

Can healthcare be improved by tailoring payment to outcomes?

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There is a longstanding idea that healthcare providers should be rewarded not just for the treatment they give, but for how successful it is. This is the foundation of a body of international research based around outcome-based payments for providers. Whilst this has an intuitive appeal the practicalities of implementing a system are daunting: Can we measure how successful treatments are? How could we base payments to providers on those measures? How large would the extra payment need to be? Would the cost be justified? Our research set out to answer these questions, using economic theory to consider the optimal design of payment systems.

Our starting point was the development of practical indicators of success, Patient Reported Outcome Measures (PROMs), which are now available for some treatments in the NHS. We showed that paying a bonus if treatment achieves a target level for PROMs can improve outcomes. As an illustration, we used data on the cost and PROMs of hip and knee replacements to provide estimates of how large the bonus payment would need to be to achieve an improvement in patient pain and mobility scores.

For hip replacement we estimated a bonus of between £45 and £226 and for knee replacement the range was £72 to £254. Both these ranges look modest relative to the cost of these procedures – around £6,000 – but there is a caveat. If the bonus is successful in improving outcomes it will also increase overall costs.

However, our data suggested that the increase in cost would be justifiable in terms of the extra benefit to patients. The bonus payment scheme would therefore be cost-effective in a broad range of circumstances.

Whilst our analysis was limited to just two specific treatments, and relies on a number of simplifying assumptions, the results are encouraging. It demonstrates that bonus payments to providers can be used to improve healthcare, and the cost of doing so seems justifiable.

[Read the full paper, funding sources and disclaimers in Health Economics.](#)

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