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TB CARE II

Engaging Communities to Accelerate Progress Toward Ending Tuberculosis

Context

Communities and civil society organizations play a key role in accelerating progress toward ending TB and on countries' Journey to Self-Reliance. Community-based TB activities can support TB prevention, extend the availability of TB treatment and treatment support, and influence the quality of care. In 2019, countries who utilized community health workers (CHWs) and volunteers as part of their TB programs reported that on average, community referrals contributed 27% of TB case notifications, and that 87% of TB patients receiving community treatment support were treated successfully.¹ Community-based organizations (CBO) and non-governmental organizations (NGO) can mobilize communities, reach vulnerable groups, provide services, and conduct monitoring and advocacy.

To build commitment and capacity in community-based TB programming, the USAID TB CARE II Project worked with TB stakeholders to develop, test, and scale up approaches to effectively engage communities. This aligned well with the project's focus on strengthening patient-centered TB care. Care that is respectful and responsive to patient preferences—including their choice of where to receive services—can improve TB treatment outcomes, particularly because of the stigma and discrimination that often accompany the illness. Key interventions promoted by TB CARE II, as well as the project's collaboration with NGOs, are described below.

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

Building the capacity of community health workers

Through its training programs and support to stronger supervision and mentoring systems in countries with field activities, TB CARE II provided learning opportunities for CHWs and volunteers in a range of TB control topics. For example:

1. WHO (2019) *Global Tuberculosis Report 2019* (Geneva: WHO). In reporting to the WHO, 89 of 101 countries implemented community-based TB activities: 56 of them reported on the contribution of community referrals to TB case notification, and 38 countries reported on the treatment success rate for patients receiving community treatment support.

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- In **Bangladesh**, TB CARE worked with the National TB Program (NTP) to train 8,000 CHWs on contact tracing, screening, and referral of presumptive child TB cases. In combination with capacity building of facility-based providers, the childhood TB case detection increased by 30% compared to the baseline.
- In **Malawi**, TB CARE II worked with the NTP and district health management teams to train and mentor volunteer teams staffing community sputum collection points. The volunteers identified over 25,000 presumptive cases of TB, which resulted in the diagnosis of over 1,200 cases of TB.

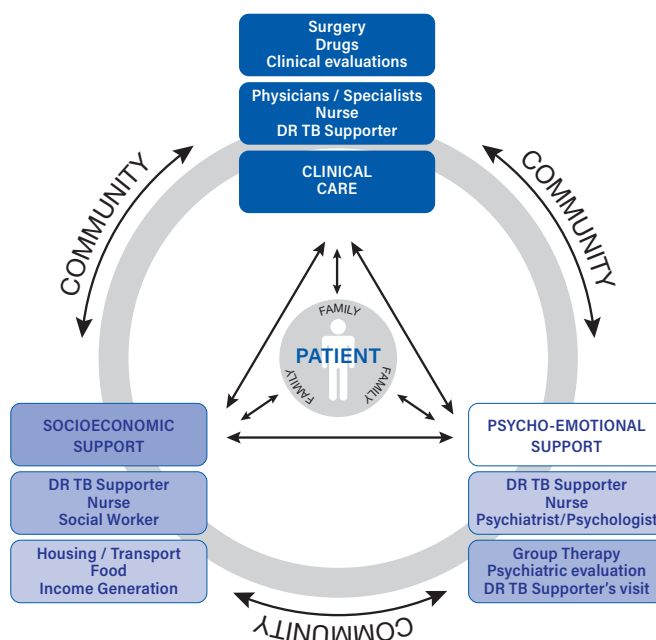
Expanding community-based programmatic management of drug-resistant TB

Treatment for drug-resistant TB (DR-TB) is long and complex, with severe side effects and further complications in cases of diabetes, pregnancy, and drug-addiction. As a result, only half (56%) of multi-drug resistant (MDR-TB) cases are successfully treated. Facility-based treatment is challenged by lack of adequate inpatient facilities; inadequate systems for monitoring side effects which results in poor treatment adherence; long distances between home and clinic leading to default; and a disconnect between health care providers and their patients, particularly when the patients are socioeconomically disadvantaged.

An alternative that helps address these barriers and also provides DR-TB patients with a choice of where to receive care is community-based programmatic management of DR-TB (cPMDT). Patients receive daily support from CHWs or community-based volunteers in their homes and communities, with monthly visits to the facility for monitoring of treatment and follow-up laboratory monitoring tests. The model also incorporates many factors that can affect patient outcomes into the treatment protocol, including clinical care as well as socioeconomic and psycho-emotional support (**Figure 1**).

To support countries in establishing and expanding community-based DR-TB care, TB CARE II collaborated with ministries of health and national TB program managers, NGOs, and other TB stakeholders to develop

Figure 1. The TB CARE II community-based care model

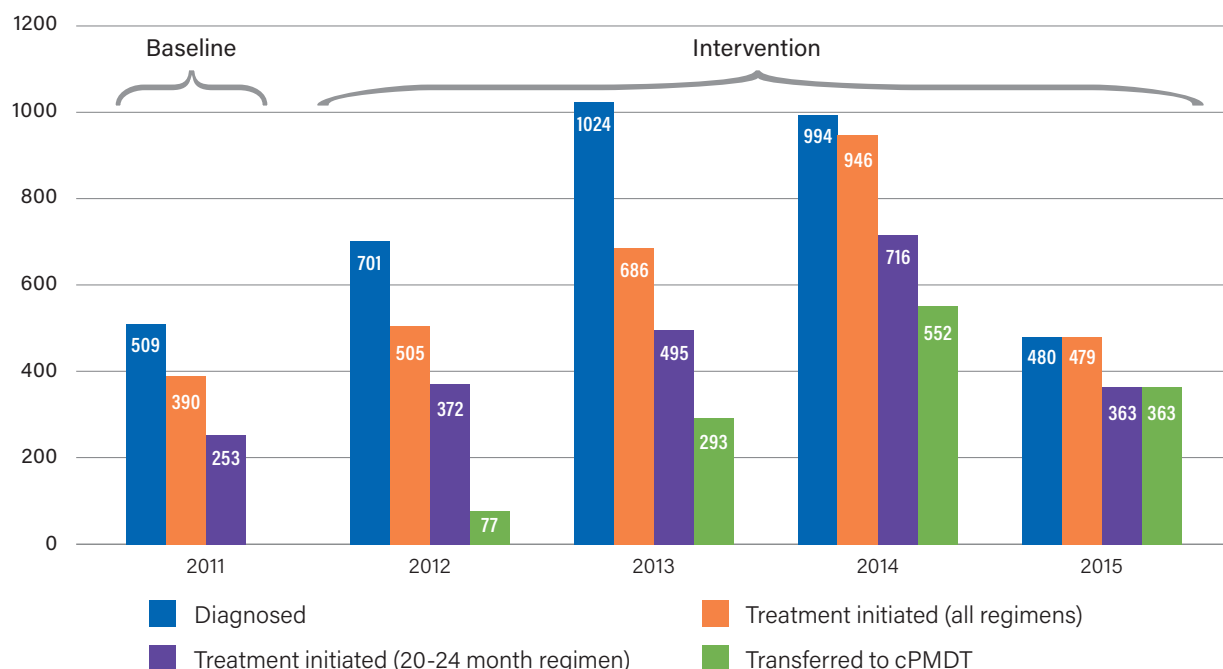


the [Community-Based Care for Drug-Resistant TB – A Guide for Implementers](#) (2017). TB CARE II also organized numerous workshops, [webinars](#), and training events. A September 2017 [workshop](#) brought together NTP directors from the 10 countries priorities under the U.S. Government's National Action Plan for Combating MDR-TB (NAP).

The project also introduced and scaled up cPMDT through long-term field support programs. For example, in **Bangladesh**, over 1,200 patients were enrolled in cPMDT during a TB CARE II pilot in 2012-2015. As more DR-TB patients were transferred to cPMDT, the proportion of diagnosed MDR-TB patients enrolled in treatment increased, from 50% in 2011 to almost 100% in 2015 (**Figure 2**).² The delay between diagnosis and treatment initiation decreased from 69 days in 2011 to 6 days in 2014. Almost all (95%) of enrolled patients completed all scheduled follow-up smear and culture tests, and **76% of patients completed treatment**. The Bangladesh Ministry of Health has continued the scale-up of cPMDT since TB CARE II ended.

2. Daru P et al. (2018) Decentralized, Community-Based Treatment for Drug-Resistant Tuberculosis: Bangladesh Program Experience

Figure 2. Trends in DR-TB diagnosis and treatment initiation, Bangladesh 2011-2015



Building the evidence base for community-delivery of isoniazid preventive therapy

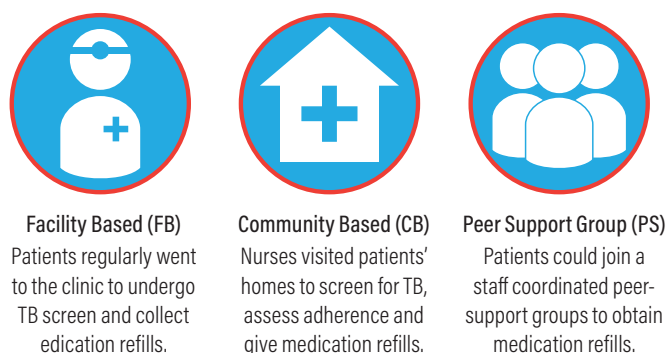
In people at high risk of developing TB, including children under 5 years of age and people living with HIV (PLHIV), isoniazid preventive therapy (IPT) prevents latent TB infection from progressing to active TB which is infectious. The six-month treatment course involves regular adherence assessments at health facilities and refills for at least three months. When taken as prescribed, IPT is highly effective and reasonably cost-effective. However, in 2018, only 59% of PLHIV newly enrolled in care and only 27% of eligible children less than five years were started on IPT.³ Furthermore, generally only about half of those who receiving treatment complete the full course,⁴ due to barriers such as lack of awareness, distance to facilities, and side effects which can seem particularly bothersome when the patient perceives little risk of TB and has no symptoms.

Given the dearth of evidence on the optimal model of IPT delivery, TB CARE II tested a model of self-selected IPT delivery, coordinated with ART refills, among 900 PLHIV in Swaziland. The project offered PLHIV a choice of three IPT

delivery models (Figure 3). Fewer patients selected the community-based model, perhaps because the PLHIV was already attending a clinic or for fear of potential stigma in the community.

Community-based IPT delivery achieved similar treatment adherence and completion rates as facility-based delivery: about 95% and 90% respectively. Moreover, giving patients a choice of IPT delivery model resulted in much higher treatment completion than the typical rate of 32% in Swaziland.⁵

Figure 3. Three IPT Delivery Models



3. World Health Organization (2019) Global Tuberculosis Report 2019 (Geneva: WHO).

4. Adams et al. (2014) Interventions to improve delivery of isoniazid preventive therapy: an overview of systematic reviews. *BMC Infectious Diseases*, 14:281.

5. Adams et al. (2017) High completion rates of isoniazid preventive therapy among persons living with HIV in Swaziland. *Int J Tuberc Lung Dis*, 21(10):1127-1132

WHO's ENGAGE TB approach for community-based TB activities includes responsibility for initiation and provision of IPT. TB CARE II contributed to the growing evidence base on the effectiveness of community delivery of IPT in particular, and the importance of patient-centered care more broadly.

Building the capacity of community-based organizations

Engaging local organizations not only extends TB services and improves the efficiency and quality of the TB program, but also strengthens self-reliance by supporting their partnerships with national governments and the private sector. TB CARE II used comprehensive sub-grants programs in field support programs to both build their technical and management capacity and expand their role in TB prevention and care. Building the technical and management capacity of NGOs to implement community-based TB activities will allow these local organizations to access funds from other donors. For example:

- In **Bangladesh**, TB CARE II supported 15 NGOs in selected low performing areas to increase case finding and community knowledge and awareness about TB. NGOs trained 1,800 maternal and child health workers on integrating TB screening in their service delivery, as well as 5,000 community health care providers. Some NGOs focused on screening among PLHIV. During 2012-2015, the NGOs detected about 35,000 new TB cases. NGO field workers also identified child contacts with TB symptoms and worked with DOT centers to register the eligible children for IPT. During 2011-2015, almost 3,000 children were screened and evaluated, and 1,000 children were registered for IPT.
- In **South Africa**, TB CARE II engaged 28 NGOs through its sub-grants program. A key focus for the NGOs was in extending case finding to vulnerable communities including children, PLHIV, people with diabetes, prisoners, and mining communities. During two years of implementation, NGOs reached over 600,000 people



A community worker conducts contact tracing

with TB information, organized screening events, trained teachers and prison peer educators on TB, and helped link TB suspects to health facilities. NGOs also played a key role in supporting treatment adherence, particularly through cPMPT and through ConnectTB, the mHealth application developed by the project to support MDR-TB patient retention and monitoring (see *technical brief on digital solutions*).

Conclusions

Communities and local organizations are key partners in USAID's "Global Accelerator to End TB". TB CARE built the evidence base on community-based TB interventions and supported countries to develop, test, and scale up effective models. The involvement of communities and NGOs also helped build social capital and develop a shared sense of urgency around Ending TB. By engaging and building capacity of CBOs and NGOs, the project increased the use of local resources for TB control while strengthening their capacity and commitment to participate in the countries' Journey to Self-Reliance. As countries move toward ending TB and toward self-reliance, all possible resources must be leveraged to support the effort.

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