**Using Standardized Patients to Measure the Quality of Tuberculosis Care: Lessons From 3,193 Provider Visits in Three Countries**

*Benjamin Daniels*

[*bdaniels@worldbank.org*](mailto:bdaniels@worldbank.org)

*Development Research Group, The World Bank, Washington, District of Columbia, United States of America*

**Abstract**

In low- and middle-income countries (LMICs), health care markets are widely believed to provide low quality care to people with tuberculosis (TB), resulting in 1.7 million annual TB deaths globally. (WHO 2017) LMICs have very different health care systems, and many have made significant progress in increasing affordable access to TB care. Whether that care is high *quality* is another question, as is how quality can be improved for vulnerable populations. Quality is difficult to define and measure, especially in decentralized systems, and “structural” measures such as equipment and medicine availability do not reliably predict clinical performance. (Das and Gertler 2007) Today, the gold standard for the measurement of clinical quality is the use of ‘standardized patients’ (SPs) — people recruited locally and trained to make identical clinical presentations incognito to a large number of healthcare providers. (Das et al 2015) This work summarizes lessons learned from implementing standardized patients presenting as patients with tuberculosis at a wide variety of clinical settings in India, China, and Kenya. (Kwan et al 2018; Sylvia et al 2017; Daniels et al 2017)

We summarize four global findings here using a combined sample of 3,193 SP-provider interactions across those three countries. First, quality is low: only 35–50% of SPs presenting to a health care provider for the first time were managed in accordance with national and international standards of TB care. Second, “incorrect” care takes a wide variety of forms – SPs do not generally receive potentially appropriate “wait and see” or “palliative” approaches from providers, but they receive a medley of care patterns that include broad-spectrum antibiotics as well as contraindicated quinolone antibiotics and steroids, which can mask TB symptoms from future diagnosis (although they do not typically receive inappropriate anti-TB medications). Third, there is a wide range of estimated quality in each provider stratum: more-qualified providers and higher-level facilities performed significantly better than others in all three settings, but in every group there were both high- and low-quality providers.

Finally, we present results from an experiment where SPs present providers with laboratory tests. In this experiment, SPs clarify that they do not know what the tests imply, thus preserving the asymmetry of information between the patient and the provider, while at the same time, increasing the availability of diagnostic information for the provider. Our experiment shows that greater diagnostic information improves correct case management and decreases unnecessary medicine use among private sector providers. This result is inconsistent with a model of pure profit maximization among providers.