

RESEARCH BRIEF

BACKGROUND

After decades of instability, Somalia has among the world's worst maternal and newborn health (MNH) outcomes with the latest UN reports estimating 621 maternal deaths per 100,000 live births (2020)¹ and ~35 newborn deaths for every 1,000 live births (2021)² – more than 80% of which are due to prematurity, complications during birth, or infections.³ While efforts have been made to strengthen facility-based care, Somalia still faces significant shortage of skilled health workers with only four doctors, nurses or midwives for every 10,000 people as of 2018.⁴ Because of this workforce shortage – among many other factors – the 2020 Somalia Health and Demographic Survey reported that access to skilled birth attendance and facility-based deliveries decreased from 36% in 2011 to 32% in 2020.⁵

This brief outlines a multi-year research study being led by the EQUAL research consortium in Somalia to determine the feasibility and acceptability of delivering life-saving MNH care at the community level to help expand access to care and reduce the risk of maternal and newborn death for the 70% of women who are not delivering at a health facility.

Expanding MNH care across communities in Somalia

In resource-constrained settings like Somalia, community-based maternal and newborn care (CBMNC) can help expand access to life-saving services and dramatically improve MNH outcomes. Evidence demonstrates that CBMNC programs can reduce maternal deaths by 20% and newborn deaths by 25%.⁶ Six countries including Bangladesh, Malawi, Nepal, Uganda, and Ethiopia have nationally-scaled CBMNC programs and have seen a reduction of under-five mortality rates, partially attributable to such initiatives. While the interventions including in the CBMNC programs may differ by location, they cover antenatal and postnatal periods including health education and promotion and both preventive and curative services. The CBMNC model is not about discouraging facility-based care, but about reducing risk by ensuring life-saving services reach women and babies who cannot or do not reach a facility.

Community health systems can help governments quickly pivot to provide essential care when facility-based services are disrupted, as demonstrated during the COVID-19 pandemic.

The government of Somalia has demonstrated a commitment to delivering MNH services at the community-level through Somalia's Every Newborn Action Plan. The Plan features an objective to "enhance community engagement and partnership for delivery of high-impact maternal and newborn health interventions," under which there is a call to develop and implement a comprehensive CBMNC program in partnership with female community health workers (CHW). It is also emphasized in Somalia's Community Health Strategy with a strategic objective to promote an integrated community-based package of health, nutrition, and hygiene/sanitation services, focusing on addressing the key underlying causes of morbidity and mortality in women and under-five children.

A MULTI-YEAR INITIATIVE TO EXPAND CARE IN SOMALIA

Recognizing the low rates of institutional deliveries coupled with the high rates of preventable maternal and newborn mortality, the International Rescue Committee (IRC) and the Somali Research and Development Institute (SORDI) are working closely with the Ministry of Health (MoH) to support and strengthen the implementation of existing community-MNH interventions while also exploring strategies and innovations to expand the package to save the most lives. This will be done through a multi-year initiative which began in 2022 including program design, program implementation, and research and evaluation.

Study overview

The research and evaluation component is led by the IRC and SORDI as part of the [EQUAL research consortium](#) funded by the UK International Development from the UK government. Specifically, EQUAL aims to determine baseline rates of key essential newborn care and other key MNH indicators including early initiation of breastfeeding, clean umbilical cord care, and newborn thermal care; to estimate the change in aforementioned rates attributable to the new CBMNC program and attributable cost; and to document operational challenges and solutions tested while implementing a CBMNC program.

Study location

The program and subsequent research and evaluation is being conducted outside of Dhusamareb, in Galguduud province. This location has experienced recurrent conflicts and drought and hosts a large population of internally displaced persons (IDP). IRC currently supports Hanaan Hospital in Dhusamareb town, which serves a catchment population of 267,900 individuals. IDPs and vulnerable host communities in this region lack adequate access to reproductive health and primary health care services with a significant percentage of the population

living further than 5km from a health center. Most areas remain underserved by ambulance and other medical referral services, further limiting access to and subsequent utilization of healthcare services. EQUAL's research and evaluation will primarily focus on areas located more than 5km from the Hannan hospital.

EQUAL PROJECT OVERVIEW

Funder: UK International Development from the UK government

Length: July 2021 – April 2026





Locations: DRC, Nigeria, Somalia, and South Sudan

Partners: Institute of Human Virology Nigeria, International Rescue Committee, Johns Hopkins Center for Humanitarian Health, Somali Research and Development Institute, and Université Catholique de Bukavu.

Design and methodology

Each pillar of the initiative is outlined in Figure 1 and will be conducted in collaboration with local and national stakeholders to ensure all activities are context-appropriate and demand-driven.

Figure 1

Project Component	
	<p>Behavioral insights (BI) and user-centered design (2022-2023) Conducted an exercise with mothers and healthcare practitioners to understand a woman’s pregnancy and postpartum journey with the purpose of identifying potential solutions for altering life-saving behaviors or improving service uptake. The focus was on exploring behaviors around breastfeeding, thermal care, and umbilical cord care. Insights from the journey mapping exercise were incorporated into the design of the program.</p>
	<p>Constrained Optimization (2022-2023) The IRC partnered with the University of Chicago, Booth School of Business to utilize constrained optimization – a mathematical modeling approach to help national stakeholders prioritize interventions by taking into account local constraints. This includes the cost of commodities and services, time and capacity of CHWs, bandwidth for training, existing policies, and more.</p>
	<p>Program design and delivery (2023-2025) The IRC in Somalia worked closely with national stakeholders to take the findings/recommendations from the BI, user-centered design and constrained optimization activities to design a comprehensive community-based MNH care program being implemented in Dhusamareb district, Galgaduud region. Program implementation will span 2023-2025 and includes thermal care, clean cord care, and early and exclusive breastfeeding, among several other MNH interventions.</p>
	<p>Research & Evaluation (2023-2025) EQUAL will conduct implementation research on the IRC’s community-based MNH care program in Dhusamareb. This includes exploring the following domains of the program: service coverage, acceptability and uptake, feasibility, social inclusion, and systems changes and shocks. This will increase understanding of the factors – including those unique to humanitarian contexts – that affect the process and results of a community-based MNH care program delivering evidence-based, life-saving services in areas with limited access to health facilities. The research will use a mixed methods approach including pre- and post-surveys to capture change in the uptake of services, as well as qualitative interviews, questionnaires, focus group discussions, and performance checklists.</p>

FINDINGS

Results from the baseline survey will be available in mid-2024.

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References

¹ Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO.

² United Nations Inter-agency Group for Child Mortality Estimation (2024).

³ UNICEF. (2019). Somalia Health. Retrieved from [www.unicef.org website: https://www.unicef.org/somalia/health](https://www.unicef.org/somalia/health)

⁴ WHO and Somali Government roll out process to deliver quality health services to all Somalis - Somalia. (2018, November 5). Retrieved from ReliefWeb website: <https://reliefweb.int/report/somalia/who-and-somali-government-roll-out-process-deliver-quality-health-services-all>

⁵ Directorate of National Statistics, Federal Government of Somalia. The Somali Health and Demographic Survey 2020.

⁶ Lassi, Z. S., & Bhutta, Z. A. (2015). Community-based intervention packages for reducing maternal and neonatal morbidity and mortality and improving neonatal outcomes. The Cochrane database of systematic reviews, 2015(3), CD007754. <https://doi.org/10.1002/14651858.CD007754.pub3>

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