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In reply

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In selecting the measure of active case finding (ACF) yield in the Kampala, Uganda, study,¹ we carefully considered most of the points raised by Drs Van Rie and Hanrahan. The authors pose a valid question that we need to think about with regard to policy decision making for ACF. There is currently no gold standard measure of ACF yield. Our goal was to present the ACF yield from a general urban population community in the context of a high tuberculosis (TB) burden setting.

We chose to use the number needed to screen (NNS) as our measure of yield because it is a reasonable generic metric that can be used as guide for policy makers who might want to compare efficiency across separate screening programs within the same local context. The NNS presented in our study was based on results from home-based self-collected sputum by patients and not sputum induction, an approach we believe is easy to implement in the ‘real world’. Several other ACF studies conducted in Africa have used similar basic sputum collection strategies rather than sputum induction.^{2–4} It is unlikely that induction would often be performed in community active case finding settings, given the stringent infrastructural requirements. In our results, the NNS based on positive smears only was 170 and the NNS from the combined positive smears and/or cultures was 131. As the authors suggest, AFC yield measured by the NNS to start one detected case on TB treatment could be an informative end-point, as it captures both the process (screening effort), and the intermediate outcome (placement on treatment) of ACF detection that impacts infectiousness. All the 39 cases found by ACF were actively referred for TB treatment, in which case the suggested measure would not have provided new information.

Improved passive case finding (PCF) was examined extensively by the FIDELIS study projects conducted in high-burden countries,⁵ and has been shown to increase case detection in the short term. However, it is important to note that PCF has the potential to reach mostly persons with relatively good health-seeking behavior who visit traditional public or private health facilities. In our study, the high proportion (77%) of ACF-detected TB cases who had attempted to seek health care for cough should be interpreted with caution. More than half of

those patients had sought care from traditional healers and local drug stores that do not have the capacity to diagnose TB; therefore, even with improved passive case finding they would still likely be missed.

Regardless of the measure of yield, it is important to reiterate that so far the strongest justification for ACF is the potential benefit of early case detection and interruption of TB transmission,⁶ if properly implemented and followed by prompt treatment initiation for identified cases. From an epidemiologic and policy point of view the measure that captures both the magnitude of effect on reduction in transmission and the amount of resource use should therefore be the most relevant to policy makers in TB control. A cost-effectiveness analysis comparing ACF and PCF strategies is certainly needed.

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