10 best resources on... pay for performance in low- and middle-income countries

Ayako Honda

Health Economics Unit, School of Public Health and Family Medicine, University of Cape Town, Anzio Road, Observatory, 7925, South Africa. Tel: +27 21 406 6982. Fax: +27 21 448 8152.
E-mail: Ayako.Honda@uct.ac.za

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Introduction

Pay for performance (P4P) is defined as the transfer of money or material goods conditional on taking a measurable action or achieving a predetermined performance target (Eichler 2006). In recent years, P4P has received considerable attention as an innovative health system model to increase the use, quality and efficiency of health care services in low- and middle-income countries (LMIC). In addition, P4P is considered as a means to progress towards achieving the health-related Millennium Development Goals (MDGs) (Montagu and Yamey 2011).

The term P4P is used interchangeably with other terms such as performance incentives, results-based financing (RBF) and performance-based financing (PBF) (Eichler 2006; Oxman and Fretheim 2008; Witter et al. 2012). P4P schemes can operate on either the supply or demand sides of health service provision (Eichler 2006; Oxman and Fretheim 2008). Incentives can be targeted at: (i) health care recipients, (ii) individual health care providers, (iii) health care facilities, (iv) private sector organizations, and (v) governments or public sector organizations (Oxman and Fretheim 2008).

This paper aims to share some of the current resources on the application of P4P in LMIC, highlighting concept papers, systematic reviews, recent empirical studies and debate that are considered to provide a holistic view of P4P schemes. As some of the broadly defined P4P concepts do not consider demand-side P4P (Lagarde et al. 2010), the selection of resources in this article focuses largely on supply-side P4P schemes.

Concept paper

Eichler and co-authors (2009) consider performance incentives as an approach to using money or material goods to affect the actions of those delivering and those receiving health services. They highlight three challenges in health systems in LMIC—low utilization rates; inefficient services; and poor quality services—and then examine how performance incentives can address these challenges. Recognizing that the effects of a performance incentive are likely to depend on the scheme design and implementation, the authors discuss elements of good design and implementation and outline a learning agenda and evaluation framework. The publication presents case studies on particular incentive-types (conditional cash transfers), countries (Haiti, Nicaragua, Rwanda and Afghanistan), and disease-types (tuberculosis), describing programme implementations and the demand- and supply-side results emerging when incentives are introduced.

Systematic reviews

Four systematic review papers examining current literature on P4P application in the health sector in LMIC are presented in this section. All four papers suggest that: there are large variations in how P4P schemes operate; there are methodological shortfalls in the current evidence, particularly in the absence of controls in most of the studies and difficulties in isolating the effects of P4P when part of a larger reform package; and there is a lack of clear evidence on the effects of P4P on use, quality and efficiencies in health care services in LMIC.

An appraisal of selected evaluations of health sector RBF schemes in LMIC by Oxman and Fretheim (2009) found that RBF has commonly been part of a package that includes increased funding, technical support, training, management changes and new information systems. Consequently, it is not possible to disentangle the effects of the financial incentives as one element of RBF schemes. Also, the paper suggests that RBF schemes can have unintended effects requiring monitoring. The paper emphasizes the need for careful design of RBF schemes, including the level and choice of targets and indicators, the type and magnitude of incentives, the proportion of financing paid based on results, and ancillary components of schemes. For RBF to be effective, it must be part of an appropriate package of

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interventions, and technical capacity or support must be available.

**Eldridge and Palmer (2009)** conducted a systematic review of literature on performance-based payment (PBP) in low-income countries, finding the concept of PBP varies greatly in terms of: who makes payments to whom, and in what sense these payments are ‘performance based’. The paper suggests case studies should describe potential advantages and disadvantages of PBP, determine the factors most influencing success, and record field situations in some detail. The paper emphasizes the importance of planning evaluation and allowing, where possible, for the inclusion of study controls. The authors describe an agenda for future research, including the assessment of the optimal conditions for implementation of PBP schemes in less-developed health systems, the impact of adopting performance measures as targets, and requirements for adequately monitoring PBP.

**Largard and co-authors (2010)** present an overview of the merits and pitfalls of four types of provider payment mechanisms, including P4P. Examining literature from Organisation for Economic Co-operation and Development (OECD) and LMIC countries, evidence on the effectiveness of P4P mechanisms targeting quality improvements was mixed and there is almost no evidence on the effect of P4P schemes on health outcomes and efficiency. Although limited, evidence is emerging on the unintended effects of P4P including: false reporting (gaming), cream-skimming, and detrimental effects on quality of care for conditions not targeted by incentives. The paper argues that the effects of P4P are likely to depend on features of the design, which can vary in terms of: performance measures; payment conditions; key attributes of payment; and whether the health institution or individual workers are rewarded.

**Witter and co-authors (2012)** undertook a systematic literature review on the effects of P4P on the provision of health care and health outcomes in LMIC. Nine studies from eight countries were included in the review: one randomized trial, six controlled before–after studies and two interrupted time series studies. The review found that P4P is not a uniform intervention, but rather a range of approaches. The effects of P4P depend on the interaction between several variables, including the intervention design, amount of additional funding, ancillary components such as technical support, and contextual factors, including the organizational context in which P4P is implemented. The review reports that the quality of current evidence is low, with limited numbers of studies reporting on specific indicators, high risk of bias in most studies, inconsistency in findings, and that it is premature to draw firm conclusions on the effectiveness, or factors determining the effectiveness, of P4P. Most areas of potential impact remain under-studied and, consequently, there is a need for high-quality research into P4P encompassing issues on intended and unintended impacts on health outcomes, equity, organizational change, user payments and satisfaction, resource use and staff satisfaction.

**Recent empirical studies**

While P4P schemes are increasingly popular in LMIC, there is more experience with P4P in the United States, the United Kingdom and other OECD countries (Lagarde *et al.* 2010). Among the P4P experiences in LMIC, most frequently cited are conditional cash transfer programmes in Latin America (Lagarde *et al.* 2007), contracting between government and non-state providers in Cambodia (Lagarde and Palmer 2009), delivery of basic health services through contracted non-governmental organizations in Haiti (Eichler *et al.* 2007) and performance-based pay for health workers in Rwanda (Meessen *et al.* 2006; Soeters *et al.* 2006; Rusa *et al.* 2009).

**Basinga and co-authors (2011)** present a randomized, controlled trial assessing the effect of performance-based payment to health care providers on the use and quality of Rwandan child and maternal health care services. The study examines 166 facilities randomly assigned at the district level either to commence P4P funding between June 2006 and October 2006 (intervention group; *n* = 80), or to continue with traditional, input-based funding until 23 months after the study commenced (control group; *n* = 86). Incentive effects were isolated from resource effects by increasing control facilities’ input-based budgets by the average P4P payments made to intervention facilities. The results showed that P4P led to increased use and quality of several crucial maternal and child health care services, but had no effect on use of prenatal care or on the timely completion of child immunization schedules, indicating that the P4P scheme had the greatest effect on services with the highest payment rates and requiring the least effort from service providers.

Given that international communities have paid considerable attention to the application of P4P interventions in LMIC, more studies in this area can be expected in the next few years (Witter *et al.* 2012). A number of web-based platforms provide up-to-date information on the application of P4P in LMIC, including the Results Based Financing for Health (http://www.rbfhealth.org/rbfhealth/) and the Centre for Global Development: Performance-Based Incentives Working Group (http://www.cgdev.org/section/initiatives/_archive/ghprn/workingsgroups/performance).

**Recent debate**

Intense international debate has been generated over the introduction of P4P in LMIC. While supporters of P4P view it as an innovative approach with strong potential to improve health care service delivery, a number of researchers have expressed concern about the recent optimism in P4P, looking at schemes from a broader, health-systems perspective. Although both stances are supported by a theoretical base, these polarized views require robust empirical evidence to substantiate their positions. Consequently, as the systematic review literature suggests, there is a strong need for studies using sound methodology and considering both intended and unintended impacts from a broader, health-systems perspective.

**Meessen and co-authors (2011),** drawing on recent experience in central Africa, suggest that PBF provides an opportunity for comprehensive reform and that it can help address structural problems in public health services in LMIC. Specifically, they argue that: by granting more autonomy in exchange for greater accountability for results, PBF provides health facilities an opportunity to tailor services to the populations they serve; PBF
can help improve allocative efficiency by strengthening stewardship; and health PBF can deliver a cross-sectoral model for results-based public finance management.

Ireland and co-authors (2011) warn against recent optimism in PBF approaches to health sector reform in LMIC. They argue that: empirical research on PBF should focus on why and how the interventions work in various settings; there are few studies that examine the side-effects of the PBF schemes; and the costs and benefits and financial sustainability of PBF schemes should be considered. Although acknowledging that PBF has a role in improving health worker performance, the authors caution that results-based and economically-driven interventions may not, on their own, adequately respond to patient and community needs.

While growing attention has been paid to the provision of extrinsic incentives to improve health care performance, including P4P, there is potential to improve health care service delivery by appealing to intrinsic motivation, such as the professionalism of health care providers, and there is concern that introduction of external rewards for an actor driven by intrinsic motivation can lower, or even erase, intrinsic motivation (Kalk et al. 2010). In a recent study, Leonard and Masatu (2010) discuss the crowd-out effects of extrinsic incentives over intrinsic motivation such as professionalism among health care providers, and seek a more balanced approach to P4P schemes. The authors examine the potential for improving health care services delivery by appealing to the professionalism of care providers. The study examines the behaviour of 80 practitioners in Tanzania for evidence of professionalism. The results show that about 20% of practitioners behave professionally, and almost half of those who do so practice in the public sector. These workers provide high-quality care even when in an environment that does not reward effort, a finding with important implications for the use of performance-based incentives. The study argues that paying for outputs or outcomes is dangerously close to the commodification of health care, and that if health sector workers are professional, then incentives and professionalism are substitutes, not complements. The study suggests that as research on the benefits of extrinsic incentives in health care continues, researchers should pay attention to a variety of results and the possibility that some of the best clinicians may not be responding to incentives.

De Savigny and co-authors (2009) introduce systems thinking, a problem-solving approach that views problems as part of a wider dynamic system, to consider the hypothetical case of P4P as a system-level intervention that targets multiple building blocks, with potentially powerful effects on other sub-systems. The authors demonstrate how interventions with system-wide impacts could be better designed and evaluated from a systems perspective in order to determine whether an intervention works, how, for whom and under what circumstances. This includes guidance on developing conceptual frameworks and understanding system-wide implications, and an overview of relevant intervention design and evaluation questions, selection of indicators and how to match evaluation and intervention designs. The 10-step concept guide provides useful insight on designing studies to assess the system-wide effects of P4P.

Resources


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