



Implementing QuanTB to Improve Forecasting, Supply Planning, and Early Warning Systems for TB Medicines: Tanzania Report

August 2016



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August 2016



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About SIAPS

The goal of the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program is to ensure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes. Toward this end, the SIAPS result areas include improving governance, building capacity for pharmaceutical management and services, addressing information needed for decision-making in the pharmaceutical sector, strengthening financing strategies and mechanisms to improve access to medicines, and increasing quality pharmaceutical services.

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ACRONYMS

EWS	early warning system
GDF	Global Drug Facility
LMIS	Logistics Management Information System
LMU	Logistics Management Unit
MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MSD	Medical Stores Department
NTP	National Tuberculosis and Leprosy Control Program
NTP	National TB Control Program
PPM	private-public mix
PSM	procurement and supply management
SIAPS	Systems for Improved Access to Pharmaceuticals and Services
TB	tuberculosis
USAID	US Agency for International Development

ACKNOWLEDGMENTS

The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program would like to express appreciation to the National TB and Leprosy Control Program (NTLP) for its cooperation and commitment in strengthening the forecasting, supply planning, and early warning system (EWS) in Tanzania. We acknowledge the NTLP and tuberculosis (TB) stakeholders and partners, including the Global Fund, for their contributions and support in the implementation of the intervention. In particular, we would like to acknowledge Jumanne Mkumbo (Senior Pharmacist, NTLP) and Browan Bariki (Senior Public Health Logistics Advisor) for providing their perspective as beneficiaries of QuanTB and SIAPS technical assistance.

INTRODUCTION

This report summarizes the information gathered as part of a review of the implementation of QuanTB and related technical assistance to strengthen TB pharmaceutical management in Tanzania.

Background

TB is a preventable and curable infectious disease that ranks alongside HIV/AIDS as a leading cause of death worldwide. If untreated, the disease can be debilitating and can kill approximately 50% of those infected. Proper forecasting, supply planning, and stock monitoring are key to ensuring an uninterrupted supply of TB commodities to meet the evolving needs of TB programs as treatment is scaled up and treatment regimens change. The US Agency for International Development (USAID)-funded SIAPS Program has provided technical assistance to national TB control programs (NTPs) in 12 USAID-focus countries since 2013. SIAPS regional or in-country technical advisors have collaborated with NTPs to address challenges that hamper uninterrupted access to TB medicines, such as the lack of reliable information for effective decision making in TB supply chain management, an EWS to prevent stock-outs or expiries, and supply chain system monitoring mechanisms, as well as limited institutional and human resource capacity in these areas. The support included the use of QuanTB—an electronic forecasting tool and EWS that transforms complicated calculations into a user-friendly dashboard that displays key quantification and supply planning information and alerts on risks of stock-outs or expiries. Implementation of the tool was complemented by other SIAPS TB technical assistance activities, such as quantification capacity-building training and participation in country monitoring missions.

Tanzania is a low-income country in East Africa with a 2015 population of approximately 53.5 million and a life expectancy at birth of 63.5 years for males and 66.4 years for females¹. In 2014, the prevalence of TB was 528 per 100,000 population, and 63,151 TB cases were reported². The health system is organized into central, provincial, and district levels. In 2014, the public health expenditure comprised approximately 46% of the total health expenditure³. The health system is funded primarily through the government's public health budget and through development assistance, including the Global Fund.

Key Gaps that Necessitated QuanTB Implementation

- *Inadequate forecasting and supply planning capacity:* Inadequate technical skills and tools to forecast and plan for the supply of required TB medicines resulted in under or overestimation of TB medicines.

¹ World Development Indicators. Available at: <http://data.worldbank.org/indicator>.

² WHO Global TB Report Tanzania Country Profile. Available at: https://extranet.who.int/sree/Reports?op=Replet&name=%2FWHO_HQ_Reports%2FG2%2FPROD%2FEXT%2FTBCountryProfile&ISO2=TZ&LAN=EN&outtype=html.

³ World Development Indicators. Available at: <http://data.worldbank.org/indicator>.

- *Lack of a stock status monitoring system:* The lack of a monitoring system for stock status and pipeline management of TB medicines was a challenge.
- *Lack of a proper EWS:* There was no proper EWS to prevent stock-outs, overstocks, or expiries of TB medicines.
- There was no structured system for referring presumptive TB cases from private drug outlets (which are used by almost 40% of people as the first point of contact when seeking health care services in Tanzania) to TB diagnostic centers.

The implementation of the QuanTB EWS helped to address these gaps.

Goal and Objectives

SIAPS conducted a review of its TB technical assistance and the QuanTB implementation in Tanzania. Specific objectives were to determine:

- Key achievements or results of SIAPS QuanTB technical assistance in Tanzania
- Experiences and perspectives of the beneficiaries from the NTLP
- Challenges and lessons learned

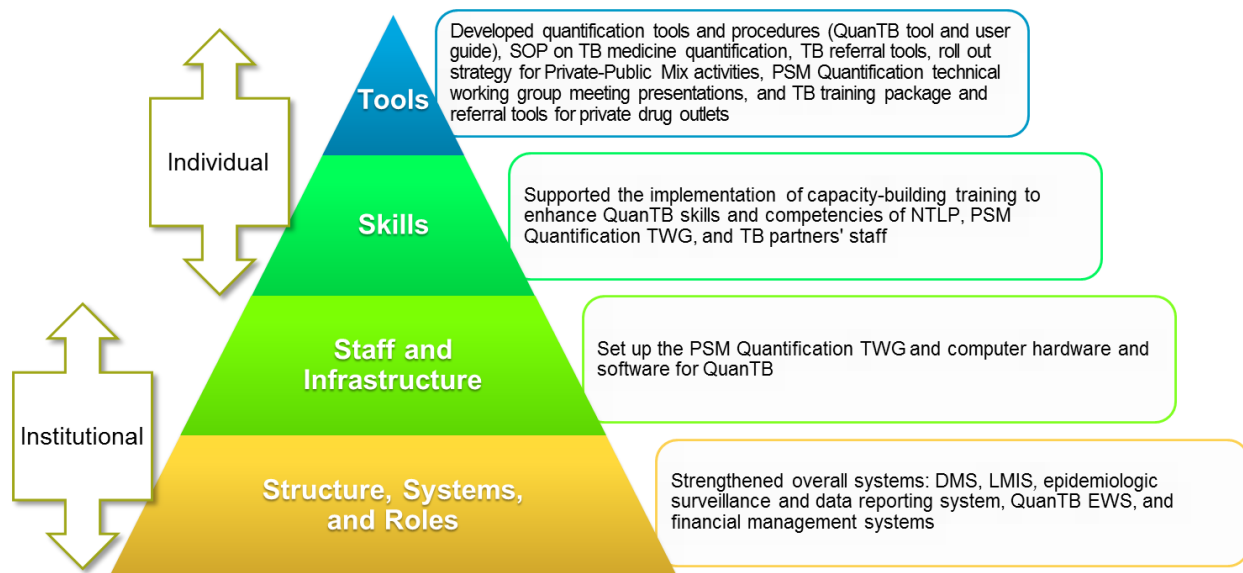
This report summarizes key aspects and results of the review.

METHODOLOGY

Data were collected through a review of relevant background documents and reports; interviews with SIAPS TB staff; and remote data collection through telecommunication with SIAPS TB field advisors (using a questionnaire for SIAPS field advisors) and with local beneficiaries of the technical assistance (using one questionnaire for active users of QuanTB and another for senior NTLP officials/decision makers). Data were analyzed by content (mostly qualitatively) and by prevalent themes around key achievements or success areas. In addition, online experience and satisfaction surveys were completed by country beneficiaries and global partners. Results of the online surveys have been reported separately⁴.

Strategic Approach

SIAPS developed QuanTB to promote a systems strengthening approach to TB medicine management⁵. As shown in figure 1, implementation of the tool is expected to strengthen the country quantification system through systemic institutional and individual capacity building. Optimum capacity in all levels of the hierarchy is key to ensuring timely reporting of valid data, timely updating of QuanTB files, generation of accurate forecasts, supply planning information, and EWS alerts. The information informs proper decision making and the development and implementation of remedial actions through a technical working group or partner coordination forum.



⁴ Goredema W, Sawyer K, Mwatawala S, Owuna C. 2017. *Implementing an Early Warning System for TB Medicines: Global Report*. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

⁵ SIAPS Program. 2013. *QuanTB User's Guide*. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

Figure 1. Systemic institutional and HR capacity building in quantification⁶

Key interventions that were implemented in Tanzania included:

- *Capacity building:* Key NTLP, Medical Stores Department (MSD), Ministry of Health/Pharmaceutical Services Unit, and partner staff have been trained on using QuanTB.
- *Ongoing implementation of QuanTB in quantification, stock status monitoring, and as an EWS:* The country is using QuanTB to forecast and plan supplies of TB medicines and to track stock status, generate EWS alerts, and take appropriate actions to prevent or minimize risks such as overstock and expiry of medicines.
- *Provision of technical assistance to the Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC) to strengthen the TB supply chain system:* SIAPS helped develop the National TB Strategic Plan, TB referral tools, the roll out strategy for public-private mix (PPM) activities, a concept note, and a funding proposal for the Global Fund.
- *Provision of technical assistance through Global Drug Facility (GDF) monitoring missions and program review:* This has strengthened quantification and the TB supply chain system.

⁶ *Adapted from:* Potter C, Brough R. Systemic capacity Building: A Hierarchy of needs. Health Policy and Planning 2004; 19(5): 336–345.

RESULTS

Process

SIAPS has provided TB technical assistance in Tanzania since January 2013. The country has been using QuanTB since February 2014. The MOHCDGEC/NTLP implemented the tool with support from SIAPS and in collaboration with key local TB partners and stakeholders, including the MOHCDGEC/Pharmaceutical Services Unit, MSD, and the Tanzania Food and Drug Administration. The country is using QuanTB for forecasting, procurement, supply planning, cost analysis, introduction of new medicines or regimens, and as an EWS. For patient information, Tanzania recently moved to a web-based DHIS system, and districts upload reports directly into the system. For stock status, the MSD shares raw data on stock status of TB and leprosy medicines using an Excel spreadsheet. The NTLP then extracts and uses relevant raw data from the spreadsheet to update QuanTB. Although the NTLPs were originally supposed to conduct quarterly physical counts to get up-to-date stock on hand data instead of relying on computer records, this was challenging for countries like Tanzania, where TB medicines are stored in zonal stores throughout the country. However, the Logistics Management Unit (LMU) now does physical counts down to zonal MSD stores. The LMU initially focused only on antiretrovirals, but TB medicines are now included. The remaining challenge is to get data from the district and health facility levels using the newly redesigned system.

Beneficiary Experiences and Perspectives

Respondents rated key attributes of QuanTB favorably. They consider the tool to be simple and user friendly compared to other tools (e.g., the World Health Organization tool they previously used for second-line medicines that involved quantifying medicines one by one, whereas with QuanTB, the user can enter cases and stock on hand and on order and immediately get the quantities needed for all medicines). They said QuanTB had evolved and improved over time, becoming simpler and more user friendly. However, they noted that setting regimens still takes time and requires knowledge of the regimens. Feedback the NTLP has received from key stakeholders, including the MOHCDGEC Pharmacy Division and other MOHCDGEC programs, such as Malaria Control and HIV and AIDS Control, has shown the tool to be fairly accurate, reliable, and acceptable as long as it is updated with correct and valid stock and case data. Although the evaluation team did not get an opportunity to interview the SCMS quantification team, the quantification team's main concern was that the tool did not take into consideration minimum and maximum stock parameters. However, that concern has been addressed in QuanTB version 4. QuanTB produces reports and dashboards that have alerted decision makers to potential stock-outs and overstocks, and a number of corrective actions have been taken based on QuanTB outputs. One official remarked that in the past, the NTLP only analyzed TB stock by expiry once a year during GDF missions, but the frequency has increased and potential problems can now be identified sooner. Respondents also agreed that the tool is timely. One added that "before QuanTB, supply planning was a challenge because it involved time-consuming guess work on how many supplies should be received and when. Stock analysis was done manually, which took more time than the automated system does. Generally, the process is faster and more reliable". The NTLP can

now access all information using one tool. Respondents indicated that at the beginning of implementation of QuanTB they were not quite sure if the QuanTB outputs were accurate. However, with orientation and capacity building over time, they have become confident that the tool produces accurate, valid, and reliable forecasts, supply planning data, and EWS alerts. QuanTB data have been used in funding applications and for planning shipments and also for making decisions related to stock levels. Key NTLP decision makers agreed that QuanTB is very useful in informing decisions related to procurement, supply planning, and general supply chain management of TB commodities. The NTLP feels it can sustain the use of QuanTB. Key NTLP pharmacists have been trained, staff have laptops, and the tool does not require an internet connection, although internet connectivity and electricity are readily available at NTLP offices. However, funds may be needed for ongoing training as new staff begin using the tool.

Accomplishments

Key accomplishments and results of the QuanTB implementation in Tanzania include:

- *Adopted and institutionalized QuanTB:* With ongoing SIAPS technical assistance, the NTLP has adopted and institutionalized QuanTB as the national quantification tool and EWS for TB medicines.
- *Enhanced local quantification capacity and skills:* SIAPS provided technical assistance to develop training materials and trained and capacitated 30 people to quantify TB medicines using QuanTB, including NTLP staff; TB supply chain subcommittee members; and other national-level stakeholders from key institutions (MSD, Tanzania Food and Drug Administration, MOHCDGEC/Pharmacy Unit, LMU staff and partners (SCMS) and other stakeholders). Since 2014, SIAPS has periodically supported the NTLP in convening TB supply chain subcommittee meetings. SIAPS and senior NTLP staff supervise and mentor TB supply chain subcommittee members in quantification using QuanTB. SIAPS supported trainings and biannual quantification review meetings involving the TB subcommittee. It also assists with conducting actual forecasting and supply planning of TB and related medicines. QuanTB forecasts and supply plans are reviewed quarterly to adjust for updated enrolled patient numbers, stock on hand, and expiry dates. The subcommittee is progressively able to update QuanTB data and generate forecasts with less and less SIAPS support. SIAPS also provided technical assistance in developing standard operating procedures on TB medicine quantification to leverage funds from the Global Fund.
- As part of ongoing efforts to enhance local capacity to manage TB medicines, SIAPS organized a regional TB meeting in Zanzibar, Tanzania, in December 2012 and the Global TB Supply Chain Meeting in Bangkok, Thailand, in March 2015, and supported MOHCDGEC staff to participate in these meetings. This allowed NTLP staff to share experiences related to the TB supply chain, learn from others, discuss and prioritize their key TB supply chain challenges, and agree on potential solutions. One NTLP official noted: “Participation in the international meetings or regional training organized by SIAPS has created a lot of exposure to me which I consider as part of SIAPS capacity building “

- *Improved forecasting and supply planning:* As mentioned previously, the QuanTB results are more timely, accurate, and reliable than those produced before QuanTB. Quantities for procurement are easily determined and orders are placed to ensure an uninterrupted supply of TB medicines. The tool also helps to review trends in actual enrollment of TB cases and to take necessary steps to minimize the risk of stock-outs or overstock of certain medicines when the number of TB cases increases or decreases. The NTLP has used QuanTB information to make decisions to improve forecasting, procurement, supply planning, and in-country logistics in Tanzania by:
 - Analysis of medicines consumption: An analysis of medicines distributed in 2014/2015 based on QuanTB reports identified rapid depletion of some TB medicines, such as RHZE, and slow uptake of second-line and pediatric TB medicines. The regional TB and leprosy coordinators were tasked to continue to sensitize health workers to manage pediatric cases using pediatric formulations to ensure that the correct dosage of adult first-line medicine formulations were provided to adult cases based on weight band and to avoid prolongation of the intensive phase. The information was also used to adjust procurement quantities.
 - The NTLP has used QuanTB information in supply planning, thereby improving procurement. The detailed medicines report has been very useful in that regard.
 - Based on QuanTB data, the country is able to determine estimated monthly consumption, which guides distribution of TB medicines.
- *Provided technical assistance in establishing and implementing the EWS to prevent stock-outs and wastage of TB medicines:* SIAPS provided technical leadership in the establishment of the EWS system for TB medicines and ongoing technical assistance in quarterly monitoring of TB stock status using QuanTB. The support includes reviewing and analyzing QuanTB outputs and using QuanTB dashboard alerts to propose corrective actions. The implementation of QuanTB and TB stock status monitoring activities have informed several TB supply chain decisions on corrective actions to mitigate stock-outs by alerting the GDF when stock reaches a critical level. Actions to prevent wastage and expiration were also initiated. Specifically, QuanTB helped to identify a potential stock-out of RHZE. The country was able to borrow 1,000 packs of RHZE from Malawi and 2,000 packs of RHZE from Zimbabwe at different times (both consignments valued at USD 115,000) while waiting to receive a consignment from the GDF. This prevented a stock-out while waiting for Global Fund money to be disbursed and for the GDF delivery. A shipment of overstocked second-line TB medicines from the GDF worth USD 326,934 was postponed in response to slow enrollment of multidrug-resistant TB patients, and future shipments were staggered. A request was sent to the GDF to postpone delivery of some pediatric TB medicines worth USD 41,318 due to the slow uptake of pediatric medicines; however, the postponement was not possible. A request to accelerate delivery of adult first-line medicines expected in April 2016 was sent to the GDF in December 2015, and the medicines were received in February 2016. The NTLP asked the GDF to accelerate delivery of RHZE from June 2015 to April 2015, and the medicines were expected to be air lifted to arrive that month. PAS was borrowed from Uganda for

treatment of extensively drug-resistant TB. Regular monitoring of the availability of TB medicines informs rational supply and distribution of those medicines within and outside of Tanzania. In some cases, the NTLP has redistributed medicines while waiting for pending consignments to arrive. At the time of the evaluation in April 2016, discussions were under way to transfer excess pediatric medicines to other countries. QuanTB data provided the GDF with good evidence to substantiate country fears of the adverse impact of stock-outs or expiry of medicines if shipments were not fast-tracked or delayed. QuanTB has also allowed the NTLP to easily monitor medicine availability in complex multidrug TB treatment regimens. As a result of these timely decisions and actions to redistribute stock or expedite or delay GDF shipments based on QuanTB dashboard alerts, there have been no stock-outs of first- or second-line medicines since May 2015.

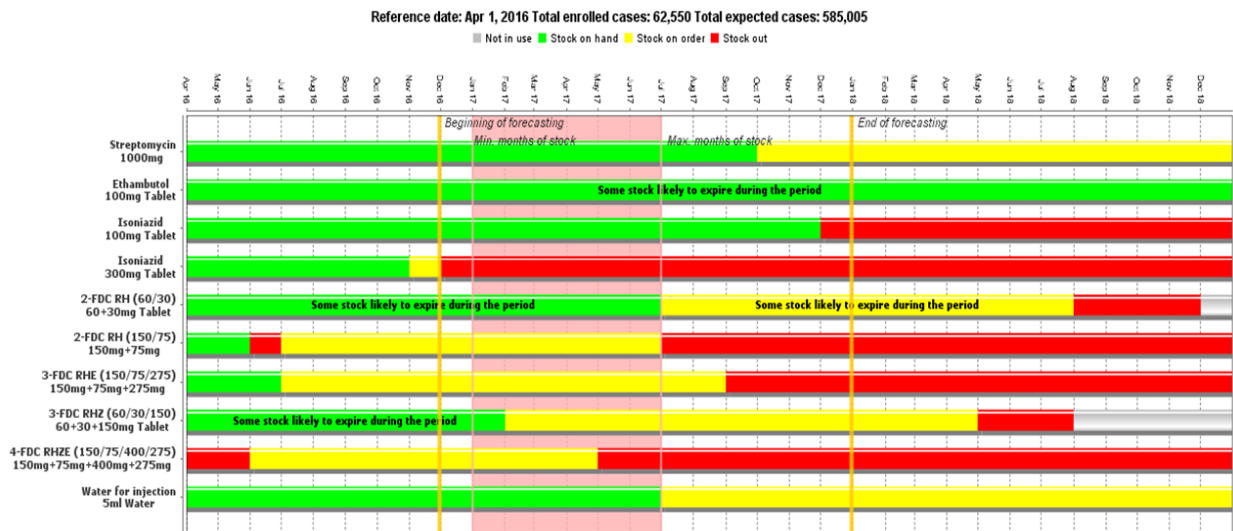


Figure 2. Sample QuanTB dashboard

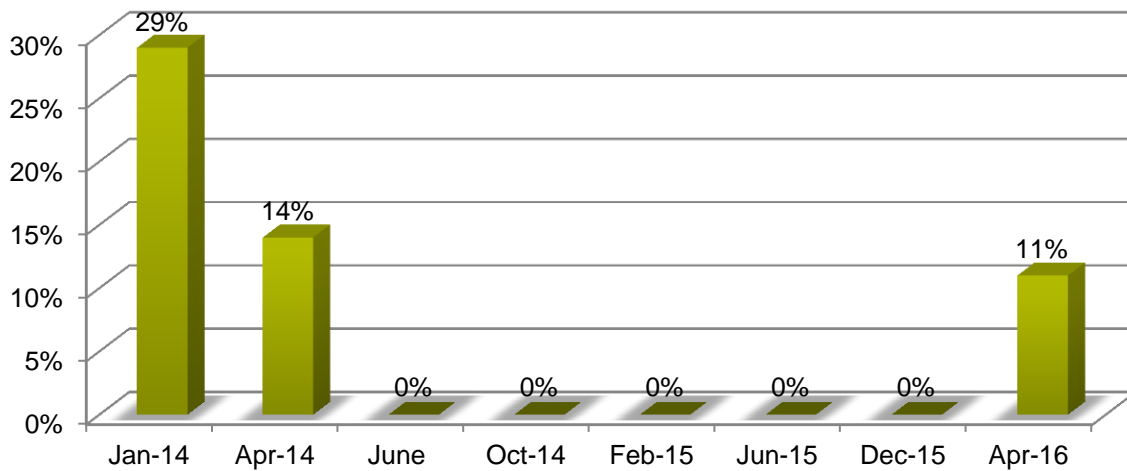


Figure 3. Percentage of stock-outs of first-line TB medicines⁷

⁷ SIAPS. May. 2016. Monitoring TB Medicine Availability: Quarterly Report-Tanzania

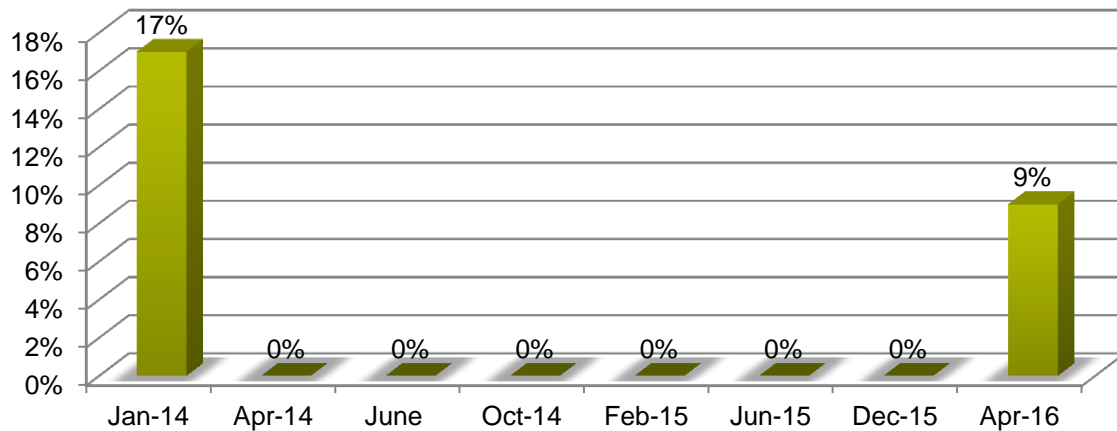


Figure 4. Percentage of stock-outs of second-line TB medicines⁸

Overall, SIAPS TB technical assistance and the QuanTB implementation have contributed to the reduction of stock-outs of first- and second-line TB medicines from 29% to 11% and 17% to 9%, respectively between June 2014 and April 2016.

Medicines with fewer than three months of stock remaining were always delivered on time to avoid stock-outs^{9,10}.

- Identified and addressed TB procurement and supply management (PSM) challenges through GDF monitoring missions and external TB program review:* SIAPS supported GDF missions in Tanzania in 2014 and 2015 and was part of an external review of the national TB program in 2014 that focused on PSM issues. The missions identified several TB supply chain challenges and recommended interventions to address them. SIAPS provided technical assistance and collaborated with the NTLP and other partners to address the identified challenges.
- Provided technical assistance to the MOHCDGEC to strengthen TB control:* SIAPS supported the MOHCDGEC in developing the PSM component of the National Tuberculosis Strategic Plan for 2015–2019, which focuses on improving pharmaceutical supply management for TB. SIAPS also provided technical assistance in writing the PSM component of the concept note and an application for a Global Fund grant. SIAPS also supported the NTLP in a pilot intervention on strengthening the connection between private drug outlets and TB diagnostic centers to increase the identification of TB cases and ensure early TB diagnosis and treatment. Activities implemented under this intervention included:

⁸ *ibid*

⁹ SIAPS. Sept. 2015. SIAPS TB Quarterly Report: QuanTB and Early Warning System Roll-out and Implementation. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

¹⁰ SIAPS. May 2016. SIAPS TB Quarterly Report: QuanTB and Early Warning System Roll-out and Implementation. Submitted to the US Agency for International Development by the Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program. Arlington, VA: Management Sciences for Health.

- Assessing knowledge and practice related to TB among drug dispensers in Tanzania, which involved 250 private drug outlets
- Providing technical assistance in the design of referral tools and the development of a training package for private drug dispensers
- Training of trainers and drug dispensers
- Coordinating sensitization meetings with 466 health workers from 98 TB diagnostic centers on the new PPM intervention
- Establishing a team of 32 trainers to support training of dispensers on TB case finding as part of the PPM approach and enhancing the capacity of 737 dispensers to support the identification of TB cases
- Conducting a final evaluation to assess the impact of involving private drug outlets in improving TB case detection (587 TB presumptive cases were identified by private drug outlets through the PPM intervention supported by SIAPS and were referred for TB diagnosis; 43% of these were confirmed as TB)
- Disseminating results and making policy recommendations
- Supporting the development of a roll out strategy for PPM activities through the engagement of private drug outlets in TB case finding; as a result, the Global Fund granted funds to roll out the intervention in 10 regions
- *Strengthened systems:* The EWS strengthened information for decision making by ensuring linkages between patient- and stock-related data and the early detection of potential over- and understocks. Improved quantification and supply planning has resulted in improved procurement. Stock status monitoring has helped to inform the redistribution of commodities in the event of under- or overstocks. Staff capacity was enhanced through training and supportive supervision, and cost analysis, budgeting, and overall financial management systems were enhanced through better estimation of national needs and less wastage.
- *Improved collaboration:* Good coordination and collaboration were established among the NTLP, SIAPS, and other local and global TB stakeholders such as the GDF and the Global Fund. SIAPS support has also helped to establish links among NTP/pharmacy staff of different countries, which has facilitated the exchange of stock among countries.

Challenges and Lessons Learned

Challenges

- *Data quality and reporting issues:* Delays in getting actual TB patient data affected the implementation of the EWS to prevent stock-outs or wastage. To address this, the country has now integrated TB patient data into the DHIS. However, transitioning to the new reporting system affected the reporting rate and timeliness of reporting in 2014 and 2015 as district teams were learning the DHIS. The overestimation of TB patient targets led to overstocks, and there were limited data available on isoniazid preventive therapy. Collecting data on stock on hand from health facilities remains a challenge but is being improved through the involvement of LMU staff in quarterly collection and reporting of TB stock by expiry. The process has helped to identify significant supplies of pediatric medicines that were at risk of expiry. The logistics management information system (LMIS) for TB has been redesigned, and all facilities are now able to report their stock on hand. TB medicines have been integrated into the eLMIS. Trainings and supportive supervision are being conducted to ensure timely data reporting. However, the supportive supervision is still inadequate, particularly after the end of the JSI/SCMS Project.
- *Programmatic:* Some pediatric cases were given adult formulations, leading to overconsumption and depletion of adult formulations, and there was noncompliance to referrals from private drug outlets among presumptive TB cases during the implementation of PPM. The suboptimal involvement of community health workers hindered follow up of presumptive TB cases.
- *Funding:* The delayed disbursement of funds for procuring TB medicines led to late procurements, and funds were lacking to support the roll out of the PPM intervention. A number of requests have been received to support the NTLP to implement PPM activities under Global Fund support, but this has not been possible. Funds in support of other TB supply chain activities were also limited. The ministry needed financial and technical support to conduct ongoing supportive supervision after training health workers on the TB logistic system, which was initially supported by JSI/SCMS Project.
- *HR/capacity constraints:* Training on TB was limited for health workers in health facilities, and presumptive TB cases referred from private drug outlets were not sent for TB sputum investigation. Additional training is needed. Some activities that needed SIAPS technical assistance were delayed due to activities planned in other countries.

Lessons Learned

- Regular monitoring of TB stock levels against patient enrollment is key to ensuring the early identification of potential wastage or stock-outs of TB medicines. However, more effort is needed to address other factors contributing to overstocks or stock-outs.

- Capacity-building refresher trainings on QuanTB and on improving data quality and reporting issues are needed to address HR issues and the adverse impact of ongoing attrition of staff.
- Strong partnerships with in country partners are key, particularly in countries with no in-country SIAPS technical advisor or office to leverage resources and coordinate support to the MOHCDGEC.
- For better coordination, collaboration, and results, TB partners supporting the implementation of QuanTB or related activities should consider embedding in-country field advisors within the NTLTP.

Gaps for Future Consideration

- Continue to build in-country capacity and experience to implement the tool. Implement ongoing staff capacity-building refresher trainings. Allocate adequate time during a quantification workshop for a brief orientation for all participants to ensure that those using the tool for the first time have a good understanding of how it works.
- For better coordination, collaboration, and results, TB partners supporting the implementation of QuanTB or related activities should consider embedding in-country field advisors within the NTP, and available at all times to support the NTP.
- Build in-country IT capacity to address QuanTB software problems as they arise.
- Improve data quality and reporting from the periphery and include lower-level data when updating QuanTB.
- Consider expanding support to cover other levels of the TB supply chain and go beyond quantification- and procurement-related technical assistance. Collaborate with other partners on training health workers managing TB medicines at the facility level to improve stock-related data reporting.
- Consider modifying QuanTB to automate supply planning instead of doing it manually. QuanTB currently uses only morbidity data, which could be linked with actual consumption data for a comparative analysis.
- Consider using the automated reporting formats recommended by the Global Fund.
- Expand support beyond technical assistance at the central level and develop a comprehensive work plan with the NTLTP.

CONCLUSION

With USAID/SIAPS technical assistance, the Tanzania MOHCDGEC's NTLP is successfully implementing the QuanTB EWS using a locally led, effective, and sustainable approach to improve forecasting, monitor stock, track expiries and stock-outs, make informed decisions, and take appropriate actions to close underlying PSM gaps. The trend of stock-out rates is evidence that implementation of the tool is contributing to achieving the goal of ensuring an uninterrupted supply of TB medicines. However, continued investment is needed to address the remaining gaps. The NTLP should continue to engage and collaborate with local stakeholders and partners to ensure sustainable use of the tool. A budget for ongoing human resource capacity building in implementing QuanTB should be included in DOH annual plans and in applications to the Global Fund.