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Effectively engaging the private sector through vouchers and contracting – A case for analysing health governance and context

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ABSTRACT

Health systems of low and middle income countries in the Asia Pacific have been described as mixed, where public and private sector operate in parallel. Gaps in the provision of primary health care (PHC) services have been picked up by the private sector and led to its growth; as can an enabling regulatory environment. The question whether governments should purchase services from the private sector to address gaps in service provision has been fiercely debated. This purposive review draws evidence from systematic reviews, and additional published and grey literature, for input into a policy brief on purchasing PHC-services from the private sector for underserved areas in the Asia Pacific region. Additional published and grey literature on vouchers and contracting as mechanisms to engage the private sector was used to supplement the conclusions from systematic reviews. We analysed the literature through a policy lens, or alternatively, a 'bottom-up' approach which incorporates components of a realist review. Evidence indicates that both vouchers and contracting can improve health service outcomes in underserved areas. These outcomes however are strongly influenced by (1) contextual factors, such as roles and functions attributable to a shared set of key actors (2) the type of delivered services and community demand (3) design of the intervention, notably provider autonomy and trust (4) governance capacity and provision of stewardship. Examining the experience of vouchers and contracting to expand health services through engagement with private sector providers in the Asia Pacific found positive effects with regards to access and utilisation of health services, but more importantly, highlighted the significance of contextual factors, appropriate selection of mechanism for services provided, and governance arrangements and stewardship capacity. In fact, for governments seeking to engage the private sector, analysis of context and capacities are potentially a more useful frame than generalizable outcomes of effectiveness.

1. Introduction

Countries in the Asia Pacific have achieved impressive population health gains in the last few decades, as demonstrated by progress towards the Millennium Development Goals (United Nations, 2013). However, these improvements in health outcomes are not equally distributed across populations. Heterogeneity by geography and socio-economic status has led to concerns about inequitable access to health services (Barros et al., 2012; Bauze et al., 2012). Some of the factors impeding equitable provision of health care are inequalities in the distribution of health care workers and facilities, financial barriers that fall more heavily on the poor, and under-investment in public health services (Efendi, 2012; Kanchanachitra et al., 2011; Meliala et al., 2012).

Health systems of most low and middle income countries (LMIC) in the region have been described as 'mixed' or 'pluralistic' (Lagomarsino et al., 2009; Meessen et al., 2011), terms which describe the public and the private sector operating in parallel and providing, and often also competing for, the same services. The private sector is not homogenous but rather encompasses different entities such as formally trained providers, informal providers like drug stores, spiritual healers and traditional birth attendants (TBA), and non-governmental and faith-based health care organisations (Basu et al., 2012; Berendes et al., 2011).

The role and extent of service provision by the private sector in the Asia Pacific has been categorised into three main geographic areas: (a) Southeast Asia, with a strong private sector providing substantial shares of primary health care (PHC) services and for-profit outweighing not-for-profit providers; (b) Countries of the Pacific where the private sector provides less than half of services

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and faith-based and not-for-profit organisations play a strong role; and (c) China and Mongolia where the private sector mainly provides some specialty services in a partnering role with government (Montagu and Bloom, 2010).

Given the inequities in access noted above, and the increasing contribution from the private sector, a key policy question that emerges is: what is the appropriate role of the private sector, and whether it has potential to contribute to addressing gaps in public service provision. This question has generated considerable debate (Oxfam, 2009; World Bank, 2009). Advocates for the private sector draw on theories of economic markets, claiming that increased competition will improve health service outcomes, such as increased utilization, efficiency, quality, or greater equity (Montagu et al., 2005; Smith et al., 2001). Opponents respond that only the public sector can warrant equitable and universal access (Oxfam, 2009) and that rapid privatization of health care is associated with worse patient outcomes (Basu et al., 2012). Two recent systematic reviews comparing publicly versus privately delivered care in LMIC found no evidence that one sector was clearly superior to the other (Basu et al., 2012; Berendes et al., 2011).

Against this background, we reviewed the available evidence from systematic reviews and the literature describing experience of engaging with the private sector in LMIC in the Asia Pacific to address gaps in public sector provision of PHC-services as a basis for the development of a policy brief for governments in this region (Asia Pacific Observatory, 2014). We used the systematic reviews to identify potentially effective mechanisms for government engagement of the private sector, and then conducted a purposive review of literature describing experiences with the selected mechanisms in the Asia Pacific region.

In recognition of the important role of social, economic and political context in understanding both outcomes and effectiveness of health system interventions in the literature (Sheikh et al., 2011) this review focuses on contextual factors and design features, particularly factors associated with health governance and stewardship, in examining the performance of these schemes and their potential engagement for the provision of PHC- services in LMIC in the Asia Pacific.

In this paper we summarise the evidence obtained from the literature on the selected mechanisms, and provide some recommendations for policy makers on issues that need to be considered in engaging the private sector to provide PHC-services for underserved populations. The first section summarises and discusses factors associated with voucher schemes. The second section focuses on contracting which is followed by a comparative analysis of contextual factors and design features most relevant to both mechanisms. We conclude with a discussion of governance issues common to vouchers and contracting and point out knowledge gaps for future research in this field.

2. Methods

Initially, a search for systematic reviews of purchasing arrangements with the private sector to provide PHC-services in underserved areas was undertaken, using the following definitions:

- Purchasing was defined as the provision of resources from government to private sector providers in return for services, or goods relevant to services. Publications were not excluded if the funding came from development partners rather than government.
- Private providers were limited to formal providers (for- and not-for-profit), i.e. recognized by a regulatory authority or having received training at a recognized institution.
- The definition of underserved areas followed an approach suggested by Patouillard et al. (2007) as either poor population groups or geographic areas with high proportion of poor with reduced access to essential health services.
- Services were limited to PHC-services, defined as the first point of contact with the health care system in a community, comprising promotion, prevention, and treatment services.

Using the definitions above, a search was undertaken of the Cochrane database, Pubmed, and CABI Global Health—limited to publications in English, with an available abstract, published from 2000 onward. This identified 56 abstracts. Abstracts were reviewed manually and reviews were excluded if (1) studies were not systematic reviews (2) did not provide information to distinguish between public and private providers (3) assessed other arrangements not directly including providers, such as conditional cash transfers (4) or reported on informal private providers only, leaving 15 systematic reviews for further analysis.

Vouchers and contracting were selected as purchasing mechanisms for further realist review based on the extent of experience in using these mechanisms in LMIC of the Asia Pacific, and on the systematic review conclusions that these mechanisms had been able to achieve improvements in service outcomes (particularly utilisation or access) in some situations.

We used a realist approach, which tries to elicit 'what worked in which context, for whom and why', for more in depth analysis of experience in using these mechanisms. The benefit of using a realist approach is that, as Pawson et al. (2005) formulate '[t]he results of the review combine theoretical understanding and empirical evidence, and focus on explaining the relationship between the context in which the intervention is applied, the mechanisms by which it works and the outcomes which are produced'.

The realist review focused on (1) social, economic and political context (2) design features of vouchers and contracting and (3) characteristics of delivered services and populations, and outcomes obtained by drawing on literature describing implementation of one or both of these mechanisms. The review used publications identified in the systematic reviews, complemented by identification of references and an additional search on Pubmed and Google Scholar for peer-reviewed and grey literature, using simple search terms for vouchers and/or contracting with location in Asia. Three reviewers identified the most relevant contextual factors with impact on health service outcomes for these schemes.

This study did not require ethics approval as no primary data collection or analysis was included. The authors did not deal with any kind of patient related data, the analysis was rather a review of previously published and grey literature.

3. Results

3.1. Effectiveness of purchasing mechanisms-results from systematic reviews

The included 15 systematic reviews were mostly of low (n = 4) to moderate (n = 10) quality according to the AMSTAR criteria (Shea et al., 2007). This section presents a summary of the effectiveness of identified mechanisms to deliver PHC-services to underserved populations.

There was some evidence that contracting can improve availability and utilization of services, especially by underserved populations (Liu et al., 2008). The public sector, however, seemed to deliver care of better quality at an overall lower cost (Patouillard et al., 2007). Nevertheless, out-of-pocket (OOP) expenditure at the household level was reduced for contracted services. The overall impact of contracting on health systems remained

unexplored and concerns existed for health service outcomes for services not contracted (Liu et al., 2008). One review concluded that contracting was an effective option in situations with an absent or weak public sector unable to reach some populations, as in "underserved areas or post-conflict settings." (Lagarde and Palmer, 2009).

There was a large volume of studies on vouchers delivering usually well-defined services, largely for reproductive health. Reviews identified mostly positive results, such as decreased OOP, increased knowledge among patients and physicians, increased utilization of services (Bellows et al., 2011), as well as increased patient satisfaction. Evidence for successful targeting was modest and the overall health system impact was not assessed (C.M. Brody et al., 2013b).

Some evidence on another mechanism, social franchising, found increased service uptake and satisfaction, but no evidence supported increased availability of services in underserved areas. Franchising might rather shift providers between various sources of care. Thus, it might be of benefit in areas with a large but unregulated private sector (Beyeler et al., 2013).

Public-private collaboration was less extensively studied and included studies were silent on positive improvements (Peters et al., 2004). Furthermore, operational issues, such as a lack of capability and willingness in the public sector to collaborate with private providers were contra-productive (Malmborg et al., 2006).

Social marketing was applied in the area of reproductive health and to the distribution of insecticide treated bed-nets (ITN) and showed mostly an increase of usage. However, the impact on the poor was the subject of one study only. The authors further stated that 'it is not possible to prove from the available literature that private sector interventions benefit the poor and improve equity' (Patouillard et al., 2007).

In summary, there was the best evidence for contracting and vouchers as mechanisms to engage the private sector in provision of PHC-services to underserved areas.

4. Vouchers

4.1. Mechanism

Vouchers are a form of demand-side health financing which provide previously powerless populations with purchasing power through targeted financing for health services (Bellows et al., 2011; C.M. Brody et al., 2013b). Voucher schemes provide a voucher for specific services with enrolled providers who are reimbursed for services rendered. Vouchers act as a 'direct link between the intended beneficiary, the subsidy, and the desired output' (Sandiford et al., 2005).

Voucher schemes were found in the literature from eight Asian countries: Bangladesh (S. Ahmed and Khan, 2011; Asian Development Bank, 2012; Nguyen et al., 2012; Schmidt et al., 2010), Cambodia (C. Brody et al., 2013a; Ir et al., 2010), China (Bellows et al., 2011), India (Acharya and McNamee, 2009; Department of Planning and Evaluation (2010); Health and Family Welfare Department, 2011; Sidney et al., 2012; United Nations Children's Fund (UNICEF), December 2011), Indonesia (Bellows et al., 2011), Pakistan (Agha, 2011a,b; Bashir et al., 2009), and from Korea and Taiwan from the 1960/70s (Bellows et al., 2011).

The literature documents a number of potential benefits of voucher schemes. (1) The ability to target resources at poor/high risk groups (Ir et al., 2010) (2) Increased quality of services through selection of providers based on standards (C.M. Brody et al., 2013b; Gorter et al., 2013) and competition between providers (Bellows et al., 2011; Gorter et al., 2013) (3) Improved efficiency and lowered cost of services through market mechanisms of supply and demand (Bhatia et al., 2006) (4) Increased utilisation of services through consumer subsidies (S. Ahmed and Khan, 2011; Warren et al., 2011) (5) Better population health resulting from increased quality, equity, utilisation and efficiency (Warren et al., 2011) (6) Rapid evaluation and monitoring (Sandiford et al., 2005).

4.2. Evidence about voucher schemes

Systematic reviews of voucher programs suggested mixed results. The voucher experience documented in the Asia Pacific related mostly to provision of reproductive health services but also sexually transmitted infections (STI) and ITN; one study evaluated the provision of general health services (Bellows et al., 2011; C. M. Brody et al., 2013b; Patouillard et al., 2007).

The reviews found that voucher programmes were successful in targeting high-risk groups. Bellows et al. (2011) found overall higher treatment costs for STI but lower costs per cured patient and decreased OOP expenditure in areas with vouchers. Facility-based deliveries, ante- and post-natal care, and use of contraceptives increased along with health knowledge. Some positive health impact was shown in reduction of unwanted pregnancies and lower STI prevalence. Evidence of increased utilization and uptake among the poor was robust (C. M. Brody et al., 2013b; Patouillard et al., 2007). However, the impact of voucher programs on the overall health system was not explored in any study.

4.3. Contextual factors influencing the success of voucher schemes

4.3.1. The capacity of public administration

Literature indicated that governance and stewardship capacity of public administration were key elements influencing performance and operation of voucher schemes. Public administrative capacity was often insufficient to manage the implementation of voucher programs and required additional inputs (Department of Planning and Evaluation (2010)). While initial stock-taking, including health needs, provider capacity, costs and identification of populations underserved, is needed for implementation planning and M&E (Bashir et al., 2009), this was not reflected in the literature. Additionally, the underlying rationale and process of decision-making to initiate voucher schemes was rarely described.

4.3.2. Development partners (DP) involvement

DPs were involved in all schemes (Agha, 2011a,b; C. Brody et al., 2013a; Futures Group, 2012; Hatt et al., 2010; Ir et al., 2010; Mavalankar et al., 2009) with only one exception (Department of Planning and Evaluation (2010)). This raises concerns about the extent of alignment of voucher schemes with national health priorities and strategies and sustainability (Peters et al., 2013; Stierman et al., 2013).

4.3.3. Capacity of providers

Increased quality through competition relies on multiple providers being enrolled in the voucher scheme of a particular area (Schmidt et al., 2010). Availability of private providers varied greatly across the region (S. Ahmed and Khan, 2011; Sidney et al., 2012) and tended to be concentrated in urban areas (Acharya and McNamee, 2009; Bashir et al., 2009). Introduction of new providers seemed possible for services with low cost of market-entry (C.M. Brody et al., 2013b). Many health services require specialty human resources, limiting the ability of voucher schemes to encourage entry of new providers (S. Ahmed and Khan, 2011; Schmidt et al., 2010).

The selection of providers for voucher schemes varied extensively, but usually included consideration of the availability of appropriate facilities, staffing, training credentials, proximity to

target populations, existing health service utilization rates, and willingness to participate in ongoing monitoring (Acharya and McNamee, 2009; Agha, 2011b; Department of Planning and Evaluation (2010); Futures Group, 2012; Ir et al., 2010).

4.3.4. Provider motivation, payment methods and costs

Payment methods varied widely. Individual services could be directly reimbursed, or block payments could be made based on average costing for a group of services, e.g. comprehensive MCH care. Some schemes avoided separate rates for higher cost services for fear of induced demand (Acharya and McNamee, 2009). Informal payments at public facilities were reported in Cambodia (C. Brody et al., 2013a) and in India (Acharya and McNamee, 2009; Bhat et al., 2009), which might act as deterrent along with the cost of vouchers in some schemes.

Rates for provider payment must take into account the cost differentials in public versus private systems. In one Indian scheme, rates were not attractive enough to engage private providers. In rural areas, the benefit of attracting new clients into the private sector was a motivating factor (Futures Group, 2012). One urban scheme limited the number of providers to encourage competition (Futures Group, 2012).

4.3.5. Patient preferences and beliefs and community engagement

Patient beliefs and preferences, e.g. use of TBA, home deliveries or use of reproductive health services (Acharya and McNamee, 2009; Agha, 2011a,b), can inhibit uptake of vouchers, which operate within formal health settings (C. Brody et al., 2013a). Prior experiences with health providers can be supportive if positive, or act as deterrent if negative. Cultural attitudes regarding the role of women can influence access to finances, decision-making authority and basic health knowledge, especially for reproductive health services (C. Brody et al., 2013a).

Awareness-raising through inter-personal communication and community mobilization using female/community health workers were among the methods used to address target populations, with varied success (Bashir et al., 2009; C. Brody et al., 2013a; Futures Group, 2012; Health and Family Welfare Department, 2011). A maternal health scheme in Pakistan attributed great importance to the role of outreach workers in promoting purchase of vouchers (Agha, 2011b). An Indian scheme depended solely on already overburdened health workers to promote vouchers, resulting in low uptake (Department of Planning and Evaluation (2010)).

4.3.6. Monitoring & evaluation

By design, voucher schemes generally focus on particular health services making M&E straightforward. Voucher schemes relied on functioning administrative and monitoring systems to reimburse providers, target beneficiaries and track services (Rob et al., 2011; Schmidt et al., 2010). None of the literature reviewed discussed the impact of voucher programs on other health service areas.

Through this purposive review we identified evidence for major contextual factors associated with voucher programs in LMIC in the Asia Pacific. Schemes were more successful in contexts where public sector providers were already operating, and for specific services with relatively low levels of additionally required investment. Low community demand required additional investment in information dissemination, and in building provider capacity, particularly by including NGOs as community outreach workers. Further investment is needed for distribution of vouchers and payment, and in monitoring impact to ensure rates of payment are adequate.

5. Contracting

5.1. Mechanism

Contracting is defined as 'a voluntary alliance between independent partners who accept reciprocal duties and obligations and who expect to benefit from their relationship' (Perrot, 2004). In essence rather than providing the service itself, a health actor (i.e. MOH) entrusts a partner (private for- or not-for-profit) with providing the service in exchange for payment (Perrot, 2004).

Proponents of contracting argue that it allows greater focus on measurable results, increases managerial autonomy, draws on private sector expertise and increases the effectiveness and efficiency of services through competition (Lagarde and Palmer, 2009). Payments are usually on the 'supply side,' with the government directly purchasing a set quantity of services (Lagomarsino et al., 2009). However, it can be questioned whether these elements are achievable in some LMIC given constraints of: limited information about private actors in the health system; administrative capacity constraints; and policy capture and corruption.

Over the last decade countries in the Asia LMIC region, such as Bangladesh, India, Cambodia and Afghanistan have piloted contracting-out programs for the delivery of PHC-services. The types of services contracted fall into two categories: (1) specific services for defined conditions i.e. TB (Zafar Ullah et al., 2006), HIV (Guiness, 2011) and malnutrition (Khan and Ahmed, 2003); or (2) as a package of PHC-services (Arur et al., 2010; Bloom et al., 2006; Heard et al., 2011).

5.2. Evidence for contracting

A number of reviews of contracting have been completed over the last 10 years with mixed results. Some (Loevinsohn and Harding, 2005; Slack and Savedoff, 2001) have concluded that contracting provided an effective way for governments to quickly improve the provision of important health services. Others (Lagarde and Palmer, 2009) questioned whether the amount and quality of the evidence was sufficient to know whether contracting actually worked. A review by Liu et al. (2008) suggested that contracting improved access to health services particularly in underserved areas, but effects on other dimensions such as quality, efficiency and equity remained unknown. The reported outcomes for contracting-out of health services to private providers in the LMIC context included: increased coverage of services (Guiness, 2011; Levin and Kaddar, 2011; Liu et al., 2008; Loevinsohn & Harding; World Bank, 2007; Zafar Ullah et al., 2006); sustainable NGO services as a result of improved government-NGO collaboration; improved accountability through more transparent monitoring of the contract arrangement (Domberger and Jensen, 1997; Heard et al., 2011); and provision of services on a larger scale (Loevinsohn & Harding).

5.3. Contextual factors influencing the success of contracting schemes

Some of the most relevant contextual factors that influenced the effectiveness of contracting (1) regulatory environment, (2) capacity of steward, (3) capacity of purchaser, (4) nature of service, (5) nature of provider market, (6) funding source and (7) degree of trust, are identified below.

5.3.1. Government/stewardship capacity

Stewardship capacity was perceived as fundamental to effective purchasing arrangements, particularly when contracting was rolled out at scale (i.e. regionally and/or nationally). Effective stewardship

requires a culture of trust, networks, links, collaboration, alliances, and information gathering with the people the government intends to serve (Boffin, 2002; Kaboru, 2012; Shukla and Johnson Lassner, 2012). The range of actors in mixed health systems in LMIC coupled with compromised or inadequate monitoring and regulatory systems made building networks of trust difficult. Contracting-out in the face of low stewardship capacity and without investment in capacity building made transparent institutionalising and accountable processes difficult (Bennett and Mills, 1998; Duc et al., 2012).

5.3.2. Development partners involvement

Development partners have been major funders and influencers of private sector engagement through contracting in Asian LMIC and results have been generally positive, including contracting NGOs in Afghanistan, Cambodia, and urban Bangladesh (Arur et al., 2010; Bloom et al., 2006; Heard et al., 2013). This support often focused on building purchaser capacity to manage the contracting arrangement, i.e. third party contract management agencies or monitoring and reporting systems (England & HLSP Institute, 2008). A main concern was the sustainability of such endeavours if donor funding were withdrawn. In the case of Cambodia, there has been a gradual transition to an internal contracting model, with investments in building public capacity for contracting suggesting sustainability going forward.

5.3.3. Purchaser and provider capacity

Resource shortages, mismanagement, lack of accountability and absent or inaccessible health services in the public sector are thought to have led to the growth of the substantial NGO sector in most Asian LMIC (Zafar Ullah et al., 2006). NGOs which collaborated at various levels with the public sector—formally or informally—were often less constrained by bureaucratic processes, thus better able to cover their costs, and in some cases more knowledgeable and skilled compared to public sector providers (Heard et al., 2013; Zafar Ullah et al., 2006). However, success of these collaborations depended on the capacity of all parties to deliver what they committed to.

5.3.4. Autonomy, collaboration and trust

Provider autonomy and the relationship with the purchaser were important and related elements to successful contracting arrangements. Four studies (Arur et al., 2010; Bennett and Mills, 1998; Heard et al., 2011; Loevinsohn & Harding) reported that the most successful arrangements gave the maximum amount of autonomy to the provider, including control over management and human resources. However, autonomy of private providers in the context of contracting-out needs to be built on a foundation of trust. In the Asia LMIC context, some contracting programs made significant investments (Arur et al., 2010; Bloom et al., 2006) in purchaser capacities to engage and manage relationships with providers to overcome lack of trust and negative purchaser–provider interactions (Guiness, 2011; Lonnroth et al., 2006; Zafar Ullah et al., 2006).

5.3.5. The regulatory system and monitoring

Effective contracting with private providers was likely to benefit from an effective system of regulation for private providers which was often missing in LMIC in Asia (Levin and Kaddar, 2011). The main means, if any, through which governments regulated private providers was contract management and performance monitoring (Montagu and Bloom, 2010). In Afghanistan, Cambodia and Bangladesh, monitoring performance was taken very seriously to try to compensate for broader institutional weaknesses (Arur et al., 2010; Bloom et al., 2006; Heard et al., 2013). However, the ability to monitor quality of care and to place sanctions on providers was often limited, even in cases where contracting has been formalised and results generally positive (Arur et al., 2010; Bloom et al., 2006). Therefore private providers were not incentivized appropriately to follow guidelines.

In contrast to voucher schemes, contracting enables the government to bring private sector providers to deliver services in previously underserved areas, rather than rely on pre-existing private providers. Contracting also provides an opportunity to deliver more complex services, including, if necessary, investment in capacity building. However, the contracting relationship requires expertise and capacity in management, and an underlying relationship of trust, and may be more suitable for the engagement of not-for-profit providers.

6. Discussion

The examination of vouchers and contracting through a realist lens showed that both mechanisms were able to engage the private sector effectively to provide PHC-services. The degree of effectiveness, however, ranging from improvements in multiple dimensions of health service outcomes to no improvement at all, was dependent on appropriate consideration of context, characteristics of provided services, and design of the intervention.

6.1. Contextual factors

Contextual features principally related to the roles and functions of the key set of actors involved in both purchasing mechanisms: government, development partners, providers and users. Expectations, strategic goals, mutual trust, and interactions between these actors in pluralistic health systems in LMIC determined success or failure of the government purchasing PHC-services for underserved areas. Key factors identified in relation to each set of actors can be summarized as follows:

Governments in the region were involved in a variety of tasks and had to fulfil a broad set of functions. Providing stewardship to a pluralistic health system was necessary to integrate services provided by the private sector into the strategic goals and objectives of the health system. Stewardship and execution of governance functions, such as guiding policy processes and building trust in the interest of collaboration, were hampered by a number of factors. Despite the recognized need for an initial stocktaking prior to purchasing there was a surprising lack of accounts of how decision making processes informed purchasing. Regulatory capacity was often too weak to implement schemes without external support, and implementation was further complicated by lack of strong M&E frameworks. Capacity for M&E was a further prerequisite for the selection of the most appropriate providers and their reimbursement as for the identification and targeting of beneficiaries.

Development partners provided varying degrees of funding to essentially all evaluated schemes. Nevertheless, the literature remained silent on political processes preceding the provision of funds and whether funding was aligned with country strategies and goals. This raised the question whether some of the issues governments were facing, such as uninformed decision making or misalignment with national priorities, were at least partly due to external forces. In this context, it seemed notable that some countries made a commitment to increased collaboration with the private sector at the same time as the receipt of significant development funds for contracting.

Provider availability, capacity and skills to provide purchased services were another set of factors common to both schemes. These interacted directly with type and complexity of purchased services. Relationships between the public and the private sector,

mutual trust, provider autonomy and discretion were highlighted as key to success of vouchers and contracting. Governments seemed to have a predilection for engagement of not-for-profit providers, such as NGOs. However, literature also revealed that health outcomes differed by provider group. Thus, selection of a blend of providers best placed to tackle health needs through a transparent process was another lesson to consider when purchasing.

Users were the final actors identified. The need to link the provision of purchased services to users and communities was a prerequisite to create demand for services. The literature was rich with examples of how cultural norms and beliefs posed barriers to accessing services, if not properly addressed. There was often a lack of understanding of the benefits of health services, which therefore required health education and communication for the target community. Moreover, users showed preferences for particular providers often based on assumptions rather than real advantages, perhaps related to the more patient-centered provision of services by the private sector.

6.2. Type of services delivered

Although it was not the purpose of this review to compare whether vouchers or contracting can deliver better health outcomes, the 'realist' approach identified circumstances favouring the delivery of services through either vouchers or contracting. Especially important here were characteristics of a particular set of services.

Complexity of purchased services differed between the two schemes. Global experience with vouchers was, apart from the provision of goods, almost exclusively limited to reproductive health services. Overall, vouchers seemed more suitable to provide well-defined and simpler health services. Contracting was used to provide both specific and more complex services, ranging from the provision of TB- services to the supply of comprehensive PHC packages. Thus, contracting might be more suitable for the provision of complex services.

A second aspect of the type of services was the level of community demand for the services. Where there was already community demand, there was less need to invest in promotion and information dissemination and reduction of financial barriers such as through the provision of vouchers was sufficient to increase utilization. However, where the service was new, or the community did not recognize the advantages of the service, investment in community education, either by the providers, such as through inclusion in the contract, or by public health promotion, was needed.

6.3. Design of intervention

A key aspect of the intervention, i.e. vouchers or contracting, that influenced effectiveness was the extent of transfer of autonomy and risk from the government to the provider. Delivery of more complex services required a greater degree of provider discretion, and hence greater autonomy, equalling the transfer of control as well as risk, to the provider. A logical consequence of a larger degree of autonomy, however, was the need for greater M&E capacity of the purchaser side and the provider side. Hence, resources for building-up government capacity in parallel to the complexity of purchased services have to be considered, or contracted-in from a third party, like international NGOs. Contracting was generally a more suitable model for the management of services requiring greater autonomy, with the most successful examples providing greater degrees of autonomy to providers. Other key aspects are the extent to which the purchasing enables inclusion of the public sector, or impacts on resources available to the public sector.

6.4. Governance and stewardship

Distinct from government, governance relates to the structures and processes that distribute power and authority in decision making within and between institutions (Brinkerhoff and Bossert, 2008). It has particularly been applied to the analysis of principal–agent relationships between various actors within the health system (Brinkerhoff and Bossert, 2013). Purchasing from the private sector involves changes in the relationship between government and providers, with the government acting as principal transferring some autonomy and resources to the private sector as its agent. Governance is also relevant to the decision to purchase from the private sector, the selection of the appropriate purchasing mechanism, and the ongoing M&E of the effectiveness of that mechanism.

Stewardship relates to the role of government in 'formulating strategic policy direction, ensuring good regulation and appropriate tools for implementing it, and fostering the necessary intelligence on the health system's performance to ensure accountability and transparency' (Travis et al., 2002). The government's role as a steward emerges in the alignment of the purchasing arrangements with the priorities and longer term strategic goals for the health system. A key aspect is whether the engagement of the private sector is seen as a short term measure to cover a temporary gap in public service provision, or whether it is part of a longer term strategy to build collaboration between public and private sectors in addressing population health needs. The government's role as a steward is also related to its capacity to manage the process of purchasing, including linking payments to expected outputs, and rigorous M&E systems.

The importance of health governance and stewardship for optimizing health outcomes in mixed systems is recognized in the literature (Hanson et al., 2008; Montagu et al., 2011). A lack of governance capacity and weak regulation in the health sector has been associated with potentially creating an 'enabling environment' for the private sector (Lagomarsino et al. (2009); Nishtar, 2007). Lagomarsino et al. (2009) emphasised the need for governments to develop their capacity to provide stewardship of mixed systems and engage the private sector, and identified regulation, financing and purchasing as key functions for attention.

7. Conclusions

This examination of the experience of two commonly used mechanisms for government purchasing of PHC-services from the private sector using a 'realist lens' confirms the importance of contextual factors, selection of the appropriate mechanism for the services required, and, in particular, appropriate governance arrangements and stewardship capacity. Our findings assist in identifying the issues that need to be addressed by governments interested in engaging the private sector to deliver PHC-services, but do not claim to determine whether public or private provision is more effective in a particular situation. Indeed, these findings suggest that generalizable conclusions on effectiveness are likely to be less useful than an analysis of the specific context, needs and capacities of public and private sectors.

In relation to the two mechanisms on which we focused, this analysis identifies that vouchers are more suitable for contexts where private sector providers already operate, and for the delivery of specific services. Governments need to be prepared to provide additional investment in establishing the voucher administration arrangements, provision of information to targeted community members, and capacity building of providers, for the introduction

of new services, or to reach previously underserved community members.

While contracting provides an opportunity to bring private sector providers to communities underserved by either public or private providers. It is also possible to deliver more complex services. However, governments need to be prepared to invest in capacity for effective contract management, and to build up relationships of trust with providers, and it may be more appropriate to engage not-for-profit rather than for-profit providers.

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