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**ABSTRACT BOOK**

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**Conclusions and key recommendations:** The prevalence of TB among household contacts is high in East-Central Uganda. CHWs can effectively implement household contact investigation in resource limited settings.

### OA23-350-27 Household contact tracing for families of Mozambican mineworkers

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**Background and challenges to implementation:** Screening of household (HH) contacts of persons with TB is a critical component of TB control. We conducted screening and testing for TB among HH contacts of Mozambican mineworkers and ex-mineworkers, as part of a cross-border program aiming to improve access to TB services for mineworkers and their families.

**Intervention or response:** Mineworkers and ex-mineworkers with TB disease were identified through review of TB registers from January 2017-February 2018, and through a targeted case finding campaign in December 2017. Index cases were contacted to obtain their residential locations in Mozambique and South Africa and a listing of persons living in each household. All adult HH contacts were screened for TB and offered HIV counseling and testing. Children (< 15) were referred to the health facility for TB evaluation and isoniazid preventive therapy (IPT), if indicated. Sputum specimens were obtained from adults with  $\geq 1$  symptom and transported to the nearest laboratory for testing according to national guidelines.

**Results and lessons learnt:** A total of 277 mineworkers and 308 ex-mineworkers were identified with TB. One thousand five hundred and sixteen (n=1516) HH contacts were identified (923 adults and 593 children). Of the 645 adult HH members in Mozambique screened for TB to date (ongoing; screening in South Africa starting April 2018), 199 had  $\geq 1$  symptom and were tested for TB; 26 (4.0%) were diagnosed with TB and linked to care. Three hundred and nine children aged < 15 were referred to the nearest health facility; 119 were initiated on IPT.

**Conclusions and key recommendations:** Screening of household contacts of mineworkers in Mozambique identified several persons with TB disease. Efforts are ongoing to screen HH contacts of migrant mineworkers both in Mozambique and South Africa. Screening families and additional close contacts of mineworkers, who have multiple residences, may be a key strategy for early case detection in labor sending and mining communities.

### OA23-351-27 Community-based active TB case finding to improve coverage of NTP services in Viet Nam

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**Background and challenges to implementation:** Despite existing NTP services covering an estimated 83% of Viet Nam's TB burden, many people with TB are still missed and those who are treated in routine settings often present with significant delays. Community TB case finding activities were established as an extension of the National TB Program in 6 districts across Ho Chi Minh City to increase TB treatment rates and promote early case finding.

**Intervention or response:** A cadre of gov't-managed community health workers visited index patient homes to verbally screen family contacts and conducted targeted screening in high-risk populations, such as the elderly, economic migrants and urban poor. Screening activities were supported by a custom-built mHealth app loaded on 4G enabled tablets which is bi-directionally linked to Viet Nam's TB notification system. Symptomatic individuals were referred to gov't X-ray services. People with an abnormal chest X-ray were then tested with the Xpert MTB/RIF assay, while those with a normal CXR were tested by AFB smear microscopy. All patients detected by the project were initiated on treatment within existing gov't health services.

**Results and lessons learnt:** Over a period of 6 months, 179 community health workers verbally screened 83,740 individuals and successfully referred over 7,000 symptomatic people for CXR screening. 2,261 people were tested by either AFB smear microscopy and/or Xpert, resulting in the detection of 175 people with lab-confirmed TB (7.7%). These community case finding efforts led to a +13.9% increase in TB notification rates in project areas compared with baseline quarters a year prior.

Indicators	Yields
People verbally screened for TB symptoms	83,740
People with one or more TB symptoms	7,051 (8.4%)
People screened by CXR	7,019 (99.5%)
People tested by Xpert and/or AFB smear microscopy	2,261 (32.2%)
People with Bac(+) TB	175 (7.7%)
<b>All Bac(+) notifications</b>	
Baseline period (16-Q4 & 17-Q1)	1,342
Intervention period (17-Q4 & 18-Q1)	1,528
Additional Bac(+) notifications	186 (+13.9%)

*[Yield and impact of community-based active TB case finding in Ho Chi Minh City, Viet Nam]*

**Conclusions and key recommendations:** In a setting with high treatment coverage rates, expanding NTP services into the community resulted in further increases in TB treatment rates. The full integration of these TB case finding activities within existing NTP services enables a level of sustainability rarely achieved by community-based initiatives.

### OA23-352-27 Systematic TB symptom screening increases the yield of TB case finding in hospital settings: lessons from Cambodia

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**Background and challenges to implementation:** TB incidence in Cambodia is estimated at approximately 55,200 cases. In 2016, 33,736 were notified and 29% (24,164) of TB cases were missed. Most hospitals lack both systematic TB symptom screening at triage and within in-patient departments, and comprehensive tracking of referrals within and between hospitals and health centers. This is a missed opportunity for TB case finding in the country.

**Intervention or response:** To improve TB case detection via screening of presumptive TB patients at triage and in-patient wards, a baseline assessment of TB case management practices was conducted, assessing the number of TB cases detected, health care workers' knowledge on TB and flow of patients in the hospital. Monthly meetings were organized to build the capacity of health care providers, track the performance and identify solutions. Four key TB symptoms were included in both triage and in-patient medical record forms to remind physicians to identify presumptive TB patients. Cough triage and the "FAST" approach were introduced in the triage area. A referral process was identified and strengthened to ensure that diagnosed patients continued treatment after discharge.

**Results and lessons learnt:** From June 2015 to Mar 2018, 5 government hospitals screened 447,867 clients for TB, identified 31,917 (7%) as presumptive TB and diagnosed 7,963 (1.8%) TB cases. Approximate one quarter of clients with presumptive TB were diagnosed with TB. Both the number of patients screened for TB and TB case notifications increased yearly. The Government adopted this approach and is scaling it up with support from the Global Fund.

**Conclusions and key recommendations:** Introduction of systematic TB symptom screening in out-patient and inpatient departments increases TB case finding. Inclusion of four TB symptoms in patient record forms, introduction of TB cough triage, and strengthening of referral systems have improved yield of TB case notification in the hospital. The approach is operationally feasible and replicated.

Year	Number of consultation cases	Number of presumptive patients	Number of TB diagnosed
2015	127,294	6,695	1,705
2016	151,452	12,290	3,040
2017	169,121	12,932	3,218

[Table: Results of systematic TB screening in health facilities]

### OA23-353-27 Finding the 'missing TB cases' in South Africa

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**Background and challenges to implementation:** Every year, 450,000 people get sick with TB in South Africa, but more worrying, 29.3 percent (WHO, 2017) of these individuals do not even receive care - they are "missed" by the health systems at diagnosis, treatment or reporting. Many of this "missing" individuals will die or continue to be sick and transmit the disease or, if treated with improper drugs, contribute to the growing menace of drug resistance. Finding missing cases which is aligned to the Sustainable Development Goals and Universal Health Coverage agenda is key to the attainment of the End TB strategy.

**Intervention or response:** In January 2018, the USAID TB South Africa Project in collaboration with the National Department of Health launched a "comprehensive package" of services aimed at finding additional 15,200 of the 154,000 missing TB cases. Implementation of the package targeted undetected TB cases along the continuum from community through all levels of the public and private health facilities. Based on the heterogeneity of SA TB profile across provinces and districts, the package varied and was adapted to each locality. The package was complemented by a continuous quality improvement approach to address gaps in the TB care cascade.

**Results and lessons learnt:** Early results within two months from the launch of the package, a total of 887 additional TB cases were found; of which 369 were from the community and 518 at the various health facilities. The closer engagement from the community through the public and private sector with the comprehensive package of services facilitated identification of the TB cases who otherwise would have been missed.

**Conclusions and key recommendations:** Finding the missing cases and ending TB is critically important for South Africa; Implementation of a multipronged and comprehensive strategy to identify missing cases is recommended to interrupt TB transmission, save lives and improve the health of affected communities nationally and globally.