

# Evidence Update

Summary of a Cochrane Review

Tuberculosis Series

Does offering incentives to patients improve attendance at clinic for test results, or increase the number of people who complete TB treatment?

Incentives may improve attendance at clinic for tests results, but we don't know if they increase the number of people who complete TB treatment.

Researchers in The Cochrane Collaboration conducted a review of the effects of incentives at encouraging patients to return for TB test results or treatment. After searching for relevant studies, they identified 11 relevant articles. This Evidence Update summarizes the findings.

## What are incentives and how might they improve adherence to treatment?

Effective treatment for tuberculosis requires people to take regular medication for at least 6 months, and failure to take this medication is one of the most common reasons for treatment failure.

Incentives are rewards such as cash, vouchers or tokens. They may encourage people to comply with instructions from health workers or assist people to adhere to treatment by overcoming the financial barriers caused by absence from work to attend appointments, or costs from travel or medical expenses.

## What does the research say?

**The effects of offering patients incentives to return for test results:**

- People offered an incentive may be more likely to return for their test result.

**The effects of offering patients incentives to complete TB prophylaxis or treatment:**

- People offered an incentive may be more likely to complete TB prophylaxis.
- We don't know if offering an incentive increases the number of people who complete TB treatment.

## Is the research reliable?

The included trials were randomized but the risk of bias was unclear due to a lack of detail in the report about the methods used.

## Can the results of the research be applied to my setting?

The trials offering an incentive to return for test results or complete TB prophylaxis were all conducted in the USA among drug users, or homeless people, and so the results may not be applicable elsewhere.

The single trial assessing completion of TB treatment was conducted in Timor Leste. The researchers offered a free daily hot meal to TB patients if they attended to take their treatment. However people found this inconvenient and attendance was not improved.



## The effects of using incentives to encourage people to complete TB diagnosis and treatment?

This table provides more detail about what happens when people are offered incentives to attend TB clinics for test results or treatment. These numbers are based on the results of the research, when available. The quality of evidence is either ranked as high, moderate, low or very low. The higher the quality, the more certain we are about what will happen.

Outcome	Without incentive	With incentive	What happens	Quality of evidence
How many people return for their tuberculin test result	44 per 100	95 per 100	People offered an incentive may be more likely to return for their test result	Low
How many people complete TB prophylaxis?	41 per 100	73 per 100	People offered an incentive may be more likely to complete TB prophylaxis	Low
How many people complete TB treatment	78 per 100	76 per 100	We don't know if offering an incentive increases the number of people who complete TB treatment	Very low

### More information

#### This summary is based on the following systematic review:

Lutge EE, Wiysonge CS, Knight SE, Volmink J. Material incentives and enablers in the management of tuberculosis. *Cochrane Database of Systematic Reviews* 2012, Issue 1. Art. No.: DOI: [10.1002/14651858.CD007952.pub2](https://doi.org/10.1002/14651858.CD007952.pub2).

#### What is a systematic review?

A systematic review seeks to answer a well formulated and specific question by identifying, critically appraising, and summarising the results of all relevant trials, published and unpublished, according to pre-stated and transparent methods.

#### What is the Cochrane Collaboration?

The Cochrane Collaboration is an international network of more than 28,000 people from over 100 countries. The collaboration is one of the biggest producers of systematic reviews on the effects of healthcare interventions, and Cochrane Systematic Reviews are recognized internationally as the benchmark for high quality information. The *Cochrane Database of Systematic Reviews* is available from [www.thecochranelibrary.com](http://www.thecochranelibrary.com) and free for eligible countries.

#### How has the quality of evidence been assessed?

The quality of evidence has been assessed using methods developed by the GRADE working group ([www.gradeworkinggroup.org](http://www.gradeworkinggroup.org)). The GRADE system considers 'quality' to be a judgment of the extent to which we can be confident that the estimates of effect are correct. The level of 'quality' is judged on a 4-point scale. Evidence from randomized controlled studies is initially graded as HIGH and downgraded by one, two or three levels after full consideration of : the risk of bias of the studies, the directness (or applicability) of the evidence, and the consistency and precision of the results.

**High:** Further research is very unlikely to change our confidence in the estimate of effect.

**Moderate:** Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

**Low:** Further research is very likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

**Very low:** We are very uncertain about the estimate.

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