

# Project synopsis: Tanzanian research project supported under the IMCHA initiative [Part 1]



**Core grant:** Building an Enhanced and Informed Cadre of Community Health Workers to Improve Maternal and Newborn Health in Rural Tanzania



**Goal:** To extend the reach of the primary healthcare system by developing a tool to aid with planning and prioritization; providing critical health and related inputs (e.g., birth kits, transport support); and equipping health workers and community health workers with skills to assess and treat women and newborns in remote rural areas.



**Who:** Shirati District Hospital (Tanzania); Bruyere Research Institute, University of Ottawa (Canada)



**Where:** Mara Region



**Principal Investigators:** Dr. Bwire Chirangi (researcher); Dr. Gail Webber (researcher); Dr. Florian Tinuga (decisionmaker)



## Results:

1. Provided critical health and related inputs (e.g., birth kits, transport support) that contributed towards improving access to health services in the target area.
2. Established a joint prioritization mechanism through extensive community consultation process to identify and address high maternal and neonatal mortality.
3. Created convergence around MNCH issues and incorporated gender considerations into discussions, which empowered women at the community level (including users and providers) to call for action, including around respectful care.
4. District-level decisionmakers committed to directing budgetary allocations towards birth kits and family planning supplies.



**Scalability:** The joint prioritization mechanism shows particular potential for scale-up regionally and nationally, as does the refined training model. In addition, m-Health tools could also be deployed elsewhere.



**Pathways to scale:** Behaviour/skills/practice; Product/technology; Methodology



**Synergy grant:** Enhancing Contraceptive Support for Men and Women in the Mara Region by Addressing Demand and Supply-side Barriers



**Goal:** To enhance contraceptive support for men and women by testing Mobile Health (mHealth) tools to improve the way community health workers provide counselling about services; raising awareness about the options and benefits of family planning with potential users; and improving the availability of relevant supplies in rural health facilities.



## Results:

1. Enhanced access to health education, outreach and counselling about family planning in the target area by training 90 community health workers using m-Health tools (materials were provided by mobile phone through a collaboration with D-Tree International).
2. Improved the availability of family planning by upskilling some 45 nurses and promoting long-term birth control methods in three hospitals in the district.
3. Identified and facilitated dialogue to start addressing the barriers related to using contraception (e.g., community perceptions and values regarding reproductive healthcare) in order to increase access to these services by women in rural communities.



**Core grant:** Quality Improvement for Maternal and Newborn Health at District-level Scale in Mtwara Region Tanzania



**Goal:** To determine the scalability of a quality improvement strategy – known as QUADS – focused on making MNCH service delivery more sustainable in six districts of Mtwara Region through capacity building of local health staff as well as community engagement.



**Who:** Ifakara Health Institute and Mtwara Region Health Department (Tanzania); SickKids, Centre for Global Health (Canada)



**Where:** Mtwara Region



**Principal Investigators:** Dr. Fatuma Manzi (researcher); Dr. Zulfiqar Bhutta (researcher); Dr. Sylvia Mamkwe (decisionmaker)



## Results:

1. Developed and delivered a package of interventions (including capacity building) to improve the provision of quality antenatal, postnatal, and neonatal care with a focus on better data use to drive improvements.
2. Designed a costing protocol that has now been fully integrated into the quality improvement cycle at community and district levels leading to better leadership around strategy implementation.
3. Incorporated gender considerations (including the status of women in the community, the importance of women's health and the role of men as health advocates) into discussions.



**Scalability:** QUADS shows great potential for further scale-up, particularly when deployed using the Plan-Do-Study-Act model and the new costing protocol. In addition, the electronic tool for quality monitoring and data use methodology could be used in other parts of the country.



**Pathway to scale:** Methodology



**Synergy grant:** Bridging the Know-Do Gap Among Health Workers and Decisionmakers Through Improved Routine Measurement of the Quality of Maternal and Newborn Care



**Goal:** To improve the measurement of MNCH care and increase the understanding and engagement of decisionmakers around the quality of care by deploying a data monitoring tool based on the World Health Organization's Quality, Equity Dignity Framework.



## Results:

1. Developed an electronic tool for quality monitoring of essential equipment and supplies for infection prevention; and promoted an innovative methodology to regularly use the data from it in health facilities.
2. Trained over 40 council health management team members and some 46 health personnel contributing to better quality of care, which in turn led to an increase in the use of services.
3. Increased the availability of medical equipment and lifesaving drugs in the target area.
4. Engaged decisionmakers in the use of data for health planning.



**Core grant:** mHealth Strategy to Reduce Eclampsia and Maternal and Infant Deaths in Tanzania



**Goal:** To improve the monitoring of maternal health trends, particularly pre-eclampsia and eclampsia, by teaching health workers how to use a mobile phone application designed to capture and use real-time data.



**Who:** Ifakara Health Institute, Ministry of Health and Pamoja Tunaweza Women's Centre (Tanzania); Queens' University (Canada)



**Where:** Geita and Singita Regions



**Principal Investigators:** Dr. Robert Tyllia (researcher); Dr. Karen Yeates (researcher); Dr. Anna Nswilla (decisionmaker)



## Results:

1. Developed a mobile phone application to collect and use real-time data on maternal health trends, which led to improved management of pre-eclampsia and eclampsia through earlier and more accurate detection.
2. Noted progressive change in practice at the intervention facilities such as the inclusion of urine dipsticks in plans and budgets to enable testing of all pregnant woman.
3. Implemented a new systems of direct health facility financing that allows facilities to manage their own account and address budgetary gaps/shortfalls.



## Scalability:

The mobile phone application offers the potential for scale-up regionally and nationally, including in rural areas, as does the direct health facility financing approach.



## Pathway(s) to scale:

Product/technology

# Project synopsis: Tanzanian research project supported under the IMCHA initiative [Part 2]



**Core grant:** Implementing and Evaluating a Modified Version of the Mama na Mtoto Package of Maternal and Newborn Health Activities



**Goal:** To implement and evaluate the application of a modified version of Mama na Mtoto in rural Tanzania to determine whether low-cost, government-led programmes contribute towards improving MNCH outcomes by strengthening health systems.



**Who:** Catholic University of Health Allied Sciences and Mwanza Regional Health Department (Tanzania); University of Calgary (Canada)



**Where:** Mwanza Region



**Principal Investigators:** Dr. Dismas Matovelo (researcher); Dr. Jenn Brenner (researcher); Dr. Thomas Rutachunzibwa (decisionmaker)



**Results:**

1. Produced a 'process model' – Maximizing Engagement for Readiness and Impact (MERI) – to assess the readiness of a system for intervention, promote sustainability and incorporate emerging needs and practical challenges. MERI also provides a baseline assessment to aid scale up.

2. Introduced a new curriculum coupled with innovative simulation training models to improve basic emergency obstetric neonatal care skills and critical clinical care management, which improved MNCH services.

3. Strengthened health system leadership, management, and governance including by empowering women to take more active roles.



**Scalability:** The MERI 'process model' was successfully adapted for implementation by the Mama na Mtoto project, which point to potential scale-up in similar contexts. Associated systems strengthening innovations (training models, evaluative frameworks and guidelines) also show potential for scale up



**Pathway to scale:** Methodology



**Synergy grant:** Mama na Mtoto: Barriers and Enablers to Gender, Equity and Scale Up



**Goal:** To test qualitative approaches and strategies aimed at engaging men and other culturally-relevant decisionmakers in MNCH issues.



**Results:**

1. Improved the engagement of men in MNCH care evidenced by increases in men accompanying their wives to antenatal care appointments, being involved in preparing for birth, and attending deliveries.

2. Improved community health workers retention by providing evidence on the factors that inhibit and promote staff turnover.

3. Produced a process model – Maximizing Engagement for Readiness and Impact (MERI) – to assess the readiness of a system for intervention, promote sustainability and incorporate emerging needs and practical challenges.



**Core grant:** Accessing Safe Deliveries in Tanzania



**Goal:** To implement proven interventions in support of the government's priority to improve obstetric and neonatal care services by providing training to health workers, together with post-training mentorship and support.



**Who:** Tanzanian Training Centre for International Health (Tanzania); Dalhousie University (Canada)



**Where:** Morogoro Region



**Principal Investigators:** Dr. Angelo Nyamtema (researcher); Dr. John Leblanc (researcher); Dr. Godfrey Mtey (decisionmaker)



**Results:**

1. Helped bridge the leadership and management knowledge and skills gaps among key actors working at different levels of management in the target area by providing them with communication, planning, and monitoring skills as well as introducing them to change management and ethics concepts.

2. Contributed towards improved performance at health facilities.

3. Improved safety and overall infrastructure of clinics through infection prevention/control and site improvement activities.



**Scalability:** The standardized curricula – and post-training support package – has already been adopted and is due to be rolled out to non-physician clinicians nationally. Useability has also been expanded by providing online and offline access to content. There is scope to scale-up further in other areas.



**Pathway to scale:** Methodology



**Synergy grant:** Leadership and Managerial Capacity Strengthening for Quality Pregnancy and Newborn Outcomes in Tanzania



**Goal:** To improve leadership and managerial capacity of key actors by providing them with training in order to sustainably improve the quality of MNCH service delivery at health centres and dispensaries.



**Results:**

1. Helped bridge the leadership and management knowledge and skills gaps among key actors working at different levels of management in the target area by providing them with communication, planning, and monitoring skills as well as introducing them to change management and ethics concepts.

2. Contributed towards improved performance at health facilities.

3. Improved safety and overall infrastructure of clinics through infection prevention/control and site improvement activities.



**Core grant:** m-Health Strategy to Reduce Eclampsia and Maternal and Infant Deaths in Tanzania



**Goal:** To improve access to quality MNCH care through community engagement and health education, with interventions targeting both users and providers.



**Who:** Institute of Development Studies, University of Dar es Salam (Tanzania); HealthBridge Foundation (Canada)



**Where:** Iringa Region



**Principal Investigators:** Dr. Stephen Maluka (researcher); Sian FitzGerald (researcher); Dr. Robert Salim (decisionmaker)



**Results:**

1. Developed a methodology for community engagement that helped improve access to and use of health facilities and increased demand for its use beyond the target area.

2. Provided community health education to a wide range of relevant stakeholders, including users and providers.

3. Highlighted misinterpretation by health workers regarding the Spousal Escort Policy (requiring a husband to accompany his partner to antenatal care), which was acting as a barrier to care for women. As a result, the government committed to revising the policy (and associated training around it) to ensure that unaccompanied women can access services.



**Scalability:** The methodology for community engagement shows potential for scale-up in other regions.



**Pathway to scale:** Methodology