4. Purchasing

**Highlights**

- Purchasing is important for incentivizing quality and efficiency. Countries are introducing complex payment reforms that require improved data collection and analysis and management to address adverse effects, including those on nonhealth sectors.

- A growing share of Bank operations are supporting countries in purchasing reforms and most of this support is to performance- and results-based payments in low-income settings. In addition, the Bank helped in building institutional and administrative capacity and investment in information to assess provider performance.

- Service use has increased when countries move from line-item budgets to paying providers for activities or performance. A change in provider payment method primarily benefits individuals seeking care. Demand-side barriers, such as user fees, and high administrative costs remain concerns for efficiency and financial sustainability of Bank support.

- Purchasing reforms are likely not sustained unless they are embedded in overall health financing, and the broader public finance context and future financing are assured.

The objective of purchasing is for providers to deliver quality care efficiently to individuals who need it. Purchasing is challenged by the financial incentives of various provider payment methods that transfer funds from the purchaser (e.g., government units and insurers) to providers and by the paucity of information on providers’ reactions to these methods. Whether these incentives lead to the desired outcome heavily depends on the institutional context for providers and how they react to them.

How did the World Bank Group support countries in purchasing, and what evidence is there for improved equity in financing and service use, financial protection, and efficiency? This chapter addresses these questions. It also includes findings from the country case studies presented in appendix E.

**Challenges**

Financial incentives set by the payment method may encourage providers to change the number of services, manage costs, and improve quality of care, all of which can affect efficiency (Ellis and McGuire 1996) (Table 4.1). Line-item budgets and hospital per diem are still common in middle- and low-income countries. But these two payment methods do not set incentives for providers to become more efficient or offer better care. To increase the number of health services, governments and
insurers increasingly pay providers based on their activities including through fee-for-service and Diagnosis-Related Groups (DRGs) which reimburse hospitals a fixed amount per patient depending on the diagnosis. In the U.S. Medicare system the average length of hospital stay fell by 15 percent in the first three years after the shift to DRGs (Cashin et al. 2005). But activity-based payment has cost implications for the payer. In the Czech Republic, the move from line-item budgets to fee for service led to an increase in activities and 46 percent growth in hospital expenditures from 1992 to 1995 (Langenbrunner et al. 2005).

Table 4.1. Provider Payment Methods and Related Incentives and Challenges

<table>
<thead>
<tr>
<th>Payment Methods</th>
<th>Financial Incentives to Providers</th>
<th>Challenges</th>
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<tbody>
<tr>
<td>Line-item budget</td>
<td>Increase number of input factors (e.g., bed, staff) and use full budget</td>
<td>Low productivity</td>
</tr>
<tr>
<td>Activity-based</td>
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<tr>
<td>Fee for service</td>
<td>Increase number of incentivized activities (e.g., services per patient, hospital days, admissions, cases treated)</td>
<td>Inefficient service use; cost increase</td>
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<tr>
<td>Per diem for hospital day</td>
<td></td>
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<tr>
<td>Case based (e.g., DRG)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay for performance</td>
<td>Increase number of services leading to improved quality or efficiency “Code creep” (distortion of treatment toward those with higher payment)</td>
<td>Transparency of information on performance Inefficient service use; cost increase</td>
</tr>
<tr>
<td>Capitation</td>
<td>Treat patients within budget</td>
<td>Substandard quality</td>
</tr>
<tr>
<td>Global budget</td>
<td>Exclude high-risk patients</td>
<td></td>
</tr>
</tbody>
</table>

Source: Langenbrunner et al. (2009).

Prospective payment—including capitation based on the number of individuals registered with the provider and global budgets to hospitals to provide a set of services—shifts the financial risk to the providers, setting an incentive to increase efficiency. In Ireland the move to capitation led to a decline of 20 percent in the number of outpatient visits (Langenbrunner et al. 2005). In the worst case, providers reduce their costs by skimping care or discourage individuals with costlier health problems from registering. Mixed payment methods are frequently used, such as capitation adjusted by some activity indicator (e.g., number or coverage of preventive services or quality).

To improve quality and efficiency, some countries including the United Kingdom and the United States have introduced performance payment to compensate providers for meeting preset quality and efficiency measures. The evidence base linking performance-based payments to better quality of care is thin in Organisation for Economic Co-operation and Development (OECD) countries (Box 4.1). Similarly, no systematic review shows the impact of performance-based payments in low- and
middle-income countries. A review of nine impact evaluations finds that their effect on quality of care, antenatal care, institutional deliveries, preventive care for children, and outpatient visits is unclear. While performance-based payments increase facility revenues, their impact on efficiency is yet to be ascertained. The review also found little evidence that such payments have triggered for managerial autonomy in health facilities (Witter et al. 2012).

**Box 4.1. What Is the Effect of Performance-Based Payments in OECD Countries?**

The evidence base linking performance-based payments to better quality of care is thin. Most studies from the United States and United Kingdom show inconsistent efficacy or have revealed unintended effects, such as improved documentation without much change in quality of care (Epstein 2007). Maynard (2012) also finds that most studies were conducted without control groups and had methodological flaws. He finds that studies with control groups show modestly improved quality scores in participating health facilities, with the lowest improvements in the already highest performing hospitals, and that larger financial incentives produced greater effects than smaller incentives. Still, the financial incentive seems to diminish over time. U.S. hospitals reported gains for the first three years, but afterwards showed no difference in the performance of the two study groups. While the design and implementation costs of performance-based payment are considerable, none of the studies has conducted a relative cost-effectiveness analysis of these programs. Maynard (2012) concludes that the scale up of performance-based payments in OECD countries was made based on poorly designed, executed, and evaluated pay-for-performance programs, which may even raise costs and worsen efficiency.

Although performance-based payment is often introduced alongside public reporting of performance results, few studies have identified whether improved performance stems from the performance-based payment itself or from the information on provider performance, which affects the reputation of the health care provider. One study suggests that the incremental effect of performance-based payment over public reporting of performance is small, around 3 percent performance improvement over two years, and varies according to baseline performance with the largest improvements observed among the poorest performing hospitals (Lindenauer et al. 2007). This finding has important cost implications given the high implementation costs of performance payment.

In addition to these constraints in provider payments, governments are challenged by insufficient information, unclearly defined benefit packages, and institutional limitations when designing the purchasing function. Asymmetric information is a major constraint for activity- and performance-based payments, particularly in low-income settings. The difficulty is choosing appropriate measures and benchmarks, and collecting reliable and valid information on provider performance on the basis of which payments are made. But the purchaser—especially in countries with weak data systems—often has little information on how health care was delivered. Another problem is that in many countries the health care benefit package is nominally comprehensive, but in practice it is narrowly defined owing to provider and financial constraints. This means that patients continue to pay user fees for
goods and services that are meant to be in the package and financed by the government or insurance.

Institutional reforms support the effect of provider payments in public health facilities. While private providers can adjust their resources, managers in public facilities seldom have the autonomy to respond to the financial incentives set by the payment method and improve efficiency by adjusting the input mix, such as staff and medical supplies. Thus changing provider incentives needs to be accompanied by public sector reforms. Concerns arise if incentives cause adverse behavior among providers, as it may lead to cost shifting across different payers or to spillover effects in other sectors (e.g., payments may lead to wage increases in the health sector and put pressure on the government to increase wages in other sectors).

Given the complexity of purchasing, purchasing needs to be fully integrated into the overall health financing and public finance context (Box 4.2). Unintended consequences such as spillover effects on other sectors need to be examined and addressed.

**Box 4.2. Integrated Approach to Purchasing**

An integrated approach consists of strategic purchasing, defining which interventions should be purchased in response to population needs, how they should be purchased, for whom, and from which providers (Figueras et al. 2005). IEG also finds that an integrated approach to purchasing considers the broader public sector context, including relevant institutional reforms needed to implement purchasing reforms, while attempting to foresee and forestall any potentially adverse effects.

**Bank Group Support to Purchasing**

An increasing share of Bank health financing projects supports governments and insurers in purchasing. Bank projects generally support health care providers and the purchaser who pays providers.

In line with the Bank’s 2007 Health, Nutrition, and Population (HNP) strategy, the Bank has introduced a focus on results and better performance in health facilities. The Bank assisted governments and insurers with changing their provider payment methods. It also helped build institutions through information, monitoring and evaluation (M&E), and regulations to define benefits. In some countries, these operations also support the abolition or reduction of user fees paid by patients, including in Argentina, Benin, Burundi, Djibouti, Nigeria, Senegal, and Zimbabwe.
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ANALYTICAL WORK

The Bank’s health teams have prepared limited analytical work on purchasing (Moreno-Serra and Wagstaff 2010); however, this body of work is growing as shown by an increasing number of impact evaluations on provider payment reforms supported by results-based financing projects (appendix Figure B.4). So far, the Bank’s impact evaluations have not analyzed the distributional effect of payment reforms and whether the poor benefit. M&E frameworks in Bank projects are presented in chapter 5.

PROVIDER PAYMENT METHODS

Some 60 percent of provider payment methods supported by Bank projects include a performance- or results-based component; project documents use these terms interchangeably (Figure 4.1). Most are introduced in health systems with automatic coverage in low-income settings and not by using the health insurer as the purchaser. A few Bank operations, mainly in Europe, supported DRG payment from health insurers to hospitals or some other case-based payment. Similarly, capitation payment adjusted by some activity and case-mix indicators are introduced mainly in Europe and Central Asia, Ghana, Latin American countries, and Vietnam. In Armenia, RBF is managed by the country’s single payer state health agency and is implemented nationally. In some countries such as Rwanda the Bank helped scale up performance-based payment developed by other donors.²

Figure 4.1. Provider Payment Methods Supported by Bank Projects, FY03–12

A more-detailed review of the Bank’s project documents categorizes Bank support in performance- or results-based payment along geographic lines. In reality, most of these payment methods are mixed payments that combine some aspects of activity-based payments (e.g., fee-for-service and case-based payment) with some quality
indicators. More recently, this type of Bank support is implemented with the support of results-based financing (RBF) operations.

- **Afghanistan.** The Bank supported the Ministry of Public Health to establish performance-based payment for contracted nongovernmental providers. Nongovernmental organizations (NGOs) are paid a capitation amount adjusted by scorecard indicators such as patient satisfaction and staff availability. The payment is a 1 percent bonus if the quality score improves. Bank support has recently transitioned to helping government paying providers a fee-for-service amount to increase the number of maternal and child health services.

- **Africa, including Benin, Burundi, Central African Republic, and Nigeria.** In these countries the Bank supports governments in the introduction of mixed payment methods to providers consisting of fee-for-service and case-based payment for specific treatments or diagnoses, such as number of hypertension cases. This payment sets an incentive to increase the number of services for which a fee is paid and to diagnose more patients with diagnoses that have higher reimbursement. It can also have adverse effects if providers “up-code” patients and diagnose them with higher-priced diseases, leading to higher costs. The payment includes a quality component as measured in scorecards or during health supervision. These projects often include a demand-side component that abolishes or reduces user fees or provides vouchers for care to poor patients.  

- **Argentina and Brazil.** Bank loans supported provider payment reforms and co-financed central government transfer payments to the health budgets of local governments (in addition to line-item health budgets) based on institutional performance in Brazil, and capitation adjusted by the achievement of 10 preventive care indicators in Argentina (Box 4.3). Payments encourage local governments in Brazil to invest in local administration, institutions, and fiduciary management in the health sector and in Argentina to ensure that providers have the resources to achieve the targets for preventive care indicators. Providers in both countries continue to receive line-item funding. In Argentina local governments also pay providers fee for service for preventive care to incentivize increased service provision (IEG 2011).

An increasing number of Bank projects support a shift to performance- or results-based payments in national health systems. The majority of them are run with the support of the Bank’s results-based financing (RBF) program implemented through the Bank’s policy and investment lending programs. In some countries (e.g., Benin and Burundi), RBF funds are pooled with funds from the government and other
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donors and then transferred to providers. RBF is a cash payment or non-monetary transfer made to a national or sub-national government, manager, provider, payer, or consumer of health services after predefined results have been attained and verified. Payment is conditional on measurable actions being undertaken (Musgrove 2011). RBF operations thus directly influence the provider payment method. The Health Results Innovation Trust Fund cofinances Bank operations that finance health interventions in countries in the International Development Association. It also funds technical dialogue and learning related to RBF operations and program evaluations. The Trust Fund has a dedicated work program to monitor countries’ progress using performance data and to support country teams in their data work.5

Box 4.3. Financing Based on Performance or Results in Argentina and Brazil

In Argentina the Bank loan disbursed an earmarked capitation amount to the government’s Plan Nacer based on the number of individuals registered in the provinces. Plan Nacer is a supply-side subsidy program that provides reproductive, maternal, and child health care in contracted public and private health facilities to uninsured children and women. The National Ministry of Health signed a performance contract with the provincial governments to transfer funds from the Bank loan and the central government budget to the provincial Plan Nacer based on the number of individuals registered (capitation) and on the results achieved on 10 health indicators. The capitation part of the transfer sets an incentive to provinces to increase the number of plan members; the second part an incentive to achieve treatment targets.

The Brazilian central government, supported by the Bank, paid a bonus payment and a performance prize to municipalities for achieving explicit governance and fiduciary targets to improve management in primary care. The bonus payment was distributed as a lump sum to the 35 (of 188) municipalities that met the three criteria, and the performance prize was shared by 12 municipalities.


INSTITUTIONS, BENEFIT PACKAGE, AND INFORMATION

The Bank helps countries in purchasing their essential benefit package mainly from public sector providers and NGOs. In Afghanistan the Bank supported contracting of the basic package of cost-effective services from NGOs. In middle-income countries, Bank technical assistance advised insurers to purchase care strategically. In the former Yugoslav Republic of Macedonia primary care providers were privatized in 2007. There, the national health insurance fund, with Bank support, contracted the essential package from private providers and paid capitation adjusted by age, gender, region, and preventive care indicators (IEG 2013). Bank loans financed information systems in insurance and governments to manage beneficiary information. In low-income countries where the Bank supports performance- or results-based payments, substantial investments in information were made.
allow for real-time monitoring and evaluation of provider performance and corrective actions.  

**Effectiveness of Bank Group Support to Purchasing**

To understand the effectiveness of Bank and International Finance Corporation (IFC) support to purchasing, one must first ask whether that support was appropriate to country conditions. In particular, was the support accompanied by an assessment of financing needs, and where appropriate, financial assistance? Also, given the demanding managerial requirements of purchasing systems, did the Bank Group tailor its support to local capacity?

**Integrating Purchasing with Health Financing and Public Finance**

In several countries the Bank has taken a more single-track approach to purchasing without integrating payment reforms with other health financing functions. This approach is contrary to the multisector approach described in the HNP strategy as the Bank’s comparative advantage. IEG’s case studies found that in the Republic of Yemen the results-based payment approach supported by the IFC and the Bank for a narrowly defined disease area is not linked to any broader health financing efforts in revenue collection or risk pooling. In Kenya, although the Bank and the IFC are providing health financing support to strengthen the National Insurance Fund, a parallel RBF program is being piloted in one county that does not appear to be connected to the health insurance reform. In Rwanda discussions about RBF support did not involve any analysis on the use of the existing health insurers as the fund holder for RBF, on the effect of RBF in health facilities that are paid capitation or fee for service by health insurance, or on what the overall impact would be on health insurance finances and future cost trends. In Benin there is no coordination with public sector budget reform. RBF is almost exclusively linked to using revenues from household payments and drug sales, and is not integrated with fiscal transfers to facilities. In Tanzania an RBF pilot has been introduced separate from overall ongoing public sector and health financing reforms which raises concerns about its sustainability. In Ghana the design of the Bank’s RBF operation is not coordinated with the payment reforms introduced by the health insurer and fails to clearly demonstrate how it will address performance problems, given already sizable increases in health worker salaries.

Where purchasing is embedded in broader public sector reforms it is more effective in establishing the relevant institutions that are needed to make it sustainable. In Rwanda the government changed the public finance law to allow for incentive payments for public sector workers; greater autonomy to facilities in regard to
recruitment, deployment, and dismissal; and direct accountability for the performance of mayors. IEG found that the Bank provided substantial support through policy dialogue and general budget support, including legal changes and management reforms in health facilities. In other countries, however, purchasing support has had less profound effects on strengthening regulatory and management functions. The above examples suggest that the Bank could give more attention to integrate purchasing with broader health financing functions and public finance to build the necessary institutions that make payment reforms sustainable, as emphasized in the Bank’s 2007 HNP strategy.

MANAGEMENT AND INFORMATION SYSTEMS

Bank support has strengthened management and information systems. In Poland the case-based payment (supported by Bank policy lending) contributes to transparency and improved data availability in the social health insurance fund (Czach et al. 2011). Similarly, in Afghanistan, Argentina, and Egypt, among others, supervision of health facilities improved as did information and reporting systems and the validity of routine data. In Serbia the Bank conducted a baseline analysis when the government considered shifting from line-item budgets to capitation. The Bank recommended additional measures to prevent possible adverse effects under capitation, including consolidated pooling of funds from the insurer and other public sources to prevent fragmented incentives; a comprehensive capitation rate to cover salaries along with public sector reforms for public employees and provider autonomy; and M&E (World Bank 2009). But in Brazil a recent Bank project failed to introduce performance-based payment because it omitted to collect the relevant information to link disbursement to results or to provide for independent technical audits of data to compute disbursement indicators.

Institutional strengthening contributed to transparency. Bank loans financed information-technology management systems in governments to monitor provider performance and in insurance companies to help process medical claims submitted by providers and monitor and assess their performance. In Argentina the Bank helped provinces invest in detailed data collection and analysis of performance indicators. Results were audited by an independent firm hired under the Bank loan, and provinces and providers were fined for incorrect data reporting (IEG 2011). In Benin, the Bank supported health strategic planning and information systems, and in Bolivia, performance agreements between the central government and the regional departments with clearly defined objectives and results. However, the contracting of international firms to carry out the verification of performance to pay providers has proved very costly in these countries.
In some cases, the Bank did support public reporting of provider performance results with the aim of informing consumers and financiers about better providers (as is done in some OECD countries; see Box 4.1). RBF programs have introduced online real time performance and financial reporting at the facility level including in Benin, Cameroon, Chad, Zambia, and elsewhere.7 The Bank did also help a few communities that were getting involved in monitoring and verification of the use of public health resources in Afghanistan, Benin, and Rwanda. IEG case studies in Nicaragua found that the Bank supported the government in bringing the community into the health sector by strengthening the use of locally collected data, including technical and social audits. The Bank in Kenya channels resources directly to health facilities and has contributed to improved reporting and accounting of revenues collected by facilities. Findings from Bank-supported research in Uganda suggest that community participation in monitoring providers can improve quality and quantity of health services as evidenced by large increases in utilization, significant weight gains for infants, and markedly lower death rates among children (Bjoerkman and Swensson 2007).

**Availability of Care and Service Use**

Availability of care and service use has increased where countries moved from line-item budgets to activity- or performance-based payments, including where this was supported by the Bank. In Afghanistan the bonus payment has been associated with an increase in availability of skilled health workers and administrative personnel. In Egypt performance-based payment positively affected provider behaviors toward patients, reduced staff turnover, and helped lift medical encounters from three to 16 per day. In Argentina a 1 percentage point provincial health budget increase, combined with a results focus for local authorities, contributed to higher utilization rates among low-income groups who seek care in public health facilities (IEG 2011).

Few studies use control groups to compare the effect of performance payment against other payment changes such as higher salaries independent of performance, or against intrinsic factors. In an impact evaluation in Rwanda, the Bank compared higher budget funding for health facilities in control districts with performance-based payments for selected services in pilot districts. It found that the payments mainly increased utilization of services that had higher unit payments and that providers could more easily control for. There was no impact on other rewarded services such as childhood immunization, malaria prophylaxis, or curative care visits for children (Basinga et al. 2011). Distributional effects across the insured and uninsured and between socioeconomic groups were not identified. Bank research also highlighted the importance of altruistic concerns that drive the behavior of health care providers. In Uganda a Bank team found that more funding to religious
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Health facilities in 1999 was passed on to patients in the form of more diagnostic services and lower user fees, which reduced financial barriers; however, public facilities performed less well (Reinikka and Svensson 2003).

While the Bank did not analyze the payment effect over the insurance effect on service use, other researchers find that insured individuals in Rwanda report large and significant improvements in several rewarded and unrewarded services and a decrease in child anemia prevalence (Sherry et al. 2012). Similarly, Skiles et al. (2012) report increased service use across all wealth quintiles and insurance as a positive predictor for service use. These findings suggest that it is mainly the care-seeking insured who benefit from payment reforms. It also shows that much still needs to be learned about how to combine payment reforms with risk pooling to address barriers in access to care for patients, such as user payments.

Financial Protection

As a change in provider payment method primarily benefits individuals seeking care (e.g., the insured and wealthier), provider payment reforms without measures to reduce user payments and improve risk pooling are unlikely to improve equity in service use and financial protection. So far, the Bank’s impact evaluations have not analyzed the distributional effect of payment reforms and whether the poor benefit or the uninsured.

Health Outcomes

The evidence linking payment reforms to better health outcomes is thin and mixed. Sherry et al. (2012) used 2005 and 2007 demographic and health survey data in Rwanda and found mixed results and no significant impact of performance-based payment (which was supported by Bank policy lending) on maternal and child health outcome indicators. However, one Bank study found (based on household survey data comparing households in 10 districts with the payment reform and 9 districts with traditional input-based financing) that performance payment led to large and significant improvements in child health between 2006 when the payment was introduced and 2008, and the payment is more effective among higher-skilled providers (Gertler and Vermeersch 2012). Distributional effects in health outcomes across the insured and uninsured and between socioeconomic groups were not identified.

Efficiency

Insurers and government entities can purchase care strategically to ensure the efficient use of health funds. There is some indication that Bank support contributed to improved efficiency where pooling of public funding increased to purchase a
benefit package with cost-effective interventions. In Afghanistan, efficiency is considered to have been improved by the performance-based NGO contracting model because access to the contracted services increased, and those services in the package are the most cost-effective interventions available for improving overall health outcomes. In Armenia spending shifted from hospitals, which had to reduce bed overcapacity, to more cost-effective primary health care. In Serbia the Bank helped streamline benefit packages where social health insurers had committed to cover overly generous benefits. The number of staff was rationalized in the health sector in Croatia and Serbia, and the Bank recommended increasing wages for primary care workers in Tajikistan. Strong government support was essential in introducing these efficiency enhancing measures in these countries and supporting the effectiveness of purchasing.

However, adverse effects of activity- and performance-based payment reforms on sector efficiency were insufficiently examined in Bank analysis. Only in a few countries (e.g., Serbia) did the Bank conduct cost and productivity analysis to identify the payment amount. Nor did Bank analysis sufficiently examine adverse reactions by providers to the payment. A case study prepared by IEG for this evaluation found that in Bolivia, fee-for-service payment for mothers and children created an incentive for beneficiaries to seek costlier tertiary care, contributing to inefficiency. In Ghana fee-for-service payment leads providers to refer patients to hospitals or clinics for more expensive treatment. It has also resulted in lengthy processing times and prolonged the reimbursement time to providers to five months. In Vietnam moving from fee-for-service to capitation payments for hospitals contributed to efficiency gains by reducing recurrent expenditures and did not have a negative effect on health outcomes. However, a recent Bank-supported study warns of adverse spillover effects because hospitals are shifting costs across different payers from insurance paying capitation to the uninsured who pay user fees, which may have implications for access and financial protection (Nguyen et al. 2013). A ruse in Rwanda was used by hospital pharmacies to prevent drugs from running out of stock—a performance indicator—by refusing to dispense the last box of pharmaceuticals (Kalk et al. 2010). The Bank could analyze adverse effects of payment reforms systematically and help countries addressing them.

**Financial Sustainability**

Purchasing reforms are not sustainable unless they are embedded in overall health financing and the broader public finance context and future financing is assured. Mainly in middle-income countries, the Bank supported purchasing reforms in social health insurance and cautioned governments about the financial consequences. A small body of Bank analytical work looked at the financial
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sustainability of insurance and advised governments on streamlining generously defined benefits (Chawla 2007; La Forgia and Nagpal 2012; Langenbrunner and Somanathan 2011; Preker et al. 2013; Smith and Nguyen 2013). In the Europe and Central Asia Region, the Bank warned that social health insurers are simple disbursement agents who create a high financial risk for the government budget and recommended strategic purchasing (Chawla 2007). The Bank also recommended selective contracting with providers and shifting to capitation and case-based payment with broader health sector reforms (Langenbrunner et al. 2009; World Bank 2010).

Where performance and activity payment was introduced through the government budget, the Bank did not give sufficient attention to the financial sustainability of this support. Many RBF projects are pilots that aim to build evidence on the impact and cost effectiveness of the intervention. Still, administrative costs and the financial implications for the payer are major concerns when introducing activity- and performance-based payments, which the Bank did not address sufficiently. In Kenya verification costs for performance payment are estimated at 20 percent of the performance budget. Governments have not assumed financing responsibility in the recurrent budget for the cost of performance- or results-based payment programs, and so even programs considered effective have not been taken over by governments. In Egypt the government scaled up the Family Health Model but not the performance-payment component after donor funding ended, even though it was perceived as successful. In Ghana plans are going ahead with a new RBF program supported by the Bank in parallel to the provider payment reforms of the National Health Insurance System, but because of financial sustainability concerns, the program will need to be financed by the Bank or donors. In Argentina cofinancing of the Plan Nacer by provincial governments encountered long delays (IEG 2011). In low-income countries, RBF is a separate budget line and mainly financed by donors from sector budget support. In Rwanda challenges of sustainability came to the fore as donor funding was scaled back (Ministry of Finance and Planning 2011).

The Bank did not examine how a change to the provider payment in the public sector affects the governments wage bill, yet this may have substantial financial implications for the government. A case study prepared by IEG for this evaluation found that the Rwandan government allocated about 10 percent of the domestic health budget to performance payments in 2010, which were used by health facilities as they saw fit, including topping up salaries and improving the facilities (Ministry of Finance and Planning 2011). In the first two years, performance-based pay increased facility budgets by 22 percent on average, most of which (77 percent) was paid as a salary top-up, resulting in an average 38 percent salary increase for staff
(Basinga et al. 2011). In absolute terms, results-based financing helped lift health workers’ salaries by $75–750 a month depending on their function and facility performance (Kalk et al. 2010). This is considerably higher take-home pay for health workers than for other public employees, such as teachers, and can pressure governments to increase other public sector wages. However, in none of the countries did Bank teams analyze the public sector wage impact of results-based financing.

As in OECD countries, decisions to scale up payment reforms were not always based on lessons from pilots, which may affect sustainability. Most of the Bank’s performance- or results-payment reforms supported by RBF programs were piloted. However, decisions were made to scale up regardless of weak, inconclusive, or incomplete pilot results. In Benin several failed RBF pilots introduced in 2007 were redesigned and reintroduced with a grant from the Bank’s Health Results Innovation Trust Fund. The evaluation of the pilot supported by this fund is not yet complete. Nonetheless, plans have been made to scale up RBF to all 34 health zones. Similarly, in Tanzania, despite multiple failed RBF programs and before the evaluation of the most recent pilot becomes available, the Bank and other donors have voiced interest in supporting a scale up to a national RBF scheme. This is a concern as early findings from an evaluation by the Ifakara Health Institute suggests that the RBF programs are burdensome, incompletely understood, unevenly implemented, not particularly effective, and unlikely to be sustainable (Chimhutu et al. 2014). In Argentina the Bank’s impact evaluation (Gertler et al. 2011) was not ready to inform the scale up of Plan Nacer nationwide. Instead, the government decided to scale up based on routine administrative data and qualitative analysis (IEG 2011).

The IEG found that in some countries, the Bank supported additional payments and transfers with questionable sustainability. In Rwanda, the Ministry of Finance raised concerns over the sustainability of the Bank-supported payment program to community health workers who are volunteer members of a cooperative (Ministry of Finance and Planning 2011). Under a former Bank project, pregnant women also received a baby kit if they delivered in health facilities or an umbrella if they have four antenatal care visits—but these in-kind transfers were stopped due to high procurement costs. Again, these examples emphasize the importance of integrating purchasing with broader health financing and institutional reforms to support sustainability.

In sum, countries are introducing complex payment reforms to incentivize providers to improve quality and efficiency. A growing share of Bank operations are supporting countries in these purchasing reforms, and most of this support is
through RBF in low-income settings. In addition, the Bank helped in building institutional and administrative capacity and investment in information to assess provider performance. IEG’s country case studies found that where Bank purchasing support was integrated with other health financing functions (risk pooling and revenue collection) and linked to public sector reforms rather than limited to narrowly defined provider payment methods, it has been relatively more effective because it addressed broader institutional reforms which in turn support sustainability. The availability of care and service use improved in countries where the Bank helped introduce activity- and performance payment often with RBF support. However, limited evidence from impact evaluations with control group points to broadly similar effects for performance-based payment and budget increases for health. Moreover, performance-based payment systems have high overhead costs for performance verification. As a change in provider payment method primarily benefits individuals seeking care (e.g., the insured and wealthier), Bank-supported provider payment reforms without measures to reduce out-of-pocket user payments and improve risk pooling are unlikely to improve equity in service use and financial protection. Payment reforms are likely not sustained unless they are embedded in overall health financing and the broader public finance context.

References


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1 The underlying rationale for performance payment is that quality varies across health facilities because providers deliver care differently. Reducing this variation by setting financial incentives was expected to increase quality and productivity of the health system. Performance-based payment methods differ substantially, however, and reflect local conditions including information technology, data availability, and providers’ willingness to participate (Maynard 2012).

2 Hospitals are paid on their performance in 52 quality indicators assessed quarterly. Health centers receive payments based on 24 indicators on service delivery measured monthly. Hospitals and health centers also receive a provider payment, including fee-for-service and case-based payments and capitation, from the social health insurance fund and from community-based health insurance.

3 In Burundi, results-based financing (RBF) is a national program, and the Bank’s funds are pooled with other donors and government funding to finance RBF and user fee abolition. In Senegal and Zimbabwe, poor women receive vouchers to seek care. The Nigeria health project introduces exemption policies for the poor. Most of these projects are still in the design phase or early implementation.

4 This is financed by the governments of Norway and the United Kingdom. The number of HNP projects with cofinancing from this fund increased from three in 2007 to nine in 2013 for a total committed amount of $260 million.

5 The trust fund supporting the RBF operations has a requirement that each country program is paired with a rigorous impact evaluation and is accompanied by a well-funded impact evaluation grant. In parallel with the requirement, extensive technical support is provided to the country teams to assure the rigor of such evaluations. At present, the portfolio consists of 34 impact evaluations and eight program and process assessments.

6 All RBF programs collect and verify performance data which allows for real-time monitoring of performance and necessary corrective actions. Most programs have an extensive database which stores administrative data and allows for a close examination of performance down to the facility level. Data collected for the most part are integrated in the countries Health Management and
Information Systems (HMIS) and beyond that also contain information on quality of care. Some countries, like Zambia and Zimbabwe, make use of HMIS data to monitor possible negative spill-over effects of RBF on nonincentivized services. The Bank team designed an RBF module for ADePT to make it easier and faster to analyze data and focus on results (http://www.worldbank.org/adept/).

Discussions with the World Bank Institute’s Innovation Lab explore options to show cross country RBF data on the web.