Paying for performance to improve the delivery of health interventions in low- and middle-income countries

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RHL summary

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Paying health-care workers for higher performance is a complex intervention that has been suggested to improve public health goals. This review assesses the current evidence for the effects of paying for performance on the provision of health-care services and health outcomes in low- and middle-income countries. It includes nine studies, six of which had controlled before-after design. Overall, the results were mixed. The review authors concluded that the current evidence base is too weak to draw any general conclusions and more robust and also comprehensive studies are needed. In designing future studies it should be kept in mind that performance-based payment is not a “uniform intervention, but rather a range of approaches”.

Cochrane review


Abstract

There is a growing interest in paying for performance as a means to align the incentives of health workers and health providers with public health goals. However, there is currently a lack of rigorous evidence on the effectiveness of these strategies in improving health care and health, particularly in low- and middle-income countries. Moreover, paying for performance is a complex intervention with uncertain benefits and potential harms. A review of evidence on effectiveness is therefore timely, especially as this is an area of growing interest for funders and governments.

To assess the current evidence for the effects of paying for performance on the provision of health care and health outcomes in low- and middle-income countries.

We searched more than 15 databases in 2009, including the Cochrane Effective Practice and Organisation of Care Group Specialised Register (searched 3 March 2009), CENTRAL (2009, Issue 1) (searched 3 March 2009), MEDLINE, Ovid (1948 to present) (searched 24 June 2011), EMBASE, Ovid (1980 to 2009 Week
Pay for performance refers to the transfer of money or material goods conditional on taking a measurable action or achieving a predetermined performance target. To be included, a study had to report at least one of the following outcomes: changes in targeted measures of provider performance, such as the delivery or utilisation of healthcare services, or patient outcomes, unintended effects and/or changes in resource use. Studies also needed to use one of the following study designs: randomised trial, non-randomised trial, controlled before-after study or interrupted time series study, and had to have been conducted in low- or middle-income countries (as defined by the World Bank).

We aimed to present a meta-analysis of results. However, due to the limited number of studies in each category, the diversity of intervention designs and study methods, as well as important contextual differences, we present a narrative synthesis with separate results from each study.

Nine studies were included in the review: one randomised trial, six controlled before-after studies and two interrupted time series studies (or studies which could be re-analysed as such). The interventions were varied: one used target payments linked to quality of care (in the Philippines). Two used target payments linked to coverage indicators (in Tanzania and Zambia). Three used conditional cash transfers, modified by quality measurements (in Rwanda, Burundi and the Democratic Republic of Congo). Two used conditional cash transfers without quality measures (in Rwanda and Vietnam). One used a mix of conditional cash transfers and target payments (China). Targeted services also varied. Most of the interventions used a wide range of targets covering inpatient, outpatient and preventive care, including a strong emphasis on services for women and children. However, one focused specifically on tuberculosis (the main outcome measure was cases detected); one on hospital revenues; and one on improved treatment of common illnesses in under-sixes. Participants were in most cases in a mix of public and faith-based facilities (dispensaries, health posts, health centres and hospitals), though districts were also involved and in one case payments were made direct to individual private practitioners.

One study was considered to have low risk of bias and one a moderate risk of bias. The other seven studies had a high risk of bias. Only one study included any patient health indicators. Of the four outcome measures, two showed significant improvement for the intervention group (wasting and self reported health by parents of the under-fives), while two showed no significant difference (being C-reactive protein (CRP)-negative and not anaemic). The two more robust studies both found mixed results – gains for some indicators but no improvement for others. Almost all dimensions of potential impact remain under-studied, including intended and unintended impact on health outcomes, equity, organisational change, user payments and satisfaction, resource use and staff satisfaction.

The current evidence base is too weak to draw general conclusions; more robust and also comprehensive studies are needed. Performance-based funding is not a uniform intervention, but rather a range of approaches. Its effects depend on the interaction of several variables, including the design of the intervention (e.g. who receives payments, the magnitude of the incentives, the targets and how they are measured), the amount of additional funding, other ancillary components such as technical support, and contextual factors, including the organisational context in which it is implemented.

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