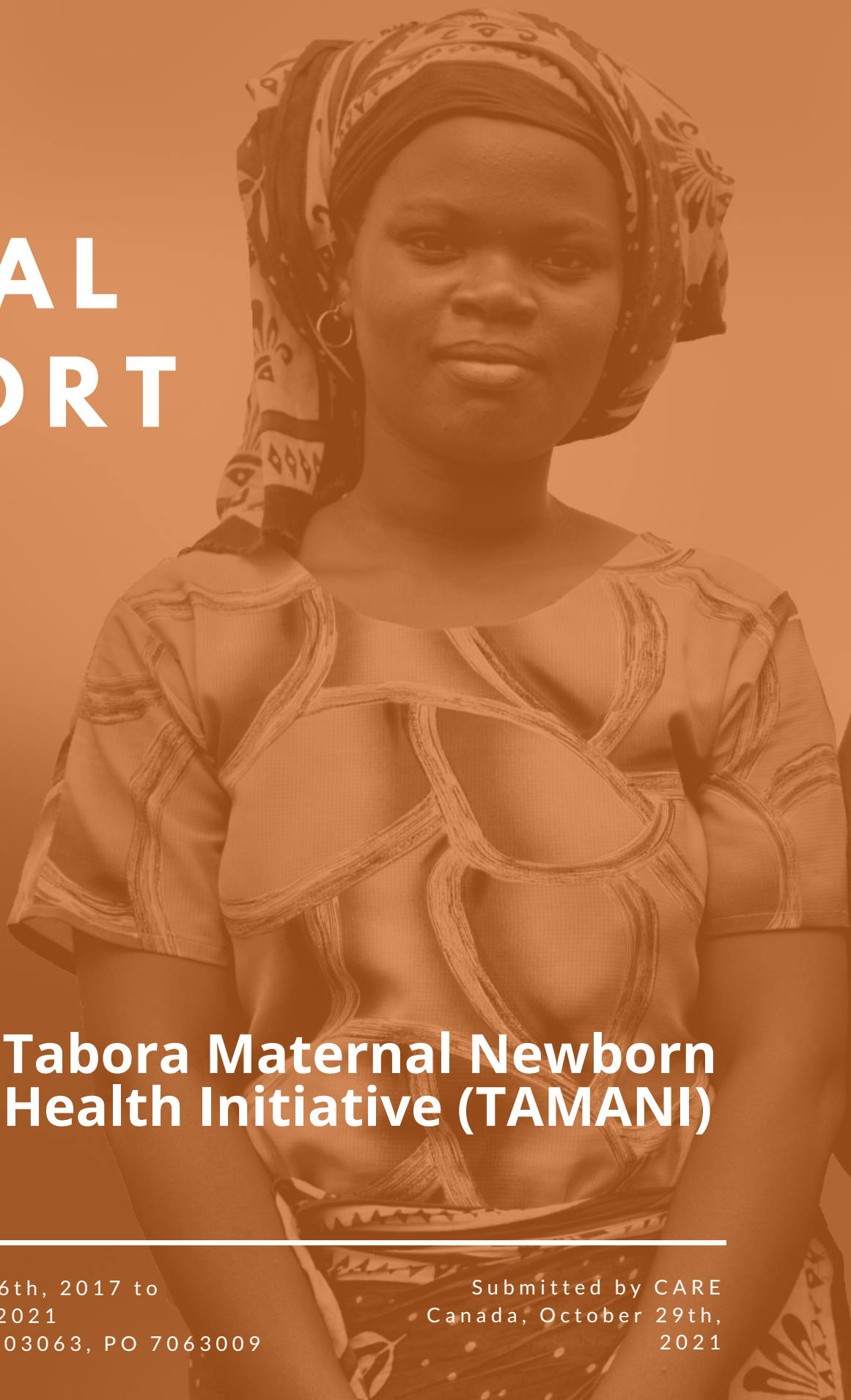
2021

FINAL REPORT



Tabora Maternal Newborn Health Initiative (TAMANI)

Period: January 6th, 2017 to December 31st, 2021
Project No. #D-003063, PO 7063009

Submitted by CARE Canada, October 29th, 2021

Project Information	
Project Name	Tabora Maternal Health Initiative - TAMANI
Implementer's Name	CARE Canada 9 Gurdwara Road Ottawa, ON, Canada K2E 7S6
Contact Information	Shantelle Spencer Program Manager, Global Health CARE Canada shantelle.spencer@care.ca
Total Project Budget	$12,821,518 CAD
Project Start and End Date	Project start date: January 6th 2017 Project end date: December 31st 2021

Contents

List of Abbreviations

ASRH	Adolescent Sexual and Reproductive Health		MDR	Maternal Death Review
AGOTA	Association of Obstetricians and Gynecologists of Tanzania		MMR	Maternal Mortality Ratio
ANC	Antenatal Care		MNCH	Maternal, Newborn & Child Health
AFSRH	Adolescent Friendly Sexual and Reproductive Health		**MoHCDGEC**	Ministry of Health, Community Development, Gender, Elderly and Children
ASRH	Adolescent Sexual and Reproductive Health		**MPDSR**	Maternal Perinatal Death Surveillance & Response
AIP	ALARM International Program		**MSRHS**	Maternal, Sexual, and Reproductive Health Services
BCC	Behaviour Change Communication		**NGO**	Non-Governmental Organization
BEmONC	Basic Emergency Obstetric Maternal Neonatal Care		**NMR**	Newborn Mortality Ratio
BoQ	Bill of Quantity		**OSCE**	Observed Structured Clinical Examination
CBHPC	Community Based Health Promotion Coordinators		**OPD**	Out-Patient Department
CBO	Community Based Organization		**PIP**	Program Implementation Plan
CCHP	Comprehensive Council Health Plan		**PO-RALG**	Prime Minister's Office - Regional Administration and Local Government
CHWCo	Community Health Worker Coordinator		**PNC**	Postnatal Care
CEmONC	Comprehensive Emergency Obstetric Maternal & Neonatal Care		**PPE**	Personal Protective Equipment
CHMT	Council Health Management Team		**PSC**	Program Steering Committee
CHW	Community Health Worker		**PSHEA**	Prevention Against Sexual Harassment, Exploitation and Abuse
CSC	Community Score Card		**RCCE**	Risk Communication and Community Engagement
CSIH	Canadian Society for International Health		**RBF**	Results Based Financing
CSO	Civil Society Organization		**RMC**	Respectful Maternity Care
DHIS	District Health Information System		**RHMT**	Regional Health Management Team
DMO	District Medical Officer		**RMNH**	Reproductive Maternal Newborn Health
DQA	Data Quality Assessment		**RMNCH**	Reproductive Maternal Newborn Child Health
DRCHco	District Reproductive Child Health Coordinator		**RMO**	Regional Medical Officer
ESIA	Environmental & Social Impact Assessment		**SAA**	Social Analysis & Action
FGD	Focus Group Discussion		**SBA**	Skilled Birth Attendant
FP	Family Planning		**SBCC**	Social Behaviour Change Communication
GII	Gender Inequality Index		**SOGC**	Society of Obstetricians & Gynaecologists of Canada
GoT	Government of Tanzania		**SOPs**	Standard Operating Procedures
HCP	Health Care Provider		**SRHR**	Sexual Reproductive Health and Rights
HCW	Health Care Worker		**TABASAM**	Tabora Adolescent and Safe Motherhood
HF	Health Facility		**TAMANI**	Tabora Maternal Newborn Health Initiative
HMIS	Health Management Information System (MTUHA)		**TBA**	Traditional Birth Attendants
HSG	Health Systems Governance		**YFS**	Youth Friendly Services
IDSR	Integrated Disease Surveillance and Response		**VSLA**	Village Savings and Loans Association

Executive Summary

The Tabora Maternal and Newborn Health Initiative (TAMANI) was a five-year project led by CARE in partnership with the Government of Tanzania's Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) and the Prime Minister's Office for Regional and Local Government (PO-RALG). Implementing partners included the Society of Obstetricians and Gynecologists of Canada (SOGC), the Association of Gynecologists and Obstetricians of Tanzania (AGOTA), the Canadian Society for International Health (CSIH), McGill University's Institute for Health & Social Policy, and the Ifakara Health Institute (IHI). The project was financially supported by the Government of Canada and is closely aligned to Government of Tanzania (GoT) health polices, strategies and guidelines.

The Final Report covers the project implementation period of January 6, 2017, to June 30, 2021.The report provides a cumulative analysis of all operations against the PIP and Annual Work Plans, as well as integrates the project endline evaluation results. Endline data collection included, a quantitative household endline survey and a qualitative gender research study both carried out between January and March 2021. While the government had minimal COVID-19 restrictions for the public at the time of data collection, Ifakara ensured that data collection for both the quantitative and qualitative analysis was carried out with enhanced COVID-19 prevention protocols for participants and researchers. The scope of both studies was not scaled back and findings of both the quantitative and qualitative reports have been included in this final report. In addition, McGill added the data from the endline baseline household survey to their data set to conduct the impact assessment of the project, the findings of which have also been integrated into this report. More details on the endline evaluation approach can be found in the outcomes section, and the full evaluation reports can be found in the annexes.

Key Successes of the TAMANI project:

- Indications of a 9pp decrease in the National Newborn Mortality Ratio and a 6pp decrease in Maternal Mortality Ratio
- Between the baseline and endline surveys the percentage of women reporting receiving four or more ANC visit during pregnancy increased from 56% to 68%, and more women at endline (33%) reported going for their visit in their first trimester of pregnancy compared to their counterparts from the baseline survey (22%).
- An increase from baseline (35%) to endline (58%) of women who felt completely confident in their ability to make healthcare decisions and visit a health facility autonomously
- Linked to this, the percentage of men who agree/strongly agree with women's right to seek health care increased from 34% at baseline to 46% at endline.
- A 12pp increase at endline of deliveries being attended by a Skilled Birth Attendant (SBA)
- At endline, 91% of women who gave birth in a health facility reported having someone check on their health status before leaving the facility, representing an increase from 54% at baseline
- Percentage of women allowed to choose their preferred birthing position increased from 4% to 9% between baseline and endline and who were allowed to choose who to accompany them during labour changed from 43% at baseline to 62% at endline.
- Women's confidence in their information being kept confidential by the staff of the facility also increased significantly, from 58% at baseline to 80% at endline
- The percentage of women who reported not being treated with respect, insulted, physically hurt, or coerced into something they did not want to do during labour decreased by almost 50% between the beginning and the end of the project, from 13% at baseline to 7% at endline.

- The percentage of women and adolescent girls who were satisfied with improved health facilities and emergency transportation increased from 53% at baseline to 77% at endline
- As of December 2020, the number of family planning visits is 2 times the number of visits reported in December 2017 for women over the age of 25, 3 times the number of visits for women between the ages of 20-24, and almost 4 times the time for adolescents between 15-19.

Lessons Learned

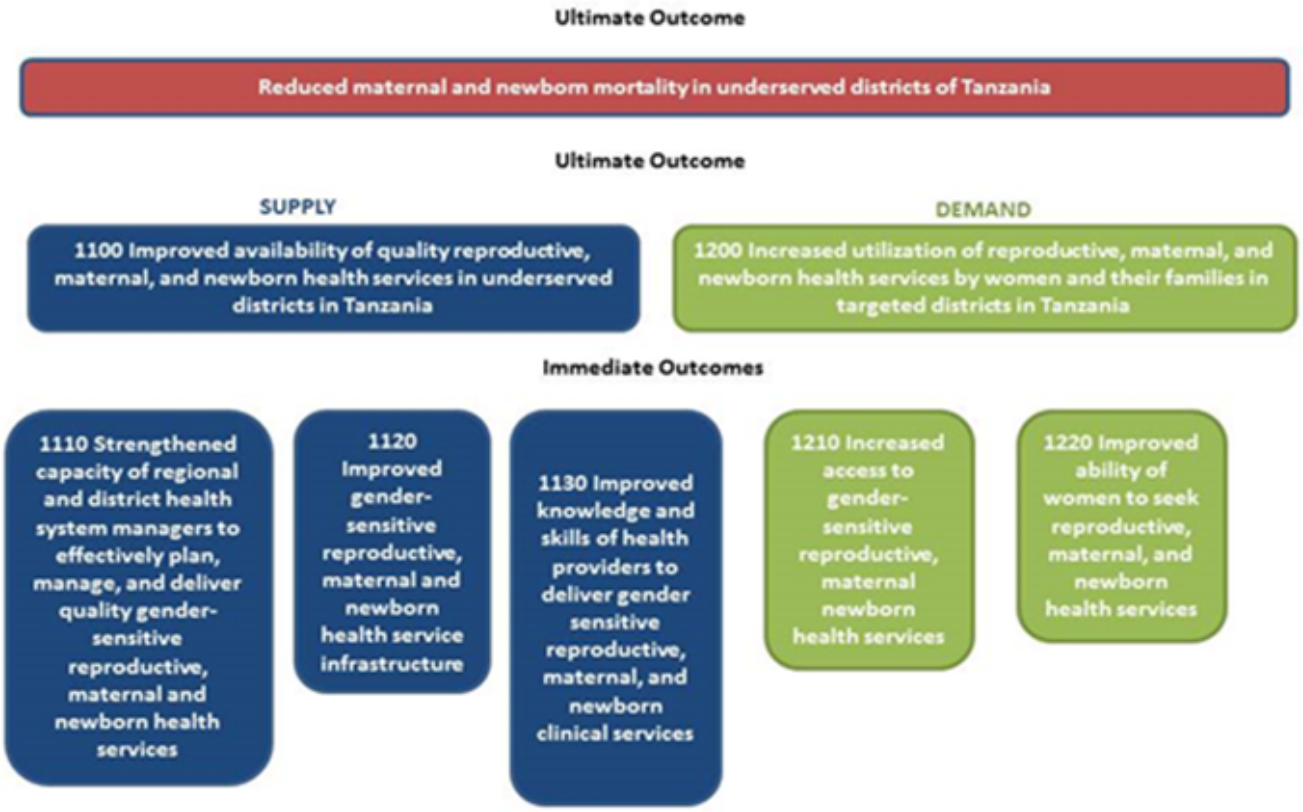
- Community Health Workers ability to reach last mile communities: The CHW engaged in TAMANI demonstrated a high level of effectiveness at delivering critical health information and serving as a link between hard-to-reach communities and the health system.
- Improving access to family planning: While the project has seen family planning and distribution of contraception increase across the life of the project, there still exists a substantial unmet need for family planning in Tabora. Future programming should include significant support to address supply, strengthening clinical skills on providing the full range of contraceptive methods (with a focus on long-acting methods for adolescents) and a strong male engagement component specific to family planning.
- Strong GoT and region/district ownership of project: The engagement of national and district-level health governance actors from proposal to implementation was a critical factor in the success and sustainability of TAMANI.
- Value in supporting professional associations: Professional associations can become an important voice for women's health in their country and AGOTA has noted that they are now in a stronger position to advocate for quality maternal and newborn care in Tanzania.
- Use of digital technology for health promotion: TAMANI saw considerable success with the use of Viamo messaging within the scope of COVID response. Leveraging the use digital technology along with expanded access to contraception could provide greater access to SRH information, particularly for youth, and should be considered in future programming.
- Demand for and effectiveness of ASRHR programming: TAMANI has demonstrated that trained youth are effective advisors for the provision of accessible, youth-friendly ASRH services, and are able to conduct ASRH sessions with limited support of project staff, in partnership with existing CHMT focal points. There remains an opportunity to expand ASRHR services that leverage existing community health infrastructure, including CHWs, and are integrated with other activities that engage young people (school, sports etc.).
- Pairing skills training & supportive mentorship for skills retention: The combination of Emergency Obstetrics and Newborn Care (EmONC) training paired with coaching and mentoring visits 6 and 12-months post-training was shown to be effective for improving or retaining lifesaving obstetric skills and the role consent, confidentiality, and reassurance play in the experience of quality of care.
- Value of community engagement and accountability through Community Scorecards processes: The development of action plans clearly demonstrated how communities can work with district health authorities to improve services and infrastructure, as well as address health challenges at the community level.
- Importance of Health Systems Strengthening: The health system strengthening components of TAMANI have strengthened CHMT and HF processes and streamlined and reinforced health governance. Continued investment in this, including training on planning and budgeting, as well as provision of core infrastructure like computers at the district level is essential to ensure the availability and quality of health care.

1. Project Description & Context

1.1: Project Description

The Tabora Maternal and Newborn Health Initiative (TAMANI) was a five-year project led by CARE in partnership with the Government of Tanzania's Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) and the Prime Minister's Office for Regional and Local Government (PO-RALG). Implementing partners include the Society of Obstetricians and Gynecologists of Canada (SOGC), the Association of Gynecologists and Obstetricians of Tanzania (AGOTA), the Canadian Society for International Health (CSIH), McGill University's Institute for Health & Social Policy, and Ifakara Health Institute (IHI). The project was financially supported by the Government of Canada and is closely aligned to Government of Tanzania (GoT) health polices, strategies and guidelines.

TAMANI's ultimate objective was to contribute to reduced maternal and neonatal mortality by increasing coverage and quality of reproductive, maternal and newborn health services across the Tabora region. TAMANI also addressed gender inequalities that limited women's decision-making autonomy to seek care, increased access to evidence-based health information through Community Health Workers (CHW's) and worked to improve respectful care by health care workers so that women were more likely to seek and receive reproductive, maternal and newborn health care.



Project outputs under 1100 (SUPPLY):	Project outputs under 1200 (DEMAND):
1111 - Regional and district health authorities trained and mentored in gender sensitive supportive supervision for reproductive, maternal and newborn health services **1112** - Regional and district health authorities trained and mentored on HMIS and effective planning and budgeting for reproductive, maternal and newborn health services **1113** - Reproductive, maternal and newborn health systems research projects conducted **1114** - Policy briefs on priority issues related to RMNH written and disseminated for district, regional and national decision making **1121** - Emergency transportation system for pregnant and postpartum women and newborns developed **1122** - Health facilities equipped and rehabilitated **1131** - Job aids disseminated based on GoT's RMNH clinical practice guidelines **1132** - Health care workers trained on CE/BEmONC and family planning **1133** - Health care workers mentored on CE/BEmONC and family planning **1134** - Maternal Perinatal Death Surveillance & Response audit developed and implemented	**1211** - CHW program for reproductive, maternal and newborn health and family planning implemented **1212** - Youth friendly sexual and reproductive health services developed and implemented **1221** - Gender-sensitive reproductive, maternal and newborn health community scorecards conducted **1222** - Communities sensitized on gender-sensitive reproductive, maternal and newborn health

Key activities of the TAMANI project included training and mentoring of Regional and Council Health Management Teams on health system strengthening, training frontline HCPs on Comprehensive and Basic Emergency Obstetric and Neonatal Care (CE/BEmONC), implementing a regional Community Health Worker (CHW) program and supporting women's empowerment and influence through community dialogues and Community Score Card (CSC) meetings.

1.2: Reach & Intermediaries

Intermediaries for the TAMANI project are the Regional Health Management Team (RHMT) and the Council Health Management Teams, Health Care Workers, and Community Health Workers. The table below shows the number of intermediaries reached through the overall project:

Intermediary	Activity	M	F	Total	Outcome
RHMTs	Trained on Health Systems Governance	2		2	1110
CHMTs	Trained on Health Systems Governance	69	55	124	1110
	Trained on HMIS & Data Utilization	36	36	72	1110

Intermediary	Activity	M	F	Total	Outcome
	Trained on Planning, Budgeting & Financial Management	69	55	124	1110
Health Care Workers	Trained on Planning, Budgeting & Financial Management	60	34	94	1130
	Trained on BEmONC	149	121	270	1130
	Trained on CEmONC	149	121	270	1130
	Mentored on BEmONC & CEmONC	93	107	200	1130
	Trained on Adolescent Friendly Health Services	55	105	160	1130
Community Health Workers	Trained as GoT CHW's	459	538	997	1210
CHW Supervisors	Trained on CHW Supervision	79	163	242	1210
Community Facilitators	Trained on SAA	42	54	92	1220
	Trained on CSC	42	54	92	1220

Total Project Reach

	Male (15-49)	Female (15-49)	Births	Total
Direct	3,073	425,897	112,329	541,299
Indirect	425,897	--	--	425,897
Total	428,970	425,897	112,329	967,196

TAMANI reached a total of 541,299 direct participants and 425,897 indirect participants. Direct reach was calculated as the number of women receiving ANC+4 and Family Planning services from health facilities supported by TAMANI, and the number of babies whose delivery was assisted by a skilled birth attendant.

Additionally, the number of direct males were calculated based on the number of male intermediaries and men and boys who attended community youth sexual education meetings. The partners of all women that directly benefited from the project were considered as indirect reach.

1.3: Context

TAMANI was implemented across the Tabora region - an under-resourced and isolated part of Tanzania, where maternal, newborn, and child mortality was the highest. The Tabora region reflects high levels of structural inequality which have a direct bearing on RMNCAH outcomes, including high rates of polygamy, teenage pregnancy, and low usage and access to family planning. At the outset of the project, maternal mortality in Tanzania remained high (MMR of 556 deaths/100,000 live births), as did rates of newborn death (25 deaths/1000 live births).

The Tanzanian political and policy environment for reproductive, maternal and newborn health evolved considerably during the TAMANI Project. At the outset of the project the Minister of Health, Community Development, Gender, Elderly, and Children (MOHCDGEC) was in the process of decentralizing many Government functions, and beginning the implementation of the Health Sector Strategy (2015-2020), as well as the One Plan II for 2016-2020. These plans maintained a clear focus on reducing maternal and neonatal mortality through increased access to family planning, scaling up of EmONC training and mentoring, improved access to adolescent friendly health services, the scale-up of the Community Health Workers program to provide prenatal and postnatal follow-up to women in their homes, and improved coordination and planning of health service delivery.

TAMANI aimed to align closely with these priorities and guidelines and kept informed of them by participating in Technical Working Group meetings for RCH and ASRH organized by MOHCDGEC. This included support to develop and review the OnePlan II action plan for Tabora and staff coordinated regularly with regional stakeholders through the RHMT. At the community level, TAMANI coordinated closely with CHMT colleagues on planning and the allocation of resources for RMNCH through participation in the CHMT meetings and through embedding staff in each CHMT office.

Several important changes to took place in the policy environment during the TAMANI project. In 2015, the GoT launched a national results-based financing program for health facilities. Tabora district enrolled in this program in 2017, and district health teams and health facilities received financial incentives for improvement in health services. The program was suspended in 2018, and not reinstated. In 2017 the MOHCDGEC made a commitment to expand and fund the national community health worker program, funding at least two community health workers per community by the 2019/2020 fiscal year. TAMANI's support to CHW training and resourcing integrated closely with this program to ensure effective continuity of the CHW program in Tabora. In 2018, then President of Tanzania made comments to discourage the use of family planning, which coincided with the MOHCDGEC's decision to halt the airing of family planning health promotion content in the media.

In year three of TAMANI, the MOHCDGEC developed the National Guideline for Gender & Respectful Care mainstreaming and integration across RMNCAH in Tanzania. The goal of the guideline was to improve the availability of quality, respectful, client-centered and gender-sensitive integrated services for children, adolescents, and adults of reproductive age regardless their social-economic status. The government endorsed the guidelines for dissemination at all levels, and TAMANI used this as an opportunity to build on and strengthen efforts to promote Respectful Maternity Care (RMC) in Tabora through reinforcing

respectful communication and consent in the coaching sessions with HCPs. In late 2019 a new program aimed to improve accountability at the health facility level, called the Makole Model, was introduced and all regions were encouraged by PO-RALG to support the implementation of this model in selected facilities. TAMANI engaged with the Makole consultant to share details of the model with the Tabora CHMT's to adapt to the Tabora context.

In year 4 and 5 of the project, the roll-out of approved reproductive, maternal, and newborn health policies and guidelines was stalled with the COVID-19 pandemic and unexpected change in leadership. As of the writing of this report, the RMC guidelines had yet to be disseminated to facilities, because of limited resources and the pandemic. In addition, the National roll out of the Makole model aimed at improving health facility efficiencies and accountability, and the Uturo community based CHW model were both planned in year 5 with the Tabora RMO selecting key districts to pilot. However, debate emerged within the GoT on the effectiveness of these models, resulting in the MOHCDGEC delaying roll-out so that further revisions could be made to both models.

The National Accelerated Action and Investment Agenda for Adolescent Health and Wellbeing was launched on April 17th, 2021. This new policy has been an important step towards improving reproductive healthcare for adolescents and will hopefully inform future investments in adolescent sexual and reproductive health in Tanzania.

Despite the continually evolving and complex context, the TAMANI team was able to adapt and implement the project reaching targets and successfully demonstrating significant impact at the outcome level. This is largely a testament to the TAMANI team and partners in Tanzania that remained committed, resourceful, and creative in ensuring project activities were implemented in a way that reinforced government policies and structures while responding to the needs of women and girls in Tabora.

1.4: COVID-19 in Tanzania

On March 11th, 2020, the WHO declared COVID-19 a global pandemic, and this rapidly became a significant stress on the health system in Tanzania. At the outset, management of COVID-19 at policy level in Tanzania escalated into uncertainty as the country chose unique approaches and methods that veered away from WHO recommendations, including a declaration that the country was free from COVID-19 in June 2020. Despite this, the country witnessed another wave of infections from January 2021 to March 2021 which was termed 'severe pneumonia'.

After President Magufuli died in March 2021, Vice President Samia Suluhu Hassan assumed office as president. Under the new president, the stance on COVID-19 changed, with an open recognition of the pandemic and need for precautions by the government, including a proactive communications strategy, and updated response plan by the newly established task force. In her first public address President Hassan announced the launch of an expert coronavirus task force which released their first report on May 17, 2021 recommending that Tanzania restart COVID-19 surveillance at all levels, implement regional and international resolutions on the pandemic, and join COVAX to deliver vaccinations to Tanzanians.

Tanzania received its first consignment of over 1 million doses of vaccine on July 26, 2021, delivered through the COVAX initiative. Priority groups were defined as health care workers, people over the age of 50 and those with underlying health conditions. Ten regions including Dodoma, Dar es Salaam, Mwanza, Mbeya, Kigoma, Iringa, Mtwara and Arusha were given priority being the hardest hit regions. According to the latest WHO report as of mid-October 2021, there have been 20,034 confirmed cases of COVID-19 with 724 deaths reported to the WHO. A total of 885,579 vaccine doses have been administered.

CARE was granted approval from Global Affairs Canada in March 2020 to repurpose $96,000 of the TAMANI budget to respond to COVID-19. To ensure staff and community safety, CARE Tanzania continued to monitor the situation while ensuring preventive protocols were observed. This support has been critical for the region, given Tabora has not received any of the COVID-19 response funds requested from the central government. More details on the TAMANI COVID Response can be found in section 2.2.

2. Project Operations

2.1: Progress on Implementation: Outputs & Activities

Intermediate Outcome 1100 (Supply): Improved availability of quality reproductive maternal and newborn health services in underserved areas of Tanzania

Output 1111 - Regional and district health authorities trained and mentored in gender sensitive supportive supervision for reproductive, maternal, and newborn health services

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
#/% RMNH joint supportive supervision visits per health facility	1 Visit/Q/HF	0.68 visits/Q/HF	68% - 2189/3180
# of m/f CHMT members trained to conduct regular RMNCH supportive supervision	8 RHMT members & 5 CHMT members/district (=40 CHMT members)	12 RHMT (2f, 10m) 65 CHMT (24f, 41m)	150% RHMT 160% CHMT
Key Activities included in the Project Implementation Plan (PIP):			
• Conduct needs assessment survey of health facilities • Develop training material job aids (Supportive Supervision, and Leadership and Management) • Train R/CHMTs on supportive supervision, Leadership and Management • Train R/CHMTs on supportive supervision mentorship • Conduct supportive supervision visits • Regional Consensus Building Workshop on Supportive Supervision Process and Tools			

Needs assessment survey of health facilities

A Health Facility needs assessment was completed in 2017 to gather baseline data on existing infrastructure and equipment. The assessment included data collection on training received by Health Care Workers in the prior two years, including Supportive Supervision.

Development of training material job aids (Supportive Supervision, and Leadership and Management)

In Year 2 CSIH developed, finalized, and implemented the first Health Systems Governance Training Package (HSG-1) specific to the TAMANI project context which included training on Supportive Supervision. CSIH consultants developed the program and content, adapted from materials used by CSIH in previous HSG workshops with health systems managers in Tanzania.

In Year 3 CSIH launched its new training package on Health Systems Governance in May 2019. The new package, titled Health Systems Governance 2 (HSG-2), built on previous sessions on leadership and management and supportive supervision. The new package linked continuous quality improvement mechanisms for supportive supervision with a focus on the continuum of reproductive,

maternal, newborn, child health services. The course was developed to align with GoT National Guidelines.

Training to Conduct Supportive Supervision Visits

Workshops in Year 2 for both the RHMT and the CHMT were designed to increase capacity and skills for health service delivery management, supportive supervision, and quality improvement to improve the health status of catchment populations and achieve national and global health targets. Topics covered included leadership and management competencies, communication, negotiation, delegation, decision-making, stakeholder analysis, continuous quality analysis, and supportive supervision including on-the-job coaching.

The workshops also provided an opportunity for R/CHMTs to apply lessons learned in a health facility setting. Facilitators reported that the approach of including participants from two different districts, as well as including the opportunity for CHMTs to conduct supportive supervision visits in districts outside of their own, provided an opportunity for mutual learning and knowledge exchange.

The HSG-2 workshop for CHMT and RHMT were conducted in Year 3 in May 2019 and November 2019 respectively. The pre and post-training test results revealed a general increase in self-assessed level of knowledge from the start of training to the end, particularly in the areas of leadership and management. The pre-test showed that most participants (>50%) ranked their skills as medium/average in each item, except skills in good decision making (which were ranked low/medium by most participants). In the post-test, most participants scored high in all areas.

Supportive Supervision Mentorship

In year four, the project transitioned to focus on mentoring with CSIH in consultation with local and national government authorities designed a four-part program to provide Supportive Supervision Coaching. Following a Plan-Do-Study-Act (PDSA) cycle, program participants learn together in a facilitated environment, and practice new methods, skills, and behaviour for supportive supervision with coaching by facilitators. However, given all field activities were suspended before this program could be initiated in Tabora, the training was shifted to a virtual format and integrated COVID-19 topics as noted in section 2.1, COVID-19 response .

The program was launched in Tabora in July 2020. The program consisted of pre-recorded videos/ presentations that could be watched at the Mentor's convenience, and live discussions and Questions & Answer (Q&A) sessions corresponding to each video. Ten modules were developed, on topics including supportive supervision basics, Framework for Effective Supportive Supervision during an Emergency, Maintaining Availability of Essential Health Supplies among others.

A pre-test was conducted prior to the first Module (n=24), and a post-test was conducted after the final Module (n=11) to understand the extent of participants' learning. Unfortunately, participation in the post-test was low, but did reflect those most actively involved in the online program. Average scores increased only slightly from 80% on the pre-test to 84% on the post-test, with the most improvement noted around mentor's ability to identify additional workforce capacity during an emergency, identifying and communicating with specific agencies to provide support during an emergency, and using digital methods to supervise facilities during an emergency. A final program evaluation was also conducted to obtain feedback on various aspects of the program (structure, content, online learning forums, etc.).

CSIH initiated the in-person Supportive Supervision Mentorship Program in Q3 of Year 4, building from the content presented and discussed through the virtual/online program conducted with select supportive

supervision mentors from each Regional and Council Health Management Team. The original Mentorship Program was designed to take place over four in-person coaching sessions, however due to the setbacks caused by the pandemic, the program was reduced to two in-person sessions.

The first of these sessions took place in November 2020 with 36(15f,21m) identified mentors and aimed to continue building capacity and skills for conducting effective supportive supervision. Specifically, the exercise was designed to provide mentors with the confidence to develop critical and reflective thinking abilities to effectively lead change, mentor, coach, and use new and creative approaches and tools throughout the full supportive supervision process. The exercise included 2-days of classroom sessions to go through planning and preparation processes and procedures for supportive supervision and discuss how an effective supportive supervision visit should proceed, followed by 2-days of on-job visits to dispensaries and health centres to practice mentoring and coaching skills as well as action planning and reporting.

Mentors were highly motivated and interested in this exercise and demonstrated self-drive and ownership in improving supportive supervision in their region/district. Supervisees at health facilities were impressed with the new method of supportive supervision being practiced, finding the visits very friendly and useful. The GROW (Goal, Reality, Options, Will) model of coaching is still new and requires more practice for supervisors to become comfortable with this approach, and supervisees also need to become familiarised with the process to ensure they are actively involved in identifying challenges and action planning. These skills were practised during the second on-the-job training session with mentors in Q1 of Year 5.

During the workshop it was recommended that the supportive supervision guides and tools being formally reviewed by the region for approval and dissemination region wide. Regions have the authorization to develop and adapt tools for supportive supervision as long as they align with national policy and guidelines.

Supportive Supervision Visits per Health Facility

From April 2018 to the end of project activities in June 2021 a total of 2,189 supportive supervision visits were completed at the 265 health facilities supported by TAMANI. On average 0.68 visits / Quarter/ HF occurred across the life of the project which does not meet the the GoT guidelines of 1 visit/quarter.

In year 2, a total of 326 Supportive Supervision visits were conducted (31% of planned visits), while in year 4 of the project the number of Supportive Supervisions was 807 (76% of planned visits) showing a significant improvement.

In the last year of the project, out of the 265 HFs supported by TAMANI 49 (18%) were visited four times or more. In total, 109 HFs (41%) were visited three times, 76 HFs (29%) were visited twice, 25 HFs (9%) were visited once and 6 (2%) were not visited. These visits were likely impacted by the pandemic with shifting priorities, limited resources, and limitations on travel in addition to reduced budget envelopes.

The supportive supervision visits are intended to work with health staff to monitor performance, identify and correct problems and proactively improve service quality. The visits are also an opportunity to encourage good practice and support health workers to maintain high quality service delivery standards. The project provided limited support to the region to conduct the supportive supervision visits (100 litres of fuel/quarter which allows for 600km of travel). While costs to cover supportive supervision were included in the region's approved budget, no funds were disbursed since July 2020. This made meeting the supportive supervision targets very difficult, while the RHMT understands the importance and value of these touch points competing demands on resources remain.

Regional Consensus Building Workshop on Supportive Supervision Process and Tools

A workshop was held in year four with Tabora RHMT and CHMT representatives from each district to review, tailor and approve a new package of tools for conducting routine Supportive Supervision visits in Tabora through a regionally owned process. The workshop also served as an opportunity to plan for the cascade of knowledge and dissemination of tools to all councils in Tabora, and to develop a process for monitoring the supportive supervision process at council and regional levels.

All tools presented were reviewed and accepted by the region with some minor adjustments to suit specific needs. Significant discussion was focused on adapting innovative approaches of conducting supportive supervision visits while adhering to the national supportive supervision guidelines. It was emphasized that this process is not intended to replace the guideline nor the existing systems, but to make the current system more efficient. Introducing the application of the GROW model and identification of prioritized area for supportive supervision was seen as contrary to the current comprehensive approach (supervising all areas within the health facilities). However, consensus was reached on how to carry out the GROW model and prioritization using facility information.

The workshop evaluation indicated that all participants felt that the training and workshops on supportive supervision to date had resulted in significant positive improvements across different areas in the supportive supervision process. CSIH subsequently developed a Supportive Supervision Tools Booklet which was presented to the Tabora Region for dissemination and use.

Output 1112 - Regional and district health authorities trained and mentored on planning, budgeting and monitoring of MNH plans

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
#/% of f/m CHMT members trained on developing CCHPs for RMNCH services	5 CHMT/district (40) 100 HF Staff	124 CHMT (69m,55 f) 94 HF Staff(34f,60m) 2 RHMT(2m)	297% 94%
# of f/m CHMT members trained on RMNH data analysis and utilization	1 CHMT member trained per district (8)	20 Health Facility Staff (12m, 8f) 72 CHMT members 2 RHMT (2m)	100% 180%

Key Activities included in the Project Implementation Plan (PIP):

- Review the CCHP guidelines and training materials.
- Train R/CHMT on CCHPs and Financial Management
- Conduct quarterly CHMT Meetings and joint work planning
- Develop training materials for HMIS
- Train R/CHMTs on HMIS and Data Utilization
- Conduct quarterly data quality assessment meetings
- Support CHMT and Health Facilities on 2021/2022 Annual Health Facility Plans and CCHPs
- Health Facility Plan Assessment Tool
- Supporting CHMT to Assess Annual Health Facility Plans

Review the CCHP guidelines and training materials

In Year 1 CSIH reviewed the new GOT Guideline for Developing Annual Health Centre and Dispensary Plans and worked on developing a new approach to this training, given the directive of the GoT to focus this work on health facility staff as opposed to CHMT members.

Train R/CHMT on CCHPs and Financial Management

CSIH rolled out its training packages for Planning and Budgeting for RMNH services during Year 2 and Year 3. Training sessions took place in line with the national planning cycle and covered all aspects of the planning and budgeting cycle, including situation analysis, problem identification, priority-setting, costing, and budgeting. Much of the training focused on group work around Actions Plans intended to guide CHMT's in drafting CCHPs and Health Facility Managers in developing their facility-specific strategic plans.

Trainings in Year 3 were conducted with Council Health Management Teams (CHMT) members and Health Facility Managers on developing 2020/2021 annual health facility plans and budgets, and Comprehensive Council Health Plans (CCHPs). Training was strategically planned to occur at the beginning of the Planning Cycle, after the guidelines, planning priorities, etc. were released. After all health facilities had completed the first draft of their plans and submitted to CHMT for review, CSIH conducted a second on—the-job exercise to support CHMT to assess the plans, identify areas for improvement, and provide guidance to health facilities to revise their plans.

Conduct quarterly CHMT Meetings and joint work planning

The quarterly review meetings are the platform for the CHMT to reflect and measure their performance against planned activities. Through these meetings, partners and CHMT members share experiences and discuss challenges (i.e., findings from supportive supervision visits). The project supported a total of 31 CHMT meetings which also provided an opportunity to share and initiate discussions on TAMANI sustainability plans, largely focused on CHW retention. Other agenda items included data quality and increasing RCH outreach services in hard-to-reach areas during the rainy season. The CHMTs showed an interest to sustain and takeover some of the TAMANI interventions and included these in their CCHP plans including CHW stipends, funding to support the operation of ambulances and a simplified Community Score Card model to gather community priorities to inform health facility planning and Quarterly CHMT meetings.

Develop training materials for HMIS

In Year 2 a training package was developed for CHMTs in Tabora with the purpose of supporting CHMT members with evidence-based decision-making skills and increasing their capacity to use sex and age-disaggregated data. The training was designed to build off the health facility planning and budgeting training (i.e. using data for M&E of health facility service plans) but also works as a standalone training package.

Train R/CHMTs on HMIS and Data Utilization

In Year 3 training was carried out on understanding, analyzing, and interpreting routine data collected through HMIS with CHMT from Kaliua DC, Urambo DC, Tabora MC, and Nzega TC in August 2019. The purpose of these workshops was to enhance quality of routine reproductive, maternal, adolescent and child health data, analyze data for M&E purposes, develop strategies for communicating data, and discuss examples of using health information for decision-making to improve service delivery.

In Year 4, a workshop was carried out to orient health facility staff from Health Centres on the DHIS2 platform use for data management, and analysis was conducted in March 2021 with HMIS focal persons

from 20 Health Centres across Tabora Region, as well as representatives from each CHMT and the RHMT. The RHMT selected Health Centres for participation based on greatest need for enhanced skills in this area. This training was developed to fill gaps identified through previous activities focused on developing annual health facility plans and budgets.

A pre- and post-test was conducted to determine extent of learning from the workshop, and found knowledge improvement, with scores across all topic areas shifting from an average of 2.5 out of 5 up to 4.5 out of 5 following the workshop. Though the overall workshop was quite successful, with participants feeling that both the content covered and facilitation met or exceeded their expectations, several challenges were identified with the overall data management process at health centres. Not all health centres are adequately equipped with laptops for digital data entry. Another significant challenge is that those responsible for data management at the health centres are often not included in the planning and budgeting process, which results in poor quality or inappropriate data being used in the development of annual health facility plans.

Conduct quarterly data quality assessment meetings

The quarterly review meetings were the platform for the CHMT to reflect and measure their performance against planned activities. Through these meetings, partners and CHMT members shared experiences and discussed challenges (i.e., findings from supportive supervision visits).

However, quarterly data quality assessment meetings were not conducted on a regularly basis. The project decided that providing funds to support these meetings (that should be happening already) was not a sustainable way to use project funds and instead redirected funds to support Health Facility staff to improve capacity on data quality. This activity was removed from the Year 3 Annual Work Plan, however TAMANI staff continued to advocate with CHMT staff to conduct Data Quality Improvement sessions as per the GoT policy.

Support CHMT and Health Facilities on 2021/2022 Annual Health Facility Plans and CCHPs

While no CCHP training was planned in year four, an online training program was delivered at the request of the region to support the ongoing Health Promotion initiatives within the Tabora Region with a focus on refreshing and improving knowledge and skills of R/CHMTs on various aspects of Health Promotion including principles, processes, strategies and approaches (see COVID response activities above).

Health Facility Plan Assessment Tool

Up until the 2021/2022 planning and budgeting cycle, there had never been any requirement to conduct a formal assessment of plans (i.e., use of checklist/ assessment tool to score the performances of the health facility plans by the councils). The assessment process was previously not standardized, and each CHMT had their own approaches of aggregating their respective health facility plans to align with the CCHP guideline. To address this issue, CSIH developed an assessment tool in 2019 to support the standardization of the assessment process in Tabora Region. While it was planned to hand over the final version of this tool to the MoHCDGEC at the end of the TAMANI Project, the MoHCDGEC institutionalized their own assessment tool requiring districts across the country to perform formal assessments of health facility plans in their catchment areas. Both the CSIH and MoHCDGEC tools are very similar, but considering that CSIH's tool has been tested and improved over three years of use, it provides several advantages including:

- The tool covers all sections in the National Planning and Budgeting Guidelines for Health Centres and Dispensaries.

- The tool has weighted scores for different criteria.
- Most criteria are described in detail so that each assessor understands what to assess, and hence resulting in a more standardized process.
- An 'All or None' approach is used, meaning that there is no room for in-between scores particularly for this level where the information needs to be thorough and precise.

In Q1 of Year 5 CSIH presented the tool along with recommendations on how to update/improve the national tools to MoHCDGEC for roll-out prior to the 2022/2023 planning cycle.

Supporting CHMT to Assess Annual Health Facility Plans

CSIH facilitators provided technical assistance in Year 4 to CHMT from each of the 8 districts in Tabora to assess the submitted plans and provide feedback to the health facilities where necessary. The timing of this activity purposefully coincided with the timing of submission of 2021/2022 annual plans and budgets from health facilities to the CHMT to ensure maximum support and benefit. A total of 76 CHMTs were involved in the exercise in which a total of 63 health facility plans were assessed. This support builds on training provided to CHMT and Health Facilities on developing annual health plans, and support provided to CHMT in 2020 for assessing plans and providing feedback to health facilities.

It is noteworthy that this was the first time that a complete assessment of plans was done for the health facility plans for the upcoming fiscal year (in this case 2021/22). By conducting a full assessment of their respective health facility plans using the HFP Assessment Tool, most participants acknowledged that the exercise and the tool were very helpful to make them identify numerous weaknesses and revise and improve their plans before final submission.

Overall, an improvement of performance scores was noted in many of the facilities that were assessed. Of all 63 plans assessed, 25 scored 80% and above, and 5 scored 90% and above. Ten health facilities did not perform well (below 70%) which contributed to a lower performance score of their respective councils. The CHMTs were advised accordingly to re-visit those with low scores and support them in improving their plans. Participants committed to ensure that they apply the tool not only in assessing the plans but also in guiding revisions of plans before they are submitted to the RHMT.

Output 1113 - Reproductive, maternal, and newborn health systems research projects conducted

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of research projects	2 research projects	2	100%
# of reproductive, maternal and newborn health publications written	3 publications	3	100%
Key Activities included in the Project Implementation Plan (PIP):			
• Develop Evaluation Protocol • Conduct Literature Review • Collect data for Formative Gender Research • Conduct research dissemination workshops			

Develop Evaluation Protocol

The Project Evaluation Protocol was finalized, and three ethics approvals were granted in Year 1 for the baseline and subsequent 'step' household surveys and gender qualitative research by Ifakara's Institutional Research Board, McGill's Research Review Committee, and Tanzania's National Institute for Medical Research. The baseline report was submitted to GAC in November 2017.

The study design to evaluate the TAMANI project was developed with CARE, McGill and Ifakara Health Institute (IHI) with consideration of the logistical constraints surrounding the implementation of the project. The sampling frame and randomization order of district clusters for implementation of the stepped wedge design was finalized in September 2017. This impact evaluation assessed the effect of two elements of the overall TAMANI project, specifically the Basic and Comprehensive Emergency Obstetric and Newborn Care training and deployment of Community Health Workers. This pragmatic evaluation examined the impact of these trainings, over and above any impacts due to the larger TAMANI intervention, including upgrading facilities, providing ambulances and community meetings. The evaluation used the staggered roll out of the EMONC trainings and CHW deployment to estimate impact while accounting for district effects and secular time trends. The full evaluation report can be found in Annex 12.5.

Conduct Literature Review

The first "step" household survey, also the projects' qualitative baseline, was completed in December 2017. The household survey was developed using material from several reference sources including the Tanzania Demographic and Health Survey, RADAR, CARE's WE-MEASR (Women's Empowerment Multidimensional Evaluation of Agency, Social Capital & Relations) tool, the Alarm International Program from SOGC, and the Respectful Maternity Care Charter from White Ribbon Alliance.

Collect data for Formative Gender Research

The research included the use of diarists recruited from two study communities (one without a district hospital (Uyui) and one with a district hospital (Urambo)) to collect and document examples of gender inequality and power dynamics within their community. Using the themes that emerged from these stories, researchers further explored these dynamics through In-depth interviews and Focus Group discussions. The IHI researchers acknowledged their position in the research and tried to reduce power imbalances between themselves and the participants of the research. As data was collected, further lines of inquiry were allowed to emerge with exploration focused on participants' experiences.

Health Research Projects

The gender qualitative research was completed in Y1 with a follow up research conducted at endline. The second research project being the step wedge evaluation, was completed and can be found in Annex 12.5.

Health Publications

The project previously participated in the White Ribbon Alliance's "What Women Want" global campaign, collecting 1600 responses from women and girls in Tabora on their one RMNH priority. This data has been analyzed and the project developed and disseminated an infographic (previously shared). In addition, the evaluation protocol was finalized in Year three and submitted for publishing by McGill. It was also published by McGill via their Website in Q3 of Y4. With the low availability of literature on respectful maternal care in practice, McGill has also submitted a version of their policy brief on RMC to a journal for publication which highlights the key learnings and recommendations on RMC based on RMC questions in the household survey and health care provider RMC evaluations.

Conduct Research Dissemination Workshops

Research dissemination workshops were originally planned as part of the endline data dissemination and sense making by McGill University. Given that travel from Canada to Tanzania is still not advised, these plans have been revised to an online learning session in November 2021 to present the endline analysis. CSIH carried out a dissemination in Q1 of Y5 in Dodoma which was hybrid in person with virtual attendance. The main purpose of this activity was to inform the Ministry of Health and PO-RALG on the experience of activities carried out by CSIH in three regions of Tanzania and consider ways of disseminating the new initiatives of planning, leadership, and supportive supervision to other regions. CSIH presented their policy briefs and recommendations for the region and MoH.

Output 1114 - Policy briefs on priority issues related to RMNH written and disseminated for district, regional and national decision making

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of policy briefs written and disseminated	5 policy briefs	5	100 %
# of reproductive, maternal and newborn health consultations held at local, district, regional and national levels	5 consultations	1	20%
Key Activities included in the Project Implementation Plan (PIP):			
• Conduct Literature Desk Review • Develop policy briefs • Conduct Consultation			

Conduct Literature Desk Review

McGill completed the draft literature review on the outcomes of interest to TAMANI in Year 1.

Policy Briefs & Consultations

The development of the policy briefs was driven both by key learning and project outcomes, as well as policy interests and gaps in Tanzania (See Annex F). These themes were selected to fill research and evidence-based policy gaps both in the healthcare and research landscapes of Tanzania.

SOGC and AGOTA have completed a policy brief highlighting learning related to the EmONC simulation-based evaluation and coaching strategy implemented within the project. The analysis focuses on the knowledge and skills retained by the health providers related to the management of four neonatal and obstetrical complications captured via the OSCE's and provides high level recommendations for the MoHCDGEC. AGOTA presented these findings at the at the International Federation of Gynecology and Obstetrics' 2021 World Congress in October and at the RMNCH Scientific Conference supported by the Ministry of Health in Tanzania (also in October 2021).

McGill completed a policy brief on Respectful Maternal Care, integrating findings from the baseline and endline results. Key recommendations were created for SOGC, CARE and AGOTA and the MoHCDGEC on how best to continue to emphasize inclusion of all aspects of RMC, including women's right to choose in

their birthing experience, and the meaning and importance of informed consent, in HCW training and mentoring programs.

CSIH completed two Policy Briefs (in English and Swahili) to inform decision making at the regional and national levels on the overall planning and budgeting process for health service delivery, highlighting key resources, challenges, and areas for improvement. CSIH carried out a dissemination meeting in Q1 of Y5 where policy recommendations and findings of their endline evaluation were presented to the region.

IHI completed one policy brief on the determinants of health facility birth and what factors continue to lead to home facility births without skilled birth attendants. IHI used endline analysis to form key recommendations for the Tabora regional and MoHCDGEC on what TAMANI interventions contributed to change and how best to sustain and scale up similar interventions to other regions.

Output 1121 - Emergency transportation system for pregnant and postpartum women and newborns developed

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
#/% of villages with emergency transportation systems	20 villages	40 villages	200%
#/% of pregnant women, and adolescent girls using emergency transportation	10 referrals/ ambulance/ month	8 referrals/ ambulance/ month	80%
Key Activities included in the Project Implementation Plan (PIP):			
• Assess current Emergency Transformation System • Purchase and distribute Suzuki Ambulances • Conduct quarterly monitoring for emergency transportation			

Assess current Emergency Transformation System

In 2015, the TABASAM project (previously funded by GAC in Tabora) purchased 16 emergency vehicles for dispensaries and health centers in Tabora to improve village access to adequate and timely health services. It was found that mothers were aware of the benefits from health center visits but were deterred by transport challenges as there was no emergency transport system in the 6 districts the project was being implemented. The Emergency Transportation Assessment was carried out in September-October 2017, with 28 women and 41 men (in catchment areas covered by the 16 TABASAM ambulances) to establish utility, affordability, challenges, and impact associated with the vehicles. Participants included health care workers, community members, and government leaders in respective wards.

Purchase and distribute Suzuki Ambulances

Four new ambulances were delivered in Year 2 to the Regional Commissioner (RC) of Tabora region. Four health facilities were identified for the ambulances; Mibono Dispensary (Sikonge district); Goweko and Tura dispensaries (Uyui district); and Usinge dispensary (Kaliua district). TAMANI monitored the function and utilization of emergency transportation throughout the project. In Year 4, the project noted that district councils increased monitoring and support to running costs including drivers' salaries, fuel, and maintenance costs for both new and old ambulances. Lessons learned from TABASAM indicated the management of ambulances worked best if in partnership between the government and communities. Left alone, communities were unable to cover the costs for major maintenance or driver's salaries. Similarly,

the government could not cover all costs due to limited budget. Hence, the project advocated for a community-government ownership model.

Conduct quarterly Monitoring for Emergency Transportation

The status of each Suzuki ambulance is summarized below:

- Mibono dispensary (Sikonge district): the vehicle is in good condition and working, it continued to serve the assigned community and surrounding villages in the Mibono catchment area and had a permanent driver assigned.
- Goweko dispensary (Uyui district): the vehicle is in good condition and has a permanent driver employed by the district council in the FY 20/21.
- Tura dispensary (Uyui district): the vehicle is in good condition, operation costs were covered by the community, while maintenance costs were covered by the district councils. Both Goweko and Tura drivers were employed by the district council.
- Usinge dispensary (Kaliua district): the vehicle was in good condition and the District Council has conducted minor maintenance and tire replacement.

In Year 3, the ambulances served a total of 172 referrals with 3.6 referrals per ambulance per month. The number of referrals per month fell because drivers were employed on a temporary basis, rainy weather conditions made some communities inaccessible. In Year 4, the ambulances served a total of 354 clients with 8 referrals per month. The monthly number of referrals increased due to permanent drivers being employed as District Councils increased the budget allocation for vehicle running costs including fuel and maintenance. Simultaneously, the construction of new health centers resulted in CEmONC services closer to communities therefore reducing referrals for C-sections. Referred clients included pregnant women and children that required emergency services and were referred because of poor progress of labor, prolonged labor, post-partum hemorrhage, anemia, and malaria.

Ambulance Referrals Per Community

Table 1: Ambulance Referrals Per Community

Ambulance	Y3	Y4	Total
Mibono	46	82	128
Goweko	14	42	56
Tura	46	69	115
Usinge	66	160	226
Total	**172**	**354**	**526**

TABASAM Ambulances

The project also monitored the 16 TABASAM ambulances throughout the lifecycle of the project, and in Year 3 began tracking numbers of ambulance referrals per district, reflected in table 1. Over the span of the project the ambulances served a total of 2,909 referral cases. One ambulance located at Ubinga dispensary in Nzega DC was under major maintenance, financed by the council, in Year 4 following a road accident due to heavy rainfall, however, no injuries occurred. At project end, all 16 vehicles were in good condition and continued to serve project beneficiaries six years after being delivered to the region.

Output 1122 – Health facilities equipped and rehabilitated

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
#/% of health facilities equipped and/or rehabilitated to provide BEmONC & CEmONC	4 Health centers (CEmONC) 70 Dispensaries (BEmONC)	11 Health Centers & 158 Disp.	Health Centers (275%) & Disp. (225.7%)
Key Activities included in the Project Implementation Plan (PIP)			
• Equip health facilities to meet CE/BEmONC standards • Rehabilitate Health Facilities			

Equip Health facilities to meet C/EmONC standards

The project completed the supply of EmONC equipment to health facilities in Year 3 and inspections were conducted by CHMTs to validate workability and standards of equipment. The equipment was distributed to 11 health centres and 158 dispensaries. Project monitoring on the use of the equipment was integrated into various activities such as coaching and mentorship, CHMT supportive supervision visits, and during project staff visits. Health care providers stated that the equipment was very useful and enabled them to put into practice the acquired knowledge and skills from the EmONC training. The project continued to advocate for budgets for cuvettes and ensured that safety precautions on equipment were provided to all CHMTs.

Rehabilitate Health Facilities

In year one the project collected views and opinions from a randomly selected group of 192 women across Tabora region on priority rehabilitation work to make health facilities more comfortable in accessing RMNH services. The consultation showed that 42% of women listed a reliable source of water as their priority while 30% pointed to solar power as their second priority. The remaining 30% suggested improvements in labour wards, theatres, delivery beds, laboratories, labour rooms, and commodities. The priorities of women guided the prioritization of rehabilitation activities that were related to water supply, solar power, and the completion of RCH buildings. This required ongoing and consistent negotiation with the regional and council health management teams to come to agreement. The final rehabilitation project was completed in Year 4.

In Year 2, the project installed planned solar power systems with 200W solar panels and five-piece lights at 10 health facilities and completed the installation of rainwater harvesting systems at 18 health care centers and dispensaries. In Year 3, after a review of updated budgets and Bill of Quantities (BoQs) received from the districts, which reflected market prices and did not include forced accounts, the number of rehabilitation projects were reduced to 14. These changes were made after extensive consultations with respective districts and after all selected facilities had conducted, shared, and approved Environmental and Social Impact Assessments (ESIAs).

The table below summarizes the final list of rehabilitated facilities. Given that all but one project was non-structural in nature, CARE followed the Contribution Agreement guidelines and included regular updates in project reports, as well as updated the construction plan for the structural Zogolo HC project in the Semi-Annual Operations Report submitted to GAC in November 2020.

Table 2: Total rehabilitation projects (21) completed including the solar power projects

District	Facility	Works	Status
Urambo DC	Urambo Hospital	Rehabilitated maternity ward	Completed
Nzega DC	Bukene HC	Rehabilitated rainwater harvesting system: Guttering, water tank and base	Completed
	Kahama Nhalanga	Installed 200W solar system	Completed
	Igusule Dispensary	Installed 200W solar system	Completed
	Ugembe Dispensary	Installed 200W solar system	Completed
	Nkindu Dispensary	Installed 200W solar system	Completed
Uyui DC	Miswaki Dispensary	Rehabilitated rainwater harvesting system: Guttering, water tank and base, Installed 200W solar system	Completed
	Miyenze Dispensary	Rehabilitated rainwater harvesting system: Guttering, water tank and base Installed 200W solar system	Completed
	Ishihimulwa Dispensary	Installed 200W solar system	Completed
TMC	Tumbi Dispensary	Rehabilitated rainwater harvesting system: Guttering, water tank and base	Completed
	Kakola Dispensary	Installed 200W solar system	Completed
	Umanda Dispensary	Rehabilitated rainwater harvesting system: Guttering, water tank and base	Completed
Kaliua DC	Nsimbo Dispensary	Completed works: Tiling, and RWH System: Guttering, water tank and base	Completed
Igunga DC	Majengo Dispensary	Rehabilitated rainwater harvesting system: Guttering, water tank and base	Completed
	Mwamashinga Dispensary		Completed
	Mwanyagula Dispensary		Completed
	Tambalale Dispensary		Completed
Nzega TC	Zogolo HC	Rehabilitated water tower, rainwater harvesting system, and plumbing	Completed
	Undomo Dispensary	Installed 200W solar system	Completed
Sikonge DC	Kipili Dispensary	Completed works on: Ceiling, Doors, Windows, Plastering, Painting	Completed
	Igalula Dispensary	Installed 200W solar system	Completed

The TAMANI project rehabilitated Urambo District Hospital Maternity Ward that attracted more pregnant women to use the hospital's delivery services. Between May 2020 to March 2021, a total of 2,426 women came to the facility to give birth, which saw a 6% (137) increase in deliveries compared to the previous period. The maternity ward became more comfortable and provided privacy to patients after exterior and interior painting and partitioning were completed, and new tiles and an entrance door were installed. After rehabilitation works, the facility hosted a special room for Kangaroo Mother Care (KMC) services for the labor ward building.

Figure 1: Rehabilitated Urambo District Maternity Ward

Figure 2: Client, Asha Juma, fetching water at Bukene H/C

In Kaliua district at Nsimbo dispensary, the health care provider in charge, Madina Haji, revealed that before the rainwater harvest system was installed, the facility used water from a local vendor who supplied water through buckets of 20 liters costing 100 TSH each. The facility used a maximum of 10 buckets of water for cleaning and client use per day equating to 1,000 TSH. The project installed a rainwater harvest system with a capacity of 5,000 liters of water to serve the facility and a full tank served the facility for 50 days, which saved 50,000 TSH.

Health Facilities demonstrated simple measures on hygiene such as improved cleanliness of toilets, installment of low-cost handwashing stations, water treatment at health care facilities, increased uptake of services, and promotion to change hygiene practices at home (e.g., regular handwashing with soap) among community members.

Installation of solar system to support night deliveries

The solar power system improved the delivery of medical services by ensuring quality light during treatment of nighttime emergencies, emergency deliveries, and for security purposes at the main building and staff quarters. The solar power system reduced expenditure on energy sources for lighting and anecdotally increased morale of health staff who were enabled to work safely at night. Health staff acquired a source to charge cell phones, which was especially beneficial in remote rural areas with no access to grid power. In Year 4, a total of 1,561 night-deliveries occurred at 10 health facilities, which had received solar power through the project. According to HMIS data, a 203% increase was noted in nighttime deliveries at these health facilities compared to the period of Oct 2019-Mar 2020 (320 deliveries) to October 2020 to March 2021 (971 deliveries).

Follow-up and Monitoring of Rehabilitation Projects

Site inspections were either initiated by the project or requested by contractors. A typical site inspection involved TAMANI project engineer, district engineer, the contractor, and representatives from Health Facility Governing Committee. Assessments focused on preliminary work (e.g., mobilization and demobilization), as well as progress made on the work as per the BoQ including how the ongoing or completed project adhered to the recommendations from the ESIA. Feedback on project performance was provided on site and thereafter documented in an assessment report signed by the district engineer. By the end of the project, all works had received two of these visits. For more information on the audit findings, see the Environmental Sustainability section.

Output 1131 - Job aids disseminated based on GoT RMNH clinical practice guidelines

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of job aids developed	4 Job Aids	4 Job Aids	100%
# of health facilities with job aids	140 Health Facilities	265 Health Facilities	189%
Key Activities included in the Project Implementation Plan (PIP)			
• Desk review BEmONC/CEmONC • Develop Job Aids • Purchase ALARM International Program (AIP) Kits			

Desk Review BEMONC

The health facility assessment survey was administered in Year 1. It requested Heath Care Workers to prioritize job aids which they felt would be most useful to them in their work. The findings prioritized job aids in this order: Management of Labour and Obstructed Labour (21%), Care of the Newborn and Resuscitation (16%), Postpartum Hemorrhage and Active Management of the Third Stage of Labour (13%).

Develop Job Aids

The four job aids were developed and approved by the MoHCDGEC and printed in Year 2 and distributed in Q1 of Year 3 to 256 health facilities. The job aids were in Swahili and provided guidance on the management of Postpartum Haemorrhage (PPH), Eclampsia, Newborn Resuscitation, and the Active Management of Third Stage of Labor with integrated respectful maternity care cues. Before distribution to the health facilities, the DRCHCO's were oriented on the use of the job aids and, thereafter, served as the contact persons in case health providers had questions. As part of the distribution process, health care providers were also oriented on the use of the job aids. Project staff continued to monitor the use of job aids at health facilities until the end of the project.

Figure 4: Four Job Aids posted beside a bed in a labour room at Isigili dispensary, Nzega DC

Figure 5: A Job Aid on Neonatal Resuscitation posted besides resuscitation table at Kitete referral hospital, Tabora MC

Purchase of AIP kits

SOGC provided two full ALARM International Program (AIP) training kits to facilitate simulation learning. One kit was provided for CEmONC and another for BEmONC. Five additional mini kits were delivered in July 2018 to support the coaching/mentoring teams. Trainers and participants both commented on the quality of the equipment and the added value they provided for the training. These kits were handed over to the RHMT for continued coaching and mentoring within the region.

Output 1132 - Health care workers trained on CE/BEmONC and family planning

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of m/f health care workers trained on CE/BEmONC	270 Health Care Workers	270 (121f/149m)	100% (121f/149m)
% change in knowledge of m/f health workers of CE/BEmONC (pre-test/post-test)	20% improvement in knowledge	24% improvement CEmONC: 33% improvement BEmONC: 35 % improvement EmONC: 15.5% improvement	120%
Key Activities included in the Project Implementation Plan (PIP): • Train HCWs on BEomONC • Train HCWs on CEmONC • Train HCWs on SRHR including long-acting family planning			

CE/BEmONC Training of Health Care Providers (HCWs)

In Year 2, TAMANI conducted 2 rounds of training with 205 HCWs in EmONC including 60 HCWs (29 male and 31 female) on Basic Emergency Obstetrics and Newborn Care (BEmONC) and 10 HCWs (6 male and 4 female) on Comprehensive Emergency Obstetrics and Newborn Care (CEmONC). After this training, the MoHCDGEC introduced changes to the BEmONC and CEmONC Learning Resource Packages combining them into one EmONC Clinical Mentorship Training. The new curriculum was 5 days (versus 2 and 3 weeks respectively). The rationale from the MoHCDGEC was that the training should be more practical than theoretical (covered by the medical training colleges). The project experienced some delays in implementing the third round of training in Year 2 given the new curriculum, availability of trainers oriented on the new curriculum, and questions on the training equipment required.

The final EmONC Clinical Mentorship training was delivered to 65 Health Care Workers in Q1 of Year 3. The five-day training was facilitated by national EmONC trainers from MoHCDGEC. The training covered content on Management of APH (Antepartum Haemorrhage) and PPH (Postpartum Haemorrhage), the management of severe pre-eclampsia and eclampsia, Respectful Maternity Care (RMC), use of the partograph, dealing with shoulder dystocia, and cord prolapse.

Table 3: Summary of total number of HCWs trained on EMONC per district

District	Female	Male	Total
Urambo	20	22	42
Kaliua	14	14	28
Igunga	19	14	33
Nzega DC	17	20	37

District	Female	Male	Total
Tabora Municipal	4	27	31
Uyui	18	16	34
Sikonge	16	20	36
Nzega TC	6	9	15
Additional	7	7	14
Total	**121**	**149**	**270**

Train HCWs on SRHR including long-acting family planning

The project had planned to integrate training on long-acting family planning into the EmONC training, but the MoHCDGEC did not allow the curriculum to be adapted, and therefore this training was not delivered.

Change in Knowledge of Health Care Workers

The written pre-test and post-tests were administered at the beginning and end of both rounds of EmONC training. In the last round of EmONC training in Year 3 there was an average pre-test score of 54% and the post-test score was 78% showing a 24% increase in knowledge after the training. The pre- and post- tests were administered by the MoHCDGEC National Trainers, who did not share the raw data with TAMANI, and instead shared total scores. This was a limitation for the project in terms of providing a deeper analysis and controlling data quality. Similarly, AGOTA noted not all trainers use the same pre- and post- tests, which was another limitation.

AGOTA noted some concerns with the consolidated EmONC training, which reduced time allotted for discussion and sharing of experiences between participants and trainers. Essential topics were also removed from the package such as Infection Prevention and Control. AGOTA recommended that the training program be reviewed in collaboration with the Ministry of Health and other development partners to update the training package and ensure essential modules and resources were included. As part of this engagement, TAMANI worked with AGOTA to share the skills and knowledge retention scores from the two training cohorts (CEmONC and BEmONC versus the Pre-mentorship Consolidated EMONC training). Additionally, observations and recommendations from previous training sessions with the Ministry were shared to improve the evidence-based decision-making module in the training package.

The photographs below show some of the practicum sessions during the training.

Figure 6: Demonstration of Neonatal resuscitation

Figure 7: Demonstration of Manual Vacuum aspiration

Output 1133 - Health care workers mentored on CE/BEmONC and family planning

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of m/f health care workers mentored on CE/BEmONC and family planning	270 health care workers (12 months post-training)	200 (93m&107f)) health care workers at 12 months post training	74%
Key Activities included in the Project Implementation Plan (PIP):			
• Develop OSCE • Mentoring visits at 6- and 12-months post-training using OSCEs			

Developed OSCEs

SOGC developed a coaching and mentoring plan in Year 1, which was adapted to replace SOGC volunteer coaches and trainers with AGOTA members as coaches and with MoHCDGEC national trainers delivering the national EmONC curriculums. This adjustment was made to align with MoHCDGEC policy. SOGC volunteer coaches instead delivered specialised support identified by AGOTA and TAMANI staff.

The coaching activities were started in Year 2 and integrated a respectful maternity care reflection tool and Objective Structured Clinical Evaluations (OSCEs) to track retention of learning post-training.

The aim of this evaluation was to estimate the extent to which the EmONC training, including coaching and mentoring visits implemented within the project, contributed to improvements in the skills of health care providers (HCPs). The RMC reflection tool was used to draw health care practitioner's attention to the importance of communication with clients and prompted personal reflection on their own attitudes towards clients.

Coaching and mentoring (C & M) visits at 6 – and 12 – months post-training

AGOTA in collaboration with the MOHCDGEC, SOGC, and CARE Tanzania led the coaching and mentorship team. AGOTA members provided BEmONC coaching and mentoring support, and an SOGC member provided CEmONC support. For each coaching team, members from the R/CHMTs were included to build regional coaching capacity. Coaching sessions promoted the retention of knowledge, skills, and confidence through competency-based clinical skills practice with anatomical models to build confidence while protecting patients from harm.

C & M visits reached 267/270 (99%) of EmONC graduates at either a 6- or 12-month visit. In total 228/270 were visited at 6 months (84%) and 200/270 were visited at 12 months post training (74%). A total of 271 (97m/174f) additional Health Care Providers benefitted from the C & M visits through participation in the coaching visits and observing simulations of birth complications such as postpartum hemorrhage management, pre-eclampsia, vacuum delivery, newborn resuscitation, and the ability to discuss clinical cases with mentors and TAMANI trainees.

Figure 8: Anacret Sindabaha - Vumilia dispensary

Below is a testimony of a participant who was not originally trained in EmONC by the TAMANI project but benefitted from C & M visits at his health facility (dispensary).

"*…The mentoring visits have changed my practices generally because I was not technical and skillful enough to deal with emergency obstetrics as well as neonatal resuscitation before and I can confidently say we have no maternal deaths or neonate deaths that have happened since we got knowledge from your mentoring visit.*" - Anacret Sindabaha

Feedback from participants and project staff identified several unintended positive consequences through the coaching component of the project; coaches modeled respectful care with patients and reviewed health facility equipment with staff and R/CHMT members and provided recommendations on how HFs can be better prepared for obstetric emergencies. In Year 4, some visits were delayed due to COVID-19, but the team managed to complete all visits in all districts planned. Having locally led coaching teams reduced the impact of SOGC volunteers being unable to travel.

AGOTA President, Honorary General Secretary, and CHMT members from respective districts joined the field team to monitor and follow-up on AGOTA activities in the final reporting period. The team engaged in discussions with various TAMANI staff, visited the Tabora RHMT Office, and participated in the coaching and mentorship visits. AGOTA delegates also provided feedback to the coaches post-mentoring. The involvement of RHMT/CHMT members in the mentorship teams increased accountability and sustainability of activity as they were in good position to plan, dedicate budget, and advocate for continued mentorship visits when the project ended. The equipment used in the mentoring visits was handed over to RHMT for that purpose.

Figure 9: Demonstration of how to perform neonatal resuscitation

Completed Coaching and Mentoring Missions

Table 4: Completed Coaching and Mentoring Missions

Dates	Districts	Male	Female	Total	Additional HCPs
September 2018	6-month Urambo & Kaliua	31	31	62/70	n/a
May 2019	12-month Urambo & Kaliua	27	31	58/70	21 (9m/12f)

Dates	Districts	Male	Female	Total	Additional HCPs
July – August 2019	6-month Igunga & Nzega DC	28	30	58/70	37 (15m/22f)
November 2019	6-month Tabora Municipal & Uyui	20	35	55/65	68 (19m/49)
January – February 2020	6-month Sikonge & Nzega TC	24	29	53/65	32(14m/18f)
March 2020	12-month Igunga and Nzega DC	26	25	51/70	36(11m/25f)
August – September 2020	12-month Tabora Municipal & Uyui	18	29	47/65	43 (13m/30f)
November – December 2020	12 months Sikonge & Nzega TC	22	22	44/65 (68%)	34 (16m/18f)

Overall, scores for the management of post-partum hemorrhage improved over time (see outcomes section for more details). A focus group discussion and interviews were conducted with Tanzanian coaches and mentors after their experiences showed that their expectations were met and many shared that they benefitted professionally and personally from this experience.

> *"Professionally, I have gained much experience on simulation training and the way we provide positive and negative feedback during mentorship process." - TAMANI EmONC mentor*

Some coaches were surprised by the condition of work in rural areas, which enhanced their understanding of rural challenges in maternal and newborn care.

> *"Most health workers who were working in the rural areas […] they are understaffed, and they have to see many cases beyond their skills and knowledge […] and sometimes, they have limited resources. This was not in my mind; I was so surprised to see a single health worker […] let's say in an antenatal clinic, he or she is capable of managing or providing antenatal services to more than 50 women in a single visit." - TAMANI EmONC mentor*

Coaching and mentoring with Canadian professionals was an opportunity to build confidence and discuss clinical cases and best practices.

> *"…the partnership helped me build some confidence... what I am doing is probably right, is acceptable internationally... in terms of improvement... because if you are psychologically satisfied that what you are doing is right... and somebody from another country can vouch for that, then you feel so." - TAMANI EmONC mentor*

The involvement of Canadian specialists in Tanzania, despite challenges in recruitment and coordination of schedules, was deemed useful to increase clinical discussions, model respectful care, improve coaching and mentoring techniques, and helped build confidence of the mentoring team. The experience was beneficial for Canadian professionals as it enabled them to understand the social and economic disparities between countries.

> *"So, we really learned a lot about how they work without many resources. I gained knowledge about how people can really deal with difficulties […] and give the best they can."- TAMANI Canadian mentor*

Output 1134 - Maternal death audit developed and implemented

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of meetings and workshops to sensitize R/CHMT on MPDSR process and gaps, to align with GoT priority to follow MPDSR policy	10 meetings	30	300%
# of maternal death review assessments	1	1	100%

Key Activities included in the Project Implementation Plan (PIP):

- Conduct Maternal Death Review (MDR) Assessment
- Conduct quarterly maternal death review meetings

Conduct Maternal Death Review (MDR) Assessment

In Year 1, a local expert was identified to conduct a maternal death assessment in Tabora. This included a review of MDRs in the Tabora region, and assessment of how practices align to the Maternal and Perinatal Death Surveillance Response (MPDSR) Guidelines. Findings demonstrated that MDR practices in 2018 failed to meet the national guidelines and standards. However, the assessment showed some capacity, although limited, of Health Management Teams (HMTs) to conduct MDRs across all health system levels in the region.

Conduct quarterly MDR meetings

A MPDSR meeting was organized in Year 2 to disseminate the findings of the assessment and implement a regional action plan to address the gaps and challenges regarding MPDR, which included lack of resources, skills, and planning to accommodate conflicting priorities, particularly at the district and regional levels. The meeting updated and catalyzed existing knowledge and skills to enable health management teams to conduct MDRs more systematically and effectively. TAMANI facilitated a field visit by the technical team, which coordinated the MPDSR workshop to follow-up with districts on implementation of the agreed plan and provided technical support where required. By Year 3, the project had surpassed the targeted number of MDR meetings and workshops across the region, reviewing 56 maternal death and 116 perinatal deaths. The main causes of maternal deaths were postpartum hemorrhage, puerperal sepsis, obstructed labor, per vaginal bleeding, anesthesia, severe anemia, and cardiorespiratory arrest. The causes of perinatal death were birth asphyxia, neonatal sepsis, prematurity, and congenital abnormality. Cultural beliefs were a barrier to access quality care as well as negative side effects from certain herbs used by patients to support pregnant women, which resulted in maternal deaths in the community.

In Year 2, 3 and 4 Regional level Maternal Death Reviews were organized by the RHMT, with the objective to review regional level strategies and progress made on MPDSR and put forward recommendations to reduce maternal and perinatal death in the region. MPDSR meetings were headed by the RMO with technical support from within the region and no external support from the TAMANI team. This demonstrated an improvement in capacities within the region to implement MPDSR guidelines, a strong regional commitment to learning, and evidence of a sustainable intervention.

Intermediate Outcome 1200 (Demand): Increased utilization of reproductive, maternal and newborn health services by women and their families in targeted districts of Tanzania

Output 1211 - CHW program for reproductive, maternal, and newborn health and family planning implemented

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of m/f CHWs trained	1000 m/f CHWs	997 (459m/538f) CHW's	99.7%
# of m/f CHWs equipped with bicycles, bags etc.	1000 m/f CHWs	997 (459m/538f) CHW's	99.7%
Key Activities included in the Project Implementation Plan (PIP):			
• Map CHWs • Train CHWs and Supervisors • Procure supplies for CHWs and Supervisors • Provide stipends for CHWs			

Map CHWs

During the mapping exercises and recruitment which started in year one, key stakeholders including the Ward Executive Officers, village leaders, and councillors were involved to select CHWs using the following criteria: nominated from the community through village meeting, ability to read and write; and be a form four leaver (this was a MoHCDGEC policy change in year one of the project from a minimum education level of standard), willing to demonstrate volunteerism spirit; be a resident of the respective area for not less than five years; between 18 - 55 years old; and demonstrate good behavior or be role model.

Efforts were made to have 70% women, though the change in minimum education made this target difficult to achieve in Tabora given the low levels of secondary school completion of girls. In addition, the higher minimum level of education resulted in a higher dropout rate because trainees left to pursue further education and livelihood opportunities.

Procure supplies for CHWs and Supervisors

Trained CHWs and supervisors were provided with supplies to reach the various communities within their catchment areas. CHWs were equipped with bicycles, backpacks, an umbrella, gum boots, reporting tools, and t-shirts with RMNCH messages linked to the gender research findings. The project advocated for districts to take up roles for printing additional reporting tools while also encouraging CHWs to use savings from monthly stipends to repair their bicycles from a sustainability perspective.

Provide Stipends for CHWs

A stipend of 25,000 TSH was paid per month to facilitate communication, for example, to buy airtime for communication with CHW supervisors at the health facility to which they are attached. The process of phasing out TAMANI support for CHW stipends was completed in Q3 of Y4, the last district councils were Uyui, Tabora Municipal, Sikonge and Nzega TC. The district councils and CHMTs were working to sustain and motivate CHWs but resource limitations remained a challenge.

CHW Training and Supervisors

A total of 997 CHWs (459m/538f; 99.7%) were trained on antenatal, postpartum, and newborn care, family planning, community based MNCH activities, referral system, maternal death reporting, and monitoring community MNCH services. The CHW training was conducted using the National MoHCDGEC Integrated Community MNCH Training Package and delivered by national facilitators. The training curriculum included two weeks of classroom training and one week of practical experience in the community.

In Y2 and Y3, 242 (163f/79m) Health Care Providers from the eight districts were trained as CHW Supervisors while still a part of the health system. They provided support to CHWs; collecting CHW reports monthly, sharing this data with health facility colleagues, and the CHW Coordinator of the CHMT. Supervisors motivated CHWs at their respective facilities by including them in FP campaigns and vaccination mobilization activities.

The process of phasing out TAMANI support for CHW stipends was part of the sustainability plan and was implemented in phases. The first districts to be phased out were Kaliua and Urambo. This was originally planned for April 2020 but the CHW's were extended by four months (August 2020) to allow CHWs to participate in COVID-19 response activities. The costs were equally shared between TAMANI and another donor who provided funding for COVID-19 activities in Tabora. The next districts phased out of CHW stipend support were Igunga and Nzega DC in October 2020 and then Uyui, Tabora Municipal, Sikonge and Nzega TC in December 2020.

As of March 2021, there were 595 retained CHWs active across all eight districts. Those who dropped out stated that it was difficult to continue the work without the financial stipend which their families depended on. For those that have been retained, the good working relationship they have with the communities and the health facilities was indicated as a major motivation. CHWs were referred to as cultural brokers or mediators, providing a link between communities and health and social services and they empowered communities to exercise their rights. In addition, the opportunity to interact with clients at household and community level gave CHWs a better understanding about the broader context of people's lives. This insight was helpful for the development of prevention programmes and optimization of treatment regimens, which was led by public health and medical professionals who often missed this insight because of being facility-based.

Table 5: Active TAMANI CHWs

District	Date	Male	Female	Total CHWs
Igunga	2021 - March	38	36	74
Kaliua	2021 - March	52	16	68
Urambo	2021 - March	54	39	93
Nzega DC	2021 - March	40	46	86
Nzega TC	2021 - March	13	18	31
Sikonge	2021 - March	44	36	80
Tabora MC	2021 - March	29	54	83
Uyui	2021 - March	47	33	80
Total		**317**	**278**	**595**

Output 1212 - Youth friendly sexual and reproductive health services developed and implemented

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of Youth and HCW's trained on Youth SRHR friendly spaces	160 m/f HCWs 80 m/f Youth	160 HCWs (55 m; 105 f) 100% 76 Youth (38 m;38 f)	HCWs: 100% Youth: 95%
# of districts (CHMTs) with m/f Youth SRHR focal points	8	8(2 m;6 f) CHMT Adolescent focal person trained on ASRH	100%
Key Activities included in the Project Implementation Plan (PIP):			
• Identify youth champions/peer educators • Develop adolescent girl and youth SRHR messages • Train youth champions • Train health care workers on youth friendly services • Mentor health care workers on youth friendly services • Conduct community youth sexual education meetings			

Identify and train youth champions & peer educators

In year 2, TAMANI identified and trained 76 (38m/38f) youth champions between August 20th and 25th 2018 on Adolescent Sexual and Reproductive Health (ASRH) to promote access to reproductive health information and encourage utilization of services amongst their peers. Youth champions were selected to represent the diversity of young people in Tabora, including adolescent parents and out of school Youth. The training used national ASRH curriculum and facilitators, with additional project specific content on life skills integrated from Plan International's Youth training package. After training, Youth champions were working in collaboration with the ASRH focal points on the CHMT, as well as trained health care workers in the catchment areas of 38 health facilities.

Develop Adolescent girls and youth SRHR messages

Key messages from the national curriculum on ASRH were used by the Youth Champions around puberty, and family planning. Discussions from the meetings showed that friends are a more trusted source of SRH information for adolescents than parents or others because of cultural taboos which hinder discussion between parents/guardians and their children on these issues. Youth sexual education meetings organized by the project provided an opportunity for youth to access accurate information as well as support youth to seek SRH information and services at the health facility.

Train Health Care Providers

TAMANI began to train HCPs on youth friendly ASRH services (2006 MoHCDGEC National Curriculum for Service Providers on Adolescent Reproductive Health) in Year 2 and reached the target (160 HCWs (55m/105f)) in Year 4. The HCPs came from the same 38 communities in which youth champions were located so that the HCPs would improve provision of youth friendly services at their respective health facilities and reinforce efforts to increase demand from young people. The training was designed to address findings from the Youth KAP assessment conducted in Year 1, which attributed negative attitudes of HCWs toward youth as a major barrier to accessing contraception.

Mentor health care workers on youth friendly services

In Year 3, the project conducted 32 supportive supervision visits to monitor youth friendly services according to national guidelines. A total of 12 health facilities had identified convenient days or times, mostly weekends, for demand of YFS, 4 health facilities had identified a room for the provision of youth friendly services, and 4 health facilities had developed additional tools for documenting non-HMIS indicators related to youth friendly services. Additionally, AFSRH information was provided in facilities, during outreach activities conducted along with other planned activities such as human papillomavirus (HPV) vaccination. The project also used adolescent mystery clients to track quality of youth friendly services from 21 health facilities with trained staff.

Community youth sexual education meetings

Trained youth champions facilitated individual awareness sessions and community outreach to 5,595 (2,783m/2,810f) in-school and out-of-school youth, without the support of TAMANI, in Igunga DC, Sikonge DC, Kaliua DC and Tabora Municipal. Key messages from the national curriculum on ASRH were used by the Youth Champions around puberty, sexually transmitted infections (STIs), life skills, drug abuse, reproductive health and rights including early pregnancy and family planning.

In Year 4, the project did not facilitate any large community ASRH education meetings with youth champions to minimize the risk of COVID-19. A total of 1,734 (898m/836f) youth were reached through youth sessions, which discussed family planning methods, risky behaviors and their impacts, puberty, as well as discussion on beliefs around maturity and menstruation cycles. These sessions played dual roles in the project; to inform youth on ASRH issues as well as build a base for continuation of youth work with the absence of project staff.

> *''I share information with my fellow youth every day on the street especially issues related to sexually transmitted diseases like gonorrhea and syphillis. Mostly we discuss about the ways of infection and prevention. I have seen changes in the community as young people are keeping themselves busy rather than remaining idle. In the evening hours youth engage in sports so as to prevent themselves from engaging in spaces where there are drugs and risky sexual behaviors. I provided this advice to my fellow youth in the community, and I am glad I am seeing those changes. This has benefits because it prevents youth from engaging in negative behavior but also it increases the welfare of the community." (Male Youth Champion, Kigwa B).*

Output 1221 - Gender-sensitive reproductive, maternal and newborn health community scorecards conducted

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of communities using community scorecards	24	24	100%
Key Activities included in the Project Implementation Plan (PIP):			
• ToT on Community Scorecards • Conduct Community Meetings • Conduct interface Meetings			

ToT Community Scorecards

TAMANI staff worked with the Community Score Card Consulting Group from CARE Malawi to conduct a ToT on implementing the Community Scorecards (CSC). The training took place in Year 2 and involved 11

TAMANI staff (3m/8f) and 8 CHMTs (5m/5f). The aim of this training was to build capacity of program staff and CHMT members to implement CSCs at the district level. The project then trained 96 (42 m, 54 f) community facilitators who led implementation within their communities. Community facilitators were trained in Igunga DC, Urambo DC, Kaliua DC, Nzega DC, Nzega TC and Tabora Municipal, these same facilitators also implemented the SAA dialogues in their community.

Gender-Sensitive RMNH Community Score Cards (CSC)

The goal of the CSC process was to engage community members in health policy and planning to ensure health facility and government accountability to community needs. In Year 2, the project trained 96 (42 m, 54 f) community facilitators who led implementation within their communities. Community facilitators were trained in Igunga DC, Urambo DC, Kaliua DC, Nzega DC, Nzega TC and Tabora Municipal.

Between April 1st, 2020, and March 31st, 2021, the project did not conduct any CSC sessions due to COVID-19, but the project continued to work with the CSC task force teams in each community to follow up on the action plans. Community leaders and facilitators were encouraged to use the CSC approach during village meetings to assess progress made in implementation of action plans.

CSC Action Plan Updates:

- In Uyui District Council, additional staff were hired, which decreased wait times and improved attitudes and practices of HCPs, and emergency transportation costs became more affordable.
- In Kaliua District Council, the CSC approach emerged as a reference platform when new development projects were being planned. Construction of 6 latrines for patients was planned to start April 1st, 2021, and discussions for a new health facility ensued.
- In Tabora Municiplaity, Tumbi village community and government worked together to build a Health Centre with 8 staff houses with funding (200 million) from the TSH fund within the government.
- In Urambo District Council, additional staff were hired following CSC sessions and additional maternity rooms were constructed with financial support from the national natural reserve authorities (via corporate social responsibility funding) and village collections.
- In Igunga District Council, Ndembezi dispensary continued to work on the remaining rehabilitation work (floor tiles, colors, and gypsum board) of the RCH building, which was covered in the budget for FY 2021/2022.

Community Meetings

In Year 2, TAMANI supported 16 community meetings in Igunga DC, Urambo DC, Kaliua DC, Nzega DC, Nzega TC and Tabora Municipal. These meetings aimed at generating and prioritizing service provision issues. Key questions: What was working well? What was not working well? What could be done to improve the provision of RMNCH services for both service users and service providers? After the scoring process was completed, the community had the opportunity for both users and providers to express their perspectives in terms of service performance.

Interface Meetings

In Year 2, 8 Interface Meetings were completed and brought community members and service providers together with CHMT members including the DMO. TAMANI staff monitored the process by reminding participants that the essence of the CSC was not to blame, but to come up with concrete actions that responded to the priorities of community members and providers. Outcomes of the interface meetings included agreed actions to support male involvement, health facility sanitation activities, address attitudes and practices of service providers, hold community health education meetings, and the installation of a

water tank and separate units at health facilities to increase privacy. Common issues in the action plans were identified during Interface Meetings including lack of night security at dispensaries, drug and supply stock outs; staff attitudes and behavior; lack of adolescent and sexual health information; lack of health facility staff housing; cost of transportation for referrals; and health providers charging fees for services that should be free.

Output 1222 - Communities sensitized on gender-sensitive reproductive, maternal and newborn health

Indicators	Project Target	End of Project Achievement	End of Project % of Achievement
# of men engaged on RMNCH issues	1,500	2,273	151%
Key Activities included in the Project Implementation Plan (PIP):			
• Develop Social Behaviour Change Communication (SBCC) materials • ToT and Social Analysis and Action SRHR dialogues • Conduct community dialogues on SRHR/MNH with VSLA and community groups • Conduct community awareness for SRHR			

TAMANI used different approaches to engage communities in discussions on issues related to SRHR and RMNCH. SAA dialogues were organized and complemented by wider community events involving drama and group discussions. See below reporting on each activity. Important to note that to avoid double counting the indicator above was calculated by counting men who attended the large community events.

Develop Social Behaviour Change Communication materials

In Year 1, TAMANI staff gathered to review the findings of the gender qualitative research and develop SBCC interventions and related messages based on the key findings. A draft plan with the key findings, implications, intended audience, potential interventions, threats, mitigation strategies, and resources was developed and used to guide the implementation of Year 2, 3, and 4 community engagement activities.

ToT SAA SRHR dialogues

In Year 2, during ToT, norms and themes were identified by engaging with Village Savings and Loans Associations (VSLAs) in Kisanga, Tutuo Usanganya (Sikonge), Itinka (Uyui), Chaggana (Igunga). Trained Community Facilitators used the "*BUT WHY?*" SAA tool to engage community members to reflect on topics including understanding the reasons behind home delivery and the use of Traditional birth attendants (TBA).

SAA community Dialogues on SRHR/MNH with VSLA and community groups

Table 6: Number of SAA Dialogues on SRHR/MNH and Participants

	Year 2	Year 3	Year 4
# of SAA Dialogues	5	44	79
# of Participants	458 (206M, 252F)	1,280 (395M, 885F)	3,941 (1669M, 2272F)

In Year 2, SAA dialogues revealed the reasons behind home delivery and the use of TBA's. The dialogues highlighted the need to improve attitudes among HCWs and social norms were identified as barriers to

accessing RMNCH services. The project applied other SAA tools in this theme before transitioning into the action plan phase of SAA to address gender barriers in accessing health services. The project continued to conduct CSC, community youth sexual education meetings, and community awareness for SRHR in the same communities to address some of the issues raised in SAA dialogues.

In Year 3, SAA dialogues involved self-reflection and challenging different opinions. Positive outcomes included men who agreed to be change agents by assisting their wives/partners with household tasks, recognition amongst men of the burden of responsibilities women face due to socio-cultural norms, which impact access to and utilization of RMNCH services.

In Year 4, a total of 3,941 (1,669m/2,272f) community members participated in 79 SAA meetings, which were facilitated to follow-up on SAA action plans. These included addressing male engagement and support for MNH services, barriers to facility-based births, teen pregnancies, use of local herbs in pregnancy and delivery and addressing the unequal division of household tasks including women's burden of care, and improving couples' communication. New community actions were committed to in the final year of the project including community sensitization on the importance of facility-based deliveries and disadvantages of home deliveries, awareness sessions with couples/spouses/partners on participatory decision-making, creation of entrepreneurship opportunities for women and youth, particularly girls, and the creation of women's economic groups to improve financial decision-making.

Conduct community awareness for SRHR

In total 4,342 (2,273m/2,070f) community members were engaged in 11 broader community awareness meetings on SRHR during the project on sexual and reproductive health and rights (SRHR). The project used awareness sessions to disseminate SBCC messages that reflected findings from gender formative research. To attract attendance, the sessions were held at open markets, soccer matches, and open public spaces, and were implemented as part of the 16 Days of Activism against Gender Based Violence and International Women's Day (IWD) celebrations. Messages focused on equal access to education for girls and boys, better investment in education and the importance of open communication, especially in marriages, on issues related to SRHR. Messages were communicated through songs, poems, role play, and 2400 fliers were disseminated.

In Year 4, no large community awareness activities for SRHR meetings were conducted due to COVID-19 and directives from the government and CARE to minimize gatherings that could pose risks to project participants and staff. Awareness raising on SRHR continued partly through CHWs work during household visits and SAA dialogues. Given that SAA dialogues are conducted in smaller groups with participants from the same community, the project was able to ensure safety protocols.

2.2: COVID-19 Response Activities

CARE Tanzania worked quickly to pivot TAMANI programming to implement COVID-19 response activities at the start of year 4 in coordination with Global Affairs Canada and the Tabora RMO. Activities were focused on providing evidence-based information to communities as quickly as possible, and training Health Care Workers and Community Health Care Workers to be able to respond to the pandemic, as well as keep themselves safe. These activities were largely implemented in Q1 and Q2 (between April and September 2020).

In addition, the project distributed PPE and worked with the RHMT to ensure that essential services such as access to contraception and delivery services remained available, and to think through the way that the pandemic would impact women and girls differently from men and boys, and plan accordingly. CARE has

advocated for the inclusion of women at all levels of the response, as well as to ensure SGBV messaging, and referral information was integrated into all communications. CARE Tanzania ensured that all COVID-19 messaging was approved by the MoHCDGEC and was part of the Risk Communication and Community Engagement (RCCE) pillar of the National COVID-19 Task Force.

In addition to support from GAC, CARE Tanzania received additional funds from Bloomberg foundation to support COVID-19 response work in Tabora region, leveraging the work of TAMANI. Through this support, TAMANI expanded COVID-19 interventions to train Regional/District Health Managers 54 (37m/17f) on Integrated Disease Surveillance & Response (IDSR), support infection prevention measures, including the provision of 416 handwashing stations to health facilities. The funding also supported training for local NGOs/CSO/CBOs, District NPA-VAWC Coordinators and District NGOs Coordinators responding to Gender Based Violence to map referral pathways and strengthen service provision, as well as supported training for TAMANI CHW's on household hygiene and facilitating SAA dialogues on the gendered impact of COVID-19.

Support from GAC and Bloomberg has been critical for the region, given Tabora has not received any of the COVID-19 response funds requested from the central government.

Table 7: Summary of reach data for the TAMANI COVID-19 response activities in Tabora

Pillar	Response	Activity Details	Results	Period	Partner
RCCE	# of radio talk shows conducted through Digital Based Communication (DBC) and audio messages (Covid, Project Specific, GBV), Safeguarding SMS	•940 CHWs, 40 Youth champion included project beneficiaries reached • 3 local radio talk shows focus on danger signs during pregnancy and child health, CHWs roles and hygiene during coronavirus outbreak.	• Mobile messages reached 13,283 CARE program participants (Male 5982, Female 7301) including TAMANI beneficiaries. • Disseminated a total of 671,745 calls around COVID-19, GBV prevention, school safety, and rapid gender analysis, of which 49% (321,852) were listened – 47,285 calls made were specific to TAMANI. • Total listening coverage of broadcasts to Tabora had an estimated listenership of 980,000.	Apr. – Aug 2020	CG FM Radio 88.5MHZ
Health	# of HCW's trained on COVID-19 event-based surveillance and contact	Training content included: • Surveillance, Screening, Identification and Triage of COVID-19, • Isolation and contact tracing, transportation, case management, Infection Prevention and Control, and PPE • Psychological Support and Care to Survivor,	• 40 (17f: 23m) HCWs trained on COVID-19 case management, event-based surveillance and contact	June – July 2020	Tabora RHMT, PORALG

		and safe and dignified burials • Distribution of PPE for health facilities R/CHMTs			
Health	# of CHWs and Community leaders oriented on COVID-19	• Training of CHW on community surveillance and contact tracing • Two trainings delivered virtually for COVID-19 response: 1) *Maintaining Essential Health Services during an Emergency, and 2) Health Promotion*	• 465 (240f; 225m) CHWs and 21 (13f; 8m) community leaders oriented on COVID-19 event-based surveillance and contact tracing • 4 RHMT (2 m, 2 f) and 32 (21 m, 11 f) CHMT supportive supervision volunteers attended virtual training	June – July 2020	RHMT and CHMTs

Provision of Personal Protective Equipment (PPE)

In collaboration with the R/CHMT's, PPE gaps were identified and purchased with the support of TAMANI. Necessary personal protective equipment (PPE) as indicated in the table below was procured and distributed during the reporting period. PPE equipment was purchased from the relevant government institutes, though procurement was delayed due to quality and safety verification checks by the authorized government agencies ahead of distribution. Distribution of PPE equipment was finalized at the beginning of Q1 Year 5.

Procured items to support COVID -19 response in Tabora region

Table 10: Summary of items procured to support COVID-19 response

Item	Unit	Description	Quantity
Mask N95	Boxes	Pack of 2 pieces	200
Surgical Masks	Boxes	Pack of 50 pieces	32
Examination Gloves	Boxes	Pack of 50 pairs/100 pieces	16
Chlorine tabs	Tin	Pack of 100 tabs	24
Alcohol based hand sanitizer (5 Liters)	Bottle	5 liters	24
Liquid Soap	Set	Pack of 16 bottles (500 Mil)	24
Heavy duty PPE (30M, 40L, 30XL)	Set	Face shield gown and top cover	100
Thermo-scanners	Each		16
Body bags (burial bags)	Each		30

3. Management Issues & Adjustments

CARE implemented the TAMANI project in close partnership with the government of Tanzania, as well as with project partners CSIH, SOGC, and IHI. All consortium and project partners had clearly defined roles and worked collaboratively throughout the program, jointly planning, sharing knowledge, and working together to ensure project results were achieved. Shifts in approaches, staffing, and activities were discussed, shared, and implemented accordingly.

A slight adjustment was made to the operating model between SOGC and the Association of Gynaecologists and Obstetricians of Tanzania (AGOTA) as noted in the outputs section. Originally, SOGC' initial role in the project was to provide technical expertise to the project through review of existing MOH guidelines, expertise in EmONC training, coaching and mentoring, support to use simulation and provision of quality training equipment and the development and submission of job. Adjustments in Y2 were made to shift the AGOTA partnership contract management from SOGC to CARE Tanzania. SOGC's expertise was directed toward supporting of the coaching and mentoring activities following an EmONC training, working with AGOTA to facilitate learning and knowledge exchange between the two professional associations and contributing to the end of project evaluation of the impact of the EmONC training program. This transition was successful and gave AGOTA a greater role in the project activities. AGOTA thought it was beneficial, enabling them to strengthen their finance management, have more control in the activities, and enhance participation of their regional members.

Management adjustments due to COVID-19

With the outbreak of COVID-19 in Tanzania and directives from the government, the project adjusted the implementation of planned activities to minimize risks to project participants and staff. Project staff in Tanzania and Canada were guided to work from home in March 2020 and activities that were able to proceed without gatherings or were part of normal community and government activity continued as usual. Demand side activities, aside from the CHW interventions, were delayed or cancelled where they required large gatherings. Selected supply-side activities continued where they required minimal physical presence such as CHMT meetings, supportive supervision visits, and the last rehabilitation project. Partners adapted activities to comply with regulations, avoid gatherings and protect against furthering transmission.

In mid-July 2020, CARE Tanzania commenced with a phased re-opening based on revised norms in terms operational and activity levels, and a principled approach to 'protect oneself, and protect others at all times' by mandating wearing of masks, distancing, handwashing and increasingly moving events outdoors.

CSIH developed virtual/remote activities where field-based activities were planned, and field-based activities remained suspended through to the end of the second quarter with local consultants' travel resuming in October 2020. New operational guidelines were developed and presented to CARE Tanzania Staff and CSIH Consultants based in Tanzania.

SOGC made the decision to suspend all volunteer travel after March 2020 to Tanzania, and as such, GAC approved a reduction in the in-kind target for the project to accommodate the changing context for international travel. SOGC immediately focused efforts on the production, collection and sharing of evidence-based sexual and reproductive health resources related to COVID-19, including resources for the international context. These included statements, clinical tools and evidence-based guidance produced by their members and network. These resources were shared with AGOTA to maintain quality of care and the health and safety of their members.

3.1 Changes to Risks & Analysis

The original project risk register was updated during each annual reporting period to reflect changes in the context in Tanzania and in Tabora.

In Year 3, risks related to COVID-19 were added with respect to access and uptake of health services, and these remained through to the end of the project. Risks related to the election and travel restrictions of government employees added in year 3 were removed in Year 4. Please see Annex 1 for the final risk register at project completion.

3.2 Changes to Theory of Change, LM and PMF

No changes to the Theory of Change and Logic Model were made between the PIP and project completion, aside from a slight edit changing reference to MDR to MPDSR in the logic model to align with the GoT policy. Two changes were made to the PMF, both in year three of the project:

- Indicator 1133 was modified to capture total number of health care workers mentored at 12-month coaching visit to avoid risk of double counting. In addition, baseline HMIS data was added for indicator 1220 and the wording was changed slightly to reflect modern contraception for women and girls only (condom distribution skewed the data).
- In the gender PMF, Indicator 1110 "# of R/CHMT's trained in the Prevention of Sexual Exploitation and Abuse (PSEA)" was added to capture the addition of this activity to the Gender equality strategy of TAMANI.

3.3 Gender Equality & Women's Empowerment

Changes in Context for Women & Girls

TAMANI conducted a Gender Analysis in early 2018 to explore the local, context-specific determinants of men and women's utilization of maternal, sexual and reproductive health services (MSRHS) in Tabora. The study found that women and girls in Tabora exercise agency in an environment that significantly limits their ability to advocate for their own rights, though it highlighted several examples of women and girls attempting to challenge the status quo surrounding gender equality and sexual and reproductive health, particularly in regards to access to quality maternal care and family planning. Decision-making, especially around sexual intimacy/sexuality and reproductive matters, largely remains in the purview of men. Gender-based violence may be used to maintain control over women's access to contraception, and women experience considerable social pressure to become a mother. Strong social norms are applied to adolescent girls with respect to sexuality and decision-making, and religious beliefs play a role in enforcing men's dominance and hindering women's freedom. At the same time, interactions with health systems reproduce dominant cultural norms in the community, and community structures such as village and ward councils offer limited protection for the rights of women.

COVID-19

In March 2020 the emergence of the COVID-19 pandemic had considerable, gendered impact on the context in Tabora. CARE Tanzania conducted a Rapid Gender Analysis and used follow-up surveys and SAA dialogues to understand shifts in the context for people of all genders throughout the pandemic. Over half of female respondents (52%) reported a decrease of control over family resources as compared to 48% of male respondents.

TAMANI conducted six SAA dialogues that integrated COVID-19 issues into the discussions, in which participants noted that families had been affected by the pandemic and men's and women's experiences differed. Participants noted that women were less likely to attend ANC clinics and access family planning and there were an increasing number of home deliveries because of fears of contracting COVID-19 at health facilities. Similarly, adolescent girls and boys feared to seek reproductive health services and early pregnancy, abortion, and early marriage were on the rise as girls and boys remained home from school. There was also an increase of SGBV cases linked to increased stress and decreased mobility. Both men and women, 54% and 56% respectively, reported an increase of harassment and violence during the pandemic at the time of survey collection. Survey results also revealed that while women reported the *ability* to report cases of GBV, much fewer were willing to report cases.

TAMANI Gender Strategy

TAMANI's gender strategy focused on 1) working with women and men to identify barriers to access health services through SAA dialogues that promote reflection on gender norms and relations at the household and community level 2) working with health facilities and the health system (structures) to increase awareness of how gender inequality and gender bias impacts service delivery, how programs allocate funding, and how health human resources are managed, and 3) identifying space for women's and girls' voices to be raised and reinforce and support women's agency around decision-making and bodily autonomy through CSC discussions, project consultations and community engagement activities.

Under immediate outcome 1100 (supply), the project incorporated the principle of Respectful Maternity Care (RMC) into all aspects of the health systems interventions. TAMANI has worked to ensure that women's experiences with maternity caregivers empower and comfort them by working with health care workers to improve their capacity to deliver quality RMNH services. This included integrating respectful maternity care principles that focus on improving the quality of communication and relationships between women seeking care, and the health care workers who deliver this care. The TAMANI project included questions about RMC in its household survey, as well as aspects of RMC in provider training and mentoring. RMC was also measured through the non-randomized experimental design impact evaluation. Interventions to support gender equality were aimed at strengthening community awareness and accountability on SRH services, as well as informing the health facility rehabilitation projects.

Under intermediate outcome 1200 (demand) key gender barriers influencing MNCH outcomes included women's autonomy in making choices to seek health care and seeking skilled labour during delivery. Unequal decision making between men and women when making decisions around reproductive health and childcare as regarded as "a woman's issue" were identified at the onset of the project. Men retaining the privilege to control household finances, in ways that affect when and how women were able to access appropriate and timely care were key topics addressed through Social Analysis and Action (SAA). Deep engagement with communities, especially men and boys to reflect on how position and power negatively impacts their partners' health status through SAA was carried out to transform power relations impacting women's autonomy in health seeking behaviour.

TAMANI was evaluated periodically using CARE's gender marker as a tool for continuous assessment of gender equality programming and was consistently graded as a gender responsive project. This means that it aimed to challenge inequitable gender norms and respond to the different needs and constraints of individuals based on their gender and sexuality. This included opening space for discussing, challenging, and engaging inequitable gender structures, systems, divisions, and power relations. It also included providing the opportunity for participants to question, experiment and challenge gender inequities that they have observed or experienced. TAMANI integrated several gender transformative interventions that aimed to challenge harmful gender norms at the community level through SAA and CSC dialogues. At the

health system level TAMANI responded to concerns raised about disrespectful care, and elevating women's voices and priorities in conversations with government actors. At the structural level, TAMANI worked with Government stakeholders to advocate for policy and planning processes to integrate gender considerations and ensure that resources are allocated to support services prioritized by women and girls.

Gender Results

CARE carried out formative research to explore the local, context-specific determinants of men and women's utilisation of maternal, sexual and reproductive health services (MSRHS) in Tabora region, Tanzania to further inform the TAMANI Gender Strategy. The research was conducted between January and February 2018, and it specifically looked at the gender dynamics that shape men and women's health practices, the ability of women and men to exercise autonomy and decision making related to sex, contraception and social and economic advancement and the ways in which gender dynamics influence adolescent's use of reproductive health services. Findings which emerged were: limited decision making power of women and girls; men's negative attitude towards girls' education; and men's violence in reaction to the use of women's use of family planning. As a follow up to this, in the last year of the project an endline qualitative gender study was carried out guided by the following question: What changes in gender and social norms have occurred in the TAMANI project communities (with specific interest in communities that have implemented gender focused activities such as the Community Score Card and Social Analysis and Action) and what sort of connection is there for increased access to RMNH services for women, men and adolescent girls and boys?. The data collection targeted both the household sphere as well as at the Health Facility level.

The research team consisted of a female team with two female IHI research assistants together with a female SAA facilitator. The male team consisted of the two male IHI research assistants together with the male CSC facilitator. Key Informant Interviews (KIIs) were conducted with Community facilitators, Community leaders and TAMANI project staff. These interviews offered important sources of information, both in terms of the project itself as well as the changes that the KIIs have witnessed as a result of different project interventions. For the purpose of the study, female FGD and IDI respondents were recruited from the SAA participant groups and the male respondents from the CSC exercises. Adolescent girls and boys were recruited from both SAA and CSC, depending on their participation in the particular locations where the fieldwork was conducted.

Themes which have been covered during the CSC and SAA were further explored, in order to evaluate what they have meant to the participants related to gender dynamics, social and economic opportunities, autonomy, decision making, use of reproductive health services etc.

The findings from the endline study suggest that women in Tabora exercise increased agency and decision-making power. Women are increasingly part of important discussions on household-level in regards to for instance household expenditure and participate in IGAs. Moreover, there seems to be an increase of discussion regarding child spacing and contraceptives even though some women still feel they need to use them in secret.

Several of the interviews from the end-line research confirm that there still is a bias for allowing boys to continue longer in school, ignore household chores in favor of homework or social activities and generally enjoy more freedoms. With this said, most girls in Tabora confirmed they do attend school (at least reaching secondary school) and several respondents argue that boys are increasingly engaged in household work that previously has been considered chores for women and girls.

Several respondents during the endline speak of stigma around offering young people sexuality education and information and access to family planning but the majority of interviews suggest this is shifting and that people would argue it is very important to target adolescents with this information and services. Several respondents argue that for instance shaming young girls is a thing of the past.

While there still appears to be some fear among adolescents for showing up pregnant at the health facility, the attitude towards youth appears to have shifted in the health facilities and both adolescent boys and girls confirm that they are accessing contraceptives and family planning information. The FGD with adolescent girls in Tumbi indeed suggest that many girls are relying on family planning methods as almost all girls present for the discussion confirmed they were using them. No health care providers interviewed for the end-line research expressed any discomfort about offering services to young people.

The following section summarizes outcomes on the gender equality indicators the project used to track gender equality programming both in the PMF and Gender Equality Measurement Framework at the intermediate and immediate outcome level (Annex B & C).

Ultimate Outcome 1000: Reduced maternal and newborn mortality and morbidity in underserved districts in Tanzania

1000 **GE Indicator :** % change in women's empowerment

Analysis of results has been informed by both the quantitative household endline survey, the impact evaluation study and qualitative gender study. The quantitative endline results are a comparison between the baseline data from November 2017 and the endline data from January 2021. The endline results under the outcomes results summarize the household survey data collected at the beginning of the project and at the end of the intervention, but do not evaluate the impact of the TAMANI project on the outcomes of interest. In contrast, the impact evaluation assessed the effect of two elements of the overall TAMANI project, specifically the Basic and Comprehensive Emergency Obstetric and Newborn Care training and deployment of Community Health Workers. This pragmatic evaluation examined the impact of these trainings, over and above any impacts due to the larger TAMANI intervention, including upgrading facilities, providing ambulances and community meetings. The evaluation used the staggered roll out of the EMONC trainings and CHW deployment to estimate impact while accounting for district effects and secular time trends.

According to the baseline survey, among women who in the last 12 months had visited a health facility for care for themselves and/or their children, only 35.3% felt completely confident in their ability to do so regardless of their partner's support or objections. There was a significant increase at endline with 58% of women surveyed who felt completely confident in their ability to make healthcare decisions, and significant increases in reported autonomy were observed in all districts. The districts with some of the lowest reported healthcare decision-making autonomy at the beginning of the project, Kaliua DC and Uyui DC, experienced the biggest increases of 32 and 31 percentage-points, respectively, by the end of the project.

Women's autonomy, in terms of a woman's ability to visit a health facility without her husband's permission, increased moderately as well in the impact evaluation. Women reported their own feelings of autonomy in decision-making 5.4% higher after the intervention, accounting for differences in districts and secular time.

> *"And now, [it is] common that women plans for this, while in the past, she would not go unless her husband would do the planning for her" (WRA, IDI 1 Kashishi)*

Qualitative interviews from the gender endline evaluation indicated an increase in communication and consultation within the family after TAMANI interventions, although the father/husband as head of household and ultimate decision-maker is still a strong norm. Men's support for a woman's right to visit a health facility without permission of her husband increased according to the qualitative evaluation, though the impact evaluation suggested otherwise. According to both reports, men's support for women use of contraception without a husband's permission remained unchanged. The qualitative endline study showed greater discussion of health and contraceptive decisions between partners, suggesting that SAA interventions may have positively impacted communication dynamics within some households in Tabora.

> *"You cannot decide anything alone, she can say something and I can disagree and I can say something and a mother refuses that's why we have to sit down and agree whether we should have it or wait a bit" (FGD, male partner of WRA, Kashishi)*

Outcome 1100 (Supply): Improved availability of quality reproductive maternal and newborn health services in underserved areas of Tanzania

1100 Indicator: % change in Respectful Maternity Care

Percent change in respectful maternal care was measured through a series of questions included in the Household Survey that include experiences with the last birth including communication with health care provider, choice of birth position and option and choice of birth companion.

To assess the level of respectful care experienced during childbirth, women (age 15-49) were asked a series of questions on their satisfaction of care and whether their beliefs, independence, emotions, dignity, privacy and preferences were respected during their most recent childbirth in a health facility that took place in the last five years as part of the household survey at baseline and endline. The results for women interviewed about their experiences delivering their most recent child in health facilities are presented in Table 11.

Table 11: Respectful Maternal Care

	Baseline		Endline	
Option to choose preferred birthing position	4.0%	(26/658)	9.0%	(81/896)
Allowed to move around while in labour	56.7%	(373/658)	46.5%	(417/897)
Told everything about the care being received	21.6%	(143/663)	20.8%	(187/897)
Given time to ask questions and voice opinions	5.9%	(39/661)	4.5%	(40/897)
Confidence in health facility and HCWs keeping information private	57.5%	(383/666)	80.4%	(721/897)
Not treated with respect/insulted/physically hurt or coerced into something didn't want to do	13.4%	(89/665)	7.4%	(66/896)
Allowed to have a birth companion	22.3%	(148/665)	25.1%	(225/896)
Allowed to choose who the birth companion is	43.2%	(64/148)	62.2%	(140/225)

Overall results for the respectful maternity care module show some mixed but promising results. While the proportion of women allowed to move around while in labour dropped considerably from 56.7% to 46.5%, the percentage of women allowed to choose their preferred birthing position increased from 4.0% to 9.0% between surveys. The decline in women's reported ability to move around in labour could be due to COVID-related adaptations made at the health facility level – given the sensitivities surrounding COVID in Tanzania at the time of data collection, this topic was not expressly covered. Some indicators which dropped; not treated with respect, told everything about care being received, time to ask questions, could have been

influenced by women being more aware of how a consultation process should be done and increased awareness of what RMC is.

More details on this indicator can be found in the outcomes section of the report.

Rolling Profile interviews provided additional insight into health facility experiences for women and the changes they observed when it comes to the quality of service, they received from health providers. One young mother described the changes she has seen in attitudes of HCPs,

> *"The community is more aware and concerned about health care services and how to access them and the bad traditional beliefs that could affect the health of mothers and children has stopped. On the side of the health facilities a lot has improved, the language used by health care providers towards patients is more professional and they are more dedicated now in their work."* (WRA, Kaliua District)

Another woman described how she saw the Community Scorecard meetings as playing an important role in improving respectful maternal care at her health facility.

> *"Currently I'm not visiting the facility regularly because my child has completed all vaccines. I now visit the facility once per month to check my baby's weight. In general, the service provided is good and I have seen an improvement in services. The number of pregnant women attending the clinic has increased as well as the number of women giving birth at the health facility. Respectful maternity care has improved. I think it is due to the meetings (CSC) conducted in our village have increased the efficiency of service and helped to change the attitudes of health providers."* (WRA, Igunga District)

Immediate Outcome 1110: Strengthened capacity of regional and district health system managers to effectively plan, manage, and deliver quality gender-sensitive reproductive, maternal and newborn health services.

1110 GE Indicators:

1) % CHMTs with knowledge of gender issues related to RMNH services
2) #/% of R/CHMTs that can provide gender-based analysis of sex disaggregated data
3) # of R/CHMT's trained in the Prevention of Sexual Exploitation and Abuse (PSEA)

CSIH integrated gender issues into all training materials and designed an endline R/CHMT survey to assess knowledge of gender issues related to RMNH services and to measure as capacity in conducting gender-based analysis of sex-disaggregated data. Respondents were asked to rate their skill level on knowledge of gender issues related to family planning/reproductive, maternal and newborn health. The average score at endline was 4.2 vs NIL at baseline. 100% of CHMT members had knowledge (level 3, 4, or 5 of gender issues related to family planning/ reproductive maternal and newborn health. Although the skill area for Gender scored high, the gender result may need to be interpreted cautiously because 32 out of 54 respondents did not answer this question. In addition to being answered by less than half of the participants, there was no similar question in the baseline with which to compare the endline score. In total, 92% (48/52) CHMT members were able to analyze gender specific indicators related to reproductive, maternal, and newborn health services.

For the #/% of R/CHMTs that can provide gender-based analysis of sex disaggregated data, respondents were asked to rate their skill level on disaggregating data by key groups, including by sex. Overall, there was an increase in the reported skill level from 2.3 at baseline to 3.8 at endline.

In total, 53(28f,24m) R/CHMT members were trained on the Prevention of Sexual Exploitation and Abuse throughout the course of the project. The COVID-19 context has been an excellent opportunity to engage the R/CHMT in discussing the gendered impacts of the pandemic. Project staff have seen a shift in how the R/CHMT are understanding the importance of considering the differing needs and impacts that this evolving context is having on women, men, and youth.

TAMANI continued to monitor changes related to GVB and sexual harassment awareness activities delivered to Government and non-government partners and continues to follow up on district action plans for implementation. During the last year of the project districts implemented their PSHEA action plans by training Council Health Management Team (CHMT), Council Management Team (CMT), staff, district GBV/VAC committee and GBV/VAC committees at village and household level on the importance of community reporting on violence against women and children. During the response to COVID in Y4, the project implemented a mass radio series to address GBV as well as trained HCWs on screening and referrals for SGBV in Tabora.

Immediate Outcome 1120: Improved gender-sensitive reproductive, maternal and newborn health service infrastructure.

1120 GE Indicator: #/% of health facilities with improved infrastructure that reflects the priorities of women and girls in the catchment communities

TAMANI staff consulted with women and girls on the focus on the health facility rehabilitation projects which led to the prioritisation of improved power and water at health facilities. Out of the total 23 rehabilitation projects (including solar power installation) 20 of these projects (87%) focused on women and girls' priorities. During the qualitative endline study women cited positive improvements in health infrastructure, including the availability of water, improved cleanliness, bins, toilets and increased number of beds.

However, some infrastructure challenges persist – while electricity is generally good sometimes the power cuts cannot be helped

> *"the remaining problem is electricity we said we will use a solar power but in our plan we needed one million shillings the commission is determined to find it anywhere...Every time it cuts off....the whole area" (Male HCP, doctor, Tumbi)*

Similarly, shortages of certain contraceptives and various other drugs as well as other medical equipment was repeated among respondents as a challenge, respondents have mixed answers where some found there's a shortage of staff and lack of privacy for instance when women are delivering, others found the opposite.

> *"There is no specific room that this room is only for delivery, there is a building where in the same building women give birth and at the same time other patients are admitted, here a woman gives birth and here if there is serious sick person is kept in the same place"*
> *"That is a challenge, the medicines are not available, drugs are a challenge, they are not available" (Female TAMANI facilitator, KII, Tumbi)*

Immediate Outcome 1130: Improved knowledge and skills of health providers to deliver gender sensitive reproductive, maternal, and newborn clinical services.

1130 Indicator: #/% of health care workers with knowledge of Respectful Maternity Care and patient rights

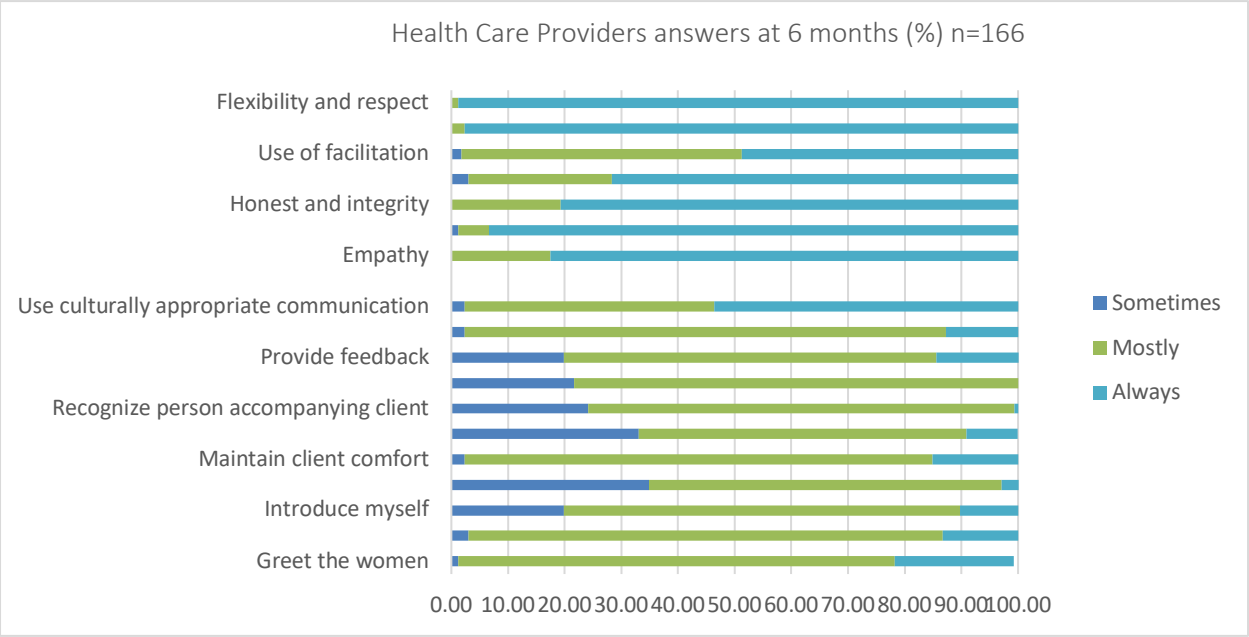
Respectful Maternity Care was part of the EmONC training (based on GoT guidelines) delivered to the 270 (100%) providers trained, and RMC was reinforced through coaching and mentoring post-training every 6 and 12 months (200 HCWs mentored). In addition to a self-reflection tool (365 responses) and on-site discussions with mentors at each facility, communication cues for RMC were also included in the four Job aids disseminated at the 265 health facilities.

The coaches and mentors used clinical examinations immediately post-training and at 6- and 12-months intervals to assess skills retention. SOGC wanted to understand if the RMC items performed as well as the other questions in the OSCEs. They compared trainees' points on RMC items and non-RMC items, in each OSCE, over time. Keeping in mind that the low number of RMC items in each OSCE can be a limitation for a fair comparison. Overall, health care providers demonstrated similar competency for RMC as other technical skills and maintained this ability across 6- and 12-month follow-ups. In addition to RMC items in the OSCEs, SOGC and AGOTA developed and delivered an orientation package on Respectful Maternity Care in year one, which included tools and resources to support the coaches in modelling respectful communication and the use of the patient charter.

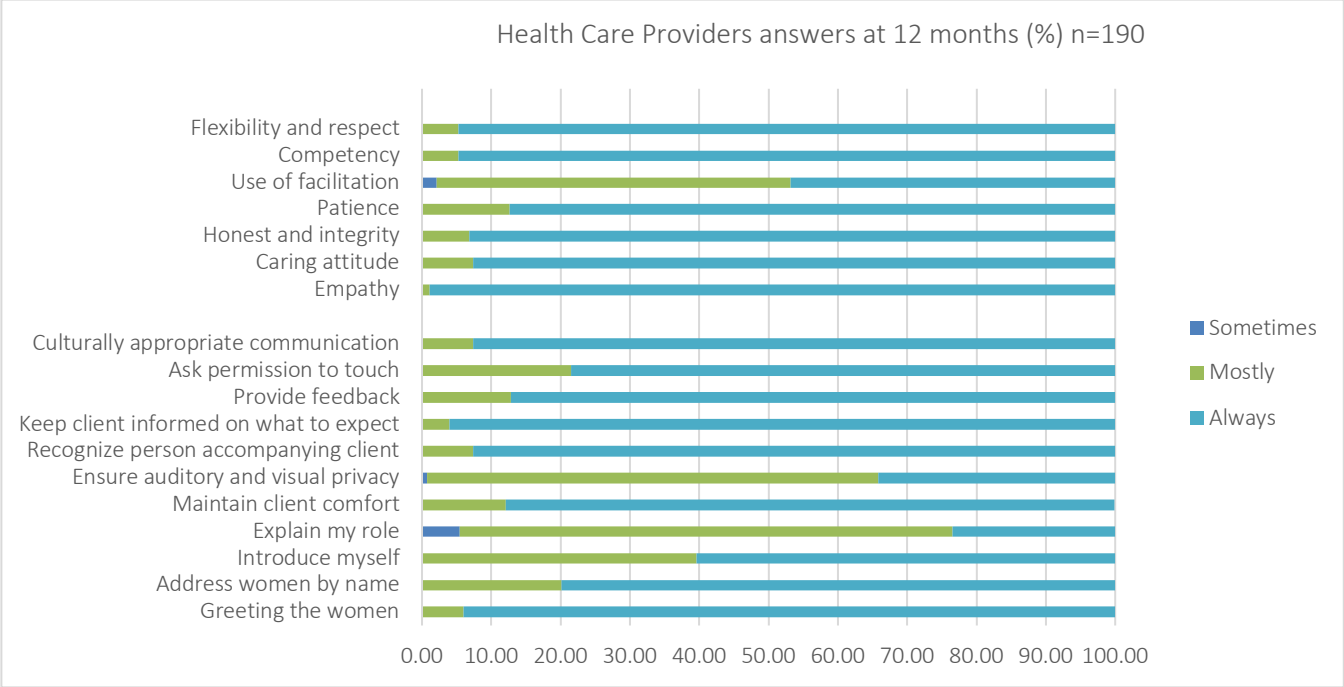
A reflection tool for Health Care Workers was developed in year two. Although the tool was primarily designed as a self-assessment for HCPs, analyzing the overall anonymous answers helped the project see trends in the perception of the trained HPCs in providing RMC in their daily practice. Questions were designed in line with generally accepted RMC indicators for provider/client communication, EmONC training communication module and in accordance with the Tanzania Patient Charter (GOT, (2013) and (2015). The first part of the short questionnaire was a reflection on communication in their daily practice. The second part related to the interpersonal qualities required by providers and the last pertained to the availability and knowledge of the Tanzania Patient Charter.

Keeping potential bias of participants in mind in filling out the tool, the findings provide some understanding of the health care provider's perception of their own gaps and strengths regarding RMC provision. The results of the self-reflection tool show a trend in the HCP's own perception of RMC. HCPs felt that they provided respectful maternity care frequently (mostly or always) to mothers and babies at 6 months - see the graph below.

Graph 1: Showing HCPs perception of RMC 6 months after training



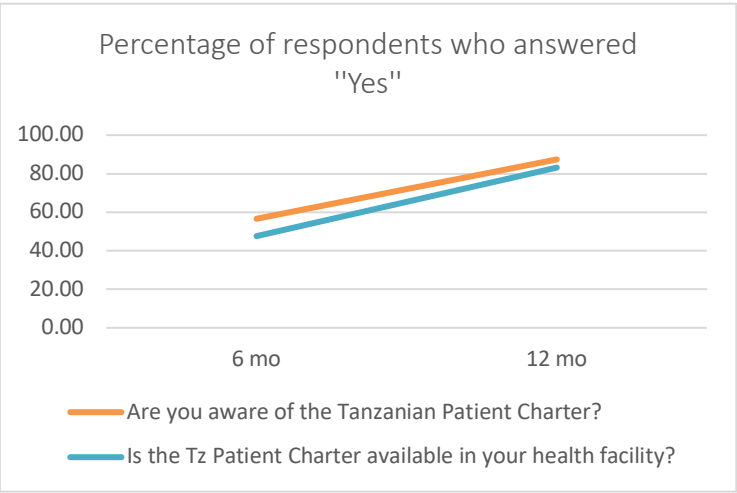
Graph 2: Showing HCPs perception of RMC 12 months after training



In the graph above, HCPs felt that their ability to provide respectful maternity care frequently (mostly or always) improved 12 months after training.

Data analysis for section 2 of the tool brought additional findings including the comparison between 6- and 12-months visit results and perception on interpersonal factors - such as empathy, honesty, caring attitude that promotes good communication between provider and patient. From 6 months and 12 months, improvements (from Mostly to Always) are noted largely in the Caring attitude, Empathy, Honesty and Integrity responses.

Graph 3: Increase in knowledge of the Tanzanian Patient Charter 6 – and 12-months post training



Finally, analysis of data (3rd section of SAT) revealed an increase in both awareness (+30.8 percentage point) and availability (+35.57 percentage point) of the Tanzanian Patient Charter over time.

A focus group conducted in December 2020 on the coaching and mentoring experience, including the utilization of the RMC self-assessment tool, suggested that the experience was mostly positive and deemed helpful by coaches. Some coaches stated that this tool and discussions *"reminded the service provider on the importance of*

communication and positive attitude" and " increases healthy and productive relationships between client and health provider and between mentor and mentee".

Intermediate Outcome 1200 (Demand): Increased utilization of reproductive, maternal and newborn health services by women and their families in targeted districts of Tanzania

1200 **GE Indicator:** % change in women's satisfaction with health facility rehabilitation projects

Follow-up on women and girls' satisfaction was included in the endline household survey as well as the qualitative gender evaluation. Women's satisfaction was calculated as the number of "somewhat satisfied" and "completely satisfied" responses. Endline results showed a significant increase in the number satisfied with rehabilitation projects, with 77% of women satisfied compared to only 53% at baseline indicating an overall increase of 45%.

> *"I see a big difference, At that time it was different and now even if you go to the hospital as a mother you have to first find water in the wells and take it there, but now there is a tank there, so even if I send a pregnant woman I have no problem, and that is the work of TAMANI, so we appreciate and we would like for it to continue."*
> *(Mother in law, IDI 2, Tumbi)*

Immediate Outcome 1210: Increased access to gender-sensitive reproductive, maternal newborn health services.

1210 **GE Indicator**: #/% of adolescent boys and girls satisfied with SRH services

TAMANI's work with youth champions on Adolescent Sexual Reproductive Health and Rights (ASRHR) and Health Care Workers on youth friendly services aimed to increase access to, and utilization of, reproductive services through community youth education meetings. Youth Champions organized dialogues in their communities and referring youth to trained HCWs. Adolescent mystery clients assessed the availability of youth friendly ASRH services, the attitude and behavior of health care workers towards adolescents, and the required privacy and confidentiality for adolescents to receive ASRH services.

Improvements in privacy, confidentiality, and respectful services were observed by mystery clients at 22 sampled facilities except for Igigwa in Sikonge district where the provider was not available to offer services. Adolescent boy's and girl's satisfaction of services was also included in the endline qualitative data collection in March 2021. Respondents shared that levels of awareness and knowledge of sexual and reproductive health services among adolescents are higher, and some shared that adolescents are more frequently seen at health facilities.

> *"Many of the young adults nowadays do go to the dispensaries to receive card and diagnoss their health status together with their partners; a lot of the adolescents are the best attendant at health centres nowadays" (Adolescent boy, FGD, Tumbi)*

While most respondents speak to the importance of adolescents having access to family planning information and services, this is still not always the case.

> *"Normally a hospital cannot provide that service to a person of that age, that is not permitted at all. A hospital cannot give her family planning services because they know that she hasn't reached a right age. The person who gets family planning services is the one who has reached the right age and she is already married. So you cannot take family*

planning issue simple like that, you must go there with your husband, you can't take contraceptives when you are alone" (FGD, adolescent boys, Kashishi)

Several respondents argued that stigma towards adolescents seeking information and services is decreasing and that service uptake in increasing alongside access to information, though some respondents mentioned there is potentially a risk or at least a fear of being scolded if you're a young woman showing up pregnant at the clinic.

Immediate Outcome 1220: Improved ability of women to seek reproductive, maternal and newborn health services.

1220 GE Indicator: #/% of CHW's that can identify at least 2 gender issues related to FP/RMNH

As CHWs began to phase out from receiving TAMANI stipends, 71 CHWs (30m/41f) were randomly selected and asked questions on their level of understanding of gender barriers to RMNH services. In total, 5 CHW respondents did not answer the questions.

When the 30 male CHWs were asked about what gender barriers they see impacting men's use of modern family planning methods, 8 (27%) responded that there is fear of becoming infertile as having many children is associated with wealth, 9(30%) responded that the uptake of modern FP methods is seen as a women's issue while 2(7%) responded that modern FP methods are seen to reduce sexual pleasure/comfort, and 11 (37%) males did not respond.

Out of the 41 female respondents, 10 (24%) of women responded that they see lack of power in decision making about modern family planning limiting uptake by women, and 18 (44%) responded that myths in the community exist on the side effects of family planning. An additional, 6 (15%) responded that women fear negative perceptions from the community, including verbal abuse, while 4 (10%) responded women fear conflict with their spouse which may lead to divorce. In total, 3 (7%) of female CHW's did not respond.

In addition, the gender qualitative endline evaluation suggested that CHW's have a comprehensive understanding of gender issues related to FP/RMNC, and a range of experiences offering counselling to households to

"You ask them why are you not using family planning, they do say it's bad, why is it bad? They tell you it's bad because it can make you fat, it can destroy your ability to get children, so they may give you so many reasons" (Male CHW, IDI, Tumbi)

"Now the mother can make decisions if the father refuses, so the mother follows the advice she has been given, or she may have decided to call the CHW who was visiting her during her pregnancy who will come and get her and bring her to the hospital (dispensary). They often bring a lot of women". (Female HCP, nurse, Kashishi).

Gender norms which limit male utilization of MNCH services

A key focus of male engagement in TAMANI has been to improve communication among couples, and share messages related to maternal health and women's rights to seek health care. The endline gender qualitative study found important progress towards improved communication and division of responsibilities at the household level, though inequalities persist.

"We women, we start at the clinic when we are pregnant. There, we will teach them family planning methods we must explain to them, but also equality in the family should not see the

wife as a useless person and that he is the only one making decisions. But also about the basic needs of the mother when she is pregnant and when she gives birth, what should the father do? we tell them but also if it happens maybe if the mother is tested and found to be infected then we also educate him not to stigmatize her to stay together but to protect themselves." (Female HCP, nurse, Kashishi).

"Gender roles at the household level have improved, couples are now helping each other to improve the wellbeing of their family. Women nowadays can make decisions for seeking health services without the consent of their husband or they can sell domestic resource for the purpose of covering the family needs for example school fees, health expenses and food. TAMANI interventions such as SAA and community awareness meetings increased awareness on the importance of gender equality in the household as now men help their wives after understanding the impact of heavy workloads performed by their wives at the family level which impacts women's health. In addition, there is increase of male involvement in maternal and reproductive health as more men are now escorting their wives to the clinic." (Female CHW, Urambo District)

Gender and social norms transformation of CHW's themselves, was explored in the gender qualitative study. Some CHWs shared that they had a change of opinion on subjects like family planning, or adolescent sexual and reproductive health.

"It has made a great impact, including helping to change my view on family planning. I used to hate family planning a lot" (Female CHW, Tumbi)

In the CHW close out survey, CHWs were asked how supportive their partner (if applicable) was to them in their role. Of those who reported having a partner, almost all reported that their partner was supportive or motivated them in their work. Only one respondent said that their partner (male) was not supportive, "My partner has a negative response, he thought I am taking a lot of time serving other families while not taking care of our own (Female CHW, Nzega TC).

It is important to note that the majority of male CHWs described their partners support as "motivating" or "supportive" while many female CHWs instead described their male partner as "allowing" them to conduct their CHW duties. The difference in perception by male and female CHWs towards their partners is important in situating the gender and social norms that impact CHWs themselves as well as for building upon for future CHW programs.

3.4 Environmental Sustainability

TAMANI was implemented with careful consideration of the impact on the environment and sustainability of its programming and made several contributions towards building environmentally friendly health facilities through the construction of water catchment structures and WASH rehabilitation, and the installation of solar power. As noted in the Operations section, all health facility rehabilitation projects were completed and assessed by the TAMANI project engineer, district engineer, the contractor, and representatives from the Health Facility Governing Committee. Assessments focused on progress made on the work as per the BOQ and adherence to the recommendations from the ESIA. An environmental audit was conducted in year 5 to follow-up and address any issues after the work was completed.

As guided by ESIA, the project undertook environmental monitoring for all rehabilitation projects to assess which measures were put into place to ensure minimum degradation of the environment at rehabilitation sites. The activity was conducted in collaboration with health facilities and contractors, with technical

backstopping from CARE TAMANI Project to follow-up on the ESIA recommendations. All rehabilitation or construction projects received certificates of completion from the Government of Tanzania and can be found in Annex 11.

Table 12: Key findings from the environmental audit

Parameters	Observations
Soil erosion, landscape and vegetation management	There were limited activities that affected landscaping especially where rehabilitation processes were only on the interior of the facility. Demolished materials were sometimes piled in one area but later were cleared. All sites were observed to be regularly cleaned with re-vegetation and removal of the topsoil during the construction for re-use in landscaping. For projects focused on rainwater harvesting, foundations for tank bases required removal of soil which was later re-applied around the bases.
Occupation, health and safety	All buildings that were rehabilitated were unused while the work was completed as both clients and health worker were evacuated to other buildings. Workers wore PPE including caps, hard gloves and reflectors. There were signboards showing rehabilitation in progress.
Solid waste, biomedical hazardous waste and wastewater management wastes	The project generated demolished materials from the old walls and tiles. The materials were collected in one area and cleared. Minor solid waste was generated and disposed of properly and in a timely manner.
Sewerage and Sanitation	Sewerage and sanitation systems at most rehabilitation sites were functional except at Urambo hospital where rehabilitation of maternity ward was taking place. The project recommended hospital management to use internal revenue to renovate sewage and ensure water supply in the building. Hospital management accepted the idea, and it was implemented.
Air pollution control	Minor waste materials produced were properly and timely disposed of.
Noise management	All rehabilitation activities were found to generate very little noise produced during the construction without the use of a sound management device. Mostly non-mechanical machines were used to cut hard materials like tiles.
Labour management	There was fair involvement of the local workforce, but women were not involved. With exception of two projects in Nzega and Sikonge, all projects were implemented by local contractors based within the respective districts.

3.5 Good Governance & Human Rights

The TAMANI project was designed to contribute to the advancement of human rights to health, focusing specifically on supporting the Government of Tanzania to achieve their commitments to achieve their targets for SDG 3, including reducing maternal mortality to below 70/100,000 live births, and ensuring universal access to sexual and reproductive health-care services.

To this end, TAMANI integrated a strong inclusive governance component that focused on enhancing the accountability and transparency of health systems in Tabora, supporting citizen participation in, and ownership of, decision-making processes related to health service delivery at the community level, and strengthening service delivery capacity of health facility and health management staff. TAMANI made the following contributions towards the following primary principles of human rights-based approaches:

Equality & Non-discrimination: TAMANI focused on promoting the universal human right of respectful maternity care (RMC) in adherence to the WRA Respectful Maternity Care Charter, through training and mentoring of health care workers and health planners and engaging with women and girls about their experience of receiving care. These activities led to a nearly 50% decrease (from 13% to 7%) in the percentage of women who reported not being treated with respect during childbirth, including being insulted, physically hurt, or coerced into something they did not want to do. The Respectful Maternal Care index increased from 3.6 at baseline to 4 at endline (out of a total score of 8) when measured at the end of the project, indicating a modest improvement in women's birthing experiences.

Participation & Inclusion: TAMANI worked to improve local governance structures to effectively plan for, manage, and deliver quality gender sensitive maternal and newborn services, and support citizens to advocate for RMNH health needs in the community using Community Score Cards, a citizen-driven accountability measure for the assessment, planning, monitoring and evaluation of health care service delivery. TAMANI also collaborated with the White Ribbon Alliance's "What Women Want" global Campaign, collecting data from 1,600 women on their top RMNH priority to be incorporated into a global RMNH advocacy campaign.

Transparency and Accountability: In alignment with the Government of Tanzania's Direct Health Facility Financing (DHFF) policy, CSIH developed a number of training packages and tools to improve the accountability and transparency of the health management teams to more effectively collect quality data, and to use this data to effectively plan and budget for the delivery of RMNH services in response to local health needs and priorities. TAMANI also integrated several feedback and accountability mechanisms to ensure transparency and accountability for project staff and partners, which resulted in a new GBV and Prevention of Sexual Harassment component being implemented with Government partners. In addition, a contact number was posted for participants to provide their concerns. The CSC intervention gave direct space for women to discuss quality of care of maternal and reproductive health services, as well as follow up interface meetings and action plans also engaged the community as both service users and service providers.

Human Rights, Governance, & COVID-19: CSIH worked closely with the TAMANI team as well as the R/CHMT's to support the region to respond to the pandemic. This included ensuring a gender lens was applied to response activities and supporting the region to plan for the delivery of uninterrupted essential health services, particularly SRHR and RMNCAH services. Throughout COVID, CSIH continued to involve stakeholders at the National and Regional levels in the design of activities and ensured relevant stakeholders have input into training content and materials disseminated with health managers and facility staff in Tabora. CSIH also continued to work to improve the accountability and transparency of the health system in Tabora, particularly through quality improvement approaches, and through improved data collection and reporting, as well as planning, budgeting, and financial management of health facilities.

While Community scorecard meetings were paused during the COVID-19 pandemic, communities continue to work on CSC action plans as discussed above, such as improvements in infrastructure (with a focus on WASH projects which are even more essential within the COVID-19 context), staff attitudes and human resources.

While the above interventions are targeted at promoting good governance on the side of duty bearers and right holders, the project has also worked towards becoming more transparent to the communities in Tabora. Using the COVID-19 digital campaign as a springboard, a package of Push Messages was sent out to CHW's focused on safeguarding (PSHEA and fraud) and provided information on where to report. A dedicated hotline (kept by the internal auditor) was used to collect feedback and is documented in a confidential database. Most feedback received during TAMANI was related to seeking more clarity on whether the project will have a second phase, future training plans, and suggestions on improvements on how monthly stipends are paid.

4. Outcomes

The household survey is the source of data for the ultimate and intermediate outcome indicators, except for MMR and NMR indicators. Ifakara Health Institute led on both quantitative and qualitative data collection, while McGill largely supported on the quantitative data analysis, and the impact evaluation. An external consultant was hired to lead on the development of the gender qualitative tools, approach and analysis as part of the endline qualitative gender research. Using CARE's approach to Gender Equality, with a focus on addressing agency, structure, and relations, the study focused on what changes in knowledge, attitudes and behaviours of women, men, adolescent girls and boys have been impacted by TAMANI that influence access to reproductive, maternal and newborn child health services. Findings of both the quantitative and qualitative reports have been included in this final report, and the full reports can be found in the annexes.

The Endline survey followed the same sampling design, instrument, and methods as baseline to ensure comparability. The household survey has followed a two-stage, self-weighting sampling design. The listing of villages within each district was obtained from the Tabora district authorities, and within each sampled village Ifakara obtained a household listing. Households within each village were assigned a unique random number generated via computer. Households were sorted based on the random number and sampled households until a sufficient number were interviewed. At baseline 1,497 women were interviewed and at endline 1,492. All eligible respondents were selected for interviews in each household. The endline data provided an analysis of where TAMANI interventions contributed to changes seen in the indicators.

The household questionnaire was translated from English to Swahili and administered in Swahili. Responses were electronically recorded using handheld devices with skip and quality check functions to minimize errors. Electronic data were securely backed up daily, and hard copies of the project documents are kept in a secure location. All electronic databases are anonymized.

The survey consisted of the following sections and modules: (1) Household Questionnaire with an information panel, household members panel, and household assets module; (2) Men's Questionnaire with an information panel and men's information module; and (3) Women's Questionnaire including an information panel and modules on demographic information, fertility, most recent birth, antenatal care, respectful maternal care, postnatal care, family planning, and women's empowerment.

Ifakara ensured that data collection for both the quantitative and qualitative survey was carried out in line with enhanced COVID-19 prevention protocols. While the government had minimum COVID-19 restrictions for the public at the time of data collection (January to March), Ifakara ensured that the training for researchers covered informed consent and routine hygiene precautions such as the availability of sanitizer and/or washing hands. For in-depth interviews and focus group discussions (FGD) participants sat outside

socially distanced, all researchers wore masks, participants were encouraged to wear masks and wash their hands prior to the start of the interview.

Figure 10 Qualitative data collector's orientation

The second source of quantitative information for the outcomes reporting comes from the step wedge impact evaluation, which assessed the effect of two elements of the overall TAMANI project, specifically the Basic and Comprehensive Emergency Obstetric and Newborn Care training and deployment of Community Health Workers. This pragmatic evaluation examined the impact of these trainings, over and above any impacts due to the larger TAMANI intervention, including upgrading facilities, providing ambulances and community meetings. The evaluation used the staggered roll out of the EMONC trainings and CHW deployment to estimate impact while accounting for district effects and secular time trends. The impact analysis differs from a baseline and endline report by taking into account effects associated with districts, and with general time trends, enabling the analysis to highlight where changes in indicators can be attributed to the TAMANI interventions.

Rolling profiles were also conducted throughout the life of the project, which involved semi-annual cohort qualitative unstructured interviews with a range of project participants. This data set has also been used to illustrate and describe the project's contributions through the lens of project participants. Other data sources for immediate outcomes include project documents and monitoring tools, the endline Health Facility Assessment Survey and the extraction of Health Management Information System (HMIS) data.

The section below provides details on progress towards the achievement of the outcomes included in the PMF (Annex 2). Note that in response to feedback provided by the GAC monitors, changes are now being presented in percentage points and % of achievement.

Ultimate Outcome Expected Results	Indicators	Baseline	Project Target	Endline (% change)	% of achievement
1000 Reduced maternal and newborn mortality and morbidity in underserved districts in Tanzania	MMR (per 100,000 live births) national estimate	556	70*	524 (7% decrease)	6% against project achievement
	NMR (per 1000 live births) national average	22**	12***	20	20% against project achievement
	Adolescent pregnancy (% of women ages 15-19 who are pregnant or have given birth)	43%	5pp decrease (38%)	42%	20% against project achievement (1 pp decrease)

* SDG 3 MMR Indicator target
** Baseline number updated as per UNICEF's 2019 data
*** SDG 3 NMR Indicator target

Explanation/Assessment of Performance:

Newborn and Maternal Mortality

The ultimate outcome indicators for MMR and NMR were planned to be reported by the project using updated DHS data in the final report. However, given there has not been a DHS survey in Tanzania since 2015, using this data source is not possible. Two alternate data sources have been identified for reporting MMR and NMR in the final report. The first is UNICEF's 2019 NMR figures (though important to note that this calculation was slightly different from the DHS so the baseline figure has been updated). UNICEF estimates that NMR has been slightly reduced from 22-20 deaths per 1000 live births from 2015 to 2019.

The latest data on MMR figures is from 2017 from a WHO, UNICEF, WBG, UNFPA report. This report estimates that the MMR has dropped from 556 in 2015 to 524 in 2017. TAMANI has worked to contribute to the reduction of both of these indicators through improvements on both the demand and supply side of maternal and newborn health services. In terms of the supply side, achievements in the number of women delivering in health facilities with skilled birth attendants, the number of health facilities now equipped and supplied to deliver CE/BEmONC, the change in skills and knowledge of health care workers performing CE/BEmONC and the number of health facilities now providing respectful maternal care have all contributed to improved outcomes for women and newborns which are reflected in the decreases in NMR and MMR at the ultimate outcome level. In terms of the demand side, an increased number of women seeking timely reproductive, maternal and neonatal health care services, including the prevalence of women attending ANC 4 or more times, improvements in power relations and the greater involvement of men in supporting women's right to seek health care have contributed to more improved health outcomes for women and neonates.

The endline gender qualitative report complemented the quantitative results seen in terms of MMR and NMR. Respondents argued that the quality of health services have improved and shared the perception that maternal mortality has gone down, health staff and ambulance services and home visits are available, and that services generally are affordable, of high quality and that waiting times for service have reduced.

> "*And another impact that since we started those things [TAMANI activities] we don't have as many complications as abortions, perinatal deaths, infant deaths, for example like a local Tumbi center you can really think for a whole year I haven't had a maternal death*" (Male HCP, doctor, KII, Tumbi)

> *"Another thing, in terms of reproductive health, it has managed to reduce maternal and child mortality, and something else related to reproductive health is that it has succeeded to reduce even the situation where babies are born in dangerous surroundings, so such things*." (Female HCP, nurse, Kashishi)

As part of the Health Facility survey, facilities were asked to report their total number of deliveries as well as total number of maternal deaths in the last 12 months before the survey.

- At the baseline survey, for the period between August 2016 and September 2017 across all 265 facilities there were 65,042 recorded deliveries and 95 recorded maternal deaths.
- At endline survey, for the period between November 2019 and October 2020 across all 261 facilities there were 107,741 recoded deliveries and 41 recorded maternal deaths.

Overall, there were more deliveries and fewer maternal deaths reported in the last year of the project versus the first year. In 2016-17 facilities were recording 146 maternal deaths per 100,000 deliveries. This proportion decreased to 38 in 2019-20. Although this represents the number of deaths as reported by each

health facility, it is possible that in some cases it also includes maternal deaths that occurred in the community as CHWs are responsible for identifying and reporting maternal deaths that occur in the community.

Adolescent pregnancy

Adolescent friendly health services were found at baseline to be nearly non-existent as part of a TABASAM study on client satisfaction (Feb 2015). Data from the Tanzania Demographic Health Survey 2015 indicated that two in five girls are married by the age of 18, and more than 50% of 18-year-old girls are pregnant or already mothers, indicating issues of access and availability for family planning for young men and women. TAMANI integrated a strong Youth SRHR component built into the project that addressed both health care workers and service provision, but also community-based structures such as safe spaces, and training Youth SRHR champions and peer educators. Adolescent pregnancy was analyzed through the household survey at baseline and endline and complemented by the step wedge evaluation. Adolescent pregnancy was measured as the percentage of adolescents who became pregnant for the first time at any given wave of data collection.

TAMANI endline survey results revealed that adolescent pregnancy slightly decreased from 43% at baseline to 42% at endline. While not a significant decrease, considering the context of COVID in the last year of project implementation and school closures during a 3-month period between the middle of March until the end of June 2020, this decrease should be regarded as a significant achievement. COVID-19 has shown to have further increased the chances that adolescent girls will be exposed to different forms of gender-based violence and the risk of teenage pregnancy where incidence of sexual violence has been heightened[1].

The impact evaluation revealed that although the percentage of adolescents who were pregnant or already mothers at any given wave of data collection was approximately 40%, only a small proportion became pregnant for the first time during the course of the intervention. These results suggest that the first-time adolescent pregnancy rate remained essentially unchanged over the course of the intervention.

Intermediate Outcome Expected Results	Indicators	Baseline	Project Target (in percentage points)	Endline (%change)	% of achievement
1100 Improved availability of quality reproductive maternal and newborn health services in underserved districts in Tanzania	% of women and adolescent girls with an unmet need for family planning	30% W:29% A:41%	W:5pp decrease A:10pp decrease	W: 38% A: N/A	8pp increase
	% deliveries assisted by a skilled birth attendant	70% W:65% A:77%	10pp increase (80%)	82% W:82% A: 83%	12pp increase/ 102% against project target

[1] World Vision. 2020. COVID-19 Aftershocks: Access Denied. https://www.wvi.org/publications/report/coronavirus-health-crisis/covid-19-aftershocks-access-denied.

	% change in Respectful Maternity Care	22%	20pp increase (42%)	25%	3pp increase / 60% against project target

Unmet need of family planning

The unmet needs for family planning indicator included married women who:

(1) were not pregnant and not postpartum amenorrhoeic and wanted to postpone their next birth for 2 or more years or stop childbearing altogether, but were not using a contraceptive method, or (2) had a mis-timed or unwanted current pregnancy, or (3) were postpartum amenorrhoeic and their last birth in the last 2 years was mistimed or unwanted. This indicator was measured both by data from the household survey at baseline and endline and was also measured through the non-randomized experimental design impact evaluation (stepped wedge).

Data from the endline survey revealed that the percentage of women who are not using contraception and have unmet needs for family planning methods increased from 30.3% at baseline to 38.7% at the end of the project. In almost every district more women reported having unmet needs for contraception and family planning at the endline than at the baseline survey. Kaliua and Tabora MC are the only two districts where the percentage of women with unmet needs remained unchanged between the two surveys. The increased percentage of women with unmet needs combined with the unchanged percentage of women using contraception could suggest barriers to contraception access, or lack of education on family planning, are continuing challenges in the Tabora region. This could also point to potential challenges with commodity availability and accessibility, or negative views on family planning following the President Magufuli's remarks against contraception in late 2018. Given that TAMANI did not work on commodity availability directly, this indicator was more difficult to influence.

It is important to note that the age-disaggregated data for adolescent girls has not been reported on at endline as the sample of adolescent girls was small at baseline and endline making it difficult to draw strong conclusions on unmet need falling for adolescent girls as a much larger sample size would be required.

Data from the stepped wedge impact evaluation revealed that while unmet need appears to increase over time in some districts but decrease over time in others, it remained relatively the same after accounting for district and time effects, with an estimated 35.0% unmet need in untreated time, and a 33.3% in treated time.

Qualitative monitoring data suggests that some project participants noted the impact CHW's had on access and information about family planning. CHWs played a crucial role on educating and supporting women to access reproductive health services this can be observed both through qualitative data collected through rolling profile interviews and the qualitative gender study at endline.

From Rolling Profile interviews, CHW in Kaliua District shared observations based on the changes he has seen at the community level, especially in relation to the uptake in family planning methods by adolescents,

> "*Young people have greatly increased their use of family planning which has led to a reduction of early pregnancy among youth. Previously there was a lot of misinformation about the effects of methods of contraception, which made it difficult to influence young people to use contraceptives, but now more young people are more informed*." (Male CHW, Kaliua District)

Qualitative data collected at endline through IDIs and FGDs revealed that previous stigma around the use of adolescents using modern family methods has decreased however there are still differences in levels of knowledge between adolescent girls and boys.

> "*Some adolescents give various excuses for not using it and could benefit from more information you ask them why are you not using family planning, they say "it's bad", so you ask them "why is it bad"? They tell you it's bad because it can make you fat, it can destroy your ability to get children, so they may give you so many reasons*." (Male CHW, FGD)

> "*Young people are the nation of tomorrow and need to receive FP education, avoiding unplanned pregnancies is a big factor and due to this it is especially important to target girls with FP info and to learn the importance of protecting herself "even if I the father decide to run away you will still remain with the pregnancy but boys need the info too, it is also important for men because we are the perpetrators, that is we are the reason why a woman is pregnant*." (Male CHW, FGD)

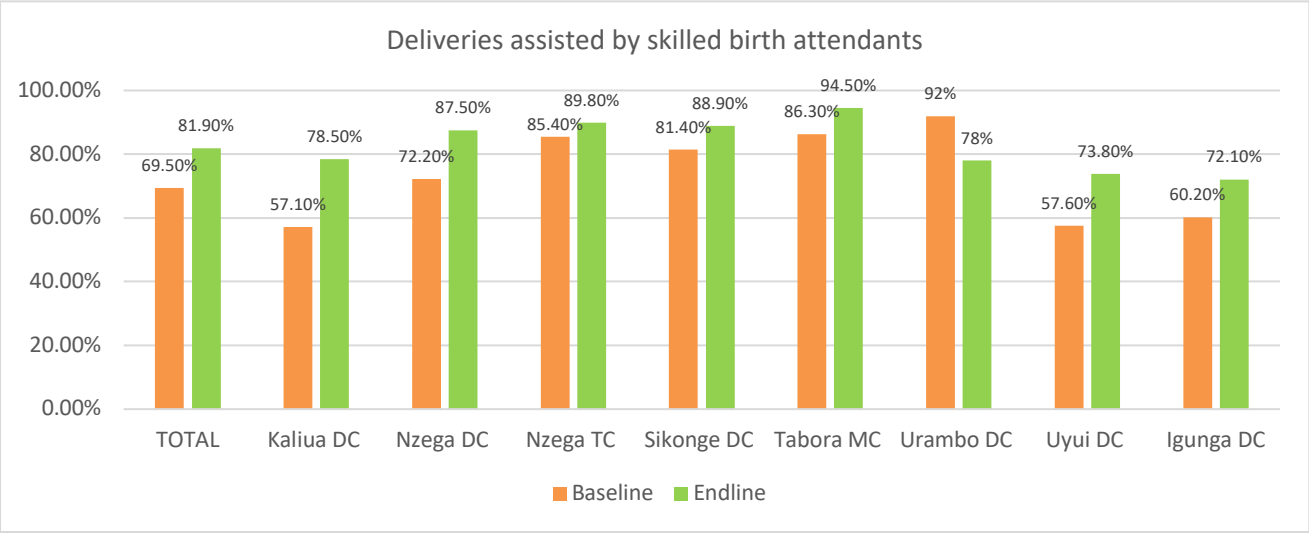
Skilled birth attendants

Skilled birth attendants (SBAs) include doctors, nurses, assistant nurses, clinical officers, assistant clinical officers, midwives, and maternal and child health aides. This indicator was measured as the percentage of deliveries assisted by a skilled birth attendant in the last five years. Progress towards this indicator was informed by both data from the household survey at baseline and endline and was also analysed through four waves of data from the non-randomized experimental design impact evaluation.

The percentage of deliveries assisted by a skilled birth attendant among women who have given birth in the last five years by district at baseline and endline is presented in Graph 4.

At baseline, 70% of women reported giving birth with a skilled birth attendant present. This proportion increased to 82% in the endline survey. Women from all districts reported deliveries with an SBA present at higher or similar rates in the endline survey vs baseline survey except for Urambo. However, given the small sample of interviewed women from Urambo (50) one should be careful to draw strong conclusions about the difference in percent of deliveries with an SBA present between the two surveys in that district.

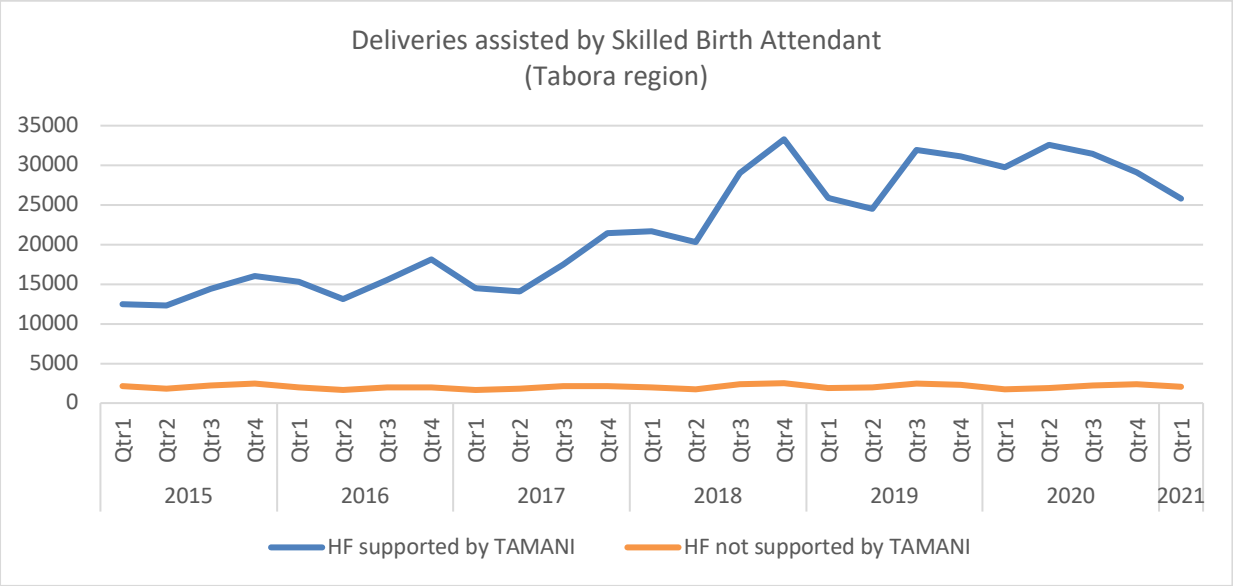
Graph 4: Deliveries assisted by SBAs in each district



Data from the impact evaluation complemented the findings from the household endline survey. While there did appear to be an increase over time in some districts (i.e. Kaliua), this is not consistent for all districts, and the within-district measurements lack precision. The estimates from the random effects model showed that the adjusted estimate for delivering with a skilled birth attendant was 76.3% (95% CI: 49.5, 100%) before the intervention and 80.9% (95%CI: 53.3, 100%) after the intervention. Comparing these two estimates suggests that the intervention increased the prevalence of delivery assisted by a skilled birth attendant by 4.5 percentage points (95% CI: -0.01, 10.0), corresponding to a 6% increase (-0.1%, 13.0%).

HMIS data on the number of deliveries assisted by Skilled Birth Attendants for two groups of Health Facilities, the (265) supported by TAMANI and the (93) facilities not supported by the project has also helped inform progress towards this indicator.

Graph 5: Deliveries assisted by SBAs each year of the project



According to the graph above, there has been a consistent increase in deliveries assisted by Skilled Birth Attendants at health facilities supported by TAMANI, with a sharp upward trend in Jan-Mar of 2018, and again in Jan-March 2019 with a steady increase until September 2020. There was a decline seen from Apr-June 2020 which coincides with the first wave of the pandemic. From the end of December until the middle of March there was a significant spike in COVID-19 in Tanzania which could have contributed to women choosing to birth at home out of fears of contracting the virus at health facilities. In August 2020 CHWs began to transition from the TAMANI project, which may have also contributed to the reduction of facility-births.

Qualitative data from the endline gender study revealed that participants observed a significant increase in the number of women giving birth in health facilities and a reduction in the use of traditional birth attendants at home. Several respondents claimed bylaws prohibit home traditional midwives and that you are required to go to the clinic, they claimed this legal update as well as TAMANI activities influenced the shift away from home births.

A female CHW explained that she is keeping track of the pregnant women in her ward who give birth at home versus the clinic arguing that the majority of women now deliver at the clinic:

> *"I have the whole timetable, and I am also aware of all my customers, knowing how many have given birth at the health center…For the current campaign, all pregnant women are required to give birth at the health centres and not at traditional birth attendants, laws actually regulate this*."(Female CHW, IDI)

Another male CHW explained,

> *"Traditional birth attendants not common anymore, they are paid to instead advise pregnant women to give birth at the facility - they are prohibited by the government but in combination with the TAMANI activities, this has given good effect for people to embrace clinic birth*." (Male CHW, IDI)

The repeated narrative is that home births are not safe for the mother or child, several respondents repeated that home births are "forbidden".

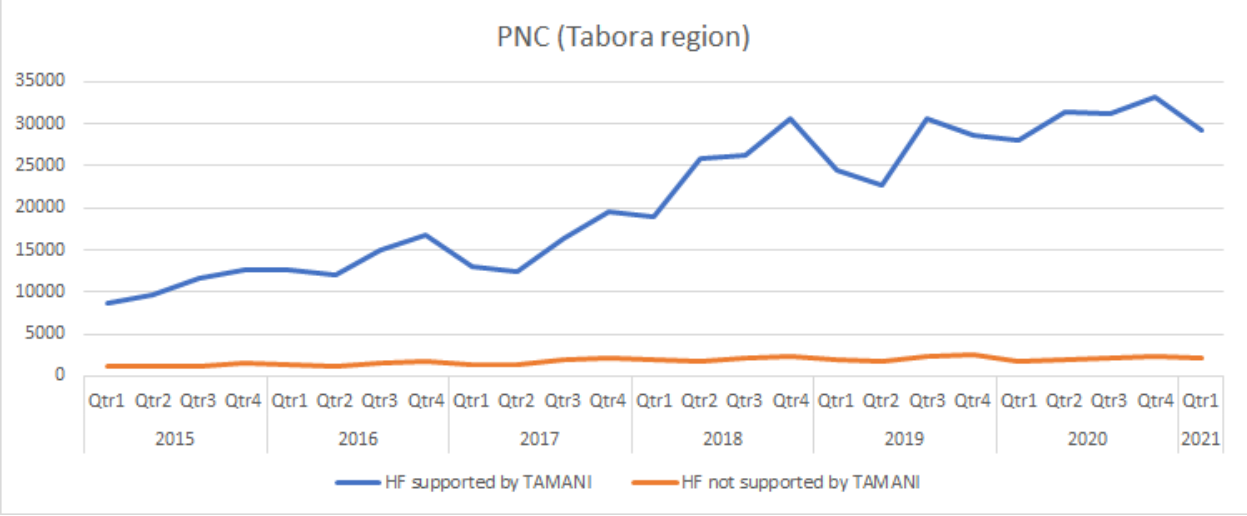
> *"Previously, people believed in customs and traditions, they trusted in traditional birth attendants whom they believed they know everything about delivery, but now it is not allowed" (Adolescent girl, FGD)*

Postnatal Care

While not a specific indicator in the PMF, TAMANI monitored at baseline and endline the number of women who received post-natal care within two days of childbirth. This indicator is based on a question "After delivery, did anyone check on your health while you were still in the facility". There was a significant increase amongst the percent of women ages 15-49 who received postnatal care within the first 48 hours after birth. At endline 91% of women who gave birth in a health facility reported having someone check on their health status before leaving the facility, this represents an important increase when compared to the baseline survey, in which 54.4% of women reported having postnatal health checks.

HMIS data has also been monitored throughout the life of the project, to inform the project of the rate of PNC between health facilities being supported by TAMANI and those with no support. The graph below shows HMIS data on the number of newborns receiving post-natal care services in the first 48 hours after birth for health facilities supported and not supported by TAMANI.

Graph 6: Number of newborns receiving post-natal care services



The graph above shows a significant increase over the 2018 year in the number of PNC visits, though this upward trend slowed in 2019 and 2020. Similar to what was observed in the first quarter of every year, there was a significant reduction in PNC visits in January – March 2021, which could be attributed to the rainy season and farming during which women are fully engaged. Overall, this is a positive trend demonstrating that women were still able to access health facilities for post-natal care services despite the impact of COVID-19.

Change in Respectful Maternity Care

Growing evidence suggests that in countries with high maternal mortality, the fear of disrespect and abuse that women often encounter in facility-based care is a more powerful deterrent to use of skilled care than commonly recognized barriers such as cost or distance. The BE/CEmONC training included the WRA Respectful Maternity Care Charter which outlines a clear standard for RMC, rooted in international human rights.

On the patient side, women's responses about their experiences of facility-based childbirth indicated a minor improvement in RMC overall between baseline and endline. Changes to specific elements of RMC were mixed, with a substantial reduction in the proportion of women reporting being disrespected, insulted, physically hurt or coerced, and an improvement in women's confidence that their information would be kept private. There was no change or a drop in the share of women who reported being able to ask questions and being fully informed about their care - this could be due to an increase in awareness of women of their rights surrounding quality of care, and their right to ask questions of their care provider. Similarly, there was no change, and/or a drop in the share of women reporting the ability to move around during childbirth and choose their birthing position, or a birthing companion. This may speak to the lack of availability for private spaces during labour in some health facilities, where male partners may not be allowed into shared women's spaces. Or it could be due to changes in health facility policies during the COVID-19 pandemic that may have limited choices available to women for their deliveries, as well as placed additional pressure on HCWs. Due to the complexity of COVID-19 in Tanzania at the time of data collection, the influence of COVID-19 on facility-based birth was not covered in the household survey, however the gender qualitative report did capture some of the constraints that COVID placed around privacy in smaller clinics where rooms dedicated to youth services had to be turned into facilities for COVID patients.

Percent change in respectful maternal care was measured through a series of questions included in the Household Survey that included experiences with the last birth including communication with health care provider, choice of birth position and option and choice of birth companion. To assess the level of respectful care experienced during childbirth, women (age 15-49) were asked a series of questions on their satisfaction of care and whether their beliefs, independence, emotions, dignity, privacy and preferences were respected during their most recent childbirth in a health facility that took place in the last five years. The results for women interviewed about their experiences delivering their most recent child in health facilities are presented in Table 13.

Table 13: Respectful Maternal Care, Baseline and Endline

	Baseline	Endline
Option to choose preferred birthing position	4.0% (26/658)	9.0% (81/896)
Allowed to move around while in labour	56.7% (373/658)	46.5% (417/897)
Told everything about the care being received	21.6% (143/663)	20.8% (187/897)

	Baseline	Endline
Given time to ask questions and voice opinions	5.9% (39/661)	4.5% (40/897)
Confidence in health facility and HCWs keeping information private	57.5% (383/666)	80.4% (721/897)
Not treated with respect/insulted/physically hurt or coerced into something didn't want to do	13.4% (89/665)	7.4% (66/896)
Allowed to have a birth companion	22.3% (148/665)	25.1% (225/896)
Allowed to choose who the birth companion is	43.2% (64/148)	62.2% (140/225)

Overall results for the respectful maternity care module show some mixed but promising results. While the proportion of women allowed to move around while in labour dropped considerably from 56.7% to 46.5% the percentage of women allowed to choose their preferred birthing position increased from 4.0% to 9.0% between surveys.

While the proportion of women allowed to have a birthing companion during their labour did not change substantially between the surveys, a higher proportion of women who could have one were given a choice of their birthing companion. At baseline only 43.2% of respondents were allowed to choose who to accompany them during labour compared to 62.2% at the endline survey.

Women's confidence in their information being kept confidential by the staff of the facility increased significantly between the surveys (from 57.5% to 80.4%), the level and quality of communication between patients and staff remains concerningly low and unchanged: less than 5% of women reported being given time to ask questions and voice their opinions during labor, and only about 21% of women felt that they were told everything about the care they were receiving and why.

Finally, the percentage of women who reported not being treated with respect, insulted, physically hurt, or coerced into something they did not want to do during labour decreased by almost 50% between the beginning and the end of the project (13.4% vs 7.4%).

Data from the stepped wedge impact evaluation was relatively aligned with endline data from the household survey. The index overall remained relatively stable over time in each of the districts, but the breakdown of indicators showed that while respectful maternal care increased in some areas (confidence in healthcare workers respecting privacy and being allowed to choose a birth companion), it decreased in others (being able to move around and ask questions). After accounting for district and secular time, the average score was virtually unchanged from 0.38 in untreated time and 0.37 in treated time.

Qualitative information from the endline gender study revealed that generally respondents find the clinic staff welcoming. The majority found there has been an improvement while a few claimed there remains challenges with staff attitudes. Some men reported that they were faced with very positive, welcoming attitudes as a result of being a father bringing his child to the clinic while other respondents noted how confidentiality is now maintained.

> *"Previously the nurses were very strict and not always welcoming but their attitudes have changed for the better and they are confidential in their work." (Female Tamani facilitator, IDI)*

Intermediate Outcome Expected Results	Indicators	Baseline	Project Target (in percentage points)	Endline (%change)	% of achievement
1200 Increased utilization of reproductive maternal and newborn health services by women and their families in targeted districts in Tanzania	% women 15 - 49 with a live birth attending ANC 4 or more times	W: 56% A: 53%	10pp increase (66%, 63%)	W:69% A:58%	W: 13pp increase / 104% against project target A: 5pp increase / 92% against project target
	Contraceptive Prevalence Rate	W: 32% A: 16%	W:5pp increase (27%) A:10pp increase (26%)	W:32% A:21%	W: No Change A: 5pp increase /80% against project achievement
	%/# of women who are autonomous to visit health facility	W: 36% A:26%	10pp increase (46%,36%)	W:58% A: N/A	W: 22pp increase / 126% against project achievement

Explanation/Assessment of Performance:

Antenatal Care

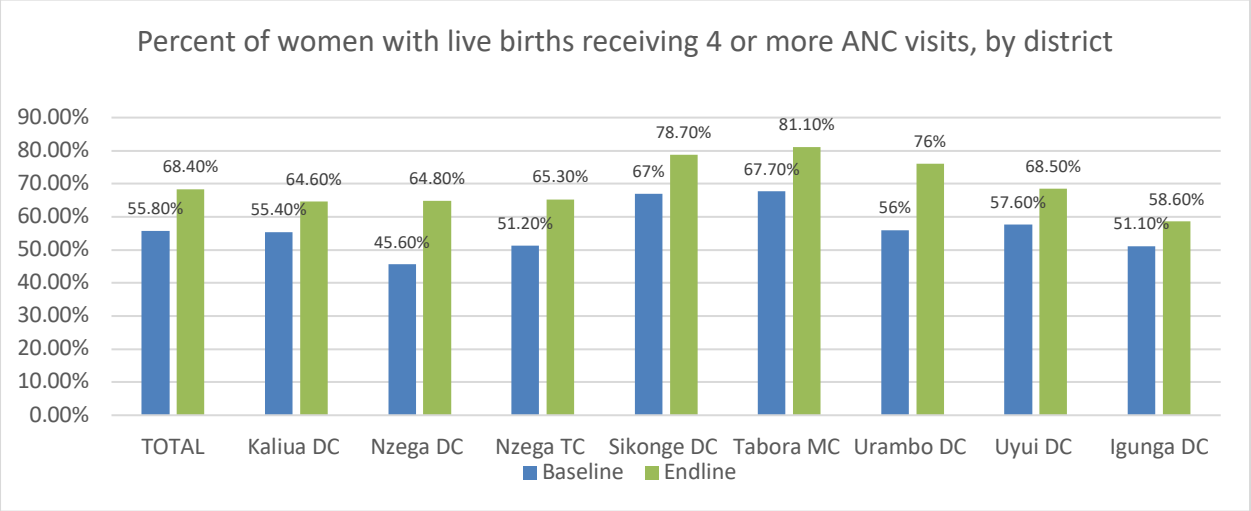
TAMANI worked on the demand side by encouraging healthy behaviours and practices including seeking timely reproductive, maternal and neonatal health care services. CHWs played an important role in educating and supporting women to access reproductive health services. The CHW program covered antenatal, postpartum and newborn care, family planning, how to plan community based MNCH activities, referral system, maternal death reporting, and reporting and monitoring of community MNCH services. The project also worked with communities to deliver comprehensive SRHR education to youth in the community through the organization of safe spaces/community and SAA dialogues to share evidence based SRH information.

Progress towards this indicator was measured both by data from the household survey at baseline and endline and was also measured through the non-randomized experimental design impact evaluation. Data from HMIS also supplemented TAMANI's monitoring of ANC +4 rates in health facilities supported and not supported by TAMANI.

ANC was measured through the number of women ages 15-49 who attended antenatal care services at a health facility four or more times during their most recent live birth in the last five years. Between the baseline and endline surveys the percentage of women reporting receiving these services increased from 55.8% to 68.4% (Graph 7). Increases have been noted across all districts with one of the lowest reporting districts at baseline (Nzega DC), making some of the largest gains (45.6 at baseline vs 64.8% at endline). At both survey waves 98% of the respondents reported seeing a health professional at least once for antenatal

care. However, a considerably higher proportion of women from the endline survey indicated going for their first antenatal visit in their first trimester of pregnancy (32.5%) compared to their counterparts from the baseline survey (21.8%).

Graph 7: Percentage of women with live birth receiving 4 or more ANC visits, by district

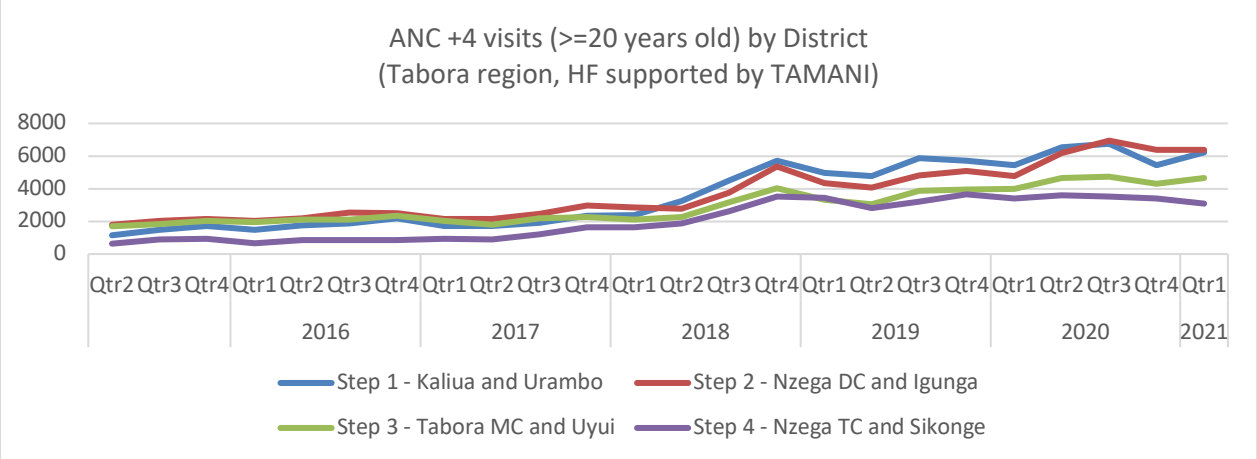


Results from the impact evaluation report, indicated that the random effects model (which accounts for time trends and district effects) showed an adjusted estimate of 63.8% (95% CI: 46.7%, 81.1%) of pregnancies receiving 4 or more ANC visits before the intervention and 65.2% (95%CI: 47.4, 83.0%) after the intervention. This corresponds to an estimated risk ratio of 1.02 (0.91, 1.12) or an increase of 1.3 percentage points (95% CI: -5.3, 7.9).

HMIS data analysed throughout the course of the project indicated that TAMANI support to health facilities though clinical training support, and/or CHW presence in communities may have contributed to an increased demand for antenatal care services.

The graph below shows HMIS data on ANC+4 visits for health facilities supported by TAMANI by district clusters of CHW roll-out for WRA over 20 years of age:

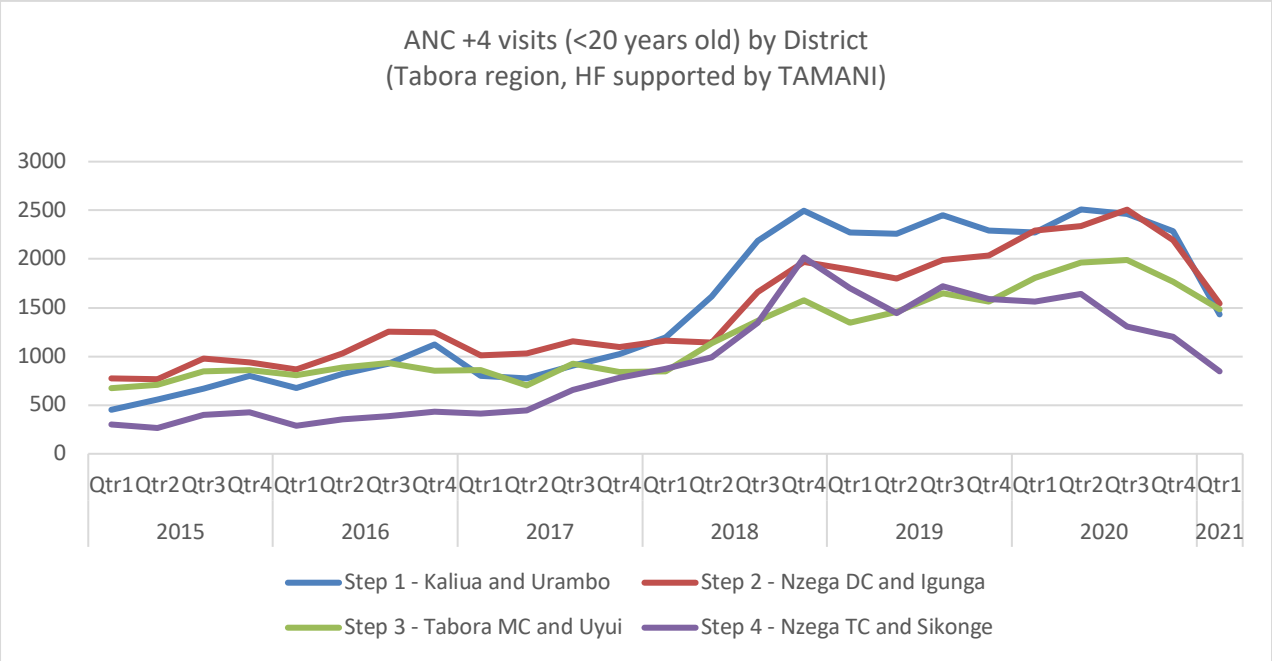
Graph 8: Number of ANC+4 visits for women (over 20 years of age) with live births, by district health clusters



Overall, there was a steady increase in the number of WRA over the age of 20 attending 4+ ANC visits across all districts with HFs supported by TAMANI throughout the life of the project.

The graph below shows HMIS data on ANC+4 visits for health facilities supported by TAMANI by district clusters of CHW roll-out for adolescent girls under 20 years of age:

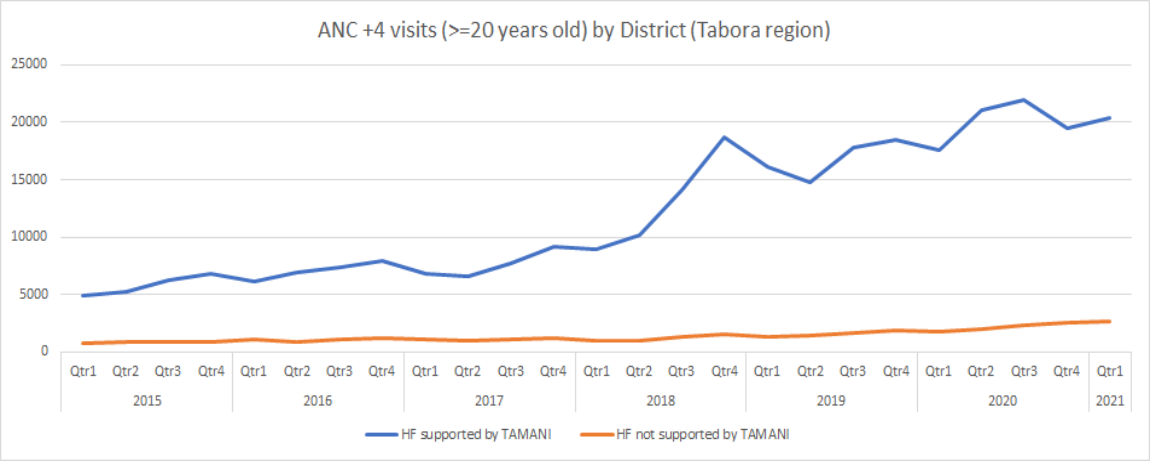
Graph 9: Number of ANC+4 visits for adolescent girls (under 20 years of age) with live births, by district health clusters



The data above demonstrates significant increases in ANC+4 visits across all ages and districts, with Kaliua and Urambo still representing the largest increases followed by the other clusters in the same order they were phased in. Since mid 2020 the number of ANC+4 visits for adolescent girls have decreased in all districts suggesting that the phase out of CHW's and the pandemic may have negatively influenced these visits.

Overall, the region has observed a large increase in ANC visits for both women below and above 20 years of age, with gains at both TAMANI and non-TAMANI supported health facilities throughout the course of the project. All districts reported reduced number of ANC+4 visits for adolescents in the first quarter of 2021. Despite the COVID-19 pandemic, TAMANI contributed to a 30% increase in adolescents and 126% increase in adult women receiving full coverage of antenatal care services since the beginning of the project.

Graph 10: Showing ANC+4 visits for health facilities supported and not supported by TAMANI



A historical trend of dips in all maternal health services coinciding with Q2 is evident when accessing HMIS data over the last 5-10 years. It is important to note when contextualizing performance trends in post-natal and antenatal care visits that CARE has noted that there is a cyclical trend for delivery and pregnancy in Tabora, related to farming cycles.

Qualitative data from endline on overall increased health service uptake also speaks to the change observed in ANC attendance.

> *"People in the past had no reason of going at the health facility as the health services were provided poorly. But through CARE has helped to firstly to educate people to go to the health services. But also, the health education that are provided at the scale/ pima card, that education made people educated and improve the attendance because people are motivated to go." (Tumbi, SAA/CSC Facilitator)*

One CHMT member described the increase in the number of women attending ANC in her district,

> *"There is an increase in ANC visits at health facilities by 60% before 12 weeks, this is because of the kind of services offered at clinics, women are now getting full ANC package at health facilities, so they sensitize others to come for the services and also the continued sensitization from CHWs to women and the community at large to utilize ANC services has led this increase." (CHMT member, Nzega DC)*

Contraceptive Prevalence Rate

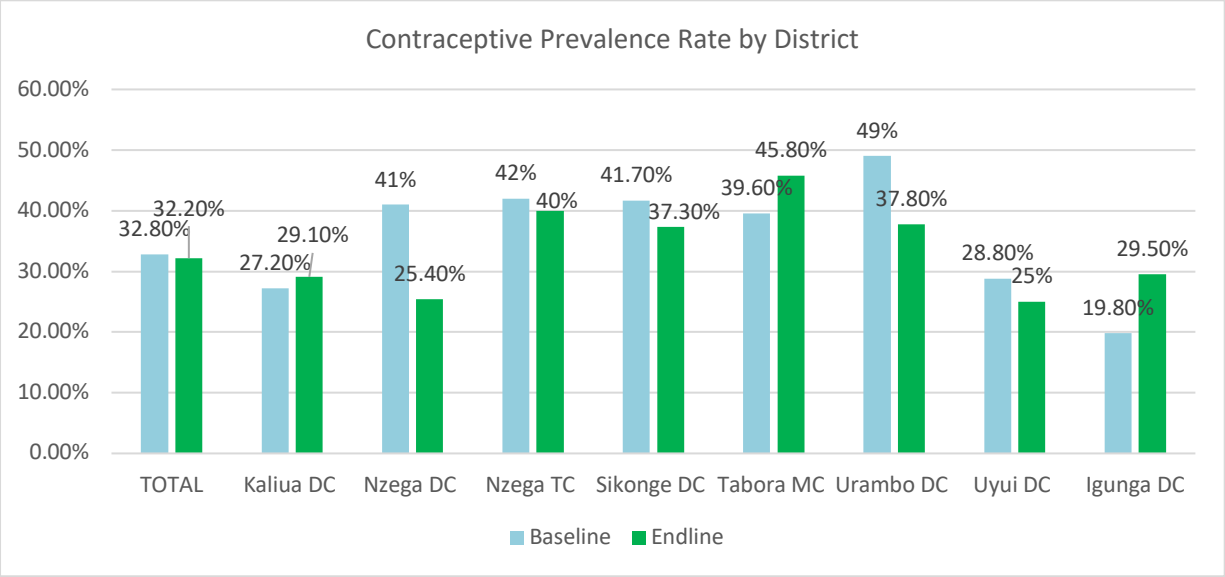
Progress towards this indicator was measured both by data from the household survey at baseline and endline and was also measured through the non-randomized experimental design impact evaluation. Data from HMIS on contraceptive rates by district supplemented TAMANI's monitoring of this indicator throughout the life of the project.

The contraceptive prevalence rate is defined as the percentage of married women using a method of contraception or family planning. The percentage of married women using any method of contraception or family planning between the two surveys remained unchanged, with 32.8% of married women surveyed at baseline and 32.2% at endline reporting using contraception. The only substantial changes were

observed in Nzega DC, where contraceptive prevalence amongst married women fell from 41.0% to 25.4%, and in Igunga DC where it increased from 19.8% to 29.5%. Data from the impact evaluation also confirmed no change in this indicator.

Modern contraceptive use including female or male sterilization, intrauterine device, injectables, implants, contraceptive pills, male or female condoms, diaphragms, foam/jelly, or lactational amenorrhea method remain the main form of family planning for women at both baseline and endline. Out of married women currently using any form of contraception, 92.1% at baseline and 93.5% at endline indicated using at least one method of modern contraception.

Graph 11: Contraceptive Prevalence Rate per district



It important to note contextually that, the former President made several public statements in 2018[2] and 2019 against the use of birth control. This strong anti-contraception stance could have swayed public opinion especially in a region where there was strong support politically for the President, being from the dominant tribe (Sukuma) is important contributing factor. In fact, feedback from project staff suggested that some community members felt it was illegal to access contraception following these remarks.

Qualitative data has provided insight into perspectives from community members on increased use of contraceptives by women and adolescents. A Community Health Worker shared the trend he has seen in the use of contraceptives by adolescents in Rolling Profiles,

[22] Tanzania's President Magufuli calls for end to birth control published online Sept 10: BBC News; 2018 [cited 2021 May 10]. Available from: https://www.bbc.com/news/world-africa-45474408.
A. B, D. O. Amnesty International condemns Tanzania's 'attack' on family planning. published online Sept 25: CNN; 2018 [cited 2021 May 10]. Available from: https://www.cnn.com/2018/09/25/africa/tanzania-suspends-family-planning-advert-intl/index.html.
President urges Tanzania's women to 'set ovaries free', have more babies to boost economy published online July 16: Reuters; 2019 [cited 2021 May 10]. Available from: https://www.reuters.com/article/us-tanzania-politics-idUSKCN1U51AZ.

"Increased adolescent use of contraceptives has significantly contributed to reducing teenage pregnancies. We have often provided family planning education with its benefits. Many young people are now encouraged to go to the center for these services. The situation was much worse before, many young people believed that family planning methods had serious health consequences, so it was not easy to accept them." (Male CHW, Kaliua District)

A woman described how the information she received from health care workers enabled her to understand the myths around modern family planning methods which made her switch from natural methods to prevent pregnancy.

"Initially the community members advised me to use more natural methods for contraception believing that hospital methods have serious health consequences. But through the training I received from the nurse, and various media outlets on the side effects of those natural methods I decided to use modern family planning methods to prevent pregnancy." (WRA, Kaliua District)

Women's Autonomy to Seek Care

TAMANI's gender strategy specifically sought to target key gender barriers influencing MNCH outcomes including women's autonomy in making choices to seek health care and seeking skilled labour during delivery. Unequal decision making between men and women when making decisions around reproductive health and childcare as regarded as "a woman's issue" were identified at the onset of the project. Men retaining the privilege to control household finances, in ways that affect when and how women were able to access appropriate and timely care were key topics addressed through Social Analysis and Action (SAA). Deep engagement with communities, especially men and boys to reflect on how position and power negatively impacts their partners' health status through SAA was carried out to transform power relations impacting women's autonomy in health seeking behaviour.

Autonomy in making healthcare decisions refers to a woman's perceived level of confidence to go to a health facility even if their partner objects. According to the baseline survey, among women who in the last 12 months had visited a health facility for care for themselves and/or their children, only 35.3% felt completely confident in their ability to do so regardless of their partner's support or objections. Large increases in reported autonomy were observed in all districts when the endline survey results were analyzed. The districts with some of the lowest reported healthcare decision-making autonomy at the beginning of the project, Kaliua DC and Uyui DC, experienced the biggest increases of 32 and 31 percentage-points, respectively, by the end of the project. Overall, 57.9% of women surveyed at endline felt completely confident in their ability to make healthcare decisions.

Women's autonomy, in terms of a woman's ability to visit a health facility without her husband's permission, increased moderately according to the impact evaluation. Women reported their own feelings of autonomy in decision-making 5.4% higher after the intervention, accounting for differences in districts and secular time.

It is important to note that that the age-disaggregated data for adolescent girls has not been reported on at endline as the sample of adolescent boys who answered this question was small at baseline and endline. A much larger sample size would be required to draw strong conclusions on adolescent boys support for a girl to visit a health facility on her own,

Qualitative interviews indicated an increase in communication and consultation within the family after TAMANI interventions, although the father/husband as head of household and ultimate decision-maker is still a strong norm in communities. Men's support for a woman's right to visit a health facility without

permission showed an increase according to the descriptive report in contrast to the impact evaluation, suggesting that other interventions such as community meetings may have been more impactful for this indicator. According to both reports, men's support for women using contraception without their husband's permission remained unchanged. The qualitative study showed greater discussion of health and contraceptive decisions between partners, but a mixed reaction among men to TAMANI's messaging on women's health and reproductive autonomy suggesting that SAA interventions have positively impacted decision-making dynamics within some household in Tabora.

Immediate Outcome Expected Results	Indicators	Baseline	Project Target	Endline	Cumulative (% of achievement)
1110 Strengthened capacity of regional and district health system managers to effectively plan, manage, and deliver quality gender sensitive reproductive maternal and newborn health services	#/% of health facilities reporting quality* RMNH related HMIS data monthly	117	150	309	309/363 HF =85% of HFs 206% against target
	District CCHP's scores in DQA 70* or higher	Uyui = 57.5% Urambo=57.5% Sikonge =70% Nzega DC=65% Kaliua =67.5% **Igunga =71.8% **Tabora=MC=85%	8	9.28% Increased	Uyui = 73% (15.49% increase) Urambo = 78 % (20.6% increase) Sikonge = 74% (4.45% increase) Nzega DC= 70% (5.07% increase) Kaliua=73% (5.76% increase) Nzega TC= 81% Igunga= 83% (11.41% increased Tabora MC=83% (1.79% decreased)

*quality will be defined as receiving a score of >95% on data completeness using DHIS2

**Scores from 2018/19 as baseline scores were unavailable

Explanation/Assessment of Performance:

In every financial year CHMTs were assessed on quality of CCHP's presented to PORALG, including a set of criteria required from the facility to district level. A key challenge has been the introduction of ad-hoc changes from MoHCDGEC and Local Government Authorities (LGAs) which requires Health Facilities to add or omit priorities during planning resulting in some errors and therefore, a reduced score.

In the 2019/2020 Tanzania financial year the total number of facilities reporting >95% data completeness is 309. Out of 363 Health Facilities, 47 did not report any RMNH quality data in HMIS, 287 other Health

Facilities had missing scores for specific services. Project partners indicate that RBF and TAMANI have contributed to quality data improvements, with Tabora being recognized as a region that has made significant improvements.

In the last year of the project, the regional average of the CCHP score increased by 9% percentage points, from 68% at baseline to 77% in March 2021.

Immediate Outcome Expected Results	Indicators	Baseline	Project Target	Endline	Cumulative (% of achievement)
1120 Improved gender-sensitive reproductive maternal and newborn health service infrastructure	#/% of women and adolescent girls satisfied with improved health facilities and emergency transportation	53%	10pp increase (63%)	77%	24pp increase/122% against target
	#/% of health facilities equipped and supplied to deliver CE/BEmONC	0	150	169 HF (11 Health Centers and 158 Dispensaries)	112% against target
	#/% total health care facilities with regular access to water	139[3]	170	220	129% against target

Explanation/Assessment of Performance:

Satisfaction with improved health facilities and emergency transportation

In consultation with the RHMT, four ambulances were distributed in the selected health facility catchment areas to improve access to care for women in emergencies and increase availability of referral services to more rural and remote populations. Health facilities identified for the ambulances to be based were: Mibono Dispensary (Sikonge district); Goweko and Tura dispensaries (Uyui district); and Usinge dispensary (Kaliua district). The RHMT chose these locations based on district geography, number of deliveries in the district, number of people served by clinics, especially pregnant women and children and distance from the health center to district's headquarters.

[3] TAMANI Public Health Facility Assessment Report, Regional Summary, January 2018

Women's and adolescent girls' satisfaction with improved health facilities and emergency transportation significantly increased, at baseline only 53% of respondents reported being "somewhat satisfied" or "completely satisfied" while at endline 77% of women and adolescent girls reported being satisfied.

Qualitative information from the endline study support the improvement seen in level of satisfaction:

> "*Nurses sleep there, so even if you go at four o'clock at night once you arrive at the clinic they will wake up the nurse and you will get service and if he sees this patient can't be treated here he calls the ambulance to come and pick you and take you to the hospital were the patient will get extra service*. " (Adolescent male youth champion, IDI Tumbi)

> "*We never had a health care centre before, but preliminary reports say that TAMANI has played a huge role in persuading the government to construct a health care centre in our ward and the largest contribution is the availability of an ambulance*." (Female CHW, KII, Tumbi)

Health facilities equipped and supplied to deliver CE/BEmONC

The project committed to equip 74 HFs with EmONC equipment based on the gaps identified through the Health Facility Assessment Survey, which was validated with CHMT and RHMT members. To date, the project has exceeded the target and equipped a total of 169 health facilities. In addition, 21 rehabilitation projects have been completed that prioritized water and power which was identified as a key priority in consultations with women and girls.

In addition to the facility upgrades directly supported by TAMANI, see below a list of eleven infrastructure projects that are underway that are linked to the Community Score Card actions plans.

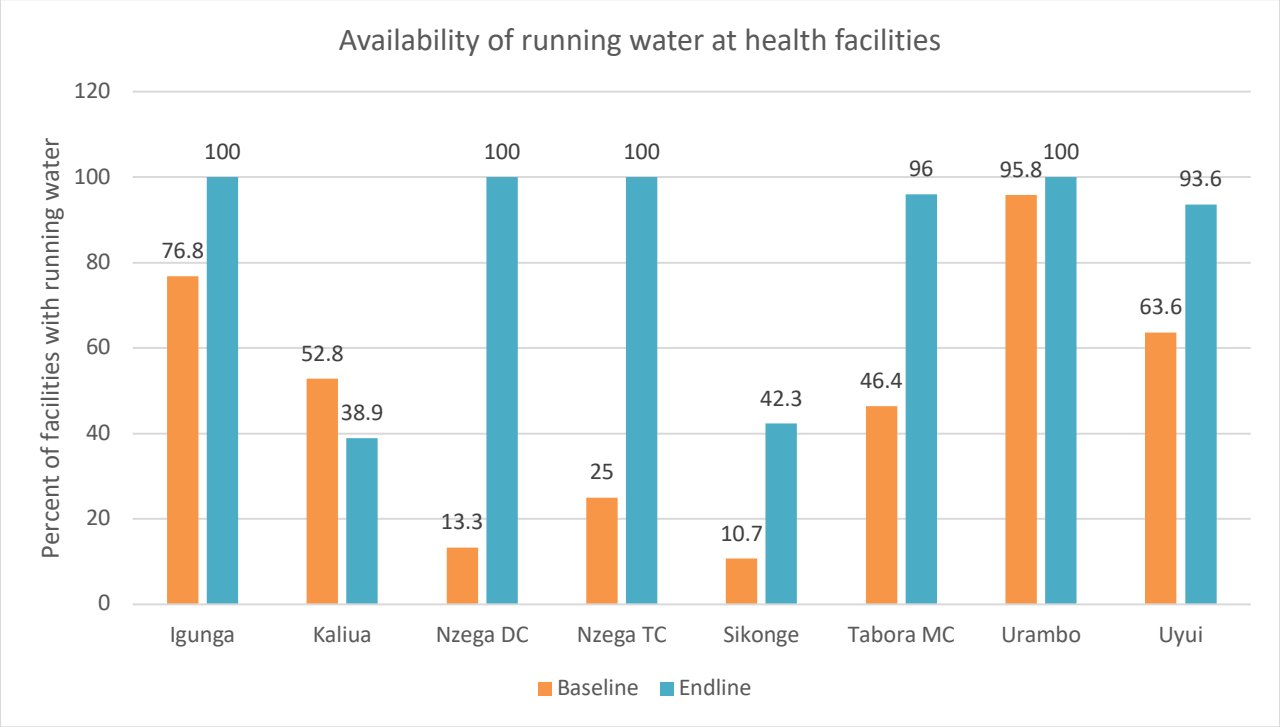
Table 13: Projects underway and linked to Community Score Card Action Plans

	Health facility	District	Type of work	Status
1	Itinka Dispensary	Uyui DC	Construction of maternity ward	Ongoing
2	Sigili Dispensary	Nzega DC	Construction of house for health providers	Ongoing
3	Ndembezi dispensary	Igunga DC	Finishing of maternity ward Installation of additional tank for rainwater harvesting system	Ongoing
4	Mwisi Dispensary	Igunga DC	Finishing of maternity ward	Ongoing
5	Itumba dispensary	Igunga DC	Construction of a new latrine	Ongoing
6	Kingwang'ko Village	Kaliua DC	Construction of a dispensary, the district contributed CAD 8,400	Ongoing
7	Kashishi dispensary	Kaliua DC	Construction of latrine for health providers	Ongoing
8	Igagala dispensary	Kaliua DC	Fast-tracked finishing of maternity ward funded by RBF	Ongoing
9	Igagala dispensary	Kaliua DC	Shallow well for supply of water	Ongoing
10	Izimbili dispensary	Urambo DC	Construction of foundation and walling for maternity ward	Ongoing
11	Miguwa dispensary	Nzega TC	Construction of youth corner	Ongoing

Access to Water

The endline health facility assessment was carried out at the end of November which examined the available resources available at health facilities across all 8 districts of implementation. TAMANI has supported rainwater harvesting systems at 11 health facilities.

Graph 12: Shows access to water at health facilities from baseline to endline.



As the graph above illustrates, significant improvements have been noted between baseline and endline across all districts beyond health facilities supported by TAMANI. Kaliua is the only district where a slight decrease is noted in the availability of running water at health facilities. Most health facilities in Kaliua have access nearby water wells which are their main source of water, water is supplied through a vendor and is treated in health facility holding tanks in accordance with government infection and prevention guidelines.

Installation of a rainwater harvesting system at Bukene HC in Nzega DC has influenced the HF Governing Committee to fund a similar project to ensure harvesting of more water for use during the dry season. The district authority, health care providers and the community view these initiatives as reducing the burden on caregivers accompanying patients to the health facility (primarily women) in walking long distances to collect water.

One community member who was taking care of a pregnant woman at a labour ward at Bukene HC said:

> *"Previously we were required to bring water from home for our patients but now we are happy to access water at the HF, thanks to those who supported the installation of running water in this health facility."*

Immediate Outcome Expected Results	Indicators	Baseline	Project Target	Endline	Cumulative (% of achievement)
1130 Improved knowledge and skills of health providers to deliver gender sensitive reproductive maternal and newborn clinical services	% retention of skills and knowledge of m/f health care workers in CE/BEmONC	n/a	100% Retention	104%	104% Average Retention of score (F: 105% / M: 103%
	#/% of health facilities providing Respectful Maternity Care	n/a	150 Health Facilities	174 Health facilities	174 Health facilities (116% against project target)

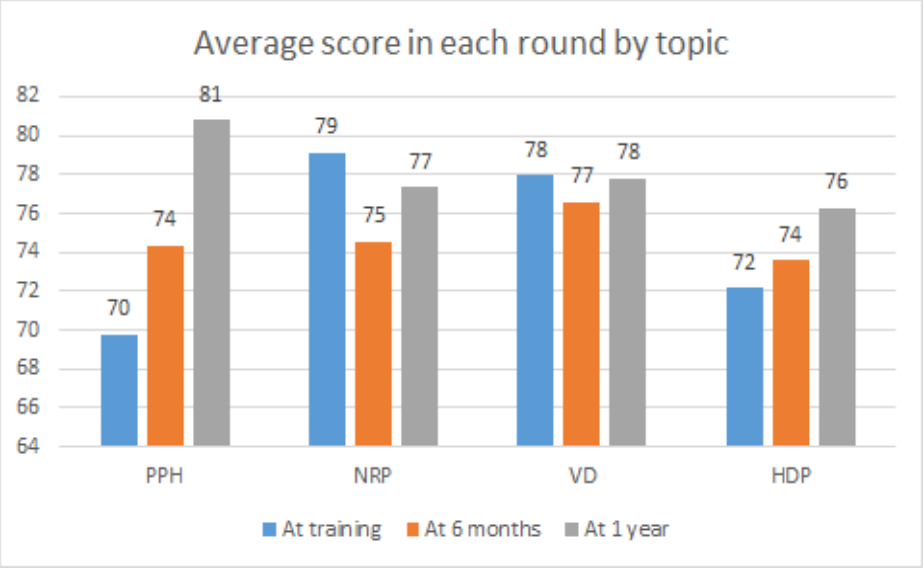
Explanation/Assessment of Performance:

EmONC Knowledge & Skills Retention

The project used OSCE's immediately post-training and at six- and 12-months' post training to assess the retention of knowledge and skills of trained HCP's. The project trained a total of 270 HCP's and reached (84%) of trainees at 6 months and 74% at 12 months post-training.

As shown in the graphs below, the average score across all four OCSES's either increased (PPH and Hypertension in pregnancy) or were maintained (Vacuum delivery and Neonatal Resuscitation).

Graph 13: OSCE average scores by topic in each round



The combination of EmONC training combined with post-training coaching and mentoring visits at 6 and 12 month is shown to be effective in improving and/or retaining 4 lifesaving skills in obstetric and newborn emergency care. Overall, post-partum hemorrhage (PPH) competency (OSCE #1) had low baseline scores but improved over time indicating a strong grasp of PPH management for all training curriculums.

Newborn resuscitation (OSCE #2) and Vacuum delivery (OSCE #3) skills were maintained over time up to one year after the training, indicating consistently high performance in these two areas. Combined scores for OSCE #4 (Hypertensive disorder of Pregnancy) were not significantly different across time points, therefore skills were maintained one-year post-training.

Individual data was stratified by numerous variables including sex, designation, facility type, and district, to assess for differences in performance. The variables present in the evaluation (district, sex, designation, facility type) did not appear to affect the retention of scores, thus training for was successful for a wide variety of HCP demographics. Overall, retention of knowledge and skills in TAMANI graduates was exceptional for all 4 OSCEs that were evaluated in the different training curriculum and follow-up coaching and mentoring sessions.

One explanation for the high retention percentage could be that trained health care providers had a chance to practice these skills in the interim, bringing confidence and support in the retention of specific steps to perform these life-saving actions. Post-training coaching is very effective in reinforcing learning processes, improving provider motivation, and improving clinical performance (McAuliffe E et al. 2013).

The hypertensive disorder evaluation average scores are lower than other clinical evaluations. However, the average score still steadily increased between baseline, 6- and 12 months, demonstrating an encouraging retention of skills compared to Neonatal resuscitation or Vacuum delivery. One Health Care Worker described how he has used the knowledge gained in the training and put into practice:

> "*I have noticed improvements in the way I do my job, before I never came across a woman with eclampsia but between July to September 2020, my colleague and I managed 3 cases of eclampsia. In the medical field we say "the disease does not read like a book" not all clients might show all signs and symptoms of a certain condition, only one or two signs might lead you to act. This happened in all three cases of eclampsia they did not show common symptoms. I am telling you if it was not for the knowledge I gained during the training I could not have served them. I have gained experience and confidence in the way I do my job, a good example is when you arrived here you found me in a family planning room, I was attending a woman to remove an implant, before I used to only to read about it in books*." (Male HCW, Igunga DC)

CARE and AGOTA shared key highlights on learning and policy recommendations to MoHCDGEC and PO-RALG for future programming.

Respectful Maternity Care

The performance of RMC specific items in the OSCEs followed the same trend as non-RMC items, demonstrating that these items are not considered soft skills and are given the same importance as clinical actions such as giving an injection or doing a uterine revision. HCPs have a good understanding that consent, confidentiality and reassurance are part of a complete experience of quality of care, and can help reduce maternal mortality and morbidity. The project chose to focus on consent and communication attitudes but other topics such as women choosing their birthing position (patient autonomy) would be a great addition to the discussion.

The inclusion of R/CHMT members in coaching and mentoring visits also appeared to be a promising approach to improving quality of care, including RMC since they could discuss with HCPs health systemic barriers they face in providing RMC, for example human resources shortage, stress, infrastructure for confidentiality, etc. During the mentoring and coaching visits, more than 190 HCP were invited to complete the self-reflection tool after the completion of the OSCEs. These self-reflection opportunities on RMC enable HCPs to critically review their own practice, recall material pertaining specifically to RMC and make improvements on their own to continue to deliver high quality care to all women.

Immediate Outcome Expected Results	Indicators	Baseline	Project Target	Endline	Cumulative (% of achievement)
1210 Increased access to gender-sensitive reproductive maternal and newborn health services	#/% of household visits by CHW's per quarter	n/a	10 HH visits/ month	10 HH visits/ month	10 HH visits/month 100% of target
	#/% of communities providing comprehensive Youth SRHR education and services	n/a	36	38	105% against target

Explanation/Assessment of Performance:

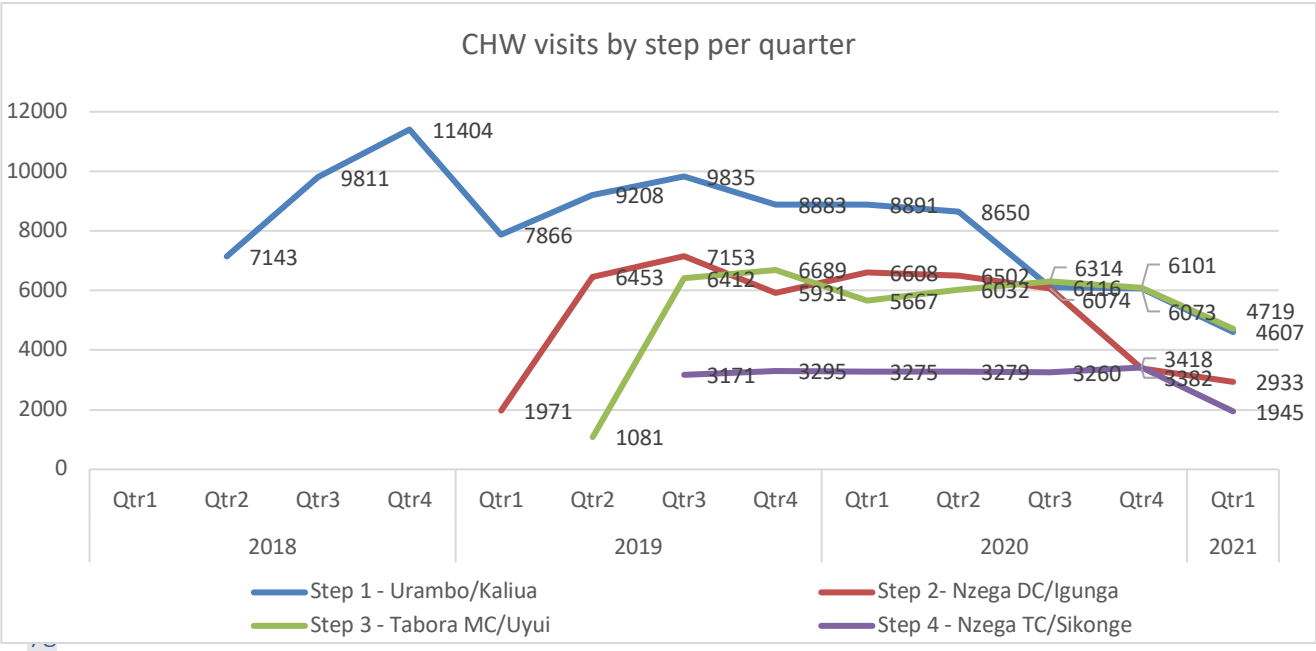
CHW Visits

CHW household visits covered a range of topics included in the CHW Scope of Practice that include antenatal, postpartum and newborn care, family planning, community based RMNCH activities, referral systems, maternal death reporting, and monitoring of community RMNCH services.

The data above represents the average number of household visits completed by 595 active CHW (317f, 278F) up until the end of July while the full CHW program was supported by the project.

Coinciding with the reduction of stipends for each respective step, monthly visits dropped between April to June 2020 in Urambo and Kaliua and between July to September in Nzega DC and Igunga. The number of visits then leveled out in Quarter 3 for Kaliua and Urambo and Quarter 4 for Nzega DC and Igunga. Smaller drops in visits are seen in Tabora Mc and Uyui and Nzega TC and Sikonge between October to December. In addition, the prolonged rains in Tabora made some visits in April 2020 and January to February 2021 challenging, the COVID-19 pandemic and the changing status of RBF has likely influenced the drops in household visits.

Graph 14: Number of CHW household visits by step



Rolling Profile qualitative interview data suggests, participants attribute many positive changes in the health status of their community as a result of an increase in health facility births, more women receiving antenatal care and more women having contact with skilled birth attendants during labour. The improved function of community health workers and their ability to provide information on family planning and support during pregnancy was also mentioned by respondents as contributing to improved community health status. Several women described the number of women giving birth in health facilities has greatly increased and how women understand the risks of home delivery.

> "*CHWs have been doing remarkable work in our society, I remember there use to be a big number of community members who were giving birth at home and used traditional herbs. The number of women attending ANC has also greatly increased*." (WRA, Igunga District)

One mother described how the information she has received from a CHW improved the health of her child and how this information was cascaded to other community members,

> "*CHWs have been a big help in helping me understand different things in relation to hygiene and how to keep the child in a safe environment. I remember there was a day a CHW visited me and found my child not in a good state of hygiene they helped me understand what to do better. I have shared information with people like my friends, family members and neighbours. Most of the time the information I received on reproductive health has been a big help to my neighbours, they will ask why my child is doing better health wise than their children and I will always try to share the information, so they are well informed*." (WRA, Kaliua District)

Comprehensive Youth SRHR Dialogues

The sessions run by trained youth champions played dual roles in the project, both informing youth with ASRH information as well as building a base for continuation of youth work with the absence of project staff by strengthening connections with local health facility staff. Qualitative information collected at endline provided evidence of the importance of youth attending sessions on health promotion and women's and men's roles,

> *"When I participated in those dialogues I was able to learn different things. For example, the importance of division of works according to gender equality, the advantage is to do works within a short time, when there is division of work there won't be interruption of works. Another thing which I learn is that the use of family planning makes parents healthy, a mother advised to attend to the clinic when she is pregnant for all her child's development stages until a child is born. Another thing is that if there is gender equality there will be division of works*." (FGD, adolescent boys, Kashishi)

Immediate Outcome Expected Results	Indicators	Baseline	Project Target	Endline	Cumulative (% of achievement)
1220 Improved ability of women, men and adolescent	#/% of women and adolescent girls receiving modern	Adults (25+): 16,643	Adult:5% increase Youth: 10% increase	Adults (25+): 41,980 (152% increase)	Adults: 240% against target Youth: 300% against target

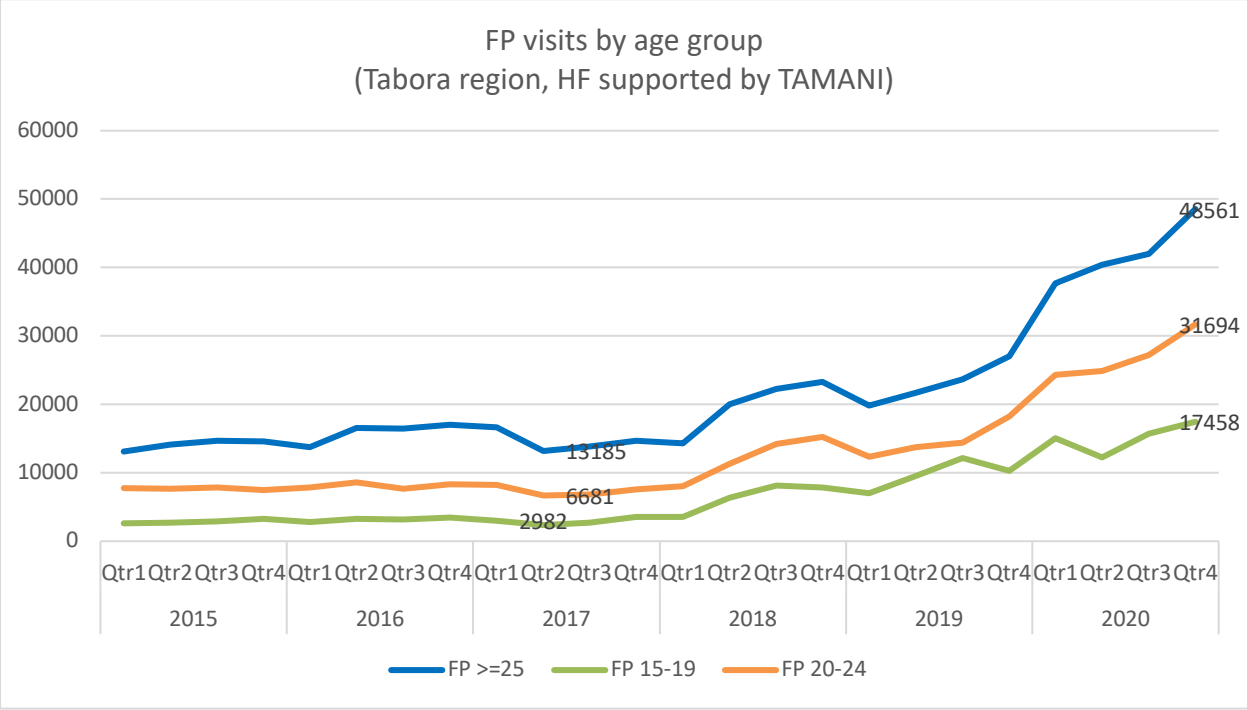
boys and girls to seek reproductive, maternal and newborn health services	contraception at health facilities.	Youth (20-24): 8,201 Adolescents (15-19): 2,982*	Adolescent: 10% increase	Youth (20-24): 27,175 (231% increase) Adolescents (15-19): 15,708 (427% increase)**	Adolescents: 478% against target**
	%/# of men and adolescent boys who agree/strongly agree with women's right to seek health care	M:34% A:27%	10 pp increase	M:46%	M: 12pp increase / 105% against target A: N/A

*HMIS Jan-Mar 2017 **HMIS Jul-Sep 2020

Family Planning visits

The graph below shows historical HMIS data on family planning visits at health facilities supported by TAMANI. Notably, there are two points where visits increase. The first began in April 2018 and continued into March 2019. The second wave began in January 2020. The increase is observed in all age groups, though adolescents (15-19) had the largest overall increase.

Graph 15: Number of FP visits supported by TAMANI by age group (15-19, 20-24, and >25 years of age)



As the graph above reflects, there has been a steady increase in the overall number of family planning visits in health facilities supported by TAMANI since the start of the project. The upward trend is more significant in health facilities supported by TAMANI when compared to the other health facilities in the region. Only for women between the ages of 15-19 was there a reduction in family planning visits between April-June 2020, which coincides with the first wave of the COVID-19 pandemic in Tanzania. Family planning visits continued to increase thereafter for all age groups.

HMIS data on family planning visits through DHIS2 was only available until the end of 2020. A discontinuity has been noted in this variable which could be due to improvements in the system to refine level of disaggregation. As of December 2020, the number of family planning visits is 2 times the number of visits reported in December 2017 for women over the age of 25, 3 times the number of visits for women between the ages of 20-24, and almost 4 times the time for adolescents between 15-19. Several factors have likely contributed to the observed changes, including government outreach services at district levels which normally happen on a quarterly basis. While this points to a significant increase in demand for, and access to, family planning counselling and services, no progress was made towards reducing unmet demand for family planning among women, and the rate of contraceptive prevalence remained stable. This could point to a disproportionately higher increase in demand for FP coupled with continued barriers to accessing FP. Supply-side challenges like a lack of availability and accessibility of family planning infrastructure or commodities, or continued social and economic barriers to accessing FP could be contributing factors.

Data from the qualitative endline demonstrated that the vast majority of the respondents stated that there is a discussion ongoing regarding how many children to have and when. It was also repeated that education is important in order to make informed decisions on family planning and for fruitful discussions. Many reiterate that previously this decision remained solely with the man and some still argue that he has the final say, which would explain why some women in Tabora still use contraceptives in secret.

> "*Both of them decide, since it's a decision of whether to get or not to get another child. They then reach an agreement whereas previously, the mother would use family planning methods without involving the father*." (Female CHW Tumbi)

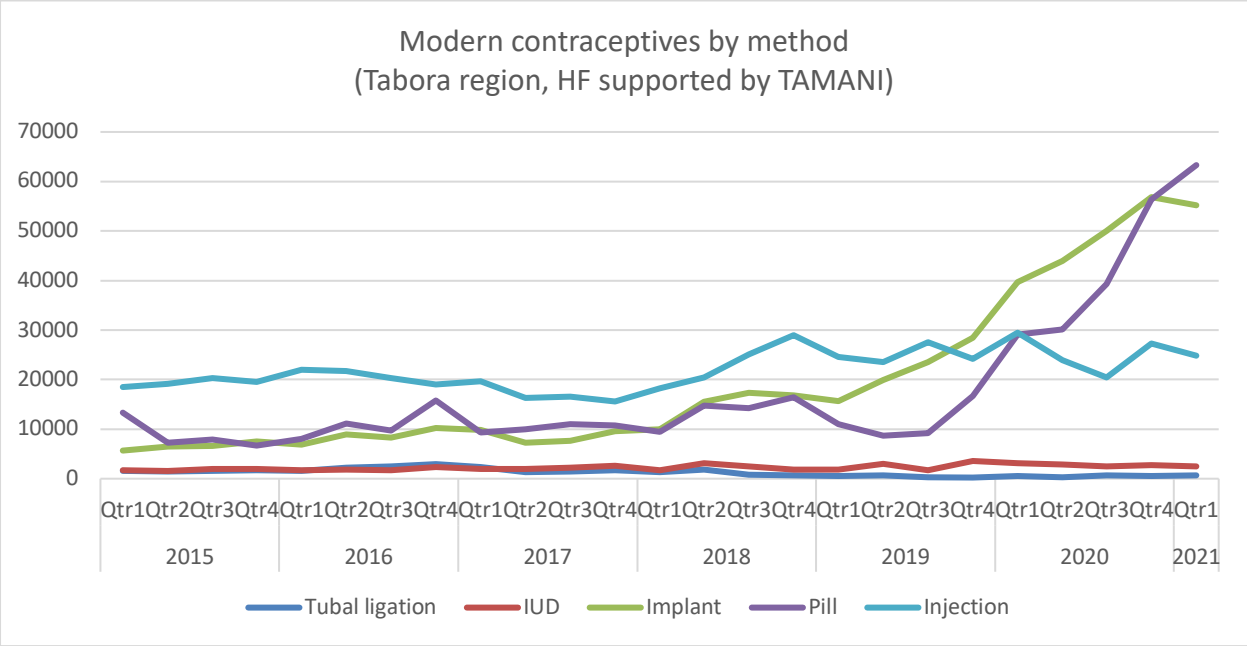
> "*Now that we have received many seminars [about contraceptive methods], we come and we are told about it. Now we decide between the husband and the wife. You sit down you plan, we go for health check-up, it's the job of both the husband and the wife*." (Mother-in-law, IDI, Tumbi)

Distribution of Modern Contraceptives

The TAMANI team has extracted data on the number of contraceptives distributed by method across the region from HMIS. As noted in the graph below, since 2018 there has been a spike in the number of women using implants and pills, initially in Apr-Jun of 2018 and again in 2019 which has continued to rise at a steady rate. We see a decline between January-March 2021 which coincides with the rainy season, which makes some health facilities more difficult to access and is when women are more heavily involved in agricultural activities. This was supported by one of the CHMT members at Nzega District Council,

> *"There is also a problem of poor infrastructure as some facilities are not easily accessed. There tends to be a decrease in service utilization at this time of the year rainy season which is planting season." (CHMT member, Nzega District Council)*

Graph 16: Shows the distribution of contraceptives by method for the region



As noted in other parts of the report, COVID-19 has had an impact on accessing primary health services in the last year. However, we don't see a major impact on most contraceptive methods, except for a slight decline in the overall number of injections and IUDs.

Men and Adolescent boys support for women's right to seek health care

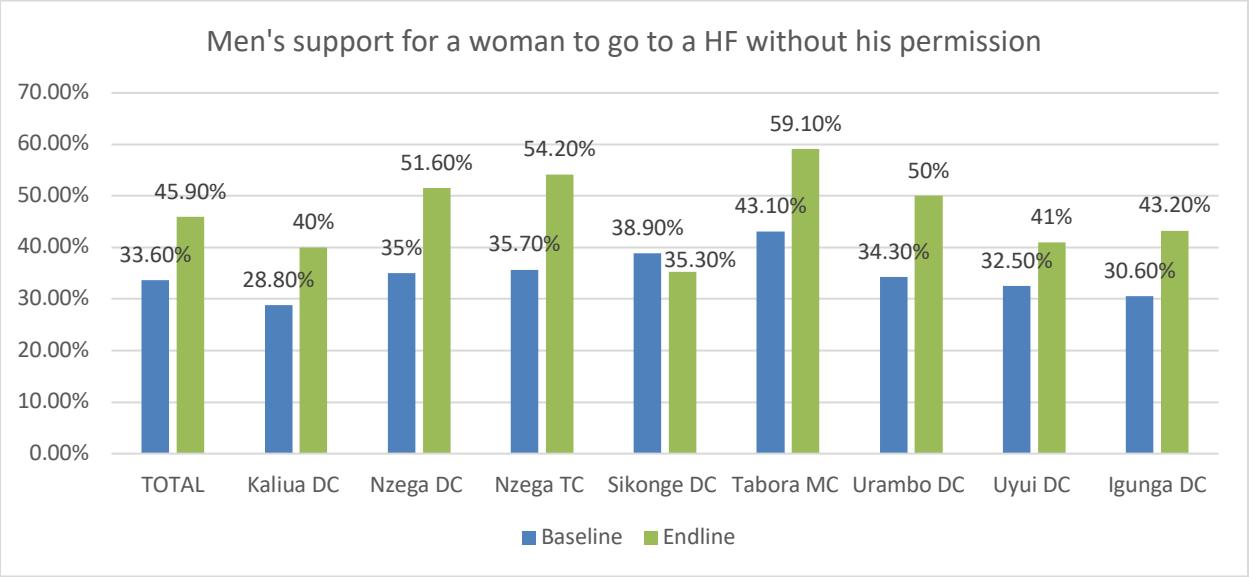
Men's support for women's reproductive and health rights is measured using their responses to the following statements:

1. A woman can go to a health facility without her husband's permission (Graph 17)
2. A woman can use family planning without her husband's permission (Graph 18)

The indicators are defined as the sum of the respondents who "agree" or "strongly agree" with the above statements.

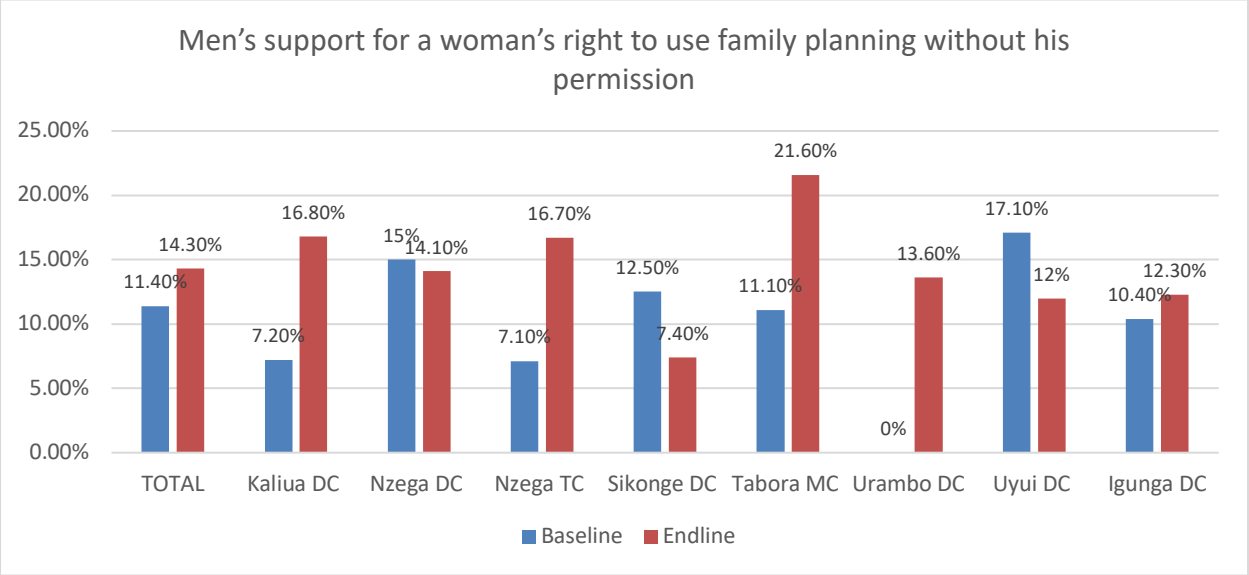
Across all districts, men's support for the rights of women to seek health care increased between the two surveys, except in Sikonge DC where the proportion remained unchanged and the lowest across Tabora region. Overall, support increased from 33.6% at baseline to 45.9% at endline.

Graph 17: Men's support for a woman to go to a HF without his permission



Interviewed men, however, showed much less support when it comes to their partners' right to use family planning *without* their consent. Measured at the endline, only 14.3% of men agreed with the statement that a woman can use family planning methods without her husband's permission, which was similar to the 11.4% of men at baseline (Graph 18)

Graph 18: Men's Support for a woman's right to use family planning without her husband's permission



Men's support for RMNH and women's health rights as measured at baseline vs endline showed mixed results. While overall as well as district-level support for the rights of women to seek health care increased between the two analyzed surveys (from 33.6% to 45.9%), support for women's right to use family planning remains low from 11% at baseline to 14% at endline.

Finally, an index of men's overall attitudes towards women's refusal of sex for specific reasons improved slightly across surveys. The value of the index increased from 3 to 3.3 on the scale of 4. Support, however, is continuously lacking for a woman's right to refuse sex if her partner has sex with other women. This could potentially be a reflection of cultural values and practices in Tanzania, specifically a practice of polygamy. Polygamyy is most prevalent in the Western part of Tanzania, with approximately one-third of marriages polygynous.

It important to note here that endline disaggregation for adolescent boys' responses was not presented for men's support for women's right to seek care due to the small sample of adolescent boys at baseline and endline and would be statistically inaccurate to present broken down.

Findings from the impact evaluation were relatively aligned with the endline survey results, finding that while there was generally higher support for a woman's right to visit a health facility without her husband's permission, there was little support for a woman using family planning without her husband's permission.

> "*The mother often likes the methods, but the father is not very easy to go for contraceptives...fathers are few who go for the family planning but she is allowed to go and use the methods" (Male TAMANI facilitator, Tumbi)*

> "*That decision should be made by both a husband and a wife but most of the time women are the ones who start the family planning topic, they start investigating which method is better, either syringe, condom or loop but when my husband refuse and I see that my health condition is not well I will go to get services secretly without informing my him" (WRA IDI 2, Kashishi)*

5. Analysis of Project Performance

5.1 Relevance and importance

TAMANI was designed to align to GoT and MoHCDGEC priorities, policies, and guidelines for reproductive health and rights in Tabora. Delivery of adolescent friendly health services contribute to OnePlan II operational targets of reducing adolescent fertility rate and increasing number of service delivery points for youth friendly services.

At project outset, TAMANI mapped the key interventions developed for the project against the LiST analysis provided by the John's Hopkins RADAR project to identify the expected positive impact on maternal and neonatal mortality in Tabora of each of the project interventions. The project addressed all the top five interventions of the maternal lives saved analysis and all but one of the seven top interventions from the neonatal and still birth lives saved analysis.

Several key informants interviewed as part of the qualitative endline study conducted in the final year of the project spoke to the relevance and importance of the TAMANI project. One key informant noted that conditions for reproductive and maternal health had improved considerably in the district, according to several indicators:

> *"In terms of reproductive health, in regard to the TAMANI project, first of all they have been able to improve for our clients so many more have given birth here. First, they have been advising, this TAMANI has done, and many have given birth at the clinics. So if we look at the number of people gave birth at home before the TAMANI project, they were*

many. But when they started, many clients give birth at the clinic, so we have benefited. Another thing, in terms of reproductive health, it has managed to reduce maternal and child mortality, and something else related to reproductive health is that it has succeeded to reduce even the situation where babies are born in dangerous surroundings, so such things." (Female HCW, Kashishi)

5.2 Appropriateness of design

From project inception, TAMANI aligned its project outcomes, outputs and activities with the Tanzanian national reproductive health program and community health worker program and interventions in Tabora. Stakeholder consultation exercises were conducted at project inception in February and March 2017 to validate and refine the project design with government partners and the TAMANI project team. The project design was revisited each year during project steering committee meetings and adjusted where necessary to incorporate changes in context and align to new policies or programming. The RHMT and RMOs worked very closely with the project team to ensure regional ownership and influence on all project activities.

Wherever possible, TAMANI aligned all training approaches and material to existing GoT national policies, protocols, and guidelines. For example, TAMANI used MoHCDGEC curriculum for BEmONC and CEmONC training, and the GoT's guidelines for Adolescent Friendly SRH (AFSRH) services to promote youth friendly services and train health care workers, youth leaders, and administrators across Tabora to ensure reproductive health services meet criteria around confidentiality, respect for autonomy and choice. The project also recruited adolescent mystery clients in Year 3 to track and assess the quality and availability of youth friendly ASRH services from 21 health facilities with trained staff.

TAMANI prioritized training health workers in areas with the most significant need for updated skills, avoided scheduling training during the busiest time for births (Sept-Dec), and avoided taking all health care workers away from their home facilities at the same time across the region, allowing health workers who were not at the training to provide short-term cover for those involved in the training. This design also allowed the project team to evaluate and continually refine the training each time it was delivered, each time improving the quality, relevance, and delivery of the training.

TAMANI was also adjusted to provide a stronger leadership role for Tanzanian OBs to deliver training – this helped to overcome the issue of language barrier between English-speaking OBs with Swahili-speaking trainees, and it helped establish AGOTA as an important local resource for RMNCH training of trainers at the district level.

Following the outbreak of COVID-19, CSIH resumed field activities facilitated exclusively by Tanzanian Consultants, with international consultants continuing to provide support in designing activities and developing training materials remotely. Activities included:

- On-job coaching for Supportive Supervision Mentors.
- Regional consensus building workshop for approval of a comprehensive package of tailored Supportive Supervision tools.
- Supporting Health Facilities (Dispensaries and Health Centres) to develop and self-assess their annual plans and budgets.
- On-job support to CHMT to assess health facility annual plans and budgets using an assessment tools and provide feedback to facilities that require updates to their plans.
- Training of Health Centre HMIS staff on DHIS2 data management and analysis with a focus on retrieving indicator data for annual planning purposes.

5.3 Sustainability

TAMANI was designed to incorporate sustainability strategies within its activities, partnerships, and implementation strategy. Key to this was ensuring that TAMANI interventions aligned with the national health and nutrition priorities of Tanzania, specifically the national level policies and priorities for reproductive health outlined in section 1, and the needs of the RHMT in Tabora. TAMANI has worked closely with the RHMT and CHMT and MoH technical committees at all levels in project design, implementation, and monitoring of activities. Similarly, efforts towards inclusive governance, as a crosscutting theme of TAMANI, has contributed towards building stronger governance structures capable of delivering on their mandates, as well as community organization for accountability.

Sustainability Plans with CHMTs – sustained resources

As part of year three and four project activities, TAMANI staff developed sustainability plans with CHMTs in each of the 8 districts. As part of these plans, the following actions towards sustainability of key support functions and resources have been taken:

- Engagement of R/CHMT co-trainers and coaches: R/CHMT members engaged co-trainers and coaches on supportive supervision and health system strengthening activities.
- EmONC training: The TAMANI Project Coordinator worked closely with the RHMT to utilize CHMT members trained as EmONC coaches and to transition project training equipment to the region to support ongoing coaching. MPDSR meetings have fully transitioned to the region and continue without project support.
- Ambulance operating expenses: TAMANI staff monitored ambulance-operating costs for the six months prior to project end to ensure required costs are covered by government resources.
- Funding of supportive supervision: Supportive supervision resources were integrated in the district budgets for FY20/21 however, disbursement of funds remains a challenge.
- Funding of CHWs: CHMTs budgets for FY20/21 have included CHW costs at various levels, however execution of the budgets hasn't been possible due to ceilings received from PORALG. For example, Urambo district had budgeted at least one CHW per facility, but they did not receive approval for these funds. Project discussions with CHMTs have continued to encourage use of non-monetary incentives such as excusing CHWs from community duties and the districts have taken up discussions with communities to co-support the continuation of CHW visits. The partnership models being adopted between communities and CHMTs to retain CHWs is further outlined in section 2.1.
- Finalizing/handover of tools, resources and learning with Government partners: SOGC and AGOTA developed job aids which involved engaging the MoHCDGEC, and the CSIH training packages were finalized handed over to Local Government Authorities, MoHCDGEC and PORALG.
- Youth Focal Points: TAMANI staff worked with trained CHMT Youth focal points to follow-up in coordination with Youth providing feedback on quality of ASRH services. During the last year of the project, the trained youth champions conducted individual awareness sessions and community outreach without TAMANI support in all eight districts. The RMO has prioritized investment in monitoring performance of facilities where TAMANI has trained HCWs on ASRH services. The monitoring will be done by both RHMT and CHMTs through supportive supervision visits.

Sustainability of project interventions – AGOTA: The strengthening of the professional association AGOTA through a respectful partnership within the project, knowledge exchange activities and activities related to its strategic planning had a very positive outcome that contributed significantly to the sustainability of project outcomes. AGOTA have demonstrated that they are now in a much better position

to advocate for and contribute to improving quality maternal and newborn care in Tanzania. AGOTA's strategic planning, capacity building activities and knowledge exchange activities improved their ability to be a stronger voice for women's health and rights in Tanzania.

Sustainability of support to RHMT and Health Facilities The final evaluation of the health system strengthening components of the project conducted by CSIH notes TAMANI has significantly strengthened their processes and streamlined their health governance role - health facility staff can now make their own plans and budgets, are more conversant with data analysis which in turn has helped to improve data quality, there is less tension between CHMT's and health facility staff during supportive supervision visits, and many problems identified at the facilities during these visits now have solutions. Further, the fact that TAMANI was built on and continues efforts of previous projects such as TABASAM brings a sense of sustainability and building on previously gained achievements.

A complete list of project resource handover activities was provided in the TAMANI Year 4 Annual Report. All resource handover activities have been completed.

5.4 Partnership

CARE Canada was the lead agency responsible for the execution and implementation of the TAMANI project, delivered in partnership with the Canadian Society for International Health (CSIH), McGill University and the Society for Obstetricians and Gynecologists of Canada (SOGC), and their Tanzanian counterpart the Association of Obstetricians and Gynecologists of Tanzania (AGOTA). TAMANI also collaborated with two Tanzanian organizations - Ifakara Health Institute (IHI), a leading health research organization in Tanzania, and the White Ribbon Alliance of Tanzania (WRATZ), the Tanzanian branch of a global advocacy organization for RMNH. In Tanzania, TAMANI was implemented in close collaboration with the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), The Prime Minister's Office for Regional and Local Governance (PO-RALG), and Regional Health Management Teams (RHMT).

Each partner brought specific technical expertise and experience to the implementation of the project, as well as supported the planning and coordination of project activities across all outcome areas to support the achievement of project results. A complete list of project partners, as well as an outline of their respective roles and responsibilities throughout the project, is in Annex 5.

All TAMANI partners came together periodically to jointly plan, adjust, and implement the TAMANI project. For example, in December 2018 partners came together to review the TAMANI MEL strategy, update the Gender Equality Strategy, and review the External Monitors' report and recommendations. Similar meetings were held in Tabora in February 2019 with the TAMANI team, as well as with the RHMT to develop the AWP in March 2019. Canadian partners met annually to review progress and adapt work plans. This resulted in stronger cross-collaboration of the partners with SOGC and CSIH working more closely together with RHMT and CHMT on supportive supervision and respectful maternity care work.

SOGC/AGOTA – Partnership

TAMANI piloted a new model for collaboration between CARE, SOGC, and AGOTA. In January 2021, an evaluation was conducted to gain insight into how AGOTA perceived the value of the partnerships developed within the TAMANI project and to determine the extent to which its participation in these contributed to strengthening the association's organizational capacity. The results of the evaluation were positive and pointed to significant development in AGOTA's organizational capacity.

> *"[We] have learned a lot… it was one of the partnerships, I can say, that has advanced our capacities as far as administrative issues are concerned… it has also provided us with lots of*

opportunities to learn, … but also to reflect on how we work.... I think that in the previous projects that we have partnered with, we did not have this luxury of having partners who... you know, anytime, any day, they were ready to extend their support whenever you need them... and they can even go beyond TAMANI..." (Participant 1)

This also enhanced AGOTA's credibility as a leading association in SRHR from various stakeholders, including MOHCDGEC

"AGOTA now... I think has the good respect of the Ministry of Health ... we are being mentioned everywhere... Any project coming to Tanzania... USAID, Engender Health... all of them are told 'contact AGOTA'... we are a central pillar of the Ministry of Health... were not there some years ago, now the Ministry is banking on us. » (Participant 5)

5.5 Innovation

In addition to using simulation-based training approaches to support facility-based mentoring, using adolescent mystery clients to evaluate adolescent-friendly services, and engaging women and girls in the "what women want" campaign, CARE Tanzania partnered with VIAMO, a social enterprise that implements interactive and targeted mobile engagement campaigns and surveys in order to deliver COVID-19 education and prevention campaign.

The messaging was adapted to evolving caseloads, expected heightened food and economic insecurity, and anticipated increases in SGBV. Donor funds were pooled to leverage scale and scope for the mobile campaign given the upfront costs and the ability to use the translated COVID-19 information across projects and regions. These messages were endorsed by the Government of Tanzania through the MoHCDGEC. A survey at the end of Year 4 was carried out with CHWs on their overall satisfaction with the program, the survey included questions on the effectiveness of the mobile messaging. In total, 85% of respondents reported that COVID-19 had some level of effect on their ability to do their work as a CHW. Almost all CHWs reported using the mobile information on virus transmission and preventative measures, either in their household visits by spreading the information on to clients and/ or during their daily life.

In addition, TAMANI implemented a mobile survey via interactive voice response to collect information from respondents to inform the rapid gender analysis. Each participant received the call once, but the Viamo platform allowed those who missed a call to call back and listen/take part in the survey at zero cost. All messaging was in Swahili aligned with the government recommended for the awareness and prevention of COVID-19. Recognizing the high mobile phone ownership and usage rate amongst both men and women in rural areas in Tanzania,[4] TAMANI leveraged digital messaging in its response campaign and was able to have a large reach and engagement while averting the need to do in person awareness meetings or surveys demonstrating the high feasibility for digital health interventions for women in rural areas.

As part of the gender qualitative endline TAMANI used SAA and CSC activities as entry points for the research, both in terms of identifying themes but also by integrating SAA facilitators as interviewers for IDIs and FGDs for a much more participatory approach to the research. This had the advantage of engaging with pre-existing distinct groups where trust had been built within the groups and with the facilitators. By using

[4] Vasudevan L, Ostermann J, Moses S, Ngadaya E, Mfinanga S Patterns of Mobile Phone Ownership and Use Among Pregnant Women in Southern Tanzania: Cross-Sectional Survey JMIR Mhealth Uhealth 2020;8(4):e17122 URL: https://mhealth.jmir.org/2020/4/e17122 DOI: 10.2196/17122

SAA and CSC, the research was much closer to the interventions and a context which the respondents were already familiar with.

5.6 Value-for-money

CARE and partners used a range of means to ensure optimum value for money during the implementation of TAMANI including the following:

- CARE maintains a procurement system which emphasizes value for money, using metrics to select vendors that include function, quality, timeliness, and price.
- Staffing structures were efficient, avoiding redundancy in staff positions while ensuring the project functions were adequately staffed with highly qualified and effective personnel.
- CARE and partners ensured a light but effective staffing structure, supplemented by the support of volunteers from SOGC.
- Operationally, the project leveraged where possible existing community structures to improve efficiency and sustainability.

Budget utilization rates were consistently on track throughout the project, reaching a 100% expenditure rate by the final year of the project. Over the 4 years of implementation, TAMANI spent $23.6 CAD per direct participant, and $30.15 CAD per indirect participant.

5.7 Informed and timely action

The COVID-19 outbreak at the beginning of 2020 arrived just as the project entered a final phase. At the same time, the social and economic pressures of the COVID pandemic pushed communities to new heights of vulnerability and placed an immense strain on the health system in Tabora. Activities were quickly adjusted, and an emergency response program rapidly launched with funding reallocated from TAMANI. This emergency response was based on a Rapid Gender Analysis conducted in May 2020, ensuring that the response was informed by the needs of people of all ages and genders, amid the highly dynamic context of the pandemic.

In response to feedback from the districts, the phasing in of key activities aligned with the step wedge evaluation approach was fast-tracked to ensure key training activities happened more quickly than originally planned. This resulted in a modification of the final evaluation design but did not compromise the rigour of the evaluation.

To minimize risks to staff and community members, the CARE Tanzania COVID response plan focused on providing evidence-based information to communities as quickly as possible, and training Health Care Workers and Community Health Care Workers to be able to respond to the pandemic, as well as keep themselves safe. In addition, the project distributed PPE and worked with the RHMT to ensure that essential services such as access to contraception and delivery services remained available, and to think through the way that the pandemic would impact women and girls differently from men and boys, and to plan accordingly. CARE worked with VIAMO to roll out digital messaging to project participants and ensured SGBV messaging and referral information was integrated into all communications. Recognizing the importance of radio for rural communities and its ability to have an enormous reach. TAMANI also used radio programs to roll out a series of radio shows on COVID-19 awareness and prevention. CARE Tanzania had to adjust its messaging during response when COVID-19 became more politicized in the country with statements by the former President which refuted the presence of the disease in the country. CARE Tanzania worked closely with VIAMO to adjust messaging to be in terms of “Infectious Disease Control” and worked to ensure that all COVID-19 specific messaging was approved by the MoHCDGEC and was part of

the Risk Communication and Community Engagement (RCCE) pillar of the National COVID-19 Task Force. This rapid response has been critical for the region, given Tabora has not received any of the COVID-19 response funds requested from the central government.

6 Lessons Learned, Recommendations and Next Steps

Community Health Worker Program

A feedback survey was carried out with CHWs in Year 4 of the project on overall satisfaction with financial incentives and any challenges experienced as a CHWs. In terms of satisfaction over half (53%) of respondents were satisfied with the level of financial, training and other benefits (t-shirt, bicycle and bag) received from TAMANI. However, another third (34%) of respondents expressed that while satisfied with the financial and training incentives, they were dissatisfied with the quality of the bicycles they received. It is important to note here that issues with bicycles with the first distribution was addressed by CARE by changing the supplier of the bicycles based on feedback from CHW's. The most enjoyable part of being a CHW, for 34% of respondents, was the knowledge of maternal, newborn and child health that they gained. For another 28%, it was the level of trust and respect that they received from the community because of the role they played in increasing access to information on reproductive and maternal health services.

Changes to the CHW policy that now requires CHWs to have a minimum Form 4 (secondary level of education) rather than standard seven (primary level) was a persistent challenge to the project, making it more challenging to recruit women and retain CHWs. In some cases, trained CHWs left their post to pursue further education/employment. This has consistently been raised at PSC meetings.

Findings from the feedback survey with CHWs also provided insight on CHWs perspectives on the benefits of hiring a male or female CHW. The overall consensus was that sex does not play a factor in the effectiveness of a CHW to perform their duties or engage with women as people understand their role and the valuable information they bring. One female CHW stated,

> *"The importance is how you provide MNCH education, clients consider the quality of service provided not whether you are female or man" (Female CHW, Igunga District)*

Several male CHWs expressed feeling a deep level of trust from the women at household visits citing women can sometimes feel more at ease and trust with revealing sensitive information to a man as there is less hesitation or perception of criticism that they could have with a woman they do not know. Both male and female CHW's reported through Rolling Profile interviews, the transformation they experienced with respect to gender norms and roles related to their role as CHW's. For example, women were invited to speak in spaces they previously were not allowed to participate in, and men saw a greater role for them to participate in RMNCAH related activities.

Several CHWs mentioned that Traditional Birth Attendants (TBA) posed a challenge to their work as some TBAs saw CHWs as a threat to their income with an increasing number of women choosing to deliver at health facilities over home delivery. In recent years policy has shifted in Tanzania which has promoted formal facility delivery, discouraging home delivery and largely eliminated training programs for TBAs. While well intentioned, policy changes leave the role of TBAs largely undefined and excluded from training programs for community health workers and the loss of the ability to collaborate with Skilled Birth Attendants in formal health facilities.

In addition, several CHWs mentioned the need to expand the CHW program so that all villages can be reached and that CHWs themselves receive further capacity building in appropriate sexual reproductive health knowledge specific for adolescent girls and boys.

Key Recommendations for CHW Programming: Consultation with CHWs to test and participate in the selection of equipment should be prioritized. The GoT should review and revisit minimum education requirements for CHWs or look at a Community Health Entrepreneur model to support the sustainability of the CHW program in the absence of a fully resourced CHW program at scale. Both male and female CHWs should be recruited. Future programs which place emphasis on the importance of building skills of and expanding the network of CHWs, could critically analyse the role of TBAs and how best they can be engaged with in future RMNCH programs in Tanzania and elsewhere in Africa. The integration of sexual reproductive health knowledge specific for adolescent girls and boys into the CHW training curriculum could increase coverage of CHW's to support ASRH information and referrals.

Adolescent Sexual and Reproductive Health & Rights

Several CHWs mentioned in the feedback survey in Year 4 the need for programs to think about cultural appropriate and age-appropriate settings to expand ASRHR knowledge, including youth clubs which could be connected to schools, sports and games which are sensitive to gender. In health facilities, adolescent mystery clients proposed two approaches to improve youth friendly ASRH services; arrange convenient days or hours for YFS to avoid long wait times and establish dedicated rooms for ASRH service for privacy.

Key Recommendations for ASRHR Programming: There is an opportunity to expand ASRHR services that leverage existing community health infrastructure, including CHWs, and are integrated with other activities that engage young people (school, sports etc.). TAMANI has demonstrated that trained youth are able to conduct ASRH sessions with limited support of project staff while working in partnership with existing CHMT focal points. In addition, leveraging the use digital technology along with expanded access to contraception could provide greater access to SRH information and should be considered in future programming.

EmONC and BeMONC Training

The combination of Emergency Obstetrics and Newborn Care (EmONC) training paired with coaching and mentoring visits 6 and 12-months post-training was shown to be effective for improving or retaining lifesaving obstetric skills and the role consent, confidentiality, and reassurance play in the experience of quality of care.

The strengthening of the professional association AGOTA through a respectful partnership within the project, knowledge exchange activities and activities related to its strategic planning was identified as a positive outcome by AGOTA. Professional associations can become an important voice for women's health in their country and AGOTA has noted that they are now in a stronger position to advocate for quality maternal and newborn care in Tanzania. Linked to this, having a Canadian SOGC volunteer accompanying Tanzanian counterparts in these visits permitted knowledge exchange on EmONC but also on various topic of medicine, including sexual and reproductive rights, HPV vaccination, provider attitude and communication skills. The paired evaluation of OSCEs with a Tanzanian and a Canadian coach was also an opportunity to mix different coaching styles and learn from each other's technical expertise.

> *«… their participation was good… the members of SOGC were actually willing to learn from us and also we learned from them… and actually, it was an enjoyable and productive partnership. » (Participant 9, SOGC Evaluation of Partnership)*

Further, the inclusion of Council/Regional Health Management Team (C/RHMT) and AGOTA members in coaching and mentoring visits appeared to be a promising approach to improving quality of care, including RMC, as these individuals are best positioned to conduct simulations and visits. They are also well suited to leading discussions with other health providers regarding systemic barriers they face in providing RMC.

Key Recommendations on EmONC & BEmONC Training: In future, an effective tactic for enhancing skills retention could include engaging facilities in supporting mentees by taking a leading role in organising mentorship sessions for retention of skills related to managing emergency obstetric conditions. Initiation of such continuous medical education sessions, facilitated by the graduates of previous courses, could ensure retention of skills and share this knowledge with others through peer-to-peer learning. To complement the integration of respectful maternity care within the clinical training, the project could have worked at the community level to integrate RMC into community dialogues and increase awareness about the patient charter. This way women and their families are empowered to ask for information about care and make informed choices such as preferred birth position and birth companion. CARE would also advise for the inclusion of representatives from the health care system in these discussions to facilitate exchange between patients and provider and to also integrate RMC into Community Health Worker training and encourage CHWs to help inform women about their rights and options at health facilities.

To ensure retention of competencies, it is also advisable that the MoHCDGEC ensures that trained personnel remain in maternity departments for at least 2 years post-training, thus strengthening their skills and modeling excellence of care to others. MoHCDGEC to reinforce investment in health care worker training on respectful maternal care with increased allocation to health facilities to ensure that resources are in place to support all aspects of RMC, such as dedicated rooms or curtains for privacy and sufficient staff time to explain options and answer questions. EmONC program should receive a dedicated budget under the MoHCDGEC and integration of RMC in EmONC training is maintained as an essential component of Emergency Obstetric and Newborn Care

Health Facility Rehabilitation Projects

A major challenge for the project team was negotiating the health facility projects with the various level of GoT involved in approving these projects. Force Account, a community engagement scheme of the GoT also complicated the budgeting and implementation process (TAMANI did not use Force Account as per GAC advice) and pressure to support one large health center, versus smaller scale projects across the region involved a lot of negotiation from the project team. CARE relied heavily on the community consultation results that identified power and water as key priorities for women in Tabora as our guiding principle for the rehabilitation projects.

Key Recommendations for Health Facility Rehabilitation Projects: All health facility rehabilitation projects should include wide consultation with communities, with particular space for women and girls to share ideas, perspectives and priorities. This is a best practice that CARE is using across our health programming.

The gender qualitative endline highlighted the need to further strengthen institutionalisation through rights holders and duty bearers responsibilities. It is important to connect interventions with government responsibilities as government accountability should be expected as a result of paying taxes and basic services. This is an area which for future interventions could be strengthened, i.e. more clarity to service users/rights holders on who has supported health facilities and why.

Health System Strengthening As noted above the health system strengthening components of the project have strengthened CHMT and HF processes and streamlined and reinforced health governance.

Key Recommendations on Health System Strengthening: Health programming should continue to integrate, fund and prioritize health systems strengthening, including training on planning and budgeting, given the critical nature of this work in ensuring availability and quality of health care. This training needs to also ensure the support resources are in place through partnership with Government so that computers and laptops are in place for facility-level staff to enable them to access data from DHIS2 and develop plans in a timely fashion. Moving forward, refurbishment of facilities and inputs such as ambulances through outside funding should be well understood, so that community members know where to escalate challenges, i.e. to be channelled to duty bearers, notably through the village/local authority as entry point.

Meeting Women's Need for Contraception

While the project has seen family planning and distribution of contraception increase across the life of the project, there still exists a substantial unmet need for family planning in Tabora.

Key Recommendations on Improving Access to Contraception: Given the importance access to contraception plays in reducing maternal mortality, the project could have better collaborated with leading FP partners in Tanzania to strengthen interventions related to increasing access to contraception. This includes building into future programming significant support to address supply, strengthening clinical skills on providing the full range of contraceptive methods (with a focus on long-acting methods for adolescents) and a strong male engagement component specific to family planning.

Leveraging digital messaging for RMNH & ASHR promotion & behaviour change

Finally, there are 44 million mobile connections in Tanzania and the country has a high internet penetration of 25%. Experience with the VIAMO messaging campaign has further demonstrated the effectiveness of mobile messaging for reaching participants in rural areas but also in times when limiting face to face meetings are needed. Tanzania's digital ecosystem has evolved in the last decade. More people use digital services today than at any time in the past. Digital messaging is an important mechanism for behavioural change, it is recommended that future projects incorporate SMS messaging as a means of targeting both women and adolescents.

Next steps

TAMANI partners have developed several learning documents and policy briefs to capture learning from the program in a way that will be useful for future program design and policy advocacy. These have been shared with key government offices, partners, and donors through a variety of platforms such as the project steering committee and project closeout events. Many of these learning documents can be found in Annex 12 and Annex 13. CARE will host a final results dissemination meeting with project partners and GoT stakeholders virtually in late 2021.

The project learnings from TAMANI will be used to inform program design for future health system strengthening, RMNCH, and ASRHR programming, in Tanzania and globally.

List of Annexes

Annex 1 - Risk Register

1. Risk (Definition)	2. Risk Response	3. Initiative LM Outcome Statement	4. Residual Risk
Development Risks			
Risk 1: COVID-19 cases across Tanzania will undermine and potentially undo support to RMNCAH services and negatively impact planned project activities and outcomes.	*CARE Tanzania developed and regularly updated the CARE Tanzania COVID-19 Response Plan. *Project team is working with RHMT and GoT on the COVID-19 response and to ensure RMNCAH resources are not re-directed and essential SRHR services continue.	1100 Improved availability of quality reproductive, maternal and newborn health services in underserved districts in Tanzania	Impact: 3 Likelihood: 3
Risk 2: Beneficiaries, health care workers, R/CHMTs and project staff perpetuate harmful gender attitudes and beliefs	*Train staff early in the project on gender equality. *Work with CHMTs to include gender as a standing issue at meetings and in planning *Include women-centred approaches to EmONC training (Respectful Maternity Care) *Engage men at the community level in maternal and newborn health education	1220 Improved ability for women to seek maternal and newborn health services 1200 Increased utilization of reproductive, maternal and newborn health services by women and their families in targeted district of Tanzania	Impact: 2 Likelihood: 3
Risk 3: Government in Tanzania appears to be committed to RMNCAH programs, with the endorsement of the One Plan II and financing for the health sector outlined in the National Five Year Development Plan 2016-2021. However, statements related to family planning may have a negative impact on access to	*CARE Tanzania will work closely with national partners to advocate for continued Government support for reproductive, maternal and newborn health as a priority area of investment and identify appropriate opportunities for policy engagement. *The project will work closely with the PSC members and others to stress the importance of access to contraception as part of RMNCAH programming/funding.	1110 Strengthened capacity of regional and district health system mangers to effectively plan, manage, and deliver quality gender-sensitive maternal and newborn health services	Impact: 3 Likelihood: 3

contraception for women and girls.		1114 Policy briefs on priority issues related to RMNH written and disseminated for district, regional and national decision making

Annex 2 – Performance Measurement Framework

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
1000 Reduced maternal and newborn mortality and morbidity in underserved districts in Tanzania	MMR (per 100,000 live births) national estimate	556	70[6]	524 (7% decrease)	6% against project achievement
	NMR (per 1000 live births) national average	25	12[7]	20	20% against project achievement
	Adolescent pregnancy (% of women ages 15-19 who are pregnant or have given birth)	43%	5pp decrease (38%)	42%	20% against project achievement (1 pp decrease)
1100 Improved availability of quality	% of women and adolescent girls with an unmet need for family planning	W:29% A: 41%	W: 5 pp decrease A: 10 pp decrease	W: 38% A:N/A	8pp increase

[5] Initial baseline data is taken from the 2015 TZ DHS, but will be updated once the baseline report is completed.

[6] SDG 3 MMR Indicator

[7] SDG 3 NMR Indicator

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
reproductive maternal and newborn health services in underserved districts in Tanzania	% deliveries assisted by a skilled birth attendant	W:68% A:76%	10 pp increase (80%)	82% W:82% A: 83%	12pp increase/ 102% against project target
	% change in Respectful Maternity Care	22%	20 pp increase (42%)	25%	3pp increase / 60% against project target
1200 Increased utilization of reproductive maternal and newborn health services by women and their families in targeted districts in Tanzania	% women 15 - 49 with a live birth attending ANC 4 or more times	W: 55% A: 53%	10pp increase (66%, 63%)	W:69% A:58%	W: 13pp / 104% against project target A: 5pp/ 92% against project target
	Contraceptive Prevalence Rate	W: 33% A: 16%	W:5pp increase A:10pp increase	W:32% A:21%	W: No Change A: 5pp/80% against project achievement
	%/# of women who are autonomous to visit health facility	W:36% A:26%	10pp increase	W:58%	W: 22pp/ 126% against project achievement

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
1110 Strengthened capacity of regional and district health system managers to effectively plan, manage, and deliver quality gender sensitive reproductive maternal and newborn health services	#/% of health facilities reporting quality[8] RMNH related HMIS data monthly	117	150	309	309/363 HF =85% of HF 206% against target
	#/% of District CCHP's scored 70% or higher in DQA	Uyui 57.5% Urambo 57.5% Sikonge 70% Nzega DC 65% Kaliua 67.5%	8 districts	9.28% Increased	Uyui = 73% (15.49% increase) Urambo = 78% (20.6% increase) Sikonge = 74% (4.45% increase) Nzega DC= 70% (5.07% increase) Kaliua=73% (5.76% increase) Nzega TC= 81% Igunga= 83.21% (11.41% increased Tabora MC=83.21%

[8] "quality" will be defined as receiving a score of >95% on data completeness using DHIS2

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
					(1.79% decreased)
1120 Improved gender-sensitive reproductive maternal and newborn health service infrastructure	#/% of women and adolescent girls satisfied with improved health facilities and emergency transportation	53 %	10 pp increase	77%	24pp increase/122% against target
	#/% of health facilities equipped and supplied to deliver CE/BEmONC	0	150 facilities	169 HF (11 Health Centers and 158 Dispensaries)	112% against target
	#/% total health care facilities with regular access to water	139	170 facilities	220	129% against target
1130 Improved knowledge and skills of health providers to deliver gender sensitive reproductive maternal and newborn clinical services	% change of skills and knowledge of m/f health care workers in CE/BEmONC	N/A	100% Retention	104% Average Retention of score	104% Average Retention of score (F: 105% / M: 103%
	#/% of health facilities providing Respectful Maternity Care	N/A	150 facilities	174 Health facilities	174 Health facilities (116% against project target)
1210 Increased access to gender-sensitive	#/% of household visits by CHW's per quarter	N/A	10/ households/ month	10 HH visits/ month	10 HH visits/month 100% of target

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
reproductive maternal and newborn health services	#/% of communities providing comprehensive Youth SRHR education and services	N/A	36	38	105% against target
1220 Improved ability of women, men and adolescent boys and girls to seek reproductive, maternal and newborn health services	#/% of women and adolescent girls receiving modern contraception at health facilities.	6%	Adult:5% increase Adolescent: 10% increase	Adults (25+): 41,980 (152% increase) Youth (20-24): 27,175 (231% increase) Adolescents (15-19): 15,708 (427% increase)**	Adults: 240% against target Youth: 300% against target Adolescents: 478% against target**
	%/# of men and adolescent boys who agree/strongly agree with women's right to seek health care	M: 34% A:27%	10pp increase	M:46%	M: 12pp increase / 105% against target A: N/A
1111 Regional and district health authorities trained and mentored in gender sensitive supportive supervision for reproductive,	#/% of f/m RMNH joint supportive supervision visits per health facility	N/A	Quarterly	0.68 visits/HF	68% - 2189/3180
	# of m/f R/CHMT members trained to conduct regular RMNCH supportive supervision	N/A	8 RHMT members & 5 CHMT members/district	12 RHMT (2f, 10m) 65 CHMT (24f, 41m)	150% RHMT 160% CHMT

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
maternal and newborn health services					
1112 Regional and district health authorities trained and mentored on HMIS and effective planning and budgeting for reproductive, maternal and newborn health services	#/% of f/m CHMT members and HF Staff trained on developing CCHPs for RMNCH services	N/A	5 CHMT members /district 100 HF Staff	124 CHMT (69m,55 f) 94 HF Staff(34f,60m) 2 RHMT(2m)	(297%) (94%)
	# of f/m CHMT members trained on RMNH data analysis and utilization	N/A	1 CHMT members/ district	20 Health Facility Staff (12m, 8f) 72 CHMT members 2 RHMT (2m)	100% 180% 200%
1113 Reproductive, maternal and newborn health systems research projects conducted	# of research projects	N/A	2 research projects	2	100%
	# of reproductive, maternal and newborn health publications written	N/A	3 publications	3	100%
	# of policy briefs written and disseminated	N/A	5 policy briefs	5	100 %

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
1114 Policy briefs on priority issues related to RMNH written and disseminated for district, regional and national decision making	# of reproductive, maternal and newborn health consultations held at local, district, regional and national levels	N/A	5 consultations	1	20%
1121 Emergency transportation system for pregnant and postpartum women and newborns developed	#/% of villages with emergency transportation systems	N/A	20 villages	40 villages	200%
	#/% of pregnant women, and adolescent girls using emergency transportation	N/A	10 referrals/ ambulance/ month	8 referrals/ ambulance/ month	80%
1122 Health facilities equipped and rehabilitated	#/% of health facilities equipped and/or rehabilitated to provide BEmONC & CEmONC	N/A	4 health centers (CEmONC) and 70 dispensaries (BEmONC)	11 Health Centers & 158 Disp.	Health Centers (275%) & Disp. (225.7%)
1131 Job aids disseminated based on GoT's RMNH clinical practice guidelines	# of job aids developed	N/A	4 job aids	4 Job Aids 100%	100%
	# of health facilities with job aids	N/A	140 health care facilities	265 Health Facilities	189%

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
1132 Health care workers trained on CE/BEmONC and family planning	# of m/f health care workers trained on CE/BEmONC and family planning	N/A	270 health care workers	270 (121f/149m)	270(100%) (121f/149m)
	% change in knowledge of m/f health workers of CE/BEmONC (pre-test/post-test)	N/A	20% improvement in knowledge	24% improvement CEmONC: 33% improvement BEmONC: 35 % improvement EmONC: 15.5% improvemen	120%
1133 Health care workers mentored on CE/BEmONC and family planning	# of m/f health care workers mentored on CE/BEmONC and family planning	N/A	270 health care workers (6 & 12 months post-training)	200 (93m&107f))/270 (149m&121f) health care workers at 12 months post training	74%
1134 Maternal Perinatal Death Surveillance & Response Audit developed and implemented	# of # of meetings to sensitize R/CHMT on MPDSR process and gaps	N/A	10 meetings	30	300%
	# of maternal death review assessments	N/A	1	1	100%

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
1211 CHW program for reproductive, maternal and newborn health and family planning implemented	# of m/f CHWs trained (using pre-test/post-test as method)	N/A	1000 m/f CHWs	997 (459m/538f) CHW's	99.7%
	# of m/f CHWs equipped with bicycles, bags etc.	N/A	1000 m/f CHWs	997 (459m/538f) CHW's	99.7%
1212 Youth friendly sexual and reproductive health services developed and implemented	# of Youth and HCW's trained on Youth SRHR friendly spaces	N/A	160m/f HCW/80m/f Youth	160 HCW's (55 m; 105 f) 100% 76 Youth (38 m;38 f)	HCW's: 100% Youth: 95%
	# of districts (CHMTs) with m/f Youth SRHR focal points	N/A	8	8(2 m;6 f) CHMT Adolescent focal person trained on ASRH	100%
1221 Gender-sensitive reproductive, maternal and newborn health community scorecards conducted	# of communities trained on using community scorecards	N/A	24	24	100%

Expected results	Indicators	Baseline data[5]	Project Target	Endline Data	Cumulative against Project Target
1222 Communities sensitized on gender-sensitive reproductive, maternal and newborn health	# of men engaged on RMNCH issues	N/A	1500	2,273	151%

Annex 3 – Gender Equality Measurement Framework

Expected results	GE Indicators	Notes	Data sources	Data collection methods	Frequency	Results
Ultimate outcome						
1000 Reduced maternal and newborn mortality and morbidity in underserved districts in Tanzania	% change in women's empowerment	Empowerment domains are included in the household survey. Women's empowerment analysis will focus on risk factors and vulnerabilities specific to women's and girl's health outcomes in Tabora.	Beneficiaries	Household survey	Baseline/ Endline	58% 22pp increase
Intermediate outcomes						
1100 Improved availability of quality reproductive maternal and newborn health services in underserved districts in Tanzania	% change in Respectful Maternity Care	Respectful maternity care questions based on the RMC charter on the rights of childbearing women have been integrated into the household survey.	Beneficiaries	Household Survey	Baseline, Endline	25% 3pp increase
1200 Increased utilization of reproductive maternal and newborn health services by women and their families in targeted districts in Tanzania	% change of women's satisfaction with health facility rehabilitation projects	The household survey includes questions on women's satisfaction with health facility rehabilitation projects.	Beneficiaries	Household Survey	Baseline/ Endline	77% 24pp increase
Immediate outcomes						
1110 Strengthened capacity of regional and district health	% CHMTs with knowledge of gender issues	Training for R/CHMTs will include key findings from the gender research. Initial findings from TNA suggested	R/CHMT members	CHMT Survey	Endline Survey	

system managers to effectively plan, manage, and deliver quality gender sensitive reproductive maternal and newborn health services	related to FP/RMNH services % of CHMT's with ability to do gender based analysis of sex disaggregated data # of R/CHMT's trained in the Prevention of Sexual Exploitation and Abuse (PSEA)	there are gaps in understanding how gender relates to the role of CHMT's.				100% (22/22) 92% (48/52) 53(28f,24m)
1120 Improved gender-sensitive reproductive maternal and newborn health service infrastructure	#/% of health facilities with improved infrastructure that reflects the priorities of women and girls in the catchment communities	Women identified improving access to water and power as initial priority rehabilitation projects. The health facility rehabilitation strategy will be driven by the priorities of women and girls.	Beneficiaries	Consultation Reports/ Project Reports	Year 4	19/21 HF Projects (91%)
1130 Improved knowledge and skills of health providers to	#/% health care workers with knowledge of	Respectful Maternity Care is part of the EmONC training (based on GoT guidelines). RMC will be reinforced	HCWs	OSCE's	Year 4	270/100%

deliver gender sensitive reproductive maternal and newborn clinical services	Respectful Maternity Care	through coaching and mentoring post-training.				
1210 Increased access to gender-sensitive reproductive maternal and newborn health services	# of adolescent boys and girls satisfied with RMNH health care services	CARE will conduct follow-up Youth SRHR surveys using exit interviews and community surveys	Beneficiaries	Youth KAP surveys	Endline Gender Qualitative Research	22/24 92%
1220 Improved ability of women to seek reproductive, maternal and newborn health services	#/% of CHWs that can identify at least 2 gender issues related to FP/RMNH	SBCC messages developed from formative research that address harmful gender norms and support positive gender norms for the health of women and girls shared with CHWs	CHWs	Survey using CHW sample	Year 4	19/64% male CHW's 38/78% of female CHW's
Outputs						
1111 Regional and district health authorities trained and mentored in gender sensitive supportive supervision for reproductive, maternal and newborn health services	#/% of R/CHMT supportive supervision trainings that review key findings from gender research	Supportive supervision training will integrate gender issues identified from baseline as key to supporting women centered health care	HCWs	Training Curriculum	Endline	5 workshops
1112 Regional and district health authorities trained and mentored on HMIS and effective planning and	#/% of R/CHMTs that can provide gender-based analysis of sex	This was integrated into the data utilization training curriculum.	R/CHMT's	CHMT Survey	Endline Survey	92% (48/52)

budgeting for reproductive, maternal and newborn health services	disaggregated data					
1113 Reproductive, maternal and newborn health systems research projects conducted	# of research projects that include on gender	The project will conduct at least one of its research projects on gender norms that determine FP/RMNH outcomes.	Research Papers	Document Review	Annually	2 / 100%
1114 Policy briefs on priority issues related to RMNH written and disseminated for district, regional and national decision making	# of project briefs that address gender norms that affect FP/RMNH		Policy Briefs		Year 4	5 / 100%
1121 Emergency transportation system for pregnant and postpartum women and newborns developed	Women's satisfaction with emergency vehicles	There have been issues with emergency vehicles in Tabora in the past as they were not suitable for pregnant women.	Beneficiaries	Household Survey	Baseline and Endline	N/A*
1122 Health facilities equipped and rehabilitated	#/% of women informing rehabilitation of health facilities	The project will consult with women in the villages of the catchment area of the health facilities to be rehabilitated to inform the rehabilitation projects.	Beneficiaries	Focus Group Discussions	Baseline	192 women
1131 Job aids disseminated based on	#/% of job aids that address	The job aids will be based on the MoHCDGEC BEmONC/CEmONC curriculum. The HH survey and	Job Aids	Document Review	After completion of job aids.	4/4 100%

GoT's RMNH clinical practice guidelines	women centred health care	gender research will also be used to inform job aids to address women specific issues.				
1132 Health care workers trained on CE/BEmONC and family planning	#/% of Health Care Workers trained on RMC	The training curriculum for BEmONC/CEmONC will include a module on RMC	Health Care Workers	Training Curriculum Pre/post - test	Each training	270/270 100%
1133 Health care workers mentored on CE/BEmONC and family planning	OSCE with Respectful Maternity CARE assessment	OSCE's integrate respectful care, with a focus on communication and consent.	OSCE	Document Review	6 and 12 months post-training	4/4 100%
1134 Maternal death audit developed and implemented	#/% of MPDSR meetings that include gender determinants of death	MPDSR meetings to include gender barriers to highlight issues that may contribute to maternal deaths.	R/CHMTs/HF staff	Meeting Notes	Annually	26 / 10 260%
1211 CHW program for reproductive, maternal and newborn health and family planning implemented	#/% of CHWs that are trained on gender issues	CHW curriculum includes gender, GBV, engaging men, and promoting participatory household decision making on RMNH.	CHW Curriculum	Document Review	After completion of CHW Training	997/997 100%
1212 Youth friendly sexual and reproductive health services developed and implemented	#/% of youth friendly materials and services that take into account the different	While the GoT AFRHS curriculum cannot be modified, the related project resources and community engagement activities will be informed by the formative research on gender norms.	Youth SRHR resources developed	Document Review	Endline	21/22** 95%

	needs of boys and girls					
1221 Gender-sensitive reproductive, maternal and newborn health community scorecards conducted	#/% of community scorecards that include gender specific indicators % change in gender specific indicators	The CSC is meant to ensure that duty bearers fulfill their obligations. CSC in the project will more specifically ensure that duty bearers fulfil their obligations towards the rights of women and girls.	Beneficiaries	Scorecard	Endline	24 / 100%
1222 Communities sensitized on gender-sensitive reproductive, maternal and newborn health	# of men and women participating in Social Analysis and Action	Social Analysis and Action seeks to change harmful and unequal gender norms and promote positive and equal gender norms. Findings from the HH survey and formative research will be applied to Social Analysis and Action activity	Beneficiaries	Project activity report	After completion of each activity	4343 (2273 m, 2070 f)

* There were only 11 women at baseline and endline who reported using emergency services

**Improvements in privacy, confidentiality, and respective services have been observed by mystery clients at 21/22 sampled facilities except for Igigwa in Sikonge district where the provider was not available to offer services.

Annex 4 - Communications Annex

Project Description

The Tabora Maternal Newborn Health Initiative (TAMANI) aimed to improve the quality of reproductive, maternal, and newborn health services available, and to address the existing barriers women and girls face in accessing care. It is directly supported 126 health planners, 270 health care workers and 997 community health workers, and indirectly supported 298,900 women and girls of reproductive age, 660,500 men and boys, and 68,600 newborns.

TAMANI Project Summary	
Project name:	Tabora Maternal Newborn Health Initiative (TAMANI)
Donor:	Government of Canada
Project lifespan:	January 2017 – December 2021
Project Partners:	CARE Association of Gynecologists & Obstetricians of Tanzania (AGOTA) Canadian Society for International Health (CSIH) Ifakara Health Institute McGill University Institute for Health Policy & Social Research Society of Obstetricians & Gynecologists of Canada (SOGC)
Government of Tanzania partners:	Tabora Regional Health Management Team Ministry of Health, Community Development, Gender, Elderly & Children (MoHCDGEC) The Prime Minister's Office for Regional and Local Governance (PO-RALG)
Project ultimate outcome:	Reduced maternal/newborn mortality and morbidity in underserved districts in Tanzania
Intermediate outcomes:	-Improved availability of quality reproductive, maternal, and newborn health services in underserved districts in Tanzania -Increased utilization of reproductive, maternal, and newborn health services by women and their families in targeted districts in Tanzania
Communities Targeted:	The project covers all districts in Tabora Region: Igunga, Kaliua, Nzega, Sikonge, Tabora, Tabora Municipal, Urambo & Uyui
Number of beneficiaries:	Directly: -126 health planners -270 health care workers -997community health workers 425,897 women of reproductive age 3,073 men -112,329 newborns Indirectly: -425,897 men and boys

Annex 5 – List of Partners

CARE Canada was responsible for the overall coordination of TAMANI and was legally responsible for the implementation of the project. The CARE Canada Program Manager works closely with all partners and manages communication and coordination, as well as donor reporting.

Contact: Rebecca Davidson, Head of Programs – Global Health

Email: Rebecca.davidson@care.ca

CARE Tanzania was responsible for the bulk of project implementation and coordinates the work of partners in Tabora. The Project Coordinator led on engagement with the GoT and worked closely to coordinate project activities with the Regional Medical Officer and the RHMT.

Contact: Flavian Lihwa, Program Coordinator – Tabora

Email: FLihwa@care.org

The **Canadian Society for International Health (CSIH)** is supporting the implementation of health system strengthening activities under Intermediate Outcome 1100 specifically providing training and support to both Regional Health Management Teams and Council Health Management Teams to increase capacity in the areas of supportive supervision, gender sensitive RMNCAH planning and budgeting, and HMIS data quality.

Contact: Hanan Muharram, Project Coordinator

Email: calexander@csih.org

The **Society for Obstetricians and Gynecologists of Canada (SOGC)** supported the coaching and mentoring activities following EmONC training and worked with AGOTA to facilitate learning and knowledge exchange between the two professional associations.

Contact: Catherine Savoie, Project Manager

Email: csavoie@sogc.com

The **Association of Gynaecologists and Obstetricians of Tanzania (AGOTA)**, worked with SOGC to support improved quality EmONC training, coaching, and mentoring and support to simulation and review and guidance on GoT MoHCDGEC policies.

Contact: Dr. Elias Kweyamba MD, Mmed. Obstetrics & Gynaecology, Consultant

Email: ellyambag@yahoo.com

McGill University's Institute for Health and Social Policy (IHSP) supported the project to conduct evaluation activities, finalized the monitoring and evaluation plan, and provided data analysis on the health facility assessment survey and the baseline household survey.

Contact: Dr. Arijit Nandi, PhD, Associate Professor

Email: arijit.nandi@mcgill.ca

Ifakara Health Institute (IHI) was responsible for data collection for the project's baseline household survey and led on the formative gender research.

Contact: Dr. Sally Mtenga, MA PhD (Dis), Research Scientist

Email: smtenga@ihi.or.tz

White Ribbon Alliance of Tanzania (WRATZ): TAMANI collaborated with WRATZ for the global White Ribbon Alliance's "What Women Want" global Campaign, collecting data from 1600 women on their top RMNH priority. TAMANI shared the data with WRATZ to contribute to their global campaign and integrated the results into community engagement and communication and advocacy activities throughout the project.

Contact: Rose Mlay

Email: RMlay@whiteribbonalliance.org

The Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) provides technical oversight to TAMANI and ensures the project is aligned with current and relevant GoT health policies and priorities. A senior representative of the MoHCDGEC participates on the TAMANI Project Steering Committee, and TAMANI staff participate in relevant technical working groups at MoHCDGEC, such as the Safe Motherhood Technical Working Group coordinated by the RCHS unit.

Contact: Dr. A.M. Makuwani, A/Deputy Director of Reproductive and Child Health

Email: amakuwani@gmail.com

The Prime Ministers Office for Regional and Local Governance (PO-RALG) provides oversight and approval of the engagement of government employees in TAMANI, and plays an on overall coordination and approval role in supporting TAMANI implementation. A senior representative of PO-RALG participates on the Project Steering Committee.

Contact: Dr. Ntuli, Director of Health, Social Welfare and Nutrition Services, PO-RALG

Email: nkapologwe2002@gmail.com

The Regional Health Management Team (RHMT) is a key partner in implementing the project in Tabora and provides key decision-making in the selection and approval of specific project activities. The RHMT, led by the RMO prioritizes where and when certain activities are implemented within the region and plays a critical coordination role, especially within the RBF context.

Contact: Dr. Honoratha F. Rutatinisibwa, RMO, Tabora

Email: honorwe@yahoo.com

Annex 6 – List of all Project and Technical Reports

Name of Report	Date Submitted
Project Implementation Plan	Original submission: April 2017 Revised: May 2017 Revised: June 2017
Baseline Evaluation Report	February 2018
1st year Semi-annual report	November 15th 2017
1st year Annual report	May 15th 2018
2nd year Semi-annual report	November 15th 2018
2nd year Annual Report	May 15th 2019
3rd year Semi-annual report	November 15th 2020
3rd year Annual report	May 15th 2020
4th year Semi-annual report	November 15th 2020
4th year Annual report	May 15th 2021
Final Report	October 29th 2021

Annex 7 – List of all Subcontractors (Canadian/International/Local) and support provided

The list of all subcontractors has been attached in a zipped folder to this report.

Annex 8 – Distribution and Transfer of Project Assets

The final Distribution and Transfer of Project Assets plan has been attached in a zipped folder to this report.

Annex 9 - Intellectual property

All data gathered and all research contracted by CARE Canada and project partners under the TAMANI project remains the intellectual property of CARE Canada and project partners.

The following academic research projects were conducted alongside the TAMANI project, and papers or reports generated and/or published remain the intellectual property of their authors and their respective institutions and publishers:

Annex 10 - Completion of Construction Works

Certificates of completion for all structural work completed by TAMANI have been obtained from relevant authorities in Tanzania and are attached in a zipped folder to this report.