



**TECHNICAL BRIEF**



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# Community interventions to improve access to TB services in Afghanistan

## PROJECT CONTEXT

The basic package of health services (BPHS) was instrumental in ensuring the decentralization of and access to health services in Afghanistan. The BPHS defines the scope of health services from the provincial and national levels to the local level, including to health posts at the community level.

In 2017, there were 14,130 health posts, each of which had two voluntary community health workers (CHWs) (one male and one female). Each CHW received monthly kits of essential medicines and other supplies. The health posts provide education; information on priority health problems such as identifying and referring patients to health centers, including those with presumptive TB cases; and other basic services. The National TB Program (NTP), with the support of USAID-funded TB projects, covered 6,500 (46%) health posts and 13,280 CHWs. However, Afghanistan has nearly 28,260 CHWs.

To achieve the NTP strategy for expansion of high quality DOTS (universal access), community-based DOTS (CB DOTS) was designed and piloted with technical and financial support from the USAID-funded Tuberculosis Control Assistance Program (TB CAP) in four provinces—

Badakhshan, Baghlan, Jowzjan, and Herat—in 2009. This approach encompasses awareness raising activities, such as community events in schools, mosques, and bazaars; disseminating information, education, and communication (IEC) materials; displaying billboards and broadcasting TB messages through local media to increase demand; training CHWs and community health supervisors on presumptive TB case identification, referrals, and DOTS provision; and proper recording and reporting activities to document evidence. In addition, basic health centers were upgraded with diagnostic service provisions to ensure community access. Based on the success achieved in bringing TB services closer to the patients, TB CAP planned to scale up CB DOTS to nine additional provinces (Kabul, Bamyan, Takhar, Faryab, Kandahar, Ghazni, Paktika, Paktia, and Khost) where USAID supports delivery of the BPHS through the Partnership Contracts for Health (PCH). In 2015, CTB implemented the full CB DOTS package in 15 provinces. The Global Fund has implemented CB DOTS in the additional 19 provinces by training CHWs and community health supervisors. CB DOTS is also an effective referral system between clinics and community care programs to deliver home-based TB treatment in rural, hard-to-reach areas in a feasible and cost-effective way.

## PROBLEM STATEMENT

Afghanistan has made remarkable improvements in health indicators since 2005. However, a wide range of barriers prevent rural communities in Afghanistan from accessing TB and other health services. TB case detection remains low in hard-to-reach areas. Populations living in rural and hard-to-reach areas are at increased risk for TB due to the presence of large numbers of internally displaced people and poor hygiene, nutrition, and ventilation. Public health facilities are also less accessible and require extensive travel time. TB case

identification and infection prevention remain challenges in these areas. A recent Ministry of Public Health (MOPH) study<sup>1</sup> showed that 67% of the population is within two hours walking distance to basic health services. Still, 34% of active TB cases are missing, with most of those in remote and hard-to-reach areas.

TB activities are not fully integrated into the BPHS. Low presumptive case identification in health facilities is due to weak coordination between communities and health facilities.

Low knowledge about TB at the community level is due to weak health education sessions in health facilities, no community events, a lack of a unique strategy for CB DOTS implementation countrywide and for community participation in case notification and TB care, and no community involvement in contact screening and isoniazid preventive therapy (IPT). The lack of a unique strategy for CB DOTS implementation has resulted in low case notification and poor treatment outcome in remote and hard-to-reach areas.

## STRATEGIC APPROACH

CB DOTS is an effective and efficient approach to engage the community in awareness, detection, and treatment of TB and brings TB services to the community. CTB designed a full package of CB DOTS activities (figure 1) to support the MOPH/NTP to expand high-quality DOTS to the community to ensure universal access to quality TB services for improved TB treatment outcomes.

Improving the referral of presumptive TB cases to health facilities for diagnosis and continuous advocacy, communication, and social mobilization at the community level have resulted in increased TB case notification and improved cure rates and treatment success rates at the provincial level.

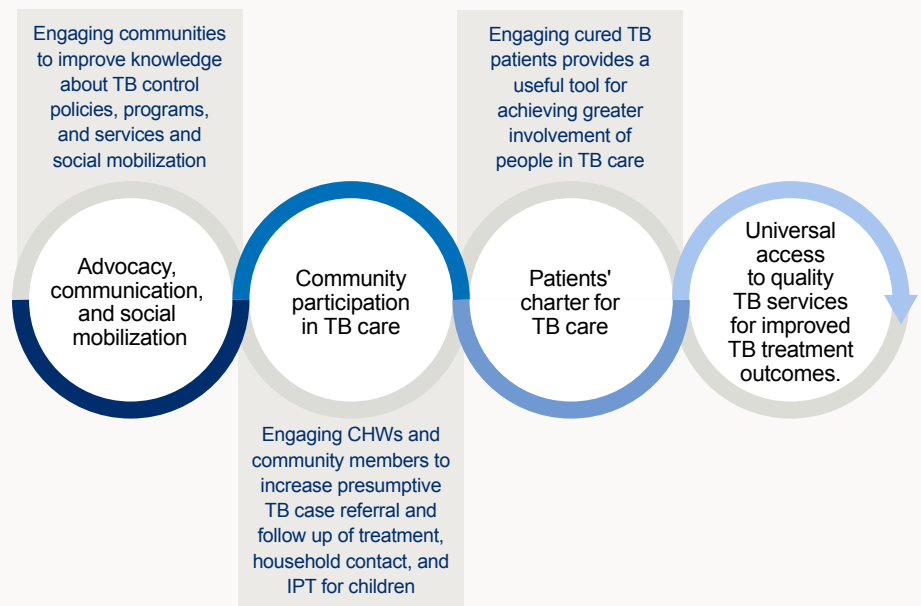
Interventions during this program were designed to engage BPHS implementers to realize the integration of the NTP in health service delivery with a focus on training CHWs. Trained CHWs are able to identify individuals

with TB symptoms, refer individuals for TB testing and treatment, and supervise patients' medication intake.

Specifically, CTB supported the MOPH/NTP in the following technical areas:

- Universal access (DOTS expansion)
- Health system strengthening and political commitment
- Monitoring and evaluation
- TB infection control
- Behavior change communications

FIGURE I. CB DOTS strategic approach for improved and universal access



## PROJECT IMPLEMENTATION

The CB DOTS full package was subcontracted (fixed price contract) and implemented by eight local BPHS implementing nongovernmental organizations (NGOs) in 13 provinces and by direct implementation by the NTP/CTB in two provinces in October 2015. Output indicators were established for each province. CB DOTS technical officers were hired by local NGOs for project implementation and management and were responsible for the following activities:

- A one-day CB DOTS orientation training for the health facility in charges in each province
- A two-day CB DOTS orientation training for community health supervisors in each province
- A one-day CB DOTS training for CHWs by the trained health facility in charges and community health supervisors in each province
- Monthly TB task force meetings
- Monthly supportive supervision by technical officer from health facilities and health posts
- Incentivize CHWs to accompany bacteriological confirmed cases of TB to health facility and follow up on treatment
- In each province, 10 TB patient associations were established that comprised between 10 and 15 cured TB patients; quarterly TB review meetings were held at the health facility level
- Recognition of best performer from CHWs and other community members
- Advocacy, community, and social mobilization activities
- Regular monitoring of CB DOTS implementation by the central CTB team

### ADVOCACY, COMMUNICATION, AND SOCIAL MOBILIZATION

In the context of wide-ranging partnerships for TB control, advocacy, communication, and social mobilization aims to influence policy change and sustain political and financial commitments; provide two-way communication between care providers and people with TB as well as to communities to improve knowledge of TB control policies, programs, and services; and mobilize and engage society, especially the poor, and all allies and partners in the campaign to Stop TB.<sup>2</sup>

In each province, 20 billboards with TB messages were installed in crowded areas. Each health facility implementing CB DOTS holds two quarterly community events for an average of 30 participants. The local radio station also airs daily TB messages at peak times.

### COMMUNITY PARTICIPATION IN TB CARE

Community participation in TB care requires a working partnership between the health sector and the community—the local population, especially the poor, and TB patients, both current and cured. The experiences of TB patients help fellow patients cope with their illness and guide NTPs in delivering services that are responsive to patients' needs. Ensuring that patients and communities alike are informed about TB, enhancing general awareness about the disease, and sharing responsibility for TB care can lead to effective patient empowerment and



Meeting with district governor and district headquarters staff

community participation, increase the demand for health services, and bring care closer to the community.

In each province, CHWs, family health action groups, and local elders are trained on identifying presumptive TB cases, how and where to refer them, and proper follow-up on their TB treatment. The community health supervisor and CB DOTS technical officer regularly carry out supportive supervision of CHWs and community groups and provide routine encouragement, motivation, and monitoring to ensure that CHWs are supported to perform in their catchment area. Transportation costs are covered for CHWs and community members who accompany bacteriological confirmed TB cases.

Responsibilities of trained CHWs and other community members under CB DOTS include:

- Identifying presumptive TB cases during household visits
- Referring presumptive TB cases to the nearest TB diagnostic center or health facility
- Collecting and transferring sputum of those unable to travel to a TB diagnostic center

- Supporting DOTS for TB patients at the community level
- Following up with TB patients for sputum examination during treatment (second, fifth, and last month of treatment)



CB DOTS trainings for male and female CHWs

- Screening the contacts of bacteriologically confirmed TB cases and supporting IPT for children under the age of five
- Providing TB health education to TB patients, their families, and the community
- Recording and maintaining proper documentation of their performance

## PATIENTS' CHARTER FOR TB CARE

The purposes of the Patients' Charter for TB Care are to empower people with TB and communities and to make the patient-provider relationship mutually beneficial. The Charter sets out the ways in which patients, communities, health care providers, and governments can work as partners and enhance the effectiveness of health services in general and TB care in particular. It provides a useful tool for achieving greater involvement of people in TB care.

In addition, 10 TB patient associations have been established with the main goal of providing a coordinating body to unite cured TB patients across the district and ensure their participation in TB control in their communities. Association members work within the catchment area of a health facility to:

- Share their TB-related experience and information with others to create awareness of TB and work against TB stigma in the community
- Advocate for partnerships to improve TB patients' health, make treatment processes more efficient, and create awareness in the community on the proper care of TB patients
- Provide social, psychological, and legal support to TB patients
- Supervise patients who take TB medicines under home-based DOTS
- Assist and encourage TB patients to comply with and complete treatment

## RESULTS AND ACHIEVEMENTS

### *Increased number of presumptive TB cases referred by CHW/ community*

Since the development and implementation of the CB DOTS full package, there has been an increase in the number of presumptive TB cases referred by CHWs or community members. The percentage and number of presumptive TB cases referred by CHWs or community members increased nearly three-fold between October 2015 and September 2017 (figure 2).

### *Increased identification of bacteriologically confirmed TB cases in remote and hard-to-reach areas*

Among those presumptive TB cases referred by CHWs or community members, there has been an increase in the number of bacteriologically confirmed TB cases (figure 3). The training and mentorship provided to CHWs contributed to improved record keeping in the TB unit registers.

### *Better integration of BPHS and CB DOTS services*

There has been a notable improvement in the performance of health facilities

in 15 provinces in selected CB DOTS indicators. For example, the percentage of bacteriologically confirmed TB cases referred by CHWs or community members increased from 2% to 15% between October 2015 and September 2017.

### *Reduced loss to follow-up and improved treatment outcomes*

The close treatment monitoring and support by the CHWs contributed to positive treatment outcomes that were registered by the NTP over the past 18 months (figure 4, table 1). Of the 2,803 pulmonary bacteriologically

confirmed TB patients registered and treated between October 2015 and December 2016, 99% (2,787) were evaluated for treatment outcome. Among these, the treatment success rate was 96% (2,680) (table 1). The treatment success rate at the health facility level was 87%. The loss to follow-up was 2% and the failure rate was less than 1% compared to 3% and 1%, respectively, at the health facility level. The number of patients not evaluated for treatment outcomes also decreased.

**Improved household investigation of index cases**

A total of 13,798 TB index cases were registered for household contact, and 85,753 contacts were screened for TB. Among these, 15,569 presumptive TB cases were detected, 977 were diagnosed with TB, and 11,437 children under the age of five were put on IPT.

**Universal access (DOTS expansion)**

CTB expanded CB DOTS to 15 provinces around the country. Although the Global Fund is implementing CB DOTS in the remaining 19 provinces, activities are limited to training of

community health supervisors and CHWs and incentives for the CHWs who identify TB sputum smear positive (SS+) patients. Engaging BPHS implementers and NGOs in CB DOTS implementation resulted in early case detection, diagnosis, and treatment of TB patients and increased access to TB services in hard-to-reach areas and among children under the age of five, women, and TB patients' contacts.

**Political commitment and systems strengthening**

CTB supported the NTP to advocate the End TB strategy<sup>3</sup> to leaders, politicians, community elites, and community members at all levels and fostered a link between health facilities and the community to secure their political commitment. Regular meetings were conducted with the MOPH/NTP, provincial health departments, and other stakeholders. Meetings were also held with local politicians and community leaders to advocate for the TB strategy in districts and villages. TB campaigns were conducted in villages and hard-to-reach areas, and World TB Day was celebrated at the



A billboard with a TB message



Advocacy with community elders in Paktika Province

community level. TB infection control at the community level was introduced and implemented through an integrated approach. A revised CHW manual and SOPs included TB infection control indicators, and CHWs were trained by BPHS implementers. Health post and community monitoring and evaluation systems were improved through regular joint visits and on-the-job training on recording and reporting systems.

FIGURE 2. Contribution of CB-DOTS in TB indicators

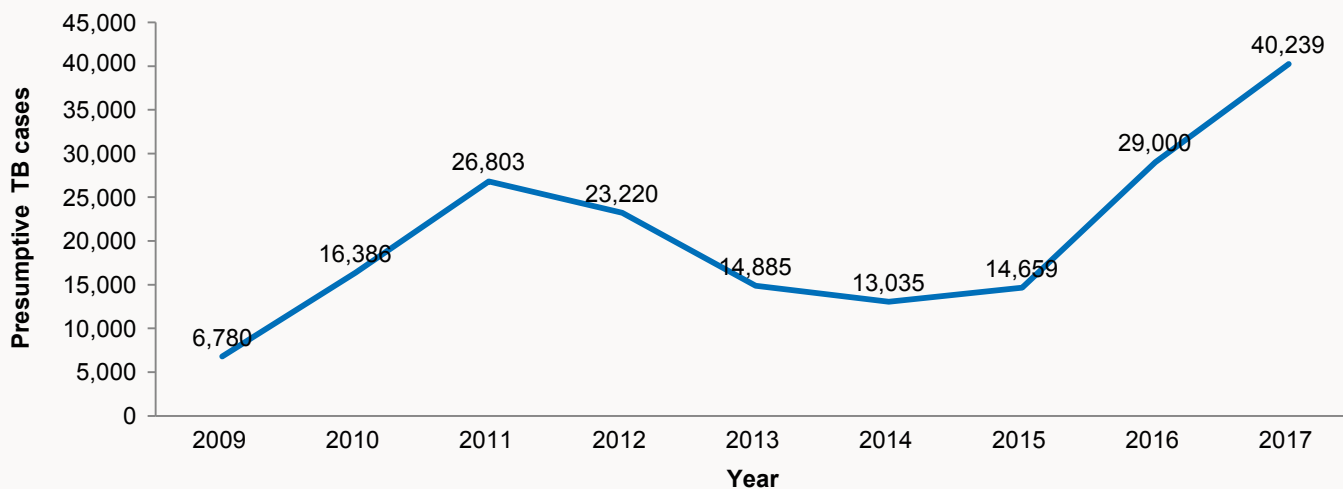


FIGURE 3. Number of bacteriologically confirmed TB patients referred by CHWs/community

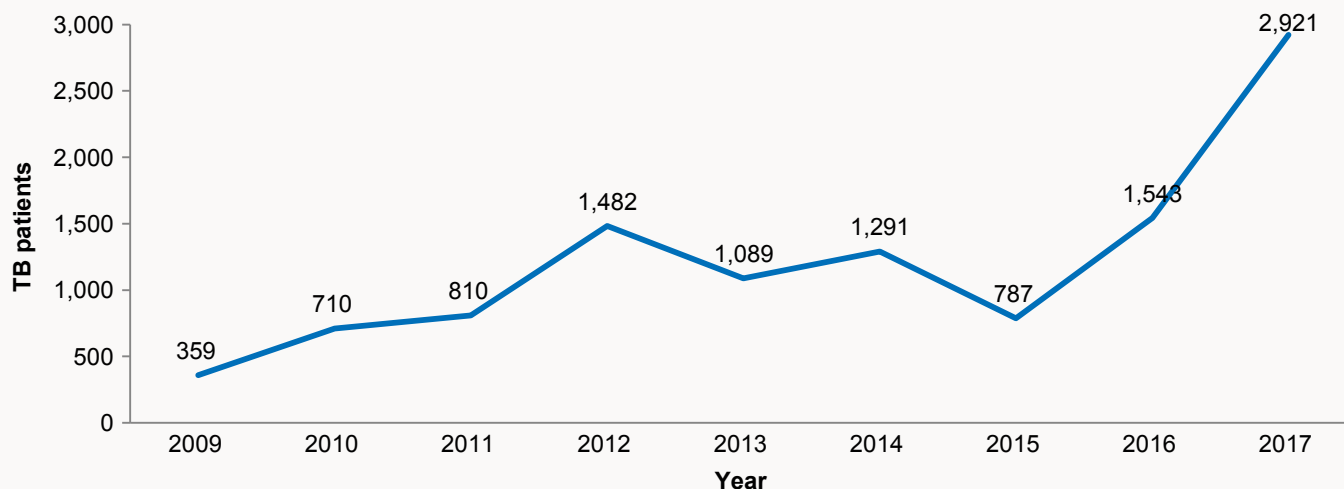


FIGURE 4. Number of TB patients under treatment by CHW/community

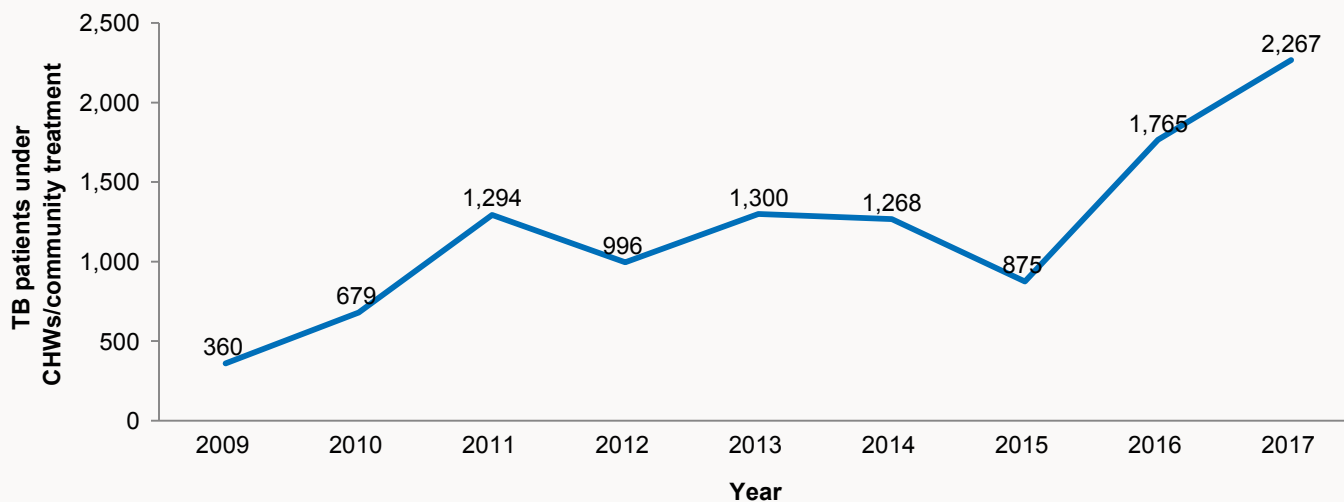


TABLE I. Treatment Outcome of CB DOTS, January 2015 through June 2016

VARIANCE	TREATMENT SUCCESS RATE	DIED RATE	FAILURE RATE	LOST TO FOLLOW UP RATE	NOT EVALUATED RATE	P VALUE
National (29,657)	25,802 (87%)	890 (3%)	295 (1%)	900 (3%)	1,780 (6%)	> 0.001
15 CTB-supported Provinces (19,652)	17,490 (89%)	396 (2%)	182 (1%)	591 (3%)	993 (5%)	> 0.001
CB DOTS (2,787)	2,680 (96%)	54 (2%)	0 (0%)	51 (2%)	2 (0%)	

## LESSONS LEARNED

The experience of CTB in Afghanistan has provided a number of important lessons learned that can be used to inform future work.

CB DOTS is an effective approach for the treatment and detection of missed cases of TB in rural and hard-to-reach areas. CB DOTS engages an entire community, including neighbors; friends; volunteers; CHWs; health personnel; local politicians and leaders; teachers; and nontraditional partners, such as local healers, schools, and university students, in TB advocacy and messaging. CB DOTS has gained increased recognition as an effective, efficient, and ethical means of delivering care to patients with TB.



CB DOTS orientation training for female CHWs

CTB is implementing the CB DOTS full package in 15 provinces with high detection of TB cases. In the remaining 19 provinces, where a limited package is being implemented, detection of TB cases has remained low.

CB DOTS can also help to address stigma with community groups through regular community events and dialogue. Using volunteers to link to the community is vital for getting information, services, and support to people with TB, who are often spread out in a region's least-accessible places. Community events with volunteers may even be more effective than TB patient associations in TB case detection. Like regular staff, volunteers need periodic, consistent training and supervision to ensure quality services. Also like paid employees, they need support and recognition of the value of their contribution to keep them motivated. Reaching neglected, shunned, isolated, poor, or otherwise marginalized populations often requires strong local partnerships

with key stakeholders, such as officials, associations, volunteers, and religious and civic leaders. The NTP recommends that the full CB DOTS package should be expanded to all 34 provinces as a means to detect and treat TB cases. CB DOTS can both optimize adherence and provide a way to offer psychosocial support.

Capturing data directly from the community fills a critical data gap needed for data-informed planning and decision making. Relying on current NTP recording and reporting formats that focus on data collection by CHWs misses data that can be collected directly from the community, TB patient associations, and other community groups, particularly because 50% of the CHWs trained in 2004 are no longer active.

Recognition is a critical driver for performance and improvement. Best performer recognition at the provincial level has played an important role in increasing the TB case detection and in overall TB program improvement.

## WAY FORWARD

CB DOTS implementation supported community members to be involved in developing local solutions to increase case notification and led to community ownership of TB control programs. CB DOTS has been implemented in more than 400 health facilities and 15 provinces, and the Afghan MOPH is working to integrate the CB DOTS strategy into its BPHS nationwide. To achieve this, the following recommendations should be considered:

- Involve mobile health teams working in *white areas*<sup>4</sup> in CB DOTS implementation
- Revise the terms of reference for health facility, health shura, and TB patient associations
- Activate a sputum sending system from basic health centers and health subcenters to diagnostic health facilities
- Strengthen supportive supervision mechanisms at the central and provincial levels
- Conduct annual refresher trainings for health facility in charges, community health supervisors, CHWs, nurses, and lab technicians
- The System Enhancement for Health Action in Transition, CTB, and Global Fund should support community events countrywide
- Institutionalize incentive schemes for CHWs
- Increase the number of billboards and installations at the provincial level

## References

- 1 Strategic Plan for the Ministry of Public Health (2011-2015), Government of the Islamic Republic of Afghanistan. Link: [www.moph.gov.af](http://www.moph.gov.af)
- 2 The goal of the Stop TB strategy was to dramatically reduce the global burden of TB by 2015 in line with the Millennium Development Goals and the Stop TB Partnership targets. Link: [www.who.int/tb/strategy/stop\\_tb\\_strategy/en](http://www.who.int/tb/strategy/stop_tb_strategy/en)
- 3 The WHO End TB Strategy aims to end the global TB epidemic, with targets to reduce TB deaths by 95% and to cut new cases by 90% between 2015 and 2035, and to ensure that no family is burdened with catastrophic expenses due to TB. Link: [www.who.int/tb/post2015\\_strategy/en](http://www.who.int/tb/post2015_strategy/en)
- 4 According to then MOPH access to health services policy, *white areas* refer to areas where a pregnant woman is within two hours walking distance to the nearest health facility.

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