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).

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.

Accomplishments

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.
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 the use of the complete, web-based e-TB Manager platform.

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.

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.

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.

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