PAY FOR PERFORMANCE FOR IMPROVED HEALTH IN BURUNDI

Dr. Jean-Francois Busogoro and Alix Beith

To increase utilization of health services and improve maternal and child health outcomes, Burundi is in the process of rolling out a publicly funded supply-side pay-for-performance (P4P) program nationwide consisting of payments to health facilities. Interesting features of this program include use of monthly quantity-related incentive payments (based on service utilization) and quarterly quality-related payments (measured partially through patient and community satisfaction) and a degree of facility-level autonomy to determine what to invest in and how to share payments among staff. This case study describes the P4P pilot scheme in Burundi, how the pilot influenced design of nationwide scale-up of P4P, and offers lessons for countries that are considering implementing similar government-led nationwide schemes.
ABOUT THE P4P CASE STUDIES SERIES

Pay-for-performance (P4P) is a strategy that links payment to results. Health sector stakeholders, from international donors to government and health system policymakers, program managers, and health care providers increasingly see P4P as an important complement to investing in inputs such as buildings, drugs, and training when working to strengthen health systems and achieve the Millennium Development Goals (MDGs) and other targets that represent better health status for people. By providing financial incentives that encourage work toward agreed-upon results, P4P helps solve challenges such as increasing the quality of, as well as access to and use of health services.

Many developing countries are piloting or scaling up P4P programs to meet MDGs and other health indicators. Each country’s experience with P4P is different, but by sharing approaches and lessons learned, all stakeholders will better understand the processes and challenges involved in P4P program design, implementation, evaluation, and scale-up.

This Health System 20/20 case study series, which profiles maternal and child health-oriented P4P programs in countries in Africa, Asia, and the Americas, is intended to help those countries and donors already engaged in P4P to fine-tune their programs and those that are contemplating P4P to adopt such a program as part of their efforts to strengthen their health system and improve health outcomes.

Annexed to each case study are tools that the country used in its P4P program. The annexes appear in the electronic versions (CD-ROM and Health Systems 20/20 web site) of the case study.

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ACRONYMS

AAP Agence d’Achat de Performance (Performance Purchasing Agency)
AIDS Acquired Immunodeficiency Syndrome
ANC Antenatal care
ARV Antiretroviral
CPVV Comité Provinciale de Vérification et Validation (Provincial Committee for Verification and Validation)
DTP Diphtheria, Tetanus and Pertussis
EPI Expanded Programme on Immunization
EU European Union
FP Family Planning
GoB Government of Burundi
HIV Human Immunodeficiency Virus
IMCI Integrated Management of Child Illness
IMR Infant Mortality Rate
MDGs Millennium Development Goals
MMR Maternal Mortality Rate
MoH Ministry of Health
NGO Nongovernmental Organization
NHDP National Health Development Plan
OVC Orphans and Vulnerable Children
P4P Pay for Performance
TB Tuberculosis
VAT Vaccin Anatoxine Tétanique (Tetanus Toxoid)
This case study shares the experience of the small central African country of Burundi, which has successfully piloted a pay-for-performance (P4P) scheme in three provinces since 2006¹ and has begun to scale up the program throughout the country. ² While a few aspects of the national scheme are still being finalized, the path forward is well established and draws extensively on lessons learned from the pilot schemes and from the P4P experience of neighboring Rwanda. The government of Burundi (GoB) is leading implementation of the scale-up, which consists of a supply-side-focused P4P program that rewards hospitals and health facilities with regular payments determined by service utilization levels and performance on quality measures. P4P is being introduced primarily to improve maternal and child health outcomes.

¹ While this case focuses on the pilots in HealthNet TPO areas, it also describes key differences with other pilot areas.

² Key materials reviewed and drawn upon to develop this case study include Soeters and Nyarushatsi (2007) and République du Burundi, Ministère de Santé (2005 and 2006).
Maternal mortality and child malnutrition rates in Burundi are the second highest in Africa. One of every six infants does not survive his or her first birthday, and one out of five does not survive his or her fifth. Indeed, Burundi’s maternal mortality rate (MMR), infant mortality rate (IMR), and under-5 mortality rate remain among the highest in sub-Saharan Africa: in 2008, the MMR was 1,100 per 100,000 live births, while data from 2007 show that the IMR was 108 per 1,000, and the under-5 mortality rate was 180 per 1,000 (World Development Indicators 2009). Malaria, diarrhea, respiratory infections, and the compounding effects of malnutrition are the main causes of mortality and morbidity among children. Figure 1 highlights selected maternal and child health indicators.

Mother with child consults a health provider in Buraza health center in Kibuye district.

Among adults (persons older than 18 years), HIV/AIDS is the second most common cause of mortality in Burundi. In 2008, the adult HIV prevalence rate was estimated at 3 percent (CEFORMI/IMEA 2008). Among pregnant women, this rate was 12 percent, considerably higher than in neighboring countries (Rwanda 9.8 percent, Uganda 8.5 percent, and Tanzania 7.5 percent) (CEFORMI/IMEA 2008). The HIV prevalence rate is highest in urban areas (4.6 percent), slightly lower in less-populated areas (4.4 percent), and about half that in rural areas (2.3 percent) (CEFORMI/IMEA 2008).

Client and community knowledge about maternal and child health in Burundi is generally weak. For example, pregnant women are often not aware that having an assisted birth greatly increases positive health outcomes for both the woman and her baby. Nor do pregnant women and their families realize the impact of antenatal care (ANC) visits on positive health outcomes. Furthermore, in 2006, findings from a core welfare indicator questionnaire indicated that the challenges posed by HIV/AIDS were insufficiently understood by the public at large. Following this study, about 75 HIV/AIDS-specific projects were launched, which targeted orphans and vulnerable children (OVC) and their host families with educational materials and food support.

In 2004, Burundi authorities brought high-level attention to the main health concerns of the country during a meeting of central-level Ministry
of Health (MoH) and state-level health authorities. In addition to sharing concerns about high infant and maternal morbidity and mortality rates, authorities discussed health systems challenges and overall poor health system performance, evidenced by low rates of service utilization, low rates of delivery in health facilities, and low immunization levels (see Table 1).

**TABLE 1: SOME EXAMPLES OF POOR HEALTH SYSTEM PERFORMANCE IN BURUNDI***

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility utilization rate</td>
<td>0.47 consultations/year/inhabitant</td>
</tr>
<tr>
<td>Births attended by qualified staff</td>
<td>9.8%</td>
</tr>
<tr>
<td>DTP3 immunization</td>
<td>54%</td>
</tr>
<tr>
<td>Children fully immunized (measles)</td>
<td>50%</td>
</tr>
<tr>
<td>Immunization against tetanus (VAT 2** and up)</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

Source: Kaneza (2007)  
Note: DTP=diphtheria, tetanus, and pertussis; VAT=vaccin anatoxine tétanique (tetanus toxoid)  
*While these data are from Kibuye district, they are representative of the entire country.  
**Tetanus boosters for pregnant women

The consultation also brought up other broader health systems issues, notably: a lack of health providers (particularly in rural areas), unmotivated health care providers, poor service quality (including regular essential drug stockouts), financial and geographical barriers to health service access by some vulnerable population groups, few clinics open 24 hours a day/seven days a week, lack of transparency vis a vis health facility management, and little to no community participation in health services management.

Following this consultation, Burundi developed its 2005-2015 National Health Policy and its 2006-2010 National Health Development Plan (NHDP). The NHDP’s primary focus was to decrease the MMR and the under-5 mortality rate. Specific goals included:

- Improving the quality and availability of obstetrical service inputs at health center and hospital levels (through additional regular training and continuing professional development of doctors and other health personnel, along with increased availability of essential equipment)
- Improving access to obstetrical services by population segments currently not being reached (through subsidizing Cesarean sections and complicated births and improving referral systems)
- Improving the quality of antenatal and postnatal care visits
- Expanding family planning (FP) activities further into the community
- Strengthening malaria prevention efforts among pregnant women
- Reducing adolescent pregnancies
- Attaining and/or maintaining vaccine coverage rates at 85 percent by 2010 through improvements in logistic capabilities of the Expanded Programme on Vaccination (EPI), improved quality of EPI services, increased training and supervision of health workers engaged in the program, and scale-up of vaccination activities where coverage was sparse.

In 2006, with the goal of decreasing demand-side barriers to service access, the GoB eliminated all health service fees for children under age 5 and for pregnant women. As a result, health service utilization by these population groups more than doubled; for example, the health facility delivery rate increased from 22.9 percent in 2005 to 56.3 percent in 2008. Nevertheless, given that equipment, drug, and qualified staff shortages, alongside poorly motivated staff, continued to constrain service delivery quality, the GoB decided to complement demand-side subsidies with implementation of supply-side P4P, with the aim of further enhancing utilization and quality of health services and improving health care provider motivation. It was hypothesized that P4P measures to improve provider motivation would trickle down, leading to higher-quality services throughout the health system (see Table 2 for challenges that it was anticipated P4P would address).

**TABLE 2. HEALTH CARE CHALLENGES THAT P4P WILL ADDRESS**

<table>
<thead>
<tr>
<th>Health Care Challenge</th>
<th>To be addressed by P4P</th>
<th>To be addressed by strategies other than P4P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial inaccessibility</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Low facility utilization (long waits, insufficient personnel, etc.)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Low rate of births assisted by qualified staff</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Immunization and ANC appointments not kept</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lack of community sensitization</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lack of PMTCT (prevention of mother-to-child transmission) services</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fixed fee payment not respected (i.e., providers request informal payments)</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Geographical inaccessibility</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Services not open 24/7</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Low rate of contraceptive prevalence</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Low rate of mosquito net utilization</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Prescription and treatment guidelines not followed</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

4 MoH Annual Reports 2005 and 2008
Burundian interest in P4P was magnified by similar ongoing experiences in neighboring Rwanda and the Democratic Republic of Congo. Donors involved in P4P early on included the European Union (EU) and the Belgian, Italian, and Swiss Development Cooperation Agencies, which provided strong backing to Burundi’s P4P efforts. Leadership for P4P, however, came from the MoH which, as a first step toward nationwide implementation, encouraged nongovernmental organizations (NGOs) working in Burundi to experiment with P4P approaches within their health intervention areas.

As a result, in November 2006, two Dutch NGOs began implementing P4P pilots in three provinces (Gitega province, managed by HealthNet TPO5, and Cankuzo and Bubanza provinces, managed by Cordaid6) with financial support from the Dutch government. In all pilot provinces, P4P was viewed as a health systems strengthening strategy, initially targeting maternal and child health, HIV, and malaria, and with potential to progressively expand over time to include chronic health problems. The pilots differed only in the choice of indicators used and the payment rates attached to these indicators. There was no other major difference between the models. In all pilot provinces, decision-making responsibility was decentralized to health facility management, thus allowing for increased local-level innovation to reach previously agreed-upon health indicators.

When setting the context within which P4P was introduced, mention should be made of the fact that Burundi is slowly working its way out of a long economic crisis and period of instability. Hence, introduction of the National Health Policy and the NHDP were timely and important as they restored a clear leadership role for the MoH and provided it with the strengthened authority crucial to making health facility contracting and effective management of the P4P scheme feasible.

5 http://www.healthnetinternational.org/HealthNetTPO(EN)/
6 http://www.cordaid.nl/english/Contact/Index.aspx?mId=10184
Encouraged by pilot results (described in more detail below), the MoH decided to make P4P an official policy and scale it up throughout the country. Initial roll-out started in mid-2009 and full-blown scale-up began in April 2010. To generate buy-in, the MoH engaged many critical health sector partners (MoH staff, donors, NGOs, etc.) and sent its own central-, provincial-, and district-level staff on study tours of Rwanda’s P4P program, so they could understand better the intricacies of P4P implementation prior to scale-up in Burundi.

Early community outreach was a critical element of the P4P pilots, and the GoB is replicating this as part of scale-up. Pilots showed that community participation can be strengthened through formation of health committees and involvement of community health workers who work with health facilities to increase awareness about key health concerns and promote hygiene at the community level. P4P in pilot provinces also helped raise community awareness about the advantages of a woman delivering in a health facility. For example, in Kibuye and Ryansoro catchment areas supported by HealthNetTPO, results from quarterly surveys on community satisfaction showed that, at the end of first quarter of 2009, only 67 percent of women questioned knew about the advantages of ANC and birth assisted by qualified staff; by the end of the second quarter, this rate had increased to 69 percent, and by the end of the third quarter, to 73 percent. Survey results also showed that P4P can contribute to increased community satisfaction and to empowerment of health providers, as P4P allows these providers to come up with creative ways of attracting clients and reinforces their professional responsibility.
P4P SCHEME DESIGN AND IMPLEMENTATION: THE WHAT, WHOS, AND HOWS

WHOS OF DESIGN
Principal participants in (both pilot and scale-up) P4P scheme design include the MoH National Steering Committee, provincial-level MoH steering committees (to be replaced in the scale-up phase by provincial health management teams), district health management teams, health facilities, and communities represented by their health committee local administrations. Other actors in the provincial-level health system were also involved, such as churches, which own 33 percent of health facilities. International partners, again primarily HealthNetTPO and Cordaid, provided technical assistance in P4P design, implementation, and evaluation.

HOW DOES PAYMENT WORK?
In the pilot areas managed by HealthNet TPO, health facilities receive two types of payment: one based on quantitative measurements and the other on qualitative measurements. These payments are linked – in that the better a facility performs in terms of quantity, the larger the potential gain through quality-related payments. Utilization-related quantitative payments are distributed on a monthly basis, while quality-related payments are quarterly bonuses. Facilities have considerable management autonomy in allocating the payments to staff or to service quality improvements, and within those two broad divisions, to financial incentives among staff members and to which service quality improvements. However, no more than 50 percent of each payment can go toward individual staff financial incentive payments, and the remaining percentage must go to service quality improvements. Annex A shows how one health facility in Kibuye district, Gitega province, chose to distribute its P4P payments.
PAYMENT RESULTING FROM INCREASED SERVICE UTILIZATION

The quantitative indicators used in the P4P pilots and listed in Table 3 reflect the basic package of care delivered by health centers. Table 4 lists complementary package indicators used by hospitals. Each facility receives a monthly monetary payment for each service included on the lists. While targets are calculated to help facilities plan to reach the catchment population, payment is not linked to targets, but rather to the number of services actually provided. For example, in one of the three pilot provinces, HealthNet TPO contracts 22 health centers. At the end of each month, each health center reports on service utilization measures such as number of consultations, of births, of FP visits, of new HIV cases identified, and of tuberculosis (TB) patients completing

### TABLE 3. EXAMPLES OF QUANTITATIVE HEALTH INDICATORS USED TO DETERMINE HEALTH CENTER PAYMENTS

<table>
<thead>
<tr>
<th>HEALTH PACKAGE INDICATORS</th>
<th>Annual Targets*</th>
<th>Monthly Targets*</th>
<th>Payment Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult outpatient consultation (1/person/year)</td>
<td>Pop x 0.7</td>
<td>Pop/12 x 0.7</td>
<td>€ 0,15</td>
</tr>
<tr>
<td>Child outpatient consultation (1/person/year)</td>
<td>Pop x 0.3</td>
<td>Pop/12 x 0.3</td>
<td>€ 0,15</td>
</tr>
<tr>
<td>Assisted delivery</td>
<td>Pop x 4.8% x 80%</td>
<td>Pop x 4.8%/12 x 80%</td>
<td>€ 3,75</td>
</tr>
<tr>
<td>Children &lt;1 year completely vaccinated</td>
<td>Pop x 4%/100%</td>
<td>Pop x 4%/12 x 100%</td>
<td>€ 1,80</td>
</tr>
<tr>
<td>VAT 2+ protected pregnancies</td>
<td>Pop x 4.5% x 100%</td>
<td>Pop x 4.5%/12 x 100%</td>
<td>€ 0,45</td>
</tr>
<tr>
<td>Family planning: all cases (new and old)</td>
<td>Pop x 21% x 20%</td>
<td>Pop x 21%/12 x 20%</td>
<td>€ 0,75</td>
</tr>
<tr>
<td>Infant malnutrition (12-59 months) followed on an outpatient basis and cured</td>
<td>All x 10.42% x 36% x 60%</td>
<td>Pop x 10.42%/12 x 36% x 60%</td>
<td>€ 0,50</td>
</tr>
<tr>
<td>Laboratory: number of malaria cases confirmed positive</td>
<td>Pop x 40% x 70%</td>
<td>Pop x 40%/12 x 70%</td>
<td>€ 0,25</td>
</tr>
<tr>
<td>Malaria: number of bednets distributed and used</td>
<td>Pop/5ans/1.5 persx40%</td>
<td>Pop/5ans/12 mois/1.5 pers x 40%</td>
<td>€ 0,60</td>
</tr>
<tr>
<td>HIV: number of cases tested</td>
<td>Pop x 2%</td>
<td>Pop x 2%</td>
<td>€ 0,30</td>
</tr>
<tr>
<td>Management of opportunistic infections</td>
<td>Pop x 5%</td>
<td>Pop x 5% / 12</td>
<td>€ 0,15</td>
</tr>
<tr>
<td>Distribution point for condoms in each village</td>
<td>Pop/500 hab par village x 100%</td>
<td>Pop/500 hab par village x 100%</td>
<td>€ 0,15</td>
</tr>
<tr>
<td>STI (STD): Number of cases detected and treated</td>
<td>Pop x 1.1%</td>
<td>Pop x 1.1%</td>
<td>€ 0,60</td>
</tr>
<tr>
<td>Number of TB cases detected and treated correctly</td>
<td>Pop x 2x50/100000</td>
<td>Pop x 1/12 x 2 x 50/100000</td>
<td>€ 12,00</td>
</tr>
<tr>
<td>Hospital referral (for delivery, high-risk pregnancies, and other emergencies)</td>
<td>Pop x 4%</td>
<td>Pop x 4%</td>
<td>€ 1,05</td>
</tr>
<tr>
<td>Epilepsy and other psychoses</td>
<td>Pop x 0.0005</td>
<td>Pop x 0.0005</td>
<td>€ 0,50</td>
</tr>
<tr>
<td>Latrines built or improved</td>
<td>Pop/6 pers ménage/3 ans</td>
<td>Pop/6 pers ménage/12/3 ans</td>
<td>€ 0,75</td>
</tr>
<tr>
<td>Very ill patients referred</td>
<td>Outpatient consultations x 0.5%</td>
<td>Outpatient consultations x 0.5%/12</td>
<td>€ 1,05</td>
</tr>
<tr>
<td>Hospitalization days (1 bed/1000)</td>
<td>Pop/1000 x 30</td>
<td>Pop/1000 x 30/12</td>
<td>€ 0,45</td>
</tr>
<tr>
<td>Family planning: insertion of implants of IUDs (2 per year)</td>
<td>Pop x 21.4% x 2%</td>
<td>Pop x 21.4%/12 x 2%</td>
<td>€ 1,50</td>
</tr>
<tr>
<td>ANC: All cases: new and 4 standard visits</td>
<td>Pop x4.5% x 80% x 4</td>
<td>Pop x 4.8%/12 x 80% x 4</td>
<td>€ 0,30</td>
</tr>
</tbody>
</table>

Note: STI=sexually transmitted infection, STD= sexually transmitted disease
* These annual and monthly targets are for planning purposes. Payment is not based on achievement of target.
### TABLE 4. EXAMPLES OF QUANTITATIVE HEALTH INDICATORS USED TO DETERMINE HOSPITAL PAYMENTS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Monthly Target*</th>
<th>Payment amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>New curative consultation by a doctor (&gt;=5 years)</td>
<td>population/12 x 5% x 45%</td>
<td>€ 0,50</td>
</tr>
<tr>
<td>New curative consultation by a doctor (&lt;5 years)</td>
<td>population/12 x 5% x 55%</td>
<td>€ 0,50</td>
</tr>
<tr>
<td>Day of hospitalization (&gt;=5 years)</td>
<td>pop/1000 x 1 x 30 x 65%</td>
<td>€ 1,00</td>
</tr>
<tr>
<td>Day of hospitalization (&lt;5 years)</td>
<td>pop/1000 x 1 x 30 x 35%</td>
<td>€ 4,50</td>
</tr>
<tr>
<td>Minor surgery</td>
<td>Pop/12 x 1%</td>
<td>€ 5,00</td>
</tr>
<tr>
<td>Major surgery</td>
<td>Pop/12 x 0,5%</td>
<td>€ 20,00</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>pop x 4,8%/12 x 30%</td>
<td>€ 50,00</td>
</tr>
<tr>
<td>Obstructed birth</td>
<td>pop x 4,8%/12 x 10% x 70%</td>
<td>€ 12,50</td>
</tr>
<tr>
<td>Voluntary HIV/AIDS testing</td>
<td>pop x (15-59 ans)/12 x10%</td>
<td>€ 1,88</td>
</tr>
<tr>
<td>Pregnant HIV+ woman put on ARV prophylaxis</td>
<td>(pop x 4,8% x 4%/12) x 20%</td>
<td>€ 3,00</td>
</tr>
<tr>
<td>Number of new cases on ARVs</td>
<td>pop x 3% x 50%/12 x 90%</td>
<td>€ 10,42</td>
</tr>
<tr>
<td>Number of ARV clients monitored by semester</td>
<td>pop x 3% x 50% x 2/12 x 90%</td>
<td>€ 5,00</td>
</tr>
<tr>
<td>Number of STI cases treated</td>
<td>pop x 5%/12 x 10%</td>
<td>€ 2,42</td>
</tr>
<tr>
<td>Detection of positive TB cases</td>
<td>pop x (87/100.000)/12 x 70%</td>
<td>€ 45,08</td>
</tr>
<tr>
<td>Number of TB cases treated and cured</td>
<td>pop x (87/100.000) x 85 %/12 x 10%</td>
<td>€ 91,67</td>
</tr>
<tr>
<td>Family Planning: Total new and prior acceptors</td>
<td>pop x 22%/12 x 21% x 4 X10%</td>
<td>€ 2,38</td>
</tr>
<tr>
<td>Family Planning: Implants and IUDs</td>
<td>pop x 22%/12 x 2% x 10%</td>
<td>€ 4,08</td>
</tr>
<tr>
<td>Family Planning: Definitive method</td>
<td>pop x 21%/12 x 1%</td>
<td>€ 10,83</td>
</tr>
</tbody>
</table>

Note: ARV=antiretroviral

* The monthly targets are for planning purposes. Payment is not based on achievement of targets.

Based on the quantitative indicators met (i.e., number of services provided), health centers receive US$700–1,500 per month, while district hospitals receive US$3,500–5,000 per month. Again, these payments reflect the number of services rendered and do not include the quality-related bonus.

Rapid improvements in curative care indicators were observed during pilots. Good progress, though not so rapid, was observed for preventive care indicators. As a result, pilot implementers decided to take advantage of P4P contract flexibility (contracts are renewed every quarter) and modify contracts regularly, changing the indicators they monitor to determine payment and/or the financial amounts per indicator, in accordance with progress achieved. The MoH has drawn on pilot indicators, using many as part of planned P4P scale-up. See Annex B for a complete list of quantitative indicators that are being used during scale-up.
PAYMENT RESULTING FROM QUALITY ASSESSMENTS

The P4P pilots addressed quality of care by monitoring service-specific composite indicators (see Annex C, Indicators Used to Assess Quality during Quarterly Assessments). Pilot programs assessed health facility performance on these indicators on a quarterly basis and awarded each facility a bonus of up to 15 percent of total amount obtained on quantitative results during the same time period. The MoH is raising this bonus to 25 percent during nationwide scale-up.

CONTRACTING MECHANISMS

Pilot contract design was a collaborative effort of the MoH National Steering Committee, pilot provincial health authorities, local administrations, and local and international NGOs. The 2006-2010 NHDP had discussed P4P within the context of human resource development which facilitated contract development. Two contracting models were piloted, differing only in who was involved in negotiating and signing contracts. In HealthNet TPO areas, both a provincial steering committee and a provincial level Agence d’Achat de Performance (performance purchasing agency, or AAP) were involved in contract term negotiation and signing. In Cordaid areas, health facilities contracted directly with the provincial level AAP and no provincial steering committee was created. In both models each health facility presented an annual business plan on which negotiations were based.

AAPs were NGO-established autonomous entities funded by donors and the Burundi Ministry of Finance. Each AAP was composed of both technical and financial staff and was led by a medical doctor or public health specialist. In addition to being involved in the negotiation and signature of contracts, AAPs were responsible for carrying out baseline studies, data verification, quality assessment, and distributing payment based on performance. In HealthNet TPO areas, where a provincial P4P steering committee was created, AAPs fell under the umbrella of this provincial P4P steering committee. Piloting found that AAPs allowed for more rapid financial decision-making and a greater link with local-level concerns and realities.

Provincial steering committees in HealthNet TPO areas were multi-sector bodies that included health facility representatives and were sometimes led by staff from the provincial administration. Each month, every health facility reported on progress to the provincial steering committee. In areas where provincial steering committees did not exist (i.e., non-HealthNet TPO areas), facilities reported directly to AAPs.
AAPs verified that facility-level reports were accurate and shared their findings with the provincial-level steering committee, which, in turn, authorized payment if there was no evidence of fraud. The purchasing agency then paid each health facility directly, via direct deposit to the facility’s bank account.

Contracts have also been established between AAPs and local associations that are responsible for community outreach and evaluation of community and patient satisfaction. These associations, which were chosen from hundreds of local association candidates, specifically seek to validate health services received, to determine satisfaction with services used, and to assess extent of knowledge about important health concerns. Patients are asked how they were treated by providers, what medicines were prescribed (if any), and what follow-up there was (see Annex D for a sample community verification protocol used by local associations). Findings from these quarterly community surveys are fed back to the respective health care providers and part of the quality payment that facilities receive depends on the survey findings. One association is contracted per health area and receives US$225/trimester. These efforts to measure community satisfaction and improvements in community knowledge about health are considered best practices of the P4P pilots and, as a result, the MoH is including contracting with local associations as a key component of nationwide P4P scale-up.
Baseline studies were conducted in the three pilot provinces using household surveys and qualitative assessments (interviews and focus groups with patients) of health service quality. Multiple training sessions, explaining the “ins and outs” of P4P contracting, were given to health providers at all levels. Local associations responsible for assessing community and patient satisfaction were recruited and trained on community-level surveying techniques. Current efforts focus on tools and training to facilitate national P4P scale-up. Specifically, a procedure manual has been developed and validated, tools from pilots have been harmonized to meet nationwide scale-up requirements, and training sessions are ongoing throughout the country.
Burundi’s population is approximately 7.5 million. At the end of 2009, the three original P4P pilot schemes covered the following populations in the following provinces.

- Pilot managed by HealthNet TPO: Gitega province: 187,484 inhabitants in Kibuye district and 127,644 inhabitants in Ryansoro district
- Pilots managed by Cordaid: 348,188 inhabitants in Bubanza province and 221,391 inhabitants in Cankuzo province

As mentioned above, the GoB began extending P4P beyond the pilot areas in 2009. With support from a variety of NGOs and international development partners, nascent P4P schemes now exist in the following provinces:

- Ruyigi province: 400,818 inhabitants (supported by Cordaid/EU)
- Rutana province: 336,394 inhabitants (Cordaid/EU)
- Karuzi province: 433,061 inhabitants (Cordaid/EU)
- Ngozi province: 661,310 inhabitants (Cooperation Suisse)
- Makamba province: 428,917 inhabitants (Cordaid/EU) and
- Rumonge district in Bururi province: 258,902 inhabitants (Cordaid/EU)

P4P SCOPE AND SCALE

The map in Figure 2 shows original pilot areas in blue, 2009 P4P roll-out provinces in brown, and remaining anticipated 2010 scale-up areas in white.

**FIGURE 2. MAP OF BURUNDI SHOWING P4P PILOT AND ROLL-OUT PROVINCES**

The GoB is leading P4P roll-out with support from the World Bank, the EU, bilateral cooperation agencies, and NGOs. In preparation for scale-up, a national P4P technical unit (*Cellule Technique Nationale*) has been established, which includes different stakeholders and is responsible for defining the broad P4P strategy and coordinating the program; however, it will not be responsible for transferring payments as, similar to during the pilot phase, contracting, financing, and service provision functions will remain separate. Financing will primarily come from the GoB (both donor and government resources), and care will continue to be provided by hospitals and health facilities. Contracting will be the responsibility of
provincial committees for verification and validation (comité provinciale de vérification et validation, or CPVV), which will replace AAPs.\(^8\) These CPVV are public-private entities, engaging public administration staff, development partners, and contracted individuals from the private sector. CPVV will be responsible for contract negotiation and signature, and data verification and validation (CPVV team responsibility). CPVV will be complemented by provincial health management teams, which will be similar to pilot MoH provincial steering committees. Therefore, the scale-up model is more similar to contracting arrangements in pilot areas where AAPs were complemented by provincial steering committees than the model that did not include provincial steering committees. This decision was made given pilot findings suggesting that program ownership strengthened faster in areas where both an AAP and a provincial steering committee were in place. During scale-up, CPVVs are also assuming the responsibility (previously of the AAPs) to contract with local associations to conduct community satisfaction assessments. See Annex E for a sample contract between a CPVV and individual health facilities, Annex F for a sample contract between health facilities and personnel under scale-up, and Annex G for a sample contract between CCPVs and local associations.

\(^8\) In some provinces, AAPs will continue to exist during a transition period. They will do verification and operate under the umbrella of the CPVV.
Despite the fact that pilot evaluation findings suggested that P4P was having the desired impact (see section on evaluation below for details), in early 2009, several obstacles to full-scale P4P implementation still existed. For example, given that the GoB was initially slow to reimburse health facilities, facilities often found themselves financially strained. With experience, this became less of a problem.
FINANCING THE SCHEME: WHO, HOW, AND POSSIBLE CONCERNS ABOUT FUTURE SUPPORT

There is clear government commitment to P4P scale-up and considerable involvement from many international partners and local civilian organizations. The Dutch government and the EU have financially supported P4P efforts implemented by both HealthNet TPO and Cordaid. Others are becoming increasingly involved, including the Swiss and Belgian Development Cooperation Agencies, GAVI Alliance, and the World Bank. The GoB is also starting to finance P4P: during scale-up (between 2010 and 2012), the government, with support from the World Bank, anticipates paying approximately US$67 million. However, this amount is still considered insufficient and additional funding is being mobilized by the GoB and sought from other partners (EU, bilateral cooperation, NGOs).
The effectiveness of P4P pilots in Burundi has been evaluated both internally and externally. In 2007, at the end of the first year of pilot implementation, an internal evaluation was conducted with the support of an international consultant. Findings, shared with health authorities and providers at a national P4P conference on P4P in 2007, were encouraging overall; however, there were concerns about data quality. Therefore, prior to the GoB completely committing to full-scale P4P implementation, and to glean more lessons from the pilot experience, both a household survey and a quality of health services survey were conducted in 2008. Also in 2008, the Royal Tropical Institute of Amsterdam did an external evaluation of the P4P pilots, which found that provider motivation had increased significantly as a result of their increased autonomy in determining incentive allocation among themselves and in negotiating indicator prices (Toonen et al. 2009). Positive results from these studies further supported P4P implementation and resulted in the GoB’s decision to move forward with P4P scale-up.

Evaluations of the pilot projects sought to answer the following questions:

- What impact did P4P implementation have on health service utilization and quality? Specifically, did use and quality of services that are part of the Basic Minimum and Complementary Packages improve?
Is P4P more cost effective than input-based financing?

Can successful implementation of P4P in Asia (Bangladesh, Cambodia, Pakistan) and Africa (Rwanda, South Africa) be replicated in the Burundi context of recent political turmoil and a profoundly poor population?

Evaluation findings were positive. Service utilization increased (see Figure 3), as did coverage of children completely vaccinated also increased (Figure 4), the rate of assisted births, and the use and uptake of new FP services (Figure 5). Overall findings revealed an average increase of 50–60 percent for each indicator compared to baseline levels.

**FIGURE 3. IMPACT OF P4P ON HEALTH SERVICE UTILIZATION IN KIBUYE PROVINCE**

![Graph showing impact of P4P on health service utilization in Kibuye province]

9 Meaning that post-conflict circumstances in Burundi have led to a reality that may be more dire than that in other more stable countries implementing P4P in terms of irregular drug supply, damaged facility infrastructure, human resource gaps, poor quality equipment, etc.
A snapshot of other principle findings includes:

- Utilization of hospital services increased, as did service quality, in all three provinces.
- There is evidence that P4P may be a useful mechanism to counter low health provider morale and potentially generate higher income.
levels as the proportion of qualified staff is still increasing in P4P areas due to the financial incentives available in those areas.

- P4P has brought out the entrepreneurial and creative attributes of service providers.

- All health facilities engaged in P4P now are involved in planning, as contract negotiation is based on the business plan of each health facility. This is not done in areas that do not yet implement P4P. Involvement in developing business plans has also contributed to increased provider motivation (Toonen et al. 2009).

- As a result of P4P, health facilities have sought to strengthen community collaboration focusing primarily on health promotion, sensitization, and education. Consequently, a higher level of community involvement is currently noted in P4P areas, compared to non-P4P areas.

- P4P targets almost all Basic Minimum and Complementary Package indicators. In only a few cases (malnutrition, for example) is the activity not targeted by the P4P program. Often the reason for non-inclusion is difficulty in identifying an appropriate indicator that can be independently measured.

- P4P is seen as a good incentive for strengthening health information systems because all health facilities need to submit complete monthly reports in a timely fashion to receive the P4P payment.

- Health services in P4P areas additionally are more likely to be open around the clock as P4P makes being open 24/7 a contractual requirement.
A few P4P challenges have come to light during P4P piloting in Burundi:

- So that health workers respond to incentives as desired, adequate inputs (infrastructure, equipment, consumable materials, drugs, and staff) all must be in place prior to P4P introduction.

- The MoH should plan for potential disparities in regional health service coverage while P4P is being rolled out as health staff may migrate to P4P pilot areas where financial incentives exist, leaving other areas less well staffed. In Burundi, when initial pilots were launched, pay was double in P4P areas and resulted in a health care staff shift (Toonen et al. 2009).

- Despite commitments by the GoB and development partners, financial sustainability continues to be a challenge.
Finally, Burundi’s experience highlights the following lessons:

- Implementing P4P is by no means an easy task. Development and implementation of a clear institutional framework can help guide the process.

- Even in post-conflict countries, where institutions and infrastructure may be weaker than in other countries and institutions, P4P may assist in building new regulatory structures and can help improve health service utilization and health outcomes.

- Community engagement and participation can play important roles in determining P4P success.

Rehabilitation of a health center paid for through P4P income
REFERENCES


République du Burundi, Ministère de Sante. 2006. Politique national de contractualisation dans le secteur de la santé au Burundi.


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