D4I Tanzania
Intensive Site Monitoring
Year End Report

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Cover Photo
Credit: Photo taken by D4I field team. © 2023 D4I.
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ANC</td>
<td>antenatal care</td>
</tr>
<tr>
<td>CHMT</td>
<td>council health management team</td>
</tr>
<tr>
<td>CHW</td>
<td>community health workers</td>
</tr>
<tr>
<td>FP</td>
<td>family planning</td>
</tr>
<tr>
<td>HIV</td>
<td>human immunodeficiency virus</td>
</tr>
<tr>
<td>HVL</td>
<td>high viral load</td>
</tr>
<tr>
<td>IP</td>
<td>implementing partner</td>
</tr>
<tr>
<td>oPITC</td>
<td>optimized provider initiated testing and counseling</td>
</tr>
<tr>
<td>PEPFAR</td>
<td>United States President’s Emergency Plan for AIDS Relief</td>
</tr>
<tr>
<td>PMTCT</td>
<td>prevention of mother-to-child transmission of HIV</td>
</tr>
<tr>
<td>QI</td>
<td>quality improvement</td>
</tr>
<tr>
<td>RHMT</td>
<td>regional health management team</td>
</tr>
<tr>
<td>RMNCAH</td>
<td>reproductive maternal newborn child adolescent health</td>
</tr>
<tr>
<td>SOP</td>
<td>standard operating procedures</td>
</tr>
<tr>
<td>TBT</td>
<td>tuberculosis preventive treatment</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
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</tbody>
</table>
Introduction

The Data for Impact (D4I) project was implemented by the Carolina Population Center at the University of North Carolina at Chapel Hill, in partnership with Palladium International, LLC; ICF Macro, Inc.; John Snow, Inc.; and Tulane University. The goal of the D4I project was to (1) generate strong evidence for program and policy decision making, (2) build individual and organizational capacity, and (3) enhance the use of data for global health programs and policies.

USAID Tanzania required ongoing intensive monitoring and administrative support services to utilize high-quality data to improve programs in real-time and ensure that United States President’s Emergency Plan for AIDS Relief (PEPFAR)-funded programs and other technical area programs, including reproductive, maternal, newborn, child, and adolescent health (RMNCAH) and tuberculosis (TB), are meeting their performance targets and providing high-quality services. D4I supported USAID’s needs by conducting intensive site-level monitoring using customized tools developed by USAID. The goal of these intensive site-level monitoring visits was to determine if sites were meeting service quality standards and best practices and to make recommendations for corrective action at the site level based on the assessments. Areas assessed include human immunodeficiency virus (HIV), TB, RMNCAH, and FP.

As part of the site-level intensive monitoring visits, the D4I team conducts root cause analysis for each focus area to determine the most important factors, or “why” factors, affecting providers, service delivery, the health system, and processes. This analysis is a collaborative effort with facility staff in identifying the core issues regarding performance. D4I also provides technical assistance to the service providers in the areas where gaps are identified and supports sites in identifying capacity-building needs to improve quality service provision.

The geographic focus for these site visits were in the Southern Agricultural Growth Corridor of Tanzania, including the regions of Iringa, Mbeya, Morogoro, Tanga, Katavi, Dodoma, Singida, Dar es Salaam, Manyara, Arusha, Kilimanjaro, Njombe, Ruvuma, Lindi, Mtwara; and the Lake Western Zone, including the regions of Tabora, Geita, Simiyu, Mwanza, Mara, and Shinyanga.

Goals and Specific Objectives

Goal: To improve clinical care, patient safety, and health care operations in U.S. government-supported health sites in Tanzania.

Objectives:

- Provide a deeper understanding of compliance and inconsistencies with clinical standards.
- Improve safety in clinical practice.
- Improve response time for corrective actions to realign with clinical standards.
Methods

Intensive site monitoring is used to examine the processes of care at sites with the intent of ensuring compliance with clinical standards and attaining targets for improvement of patient safety and health care operations. The purpose of these visits was to determine if sites were meeting service quality standards through usage of standard operating procedures (SOPs) and national guidelines, documenting best practices, identifying gaps, and developing recommendations for improvement. The site monitoring process has three phases, which include processes before, during, and after site visits, as described in Appendix A.

The HIV and TB service areas assessed included index testing, optimized provider-initiated testing and counseling for HIV, retention to treatment for HIV, prevention of mother-to-child transmission, early infant HIV diagnosis, viral load coverage, and TB preventive diagnosis and treatment. Areas assessed for RMNCAH included antenatal care (ANC) services, labor and delivery services, family planning services, and adolescent-friendly sexual and reproductive health services. During these focused site monitoring visits, D4I offers technical assistance to the service provider in any areas where gaps are identified and supports sites in identifying capacity strengthening needs to improve quality service provision.

The site monitoring visits included capacity building to the service providers, experience sharing, and scaling up best practices. The site monitoring was conducted collaboratively with multiple stakeholders, including implementing partners (IPs), regional and council health management teams, President’s Office-Regional Administration and Local Government Tanzania, USAID, service providers, community volunteers, and civil society organizations working with IPs.

Site Selection and Visit Frequency

Sites were selected according to poor indicator performance. The team used monthly data for the selected indicators to assess progress on clinical cascade using the monthly portal and later Care and Treatment Center (CTC) Analytics platforms. Site monitoring visit frequency was mostly based on USAID demand and site performance.

Approaches

D4I used a collaboration and bottom-up approaches to conduct site monitoring where the following modalities were used.

1. **On-site monitoring visit:** Site monitoring team visited a facility, met with service providers from different service delivery points to assess compliance with service delivery and documentation practices, discussed the strengths and challenges, provided coaching and mentorship, and agreed on recommendations for improvement.

2. **Cluster site monitoring:** Three to eight facilities gathered at one facility, where every facility was represented by at least two service providers. The site monitoring team discussed the strengths and challenges, providers shared experiences, and agreed on recommendations for improvement.

Site Monitoring Tools

Site monitoring tools were developed jointly with D4I and USAID, including tools for TB health facilities; the HIV, RMNCAH, and TB communities; and the FP community. These tools were edited based on USAID needs as the project progressed.
Following the completion of each site visit, the results of the root cause analysis were fed into recommendations provided at the end of the visit developed by the D4I team. The D4I team uses driver diagrams guided by the theory of change model to present change ideas and recommendations for improvement based on findings from intensive site monitoring visits. These driver diagrams systematically depict the relationships between the proposed recommendations, the aims of the improvement, and the changes to be tested and implemented in a way that is easy to understand and adopt. This tool reinforces quality improvement (QI) knowledge among site monitoring stakeholders and supports QI project development, evaluation, and scale-up efforts.

These recommendations are reviewed and discussed with USAID, IPs, and government stakeholders. All stakeholders collaborate to identify course-correction action plans for immediate implementation. This approach to conducting joint site monitoring feedback meetings with USAID, IPs, and government stakeholders to discuss findings, share experiences, and develop actions plans help to strengthen the government’s ability to coordinate and provide support in quality service provision with the IPs and facility service providers.
Achievements and Outcomes

Objective 1. Provide deeper understanding of compliance and inconsistencies with clinical standards

Activity: Conduct intensive site monitoring to monitor and analyze progress

Under this objective, D4I conducted intensive site monitoring visits to the priority regions in the selected facilities and communities for the USAID-funded Afya Yangu-Northern, Afya Yangu-Southern, Afya Yangu-RMNCAH, Afya Shirikishi, Momentum, Uhuru, and Uzazi Staha projects. A total of 189 HIV/TB site visits and 84 RMNCAH site visits were conducted (Table 1).

Table 1. Distribution of site monitoring visits by region

<table>
<thead>
<tr>
<th>Region</th>
<th>HIV/TB</th>
<th>RMNCAH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilimanjaro</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Singida</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Dodoma</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>Manyara</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Ruvuma</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>Njombe</td>
<td>33</td>
<td>-</td>
</tr>
<tr>
<td>Mtwara</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Morogoro</td>
<td>36</td>
<td>-</td>
</tr>
<tr>
<td>Iringa</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td>Arusha</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Geita</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>Katavi</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Mara</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Mwanza</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Shinyanga</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>Simiyu</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Tabora</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>189</td>
<td>84</td>
</tr>
</tbody>
</table>
**Key Achievements**

- The site monitoring exercise supported the habit of data use among facility service providers, IPs, regional health management teams (RHMTs), and council health management teams (CHMTs) by strengthening documentation of service delivery data. The site monitoring team provided coaching and orientation on the proper filing of service delivery registers where documentation knowledge gaps among service providers were observed.

- **Improved adherence to the national guidelines and SOPs among service providers on the provision of quality services.** Site monitoring teams identified gaps among service providers in adherence to the guidelines on provision of quality services, i.e., the use of old versions of the guidelines/protocols/SOPs or lack of availability of guidelines. The site monitoring team informed the facilities on the availability of updated guidelines/protocols/SOPs and oriented the service providers on the updates.

- **Increased accountability to the service providers, R/CHMTs, and IPs through regular site visits, technical assistance, and follow-up of action plan developed.**

- **Served as a platform for sharing best practices and experiences from other facilities, councils, and regions.**

- **Built on the existing platform for clinical audits done by the R/CHMTs.**

- **Improved technical capacity of the service provider following technical assistance, coaching, mentorship, and orientations provided during the site monitoring visits.**

**Key Outcomes**

The ongoing support and technical assistance provided by the site visit teams helped to improve indicator performance in the visited facilities across regions. The performance trends in regions visited by D4I are shown in Figure 1, alongside when D4I team site visits were completed. Morogoro region saw the most improvement across HIV and TB indicators. After one USAID-led and two subsequent D4I-led site monitoring visits, the performance of Morogoro region improved from 14% to 80%, (Figure 2).
Figure 1. CQI indicator performance by region
Figure 2. Morogoro region CQI indicator performance
**Objective 2. Improve clinical care and patient safety**

**Activity: Strengthen the capacity of stakeholders to perform monitoring for healthcare quality assurance**

Site monitoring visits identified knowledge gaps through conducting root cause analysis in provision of quality services among service providers. Orientation, on-job training, coaching and mentorship approaches were used to build the capacity of service providers to address these gaps. The approach to capacity building was determined by the extent of the knowledge gaps identified. The site monitoring team identified technical areas where intense capacity building was needed and agreed with R/CHMT and IPs on how best to provide capacity building following the site visit to help improve and sustain the quality of clinical service and patient safety.

The areas where capacity building was conducted for HIV and TB include key indicator definitions, documentation in the service delivery registers, monitoring of quality of services through Quality Improvement teams, a group of health care providers/CHMTs responsible for analyzing site data and prioritizing the indicators for improvement, HIV screening through optimized provider initiated treatment and counseling (oPITC), index services, prevention of mother-to-child transmission of HIV (PMTCT) services, linkage case management model, high viral load (HVL) coverage and suppression, and data use. For RMNCAH capacity building, capacity building covered newborn resuscitation, management of obstetric complications, and family planning. Capacity building was also offered to community health workers (CHWs) for community family planning services on awareness and demand on FP service utilization, community refilling of short-term FP methods to comply with SOPs at the community level, and integration of maternal child health services at the community level. The capacity building was conducted at 266 facilities visited for both HIV/TB and RMNCAH.

**Key Achievements**

**RMNCAH**

- ANC orientation of new ANC Guidelines was provided to health care workers on the required services of the clients to receive during ANC contacts.
- Oriented CHWs on the integration of ANC services at the community level and linkage system aiming at improving early ANC attendance, early referral for identified pregnant complications, follow-up of risk mothers and promoting early health-seeking behavior among pregnant women.
- Family planning health care workers were oriented on medical eligibility criteria for contraceptive use as required by WHO standards. D4I staff is providing FP technical assistance at Tinde HC, Shinyanga.
- Maternal and Newborn (Labor and Delivery): managed to orient health care providers on active management of third stage of labor and provision of uterotonics, indicator definition, and how to report provision of uterotonics.
- Newborn and Child health: Capacity building was done on newborn resuscitation as health care providers had the opportunity to practice and follow the action steps required to assist the baby to breath, followed by learning how to document on the health management information system (HMIS) tools/registers for the successful action steps that were performed.
- Integrated Management of Childhood Illnesses (IMCI): Coaching was provided to health care providers on how to conduct assessment of danger signs for under-five children and fill in...
checklists focusing on four main symptoms such as cough, difficulty breathing, diarrhea, and fever.

- Oriented service providers on the provision of sexual and reproductive health (SRH) services for adolescents and youth and documentation of the services in the registers.

**HIV/TB**

- oPITC: Orientation was provided to service providers and CHWs on proper screening of clients to abide by the national screening tool, which contributed to the improvement of eligibility criteria (40 to 60%) and yield.
- Index services: Coaching was conducted to service providers on pretesting and post-testing elicitation of index contacts which, led to improvement of elicitation and testing services.
- Linkage Case Management model: Coaching, on-the-job training, and mentorship were conducted to service providers and community volunteers, which led to improved treatment adherence and retention.
- PMTCT services: Orientation and on-the-job training was provided on HIV viral load algorithm, TB preventive therapy, documentation of HIV-exposed infants (HEI) card, cohort register, and CTC2 card.
- Continuous Quality Improvement: Coaching of health care providers on QI improvement approach on way of improving performance across the indicators on HIV /TB and RMNCAH. They were coached on analyzing the data, prioritizing indicators for improvement and initiating the QI project for improvement.
- Documentation: Orientation was provided to the service providers on proper filling of HIV and TB service provision tools to improve data quality, data use, and indicators performance.

**Key Outcomes**

Capacity building has provided an opportunity for health care providers to improve their skills in the provision of quality healthcare services by abiding to the guidelines, protocols, and SOPs on RMNCAH, HIV/TB and community family planning services. This has supported the improvement of indicator performance against the set targets in uterotonics, newborn resuscitation, oPITC, HVL and tuberculosis preventive therapy (TPT) achievement and coordination and collaboration between community and facility services provision.

Capacity building efforts have also helped to strengthen the QI skills for CHMTs and service providers on conducting root cause analysis, prioritization of indicators and development of tested changes to improve quality of services through use of government QI tools and CQI web platform. In turn, this has contributed
to improved data quality and data use for poor-performing indicators. Likewise, coaching conducted on documentation and proper filling of service delivery registers has assisted in increasing accountability and decision-making among service providers.

**Objective 3. Improve response time for corrective actions to realign with clinical standards**

**Activity: Conducting regular feedback meetings with project stakeholders**

Following each site monitoring visits, D4I conducted site monitoring findings feedback meetings with the facility teams, regional and council health management teams, IP, and USAID, which detailed strengths, gaps, recommendations for improvement, and agreed on the action plans.

Throughout the project implementation period, the team managed to conduct over 100 feedback meetings with project stakeholders. These meetings improved communication among stakeholders and enhanced IPs’ commitment to corrective measures. Moreover, this helped to significantly reduce response times and ensure practices were in line with the clinical standards, ultimately improving the quality of healthcare services.

**Key Achievements**

- **Improved Information exchange**: Feedback meetings provided a platform for experience sharing and information exchange among CHMTs and RHMTs and helped to inform on making corrective measures to comply with clinical standards.

- **Improved understanding of root cause for the identified gaps**: The meetings provided an opportunity for stakeholders to have a common understanding of the underlying root causes of identified gaps, and to seek clarifications in areas that were not clear. This helped to ensure an understanding of what needs to be addressed and agreement on the action plan for corrective measures.

- **Reinforce commitment and accountability among IP, service providers and CHMTs**: Action plans were developed collaboratively with the IP to address the identified gaps and assign responsibilities for corrective measures.

**Key Outcomes**

The feedback meetings helped to coordinate stakeholder collaboration on addressing key gaps and building consensus and accountability on proposed action plans for the implementation of corrective actions. These meetings also facilitated documentation of corrective actions and improve reporting back to R/CHMTs and USAID. They also improved monitoring and tracking of
progress of corrective actions through proper documentation with clear timelines, roles, and responsibilities assigned.

**Challenges and Mitigation Strategies**

No major challenges were faced by the project through its implementation. The small challenges that did arise were efficiently addressed through prompt action and collaboration with stakeholders. These challenges included occasional data discrepancies and the need for additional training in specific areas. Strategies employed included immediate correction of data discrepancies, provision of targeted training sessions, and continuous engagement with stakeholders for feedback and improvement.

**Lessons Learned**

Several lessons were learned during the implementation of the project. Notable lessons include the importance of collaborative approaches in site monitoring, the significance of real-time feedback in driving corrective actions, and the value of capacity building for sustained improvements. The project highlighted the effectiveness of a bottom-up approach in addressing specific gaps at the facility level, fostering a sense of ownership among service providers, and promoting a culture of continuous improvement. Some key detailed lessons learned include:

- Regular on jobs training and hands-on supportive supervision by R/CHMT and IPs is very crucial not only in building healthcare workers’ capacity but also in identifying the areas where healthcare workers are not practicing in line with guidelines and correcting them.
- New changes and updates need to be effectively communicated to healthcare workers, and ensure they have “buy-in” to those changes. Also, appropriate time is needed to orient healthcare workers on those changes and the expected benefits of those changes to encourage acceptance and uptake of changes.
- Regular spot checks on source documents by the facility in-charge/ head of unit or any other person assigned is crucial before reports are submitted due to several performance gaps being attributed to poor documentation.
- Close monitoring and coordination of commodities by R/CHMT is important to ensure regular availability of commodities and supplies and hence avoid recurrent stock, a common challenge that was observed.
- Engagement of community leaders, religious leaders, traditional birth attendants, other influential people, and men as agents of change can influence social behavior change interventions to improve access family planning services, ANC early booking, and delays in accessing service.
- Use of lay health care works (e.g., expert clients, CHW etc.) is a good approach in covering the current shortage of human resources for health. However, there is a need to ensure that the work done by that cadre is closely and frequently monitored by trained healthcare workers at the facility to ensure that they abide to the set standards of service delivery.
- Providing monetary incentive to service providers and community volunteers is a good approach in improving work moral and performance to reach the target. However, the provision of those incentives needs to be well coordinated and monitored to avoid dishonesty which could result in falsification of the services provided.
Recommendations

While site monitoring visits and provided technical assistance have contributed to key improvements, performance challenges still remain in key HIV and RMNCAH focus areas, such as under target service delivery, inadequate follow-up and coordination among healthcare workers and community volunteers, limited knowledge on provision of service as per the guidelines for both service providers and community volunteer, and lack of/ limited documentation, data analysis, and data use. To address these key gaps, the D4I team recommends the following:

- Strengthen the coordination of community volunteers for sensitization and linkage of various services
- Improve collaborations between IP workers at the facility and community level
- Enhance accountability mechanisms by facilitating the use of data and demand creation through supporting facility staff in reviewing the data, and developing data guidance tools for site-level data use and analytics to empower facility staff to understand and utilize data to inform decisions
- Strengthen the capacity of the site Quality Improvement and Work Improvement teams
- Consider replacing SIMS with the intensive site monitoring approach to continuously monitor the performance and ensure sites uphold established service delivery standards
- Inclusion of infection prevention control, postnatal and nutrition services in the RMNCAH since most of maternal death occurs after delivery
- Extending site monitoring to cover community health service for both HIV and RMNCAH supported services

Conclusion

In conclusion, the D4I project made significant strides in achieving its objectives, positively impacting healthcare quality in USG-supported health sites in Tanzania. The lessons learned and recommendations provide valuable insights for the continuous improvement of similar initiatives in the future. The collaborative efforts of all stakeholders were instrumental in ensuring the success of the project.

For future implementation, it is recommended to continue the collaborative approach involving multiple stakeholders and to emphasize capacity building in identified areas. The success of the project in improving clinical care, patient safety, and healthcare operations underscores the importance of sustained efforts in monitoring and quality assurance. Furthermore, integrating technology for streamlined data collection and analysis could enhance the efficiency of site monitoring and facilitate real-time decision-making.
Appendix

A. Site Monitoring Process

Intensive Site Monitoring Process

B. Site Monitoring Recommendation Forms:

1. RMNCH Recommendations Forms:
   RMNCH Final Site Monitoring Reports - Google Drive

2. TB/HIV Recommendations Forms
   HIV_TB_D4I Site Monitoring Final Reports - Google Drive

C. Site Monitoring Tools

Site Monitoring Tools - Google Drive