



# Testing a Community-Based TB Care Model in Mozambique

## PROJECT DATES

September 2009 – September 2014

## PROJECT BUDGET

USAID contribution: \$1,500,000  
World Relief contribution: \$500,000

## LOCATION

Bilene, Chicualacuala, Chigubo, Chokwe, Guija, Mabalane, Massangena, and Massingir Districts, Gaza Province, Mozambique

## CONTEXT

Mozambique suffers from the world’s third-highest incidence of TB (552 per 100,000). The challenge is particularly acute in the southern province of Gaza, where there is a high percentage of migrant workers and HIV-TB comorbidity is higher than the national average. Gaza Province faces a number of challenges, including transportation and frequent absences by health care providers, which create barriers to testing, diagnosis, treatment, and follow-up. *Vurbonga* worked in remote villages in Gaza Province to improve community engagement in TB case notification and treatment by expanding the use of an existing Care Group network, in combination with health system strengthening. (Data source: World Health Organization [Global TB Report 2014](#))



Mozambique - Gaza by Profoss (via Wikimedia Commons)

## BENEFICIARY POPULATION

Total population in the project area: 306,188  
5,983 suspected TB cases in the project area

## PROJECT AT A GLANCE

	TB Patients
Household	✓
Community	✓
Facility	✓
District	✓
National	✓

## Project Approach

World Relief adapted its proven Care Group approach, a peer support approach traditionally used for child survival interventions, to address TB prevention, detection, and support for treatment adherence in southern Mozambique. A cascade training model designed to reach every household with semimonthly visits, each Care Group comprises 10 to 15 volunteer health educators, each responsible for a block of 10 or so neighboring households. The low household-to-volunteer ratio enables frequent visits and fosters deeper relationships for promoting behavior change. Consistent coverage of households also enables disease surveillance and vital-events reporting.

The *Vurbonga* (“Dawn”) project engaged its Care Group network, in place in some districts since the 1990s, to take on TB with the addition of a new volunteer cadre, the TB “focal point,” for referrals and promotion of treatment adherence. In rural areas, a system of community-based treatment observers, known as *padrinhos* (literally, “godparents”), directly observed their family members or neighbors taking TB medication.

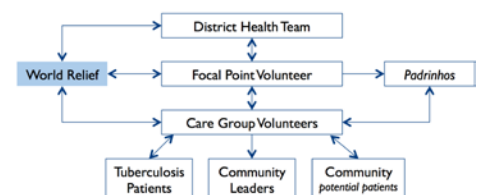
The program was built around these community relationships and the need to increase knowledge of TB. Simultaneous systems strengthening activities focused on improving health facilities’ diagnostic capabilities. This approach aligns with the Ministry of Health’s 2013–2017 Strategic Plan for TB control, which establishes community involvement as a key strategy for combating TB.

DESIRED OUTCOME	MAIN ACTIVITIES AND SELECTED OUTPUTS
Empower people with TB to seek and complete treatment with the support of their communities	<ul style="list-style-type: none"> <li>✓ 350 Care Groups established and 3,350 Care Group volunteers trained on TB messaging, referral, follow-up, and community support for treatment</li> <li>✓ 4,192 women and 2,517 men (Care Group volunteers, village leaders, traditional healers, and religious leaders) trained to liaise with Care Groups, the health system, and <i>padrinhos</i></li> </ul>
Strengthen the national TB program systems to improve TB delivery and patient outcomes	<ul style="list-style-type: none"> <li>✓ New role created for TB (focal point volunteer), with community referral system linking focal point and facility</li> <li>✓ Joint project-district supervisory visits to health posts and community visits to care groups conducted</li> <li>✓ Community-based treatment observers (<i>padrinhos</i>) trained in numbers equal to TB patients</li> </ul>
Decrease burden of HIV in people with TB and burden of TB in people living with HIV/AIDS	<ul style="list-style-type: none"> <li>✓ 60 home-based care activists trained to identify and refer possible TB cases among HIV-positive clients and provide CB-DOTS* to improve treatment adherence and success</li> </ul>

\* Community-based, directly observed short-course treatment for TB.

## Partnerships

Care Group volunteers engaged village leaders and households directly to raise awareness and detect potential TB cases. Suspected TB cases were referred to the district health facility by the focal point volunteer, who also assigned a *padrinho* to patients with confirmed cases. Focal points coordinated 30 to 50 Care Group volunteers, who each worked with 10 families. Thus, each focal point covered 1,500 to 2,500 people.



# TESTING A COMMUNITY-BASED TB CARE MODEL IN MOZAMBIQUE

## A Trusted Community Network for TB Prevention and Treatment

Adapting a trusted volunteer network was a valuable strategy with dramatic increases in TB-related knowledge among adults in the project area and strong links between villages and government services. Future programs will benefit from collaborating with communities to integrate TB in all health interventions (such as prenatal care, HIV, and family planning) and improve follow-up referrals from health centers back to the focal point volunteers. Systematic contact tracing and pediatric TB interventions are also key points of collaboration.

### Key Findings

The project evaluation used data from knowledge, practice, and coverage surveys carried out with household members over age 15 at baseline (2010; n=300) and endline (2014; n=300), as well as focus group discussions, key informant interviews, and site visits.

- **Community-Level Knowledge.** Understanding of TB prevention/care options improved dramatically in the target population (Figure 1). Success rates for treatment rose from 78.6 in 2010 to 93 percent in 2014, after failing to improve in years 1 to 4.
- **Partnerships for TB Referral and Treatment.** Adding TB to Care Group interventions created a strong community network. Focal points were a crucial link between villages and government services, especially for referral and treatment adherence. By 2014, 46 percent of referred cases in the project area were referred by *Vurbonga*-supported volunteers.
- **Case Notification Challenges.** Although the case notification rate fell short of the target (165 per 100,000), it did increase from 134 to 149 (see Figure 2, with provincial rates for comparison). *Vurbonga* did not use systematic contact tracing; worker migration

to South Africa, weak government diagnostic services, and unrealistic targets may be factors. Combined with high incidence of HIV co-infection, the lack of progress in case referral may explain the slower improvement in treatment: late diagnosis increases the chance of mortality.

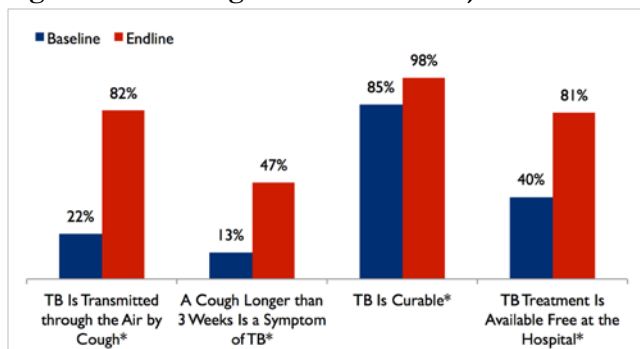
### Lessons Learned

- **Community Engagement.** Engaging community-based actors to deliver information and education helped improve knowledge of TB prevention and treatment in the intervention area.
- **TB Liaisons.** Adding focal point volunteers was effective in mobilizing community attention to TB, even if it did not result in increase in a substantial increase in case notification. Engaging health center staff in joint training with community members was important to build trust in CB-DOTS, with payoffs in treatment success rates over the longer term and the high value health center staff placed on focal point volunteers.
- **Whole-Systems Approaches.** Future project design should incorporate a holistic approach to match *Vurbonga's* effectiveness in community engagement with health systems strengthening for substantial improvement in case notification rates.

### Contact for More Information

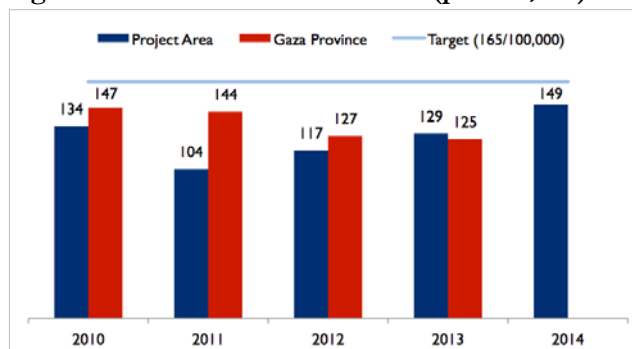
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Figure 1. Knowledge of TB in the Project Area



\* indicates statistical significance  $p < 0.05$

Figure 2. Case Notification Rate\*\* (per 100,000)



\*\* 2014 rates for Gaza Province (provided for comparison) are not yet available.

The *Vurbonga* project was supported by the American people through the United States Agency for International Development (USAID) Child Survival and Health Grants Program. *Vurbonga* was managed by World Relief. This publication is made possible by the generous support of the American people, through USAID Cooperative Agreement No. AID-OAA-A-14-00028, and prepared independently by EnCompass LLC. The contents are the responsibility of the authors, and do not necessarily reflect the views of USAID or the United States Government.