



CASE STUDY

Cost assessment for preventive treatment

WHY DID WE DO IT?

In countries with high TB burdens, 6 months of isoniazid is the most commonly used preventive treatment regimen. Newer, shorter regimens lasting 3 or 4 months are used in high-income settings, and programmatic experience from these has shown that patients are more likely to complete treatment. Countries with high TB burdens have been discouraged from using the shorter regimens because the drugs are more expensive. However, analyses from Australia and Canada have shown that the cost of delivering preventive treatment is dominated by the cost of clinical visits, and using shorter regimens reduces total health systems costs by reducing the number of clinical visits required, despite higher medication costs. It is unclear whether this would hold true in countries with high TB burdens, where health care delivery costs are generally lower.

WHO

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WHERE

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WHEN

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WHAT

Cost of delivering 12-dose isoniazid and rifampentine versus 6 months of isoniazid for tuberculosis infection in a high-burden setting. *In prep* (2020)

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HOW DID WE DO IT?

The TB prevention program of the Indus Health Network in Karachi, Pakistan, is one of the first programs in a high-burden setting to use a short regimen of 3 months of weekly isoniazid and rifampentine programmatically. Results from this initiative have received great enthusiasm from stakeholders in other countries with high TB burdens. However, these stakeholders face difficulty convincing leaders in their own countries to procure drugs that are substantially more expensive, despite improved outcomes. In response to this Yuen, Hussain and Lu discussed the utility of a comprehensive cost analysis to capture the true cost of service delivery. However, during the analysis it became clear there are different ways of considering these costs. Economists comprehensively consider costs to society, including costs associated with health infrastructure and costs to patients in terms of lost productivity while they are receiving treatment. However, program administrators are primarily concerned their program budgets. Much effort was spent identifying how to present the results of the analysis in a way that would satisfy both groups of stakeholders.

WHAT DID WE LEARN?

We found that 3 weeks of weekly isoniazid and rifampentine cost less per completed course than 6 months of isoniazid, and that the medications comprised less than 20% of the total cost of delivery. Cost analyses such as this one are useful for uncovering the "hidden" costs of health care delivery and contextualizing budget decisions being made by TB programs. However, economic analyses are also challenging to present to program directors because there is not a simple correspondence between the costs being presented and the costs borne by program budgets