USAID
FROM THE AMERICAN PEOPLE

TB CARE II

TB CARE II in South Africa

Context

South Africa is classified by the World Health Organization as a high burden TB, HIV and multi-drug resistant tuberculosis (MDR-TB) country. In 2014, the country had the third highest estimated TB incidence rate in the world – 860 per 100,000 population, following Swaziland and Lesotho, with nearly half a million new TB cases. About 26,000 of the 330,000 reported cases of TB had MDR-TB, which is more difficult to diagnose, treat, and cure. One of the main factors behind the high rates of TB in South Africa is the HIV epidemic. TB is easily spread among people whose immune systems are suppressed by the AIDS virus, and it is the leading cause of death among people living with HIV/AIDS (PLHIV). In 2014, almost two-thirds of TB patients (62%) were co-infected with HIV.

During 2014 to 2016, the USAID TB CARE II Project bridged activities between the USAID TB Program South Africa (2009-2015) and the TB South Africa Project (2016-present), both implemented by University Research Co. LLC (URC). Based on discussions with the South Africa National Department of Health (NDOH) TB the project particularly focused on strengthening MDR-TB case finding and management, improving case finding and management of TB in children, and implementing demonstration projects on TB and diabetes integration. The project worked nationwide, providing support to all nine provinces, and 22 of 53 (42%) districts across the country, particularly those with the highest burden of TB. Key interventions are described below.

1. World Health Organization (2014) Global Tuberculosis Report 2014.

The USAID TB CARE II Project (2010-2020)

- Provided global leadership and technical support to National TB Programs and other stakeholders to accelerate the implementation of TB, TB-HIV co-infection, and multi-drug resistant TB services.
- Particular emphasis on innovative technological approaches to improve TB case detection and treatment, and interventions related to infection control and programmatic management of drug-resistant TB.
- Strengthened TB program capacity and fostered commitment to ending TB by empowering government partners, civil society, communities, and the private sector to develop local solutions to address bottlenecks and strengthen health systems for TB control.

Key interventions and results

Increasing demand for TB treatment

In 2016, TB CARE II was tasked by the NDOH to develop a campaign for advocacy, communication, and social mobilization for the NTP's 3-year "Massive TB Screening Campaign." Leveraging funding from Johnson & Johnson, the campaign included community outreach, public service announcements, and interviews in mass media. Celebrity ambassadors, many of who had experienced TB, encouraged their followers to be screened for TB, HIV, and

AUGUST 2020

TB CARE II is funded by United States Agency for International Development (USAID) under Cooperative Agreement Number AID-OAA-A-10-0021. The project team includes prime recipient, University Research Co., LLC (URC), and sub-recipient organizations Jhpiego, Partners In Health, Project HOPE along with BEA Enterprises; Brigham and Women's Hospital; the Canadian Lung Association; Clinical and Laboratory Standards Institute; Dartmouth Medical School: The Section of Infectious Disease and International Health; Euro Health Group; McGill University; and The New Jersey Medical School Global Tuberculosis Institute.

diabetes. During October-December 2015 alone, over 45 million people were reached with TB messaging, with almost 30,000 screened for TB.

Key partners in the effort were 28 non-governmental organizations (NGO) which received TB CARE II sub-grants. NGOs played an essential role in extending TB screening and sputum collection or referral, reaching specific populations such as PLHIV, children, and prisoners, and supporting directly observed treatment (DOTS) and community-based programmatic management of MDR-TB patients (cPMDT).

Improving case finding and management of TB in children

In South Africa, approximately 15-20% of all TB cases occur among children. In 2015, the NDOH launched a **Tackling TB in Schools** campaign in collaboration with the Department of Social Development and the Department of Education, with support from TB CARE II. The initiative included instructor training on TB screening and the use of age-appropriate interactive tools such as coloring sheets, TB screening cards to share with their families, and action messages. The campaign reached 59,000 children. As a result, 70 children were diagnosed with TB and 170 family members were linked with care. Complementing school-based activities, TB CARE II also implemented a national campaign on childhood TB, raising awareness of TB, particularly TB meningitis which impacts the brain or spinal cord and is more common among children.

To strengthen TB service delivery for children, the project improved provider skills through training and supervision and developed a package to support children who were being treated for TB and MDR-TB. The **Buddy Beat TB** comic, 'How To Guide', and video were developed in collaboration with Brooklyn Chest Hospital in Western Cape Province. Buddy the TB fighting cat walks pediatric patients through what to expect while they are on treatment, empowering children by helping them to cope with the anxiety and uncertainty they may experience during hospitalization.

Integrating TB and diabetes

People with diabetes have three times the risk of developing TB, and patients with both TB and diabetes experience worse TB treatment outcomes. The increasing prevalence of diabetes in South Africa threatens to undermine progress that has been made in TB control. TB CARE II developed training materials on TB and diabetes for health care workers, based on national guidelines, and worked with health facilities in four districts to train and mentored almost 500 site coordinators, data capturers, and health care workers on TB/diabetes co-morbidity. Supported facilities also received glucometers and test strips to support screening TB patients for diabetes. Following training, health care workers screened patients with diabetes for TB and TB patients for diabetes mellitus in their facilities, and provided follow-up per national TB and diabetes guidelines. During 2015-2015, 93% of 4,600 diabetes patients were screened for TB, identifying 40 cases of TB/diabetes co-morbidity.

Buddy the TB fighting cat educating children

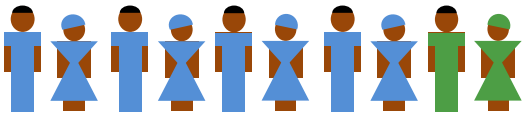
Strengthening MDR-TB case finding and management

TB CARE II established and continued to support existing DR-TB review committees in the nine provinces. These committees supervise the management of DR-TB clients, including integration with HIV services, at DR-TB sites as well as at decentralized facilities. The project helped establish five new decentralized sites and continued to support established earlier in project-supported areas, training over 700 clinicians on MDR-TB management and encouraging the use of standard operating procedures for MDR-TB review, which required monthly comparison of cases diagnosed and initiated at the facility level in collaboration with district TB coordinators and facility managers. By bringing MDR-TB services closer to the patients, and improving the quality of care, by 2016 the

TB CARE II's Focus on Results

TB/MDR-TB

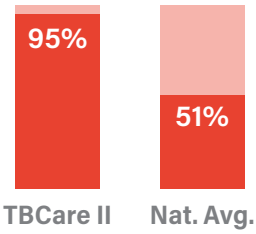
over **45** million people were reached with TB messaging through the massive screening campaign

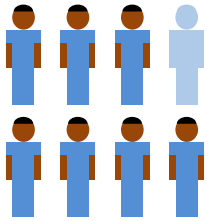


29,551 screened for TB

7,072 tested for TB

Treatment initiation of confirmed DR-TB patients: above 95%, compared to the national rate of 51%



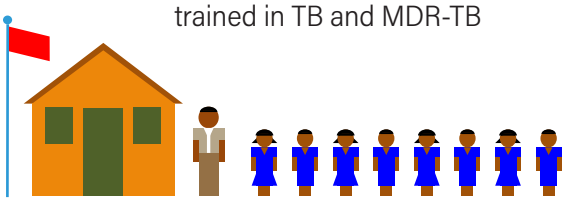


In supported DR-TB decentralised sites, **only 13.7% of patients were lost to follow-up**, much lower than the national average.

TB/Diabetes

- **Trained 492 health care workers** on TB/diabetes co-morbidity.
- **Screened 4,667 diabetes patients** for TB
- **Diagnosed 40 cases of co-morbidity**

Over 997 health care workers trained in TB and MDR-TB



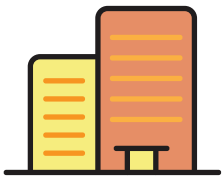
Working with schools, reached **59,000 students** with TB messages, diagnosed **70 learners** with TB and linked **170 family members** to care

TB Partnerships

Engaged **28 NGOs** in case detection in vulnerable communities, patient retention, and TB/HIV/DM collaborative activities.

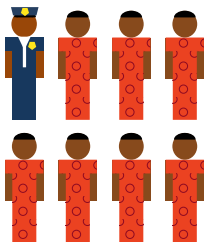
NGOs screened over **300,000 people**, identifying **1,830 TB patients**.

Engaged **242 companies** in discussions about TB control in the workplace.



In mines and mining communities:

- *Screened* **1,004 people for TB**
- *Tested* **54 people for TB**
- *Detected* **51 cases of TB**



Trained
2,596 prison inmates &
24 correctional officers
on TB screening and support to treatment adherence

treatment initiation rate of confirmed DR-TB patients increased to above 95% in project-supported provinces and only 14% of patients were lost to follow-up, much lower than the national average.

To support treatment adherence for both TB and MDR-TB patients, TB CARE II developed an mHealth application called ConnecTB. ConnecTB facilitates patient management, interaction between the provider and the patient, pharmacovigilance for DR-TB, and adherence. Since 2015, the platform has supported the scheduling of over 134,000 DOT visits, increased patient adherence to 98%, and helped identify and screen 2,000 adult and 260 child contacts. ConnecTB has now been adopted by NTP.

Engaging the private sector in TB control

TB CARE II established a strong partnership with the South African Business Coalition on Health and AIDS (SABCOHA), developing a toolkit, Implementing a TB Workplace Programme, and organizing a series of round table discussions in all nine provinces. The events brought together 940 representatives from 242 companies to discuss strategies to prevent and control TB in the workplace. A subsequent conference for company peer educators brought together 423 managers, union representatives, and nurses to develop specific advocacy plans for TB peer education in their places of work.

TB CARE II also worked with the mining industry, the Health and Other Services Personnel Trade Union of South Africa (HOSPERSA), the Independent Community Pharmacy Association, traditional health practitioners, and other private sector partners. These partners disseminated TB information through their networks through peer educators and events, provided TB screening, increased referrals to TB services, and where available, improved the quality of care provided by company clinics.

Improving data management for TB

Reliable and timely data is critical to effectively monitor patient outcomes and for program management. However, training gaps, lack of staff, and revisions to indicators and reporting software were resulting in incomplete data. TB CARE II developed standard operating procedures to complement NDOH training manuals for the updated electronic TB record (v.2). Health workers were mentored on revised TB records and registers during supervision visits. To improve the quality of reporting, the project conducted data verification exercises for TB, MDR-TB, and TB/HIV indicators to identify weaknesses in data and patient management processes. This led to measures to strengthen data management skills by data capturers and TB focal persons, as well as improvements to service delivery. For example, almost all provinces reported increases of up to a 10% in DR-TB treatment success rate after the exercise. The project also supported the use of data in existing district improvement plans, as well as DR-TB and TB/HIV review meetings.

Conclusions

In just over two years, TB CARE II made a strong contribution to strengthening TB control in South Africa. While many of the activities were seamlessly continued from the TB Program South Africa, TB CARE II also developed new innovations for the South African context, such as the developing and testing models for TB/diabetes integration, initiating dialogue on a strategy on palliative care for DR-TB patients, and introducing the ConnecTB mHealth application to support treatment adherence and the model. To develop these interventions, the project drew on its other work globally and in other project-supported countries, accelerating the spread of effective models for TB control.

USAID Bureau for Global Health | TB Team

500 D Street SW | Washington, DC | 1.571.309.0217

Hala Jassim AlMossawi: Acting Director, TB CARE II ▪ hjassim@urc-chs.com

University Research Co., LLC ▪ 5404 Wisconsin Avenue, Suite 800 ▪ Chevy Chase, MD 20815, USA ▪ http://www.urc-chs.com