

Regional Approach to Technical Assistance

Despite increased funding and the establishment of global initiatives such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, many countries continue to face shortages of quality-assured first- and second-line anti-TB medicines.



Approach

At the regional level, SIAPS aims to increase the pool of international consultants trained to conduct Global Drug Facility (GDF) monitoring missions, WHO NTP reviews, and short-term technical assistance by conducting regional trainings for GDF and Stop TB Partnership consultants, NTP managers, and international partners. SIAPS provides continuous technical assistance to 13 countries in Africa, Asia, and Eastern Europe to ensure constant availability of all TB medicines and to minimize wastage of resources as a result of expiries. Interventions implemented through technical assistance utilize a health system strengthening approach. The multi-stakeholder activities strengthens governance, human resources, information for decision making, TB service delivery, and supply chain management.



Results

SIAPS installed regional TB advisors. The advisors help select countries strengthen their capacity by providing support to NTPs and local partners to ensure the availability of quality pharmaceutical products and support the implementation of effective pharmaceutical services for achieving global TB program targets.

As part of SIAPS efforts to strengthen countries' quantification and forecasting capacity and establish an early warning system to prevent stock-outs and minimize TB medicine wastage; the capacity and skills of over 200 people have been built, including NTPs and MoH (Bangladesh, DRC, Ethiopia, Kenya, Myanmar, Nigeria, South Sudan, Tanzania, Uganda, Zambia, and Zimbabwe), the Global Fund and GDF, WHO, and local and international partner organizations.

Within two years of implementing QuanTB, 11 countries reported to SIAPS on their use of the desktop tool for medicines tracking and the decisions on the basis of QuanTB data. As a result of this technical assistance, countries reporting stock-out of at least one first-line drug were reduced from 80% at baseline in April 2014 (n = 5) to 18% in September 2015 (n = 11). Countries reporting a stock-out of at least one second-line drug were reduced from 67% at baseline in April 2014 (n = 6) to 36% in September 2015 (n = 11).

ABOUT SIAPS | The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) program works to assure access to quality pharmaceutical products and effective pharmaceutical services through systems-strengthening approaches to achieve positive and lasting health outcomes. SIAPS is funded by the US Agency for International Development (USAID) and is implemented by Management Sciences for Health. For more information, visit www.SIAPSprogram.org.



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PHARMACEUTICAL MANAGEMENT FOR TUBERCULOSIS



USAID
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SIAPS
Systems for Improved Access
to Pharmaceuticals and Services

The Systems for Improved Access to Pharmaceuticals and Services (SIAPS) Program, funded by the US Agency for International Development (USAID), provides technical leadership in pharmaceutical management for global tuberculosis (TB) initiatives, donors, and national TB programs. SIAPS targets result areas that are vital for stronger health systems, such as improved governance, increased capacity for pharmaceutical management, and information for decision making. By implementing activities addressing rational drug use, supply planning, and public-private partnerships, SIAPS helps meet the challenges of TB medicines management.

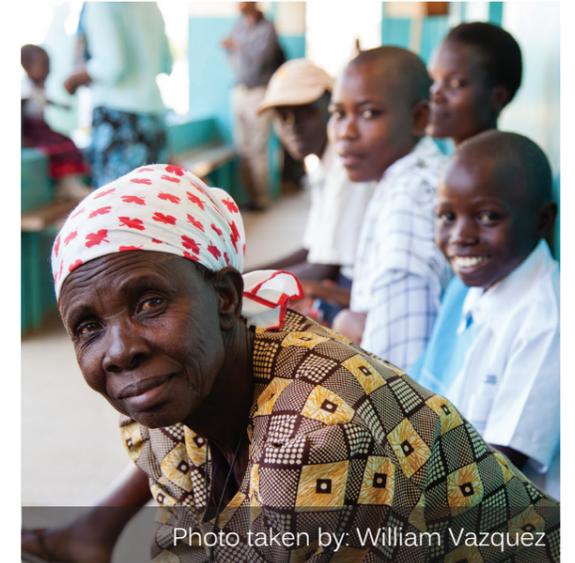


Photo taken by: William Vazquez

Drug Use Reviews

Treatment for multidrug-resistant (MDR) TB is expensive and involves regimens with toxic medicines that often produce severe, and sometimes permanent, side effects. National TB programs (NTPs) in resource-limited settings do not always systematically monitor the use of MDR-TB medicines—this may result in patients not complying with their medicine regimen, worsening disease, or the spread of MDR-TB. Drug use reviews (DURs) are used to identify common problems in medicine management, such as erroneous dosing, avoidable side effects, and incorrect medicine selection. When applied to anti-TB medicines, DURs can help prevent the development of further drug resistance, optimize patient outcomes, and ensure patient safety.

Approach

SIAPS developed the *Guidelines for Implementing Anti-Tuberculosis Drug Use Review Programs*, a complete package of materials with step-by-step instructions on setting up a DUR. By compiling treatment information from textbooks, medicine package inserts, and WHO guidelines, SIAPS created evidence-based data collection forms and indicators for monitoring anti-TB medicine use and managing adverse drug reactions; the guidelines also include suggestions for improvement strategies.

Accomplishments

The guidelines have been field tested at six high-burden MDR-TB facilities in Kenya resulting in immediate revisions to their *Guidelines for the Management of Drug Resistant Tuberculosis in Kenya*. In addition, DUR programs have been implemented in Ukraine and Uzbekistan and will start in Bangladesh in early 2016. Data collected during the reviews will be analyzed to identify, resolve, and prevent any problems related to the use of the drugs or regimens reviewed. SIAPS provides training on use of the guidelines and support during the initial phases of countrywide DUR program implementation.

Strengthening the capacity of providers to ensure MDR-TB patients are receiving appropriate treatment and are managed according to international standards by implementing a DUR program could save many lives and reduce the occurrence of new MDR-TB cases.

QuanTB

Ensuring that patients have continuous access to TB treatment requires complex projections and calculations by TB program staff. Making these predictions is becoming more challenging as new diagnostic devices rapidly increase the number of individuals diagnosed and the introduction of new medicines and guidelines impact the quantity of medicines needed. Countries using e-TB Manager as a management information system benefit from its forecasting tool that incorporates the number of cases enrolled on treatment, actual regimens, expected cases, and stock by medicine and expiry dates. These quantification capacities were previously available only through use of the complete, web-based e-TB Manager platform.



Approach

To make these benefits more widely available, SIAPS developed QuanTB—a downloadable desktop tool. QuanTB is an electronic forecasting, quantification, and early warning tool designed to improve procurement processes, ordering, and planning for TB treatment. QuanTB transforms complicated calculations into a user-friendly dashboard displaying key information for managing medicines. When used on a monthly or quarterly basis, QuanTB serves as an early warning mechanism, providing information on actual versus planned consumption, medicine needs, impending expiries, and stock-outs of medicines.



Results

SIAPS has trained NTP drug management staff from 16 countries (Bangladesh, DRC, Ethiopia, Kenya, Malawi, Mozambique, Myanmar, Nigeria, Philippines, South Sudan, Tajikistan, Tanzania, Uganda, Uzbekistan, Zambia, and Zimbabwe), other organizations, and independent consultants to use QuanTB for quantification and tracking of TB medicines. Of these countries, 14 have adopted QuanTB as the national tool for quantification and monitoring. In addition, QuanTB has been downloaded over 1,000 times. Within two years of implementing QuanTB, the percentage of countries reporting stock-outs of first- and second-line medicines was reduced by 60% and 30%, respectively. Based on decisions made using QuanTB country data, overstock was decreased resulting in a savings of almost 1 million US dollars by postponing and reallocating second-line medicine shipments.

By supplying updates on areas such as available months of stock, quantities likely to expire before use, and last day to place orders to avoid a stock-out or overstock, QuanTB can help improve order planning and supply management.

e-TB Manager

Managing information for adequate TB program support requires the integration of data from various health system elements and levels. The high prevalence of multidrug-resistant (MDR) and extensively drug-resistant (XDR)-TB is a significant health challenge in many countries; it increases the need for tools that promote effective case management and ensure an uninterrupted supply of TB medicines.



Approach

e-TB Manager was designed by SIAPS and its predecessor programs as a health systems strengthening platform for managing information needed by national TB programs (NTPs). e-TB Manager integrates data across most aspects of TB prevention and care, including reporting and follow-up on presumptive and confirmed TB/DR-TB cases, medicines management, and laboratory testing. The platform's report feature also allows for producing custom reports and indicators.



Results

Over the last several years, e-TB Manager has been successfully implemented in 12 countries and is currently used at more than 2,500 sites to manage over 400,000 TB cases (all forms) worldwide. Selected countries using e-TB Manager gained improved quality, timeliness, and completeness of data by reducing the need for supervision visits by 70%. Countries also benefited from improved treatment adherence with built-in alerts by maintaining the DR-TB cure rate around 60% while also doubling case reporting. e-TB Manager promotes countrywide TB monitoring and surveillance by identifying high- and low-performing TB sites and helped target interventions.

e-TB Manager has shown potential for strengthening TB programs in countries and globally; however, it must be implemented as part of comprehensive technical assistance to strengthen health systems.

Public-Private Partnerships

It's been well documented that in many high-burden TB countries, people with TB-like symptoms commonly seek care first from private sector providers. However, private sector services for TB are often disconnected from the NTP, which may result in patient delays accessing quality, affordable treatment. Despite the demonstrated need, there are limited models of private sector involvement in TB diagnosis and treatment, particularly in the context of different country environments.



Approach

In accordance with the global TB strategies of the Stop TB Partnership and the US Government, SIAPS has developed a strategic approach that begins with compiling in-country information on the TB/DR-TB situation in the private sector. SIAPS then collaborates with key stakeholders to design environment-specific interventions based on the collected data.



Results

SIAPS has piloted unique public-private partnership activities in Tanzania and Pakistan to explore the potential of increasing TB case finding. In both countries, SIAPS spearheaded an assessment of knowledge, attitudes, and practices of private pharmacies and drug shops and then used the findings to develop interventions to establish referral mechanisms between the private retail outlets and TB diagnostic centers under the leadership of the respective NTPs.

In Tanzania, 587 clients with TB-like symptoms were referred to TB diagnostic and treatment centers by the 588 participating outlets. Records for 38% (223 out of 587) of clients referred were tracked and found at the health facilities. Of those, 83% (186 out of 223) were sent for sputum investigation, and from these, 43% (81 out of 186) were confirmed as having TB. Following these findings, SIAPS assisted the NTP to develop a scale-up strategy which has, subsequently, been approved for funding by the Global Fund.

In Pakistan, 502 pharmacies were part of the pilot; these trained pharmacies referred 1,071 presumptive TB cases to general practitioners trained under the public private mix model and public sector basic medical units over a period of 8 months. Out of these, 829 (77%) were traceable and 198 (18%) of the total referred were confirmed as having TB.

Results from these pilots have shown that establishing a mechanism to refer patients from private drug outlets to TB diagnostic facilities, combined with enhancing dispensers' TB symptoms knowledge and providing the necessary tools, expands NTPs' reach and has the potential to significantly increase TB case finding.



Photo taken by: Michael Paydos