

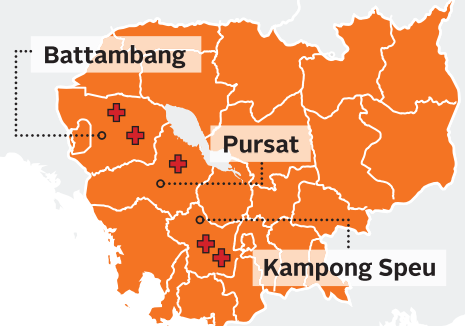
# Intensified Case Finding in Hospitals

## BACKGROUND



In 2016, TB is the ninth leading cause of death worldwide and the leading cause from a single infectious agent, ranking above HIV/AIDS.<sup>1</sup> Of the 10.4 million people who become sick with TB every year 4.1 million are not reported. Finding these “missing patients” is essential to reach TB elimination. Hospitals are an obvious place to look as people who receive care for other conditions are already within the health system. A study in China showed that monitoring hospital reporting and referrals and active follow-up of diagnosed patients increased case notification of smear positive TB by 33%.<sup>2</sup>

Cambodia has an estimated 55,200 new TB patients each year with about 29% “missing”. Most hospitals lack systematic TB symptom screening at triage and comprehensive tracking of referrals through diagnostic work-up between departments within hospitals and between hospitals and health centers. A multi-symptom screening approach for all patients accessing services at referral hospitals, combined with more sensitive diagnostic tools such as GeneXpert can be instrumental to find the missing cases.



“Red Cross” symbol represents referral hospitals where this approach implemented.

## OBJECTIVE



To improve TB case detection by screening for TB among all patients seen at general outpatient triage and inpatient wards of referral hospitals, to reduce the nosocomial spread of TB in hospitals and to improve TB-related linkages both within and between facilities.



## APPROACH



- The CTB team conducted a baseline assessment of TB case management practices, health care workers' knowledge on TB and patient flow.
- The team organized an introductory meeting with key staff and the hospital director to introduce the activities and decide on tasks and responsibilities.
- The hospital introduced cough triage and the “FAST” approach in the triage area along with a designated separation area for cough patients.
- The referral process was developed and strengthened to ensure that diagnosed patients continue treatment after hospital discharge to peripheral health centers (HC).
- A feedback mechanism was created between hospitals and HCs and reviewed monthly to ensure that patients reach HCs. Referral slips were issued including patient contact details and point of contact for HCs to facilitate successful referrals.
- CTB provided training on TB diagnosis and treatment for key health care providers.

<sup>1</sup> Global TB report 2017

<sup>2</sup> Wang L, Cheng S, Xu M, Huang F, et al. Model collaboration between hospitals and public health system to improve tuberculosis control in China. *Int J Tuberc Lung Dis.* 2009;13(12):1486-1492

## KEY ACHIEVEMENTS



During 3 years of implementation, the project achieved the following:

- CTB trained 199 health care workers.
- Four key TB symptoms were added to both outpatient department triage forms and inpatient medical record forms to remind physicians to identify presumptive TB patients. The government adapted the revised triage form for nationwide use in the hospitals.
- Standard of Operation Procedures (SOP) were developed for use in the National TB Program (NTP)
- NTP adopted the approach for scale-up with Global Fund support.
- From June 2015 to December 2017, the Project implemented this approach in 5 hospitals, screened 447,867 people for TB, identified 31,917 cases of presumptive TB, and diagnosed 7,816 TB patients, 8% to the NTP notifications. Approximately 7% of patients seeking care at hospitals had TB symptoms and of those 25% were diagnosed with TB.
- Both the number of patients screened for TB and TB case notifications significantly increased as shown in the figure 1.

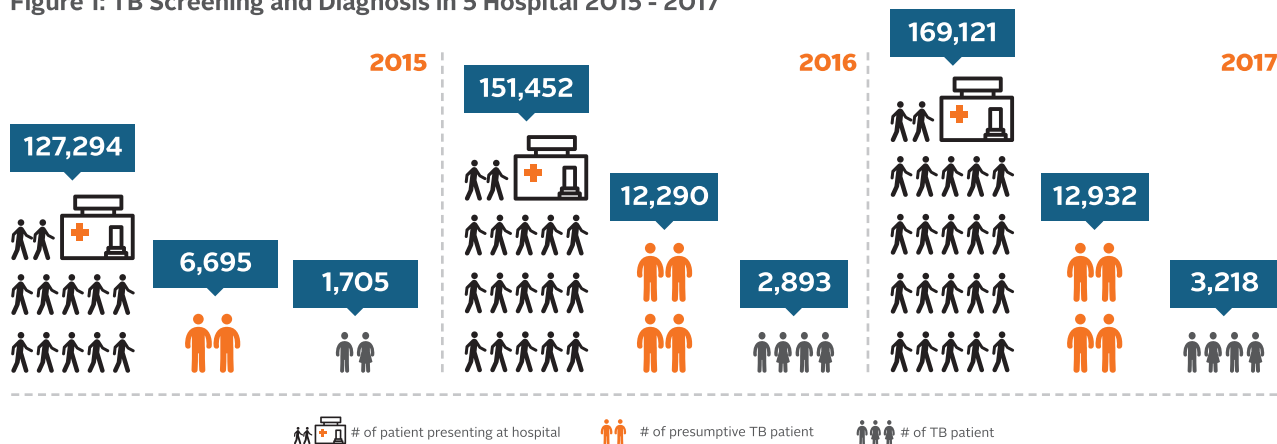


**An elderly patient is asked to collect his sputum sample for Xpert testing.** Photo credited by Ngo Menghak

## CONCLUSIONS

The steady quarterly increase in TB case notification at five referral hospitals follows the implementation of this intensified case finding approach. The introduction of TB cough triage, and strengthening of the referral system improved the yield of TB case notification in hospital settings. This approach to case finding helps close the gap of missing TB patients, and is complementary to the Community-DOT (C-DOT) approach for case holding. This operationally feasible and replicable approach is a sustainable intervention with the potential to help Cambodia reach END TB goals.

Figure 1: TB Screening and Diagnosis in 5 Hospital 2015 - 2017



## ACKNOWLEDGEMENT

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