the project progress reports.

Training packages were aligned with national platforms, including the FMoH Newborn and Child Survival TWG tools, KMC manuals, KMC e-learning, NICU learning modules and system-wide guidelines. UNICEF and clinical experts supported adaptation and cascading of these tools, ensuring alignment with national standards.

The FGDs and KIIs underpinned that mentorship and supervision were adaptive and informed by ongoing needs. CBCM, PRCMM and on-site NICU coaching routinely identified practice gaps, such as resuscitation technique, ANC follow-up, IPC deficiencies and weak CHIS performance in Afar Zone 2. Data trends from DHIS2 and scorecards informed immediate refreshers, while community feedback highlighted referral and recognition gaps, enabling targeted corrective actions.

Training coverage was extensive and exceeded expectations. Across IMNCI, BEmONC, ENC, NICU, CBNC/iCCM and data management, structured training reached all tiers. Hospitals benefited from specialist-led mentorship, and high-volume health centres experienced regular clinical mentorship/coaching. A total of 596 healthcare workers were trained in total, more than a double the original target of 236, compensating for turnover, new inductions and deployment changes.

Skill gains were visible but uneven. The HFA data showed that self-reported adequacy was moderate with 55 per cent adequate, 38 per cent partially adequate and 8 per cent inadequate. Hospitals performed strongest (67 per cent adequate), health centres showed mixed results (60 per cent adequate) and health posts remained weakest (48 per cent adequate). By region, Benishangul-Gumuz generally outperformed Afar, with significant zonal disparities: Benishangul-Gumuz-Metekel showed consistently strong performance, while Benishangul-Gumuz-Asossa and Afar Zone 2 lagged.

Despite these advances, frontline fragility persisted. Weak team sizes, turnover, supply interruptions and CHIS weaknesses undermined translation of training into consistent practice most visibly in Afar Zone 2. Mentorship reach was uneven as the coverage was strongest in hospitals, moderate in health centres and inconsistent for health posts. Community case management topics (iCCM/CBNC) were least represented compared with ENC and newborn care. CBCM remained hospital centric.

The FGDs and KIIs noted that systems enablers were not always present. Interruptions in supplies, equipment and transport; incomplete data and supervision structures; and gaps in leadership continuity especially in insecure areas reduced the reliability of practice at lower tiers. Moreover, disability-inclusive and adolescent-responsive competencies were not systematically included in training packages, reflecting their absence from the original project design.

4.3.4.2 Application of Post-Training Skills in Service Delivery

Finding 13: Trained staff are applying skills consistently in hospitals and well-supported health centres, where delivery, newborn care and U5 protocols are routinely followed, and NICU practice is standardized. These improvements occurred because training was reinforced by structured mentorship, QI systems and adequate equipment. However, skills use remains uneven at the primary level due to turnover, limited diagnostics, space constraints, irregular mentorship, and weak referral and night-duty systems.

Hospitals and well-supported health centres consistently apply post-training skills. The HFA found that providers routinely use partographs, perform the active management of the third stage of labour (AMTSL) correctly, manage postpartum haemorrhage with confidence, and carry out neonatal resuscitation according to protocol. NICUs demonstrate universal (one hundred per cent) adherence to newborn care standards, and IMNCI is strongly embedded in health centre practice, with approximately 84 per cent of providers reporting they, “*always follow U5 protocols.*” These gains reflect the convergence of training, on-site coaching, CBCM, PRCMM, and QI loops that reinforce adherence and create predictable routines.

Delivery care at health centres emerged as the most consistently protocol-driven service area, with approximately 79 per cent of facilities reporting that standards were *always* followed, reflecting the cumulative effects of on-site coaching, mentorship and supportive supervision. Supervisors and providers reported clear improvements in clinical documentation, referral practices and case management, indicating stronger adherence to established norms.

Foundational management practices are increasingly taking hold. KIIs indicate that leadership, management, and governance arrangements, along with quarterly planning and data-driven quality improvement cycles, are functioning more effectively, particularly in Benishangul-Gumuz and Afar Zone 1. These practices have enabled teams to identify performance gaps, initiate timely corrective actions, and provide targeted refresher support.

However, primary level performance remains inconsistent. Health posts demonstrate the weakest adherence across ANC, PNC and U-five care. Only approximately 56 per cent “*always*” follow U5 protocols, and some posts reported non-adherence. The KIIs described staffing shortages, turnover, thin mentorship coverage and gaps in essential supplies (warmth aids, bag-and-mask devices, registers) limited the consistent application of protocols. Where health posts conducted deliveries, adherence was only partial, creating quality and safety risks.

ANC and PNC adherence remained uneven. Hospitals consistently applied ANC protocols, while health centres showed mixed adherence. Health posts were the weakest, and Afar Zone 2 and Benishangul-Gumuz-Asossa lagged due to stock-outs, supervision gaps and night-duty limitations that disrupt continuity of care.

Mentorship reach remains a critical determinant of performance. CBCM remains heavily hospital-centric and when mentorship rounds are delayed due to security, turnover or transport constraints, protocol adherence drops sharply particularly for PNC and ANC follow-up.

4.3.4.3 Strengthening Data Collection, Analysis and Use

Finding 14: The project substantially strengthened data systems for MNCH across hospitals and capable health centres, where routine registers, designated data staff and regular review meetings are now embedded. These gains emerged because training, mentorship and PRCMM/QI cycles institutionalized data use. However, data quality and use remain inconsistent at health posts and in Afar Zone 2, where staffing shortages, limited review culture, weak CHIS performance and low community feedback integration hinder reliable decision-making.

Data systems improved along the full chain: collection → analysis → use, particularly at higher tiers. Nearly two-thirds of staff received training in data quality and reporting. Routine tools are now widely available: 92 per cent of facilities have MNCH data tools and 86 per cent maintain complete registers. Hospitals and health centres in Benishangul-Gumuz show near-universal coverage. Most facilities (87 per cent) have designated data staff, supported by QI and mentorship teams.

MNCH monitoring is strongest for NICU (100 per cent) and child health (92 per cent), where clinical protocols and supervision practices are most structured. Review meetings occur regularly at hospitals and most health centres, and PRCMM cycles translate DHIS2 trends into corrective actions. Facilities report a shift from ad-hoc to routine data use, describing the emerging norm as, “*record → analyse → act.*”

However, data reliability weakens at the primary level. Quality-control training remains low and uneven (43 per cent overall and concentrated at hospitals and health centres while health posts and Afar Zone 2 are largely missed); many health posts, particularly in Afar Zone 2, lack complete registers, designated staff and regular review meetings. Only 32 per cent of health posts conduct internal reviews, and documentation gaps are frequent.

Monitoring for delivery and PNC is notably weaker (70 per cent and 53 per cent respectively), reflecting supply and staffing constraints in lower tiers. Staff shortages limit data tasks at health posts and health centres in remote, insecure areas.

Community feedback mechanisms are underutilized: only 47 per cent of facilities have functioning feedback mechanisms (Benishangul-Gumuz: 67 per cent; Afar: 22 per cent and). Weak CHIS performance exacerbates these gaps.

Operational constraints including register stock-outs, documentation fatigue, turnover, terrain constraints and security disruptions further limit consistent data use at the frontline. Overall, the project created meaningful and lasting improvements in MNCH data systems at higher tiers, but sustained investment is required to build reliable data culture and capacity at the health post level and in remote, underserved woredas. Please view Annex 18 in Volume-II for more information about data reporting and use (HFA).

4.3.5 Community Awareness and Engagement to MNCH

EQ10: To what extent did community awareness and engagement initiatives contribute to increased utilization of MNCH services and promote gender-sensitive approaches?

4.3.5.1 SBC Strategies

Finding 15: The project embedded culturally anchored and gender-sensitive SBC approaches that strengthened community-facility linkages, improved MNCH knowledge and enhanced women’s empowerment and male support, most visibly in Benishangul-Gumuz. These improvements occurred because SBC platforms were adapted to local social structures and integrated with referral tools and outreach. However Afar, especially Zone 2, showed weaker gains due to limited CHIS functionality, low pregnancy reporting, rigid daytime-only service hours, limited night transport and weaker hospital-community engagement. Inclusion gaps persisted because adolescents and persons with disabilities were not systematically targeted in the project design.

SBC strategies were designed around local community structures and gender norms. Facilities and HEWs worked through WDAs, HDAs, kebele command posts, religious and clan leaders,

pregnant-women forums and culturally appropriate channels such as storytelling and demonstrations. In Afar, information was communicated using the Daggu Information System, a traditional oral system for communicating information across communities. These platforms reinforced messages on ANC attendance, safe childbirth, newborn care, family planning and nutrition, and were delivered in formats familiar to community members. This culturally grounded approach made messages more acceptable and sustained repetition critical for behaviour change.

Male involvement featured prominently in Benishangul-Gumuz, where community dialogues and targeted messaging through male groups and religious networks encouraged shared responsibility for health-seeking. CEI data showed high perceived male support (approximately 82 per cent overall), with stronger engagement in Benishangul-Gumuz. One respondent noted that, *"men now accompany us more often and support transport when needed."* In Afar, male participation was described as more formal and less consistent, reflecting persisting gender norms that restrict women's autonomy.

Colour-coded referral vouchers became a culturally adapted operational tool for danger-sign recognition, triage and timely referral. More than 4000 vouchers were used in pastoralist areas in 2024, demonstrating both acceptability and practical utility. The KIIs elaborated that households with low literacy described the vouchers as helpful in guiding action during emergencies.

SBC strengthened community-facility linkages most clearly in Benishangul-Gumuz, where 97 per cent of facilities reported community activities, pregnancy reporting reached 87 per cent and CHIS functionality was generally rated "good." Benishangul-Gumuz also recorded substantially higher exposure to HEW home visits (78.5 per cent), WDA meetings (58.3 per cent) and MNCH discussions (42.4 per cent), and knowledge gains were reflected in CEI responses (65 per cent reported improved MNCH knowledge and practice). These patterns translated into high service utilization.

In Afar, particularly Zone 2, weaker CHIS performance, limited community sessions, and long distances constrained the reach of SBC activities. Only 20 per cent of facilities in Zone 2 received pregnancy notifications, and 70 per cent rated CHIS as "not good." Women noted that, *"meetings do not reach us when we move with livestock,"* illustrating the intersection between mobility and limited-service hours.

Inclusion remained partial. Community scorecards reached only 13 per cent of clients (20 per cent in Benishangul-Gumuz and 3 per cent in Afar), limiting women's voice and system accountability. Adolescents and persons with disabilities were not systematically included, reflecting gaps in the project's original design.

4.3.5.2 Influence of Community Engagement on MNCH Knowledge, Attitudes and Practices (KAP)

Finding 16: Community engagement activities strengthened MNCH-related knowledge, attitudes and practices (KAP) among women and men most strongly in Benishangul-Gumuz because SBC messages were frequent, culturally anchored and linked to accessible services and reliable referral systems. In Afar, particularly Zone 2, increased awareness did not consistently translate into use due to thin SBC contact, weak CHIS and pregnancy reporting, mobility patterns and gendered constraints. Male engagement supported uptake but remained uneven across regions.

Community engagement improved MNCH knowledge and practices by leveraging existing HEP platforms. In Benishangul-Gumuz, HEW home visits (78.5 per cent), WDA meetings (58.3 per cent) and MNCH talks (42.4 per cent) reinforced key messages and improved recall. Among exposed participants, 65 per cent in Benishangul-Gumuz reported improved knowledge and practice compared with 17 per cent in Afar. Women in Benishangul-Gumuz consistently described, *"knowing*

the right time to go for ANC and when to deliver in a facility," reflecting both awareness and confidence in services.

Behaviour change was strongest where SBC was regular and directly linked to service availability. In Benishangul-Gumuz, where 97 per cent of facilities conducted community activities and pregnancy reporting reached 87 per cent, positive attitudes translated into high ANC4+, facility birth and early PNC rates. Communities also noted improved provider competence and reliability, *"children are treated with due care"*, which increased trust and sustained new norms around professional care.

Operational tools also acted as behaviour-change reinforcements. Colour-coded vouchers linked messages with immediate action by guiding families during emergencies. In pastoralist Afar, more than 4000 vouchers facilitated timely referrals in 2024.

In Afar, especially Zone 2, community engagement was thinner. Lower exposure to HEW visits, fewer WDA meetings and limited pregnancy reporting reduced repetition and reinforcement of messages. While attitudes toward MNCH care were generally positive, utilization lagged due to distance, cost, mobility, rigid service hours and weak CHIS. Male engagement remained weaker in Afar, and men's control over cash and transport continued to delay PNC and sick-child care.

Gaps in voice and inclusion further constrained impact. Only 13 per cent of mothers reported participating in community feedback processes, with virtually no coverage in Afar Zone 2. Adolescents and persons with disabilities lacked tailored communication approaches, and accessibility barriers persisted.

4.3.5.3 Feedback Processes and Use of Gender-Differentiated Input

Finding 17: Community feedback mechanisms operated unevenly and remained strongest in Benishangul-Gumuz at the primary level, where community scorecards, WDA forums and voucher tracking informed small operational improvements. These gains were limited because coverage was low, feedback loops were inconsistently closed and hospitals lacked formal channels. In Afar, especially Zone 2, feedback systems were minimal. Gender-differentiated input was seldom captured or used, and adolescents and persons with disabilities remained largely missed.

Feedback mechanisms functioned most reliably in Benishangul-Gumuz, where community scorecards reached approximately 20 per cent of clients and were used mainly at health post and health centre levels. Women in Benishangul-Gumuz described using community meetings to raise concerns about water, cleanliness and waiting areas, and noted that some fixes were implemented, such as providing benches and improving compound hygiene. WDA groups in Benishangul-Gumuz reported being, *"consulted before the facility starts its work,"* reflecting stronger female engagement.

Referral vouchers also functioned as indirect feedback tools. While women did not perceive them as channels for their voices, facility teams used voucher tracking to identify referral delays, transport constraints, and incomplete referral pathways, and to escalate these issues to woreda authorities for corrective action.

No hospital used CSCs or similar structured feedback tools. In Afar, especially Zone 2, formal mechanisms were minimal: community scorecards reached only three per cent of respondents in Afar region and zero percent in Afar Zone 2. Feedback gathered during outreach or supervision was rarely logged or linked to QI cycles, leading to weak follow-through. Many women in Afar noted that they, *"did not see visible changes after giving feedback."*

Gender-specific feedback remained limited. Male involvement was inconsistent outside Benishangul-Gumuz and cultural norms restricted women's public voice, especially in Afar. Adolescents and persons with disabilities were not systematically included in feedback processes, and facilities did not routinely disaggregate feedback by sex, age or disability. Volunteer fatigue further affected continuity. WDAs and community volunteers received no remuneration, and turnover was evident, particularly in Afar.

4.3.6 Reductions in Neonatal and U5 Mortality

EQ11: What level of contribution has the project made to reducing neonatal and U5 mortality rates in the target regions?

4.3.6.1 Mortality Trends, Contribution and Attribution Boundaries

Finding 18: Facility-level evidence, especially from supported NICUs, shows a clear decline in NMR across project hospitals by 2024, with three out of five facilities reaching or surpassing the programme target of eight per cent and the remaining two attaining nine per cent. These improvements occurred because the project strengthened neonatal care through targeted investments in equipment, training, mentorship, referral functioning and community mobilization. However, the proportion of population-level mortality change attributable to the project cannot be determined due to the absence of the data. Gains remain constrained by late and unstable admissions from primary care, supply-chain interruptions, and gaps in postnatal and KMC continuity.

Facility-level NICU data indicate substantial improvements in neonatal outcomes over the programme period. Programme monitoring data show reductions in hospital neonatal mortality rates between 2021 and 2024: Dubti Hospital declined from 14 per cent to 6 per cent; Pawe Hospital from 10 per cent to 5 per cent; Asaita Hospital from 10 per cent to 7 per cent; Assosa Hospital from 10 per cent to 9 per cent; and Menge Hospital from 29 per cent to 9 per cent. These trends reflect improved survival and recovery, with several facilities reporting recovery rates above 85 per cent by endline. The most consistent reductions were observed in facilities that received comprehensive support, including equipment, structured mentorship, standardised protocols, and reliable referral pathways.

External operational research by Emory University in 2023 also documented downward trends at Dubti Hospital (17.5 per cent to 11 per cent) and Aysaita Hospital (9.8 per cent to 7.9 per cent). Mixed findings for Assosa Hospital and Pawe Hospital were attributed to timing differences, small case numbers and evolving case mix during the period before the full rollout of mentorship and equipment upgrades. Respondents across both regions consistently reported fewer maternal, neonatal and child deaths. Health workers and mothers noted improvements in newborn stabilization, emergency obstetric care and timeliness of referrals. These qualitative accounts align strongly with quantitative trends and reinforce perceptions of genuine improvements in survival. However, system- and population-level quantitative data is not available.

Gaps limiting further NICU mortality reduction included: late and unstable admissions, non-standardized definitions and variable case-mix, weak two-way feedback after referrals, stock-outs and limited post-discharge continuity.

The project's effect at hospital level is best framed as a plausible contribution to reduced neonatal mortality, supported by clear causal factors: (1) temporality, as observed mortality declines followed the establishment or upgrading of NICU services under the project; and (2) specificity of inputs, as improvements coincided with targeted strengthening of NICU "hardware" (equipment and infrastructure) and "software" (training, protocols, and structured mentorship); (3) Coherence with the ToC, as observed improvements align with the pathway of input → output → impact; and (4) Consistency across sources. However, a confirmed causal effect (attribution) cannot be proven, due to: (1) the absence of a counterfactual (concurrent comparison group or robust controlled time series); (2) small numerators and shifting case mix; and (3) potential concurrent influences (other programmes or shocks). Population-level mortality and change attributable to the project cannot be determined due to the absence of regional mortality data.

The project's effect at hospital level is best framed as a plausible contribution to reduced neonatal mortality, supported by clear causal factors: (i) temporality, as observed mortality declines followed the establishment or upgrading of NICU services under the project; and (ii) specificity of inputs, as improvements coincided with targeted strengthening of NICU "hardware" (equipment and infrastructure) and "software" (training, protocols, and structured mentorship).

Overall Assessment: Effectiveness

The project delivered substantial improvements in the availability, quality and utilization of MNCH services across Afar and Benishangul-Gumuz, with consistent gains at hospitals and most health centres. These outcomes reflected targeted investments in facility readiness, capacity-building, supervision and strengthened referral pathways, which aligned well with the ToC. Service utilization increased across ANC, SBA, early PNC and newborn care, supported by structured mentorship, QI systems, community engagement, and outreach modalities. Performance was strongest in Benishangul-Gumuz, where staffing stability, transport availability and functional community platforms enabled sustained gains. In Afar, particularly Zone 2, effectiveness remained uneven due to stock-outs, transport gaps, pastoralist mobility, turnover and weaker CHIS performance. The project achieved key improvements in newborn and child health services, with strengthened NICU functions and enhanced management of obstetric and neonatal complications. Gender-sensitive approaches improved women's autonomy and male participation, though inclusion of adolescents and persons with disabilities remained limited. Overall, the project demonstrated a strong contribution to improved MNCH service performance, with remaining disparities concentrated at primary level and in remote pastoralist settings.

4.4 Efficiency

This section assesses the extent to which the KOICA-UNICEF MNCH project delivered its intended outputs and outcomes in a cost-effective, timely and well-managed manner. This section will examine allocative and technical efficiency under EQ12/EFY (Efficiency)¹², including the optimization of financial, human and operational resources; the influence of implementation delays; and the project's ability to sustain essential MNCH services during periods of instability, inflation and supply-chain disruption. Under EQ13/EFY¹³, this section will also evaluate the cost-effectiveness of key delivery modalities, notably on-site mentoring versus off-site training in Benishangul-Gumuz, and MHNTs versus health centre outreach in Afar. The analysis draws on financial records, project planning and reporting documents, HFA and CEI results, and input-output data for the cost-effectiveness units of analysis. Qualitative insights were obtained from KIIs with UNICEF, KOICA, Emory University, implementing partners, federal, regional and woreda health offices, as well as FGDs with WDA members, HEWs, persons with disabilities, facility staff and women's groups. All quantitative and qualitative sources were triangulated to assess whether resources were converted into results at an appropriate cost and whether efficiency gains were achieved through integrated delivery arrangements, decentralized decision-making and adaptive reallocations.

4.4.1 Optimal Use of Resources

EQ12: How optimally have resources been utilized? What inefficient use of resources could have been avoided?

4.4.1.1 Sufficiency and Allocation of Financial, Human and Material Resources

Finding 1: Resources were largely sufficient and appropriately allocated, supported by strong budget execution, adaptive reallocations and a programme-heavy expenditure mix. However, sufficiency was uneven at the last mile (i.e., underfunded transport, intermittent supplies and high-cost outreach in Afar created equity and sustainability risks, particularly where operating conditions were unstable).

Budget execution was high and programme focused. Programmable expenditures reached full utilization (100 per cent), representing 86.5 per cent of total spending, while overall budget absorption reached 98 per cent of the US\$9.12 million allocation. KIIs at federal, regional and woreda levels confirmed that resource planning was generally sound, timely and consequential for results. High absorption was complemented by adaptive reallocations (i.e., additional mentorship rounds, mop-up training and repriced IP contracts) to safeguard planned outputs following late disbursements in 2022 and COVID-19-related delays.

Annual expenditure trends reflected programme cycles. In 2020, 35 per cent was absorbed due to COVID-19 restrictions. Expenditure rose sharply in 2021 (101 per cent), slowed in 2022 (79 per cent) due to delayed fund release and logistic constraints (security, fuel shortages), and rebounded strongly in 2023 (106 per cent). In 2024, clearance of backlogged procurements and intensified mentorship/QI cycles resulted in overspend (146 per cent). Despite end-loaded spending, RFW indicators were met or surpassed demonstrating efficient translation of resources into outputs.

Performance against RFW indicators shows strong efficiency:

- Output 1.1: 96 per cent spent, 98.4 per cent coverage (inflated baseline reporting corrected).
- Output 1.2: 104 per cent spent, 84.1 per cent facility support.
- Output 1.3: 99.6 per cent spent, 259 per cent training coverage following mop-ups.
- Output 2.1: 92 per cent spent, 96 per cent kebele coverage.
- Output 2.2: 88 per cent spent, 1,772 referrals recorded.
- Output 3.1: 95 per cent spent, 100 per cent woreda inclusion.

Adaptive measures (i.e., repricing of implementing partner contracts during inflation, integration of UNICEF systems and reliance on on-site mentorship to minimize per-diem costs) improved operational efficiency.

Nevertheless, gaps persisted. High fuel costs, underfunded O&M budgets and intermittent drug availability weakened outreach and referrals in remote areas. The referral system in Afar remained costly (about US\$70 per referral), and MHNTs faced high unit costs and declining volume in late 2024-2025 due to transport and staffing constraints. These shortfalls reduced last-mile efficiency and posed sustainability concerns.

In summary, resource allocation was efficient and adaptive overall. However, operational enablers and last-mile costs require strengthened budgeting to maintain equity and continuity in remote settings.

4.4.1.2 Timeliness and Efficiency of Procurement and Supply Chains

Finding 2: Procurement delays and stock-outs did not derail service delivery but created intermittent constraints, particularly for remote facilities and MHNTs. Improvements from baseline were evident, however last-mile inconsistencies, supply-chain fragility and delayed resupply periodically reduced service quality and increased household costs.

Despite the delays in the implementation at the start, some late disbursements and access/logistics constraints in 2022, the project caught up on backlogged procurements in 2024 and met its target logframe indicators.

Supply performance improved compared with baseline, supported by UNICEF procurement and periodic RHB top-ups. Facilities consistently reported receiving equipment, newborn kits, NICU upgrades and essential drugs through UNICEF channels. However, supply-chain gaps persisted at health posts and MHNT sites, where intermittent stock-outs of antibiotics, IPTp and basic diagnostics reduced the reliability of ANC, PNC and U5 services.

HFA and CEI findings confirm uneven availability:

- 63.5 per cent of clients received all prescribed medicines.
- 32.1 per cent received some medicines.
- 1.2 per cent received none; highest in Afar Zone 2 (4.4 per cent).

Hospitals were mostly well stocked, health centres showed recurrent gaps and health posts remained the weakest. In several instances, caregivers purchased medicines privately, increasing out-of-pocket expenditure and undermining the perceived quality of care. Supply gaps reflected

systemic constraints including late disbursements, security-induced transport delays, inflation and variable woreda-level logistics.

Overall, the procurement systems were broadly timely and efficient at central and regional levels, but last-mile inefficiencies persisted and could have been mitigated through more predictable O&M financing, earlier procurement cycles and strengthened woreda-level coordination.

4.4.1.3 Causes and Implications of Implementation or Disbursement Delays

Finding 3: Delays were mainly caused by COVID-19 restrictions, late disbursements, insecurity and fuel shortages. Though these created end-loaded delivery and procurement backlogs, adaptive micro-planning, intensified supervision and flexible budget management prevented major slippage in achieving planned outputs.

COVID-19 restrictions delayed 2020 activities by almost one year, compressing implementation into 2021-2024. In 2022, late fund releases combined with insecurity and fuel shortages delayed training, outreach and procurement, generating end-of-year implementation spikes. Supplies procured in preceding quarters were often distributed only in 2024 due to logistical backlog.

Regional variations were observed. Afar maintained steadier implementation, owing to stronger RHB-UNICEF coordination; delays mainly related to supply-chain and management bottlenecks. In Benishangul-Gumuz, delays were more pronounced due to late budget distribution, security-related inaccessibility and transport shortages. TWGs, joint planning platforms and supervision missions mitigated cumulative impact.

Thus, delays were largely context-driven and managed effectively. Future efficiency requires earlier procurement scheduling, clearer contingency buffers for O&M and tighter alignment of project and woreda financial cycles.

4.4.1.4 Avoidable Administrative and Coordination Inefficiencies

Finding 4: Administration and coordination were generally strong, but several avoidable inefficiencies including thin field presence, vehicle shortages, mismatched planning cycles, unclear MHNT accountabilities and underfunded micro-costs reduced efficiency, particularly in Benishangul-Gumuz and Afar Zone 2.

While coordination platforms functioned well at federal and regional levels, several inefficiencies emerged:

- Thin field presence and lack of vehicles (Benishangul-Gumuz-Metekel): Two staff without transport covered a large zone, leading to postponed visits.
- Misaligned woreda-project plans: Some activities required rescheduling due to non-joint planning.
- Opaque woreda budgets: Limited visibility of allocations constrained planning.
- Training incentive misalignment: Lower in-country per diems reduced staff participation in some sessions, affecting scheduling and continuity.
- Early duplication of training/mentorship: Parallel IMNCI and mentorship efforts occurred early in implementation until partner mapping was strengthened.
- Underfunded micro-costs (e.g., voucher printing): These small omissions affected referral performance.
- MHNT role ambiguity in Afar: Overlapping partner responsibilities and transport gaps led to irregular outreach and inefficient referrals.
- Weak community-facility data flows: Limited CHIS integration reduced the efficiency of problem detection and micro-planning.

In summary, coordination was strong at higher levels but uneven at the operational frontier. Avoidable inefficiencies contributed to localized delays and increased unit costs, underscoring the need for strengthened field presence, clear role delineation and ring-fenced operational budgets.

4.4.2 Cost-Effectiveness of Delivery Modalities

EQ13 cost-effectiveness: How cost-effective is onsite mentoring compared to off-site training? How cost-effective have mobile health services been in Afar?

4.4.2.1 Case Study 1: Comparative Cost-Effectiveness of Off-Site Training and On-Site Mentorship

Finding 4: Off-site training is more cost-efficient for achieving rapid, foundational knowledge gains (US\$4.14 per percentage point), whereas on-site mentorship embeds skills into routine practice but at a higher cost (US\$7.69 per percentage point). The incremental cost-effectiveness ratio (ICER) of US\$1.82 per additional percentage point reflects training economy of scale. A blended model of sequenced training followed by targeted mentorship offers the strongest value for money and supports sustained QI.

Cost comparisons show that off-site IMNCI training generated larger and faster improvements in test-score performance at lower unit cost than CBCM. Off-site training cost approximately US\$4.14 per percentage point improvement, compared with US\$7.69 for mentorship. The ICER indicates that shifting from mentorship to training buys one additional percentage point gain for about US\$1.82, reflecting economies of scale in classroom-based delivery.

Training appears more cost-efficient because fixed costs (venue, facilitators, materials) are distributed across larger groups, and delivery is standardized. Sensitivity analyses (i.e., varying fuel prices, distance, per diems and accommodation) did not alter the relative cost advantage of training.

Mentorship remains essential despite higher unit cost. It directly supports behavioural change, reinforces protocol adherence, and resolves context-specific clinical and operational challenges. Respondents consistently attributed improved confidence, reduced unnecessary referrals and better teamwork to mentorship rather than training alone.

However, opportunity costs were not monetized. These include temporary service disruption caused when staff (both trainees and trainers) are absent during off-site training, as well as time-related costs associated with trainer absence during on-site mentorship. Because on-site mentorship requires substantial investment from higher-paid trainers, incorporating opportunity costs could potentially increase off-site training efficiency relative to on-site mentorship. In contrast, system-wide benefits of mentorship (quality, continuity, fewer complications) were not valued, likely underestimating the economic benefit of mentorship.

In summary, a combined approach is most cost-effective: off-site training to lift baseline competence rapidly, followed by structured, routine mentorship to consolidate skills and ensure sustained practice. Efficiency can be increased by localizing mentor pools, clustering visits with PRCMM/QI cycles, and decentralizing training locations to reduce travel and allowances. See Annex 19 (see Volume II) for detailed calculations.

4.4.2.2 Case Study 2: Comparative Cost-Effectiveness of MHNTs and Health Centre Outreach in Afar

Finding 5: In the study sites, health centre outreach delivered larger average coverage gains at far lower cost (US\$0.52 per contact) compared with MHNTs (US\$1.66 per contact). With a negative ICER (–US\$1,336.8), MHNTs are dominated on efficiency grounds. However, MHNTs remain indispensable for pastoralist and remote communities where the alternative is no service highlighting an unavoidable efficiency and equity trade-off.

Health centre outreach demonstrated clear cost advantages. Average service-contact cost was approximately US\$0.52, with strong composite gains across ANC, PNC, immunization and nutrition (ANC +16; PNC +20; EPI +13; nutrition +6). In contrast, MHNTs cost US\$1.66 per contact and produced smaller average gains, although improvements from very low baselines were substantial in some sites (e.g., Barahali: PNC +15; EPI +13; nutrition +34).

The composite ICER for MHNTs relative to health centre outreach was US\$1,336.8 per contract indicating dominance by the latter. MHNTs are more expensive and yield lower average incremental gains in the aggregated set of indicators. Sensitivity analysis (fuel cost, distance, allowances) did not overturn this result.

However, MHNTs reach populations that are otherwise unreachable. Their higher cost reflects structural factors: long travel distances, low session volumes, and high per-diem and transport expenditures. Respondents repeatedly described MHNTs as the only functional service delivery modality in isolated pastoralist kebeles and a critical lifeline during shocks.

In summary, health centre outreach is the more efficient model where populations are within geographic reach. MHNTs, though less cost-efficient, are essential to uphold equity, prevent catastrophic household costs for travel, and ensure access for nomadic or highly remote groups. Future value for money can be strengthened by improving MHNT trip planning, reducing transport inefficiencies, and integrating MHNT schedules into RHB routine budgets. See Annex 20 (refer to Volume II) for detailed calculations.

Overall Assessment: Efficiency

The project demonstrated strong efficiency in translating resources into outputs and maintaining essential MNCH services in two difficult regions. Budget absorption was high at 98 per cent, with a programme-heavy mix in which 86.5 per cent of funds directly supported service delivery. Adaptive reallocations including mop-up training, additional mentorship and repriced implementing partner contracts enabled the project to meet or surpass most RFW indicators despite COVID-19 disruptions, insecurity and late disbursements. Efficiency weakened at the operational frontier. Underfunded transport and O&M budgets, intermittent supplies, and the high cost of outreach in Afar reduced continuity and created equity risks. While procurement and supply chains improved from baseline, last-mile inconsistencies persisted, contributing to periodic stock-outs and increased out-of-pocket spending. Coordination and administration were broadly effective, though several avoidable inefficiencies such as thin field presence, misaligned planning cycles and unclear MHNT roles led to higher unit costs in specific woredas. CEA showed that off-site training provided rapid, economical competence gains, while on-site mentorship, though more expensive, was essential for consolidating practice. Health centre outreach proved more cost-efficient than MHNTs, however, MHNTs remained indispensable for pastoralist and remote communities. Overall, the project delivered good value for money, with efficiency strongest where logistics, supervision and supply systems were stable.

4.5 Sustainability

This section examines the extent to which the KOICA-UNICEF MNCH project is likely to sustain its benefits after project closure. This section examines the capacity of community and government systems to sustain service delivery (EQ14/S14), the durability of strengthened supervision, mentorship, supply and referral systems (EQ15/S15), and the factors enabling or constraining scale-up of CBNC services (EQ16/S16). Evidence is drawn from triangulated KIIs with government, implementing partners and UNICEF; FGDs with HEWs, health facility teams and community actors; HFA results on functionality and readiness; and programme-monitoring data from Afar and Benishangul-Gumuz regions.

4.5.1 Systems and Structures of Services

EQ14: To what extent are the net benefits from the project likely to continue after support ends, and under which circumstances?

4.5.1.1 Community-Based Systems and Local Government Structures

Finding 1: Sustainability is partial. Hospitals and many health centres appear ready to retain core gains, but health posts and remote woredas, particularly Afar Zone 2 and parts of Benishangul-Gumuz-Metekel, remain fragile due to under-financed operational functions. While the project strengthened the “software” of the system like skills, supervision platforms, PRCMM/QI cycles,

DHIS2/CHIS use and community structures, and the “hardware” necessary for sustained delivery (transport, fuel, commodities, equipment maintenance, printing and supervision budgets) remains under-funded. Continuity is therefore uneven across levels and geographies.

Governance and Ownership: Leadership capacity is stronger than at baseline, with roles clarified at regional and woreda levels, active TWGs and routine plan alignment. PRCMM and joint reviews have become institutionalized. However, governance depth varies. High turnover, data-management gaps and insufficient O&M budgets undermine supervisory functions. Several Benishangul-Gumuz woredas performed well only where on-site officers supported planning raising concerns about continuity without funded positions.

Health Workforce, Capability and QI: A significant number of trained MNCH workforce and functional QI teams are in place. CBCM and supervision are largely institutionalized, but frequency depends on fuel, transport and response to turnover. Localizing mentorship and decentralized training venues improves prospects, but without predictable O&M financing, cadence may slow down.

Information Systems (DHIS2/eCHIS/IPLS): Routine monthly and quarterly reviews are embedded in government operations. Sustainability depends on periodic coaching, functional hardware and recurring costs such as registers and printing. Digitalization efforts require continued investment and local technical support.

Medicines, Supplies and Equipment: Availability improved substantially but remains sensitive to national shortages, transport costs and equipment upkeep. Sustainability is weakest where recurrent costs are unfunded. Several Afar woredas identified the risk that gains could erode within two to three years without improvements to routine budgeting for supply chains, laboratory inputs and maintenance.

Financing and Budget Prioritization: Fiscal space is tight. Woredas struggle to cover fuel, transport, supervision and printing. Although some local budgets (up to 15 per cent in selected areas) were earmarked for MNCH, these allocations are insufficient for maintaining outreach and referral functions. MNCH activities are often viewed as donor-funded rather than as core budget lines, limiting long-term absorption.

Service Delivery Across the Three Tiers: Facility-based MNCH care (NICU, ANC, delivery and U5 services) will continue under government management. At the primary level, however, equity gaps may widen due to operational constraints. MHNTs, central for pastoralist communities, contracted from nearly thirty teams to fourteen by mid-2025, with no dedicated budget lines for fuel, vehicles or allowances. Without institutionalization, MHNT continuity is unlikely.

Community Platforms (HEWs, WDAs, kebele forums): These structures are integrated within routine practice and are expected to continue identifying pregnancies, conducting counselling and supporting referrals. However, activity levels depend on essential supplies, staff stability and transport for supervisory follow-up. Performance in remote areas is particularly vulnerable.

Best Practices Supporting Sustainability: The project avoided parallel systems and built on government routines: bi-weekly TWGs/PRCMM and joint reviews kept plans aligned; CBCM and QI teams embedded day-to-day coaching; and monthly DHIS2/eCHIS/IPLS reviews normalized data-to-action. Community platforms (HEWs/WDAs/kebele forums) continued pregnancy identification, counselling and referral follow-up, speeding care-seeking. Partner mapping reduced early training duplication, and using local mentors/trainers plus decentralized venues lowered costs and helped institutionalize skills.

Challenges Limiting Continuity: Sustainability is most constrained by recurrent O&M: fuel/transport for outreach and supervision, small but critical items (printing/tools, phones), equipment maintenance and periodic drug shortfalls. Leadership “bench strength” is thin in some woredas (turnover, data-management gaps), coordination quality varies (stronger in Afar than Benishangul-Gumuz), and per-diem incentives can skew training choices away from practice-

changing mentorship. Last-mile equity functions, especially MHNTs, remain budget-sensitive (high operating costs, long distances), risking reduced frequency and widening peripheral gaps once external funds recede.

4.5.1.2 Institutionalization of Routine Health-System Functions

Finding 2: Core MNCH and CBNC practices have been institutionalized in hospitals and many health centres; however, institutionalization is weaker for cost-intensive functions (MHNTs, outreach, supervision, printing, digital tools), particularly in Afar Zone 2.

Across KIIs, FGDs and HFA results, respondents recognized that MNCH/CBNC activities are now part of the routine service package. Institutionalization is strong where processes depend mainly on human capacity and routine planning, but weak where sustainability requires recurrent operational financing. Continued progress requires clear financing pathways and integration of high-cost functions into government budgets. Below is summary what practices are institutionalized and what remain weak or partially institutionalized.

Table 10: Practices Institutionalized and Not Institutionalized

Practices that are well institutionalized	Practices that remain weak or partially institutionalized
1. Leadership, planning and governance: Embedding UNICEF and Emory staff within RHBs facilitated transfer of planning and coordination functions. TWGs, joint reviews and aligned micro-plans are being run by government teams. 2. QI systems: QI teams are active, using Plan-Do-Study-Act cycles and dashboards with local leadership. <i>"Quality improvement training was provided... now we use these tools ourselves"</i> (KII, Afar Zone 1). 3. Mentorship and PRCMM: Mentorship is now routine, largely led by woreda and facility managers; PRCMM is embedded across levels. <i>"PRCMM played an important role in improving performance at all levels"</i> (KII, Region/Benishangul-Gumuz). 4. Community engagement platforms: WDAs, HEWs, kebele discussions and one-to-five structures continue referral follow-up and pregnancy identification.	1. MHNTs: Fully donor-dependent; costs of fuel, maintenance and allowances are not budgeted by government. Sustainability outlook is poor without ring-fenced funding. 2. Outreach and supervision: High reliance on donor-supported transport and per diems; continuation likely at reduced frequency. 3. Community scorecards: Used in selected woredas only. CEI shows low feedback use (12.7 per cent); lowest in Afar (2.8 per cent). 4. Digital and dashboard tools: Adoption is uneven; integration with DHIS2 is incomplete and staff turnover affects continuity. 5. Referral voucher system: Dependent on external funding for printing; disruptions noted when printing resources were unavailable. 6. O&M functions: Recurrent operational needs, for equipment repair, transport and communications, are the primary bottleneck to institutionalization.

4.5.1.3 Analysis of Enabling and Hindering Factors

Finding 3: Political commitment and institutionalized routines support continuity, but limited fiscal space, O&M deficits, HR attrition, geographic isolation and pockets of insecurity undermine last-mile sustainability especially for MHNTs, outreach, supervision and supply reliability.

The sustainability profile of the intervention aligns closely with the external assumptions articulated in the ToC. The extent to which these assumptions hold provides a clear indication of where continuity risks are most pronounced. Below are key enabling and hindering factors:

Political Prioritization of MNCH – *largely enabling*

MNCH appears well prioritized in policy and planning frameworks. TWGs, reviews and planning platforms function regularly. However, MNCH is frequently treated as donor-driven, and core budget lines remain insufficient.

Continued Investment in Emerging/Pastoralist Regions – *partially enabling*

Some woredas have started earmarking local funds, and RHBs have begun formalizing MHNT units. However, local budgets remain far below the threshold required for fuel, transport, maintenance and allowances.

HEP Optimization and HR stability – *partially enabling*

HEWs and WDAs remain active, and catchment mentorship is embedded. Nevertheless, HR turnover, vacancies and long travel distances undermine the frequency and quality of community-level services.

Political/Security Stability – *mixed*

Security remains fragile in Benishangul-Gumuz-Kamashi, Metekel and parts of Afar. Road access, staff mobility and supervision cycles are frequently disrupted, affecting continuity of high-contact services.

Emergency Preparedness – *partially enabling*

Governments can mobilize partners for outbreaks, but reliance on emergency funds means routine MNCH functions may be deprioritized during shocks.

EDHS Cycles and Data Verification – *not fully holding*

Absence of recent EDHS verification slows tracking of medium-term outcomes and equity trends.

Emerging Good Practices

Local financing and ownership emerged: an Afar woreda earmarked 15 per cent of its budget for the health office and MHNT fuel/salaries; the Afar RHB (and FMOH) began formalizing and budgeting MHNT units to shift from donor dependence to government stewardship.

Key Sustainability Challenges

Underfunded O&M at woreda and region levels (fuel for outreach/supervision, mentorship costs, printing, commodities) and donor dependence for MHNTs undermine continuity; high staff turnover erodes institutional memory; conflict and displacement disrupt delivery.

4.5.2 Health System Strengthening for Sustainability

EQ15: Have health systems been strengthened to ensure the sustainability of gains made by the project?

4.5.2.1 Supervision, Mentorship and Supply Management

Finding 4: Systems for supervision, mentorship and supply management have been strengthened and institutionalized, most visibly in hospitals and stronger health centres, but their continuity is highly sensitive to operational budgets. Remote woredas, particularly Afar Zone 2 and Benishangul-Gumuz-Metekel, face emerging risks as supervision cadence and supply reliability weaken without predictable O&M financing.

Supervision and mentorship have become embedded within routine government operations. Hospital teams provide mentorship to health centres, and PRCMM and QI cycles are incorporated into regular planning calendars at regional and woreda levels. According to HFA data, supervisory coverage reaches 100 per cent of hospitals, 68 per cent of health centres and 60 per cent of health posts, with stronger regularity in Benishangul-Gumuz compared with Afar. These arrangements reflect the intended ToC pathway of institutionalizing CBCM and data-driven oversight.

However, sustainability is constrained by weak operational financing. In remote areas, supervision visits are already declining because travel, fuel and printing costs are not consistently budgeted. Health posts and lower-capacity health centres in Afar Zone 2 and parts of Benishangul-Gumuz-Assosa reported interruptions in mentorship, which undermines protocol adherence and weakens day-to-day problem-solving. Without routine O&M funding, the institutional structures may persist, but the frequency and quality of supervision will diminish first at the periphery.

Supply management systems strengthened in parallel. Availability of essential medicines and equipment improved from baseline, particularly in hospitals and better-resourced health centres where IPLS use, stock registers and periodic reviews enable timely action. Data from CEI indicate that 63.5 per cent of clients received all prescribed medicines, 32.1 per cent received some and 1.2 per cent received none, with the highest gaps in Afar Zone 2. Stock-outs at health posts and some health centres remain common, and several facilities direct clients to private pharmacies when items are unavailable, increasing out-of-pocket costs and undermining trust. Last-mile supply reliability continues to depend on donor-supported transport and logistics.

Overall, the strengthened systems will continue in form, but without predictable O&M budgets, the continuity, quality and equity of supervision and supply management will deteriorate, most rapidly in remote and pastoralist areas.

4.5.2.2 Establishing and Maintaining Referrals

Finding 5: Referral linkages are functional and widely used, with colour-coded vouchers, community mobilization and facility protocols embedded in routine practice. Sustainability, however, is threatened by unfunded transport, high referral costs and the absence of budget lines for voucher printing. These —gaps pose the greatest risks in Afar and remote pockets of Benishangul-Gumuz.

Referral systems are now routine across most facilities. HFA data show that referral protocols are in use in 85 per cent of facilities for maternal cases, 89 per cent for newborn referrals and 83 per cent for sick-child referrals. Transport availability is strong in hospitals and health centres, 77 per cent of Benishangul-Gumuz facilities and 74 per cent of Afar facilities report access to transport. However, transport remains limited at health posts, where availability falls to 64 per cent in Benishangul-Gumuz and 55 per cent in Afar.

Colour-coded vouchers are widely adopted and have proved effective for low-literacy households. Thousands of referrals in Afar were channelled through the voucher system, and TWG and PRCMM discussions provided follow-up and accountability. Community structures such as HEWs, WDAs and kebele committees identify pregnancies and sick children, and escalate cases that require timely referral.

However, sustainability is constrained by high transport costs and limited operating budgets. In Afar, referral transport costs average around US\$70 per referral, which is prohibitively high for government budgets. Night-time ambulance delays were reported in both regions, with women delivering en-route to facilities when transport was unavailable. In Benishangul-Gumuz, the absence of budget lines for voucher printing led to interruptions in their use after project funding ceased. In several remote areas, referral performance depends on improvised arrangements linked to donor inputs rather than fully institutionalized financing.

Overall, the structure of the referral system is robust and likely to persist. Yet without predictable funding for transport, maintenance and essential materials, referral quality and equity particularly for time-sensitive maternal and newborn emergencies are at risk of progressive decline.

4.5.2.3 Retention of Trained Staff

Finding 6: Most trained staff have been embedded within government systems, especially in hospitals and stronger health centres. However, retention at the frontline remains fragile due to turnover, difficult postings and dependence on external funds for supervision and refresher support.

Capacity-building efforts were delivered through RHB and woreda systems, enabling institutional absorption of skills. Focal persons were appointed, handovers were completed, and PRCMM and QI cycles were incorporated into routine workplans. Stakeholders confirmed that, “people already in the system... can still do clinical mentorships,” indicating that capacity is anchored within government structures rather than remaining project dependent.

The project intentionally exceeded training targets to buffer against turnover, training 596 staff against a target of 230. This number increased due to new inductions. This larger trained pool has helped maintain continuity in hospitals and health centres despite staff movement. Several Afar

woredas noted that trained providers, “are still providing like in the past,” demonstrating that skills are being applied.

However, frontline continuity remains fragile. High turnover persists in remote and insecure areas, especially Afar Zone 2 and Benishangul-Gumuz-Kamashi, necessitating repeated onboarding of new staff. Supervision and mentorship frequency is declining in these locations because travel, printing and minor operational costs are not funded. Budget scarcity and the absence of hardship allowances contribute to staff transfers away from the most underserved posts.

These constraints suggest that while capacities are embedded and currently applied, sustained continuity at the periphery will require financed supervision cycles, retention incentives and systematic refresher mechanisms. Without them, skill application will weaken in the locations where needs are highest.

4.5.3 Scalability of CBNC Services

EQ16: What factors could contribute to or hinder the potential scalability of the CBNC services in various contexts of the country?

4.5.3.1 Key Enabling Factors

Finding 7: CBNC scale-up is enabled by strong community ownership, embedded delivery platforms, alignment with government systems, adaptable outreach modalities and standardized quality tools that reduce marginal costs. These conditions facilitated uptake during implementation and provided a viable foundation for expansion.

Scalability is rooted in strong community ownership. The project built upon the existing HEPs through HEWs, WDGs and kebele-level committees, all of which demonstrated sustained involvement in case identification, counselling and referral support. This community uptake, reflected in improved care-seeking and early recognition of symptoms, supports scale-up by lowering marginal outreach costs and ensuring continuity beyond external support.

The referral system including colour-coded vouchers and simple feedback loops was consistently described as effective in strengthening trust and accountability. Its design suits low-literacy environments and allows for consistent triage and timely escalation of sick newborns and young infants. These low-cost, standardized tools are well suited for replication across additional woredas.

Alignment with government structures further supports scaling. CBNC interventions were delivered through routine MoFH platforms without parallel systems, ensuring compatibility with regional plans and easing future budget integration where fiscal space allows. This institutional alignment reduces transaction costs for replication and enhances policy coherence.

The technical package proved adaptable. CBNC services were delivered through flexible modalities including MHNTs in Afar and integrated outreach through health centres in Benishangul-Gumuz demonstrating that the model can adjust to diverse geographic and livelihood patterns. Bundling of ANC, immunization and nutrition with CBNC improved efficiency and responsiveness.

Capacity-building investments also underpin scalability. On-site mentorship, QI tools and integrated review mechanisms created standardized practice templates that can be rolled out at scale. PRCMM and cross-learning exchanges further supported harmonized uptake across districts.

Illustrative best practices enabling scale-up

- Local mentor pools replacing external teams reduced travel and per diem costs and enhanced ownership.
- Integrated outreach models combining facility outreach and MHNTs provided a flexible approach for reaching both accessible and hard-to-reach kebeles.
- Structured on-site mentorship strengthened emergency newborn and obstetric care, suggesting a replicable approach for promoting practice change at scale.

4.5.3.2 Geographical, Cultural and Financial Constrains in Expansion of Services

Finding 8: Scalability is constrained by geographic isolation, socio-cultural barriers, limited fiscal space, human-resource instability, stock variability and uneven partner coverage. These structural constraints are most acute in pastoralist, remote and conflict-affected settings, increasing reliance on donor inputs.

Geographic isolation remains the most significant constraint. Long distances, no public transport, impassable roads during rainy seasons and night-time access barriers reduce both service provision and uptake. Health posts and MHNTs in remote kebeles depend heavily on donor-supported transport and fuel, which constrains routine expansion.

Cultural barriers also affect scale-up. Although awareness and support from men improved, especially in Benishangul-Gumuz, women's autonomy remains limited in parts of Afar. Male control of household finances affects timely care-seeking and the ability to purchase medicines during stock-outs. HEWs reported challenges discussing reproductive health with men, which limits the effectiveness of household-level engagement.

Financial constraints are binding. Woredas lack dedicated budget lines for supervision, transport, printing of referral tools and resupply of basic commodities. This forces dependence on external funds and leads to gaps in continuity. Stock-outs shift costs to households, further discouraging uptake in poorer communities.

Human resource constraints impede expansion. Frequent turnover in rural posts, persistent vacancies and rotation of trained providers dilute institutional memory. Without funded refresher training and hardship allowances, expansion risks lowering quality in new areas.

Partner presence is uneven and is especially thin in Benishangul-Gumuz. Limited co-financing opportunities reduce the feasibility of broader rollouts, and local budgets remain insufficient to absorb the full operational requirements of CBNC scale-up.

4.5.3.3 Adaptation for Scale-Up

Finding 9: CBNC scale-up is feasible but requires adaptation of delivery models, strengthened operational financing, formalized referral mechanisms, improved workforce retention, enhanced inclusion measures and integration of CBNC indicators into digital systems. Without these adaptations, scale-up risks widening inequities and overstretching existing systems.

Service-delivery models require contextual tailoring to balance equity, efficiency, and sustainability. MHNTs remain essential for dispersed pastoralist settlements but are costly to sustain at scale. A more viable approach is a differentiated model in which district-managed integrated outreach serves semi-remote areas, while MHNTs are reserved for the hardest-to-reach locations. Evidence from Afar further underscores the importance of aligning outreach schedules with community movement patterns, including seasonal routing, market-day clinics, and simple night-referral vouchers to address distance and timing barriers. These approaches require financed SOPs, defined staffing norms, and predictable fuel allocations.

Continuity of services depends on strengthening routine system enablers. Facilities highlighted persistent needs for regular printing of registers and referral vouchers, modest operational budgets, and buffer stocks where cold-chain systems are unstable. These elements should be explicitly costed and integrated into woreda annual plans. At community level, volunteers remain central to mobilisation and defaulter tracing, yet signs of fatigue and attrition are evident. Clarified roles, light supervision, and affordable recognition schemes would help sustain motivation and retention without creating parallel incentive systems.

Quality and continuity also depend on expanding support at lower tiers. Mentorship should be intensified for health posts and remote health centres through shorter, more frequent coaching cycles, underpinned by predictable transport financing. Referral systems require formal institutionalisation: colour-coded vouchers and feedback loops have proven effective but should be embedded within RHB and MoH SOPs, with secured financing for printing, tracking, and review.

Equity and inclusion must be systematically embedded through disability-responsive and SGBV-sensitive adaptations in CBNC training, communication materials, and facility readiness standards. Finally, digital integration offers clear opportunities to support scale-up and accountability. Embedding CBNC indicators within DHIS2 and eCHIS would harmonise reporting, improve monitoring, and strengthen performance management. A phased, co-financed rollout, beginning with clustered, accessible kebeles, would help preserve quality, allow learning and adaptation, and enable gradual absorption into local systems in line with UNICEF-supported system-strengthening principles.

Overall Assessment: Sustainability

The sustainability of the KOICA-UNICEF MNCH project is assessed as moderate, with strong prospects for continuity of core practices but significant risks for last-mile functions. Many gains have been embedded within existing government systems, including PRCMM, QI teams, CBCM routines, DHIS2/eCHIS use, and strengthened clinical capability at hospitals and better-resourced health centres. These system-level integrations, supported by community structures such as HEWs, WDGs and kebele forums, provide a solid foundation for sustaining essential MNCH services through institutionalization, ownership and system resilience. However, continuity remains highly sensitive to operational financing, particularly for transport, fuel, equipment maintenance, printing of referral tools, supervision and outreach. These unfunded recurrent costs disproportionately affect health posts, remote woredas, pastoralist areas and conflict- and displacement-affected zones such as Benishangul-Gumuz-Metekel and Afar Zone 2. Staff turnover, intermittent stock availability, gaps in referral transport, and incomplete disability and SGBV integration further constrain sustained equitable service delivery. Overall, sustainability is strongest where systems, routines and leadership are established, but weakest where equity-oriented, last-mile delivery depends on unreliable financing. Continued gains will require predictable O&M budgets, institutionalized referral tools, strengthened workforce retention, and phased support to maintain quality and reach after project closure.

4.6 Impact

This section assesses the orientation to impact of the KOICA-UNICEF MNCH project. It analyses trends in newborn and maternal mortality, changes in the capacity of health systems and communities and examines unintended effects (EQ17/S17). Evidence draws on project reporting documents, routine monitoring data, operational research results, the HFA, CEIs and the effectiveness chapter of this report. Qualitative evidence includes KIIs with UNICEF, KOICA, Emory, implementing partners, the FMOH and regional and woreda health offices, as well as FGDs, WDAs, HEWs, persons with disabilities, health facility staff and women's groups, alongside case studies. All quantitative and qualitative sources were triangulated to assess the project's orientation to impact. The evaluation applied a contribution analysis approach, consistent with the mixed-methods design outlined in the methodology section. Facility-level mortality trends were examined using routine service statistics, NICU registers and operational research data, and were triangulated with qualitative evidence from health workers, managers and communities. The analysis explored changes in service readiness, utilization, quality of care and referral performance as intermediate pathways to impact, recognizing the absence of a counterfactual and population-level mortality data. KIIs, FGDs and case studies were used to validate causal pathways in the ToC and to identify unintended effects. The combined use of quantitative trends, qualitative accounts and ToC testing strengthened the credibility of conclusions regarding the project's plausible contribution to improved maternal and newborn outcomes.

4.6.1 Reduced Mortality and Influence on Health Systems and Communities

EQ: 17 What overall difference does the intervention make? (Orientation to Impact)

4.6.1.1 Reduction in Mortality

Finding 1: Facility-level newborn and maternal mortality declined during the project period. Three of five supported NICUs achieved or surpassed the 8 per cent mortality target in 2024, improving from the 12 per cent baseline. The evaluation points to a plausible contribution of the project to this reduction whereas attribution cannot be established. Strengthened obstetric and newborn care, combined with higher facility births and more reliable referral pathways, were consistently linked to reductions in maternal deaths. Population-level mortality cannot be reliably assessed with available data.

Evidence from routine monitoring, operational research and qualitative sources demonstrates a clear pattern of improvement in newborn survival at facility level. By 2024, Dubti, Aysaita and Pawe hospitals recorded NICU mortality rates of 6 per cent, 7 per cent and 5 per cent respectively, achieving or surpassing the endline target. Assosa Hospital and Menge Hospital showed sustained progress at 9 per cent each, reflecting a marked advance from the 12 per cent baseline. These improvements correspond with the sequencing of core project inputs, including NICU equipment upgrades, NBC, clinical mentoring in BEmONC and NICU care, improved triage and stabilization, and better documentation practices. Operational research from 2023 indicated similar directional gains, although variability across sites reflected differences in timing, small numerators and evolving case-mix profiles.

Qualitative evidence from both regions consistently reinforced these trends. Health managers and providers associated fewer newborn and maternal deaths with strengthened emergency obstetric care, improved neonatal resuscitation, increased availability of essential equipment and enhanced referral organization. The alignment between interventions and observed improvements at the hospital level is strong, and the presence of several causal factors (i.e., temporality, specificity of inputs, coherence with the ToC and consistency in triangulation) supports a plausible contribution of the project to reduced mortality at the NICU level. However, attribution cannot be confirmed in the absence of a counterfactual, potential influence of other programmes and sensitivity of mortality indicators to small sample sizes. Population-level mortality change linked to the project cannot be determined due to the absence of regional mortality data. Maternal mortality trends cannot be quantified at population level, but triangulated evidence indicates reductions in facility-managed deaths. Facility-based births reached 72.6 per cent overall (Benishangul-Gumuz: 88.9 per cent; Afar: 50.9 per cent), an improvement from the 64.4 per cent baseline and above the KOICA logframe target. Respondents attributed safer pregnancies and deliveries to strengthened partograph use, better management of post-partum haemorrhage (PPH), maternity waiting homes and colour-coded referral vouchers that reduced delays.

Overall, the project made a plausible contribution to reductions in newborn and maternal mortality at the facility level. The convergence of strengthened service readiness, improved provider competence and increased utilization provides credible pathways for impact. However, population-level mortality trends cannot be determined without representative EDHS or CRVS data and a counterfactual analysis.

4.6.1.2 Influence on Health Systems and Community Capacities

Finding 2: The health system and community capacities strengthened across all major system building blocks. Improvements were strongest at hospitals and higher capacity health centres, where mentorship, PRCMM/QI cycles and DHIS2/IPLS reviews became routine. However, institutionalization is uneven and remains budget-sensitive: primary facilities and remote areas, especially Afar Zone 2 and conflict-affected woredas in Benishangul-Gumuz, face persistent O&M, HR and supply constraints that threaten continuity and equitable gains.

Project activities generated positive effects across all health system building blocks, including governance, service delivery, health workforce, information systems, access to medicines and technologies, and financing. These included the following:

Capacity strengthening occurred across the health workforce, service delivery structures, information systems, governance arrangements, and medicines and technologies. Large-scale training and CBCM improved provider competence, while PRCMM and QI cycles enhanced adherence to protocols and supported routine problem-solving. A QI team functioned in approximately 79 per cent of assessed facilities, with the highest consistency in hospitals and stronger health centres. These improvements reflect the ToC pathway linking trained providers and strengthened supervision systems to improved MNCH practices.

Information systems also benefited. Regular DHIS2, eCHIS and IPLS reviews helped facilities identify gaps and initiate corrective actions, reinforcing data-to-decision habits. Nonetheless, the quality and frequency of data-use practices were weakest at health posts and remote zones, where turnover, limited digital literacy and logistical barriers constrained routine review processes.

Service delivery capacity improved through better readiness at hospitals and health centres, supported by upgraded NICU kits, NBC and more reliable supply management. These changes strengthened community trust and contributed to higher utilization. However, health posts in remote areas continued to face infrastructure constraints and supply instability, limiting their ability to sustain care continuity.

Community platforms showed strengthened roles in identification, referral and demand generation. HEWs, WDA networks and kebele structures supported early care-seeking, referral completion and improved awareness of ANC, delivery and newborn care. Exposure levels and practice uptake were notably higher in Benishangul-Gumuz, aligning with stronger CHIS use, more frequent HEW-community contact and higher pregnancy reporting.

Governance and management capacities improved through regular TWGs, joint planning and strengthened leadership at RHB and woreda levels. These mechanisms increased accountability and helped translate data into managerial actions. Yet continued reliance on external funding for O&M, particularly for transport, supervision, printing and supply distribution remains a significant constraint.

Access to medicines and technologies improved since baseline, especially in hospitals and health centres. Still, stock-outs persist, especially at health posts and in remote zones.

External ToC assumptions were only partly realized. Political commitment to MNCH remained strong, enabling institutionalization at hospitals and many health centres. However, tight fiscal space limited last-mile intensity. In remote areas, turnover, limited incentives and persistent insecurity weakened continuity. Delayed national survey cycles (EDHS) also restricted opportunities for independent verification of medium-term outcomes.

The project demonstrably strengthened health system and community capacities, with sustained institutionalization in several core functions. However, without predictable O&M financing, strengthened HR retention strategies, reinforced last-mile supply systems, and gains at the primary level and in remote woredas remain vulnerable.

4.6.1.3 Unintended or Secondary Effects of the Intervention

Finding 3: The project generated positive secondary effects, particularly improvements in routine problem-solving, data use and budget prioritization while unintended risks were limited, localized and context specific. Positive spillover extended beyond the MNCH package, whereas potential downsides included perceptions of inequity in non-supported woredas and continued reliance on external inputs in resource-constrained settings.

The project produced several positive, system-level spillovers. Strengthened QI and mentorship practices, regular PRCMM cycles, and improved DHIS2/IPLS use enhanced routine managerial decision-making beyond MNCH. Respondents from regional and woreda levels described improvements in reporting quality, follow-up actions and accountability mechanisms, reflecting

broader institutional benefits derived from the project's system-strengthening approach. In some woredas, advocacy and visibility around MNCH reportedly influenced planning discussions and resource prioritization, indicating that the project helped shape managerial culture even where direct financial inputs were limited.

Evidence from KIIs and FGDs also shows strengthened community confidence in facilities. Improved newborn care, referral functionality and consistent outreach contributed to increased care-seeking and household trust effects that extended to other service areas.

Unintended negative effects were not widespread but appeared in specific contexts. Some non-supported neighbouring districts expressed perceptions of unequal treatment or 'being left behind,' particularly where the project improved services in adjacent woredas. These perceptions reportedly affected cross-woreda cooperation in limited cases. In addition, several Benishangul-Gumuz officials noted a degree of dependency on partner inputs, reflecting uncertainty about sustaining key functions (e.g., supervision, transport and MHNT operations) without external financing.

Across interviews and FGDs, most stakeholders indicated *no major unintended negative effects* in their areas. Where concerns arose, they were linked primarily to underlying contextual constraints such as partner drawdown, fiscal limitations or insecurity rather than to the project's design or implementation.

Overall, unintended effects were modest and context specific. Positive spillovers were more pronounced, reinforcing system performance and community trust. Risks were linked mainly to structural inequities and dependency on external support rather than to project-induced harms.

Overall Assessment: Impact

The project demonstrated a clear and credible orientation towards impact, with consistent facility-level evidence of reduced neonatal mortality and improved maternal outcomes in supported hospitals. NICU case fatality declined from a baseline of 12 per cent to between 5 and 9 per cent across all assessed facilities, with three of five hospitals meeting or exceeding the 8 per cent target in 2024. These improvements align with strengthened newborn and obstetric care, increased facility births and more reliable referral pathways. Although population-level impacts cannot be verified due to the absence of regional mortality data and a counterfactual, triangulated evidence from routine service statistics, operational research and qualitative accounts supports a plausible contribution of the project to improved outcomes at facility level. The project also strengthened health system and community capacities across all major building blocks, including workforce skills, QI and PRCMM routines, data use, medicines and technologies and community-facility linkages. Gains were strongest in hospitals and higher-functioning health centres, while continuity remained budget-sensitive and more fragile in remote or insecure areas. Positive spillover, including improved problem-solving, strengthened accountability and greater community trust, extended beyond the MNCH programme. Unintended negative effects were modest and context-specific, primarily related to perceived inequity in non-supported woredas and continued reliance on external operating funds. Overall, the project delivered meaningful improvements with a credible contribution to enhanced maternal and newborn outcomes and strengthened system performance.



5 CONCLUSIONS, LESSONS LEARNED AND RECOMMENDATIONS

This chapter presents the main conclusions, lessons learned and recommendations from the summative evaluation of the KOICA-UNICEF MNCH project (2021-2024). This chapter synthesizes evidence across the evaluation criteria to demonstrate what worked effectively and what factors limited performance, equity and sustainability. The conclusions reflect triangulated findings from all sections of Chapter 4 and provide forward-looking insights to inform subsequent programming in Afar and Benishangul-Gumuz. Lessons learned identify system-wide learning, while the recommendations propose practical measures for government, UNICEF, KOICA and partners to institutionalize inclusive, resilient and equitable MNCH service delivery within Ethiopia's decentralized health system.

5.1 Conclusions

The KOICA-UNICEF MNCH project delivered a coherent and integrated package of MNCH initiatives that measurably improved service availability, readiness and utilization across hospitals, health centres and selected frontline platforms in Afar and Benishangul-Gumuz. The strongest and most consistent gains were observed in hospitals and better-functioning health centres in Benishangul-Gumuz and selected Afar woredas, where staffing stability, functional supervision and reliable supply chains enabled effective translation of training and QI inputs into improved clinical practice. Strong evidence from facility assessments, service statistics and CEIs demonstrates improved quality of

care, increased utilization, expanded outreach coverage and strengthened referral readiness in these settings. The intervention aligned well with national MNCH priorities and UNICEF's equity commitments, contributing to heightened community trust and measurable service-level gains under challenging and insecure conditions. Where outreach and mentorship models were consistently implemented, particularly health centre-led outreach in Benishangul-Gumuz and MHNT supported delivery in Afar, utilization gains were demonstrably higher, underscoring the importance of adaptive delivery modalities matched to context.

However, progress was unevenly distributed. Evidence shows that service gains were weakest at the health post level and in highly mobile pastoralist zones, where recurrent stockouts, limited transport availability, high staff turnover and weak supervisory continuity disrupted service delivery despite technical inputs. Weak functionality of WASH and IPC infrastructure at the primary level (outside project scope) further constrained quality of care, while incomplete disability inclusion and adolescent-responsive design limited equitable reach. These constraints are empirically supported by triangulated quantitative and qualitative findings, rather than inferred from context alone. Sustainability remains uncertain in the absence of predictable operational financing, institutionalized supervision and mentorship, and strengthened last-mile referral systems. Facilities and woredas that embedded QI routines, mentorship cycles and data-use practices into regular government systems demonstrated stronger early sustainability signals than those reliant on project-driven support. Future phases will require explicit prioritization of equity, inclusion and system resilience to ensure that gains reach those most at risk of being left behind.

Relevance: The intervention addressed well-documented MNCH risks through a design grounded in robust baseline assessments and responded effectively to critical gaps in newborn care capability, BEmONC readiness, referral pathways, and access barriers for pastoralist and displaced communities. Relevance was strongest in higher-level facilities and outreach-enabled health centres, where identified needs directly matched the project's clinical mentoring, equipment and QI investments. This conclusion is strongly supported by design documentation, stakeholder interviews and alignment with national strategies. However, evidence shows that disability inclusion, adolescent-responsive services and structured SGBV referral pathways were insufficiently integrated at the design stage, limiting universal accessibility. Where ad hoc adaptations occurred during implementation, they were locally driven and uneven, resulting in variable relevance across population groups. Equity and inclusion considerations therefore require earlier and more explicit integration, supported by measurable targets and duty-bearer accountability frameworks.

Coherence: The project demonstrated strong coherence through coordination with RHBs, woreda authorities and implementing partners, with documented evidence of joint planning, harmonized supervision and technical embedding that reduced duplication. Coherence was most effective in Benishangul-Gumuz, where institutional stability and partner continuity allowed alignment mechanisms to function as intended across planning, supervision and review cycles. Where coherence was weaker, particularly in multisectoral linkages with WASH and SGBV systems or in insecure areas of Afar, this was consistently reported across KIIs and field observations. These gaps constrained the project's ability to address structural determinants of MNCH outcomes despite strong health sector performance, indicating that multisectoral coherence is a limiting factor rather than a peripheral issue. Strengthened multisectoral pathways and clearer institutional arrangements are therefore evidence-based priorities rather than inferred recommendations.

Effectiveness: The intervention achieved most planned outputs and contributed to significant improvements in service availability, quality and utilization. Strong evidence supports improvements in NICU functionality, BEmONC readiness, outreach reach and client satisfaction, particularly in Benishangul-Gumuz and in Afar facilities with stable staffing, functional infrastructure and uninterrupted mentorship. Standardized newborn care protocols were more consistently applied in these settings, translating training into observable practice change. Effectiveness was specifically weaker at the health post level and in Afar Zone 2, where insecurity, turnover and supply constraints were acute. These variations are empirically documented and demonstrate that integrated delivery

models are effective only when supported by minimum operational enablers, particularly supervision continuity, transport and commodity availability.

Efficiency: Resource use was generally efficient, with adaptive reallocations enabling continuity during shocks and mentorship and QI systems enhancing value for money. CEA provides moderate to strong evidence of efficiency gains, particularly for blended training and health centre-led outreach models that achieved broader coverage at lower unit cost compared to fully mobile delivery. Efficiency losses linked to delayed procurement, logistics constraints, and fragmented data systems are partially evidence-based and partially inferential, drawing on triangulated operational data and stakeholder perspectives. Evidence suggests that addressing predictable bottlenecks, especially transport financing and data fragmentation, would yield disproportionate efficiency gains without additional technical inputs.

Sustainability: Early sustainability signals are evident in strengthened QI teams, NICU systems and continued outreach in better-resourced woredas. Evidence from supervision records and stakeholder interviews confirms emerging institutional ownership. Facilities that institutionalized mentorship, routine supervision and data-use practices within government systems demonstrated greater continuity than those dependent on external facilitation. However, sustainability risks remain high where recurrent financing is weak, supervision is not institutionalized and primary-level platforms lack foundational resources. These risks are strongly evidenced and not speculative. Without predictable funding for transport, supervision and maintenance, gains in remote and pastoralist settings are unlikely to persist. Sustainability will depend on formalized transition planning, costed woreda budgets, and embedded supervision, mentoring and data-use systems.

Impact: The project contributed to improved newborn survival prospects, increased facility births, earlier initiation of care, and strengthened confidence in public-sector MNCH services. Impact-level conclusions are cautiously framed, drawing on contribution analysis, service trends and qualitative evidence rather than attribution. Impact gains were most evident in areas where service readiness and referral functionality improved simultaneously, reinforcing the importance of system-wide rather than isolated interventions. Where structural constraints persist, particularly in remote pastoralist settings impact gains remain fragile. Scaling impact will require explicitly inclusive delivery models, equitable financing and strengthened system resilience.

Cross-Cutting Issues and ToC Validation: Gender-responsive approaches were effectively integrated through women-led community structures, provider composition and community engagement. Evidence confirms meaningful equity gains for pastoralist and displaced communities. However, disability inclusion, adolescent-responsive services and structured SGBV pathways remained partial and inconsistent, reflecting design-stage omissions rather than implementation failure alone. Validation of the reconstructed ToC confirms a plausible and evidence-supported causal pathway, while also highlighting assumptions particularly regarding supply stability, transport, staff retention and inclusive access that were only partially realized. Future ToCs should explicitly articulate equity, inclusion and resilience as core causal pathways, with defined indicators and accountability mechanisms, rather than treating them as contextual assumptions.

5.2 Lessons Learned

1. Embedding system-strengthening functions within government platforms supports durable improvements, but resilience requires deliberate multisectoral and risk-informed integration. Strong evidence from supervision records, stakeholder interviews and facility assessments confirms that institutionalizing supervision, mentorship, QI cycles and data-use routines within RHB and woreda structures strengthened continuity and reduced duplication. However, limited coordination with WASH, nutrition and SGBV systems and frequent leadership changes constrained equitable resilience at frontline level, indicating that system strengthening alone is insufficient without intentional multisectoral design and risk management.

2. Operational enablers determine whether technically sound interventions translate into equitable service gains. Despite robust technical design, results varied sharply where transport, fuel, printing, supervision budgets and staffing stability were unreliable. These routine operational inputs proved decisive in determining whether women, newborns and remote populations could consistently access services, underlining that equity in outcomes depends on reliable system inputs, not only clinical QI.
3. Outreach models must explicitly balance efficiency with the LNOB principle to reach underserved populations. Evidence from CEA and service coverage data shows that health centre outreach offered broader coverage at lower cost, while MHNTs were essential for pastoralist and remote communities where no fixed service platform exists. This lesson combines empirical evidence with contextual inference, indicating the need for a clear efficiency-equity decision framework to guide deployment and avoid efficiency gains that inadvertently exclude high-risk groups.
4. QI gains are strongest and most sustainable when skills development, mentorship, supplies and accountability mechanisms are aligned. Evidence from training records, mentorship tracking and facility assessments confirms that blended off-site training and on-site mentorship improved provider competence. However, inconsistent supplies, staff turnover and weak supervision at lower tiers limited consistent application of skills. This demonstrates that QI is not a standalone intervention but a system function requiring coordinated reinforcement.
5. Referral systems perform reliably only when operational costs and feedback mechanisms are fully institutionalized. Protocols, colour-coded tools and ambulance access improved referral initiation, yet gaps in fuel financing, communication tools and feedback documentation limited referral completion and learning. Sustained referral performance depends on predictable financing, clear accountability and routine documentation across all levels of care.
6. Equity and inclusion must be designed from inception rather than addressed through incremental adjustments during implementation. Evidence shows that while access expanded for pastoralist and displaced communities, adolescents, persons with disabilities and SGBV survivors were not consistently reached. These gaps stemmed primarily from design-stage omissions and rigid service modalities rather than implementation failure alone. Inclusive MNCH programming therefore requires explicit identification of marginalized rights-holders, tailored service adaptations and monitored equity targets from programme inception.

These lessons underline the central importance of strengthening systems, reinforcing operational foundations, and embedding equity and inclusion from the outset of programme design. They offer transferable insights for MNCH interventions in similarly fragile, pastoralist and resource-constrained settings, and provide a practical evidence base to inform adaptive management, scale-up and strategic planning across Ethiopia's decentralized health system.

5.3 Recommendations

The recommendations presented in this summative evaluation are directly derived from the evaluation's key findings, conclusions, and lessons learned, ensuring a clear and traceable link between evidence, analysis, and proposed actions. An iterative and consultative process was applied to develop and refine the recommendations. Preliminary recommendations were shared with the project ERG and UNICEF Ethiopia through draft reports circulated on 16 September 2025 and subsequently re-shared for further review. This was followed by a virtual consultation in October 2025 involving key duty-bearers, including UNICEF Ethiopia, government counterparts, and technical partners. Recommendations were further refined through technical discussions with UNICEF Ethiopia's Health Section senior management and were subsequently validated through a national-level validation workshop held in Afar. This process ensured alignment with national priorities, operational feasibility, and institutional mandates. While direct participation of community-level rights-holders in the formulation of recommendations was limited due to the summative nature of

the evaluation and time constraints, their perspectives were systematically incorporated through evidence generated from FGDs, KIIs, and community consultations.

The recommendations are clearly prioritised and sequenced, distinguishing between high-priority actions required to sustain lifesaving MNCH services and medium-term system-strengthening measures necessary for resilience and institutionalisation. Each recommendation is action-oriented, feasible, and targeted to specific duty-bearers, including UNICEF Ethiopia, the FMoH, RHBs, woreda authorities, and partners, thereby supporting accountability and follow-up. Collectively, the recommendations aim to strengthen equitable, resilient, and accountable MNCH service delivery in Ethiopia, with particular relevance for remote, pastoralist, and displacement-affected settings, while offering transferable lessons for similar UNICEF-supported MNCH interventions in other contexts.

Recommendations	Priority	Responsible Party and Timeframe	Linked EQs/ Findings
1. Improve facility readiness and supply-chain reliability to ensure the consistent availability of essential MNCH commodities, functional equipment and IPC/WASH services across all levels of care, with particular attention to health posts and remote facilities by: i) Institutionalizing routine monitoring of tracer MNCH commodities with clear accountability and escalation mechanisms to reduce stock interruptions. ii) Prioritizing IPC and WASH improvements at lower-level facilities using minimum service standards as an equity benchmark. iii) Establishing preventive maintenance arrangements for essential MNCH equipment, including inventories and maintenance schedules. iv) Advocating for inclusion of utilities, IPC consumables and minor maintenance costs within recurrent woreda budgets to strengthen sustainability and state accountability rather than reliance on external partners.	High	Responsible: UNICEF, Ethiopian Pharmaceutical Supply Agency (EPSA), FMoH, RHBs, Woredas Timeframe: 3-9 months	Effectiveness EQ5 and EQ6: Persistent supply gaps for facilities/ IPC/WASH Efficiency EQ12: High fragility at health post level and supply gaps Sustainability EQ14: Dependence on external support
2. Enhance referral and emergency transport systems to improve continuity of care across the MNCH service pathway, particularly for obstetric and newborn emergencies by: i) Defining and applying standard referral denominators at woreda and facility levels to support transparent monitoring. ii) Institutionalizing routine tracking of referral initiation, completion and feedback between referring and receiving facilities,	High	Responsible: Woredas, Facilities, RHBs, UNICEF Timeframe: 6 months	Relevance EQ1: Missing referral denominators Effectiveness EQ6, EQ7 and EQ8: Weak feedback and inconsistent referral Sustainability EQ15: Under-funded transport systems and inadequate O&M funds

Recommendations	Priority	Responsible Party and Timeframe	Linked EQs/ Findings
ensuring accountability for failed or delayed referrals. iii) Ensuring predictable availability of transport, fuel and maintenance funding using standard referral tools with explicit prioritization of hard to reach and high-risk populations.			
3. Strengthen frontline MNCH service delivery, quality assurance, and human resource systems to ensure consistent, equitable, and high-quality care across facility-based and outreach platforms by: i) Integrating short, targeted training with routine on-the-job coaching and mentorship follow-up through blended learning approaches. ii) Embedding mentorship and quality assurance responsibilities within regular supervisory cycles to reinforce institutional accountability rather than individual goodwill. iii) Strengthening newborn care (including KMC and thermal protection) and diagnostic capacities at lower-level facilities serving high-risk and underserved populations. iv) Institutionalising structured quality improvement processes at health-centre and health-post levels, with community-responsive feedback loops. v) Applying outreach service delivery models consistently under harmonised supervision, using health-centre outreach as the core platform and MHNTs only where rights-holders would otherwise be excluded. vi) Promoting feasible retention measures and reinforcing adherence to staffing norms in hardship and remote postings to prevent inequitable service quality.	High	Responsible: FMoH, (RHBs), Woreda Health Offices, UNICEF, and Development Partners Timeframe: Start within 3 months; ongoing	Effectiveness EQ5: Persistent service quality and coverage gaps at lower tiers, particularly for newborn care and continuity of services. EQ6: Marked variability in provider competence, mentorship coverage, and supervisory quality across regions and facility levels. EQ8: Inconsistent application of outreach and quality assurance mechanisms affecting continuity of care. EQ9: Uneven utilisation of strengthened skills due to supervision and workforce constraints. Efficiency EQ12: Variation in delivery models and inconsistent alignment between outreach modalities, supervision, and resource use. Sustainability EQ15: Limited retention of trained staff and fragile continuity of quality

Recommendations	Priority	Responsible Party and Timeframe	Linked EQs/ Findings
			services in hardship and remote locations, undermining institutionalisation and long-term system performance.
4. Strengthen MNCH results, data and performance monitoring systems to support evidence-based planning and decision-making by: i) Operationalizing a clear RFW with defined indicators, denominators and reporting roles, including equity and disability disaggregated indicators. ii) Strengthening DHIS2 and eCHIS data verification, especially at primary level facilities. iii) Institutionalizing routine data review meetings, at woreda and regional levels, with dashboards that explicitly flag inequities and service gaps affecting marginalized groups.	Medium	Responsible: UNICEF, FMoH, RHBs, Woredas Timeframe: 6-12 months	Relevance EQ1 and EQ2: Gaps in indicator definitions and denominators limited clarity of programme intent and tracking Effectiveness EQ9 and EQ10: Uneven data quality Sustainability EQ15: Weak institutionalization of data systems Impact Q17: Mortality data is not available
5. Integrate risk-informed and shock-responsive approaches into MNCH planning and implementation by: i) Developing and integrating contingency micro-plans within routine MNCH planning processes to protect continuity of essential services for high risks populations. ii) Adapting outreach and supervision plans to seasonal, climatic, security and access constraints. iii) Conducting periodic review of contextual risks through TWGs and adjust operational approaches based on pre-agreed equity focussed triggers.	Medium	Responsible: UNICEF, FMoH, RHBs, Woredas Timeframe: 6-12 months	Relevance EQ1 and EQ2: Uneven adaptation to contextual shocks Coherence EQ3 and EQ4: Gaps in multisectoral linkages and fragility related disruptions Sustainability EQ14: Insufficient O&M funds
6. Operationalize equity, gender and inclusion within MNCH service delivery at facility and outreach level by: i) Providing practical integration of disability responsive, adolescent-responsive and gender-responsive MNCH services including reasonable accommodations. ii) Integrating survivor-centred SGBV referral pathways into routine MNCH care,	Medium	Responsible: UNICEF, RHBs, Woredas, Ministry of Women and Social Affairs (MoWSA) Timeframe: 6-12 months	Relevance EQ1: Gaps in disability and SGBV inclusion Effectiveness EQ10: Uneven access for vulnerable groups Impact EQ17: Partial reach to high-risk populations

Recommendations	Priority	Responsible Party and Timeframe	Linked EQs/ Findings
recognizing survivors as rights-holders entitled to safe and dignified services. iii) Institutionalizing periodic gender and inclusion reviews within supervision and QI systems, with clear follow-up actions and accountability.			
7. Strengthen governance and sustainable financing mechanisms to institutionalize MNCH functions within government systems by: i) Embedding costed and time-bound MNCH micro-plans with clear O&M budgets. ii) Formalizing MNCH coordination platforms with clear mandates and reporting lines. iii) Strengthening multisectoral planning with WASH, nutrition and protection sectors to address structural determinants of MNCH inequities. iv) Supporting structured leadership handover and capacity-building to address staff turnover.	Medium	Responsible: FMOH, RHBs, Woredas, UNICEF Timeframe: 6-12 months	Coherence EQ3 and EQ4: Gaps in multisectoral coordination Sustainability EQ14 and EQ16: Insufficient recurrent funding Effectiveness EQ6 and EQ8: Fragmentation across delivery systems
8. Institutionalize community engagement and accountability mechanisms within MNCH systems by: i) Integrating structured community feedback tools into routine supervision and review processes, with documented response mechanisms. ii) Ensuring inclusive participation of women, adolescents, persons with disabilities and GBV survivors as active agents rather than beneficiaries. iii) Providing modest and predictable support to sustain community platforms, recognizing the risk of volunteer fatigue and inequitable reliance on unpaid labour.	Medium	Responsible: RHBs, Woredas, HEWs/WDAs, civil society organizations Timeframe: 6-12 months	Relevance EQ2: Weak engagement of adolescents and persons with disabilities Effectiveness EQ10: Limited feedback pathways Sustainability EQ14: Volunteer fatigue and low continuity

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7 Annexures- Volume 2 (Attached in Separate File)

The following annexes are included in Volume 2: Annexes of Endline Evaluation of Optimizing Care for Newborns and Children in Afar and Benishangul-Gumuz Ethiopia Project (January 2022 - June 2025) for clarity and ease of reference.

- Annex 1: Constructed theory of change
- Annex 2: Evaluation question and suggested refinement
- Annex 3: Evaluation matrix
- Annex 4: List of key documents
- Annex 5: Sampling distribution
- Annex 6: Healthcare facility assessment questionnaire
- Annex 7: Client exit interview questionnaire
- Annex 8: Distribution of KIIs and FGDs
- Annex 9: Checklist for KIIs
- Annex 10: Checklist for FGDs
- Annex 11: Cost-effectiveness methodology
- Annex 12: Checklist for case studies
- Annex 13: Ethical approval certificate from HML-IRM
- Annex 14: Consent forms
- Annex 15: Key needs identified
- Annex 16: Human resources for MNCH
- Annex 17: Utilization of services
- Annex 18: Data reporting and use
- Annex 19: Comparative cost-effectiveness of MHNTs and health centre outreach in afar
- Annex 20: Cost-effectiveness study 2: Cost-effectiveness of mobile health services in afar: MHNT vs health centre outreach
- Annex 21: Overall project targets and achievement
- Annex 22: Availability of selected drugs, supplies and equipment at hospitals, HCs and HPs in afar and BG regions – baseline vs endline (HFA 2025)
- Annex 23: Evaluation reference group and young evaluators
- Annex 24: Terms of reference

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