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# ABSTRACT BOOK

## 49th World Conference on Lung Health of the International Union Against Tuberculosis and Lung Disease (The Union)

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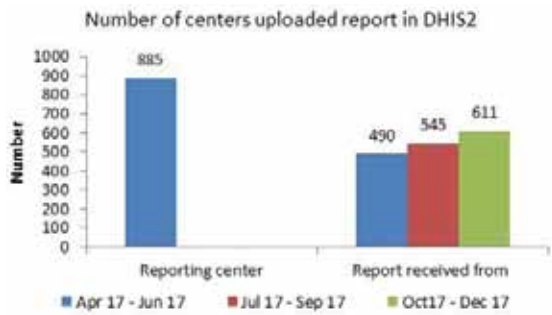


*[Fig. Number of reporting centers uploaded reports through DHIS2]*

## PS40-847-27 Optimizing community screening for TB: spatial analysis of localized case finding from door-to-door screening for tuberculosis in a district of Ho Chi Minh City, Viet Nam

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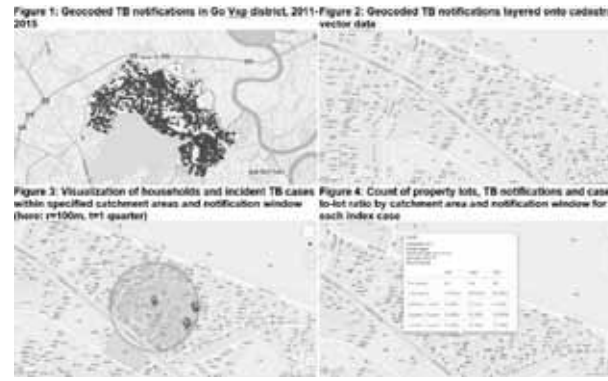
**Background:** Tuberculosis is the largest infectious disease killer globally. To reach ambitious global targets, early and increased TB case detection is essential. Many strategies find few cases or with long delays. New technologies and collaborations may improve screening to detect more cases.

**Methods:** This study used a cross-sectional, spatial analysis of routine TB surveillance and cadastral data in Go Vap district, Ho Chi Minh City. We mapped all people with TB to their household level with geocodes and calculated theoretical door-to-door screening yields to model community contact investigation in three concentric catchment areas (50m, 100m, 200m) and three notification windows (one, two and four quarters) for each index case. We compared these yields to reference values from literature and fit a GEE linear regression model with patient covariates onto the data.

**Results:** The sample included 3,046 TB patients over a 5 year period. Adjusted theoretical yields in 50m, 100m and 200m catchment areas in the two-quarter notification window scenario were 0.32% (95%CI: 0.27,0.37), 0.21% (95%CI: 0.14, 0.29) and 0.17% (95%CI: 0.09, 0.25), respectively. The 50m catchment area in all notification window scenarios and the other areas in the four-quarter scenario had significantly higher yields compared to a review of active case finding yields from literature. GEE regression evinced higher theoretical yield for treatment failure index cases (beta=0.12, p=0.001) and short-term inter-province migrants (beta=0.006, p=0.022), while greater distance to the DTU (beta=-0.02, p< 0.001) was associated with lower yield.

**Conclusions:** This study is an example of inter-departmental collaboration through the application of repurposed cadastral data to progress towards the end TB objectives. We showed that it may be possible optimize community screening via identifying and targeting catchment areas of index cases for spatially restricted community screening.




*[Mapping of TB patients onto cadastral data]*

# PS41 Temporal trends, spatial distribution and modelling for human immunodeficiency virus and diabetes

## PS41-848-27 Rapid, sustained scale-up of ART for HIV-positive TB patients in Mozambique, 2010-2017: successes and next steps

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**Background:** Mozambique has one of the highest rates of both TB (551 cases per 100,000 persons) and HIV (national prevalence: 13.2%) in the world and an estimated TB case detection rate of 54% in 2017. The WHO recommends that all TB patients are tested for HIV and all HIV-infected TB patients are started on antiretroviral therapy (ART). Mozambique adopted universal ART for TB-HIV patients in 2012 and began rapid scale-up of