
NEP Tanzania Brief: February 2018

The Government of Tanzania has implemented various strategies to improve maternal survival, however, maternal mortality has remained unchanged over the Millennium Development Goal (MDG) period (2000-2015) (Figure 1).

Several years into the MDG period, Tanzania developed “The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn, and Child Deaths in Tanzania 2008-2015” (“One Plan”), which included a comprehensive set of evidence-based interventions to reduce maternal mortality.

The maternal components of the One Plan are based on the “four pillars of safe motherhood”: family planning, antenatal care, clean and safe delivery, and essential obstetric care. The plan set out ambitious targets for coverage of key interventions in each of the four areas: modern Contraceptive Prevalence Rate (mCPR), four or more Antenatal Care visits (ANC4+), Skilled Birth Attendants at delivery (SBA), availability of Basic Emergency Obstetric and Newborn Care (BEmONC), and Comprehensive Emergency Obstetric and Newborn Care (CEmONC).

In 2013, the One Plan Midterm Review¹ and Tanzania Countdown Case Study² revealed slow progress towards maternal targets. This triggered development of the Sharpened One Plan (SOP), which the Government implemented during the last 500 days of the strategic plan. The SOP increased emphasis on family planning and delivery care interventions with a special focus in Western and Lake Zones and among adolescents and poorest.

By the end of the One Plan period, Tanzania did not achieve the target to reduce maternal mortality. This brief summarizes findings from the National Evaluation Platform (NEP)'s evaluation of the One Plan’s implementation and important lessons learned.

**Evaluation design**

The NEP Technical Task Team (TTT)—a collaborative working group led by the National Bureau of Statistics with participants from Ministry of Health, Community Development, Gender, Elderly, and Children (MoHCDGEC), President’s Office Regional Administration and Local Government (PO-RALG), Tanzania Food and Nutrition Centre (TFNC), Tanzania Commission for Science and Technology (COSTECH), National Institute for Medical Research (NIMR) Muhimbili University of Health and Allied Sciences (MUHAS), Eastern Africa Statistical Training Centre (EASTC), Sokoine University of Agriculture (SUA), and Partnership for Nutrition in Tanzania (PANITA)—carried out the evaluation. The TTT developed an impact model to describe the causal chain between the One Plan’s inputs and impact, and specified four evaluation questions related to implementation of the One Plan’s maternal components (Figure 2).

1. Did Tanzania meet One Plan targets for maternal mortality & interventions coverage (mCPR, ANC4+, SBA, BEmONC, CEmONC)?
2. Did coverage of interventions become more equitable across the One Plan period?
3. Did availability of maternal services increase? Did quality and utilization change over the One Plan period?
4. Were the inputs and activities carried out per plans?

The NEP TTT carried out a comprehensive data mapping activity and identified a number of relevant data sources for the One Plan period. For impact and outcome indicators, the TTT used three Tanzania Demographic and Health Survey (TDHS) (2005, 2010, 2015). Data on availability and quality of services (outputs) came from the Tanzania Service Provision Assessment (TSPA) 2006 and 2015. The team employed guidance from the WHO and others to develop summary scores for three key dimensions of quality: readiness to provide services, provider competency, and client satisfaction. The team obtained data on service utilization during the Sharpened One Plan period (2014-2015) from the health management information...
system, which is implemented on the District Health Information System (DHIS-2) software platform.

The team assessed the quality of DHIS-2 data using World Health Organization tools. The team used 2014-2015 input data from the Human Resources for Health Information System (HR-HIS) and National Health Accounts. The team also explored using data from the Service Availability and Readiness Assessment (SARA), Service Availability Mapping (SAM), and Emergency Obstetric Newborn Care (EmONC) surveys, however, the team did not use these data sources for the evaluation because of data availability and methodological differences. Due to changes in regional administrative boundaries during the One Plan period, the team standardized all TDHS and TSPA data to 2005 boundaries to allow comparisons over time by region.

Findings

The One Plan aimed to raise mCPR among married women from 20% in 2005 to 60% in 2015. mCPR coverage increased across Tanzania Mainland, but the One Plan target was not reached.

There was a decline in ANC4+ coverage in Tanzania Mainland, with small improvement over the last five years of the One Plan. However, ANC4+ coverage in 2015 was 41 percentage points below the One Plan target.

SBA coverage gradually increased from 46% in 2005 to 66% in 2015. However, Tanzania Mainland fell short of reaching the One Plan target by 14 percentage points. Among all interventions assessed by the TTT, SBA coverage increased the most during the One Plan period.

Figure 3. Coverage of One Plan interventions during the One Plan period (Sources: mCPR, ANC4+, SBA from TDHS 2005, 2010, 2015)

Family Planning

Family planning contributes towards reducing maternal mortality by limiting the total number of high risk pregnancies. Family planning prevents unintended pregnancies and promotes birth spacing. Tanzania Mainland did not reach the mCPR target; only 33% of married women used modern contraceptives in 2015. Although the country didn’t reach the target, mCPR increased in all regions except Arusha and Dar es Salaam (Figure 5). The gap in mCPR coverage between rural and urban areas dramatically decreased from 20 (2005) to 4 (2015) percentage points. The gap reduced because mCPR coverage increased in rural areas from 16% (2005) to 32% (2015) while mCPR stayed constant in urban areas.
Is mCPR coverage low because women are not interested in family planning? No! According to the TDHS 2015, demand for family planning has not been met for half of currently married women. If all of these women had been reached with modern methods, the One Plan coverage target would have been surpassed. Availability of family planning across all facility types remained high across the One Plan period (more than 75%), but readiness to provide quality services was low. In 2015, only 10% of health facilities had all essential items required to provide family planning services. Overall client satisfaction with family planning services has remained high (at 90%) during the One Plan period.

### Antenatal care

High coverage of ANC services is important for both maternal health and infant survival. Under Focused Antenatal Care guidelines in place during the One Plan period, pregnant women are supposed to attend at least four ANC visits in order to receive a complete package of interventions. This package includes tetanus toxoid vaccine, intermittent preventative treatment in pregnancy, iron and folic acid supplementation, as well as HIV testing and monitoring fetal growth. The guidelines include other interventions that the team did not analyze.

The proportion of women attending four or more ANC visits declined from 59% in 2005 to 40% in 2010 and then increased to 49% in 2015. ANC4+ declined in all but three regions (Tabora, Morogoro and Kilimanjaro). The gap in ANC4+ coverage between the richest and poorest households increased from 21 (2005) to 32 (2015) percentage points (Figure 6).

#### ANC4+ Coverage by Wealth Quintile

![Figure 6. Gaps in ANC4+ coverage among wealth quintiles](Source: TDHS 2005, 2010, 2015)

Figure 6. Gaps in ANC4+ coverage among wealth quintiles (Source: TDHS 2005, 2010, 2015)
Understanding the quality of ANC services is important to determine how to improve effective ANC coverage. The team supplemented analysis of existing survey and routine data with a qualitative assessment on dimensions of care that are important to women’s and health workers’ perceptions of ANC quality services. The team conducted this study in the Tanga region. The study included over 60 women and 30 healthcare providers. The findings indicate that women and service providers are well informed about what should be included in ANC services. Clients are concerned about respectful care, access to services, shortages of commodities and supplies, lack of emergency transportation, and the cost of ANC services. Clients shared that they have been denied services if their partners were not present and felt that all pregnant women should receive services regardless of whether their male partners are present. Providers are concerned about shortages of commodities and supplies, insufficient skilled staff, availability of in-service training, provider benefits, and cost of services. Study participants acknowledged government efforts to improve maternal health and recommended that more actions need to take place to fully implement health policies.

Delivery

Improved delivery care including SBA at delivery and availability of emergency obstetric services are the most critical interventions for reducing maternal mortality. Although Tanzania Mainland did not reach the SBA, BEmONC, or CEmONC targets, SBA coverage increased by 19.5 percentage points over the One Plan period — with notable progress in the last 5 years. SBA coverage improved in all regions. One-third of regions reached the One Plan target (Figure 7).

![SBA Coverage by Region (TDHS 2015)](source: TDHS 2015)

Availability of normal delivery services was high across all types of public facilities (>70%) compared to private facilities (46%).

Figure 7. SBA coverage by region in 2015, ordered highest to lowest coverage (Source: TDHS 2015)
Emergency obstetric services are crucial to saving mothers and newborns in the event of a life-threatening delivery. TSPA 2006 defined BEmONC as six key obstetric signal functions: (1) parenteral administration of antibiotics for mothers; (2) parenteral administration of oxytocic drug; (3) parenteral administration of anticonvulsants; (4) assisted vaginal delivery; (5) manual removal of placenta; and (6) manual removal of retained products among facilities offering delivery services. CEmONC is defined as all BEmONC services and two additional services: (7) surgical caesarean capacity, and (8) blood transfusion. CEmONC is only provided at hospitals and health centres. The One Plan aimed for 70% of health centers and dispensaries to offer all BEmONC services and 100% of hospitals to offer all CEmONC services. Tanzania did not reach BEmONC or CEmONC targets, however, the percent of facilities providing any emergency obstetric services increased between 2006 and 2015.

When there are complications, cesarean section is an important service to save the lives of both the mother and baby. In Tanzania Mainland, 45% of hospitals provided cesarean section, which is short of the 100% target. Availability at health centers remained low (3%), which is problematic given that most women attend health centers to give birth.

**Sharpened One Plan**

Recognizing the slow progress towards targets in the 2013 midterm evaluation, the MoHCDGEC prioritized disseminating the SOP to Lake and Western regions between November 2014 and May 2015. The MoHCDGEC engaged districts in the planning process and hosted regional dissemination events.

Although Tanzania did not reach 2015 coverage targets, there is evidence from DHIS-2 that ANC4+ utilization increased across all regions during the two years (Figure 8).
Due to limited availability of human resources and budget data, the TTT could only access human resources and budget allocation data for 2014-2015. By the end of the One Plan period, Tanzania Mainland still had an insufficient number of skilled healthcare workers in all regions (Figure 9). None of the regions attained the recommended number of 23 health workers per 10,000 people. Moreover, the health sector budget allocation for reproductive health dropped from 16% to 10% during the SOP period. Insufficient resources to implement One Plan activities could have made it challenging to achieve One Plan targets.

![Skilled health workers per 10,000 people in Tanzania Mainland (2015)](Source: HR HIS)

**Summary of Findings**

1. **Did Tanzania meet One Plan targets?**
   - Tanzania Mainland overall did **not** reach One Plan targets for maternal mortality, mCPR, ANC4+, or SBA.
   - Several regions reached targets for SBA.
   - No regions met the target for ANC4+ and mCPR. ANC4+ coverage declined in most regions during the period.

2. **Did coverage of interventions become more equitable across the One Plan period?**
   - Yes & No
   - The gap in coverage between richest and poorest decreased for mCPR and SBA, but widened for ANC4+.
   - The gap in coverage between rural and urban households decreased for mCPR, but widened for ANC4+.

3. **Did availability of maternal services increase? Did quality and utilization change over the One Plan period?**
   - There was no increase in the availability of maternal health services during implementation of the One Plan.
• Except for readiness to provide family planning services, other dimensions of family planning (availability and provider competency) remained stagnant or low across the One Plan period.
• During the Sharpened One Plan period, utilization of ANC4 services increased and utilization of family planning and facility delivery services remained stagnant. These trends occurred in all zones - not just zones prioritized by the Sharpened One Plan.

4. Were the inputs and activities carried out per plans?
• No - key inputs did not increase over the One Plan period.
  • Funding for maternal health decreased.
  • Tanzania Mainland had insufficient skilled health workers to carry out activities.

## Recommendations

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<td><strong>Monitor ongoing efforts to expand ANC4+ coverage and adopt revised WHO ANC guidelines.</strong></td>
<td>Tanzania launched One Plan II (2016-2020) and is going to adopt the WHO’s recommendation of 8 or more ANC visits in the national ANC guidelines. Crucial to successful implementation of One Plan II and the revised ANC guidelines is addressing the decline in ANC4+ coverage over the One Plan period.</td>
<td>DHIS-2 is a key data source for monitoring progress. Although data quality is improving with time, there are still some concerns with data quality. Insufficient availability of trained staff to analyze, interpret, and disseminate service provision data at regional and council level.</td>
<td>Annual review of relevant DHIS-2 and other routine data (e.g. eLMIS, HR-MIS) and coverage trends. Conduct routine data quality assessment at all levels (health facilities, councils, regions, and national). Conduct evaluation of coverage and quality of services when new DHS and facility survey estimates come available in the next 2-3 years.</td>
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<td><strong>Improve readiness of health facilities to provide maternal health services.</strong></td>
<td>Health facilities readiness (trained staff and guidelines, equipment, medicines, and diagnostics) remained poor across all three maternal intervention areas: family planning, ANC, and delivery care.</td>
<td>Insufficient trained staff to provide services. Systems to monitor readiness are currently weak, but gradually have been improving.</td>
<td>Build capacity of existing health workers and strengthen supply chains to provide quality care. Set official targets for facility readiness to deliver quality services.</td>
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<td><strong>Invest in improving data literacy among Reproductive, Maternal, Newborn, Child Health &amp; Nutrition (RMNCH&amp;N) program and policymakers</strong></td>
<td>RMNCH&amp;N program and policymakers must be able to clearly understand data to make evidence-based programs and policies. However, statistical background among these individuals vary and there is a desire to become more comfortable with interpreting data.</td>
<td>Budget constraints Availability of individuals for training.</td>
<td>NBS can develop a brief data literacy training package that can be used in meetings at MoHCDGEC and PO RALG to orient them in basic statistics so that RMNCH&amp;N program and policymakers can be able to interpret data and identify key messages. NBS can also develop a cadre of individuals who can deliver the curriculum.</td>
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RMNCH&N: Reproductive, Maternal, Newborn, Child Health & Nutrition
### Partners Coordination

| Improve coordination and monitoring of partners working on RMNCH&N. | There are significant differences in coverage of family planning, ANC, and delivery services interventions by region. The Government of Tanzania attributes this in part to inequities in partner financing and engagement. Having a system in place to document regional partner activities and creating a cohesive strategy for coordinating partners’ work would help avoid duplicating efforts in certain regions and identify regions that need additional resources. | RMNCH&N partners often have specific objectives and interest in specific geographical regions and programs strategies. Existing efforts to coordinate partner activities, for example technical working groups, have had mixed success. | Encourage RMNCH&N partners to implement programs based on government strategic plans. PO RALG should advise partners where and what to implement based on country needs. Identify clear government reporting structures for RMNCH&N partners at all levels. Routinize technical working groups. Maintain and make accessible documentation on what RMNCH&N partners are doing in each district. |

### Financial

| Increase investments in human resources, commodities, and infrastructure for delivery of maternal health services. | Insufficient finances for activities outlined in government strategic plans—like the One Plan—hinders fully implementing activities and reaching targets. Timely and full disbursement of financial resources is needed for effective implementation. | Inconsistent and limited availability of public sector funds, which are divided among competing government priorities. Most RMNCH&N interventions depend on donor funding, which can change over time due to donor priorities. | Provide incentives to encourage public-private investment in family planning, ANC, and delivery services. |
| Ensure that the National Health Account lists contributions from all development partners. | National Health Account report does not reflect the contribution of key development partners to the health sector, making it difficult to plan based on resources available. | Resistance from some partners to disclose their budgets. Differences in financial years between development partners and the Government of Tanzania. | Require development partners to share relevant information on their support to the government. |
Acknowledgments

NEP is a rigorous new approach to compiling and analyzing health and nutrition data from diverse sources, so that the Government can get strategic, evidence-based answers to their most pressing RMNCH&N program and policy questions. The NBS in Tanzania oversees NEP implementation and receives technical support from the Institute for International Programs at Johns Hopkins University. Tanzania is building NEP from 2014 to 2017 with funding support from the Government of Canada. Please direct all inquiries on NEP to the NBS Director General (dg@nbs.go.tz).

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