



STRENGTHENING HEALTH SYSTEMS TO STOP TB: A PEOPLE-CENTERED APPROACH

Stronger health systems. Greater health impact.



STRONG SKILLS AND A CARING HEART

A KENYAN NURSE SHOWS WHAT IT TAKES TO MANAGE TB CARE

“Kwa dawa ya TB ni lazima utembe mpaka upate (You should never give up when searching for anti-TB medicines).”

This is the advice that Esther Wahome, a registered community health nurse in a Kenyan health facility, gives to her clients when they come to the TB clinic. “For me,” says Esther, “the worst thing is to have a patient come in and not get medication.”

Although her clinic sometimes lacks medication, the staff is always in communication with the District TB and Leprosy Coordinator, who directs them to other facilities that have the medication they need. As Esther explains, “Based on my records, I can estimate how much [medicine] I will need for the following month. We have also developed networks and work as a team with other facilities to exchange and then replace drugs so that no patient leaves without receiving treatment.”

The USAID-funded Health Commodities and Services Management (HCSM) Program, led by MSH, works with the Kenyan Ministry of Health to strengthen systems that deliver overall health care commodities and related services. The program also supports public, private, and faith-based health facilities in Kenya, including Esther’s, to minimize stock-outs and ensure access to care. HCSM provides such support through trainings, manuals, and electronic tools to help facility staff manage TB services.

At her TB clinic, Esther administers TB medication and counseling, keeps clinic records up to date, and gives health talks on nutrition, prevention, and signs and symptoms of TB. Her skills in management, organization, and communication support her passion for nursing—she advises others who want to become nurses that they need to have a caring heart. “I like serving in the TB clinic because I get to see patients who are weak regain their strength. Seeing patients thrive fulfills me and is my joy.”

A HEALTH SYSTEMS APPROACH IS A PEOPLE-CENTERED APPROACH

Seven-year-old Makasi, an HIV-positive orphan in Tanzania, was diagnosed with TB at a local health center. His clinicians overcame the difficulty of identifying TB in children co-infected with other diseases by using standardized TB case detection guidelines.

Tuberculosis has been affecting humans since prehistoric times and the key to TB control may be just as old: people themselves. Putting people at the center of TB control efforts—building their capacity to manage TB efficiently and reaching those who are most vulnerable to TB—can make all the difference.

When Makasi became ill with TB, he would likely have been given the wrong treatment were it not for the clinic's new pediatric TB score chart and standard operating procedures for TB case detection. He was emaciated when he visited the clinic, but six months later Makasi had doubled his weight and was well again.

At Management Sciences for Health (MSH), we focus on people at all levels of the health system: **individuals** who make decisions about their health, **community health workers** who bring services close to the home, **facility health workers** who administer essential health services, and **government officials** who set standards and allocate resources. Our success with people-centered TB control initiatives shows that TB is more than just the tuberculosis bacilli. It is a problem of weaknesses in health systems. With a people-centered, health systems approach, we can better understand TB's effects on people and how people can best control TB.



PHOTO: RUI PIRES

STRENGTHENING TB SERVICES ACROSS THE HEALTH SYSTEM

INTEGRATED AND INNOVATIVE HEALTH SERVICE DELIVERY

MSH applies 40 years of experience to integrating primary health care, including services for TB, HIV & AIDS, and chronic diseases, around the world. Through innovative solutions, we support the full range of prevention, care, treatment, and management services.

The PEPFAR- and USAID-funded Help Ethiopia Address the Low TB Performance (HEAL TB) Project, led by MSH, focuses on training health workers conduct high-quality screening, testing, diagnosis, and treatment for TB, multidrug resistant tuberculosis (MDR-TB), and TB/HIV co-infections. Innovative strategies—such as a contact screening matrix that HEAL TB trained health workers to use for tracking and screening family members of TB patients—have helped health workers diagnose and treat hundreds of patients' family members.



PHOTO: WARREN ZEIMAN

WELL-FUNCTIONING TB PHARMACEUTICAL MANAGEMENT AND LABORATORY SYSTEMS

We strengthen or establish reliable, cost-effective, and sustainable mechanisms to help ensure the availability of medicines and laboratory supplies needed for TB care and treatment.

The **Systems for Improved Access to Pharmaceuticals and Services (SIAPS)** Program, funded by USAID and led by MSH, promotes the improved availability of quality TB products and services by engaging a wide range of stakeholders. At the global level, SIAPS works closely with the Global Drug Facility (GDF) and recently helped GDF develop a strategy for procuring quality TB medicines at low prices. Between 2001 and 2011, the GDF treated more than 20-million patients and provided funding for first-line drugs to 133 countries. At the country level, SIAPS works with pharmacies, hospitals, and providers in the private sector to promote standardized treatment for TB/MDR-TB, while also working with partners in the public sector to ensure medicines safety.

Securing Ugandans' Right to Essential Medicines (SURE), a USAID-funded program, also led by MSH, assisted the country's ministry of health in integrating TB medicines into the mainstream essential medicines supply chain—a parallel supply system had led to duplicated costs and efforts, as well as stock-outs. In response, MSH helped shift the primary responsibility for managing TB supplies to the national medical store, assisting them with tracking the complex stock of multiple TB medicines to know when new orders were needed, as well as identifying countries where the ministry of health could donate excess medicines with short shelf life. Uganda SURE continues to support the ministry and implementing partners with quantifying and procurement planning for TB commodities—helping to promote an uninterrupted supply of TB medicines at all treatment facilities.

TRAINED HUMAN RESOURCES FOR HEALTH

We work with governments and health system managers to prepare a health workforce capable of providing high-quality, integrated TB services.

The USAID-funded **TB CARE I** project in Afghanistan, led by MSH, engages health facilities in using DOTS, the internationally recognized urban and community-based treatment method for TB. Since 2011, TB CARE I has trained more than 8,000 community health workers and 3,750 facility-based staff to use DOTS. This training enabled health workers to identify over 250,000 suspected cases of TB and diagnose over 39,000 TB cases in just two years. TB CARE I has also worked with facilities to establish cross-training and retraining of systems that ensure staff provide timely TB diagnosis and quality treatment. These efforts have helped Afghanistan's TB treatment success rates to improve from 83 percent in 2008 to 90 percent in 2012.

BETTER LEADERSHIP, MANAGEMENT, AND GOVERNANCE

We foster leadership, promote good governance, and help modernize health care management. MSH has extensive experience in individual performance improvement and organizational capacity-building.

Launched in 2013, the USAID-funded Track TB Activity (TRACK TB) project, led by MSH in Uganda, focuses on increasing TB case detection and treatment success rates by strengthening the leadership and technical capacity of the National Tuberculosis and Leprosy Control Program, implementing urban DOTS in Kampala, and providing technical assistance and coordination support to other partners implementing TB control programs. TRACK TB also works with managers and health workers at all of the country's MDR-TB treatment sites to ensure high-quality service delivery.

IMPROVED INFORMATION AND DATA SYSTEMS

Well-functioning information systems allow health care providers to make the most of limited resources and better serve clients. By developing tools and trainings to systematically collect data to inform decision-making, MSH assists countries in implementing practical solutions to challenges in TB control.

e-TB Manager is an electronic tool that integrates key aspects of TB control—screening, diagnosis, treatment, medicines, and outcomes—into a single platform. Twelve countries, from Eastern Europe, Africa, Asia, and Latin America, have adopted this tool, which has been used to manage more than 100,000 cases of TB/MDR-TB. When implemented as part of comprehensive technical assistance to TB programs, e-TB Manager has the potential to help ensure uninterrupted availability of TB medicines and promote effective TB case management.

INNOVATIVE HEALTH CARE FINANCING

MSH brings 15 years of expertise in performance-based financing, grant management, and costing to support the scale-up and improvement of TB services.

The USAID-funded TB CARE I project is helping Indonesia develop a financial plan for sustaining the nation's TB programs as international funding is withdrawn. MSH is working with the government to estimate costs and establish guidelines for universal health coverage, private sector donations, and increased support from local government budgets.

QuanTB: HELPING TO ENSURE AN EFFECTIVE FLOW OF MEDICINES

Effective treatment for MDR-TB can take two or more years and requires a complex regimen of pills and injections. For patients to have continuous access to medicines, TB program staff must carefully forecast medicine needs. To support countries in this effort, SIAPS recently developed **QuanTB**—a downloadable, desktop tool that transforms complicated quantification and forecasting calculations into a user-friendly dashboard for medicines'

management. By supplying updates—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 serve as an early warning system for programs, helping to ensure an effective flow of medicines. **QuanTB is available to any TB staff tasked with medicines management, whether a clinician in Southern Africa or a program manager in Eastern Europe.**



TB CARE I — PREVENTION. CARE. TREATMENT. MANAGEMENT.

The global, USAID-funded TB CARE I program collaborates with national and international initiatives worldwide to increase TB case detection and treatment success. As a member of the TB CARE I coalition, MSH supports projects in Afghanistan, Cambodia, Ethiopia, Ghana, Indonesia, Mozambique, Nigeria, South Sudan, Vietnam, and Zambia.



PHOTO: KATY DOYLE

REDUCING FEAR FOR BETTER TB CARE IN SOUTH SUDAN

In South Sudan, many community members and health workers avoid TB patients for fear of infection. To reduce such stigma and improve TB control, TB CARE I trains health workers and educates communities on TB transmission, prevention, and safe treatment. Since 2012, TB CARE I has reached 163 health workers and 125 community residents using these training interventions. The team has also trained 95 laboratory technicians to integrate TB diagnosis into routine laboratory services. These interventions are producing promising results: since 2010, South Sudan's TB patient diagnosis has increased by 39 percent (from 6,411 patients in 2010 to 8,924 patients in 2012).

IMPROVING STANDARDS FOR TB CARE IN GHANA

In Ghana, TB CARE I is working with the government to roll out standard operating procedures for TB case detection and urban DOTS to improve facility-based TB control practices. As part of this process, TB CARE I trained 120 health workers from six health facilities to follow clinical guidelines for TB control. After the trainings, TB CARE I conducted monthly site visits and provided hands-on mentoring, additional trainings, on-site monitoring, and supervision at all implementing facilities. These efforts helped facilities increase TB case identification from 338 in 2011 to 519 in 2012 and reduce the number of TB patient deaths from six per month in 2011 to two per month in 2012.

TO ACHIEVE STRONGER HEALTH SYSTEMS, MSH ADVOCATES FOR:

- Increased funding for TB
- Increased research and focus on TB in children and infants
- Emphasis on the role of TB in an integrated health system (such as, TB/HIV services)
- Increased TB research on timely topics, such as TB and gender

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