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VERIFICATION IN PERFORMANCE-BASED INCENTIVE SCHEMES

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DISCLAIMER

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ACRONYMS

AfDB	African Development Bank
CBO	Community-Based Organization
CHAI	Clinton Health Access Initiative
CHMT	Council Health Management Teams
CHT	County Health Teams
COP	Community of Practice
DHIS2	District Health Information System 2
DHMT	District Health Management Teams
GAVI	Global Alliance for Vaccines and Immunizations
HDP	Health Development and Performance
HIS	Health Information System
HMIS	Health Information Management System
ID	Piece of Identification
JICA	Japan International Cooperation Agency
LMIC	Low- and Middle-Income Countries
MOH	Ministry of Health
MOHSW	Ministry of Health and Social Welfare
NGO	Non-Governmental Organizations
NORAD	Norwegian Agency for Development Cooperation
OBA	Output-Based Aid
PBI	Performance-Based Incentives
PEPFAR	President's Emergency Plan for AIDS Relief
PMT	Pilot Management Team
PwC	Price Waterhouse Coopers
RBHS	Rebuilding Basic Health Services
RHMT	Regional Health Management Teams
UNAIDS	Joint United Nations Program on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	US Agency for International Development

VMA	Voucher Management Agency
VMIS	Voucher Management Information System
WB	World Bank
WHO	World Health Organization

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EXECUTIVE SUMMARY

Verification in Performance-based Incentive (PBI) schemes aims to ensure that reported data accurately reflects actual performance, both by detecting and correcting misreporting, and by identifying and deterring fraud. In doing so, PBI verification guarantees the credibility of the scheme so that the different stakeholders trust that the performance that is being reported and rewarded is real. In low- and middle-income countries (LMICs), PBI verification is typically designed and implemented in environments with weak information systems, characterized by poor data availability, transmission, and information culture, and with low levels of implementation capacity. This context leads to considerable heterogeneity in how LMICs design and implement PBI verification. Furthermore, PBI verification is dynamic and tends to evolve over time, particularly as schemes move from pilot phase to national scale-up and as the behavior of PBI actors (e.g. service providers, district health teams) changes in response to the introduction of financial incentives. However, details about how verification systems evolve, along with the trade-offs that must be made along the way, are seldom documented.

This report contributes to this gap by summarizing lessons learned on how performance is verified in the context of health sector PBI in LMICs, based on the experience of six purposefully selected PBI schemes (Benin, Burundi, Kenya, Liberia, Rwanda, and Tanzania). The report is intended to serve as a guide for designers, implementers, and stakeholders, by providing lessons about the trade-offs to consider in the selection and refinement of key verification system features. It proposes a framework to facilitate discussions on these trade-offs, by considering verification system features (i.e. independence, rigor, consequences, transparency, and integration), the design and implementation process (i.e. stakeholder engagement, data use, and available capacity), and the ultimate goals of verification (financial and institutional sustainability, and credibility). For each of these dimensions, we discuss the different options (ranging from ideal to less ideal), which actors involved in the design or implementation of a PBI scheme's verification system could use as a guide. The verification framework can also be used to evaluate country verification schemes as they evolve, and to help steer them towards achieving the overall PBI verification objectives.

The six country case studies illustrate that an ideal verification system does not exist. Typically, the design of a verification scheme involves many trade-offs, which translate into various degrees of independence, rigor etc., and ultimately into various degrees of credibility and sustainability. Challenges in implementation arise because strengthening one verification feature may come at the expense of another one. For example, a very rigorous system is also an expensive one, and a highly independent one is likely not well integrated. Therefore, as a verification system evolves, it is important to keep in mind that all verification features are interlinked and matter and it is recommended to opt for a balanced design that does not over-emphasize some features while neglecting others. Furthermore, the experience of the six countries included in this report provide the following key lessons:

- Although verification is set up to catch and deter fraud and that fraud does exist, inconsistencies in data - especially in the beginning - tend to be due more to poor data entry and lack of local capacity to fulfill the requirements of the system. Therefore, the first few rounds of verification can be expected to be less about fraud and more about identifying the weaknesses of PBI implementation – such as unclear indicator definitions, wrongly classified cases, incorrect use of data collection tools – and fine-tuning the PBI instruments, as well as ensuring that participants fully understand the new system.

- Verification can be carried out in many different ways, but it was generally agreed that stakeholder engagement in verification is important - whether through mixed verification or through peer review. The role of the community, however, was often debated. Engaging communities in order to ensure the veracity of the data and to strengthen community engagement can come at the price of some independence and rigor.
- The degree of rigor of verification can vary considerably, both across PBI schemes and over time within a given scheme. Pilots usually place significant emphasis on high levels of credibility and rigor. As verification schemes evolve and move to scale, verification designers have to master the art of maintaining a good balance between affordable costs and adequate degrees of independence, integration, and rigor, so as to ensure sufficient levels of credibility without compromising long-term sustainability.

In addition to the lessons they provide, our case studies also reveal several gaps in the way that verification is currently documented. In order to facilitate further evaluations and comparisons of verification procedures, PBI designers and implementers should consider including detailed descriptions of their verification plans in project documents, and updating these regularly as the schemes evolve. Also, the cost of verification procedures is not always easy to tease out and it is not reported uniformly. In the future, it would be helpful if standard verification metrics were developed, so as to be able to make comparisons between various PBI schemes and to be able to trace the evolution of key verification features (including cost) over time. Finally, only a few verification scheme descriptions include information about how such a scheme is to transition from pilot to scale.

Strengthening the verification process is a complicated endeavor. Country PBI schemes currently looking into verification design can start by thinking through the framework, lessons learned and country examples presented in this guide. In addition, opportunities for further capacity development are available through local and regional PBI and verification experts. Several Communities of Practice (COPs) on PBI have been launched in recent years. These COPs provide virtual forums for discussion and opportunities for peer-to-peer learning. Additionally, the use of new technologies - such as cell phones or tablets - for data collection, validation and analysis could be considered in future verification pilots and assessed for rigor and cost-savings. Most importantly, however, is opening up the "black box" of verification by improving documentation and continuing to share lessons learned.

1. INTRODUCTION

In the context of performance-based incentive (PBI) schemes in the health sector, verification – also sometimes referred to as data auditing or data validation – represents a critical step in the PBI cycle. This cycle typically starts with the signature of performance contracts with PBI recipients such as non-government organizations (NGOs) involved in health service delivery, public health facilities or district health management teams (DHMTs). Among other things, these contracts stipulate how the PBI recipient's performance is to be defined, measured, reported and rewarded. The second step in the PBI cycle involves the compilation and transmission of performance data by PBI recipients, usually accompanied by a payment request. The verification of this data is the third step in the cycle. It aims to ensure that reported data accurately reflects actual performance, both by detecting and correcting misreporting, and by identifying and deterring fraud. Next in the PBI cycle is the payment of PBI recipients, based on their reported and verified performance. The cycle ends with a review of any design and implementation problems and the adoption of appropriate corrective measures to get ready for the start of a new cycle.

In high-income countries, the reporting and verification system adopted in a PBI program is usually highly computerized, with many of the routine verification tasks totally automated. PBI verification in low- and middle-income countries (LMICs), however, is typically designed and implemented in environments with weak information systems – with poor data availability and transmission – and with a weak information culture. Yet, there is considerable heterogeneity in how LMICs design and implement their respective PBI schemes, including the verification function within these schemes. This heterogeneity stems from a series of factors, including the broad divergence in the performance of health information systems, differences in culture, and the level of financial investment. In general, the verification function within these schemes evolved to include a combination of the following main elements:

- Procedures aiming to ensure accuracy and consistency in reports on the volume and/or quality of health services which health facilities submit together with their PBI payment requests
- Procedures aiming to ensure the veracity of the information on which the performance reports are based by checking that service users who are listed in a facility's registers are real and actually received the services recorded in those registers
- Procedures aiming to verify the quality of reported health services or, more generally, the quality of care within the facility (Naimoli and Vergeer 2010)
- Procedures aiming to ensure that the verification is carried out properly (i.e., counter-verification)

Similar to the overall evolution of PBI schemes, verification systems within these schemes are dynamic. They tend to evolve as schemes move from pilot phase to national scale-up and as the behavior of PBI actors (e.g. service providers, district health teams) changes in response to the introduction of financial incentives. Details about how verification systems evolve, along with the trade-offs that need to be made along the way, are seldom documented.

The purpose of this report is to summarize lessons learned about how performance is verified in the context of PBI in the health sector in LMICs and about the capacity required to oversee and implement the verification function. Based on the experience of existing PBI schemes, it intends to serve as a guide for designers, implementers, and stakeholders, by providing lessons about the trade-offs to

consider in the selection and refinement of key verification system features. This report was developed from a review of available documentation and discussions with PBI verification experts in six purposefully selected PBI schemes: Benin, Burundi, Kenya, Liberia, Rwanda, and Tanzania.[1] These discussions served two purposes. First, they contributed to the identification of key principles to consider in the design and implementation of a verification system. Second, they complemented the schemes' descriptions found in PBI project documents and they helped illustrate the principles identified and some of the trade-offs involved.

Reflecting on those key factors, the report first proposes a framework for describing and evaluating key verification features and design options. The discussion that follows illustrates the kind of trade-offs that typically need to be made when designing or implementing a verification system. The report concludes with a summary of lessons learned about PBI verification design, implementation, and the trade-offs made along the way. Our data collection and compilation approach, as well as the detailed descriptions of the verification systems in the six selected countries are described in annex.

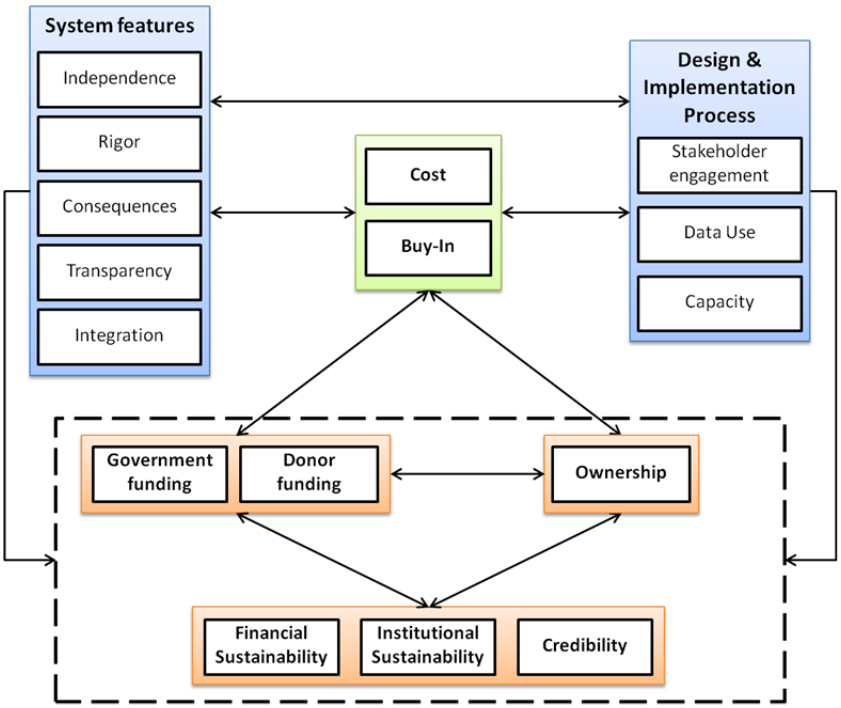
[1] The information gathered from documents or through key informant interviews could not be verified in the field. Also, because the documentation of verification procedures varied by country, we were not able to extract the same level of information in each instance, and therefore we describe some of the case studies in greater detail than others.

2. PBI VERIFICATION: A FRAMEWORK

The main goal of verification in the context of PBI is to guarantee the credibility of the PBI scheme; the different stakeholders need to trust that the performance that is being reported and rewarded is real. This credibility needs to be safeguarded at all times. If stakeholders start doubting the validity of the performance data, the whole scheme is in danger. The verification mechanisms need therefore to be designed and implemented in a way that is sustainable, both institutionally and financially.[2]

In this section, we propose a framework that shows the various factors that will contribute to the credibility and sustainability of a verification system, as well as the relationships that exist between these factors (see Figure 1). We developed this framework based on our country case studies and discussions with PBI experts. It is intended to guide the decision-making process inherent to verification design and implementation and to facilitate related discussions around the trade-offs that must be made along the way. Additionally, we propose that this framework can be used to evaluate country verification schemes as they evolve, and to help steer them towards achieving the overall PBI verification objectives.

Figure 1. Verification in PBI Schemes: A Framework



[2] While sustainability is critical for all the functions of a PBI scheme, our focus, in the context of this paper, will be on the sustainability of the verification arrangements.

2.1 VERIFICATION SYSTEM FEATURES

A first set of factors influencing the credibility and sustainability of a verification system, either directly or indirectly, can be grouped under the heading *system features*. These features all relate to questions around *what* is to be verified, *by whom*, and *how*. They comprise independence, rigor, consequences, transparency and integration.

2.1.1 INDEPENDENCE

Ensuring a sufficient degree of independence when selecting the entities involved in the various verification tasks is critical to minimizing conflicts of interest. This is achieved by selecting entities that have no stake in the outcomes of the verification exercise. Options range from hiring an external agency such as an international or local NGO or an external auditor – thereby achieving the highest level of independence – to giving the responsibility for the verification tasks to an entity that is close to the actual PBI recipient, such as a DHMT. The latter option clearly results in a level of independence that is substantially lower. The option adopted by many PBI schemes lies somewhere between these two extremes, with a mixed verification team being set up for the verification of reported facility performance. Mixed verification teams offer a way to maintain the engagement of local stakeholders while ensuring that there is sufficient additional oversight from other parties.

Who should be in charge of verification so as to ensure a sufficient degree of **independence** and minimize conflict of interest**?**

These teams are usually comprised of representatives from the various stakeholders. They may for instance include representatives from the regional medical authorities, the civil society, the local government, an external entity etc. The composition of a verification team may vary for the different types of PBI recipients. For the verification of hospital performance, for example, several countries decide to include peers in the mixed teams. In other words, hospital staff are engaged in verifying each others' reported performance. Some countries also ensure that there is some overlap between the composition of the verification teams and that of the teams in charge of routine supervision.

For the verification tasks that need to be carried out at the household level, many countries opt for the contracting of local associations or community-based organizations (CBOs) that have a solid knowledge of the local community and population. Some schemes purposely choose community associations or CBOs that do not work in the health sector in order to minimize potential ties with the health facility the performance of which is to be verified.

When counter-verification procedures are in place, they are usually carried out by an agent external to the PBI scheme, such as a national or international NGO, or an external auditor.

2.1.2 RIGOR

The rigor of a given verification system largely depends on what is being verified, with what frequency and to what degree. It also depends on the effectiveness of counter-verification procedures. This rigor, in turn, influences the level of confidence associated with the reported performance data.

What to verify? PBI schemes may decide to verify the reported volume of services delivered, the quality of these services and/or some aspects of quality of care more broadly. The volume of services can typically be verified at two levels: at the level of PBI recipients (does reported quantity reflect the data in the registers?) and at the level of service users (is the data in the registers valid, i.e., have reported

services indeed been provided to the community?). Quality as well can be verified at these two levels. The way quality is verified at the level of PBI recipients depends on how quality is being measured.[3] In schemes that reward quality based on a predesigned scorecard or checklist, such as Benin, Burundi, and Rwanda's for instance, verification involves checking the accuracy of scorecard or checklist completed by the facility. Alternatively, the verification entity or team may have to fill out its own scorecard or checklist. The score can then be compared to that obtained by the facility. Some PBI schemes, such as those in Kenya and Liberia, also link quality measurement with facility accreditation. The accreditation survey is developed based on national guidelines and is usually administered yearly. In Liberia, for example, maintaining a certain accreditation level is one of the PBI performance indicators. When services users are interviewed in the community to ensure reported services are real, a few questions can be added to the questionnaire to gauge the users' satisfaction with the services received, and hence to assess perceived quality of care. In addition to the verification of volume and quality, PBI schemes may also implement counter-verification procedures. These represent an extra layer of verification, focused on checking the work of verification teams, possibly at the same two levels. Ideally, a PBI scheme should verify both the quantity and the quality of services – both at the level of recipients and at that of service users – and it should put in place adequate counter-verification procedures. Note that what is verified may vary for different types of PBI recipients (e.g. health centers, district hospitals, DHMTs).

What aspects of service delivery should be verified, with what frequency and to what degree, and how much of the verified data should be counter-verified to have a **rigorous** verification system and to guarantee an acceptable level of confidence for the performance data?

With what frequency? We mentioned in the introduction that verification is to precede payment in the PBI cycle. The frequency of verification should therefore correspond to that of payment. In many PBI schemes, this is the case for the verification of the quantity of services. Verification of quality, however, is often less frequent, especially when the process is labor and time intensive. For example, while some countries (such as Burundi, Liberia) verify quality quarterly, others, like Benin, verify it biannually. Liberia, for example, at first conducted quality verification once per year, before switching to its current, quarterly process. The frequency of counter-verification varies greatly from one scheme to another. For example, internal verification occurs monthly in Tanzania, when District Health Management Teams Review facility reported data. In addition, an independent firm conducts periodic spot-checks based on real-time monitoring of data and in response to recommendations of a National Verification Committee. Counter-verification occurs quarterly in Benin and Liberia, and bi-annually in Rwanda.

To what degree? In addition to the aspects of performance that are to be verified – i.e., quantity, quality or both – and the frequency of the verifications, another dimension of rigor is the depth of the verification exercise. Are all PBI recipients to be subjected to verification in each and every verification round? For how many of the performance indicators is the quantity to be verified at the level of the health facility? Is performance verified for the entire period covered by the performance report? In PBI schemes where a quality checklist is used, how much of it is to be verified? How many of the service users need to be tracked and interviewed? How much of the verified data needs to be counter-verified? Obviously, no PBI scheme verifies every single piece of reported performance. Most schemes use some form of random sampling in their verification system: random sampling of facilities, of indicators, of time periods, of quality checklist components, and/or of service users. The sampling size can vary greatly from

[3] For a discussion of the various ways in which PBI schemes reward quality, see Ergo, Paina et al. 2012.

one scheme to another. In Benin, for example, verification of the volume of services is done twice per quarter for each facility in the PBI pilot districts. In Rwanda each counter-verification visit focuses on 8 to 10 facilities out of the 400 total health centers. From each of the 5 provinces, 2 districts are selected. For each district, 1 facility is selected for counter-verification. Within each facility, a sample of patients is selected randomly. Facilities can either be selected randomly, based on probability, or purposefully, in cases where the reported data is largely different than expected. In Burundi, counter-verification occurs quarterly for a sample of 25% of all provinces, and within those 25% of all health centers – and all hospitals, ensuring that by the end of an implementation year, all facilities have been covered.

2.1.3 CONSEQUENCES

Verification is mainly aimed at ensuring that reported performance data can be trusted. This is achieved through the implementation of procedures that allow detecting misreporting, whether intentional or unintentional. But this is only part of what is needed. Equally important is to have in place a system of enforced consequences for PBI recipients, in order to deter fraud. The root cause of problems found through verification should be identified and procedures should be in place for taking action. Discrepancies between reported and verified PBI data can stem from a variety of sources – among them improper use of PBI tools, miscalculations, errors in data entry, or fraud at the facility level. Because of this, verification schemes usually allow for a range of acceptable discrepancies before bonus payments are reduced. Our case studies show that this range can vary considerably. In Benin and Burundi, for example, a 10% discrepancy is permissible before the payment is reduced by an equivalent of that percentage discrepancy. In both countries, the permissible discrepancy was much lower initially at 2% and 5%, respectively. However, the percentage of discrepancy was revised and increased to account for on-going capacity development and for avoiding a system in which everyone is penalized in the beginning, as they adapt to the PBI scheme and as data entry errors and miscalculations are likely more prevalent than fraud. While the amount by which PBI payment is reduced often corresponds to the percent discrepancy, in Burundi, if discrepancies are greater than 20%, all payment is cancelled for that verification period. Decisions as to what is acceptable and what the consequences should be in case of unacceptable discrepancies will vary by context and are likely to evolve, especially in the early stage of implementation. Most importantly, consequences which are fair, enforced consistently in a timely fashion, with clearly outlined and widely communicated dispute procedures, and linked with mechanisms to support PBI recipients to avoid future incidents, assure the legitimacy of the verification procedures, and, in the long-term, of the overall PBI scheme.

What type of **consequences** and penalties should be connected to the verification process?

2.1.4 TRANSPARENCY

High transparency for both verification procedures and the subsequent communication of results is also an important feature of the verification system. Dissemination of verification results – including issues that were identified and related consequences – is key for maintaining open communication channels between all the PBI stakeholders. In addition, sharing this information with the communities served by PBI recipients, possibly through local media or the civil society, can help deter fraudulent behavior.

What mechanisms should be put in place for ensuring **transparent** verification procedures and communication of verification results and possible related consequences?

Many PBI schemes have a web-portal, which contains service delivery and financial data, as well as verification reports. In an ideal context, verification reports would be available in real-time. In reality, however, most PBI schemes still rely heavily on paper-based reporting. There is usually a delay between the verification of performance data and the posting of the verification report on the web. Furthermore, web-portal access might be restricted through password protection. In addition to making the data available on the web, PBI schemes can also organize periodic stakeholder meetings to share challenges and experiences with the verification process.

2.1.5 INTEGRATION

Closely related to the feature *independence* discussed earlier is that of integration. In the context of PBI verification, integration refers mainly to the extent to which the verification mechanisms adopted make use of existing procedures, tools and entities. For example, the Tanzania PBI pilot was designed around the same time as the District Health Information System 2 (DHIS2) was being piloted. Therefore, verification is closely tied to the health information system. Similarly, as of 2011, Burundi linked the PBI data system to the national HMIS, which made the automation of some of the verification features possible. In several of the countries we examined - including Benin, Rwanda, Tanzania - District Health Management Team members play key roles in carrying out verification visits (often as part of mixed verification teams) and are seen as focal point for organizing verification in the long term. Also in Burundi, the focus has been on ensuring that the entities carrying out verification are embedded in the system - with some additional external agents on the team, so as to maintain independence.

To what extent should the verification procedures be **integrated** into the system?

Interestingly, integration does not necessarily go hand in hand with independence, as greater independence calls for the contracting of external entities to carry out the verification tasks.

In some way, integration in the context of verification also relates to the link with the national health management information system (HMIS), even though this link is a feature of the broader PBI scheme. By the time the verification system is developed, performance indicators may have already been selected, in which case the link with HMIS, or the absence thereof, is a given. Yet, one could see the design of the various elements of a PBI scheme as an iterative process, and it is therefore important, when selecting performance indicators, to realize how verification can help improve the quality of HMIS data, thereby contributing to a strengthening of the HMIS and encouraging the various stakeholders to make more use of HMIS data. This added value generated by verification is an additional reason for selecting HMIS indicators as measures of performance in a PBI scheme.

2.2 VERIFICATION DESIGN AND IMPLEMENTATION PROCESS

The second set of factors influencing the credibility and sustainability of a verification system have been grouped under the label design and implementation process in our framework (see Figure 1). This process involves *stakeholder engagement, data use, and capacity building*.

2.2.1 STAKEHOLDER ENGAGEMENT

Stakeholder engagement refers to facilitating the participation of key PBI actors in various aspects of the design and implementation of the verification procedures. It will greatly contribute to making the system suitable for local realities. For this to be most effective and rewarding in the long-term, PBI scheme verification designers should be aware of who the key local and external stakeholders are and

which processes and discussions they could feasibly be involved in. In addition to being engaged in the discussions around the design of the different elements of the PBI scheme, including verification, stakeholders – particularly those operating at the national level – can be provided roles as part of verification teams, providing additional opportunity to interact with other groups of stakeholders as well as PBI program recipients. Community representation is often sought on these mixed verification teams as well. In addition, the household-level verification is usually carried out by local associations or CBOs. Stakeholder engagement is as important in the initial design of the PBI verification system as it is through subsequent revisions, especially during scale-up. However, the engagement of stakeholders must be balanced with the goal of maintaining the independence of the verification process and minimizing conflict of interest.

> How can the various **stakeholders** be **engaged** in the design of the verification system and in the verification process itself?

2.2.2 DATA USE

Data use is another important factor relating to the design and implementation process. Often the systems in which PBI schemes operate see the collection and organization of data as a burden. The PBI scheme and its verification process, together with the accompanying new forms and procedures and the visits and discussions led by the verification teams, could easily be perceived as another layer to this burden. Yet, using verification procedures to identify gaps in the data and to reduce underlying capacity gaps can ultimately improve data quality and make the PBI data easier and more accessible to use.

> How can the verification procedures help identify gaps in the data and reduce underlying capacity gaps?

2.2.3 CAPACITY BUILDING

Tied in with data use is having the necessary capacity to design, implement, and eventually institutionalize the verification function in a PBI scheme. Considerable capacity building efforts are required to ensure that verification procedures become institutionalized in a PBI scheme. Both the capacity of the actors that carry out verification and that of those whose performance is to be verified need to be developed. The capacity building that is necessary relates not only to the verification procedures *per se*, but also to other elements of the PBI scheme. Examples include: training PBI recipients to correctly use PBI tools and produce quality reports; working with PBI recipients to minimize errors in data reporting; discussing how fraud is defined and what the consequences are; digitalizing data collection and analysis procedures in order to reduce delays in transmission; training verification teams, including CBOs to effectively and reliably conduct verification procedures.

> Whose capacity needs to be strengthened and how? Who will be responsible for this **capacity building**?

2.3 VERIFICATION INTERMEDIATE FACTORS

We mentioned the ultimate goal of a PBI verification system earlier – the verification system should guarantee the credibility of the PBI scheme and this credibility should be sustained over time, both financially and institutionally. We have also discussed two sets of factors that will determine whether

this goal can be achieved – a number of design features and factors relating to the design and implementation process. The effect of these factors on the ultimate goal can be either direct or indirect, through their influence on each other and on four intermediate factors: *cost*, *funding*, *buy-in* and *ownership* (see Figure 1).

2.3.1 COST

The cost of verification is influenced both by the verification system features selected, as well as by the design and implementation process. It includes all of the initial investments needed to design and set up the verification system, including the costs to train the different PBI actors. It also covers the recurrent costs associated with the routine execution of the actual verification tasks. The total cost of verification typically decreases over time – it tends to be much higher in the beginning while the system is being set up, as well as during the more resource intensive pilot period. It is particularly influenced by two of the design features, namely the level of rigor – e.g. periodicity and sample sizes – and the level of independence – it is more costly to hire an international NGO to conduct the verification tasks, for example, than to rely on existing entities that are already part of the system. It is also dependent on some of the factors relating to the design and implementation process, in particular the amount of capacity building required. The cost of the scheme then directly influences the balance between local and donor funding and the levels of each. More expensive schemes are less likely to be funded exclusively by local resources, and more likely to be donor dependent. While dependency on donor resources in the early phases of a PBI scheme might be unavoidable, it could compromise financial sustainability in the long term. The cost will also influence the level of buy-in from stakeholders. An excessively expensive verification system is unlikely to gain much support.

> What is the **cost** associated with the selected design features and with the design and implementation process?

2.3.2 BUY-IN

Buy-in from the different stakeholders stems to a large extent from their engagement in the design and implementation process. It is also influenced by the actual design features of the verification system. The more stakeholders are engaged in the design and implementation process, and the more they feel comfortable with the design decisions made, the more likely they are to "buy-in" to the verification system. The level of buy-in is not necessarily uniform across stakeholders though. For many local actors, for example, the level of buy-in will greatly depend on how well the verification system is integrated. Many donors, on the other hand, will want to see the highest possible level of independence before buying in. Buy-in from local actors is a precondition for ownership of both the verification procedures and the verified data. Buy-in from the Ministry of Finance will be critical to secure government funding. The greater the buy-in from external actors, the more likely it will be for donor resources to be available, especially during the resource-intensive initial stages.

> Is there **buy-in** from the different stakeholders? What needs to be done to get more buy-in?

2.3.3 OWNERSHIP

Ownership in this context refers to the degree of control local stakeholders, including but not limited to the Ministry of Health (MOH), are able to exercise over the design and implementation of the verification system. It is closely related to the way in which these stakeholders have been engaged throughout the process, to whether they fully understand the verification procedures and the other elements of the PBI scheme thanks to adequate capacity building, and to their level of buy-in. It also depends on the extent to which verification procedures have been integrated into the existing system. It is important to ensure that local stakeholder's 'control' over the design and implementation does not jeopardize independence, and therefore the credibility of the scheme, especially when the local stakeholders in question are (close to) PBI recipients.

How much control are local stakeholders able to exercise over the design and implementation of the verification system?

2.3.4 FUNDING

Another important intermediate factor is the availability of funding to pay for the design, set up and implementation of the verification system. This funding can come from the government or from donors. In many schemes, the share of donor funding tends to be higher in the initial phases of design, set up and piloting. As the scheme evolves, the share of government funding will need to increase for the verification system to become financially sustainable. Whether or not the necessary funding can be secured through the different phases of the PBI scheme will depend on the cost involved (the higher the cost, the more funding is required) and the level of buy-in. Also, the government is more likely to mobilize adequate resources if it 'owns' the system. Donors are most likely to contribute financially if they feel the system assures a sufficient level of credibility.

Is there sufficient **funding** available to finance the verification system? What is the relative contribution of government and donors?

2.4 VERIFICATION ULTIMATE GOALS

Let us now go back to the ultimate goals of verification and see how their achievement is influenced by all the factors described in the previous sections.

2.4.1 CREDIBILITY

Does the verification system warrant the credibility of reported performance data? The answer will depend on the design features of the system, mostly the independence and the rigor, but also the consequences and the transparency. It will also directly depend on the factors associated with the design and implementation process, especially on whether sufficient efforts have been made to build the capacity of all the stakeholders. In addition to building the capacity of those directly involved in the different verification tasks, it is also important to ensure that those who will judge the credibility understand the system well enough to have an informed opinion.

Does the verification system warrant the **credibility** of reported performance data?

2.4.2 FINANCIAL SUSTAINABILITY

Financial sustainability is directly related to the availability of funding and to the share of the funding that comes from the government budget. However, it also greatly depends on the balance between the system features and their cost of design and implementation. Whether a verification system is financially sustainable cannot always be determined in the short term. An initial design of a pilot might seem unsustainable because of the large initial investments necessary and the fact that these initial investments are often from external sources. However, such initial investments, if implemented in such a way that they also develop local capacity, could pay off significantly in the long-term. Furthermore, if the verification scheme inspires credibility, it is more likely that the funding will be there - both from national governments, as well as from external development partners.

2.4.3 INSTITUTIONAL SUSTAINABILITY

Whether institutional sustainability of the verification scheme is achieved depends on the extent to which verification procedures are integrated within the local system, on the available and potential local capacity, and on stakeholder buy-in as well as local ownership of procedures. The more verification procedures are incorporated in existing procedures, the more they can make use of existing tools and the more they are embedded within local entities, the more they will become part of routine procedures.

3. MAPPING DESIGN AND IMPLEMENTATION OPTIONS

In order to fully capture the dynamic relationships described in the above sections and in Figure 1, we propose using this framework to assess the various design and implementation options associated with verification and to illustrate some of the trade-offs that need to be made.

Ideally, all PBI verification schemes would be characterized by features that maximize the credibility and the long-term sustainability, while minimizing the costs. This design option has systems features characterized by high levels of independence, rigor, transparency, integration, and highly enforced and fair consequences. During design and implementation, stakeholders are engaged, data use is high, and available capacity is also high - meaning that human and financial resources to build capacity will be minimal. Such design features ideally result in a scheme that is low cost, with high levels of buy-in and local ownership, that guarantees the credibility of performance data (and more broadly, of the PBI scheme) and that can be sustained over time, both financially and institutionally.

This ideal scheme represents one end of the spectrum. At the other end, we would find a verification scheme with the exact opposite characteristics, i.e. a low level of independence, a low level of rigor and so forth. Such scheme would be expensive and unsustainable. On top of that, it would not be able to guarantee the credibility of the data. Clearly, it is unlikely for any country's verification scheme to be at either of these extremes. Typically, the design of a verification scheme involves many trade-offs, which translate into various degrees of independence, rigor etc., and ultimately into various degrees of credibility and sustainability. While the goal for any verification scheme is to get as close as possible to the ideal situation described above, the trade-offs will result in a scheme that lies somewhere between the two extremes and that hopefully achieves a sufficient degree of sustained credibility.

Challenges arise because strengthening one key element may come at the expense of another element. This is precisely why trade-offs need to be made. Here are a few concrete examples.

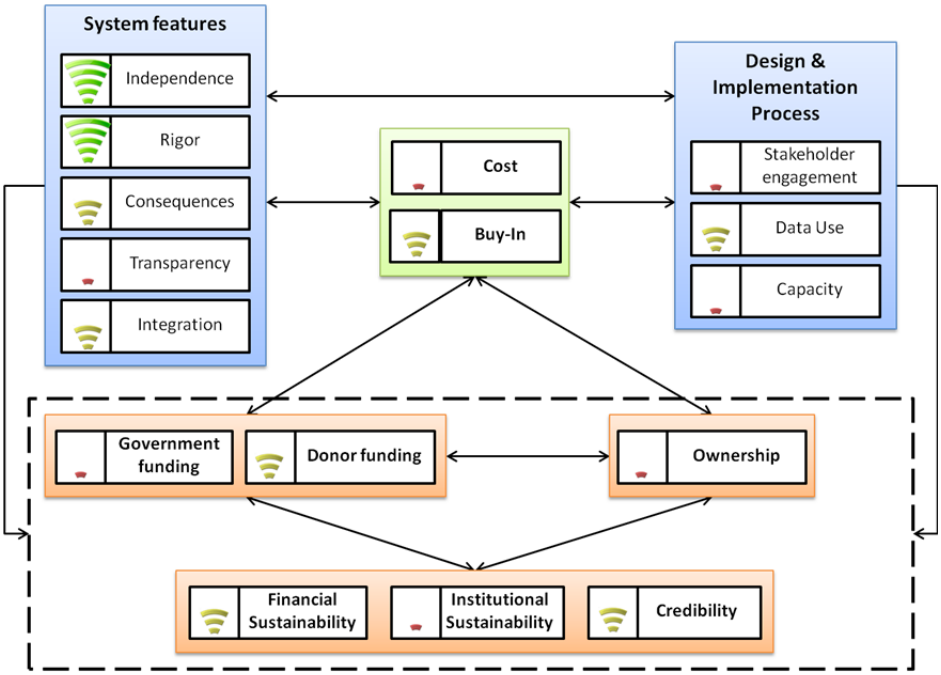
- Rigor is expensive: Making the verification procedures more rigorous will inevitably result in a more costly verification system. While the rigor will contribute to credibility, the associated cost makes it more difficult to reach financial sustainability.
- Independence reduces integration: Involving an external third party organization allows for a high level of independence in the verification procedures. At the same time, this organization operates completely outside the existing system.
- Integration requires capacity: Putting existing entities in charge of the various verification tasks puts an extra burden on these entities. It also requires a certain minimum level of capacity, which may or may not be there.
- Stakeholder expectations may differ: While donors may attach relatively more importance to independence, rigor and transparency, the MOH may be more interested in ensuring integration and keeping the costs down.

While making these trade-offs, it is important to keep in mind that all the factors matter. It is therefore recommended to opt for a balanced design that does not over-emphasize some factors while totally neglecting others. For example, verification procedures may score extremely high in terms of

independence and rigor; without sufficient stakeholder engagement, buy-in, and local ownership, however, they are unlikely to reach institutional sustainability, even if the costs are affordable. These trade-offs are illustrated in greater detail in the example below (see Figure 2). We used the green, full signal to illustrate desirable, optimal verification elements. For example, high levels of independence or low, affordable costs would be marked with a green, full signal. The yellow, medium-level signal is used to illustrate elements that are at moderate levels. For example, moderate levels of data use could be observed if verification actors make use of data in some instances, but not consistently. The red, low signal indicates undesirable characteristics. For example, a low signal associated with costs would mean that costs are high, and therefore, unaffordable. A low signal associated with capacity would mean that capacity to carry out verification is low, and therefore needs development.

Figure 2 provides a hypothetical example of how the framework could be used to assess and guide verification schemes - both during design and, periodically, as the PBI scheme evolves.

Figure 2. Hypothetical Verification Scheme Illustrating Key Trade-Offs



In the hypothetical verification scheme presented in Figure 2, verification procedures are carried out by parties that are external to the system, which translates in a high level of independence. These procedures are extremely rigorous. However, the verification system is not transparent: it is difficult to access actual verification data and information about verification procedures. Even though some penalties or consequences are in place in case excessive discrepancies are identified through verification, these are not consistently enforced. Furthermore, while some verification tools and procedures are integrated in the national health information system, most are implemented in parallel. Also, as mentioned earlier, none of the entities carrying out the verification is part of the system.

These system features come at a high cost, but thanks to the high levels of independence and rigor, buy-in is higher than otherwise expected, at moderate levels. However, the buy-in is mostly fueled by external funders, as local stakeholder engagement is low in part due to overall low systemic capacity

levels. Verification data is moderately used within the system, but is hampered by the fact that poor levels of transparency limit data availability and by low levels of capacity, which complicate any analysis or use of data by local actors.

Given the limited local capacity and minimal stakeholder engagement, local ownership of verification procedures and their findings is low. In the absence of strong government buy-in and ownership, the high costs of implementation of this hypothetical scheme are mostly funded with donor money, with some contribution - albeit very modest from the national government.

These features and characteristics result in a verification scheme that has moderate levels of credibility, despite the high levels of rigor and independence. It also displays moderate financial sustainability - as it is developed and implemented mostly through donor funding - and low institutional sustainability.

A number of our case studies displayed some of the trade-offs illustrated in this hypothetical verification scheme. For example, Liberia's verification scheme displays the trade-offs between integration, rigor, costs, and local capacity. Because of low local capacity to implement the PBI scheme, NGOs are the principle entities contracted to do so. Concerns of high costs, in an environment that is already highly dependent on external resources, led to some compromises in terms of rigor. As a result, Liberia's verification system is somewhat less rigorous than that of some of the other countries. Verification in this scheme is currently not mandatory - although checks are in place to incentivize NGO partners to carry it out. Moreover, household-level verification is currently not in place. In Benin, Burundi, Kenya and Rwanda, it was decided to implement counter-verification through an external entity, considering that the benefits associated with the credibility obtained through independence and rigor would outweigh the initial financial investments. The trade-offs between stakeholder engagement and independence of verification procedures and results are illustrated through the case studies in Benin and Burundi. Mixed verification teams were selected so as to maintain various stakeholders involved, while at the same time minimizing any potential sources of conflict of interest.

4. DISCUSSION AND LESSONS LEARNED

Our report summarizes, in general terms, key aspects underlying verification in PBI schemes in low and middle income countries, as well as the key trade-offs faced by designers and implementers of PBI schemes. The evolution of the PBI schemes explored through this report, as well as example of the trade-offs they had to face are illustrated further through the individual case studies found in the adjoining annexes.

The framework proposed in this report is meant to serve as a guide for countries that are seeking to introduce or improve their verification procedures. Furthermore, the following questions can help navigate the framework and the decision-making process linked to the selection of various design and implementation elements:

- Who should be in charge of verification so as to ensure a sufficient degree of independence and minimize conflict of interest?
- What aspects of service delivery should be verified, with what frequency and to what degree of rigor, and how much of the verified data should be counter-verified to guarantee an acceptable level of confidence for the performance data?
- What type of consequences and penalties should be connected to the verification process?
- What mechanisms should be put in place for ensuring transparent verification procedures and communication of verification results and possible related consequences?
- To what extent should the verification procedures be integrated into the system?
- How can the various stakeholders be engaged in the design of the verification system and in the verification process itself?
- Whose capacity needs to be strengthened and how? Who will be responsible for this capacity building?
- Is there buy-in from the different stakeholders? What needs to be done to get more buy-in?
- Is there ownership from local stakeholders? How much control are local stakeholders able to exercise over the design and implementation of the verification system?
- Is there sufficient funding available to finance the verification system? What is the relative contribution of government and donors?
- Does the verification system warrant the credibility of reported performance data and, more broadly, of the PBI scheme?

PBI verification develops as a dynamic process, which constantly evolves. The countries we examined for this report find themselves somewhere in between the two extremes described in the previous section and are also in constant, dynamic flux. One of the overarching lessons echoed by all of these cases probably lies in the fact that, although verification is primarily set up to catch and deter fraud and that fraud does exist, inconsistencies in data – especially in the beginning – tend to be due more to poor

data entry and lack of local capacity to fulfill the requirements of the system. Based on these experiences, respondents advised to expect the first few rounds of verification to be less about fraud and more about identifying the weaknesses of PBI implementation – such as unclear indicator definitions, wrongly classified cases, incorrect use of data collection tools – and fine-tuning the PBI instruments, as well as ensuring that participants fully understand the new system.

The case studies show that the verification function can be carried out in many different ways, which may involve a range of actors. These actors and the verification activities in which they are typically engaged are listed in Table 1. The table also shows how the involvement of a particular actor may affect some of the key features of the verification scheme, namely independence, integration, cost and stakeholder engagement. Each of the features is rated as low, medium or high.

While across the countries we examined it was generally agreed that stakeholder engagement in verification is important. Some countries engage mixed verification teams, while others conduct verification through peer review. The role of the community, however, was sometimes debated. Some countries decided to not include a community element in their verification – citing high costs, as well as low capacity among CBOs. Other countries opted to involve CBOs in patient-tracking. Beyond the primary goal of ensuring the veracity of recorded and reported performance data, some respondents familiar with the verification schemes of these countries also cited the involvement of CBOs in the verification process as a way to channel community feedback and to strengthen community engagement. Whether the latter truly happens, however, is not always clear: none of the countries studied seemed to have been able to effectively achieve this. In fact, the two goals – ensuring the veracity of the data and strengthening community engagement – may not always be compatible (Morgan 2012). In order to achieve the first of these two goals, CBOs need some level of independence, both from the health facilities of which they are expected to verify the data, and from the community in which they are supposed to track and interview service users. In Burundi, for example, one of the eligibility criteria for CBOs was not having strong ties with the health facilities.

Household-level verification does undeniably add a substantial cost to the verification scheme. For schemes that decide to include this layer of verification, the involvement of CBOs might promise cost savings, as the services of these organizations are typically cheaper than those of larger, national or international organizations. Whether the involvement of CBOs represents the most effective strategy, however, will greatly depend on two factors: the capacity of selected CBOs and their level of independence. Finally, it is important to keep in mind that the likely monetary savings may, to some extent, come at the expense of rigor. In Burundi, for example, the frequency of household-level verification had to be reduced from quarterly to biannually due to insufficient capacity among the selected CBOs to complete their verification tasks within one quarter.

Table 1. Who Should Carry Out Verification - A Summary of Verification Actors and Activities They Usually Engage In

Potential verification actors	Quantity	Quality	Patient-tracking	Counter-verification	Independence	Integration	Cost	Stakeholder engagement
Ministry of Health	X	X			Low	High	Low	Medium
NGO Partners overseeing service delivery	X	X			Low	Low	Low	Low
Hospital peers	X	X			Low	High	Low	High
Mixed verification team (w/ member of external* entity)	X	X			Medium	High	High	High
Mixed verification team (w/out member of external entity)	X	X			High	High	Medium	High
Local external entity (e.g. consulting firm, auditing firm, NGO)				X	High	Low	Low/Medium	Low
International external entity (e.g. consulting firm, auditing firm, NGO)				X	High	Low	High	Low
Community-based organizations			X		Medium	High	Low	Medium

* Note: An external entity is an organization that is completely independent from the PBI scheme, and can be either national or international.

Our case studies also illustrate the fact that the degree of rigor of verification may vary considerably, not only across PBI schemes, but also over time within a given scheme. As mentioned earlier, verification, and PBI in general, is a very dynamic process. During the piloting phase, significant emphasis is usually placed on achieving high levels of credibility - usually through investments in external verification agents and highly rigorous procedures. Both the proportion of health facilities being regularly verified and (where applicable) the proportion of service users being interviewed tend to be larger during that phase. During scaling-up, there is a tendency for verification designs to move away from expensive international agents to local ones, and from more expensive, parallel schemes to more integrated ones. There is also a tendency to reduce sample sizes. In this process, verification designers have to master the art of maintaining a good balance between affordable costs and adequate degrees of independence, integration and rigor, so as to ensure sufficient levels of credibility without compromising long-term sustainability. Important is not to allow the level of rigor to go down to a point where the credibility of the data starts being questioned, as this may jeopardize the entire PBI scheme. Making sure that the threat of being verified is always present may to some extent counteract this danger. Even though more research is needed on the topic, one might expect that such threat, if big enough, would deter fraud as effectively as systematic, comprehensive verification. The use of random selections can play an important role in this regard (e.g. random selection of indicators, random selection of performance periods, random selection of facilities, random selection of service users...). Achieving the 'right' balance also entails ensuring that a robust system of consequences is in place. Clear definitions of which discrepancies are associated with penalties, which actors enforce them, and how they are communicated through the system are key contributors to re-asserting the robustness of the system and its credibility.

In addition to the lessons they provide, our case studies also reveal several gaps in the way that verification is currently documented. In order to facilitate further evaluations and comparisons of verification procedures, PBI designers and implementers should consider including detailed descriptions of their verification plans in project documents, and updating these regularly as the schemes evolve. Also, the cost of verification procedures is not always easy to tease out and it is not reported uniformly. In the future, it would be helpful if standard verification metrics were developed, so as to be able to make comparisons between various PBI schemes and to be able to trace the evolution of key verification features (including cost) over time. Finally, only a few verification scheme descriptions include information about how such a scheme is to transition from pilot to scale.

Strengthening the verification process is a complicated endeavor. Country PBI schemes currently looking into verification design can start by thinking through the framework, lessons learned and country examples presented in this guide. In addition, opportunities for further capacity development are available through local and regional PBI and verification experts. Several Communities of Practice (COPs) on PBI have been launched in recent years.[4] These COPs provide virtual forums for discussion and opportunities for peer-to-peer learning. Additionally, the use of new technologies - such as cell phones or tablets - for data collection, validation and analysis could be considered in future verification pilots and assessed for rigor and cost-savings. Most importantly, however, is opening up the "black box" of verification by improving documentation and continuing to share lessons learned.

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[4] One COP was launched as part of the *Harmonization for Health in Africa* (HHA) initiative supported by AfDB, JICA, NORAD, UNAIDS, UNFPA, UNICEF, USAID, WHO and WB See http://www.hha-online.org/hso/financing/group/results-based-financing. Another one was launched as part of the HealthSpace Asia platform (http://healthspace.asia/group/cop-health-financing-asia). While it focuses more broadly on health financing in Asian countries, one of its areas of interest is PBI.

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ANNEX 1: METHODS USED TO DEVELOP THIS REPORT

The information presented in this report was gathered primarily through a review of available literature and country-specific PBI project documents, and through interviews with country staff and stakeholders. The literature search identified mostly grey literature highlighting cross-cutting issues related to verification, but, with a few exceptions of mostly World Bank reports (Naimoli and Vergeer 2010; Vergeer, Manshande et al. 2010; Vergeer, Manshande et al. 2011; Vergeer, Manshande et al. 2011; Vergeer, Manshande et al. 2011; Vergeer, Vroeg et al. 2011), our search did not reveal detailed descriptions or evaluations of country verification schemes. Country project documents provided a detailed look at how verification schemes were designed. Interviews with selected country staff and stakeholders served to identify how verification schemes were implemented in practice and how they have evolved over time, particularly as pilot PBI projects were rolled out to national scale.

The countries we examined for this report include: Benin, Burundi, Kenya, Liberia, Rwanda and Tanzania. They were purposefully selected to include PBI schemes at various stages of development and also to exemplify unique country situations. All but Kenya's voucher program, which has demand-side components, have implemented only supply-side PBI schemes. Burundi and Rwanda have been implementing their schemes for several years – the schemes in both Burundi and Rwanda have been scaled up nationwide – while Benin and Tanzania's are recently launched pilots, the verification procedures of which are just getting underway. Our case studies also represent countries along a spectrum of service delivery mechanisms – whereas in Liberia's post-conflict environment health services are mostly delivered through the NGO and private sector, Benin and Burundi have a public-sector focused health delivery system. Although these six case studies represent a variety of contexts in which PBI and related verification processes have been implemented, they are not intended to be representative of all the PBI schemes that have been designed and/or implemented to date.

For each country case study, we interviewed two to three individuals. These individuals were selected based on their involvement in the design and/or implementation of the PBI scheme. Our team attempted to capture the evolution of the verification process from different perspectives. Typically, a couple of individuals involved in the design of the PBI scheme or who had had significant involvement over the years were contacted first. These contacts then linked us to colleagues involved in the actual management of the verification (e.g. a third party agency responsible for verification or, in the case of a voucher program, a voucher management agency).

Our interview questions focused on the evolution of the verification schemes, and, in particular, any revisions in the design in response to challenges encountered. The questions addressed operational details about the verification process, such as the actors involved, frequency, procedures and tools. The interview also included a discussion of counter-verification. The last part of the interview focused on cost of verification, overall strengths and weaknesses, and both positive and negative unintended consequences. In addition, it also touched upon the role of verification in the broader context of the PBI scheme, as it related to overall rigor and quality of verification results, sustainability, local capacity, and trust among stakeholders (the interview guide is available upon request). After the country case study reports were developed, they were shared with some of the key informants interviewed in order to ensure accuracy and also to fill in any remaining information gaps.

ANNEX 2: VERIFICATION IN THE BENIN PBI SCHEME

Benin has recently begun piloting a supply-side scheme to incentivize public and private not-for-profit facilities (including hospitals) in eight (out of 34) districts. The PBI component is the principal focus of a broader health sector program, which includes components for improving financial accessibility and institutional strengthening. The design of this scheme has been underway since mid-2009, but the contracts between the Ministry of Health and health facilities, as facilitated by the PBI Project Coordination Unit, have only been signed in January and February 2012. As the first quarter only included the month of March 2012, the MOH has decided that the first payment related to this scheme will only be issued after the second quarter, ending June 2012. Therefore, the verification of the first quarter has started, recently, in April 2012.

The PBI scheme is focused on improving access to quality maternal, neonatal, and child health services. The scheme has an additional focus on malaria, in response to Benin's Free Malaria Care Initiative - a national policy of removing user fees to malaria services for mothers and children. The implementation of the Free Malaria Care Initiative in the 8 PBI pilot districts is financed through the World Bank's Health System Performance project - the same source of funding as for the PBI project. Therefore, malaria-specific indicators have been added to the PBI project indicators.

In order to determine the effect of the PBI scheme, half of the facilities in the pilot districts were assigned to a "treatment" arm – which includes PBI. The other half will be assigned to a "control" arm, which, in the first phase of implementation will not include PBI, although the "control" districts received additional funding to support their activities, not linked to performance. Furthermore, in both the "control" and "treatment" arms, the scheme will test two approaches for PBI implementation. Half of all facilities will receive increased financial management autonomy, meaning that the facility manager will decide on the allocation of the PBI credit, in compliance with some rules (at least 50 percent will go for equipment, drugs, training sessions, and a maximum of 50 percent for health worker bonuses). For the second group, the allocation of bonuses will be determined by the district health officer, given the same sets of rules mentioned above.

OVERVIEW OF VERIFICATION

The verification process has two layers – verification at the level of PBI recipients (i.e., health facilities) and verification at the level of the population receiving the services. At the level of PBI recipients, the purpose of verification is to validate the volume and quality of services delivered. The verification of the facility reports aims to ensure that the reports submitted by health facilities regarding the quantity and quality of services delivered actually match their respective facility-level data. These verification procedures are slightly different for health centers and hospitals.

The volume of services delivered is reported monthly by health center teams, and is verified twice per quarter for each health center by the District Health Management Team (DHMT), together with the district's controller, who is a member of a contracted, third party, international consulting firm (namely AEDES, Belgium). After the end of a quarter, health centers are provided one week to submit their reports. Verification teams are given two weeks after the submission of the report to complete their verification activities, validating the reported number of services delivered in health centers. For

hospitals, there are only a couple of quantity indicators on which they have to report - both related to the number of inpatient stays required for either general or surgical services. These two are in addition to some indicators related to malaria, according to the user fee removal policy that was recently implemented in Benin. These quantity indicators are all verified at the same time as quality of services (see below).

The quality of services is measured once per quarter for each health center, by a mixed team comprised of the DHMT and the district controller. The procedures are similar for hospitals, with the exception that the mixed verification teams for hospitals are comprised of peer hospital representatives, as well as the district controller. The verification of reported quality of care is conducted once every six months, in a random sample of health centers, through surprise visits. In addition to verifying the results reported on quality checklists, the verification teams also carry out exit interviews with patients. The second layer of verification happens at the household level, and intends to determine whether the patients documented in facility registers actually exist and received treatment. The patient verification component is carried out every quarter by local community-based organizations (CBOs), contracted by the Project Coordination Unit and supported by the same international consulting firm mentioned above. The CBOs have not yet been selected, and the criteria for selecting them are currently under development. The same CBOs will also be in charge of the identification of the poor who are entitled to free health care services, as supported by the component on financial accessibility. The verification of facility reports will be conducted for all PBI indicators. For household-level verification, the indicators for which verification will be carried out have not yet been selected, but it will likely involve a random subset of the list of PBI indicators. Household-level verification begins at the same time as the verification of volume of services and these verification teams are allotted 2 weeks to complete their activities.

The counter-verification, in this case the oversight and verification of CBOs will be carried out by the international consulting firm who is also charged with developing the capacity of CBOs to eventually carry out the verification process independently. Because implementation is just beginning, the counter-verification procedures and the external audit of the international consulting firm have not yet been decided, nor is it clear what happens when the counter-verification reveals problems with the verification.

The Table 2 below summarizes the key actors engaged in the verification and counter-verification process.

Table 2. Benin: Key Actors Engaged In the Verification and Counter-Verification Process

Verification actors	Description	Verification of quantity	Verification of quality		Household-level verification	Counter-verification
			Health center	Hospital		
District Health Management Team (DHMT)	Teams appointed by the Ministry of Health to oversee the management of the health districts.	X	X			
Community-based organizations	CBOs are organizations contracted by the Ministry of Health and receive technical support from District				X	X

Verification actors	Description	Verification of quantity	Verification of quality		Household-level verification	Counter-verification
			Health center	Hospital		
	Controllers					
Third-party organization	International consulting firm (AEDES). Technical assistants - called district controllers - hired through AEDES, are permanently based in each district and join the DHMT and the CBOs for verification activities.	X	X	X (with hospital peers)	X	X

EVOLUTION OF THE DESIGN, IMPLEMENTATION, AND UNIQUE FEATURES

SYSTEM FEATURES

Independence: Benin is proposing to use mixed teams for verification, with active engagement of an external independent organization in each layer of verification. The third party independent verification was not initially considered as part of the verification scheme. However, this was strongly encouraged by the stakeholders funding the PBI scheme, who wanted to ensure that the PBI scheme is seen as credible. They thought that conflict of interest would be created should the MOH be in charge of verification. These stakeholders brought in experience from Rwanda and Burundi – who had already implemented and scaled-up verification mechanisms in similar PBI schemes – and assuaged MOH concerns about high initial costs and long-term sustainability by adding a strong technical assistance component intended to develop local capacity and facilitate a transition to all local actors in 2-3 years. In order to facilitate capacity building, the international consulting firm hired to engage in third party independent verification currently has deployed a technical advisor in each of the zones. This technical advisor serves as the district controller and plays a key role in assisting with verification and counter-verification. In addition, this advisor is responsible for capacity building (training and technical support) of DHMTs and community-based organizations. Within 1-2 years, it is expected that the role of independent third party verifier will be taken over by a local organization. The zonal advisors are to facilitate this transition.

Rigor: The quality of the data produced was of high importance to Benin stakeholders and also part of the reason why donors, in particular, advocated for the use of an external independent agency in the implementation of verification and in the capacity building efforts for local actors. Attention to rigor is also evident in the frequency of the verification, which ensures that all facilities receive quarterly visits for the verification of reports and quarterly measurement of quality of care.

Consequences: Calibrating penalties so that they are credible and feasible to implement given the capacity of PBI recipients to adjust to the PBI scheme has been another element that has evolved in Benin. In the initial design, fraud is defined as a mismatch between reported services and those recorded in patient registries; providing incomplete services which do not meet the criteria linked to performance indicators; including "ghost" patients or services in facility registries; hampering verification

activities or corrupting/colluding with verifiers. Penalties, which are essentially a reduction in the PBI credit, are applied after the verification data comes in.

Initially, health facilities were allowed a margin of error of 2% in their reports on quantity of services delivered. Any error greater than 2% would be classified as fraud. In order to allow facilities to adjust to the PBI system, and in particular to the reporting requirements, the tools and the verification process, the margin of error was increased to 10%. This larger margin allows for facilities to have a period in which they can understand the verification tools and procedures (e.g. improve data error rates) without being penalized. In case fraud is detected, a proportion of the bonus will be withheld – a proportion which increases for multiple offenses.

Transparency: Maintaining clear, effective, and transparent communication channels, as well as easy access to data is also important to a robust PBI system. Public announcements of the occasional fraudulent cases were seen as important. Eventually, the main approach for sharing information about the PBI scheme would be trough a web-portal, similar to the ones available in Burundi and Rwanda. (See htt://beninfbr.org/)

Integration: The level of integration in Benin's PBI verification scheme revolves mostly around the entities selected to carry out verification. The PBI scheme places significant emphasis on developing the capacity of DHMTs to eventually carry out verification procedures without the assistance of AEDES. Additionally, while the inclusion of CBOs as partners in verification is not in line with existing procedures, Benin's PBI scheme has built-in a strong capacity building element for these CBOs, so that they may also carry out verification without the assistance of AEDES in the future.

DESIGN AND IMPLEMENTATION

Because the implementation of the pilot project is just beginning, not much can be said about the use of verification data and verified performance data. However, the following section discusses some additional key elements in the design and implementation of verification.

Stakeholder engagement: Stakeholders were engaged throughout the design period through frequent consultations. Additionally, stakeholder engagement is maintained during the implementation of verification through the use of mixed verification teams – whose independence is maintained through the involvement of the district controller from AEDES, Belgium.

Development of local capacity has been a strong focus in the design and implementation of the Benin scheme. In regards to the actors who carry out the verification, one of MOH's highest priorities was to involve DHMTs in verification from the beginning of implementation, as they would represent the entity responsible for carrying out verification in the long term. The role of community-based organizations was also debated. While the MOH was keen to involve CBOs in the verification process, it also wanted to limit the number of contracts it issues in order to reduce paperwork. For this reason, the MOH was more in favor of contracting with larger NGOs for conducting household-level verification. Other stakeholders, however, were more in favor of using small-scale organizations with a strong local presence. The current pilot tests the feasibility and practicality of both approaches: the MOH will contract with small-scale entities in 4 districts, and then one single larger NGO in the other 4. Based on early findings, it is likely that one CBO will be selected for each "commune," resulting in 21 CBOs for the 8 health districts As mentioned above, the transition to a verification process fully led by local organizations is expected to take between 1-2 years. Two important strengths of the current design include: (1) that it gives a lot of importance to DHMTs (under the oversight of the independent district controller), and (2) that it sees a gradually increasing role of the CBOs, allowing for capacity development in the transition to a more sustainable model.

Cost of verification: Cost of verification was a key concern of Benin's MOH, especially as they were considering the long-term sustainability of the PBI scheme. This was the main reason why the MOH initially preferred the verification process to be led by local organizations. For the World Bank and other partner organizations, however, ensuring the credibility of the scheme from the very beginning was considered to be critical and well worth the cost of hiring an international third party verifier. Estimates of the total cost of the verification process are not yet available.

Buy-in: The initial rigor of the verification process, with results being verified at every step, is already paying off. It has contributed to the current design being received positively by local and international stakeholders. It has also inspired other organizations, such as the Global Alliance for Vaccines and Immunizations (GAVI), the Global Fund and the Belgian Technical Cooperation (BTC) – form of virtual pooled funding – to adopt a similar verification process in the districts they support; the reliability of that process is perceived as trustworthy and inspires confidence that funds will be well used.

INTERMEDIATE AND LONG-TERM AIMS

Because implementation of the Benin pilot project has just started, some outcomes and characteristics of its verification process are yet to be revealed and features such as sustainability cannot yet be assessed. It is likely that the verification procedures will be quite costly for the pilot project, as the verification includes an international consulting agency. However, in the long-term, these costs might be well justified since they include funding for significant capacity building efforts, as well as a built-in transition to local actors in the medium-term. The credibility of the scheme, as well as the levels of local ownership remain to be determined as implementation continues, but it is likely that funding, from both government and external actors will be made available as long as the levels of rigor, independence, and stakeholders engagement remain good.

ANNEX 3: VERIFICATION IN THE BURUNDI PBI SCHEME

Burundi has begun piloting PBI in 2006. Pilots were implemented by CORDAID in Bubanza and Cankuzo provinces, and by HealthNet TPO in Gitega province. In 2009, after positive experience with these pilots, the government of Burundi decided to make PBI national policy; a nationwide scale-up was launched in April 2010, with the following goals:

- Improve utilization and quality of health services;
- Improve verification mechanisms and reimbursement of free health care package;
- Motivate and stabilize the health personnel;
- Encourage health staff to work in peripheral health facilities;
- Strengthen management, autonomy and organization of health facilities;
- Take into account the views of beneficiaries in the management and resolution of health problems.

Through this PBI scheme, facilities receive monthly fees for each service delivered on a specified list (24 from the basic health package for health centers and another 24 for a complementary health package for hospitals). Health facilities serving disadvantaged populations (i.e., those located in poor and/or remote locations) receive unit fees that are up to 80 percent higher than those in richer and less remote areas. Facilities also have the opportunity to earn bonuses of up to 25 percent of total fees earned the previous quarter depending on their quality performance, which is determined by an assessment of 109 composite indicators and community client surveys conducted at random each quarter by local organizations. These organizations verify whether services have actually been delivered and gauge client satisfaction with services. The PBI scheme also includes contracts signed between the Ministry of Health and the various actors engaged in the management and verification of the scheme - such as Provincial and district health teams, and the PBI implementation unit. The incentives tied to these contracts are linked to these actors' performance relative to the implementation of PBI.

OVERVIEW OF VERIFICATION

The verification procedures in Burundi are composed of two layers. The first of these is the verification of reports submitted by PBI recipient facilities and the second layer is the verification that the population actually received the services reported. The health facility reports used for this are the same as the ones used to report data to the Health Information System (HIS). The PBI indicators are highlighted in an annex to the routine HIS reports. The verification of these reports serves to ensure that the reports submitted by health facilities (health centers and hospitals) regarding the quantity of services delivered actually match their respective facility-level data. Each Provincial Verification and Validation Committee, known as the *Comité Provincial de Vérification et de Validation*, is comprised of representatives from the local government, the Provincial and district health teams, the donors, and the civil society. This committee is comprised of two teams, one for validation and one for verification.

The validation team focuses on the management of contracts, the validation of data, and oversight of local PBI implementation. The validation of data involves the monitoring and evaluation of how verification is carried out, analysis of verification data, validation of calculations made by health facilities, validation of the quarterly reports by health facilities on quality and the semiannual household-level verification reports on quality of care and patient satisfaction. In addition, this team communicates to health facilities any changes or penalties to their bonus, after verification.

The verification team is comprised of a team coordinator from the MOH, 1 verifier per 15 health facilities, and 1 trainer of local organizations for each province. This is a mixed team, in which 50% of members are civil servants, and the other half are contracted personnel recruited by international partners. The tasks of this team include the planning of monthly verification activities, the verification of monthly health facility reports on the volume of services delivered, the compilation of related verification reports, the selection of the sample of service users for household-level verification, the participation in routine trainings related to verification, the calculation of the bonuses to be received by health facilities, the identification of any problem or issue, and the input of both qualitative and quantitative data into Burundi's PBI web portal. Monthly verification occurs after the 5th day of each month and is conducted on all of the 24 contracted indicators.

Health facilities also complete a quality of care checklist, which is verified every quarter for health centers by the Provincial Health Office (*le Bureau Provincial de Santé*), in collaboration with the District Health Office (*le Bureau de District Sanitaire*). Quality of care in hospitals is evaluated quarterly through a peer review process, led by a team of senior staff from at least two other hospitals from another province, as well as a member from the Provincial Health Office the Central Extended PBI Technical Committee (*Cellule Technique FBP Elargie*). This team includes the Chief Medical Officer, the Administrative and Financial Director, and the Director of Nursing, together with representatives of the District Health Office and the Provincial Health Office. Each team member has specific tasks. For example, doctors evaluate clinical aspects, while administrative and financial directors evaluate aspects of management, organization, and finance. Directors of nursing evaluate hygiene and quality of care. The visit is conducted over one day, and carried out in two phases: 1) the evaluation, using the grid and 2) presentation to the providers of the results, with recommendations for improving quality. This peer evaluation yields a "technical quality score" that can range from 0 to 100 percent. Any score below 50 percent is considered inadequate. In these cases, peer evaluators must identify the factors contributing to this low score and propose urgent actions for improvement, including administrative measures, if necessary. Any component on the grid receiving a score of less than 60 percent also must be analyzed and corrective actions proposed. The other purpose of the presentation is to provide constructive and actionable feedback on how the quality bonus can be used to achieve rapid improvements (Naimoli and Vergeer 2010). Although verification happens routinely, it can also be triggered by discrepancies between data reported through the web-based database and facility registers.

Household-level verification in Burundi is carried out by local, community-based associations, which are contracted by the Provincial Verification and Validation Committees, usually one for each PBI facility. The purpose of household-level verification is to determine whether the patients surveyed actually received the services that were reported by facilities, as well as to assess patient satisfaction with the services provided. The local organizations are selected based on their location near the health facility's catchment area, and the ability of members to read/write, and their reputation within the community. This verification was initially conducted every quarter for each facility, but has recently been revised to be conducted only once every 6 months, because it was difficult to logistically arrange the verification (oftentimes the associations would not always finish the verification for one quarter before they were given to do the same for the following one), the time it takes to complete a verification cycle, and for resource reasons. For each health center, around 80 patients are selected for tracking – which reflects, on average, about 10 patients for each of the indicators in the sub-set selected (usually the 6 out of the

total 24 that are verified based on facility reports). Although, for some services, particularly those that stand out in volume within a report, the greater the volume of patients registered for a certain service, the greater the number of patients who will be traced. Patients are selected randomly by members of the verification team, for each service to which an incentive is attached and that is part of the sub-group selected for verification at any given time. Household-level verification teams are given questionnaires with only the patients' name and location, but not other information. These associations are paid per each questionnaire completed 100%.

The counter-verification in Burundi is carried out by an independent, third-party agency (Health Development and Performance (HDP), a Rwandan NGO). The goals of counter-verification are to: (1) counter-verify the quantity and quality of services provided by health centers and hospitals; (2) to measure compliance of PBI management actors with the activities specified in their contracts; and (3) to carry out a community survey to ensure that patients actually received the reported services, to measure community satisfaction with health services, and to ensure that household-level verification conducted by the CBO was implemented correctly. The counter-verification occurs quarterly for a sample of 25% of all provinces, and within those 25% of all health centers – and all hospitals. With this structure, by the end of an implementation year, all health facilities have been covered. If there are discrepancies between verified data, then the verifiers are sanctioned. So far, no cases of fraud have been identified. The PBI scheme allows for a discrepancy of 5% between the verified data and the counter-verified data. Any greater discrepancies result in a sanction on the bonus for the related Provincial verification committee, equal to the size of the discrepancy.

Table 3 summarizes the main verification actors and actions in Burundi's PBI scheme.

Table 3. Burundi: Key Actors Engaged In the Verification and Counter-Verification Process

Verification actors	Description	Verification of quantity	Verification of quality		Household-level verification	Counter-verification
			Health center	Hospital		
Provincial Verification and Validation Committees	Provincial MOH representatives, medical personnel, civil society representatives, and NGO representatives	X				
Mixed quality verification teams	District Bureau of Health and Provincial Health Office representatives.		X	X (w/hospital peers)		
Local associations	NGOs or CBOs contracted by the Provincial Verification and validation Committees				X	
Third-party organization	External agency (HDP) in charge of counter-verification and the development of local capacity					X

EVOLUTION OF THE DESIGN, IMPLEMENTATION, AND UNIQUE FEATURES

SYSTEM FEATURES

Transparency: Each month, all facilities (including hospitals) report the services they delivered on an Internet-based data reporting system, managed by the central technical unit within the MOH, with technical assistance from a contracted IT specialist. The PBI website and database offer the public general information such as news releases, an events calendar, a basic set of documents and basic contact information of main partners and actors involved in PBI. It contains a 'registered user' section that has more elaborate and targeted information for end-users of Performance-based financing in Burundi, and offers access to the PBI database through a second password-secured layer. While one of the strengths of the PBI scheme in Burundi is that it is able to capture a significant amount of data on its PBI portal website and the database it builds monthly, concerns about transparency and the difficulty of accessing information remain as the web-portal is password-protected. Furthermore, it is unclear whether the process of household-level verification is useful in providing patients a way to express themselves and have a voice in the verification process. It is also unclear how the information from patient satisfaction surveys captured through household-level verification is fed back into the PBI scheme.

Rigor: Burundi's PBI scheme covers the verification of both quantity and quality of services, through multiple mechanisms. The frequency of verification - monthly for quantity, quarterly for technical quality and biannually for subjective quality is typical of similar PBI schemes. The Burundi scheme proposes a very rigorous household-level verification - which is conducted twice a year. One challenge related to rigor in the context of household-level verification is the difficulty to ensure consistent application of standardized methods by local community associations, especially if there is significant heterogeneity in their capacity to do so and they require significant amounts of capacity development. The level of depth in the verification scheme is difficult to assess, as sample size information was only available for counter-verification procedures, but it was not available for the other layers of verification.

Independence: During the PBI pilot, the verifiers were external to the system (i.e., from CORDAID and other NGOs implementing the PBI pilot) in order to minimize the conflict of interest. With the evolution of the scheme and its national scale-up, the MOH is now the main actor implementing the verification and has even created "verification functionaries" – which are civil servants deployed from the MOH who work in collaboration with other external agents (e.g. civil society, NGOs, development partners). While the selection of verifiers from the health sector and the ability to take advantage of their expertise is a strength of Burundi's scheme, it could also create some conflict of interest. For example, while the peer review mechanism has advantages, it is also possible that providers might at some point try to collude with one another in order to maximize the bonus amount that they are eligible to receive.

Consequences: In order for the data in the facility's registers to be considered validated, it must include a patient's first and last names, address, age and description of the services delivered. If registers miss only one of the required pieces of information, the case is not considered valid and is counted as an error in the verified performance data. Initially, health facilities were allowed only a 5% margin of error when comparing their records with the verifiers'. The current design imposes a 5% reduction in payment if a discrepancy between 5% and10% is found for a specific indicator. If the discrepancy found is between 10% and 20%, the current design mandates a 10% reduction in payment for that indicator. If the discrepancy for any indicator is more than 20%, then the health facility would not receive any payment for that indicator.

Integration: A strength of the Burundi scheme is the focus on selecting verifiers from the health sector – so as to ensure that they can understand the medical language and maintain proper communication channels with health providers. Often, it is more senior supervisors that are selected as verifiers. The advantage of this is that their technical expertise is well known and trusted. This strengthens the partnership between health providers and the verification agents. During Burundi's scale-up of PBI, the Provincial Verification and Validation Committees, with its mixed team composition, provided an opportunity to smoothly transition from the international-NGO-led PBI scheme to one integrated within the local health system. Health facilities need to complete two types of PBI related forms: one for monthly service volume statistics and a second one for quarterly quality of care statistics. Until 2011, the PBI data system was not linked with Burundi's HMIS. This created difficulties because it increased the burden on health providers - who were now required to complete an additional registry for the PBI scheme. The aggregation of data between health centers and hospitals posed an additional challenge, as the same forms were not always used. However, in response to these challenges, since mid-2011, PBI data is collected on paper through the routine HMIS. The PBI data is subsequently extracted from the paper HMIS reports at the district level. The district level reports are subsequently entered in a computerized database at the Provincial level by the Provincial verification teams. The PBI data is currently entered in a database separate from the HMIS one. However, linkages between the PBI and the HMIS exist because the PBI scheme uses the same tools as the HMIS, is rewarding facilities based on their performance on certain HMIS indicators, and HMIS data is not sent to the district level until verification is complete. Using the same tools and procedures as the HMIS reduces the time burden on health care providers and contributes, in theory, to minimizing data collection and entry errors. In practice, however, one of the main challenges identified through counter-verification is poor completion of registers and reports by health providers. Lack of time is usually cited as the main reason. Furthermore, there is often confusion about how PBI indicators are defined. Data entry also proves to be challenging and represents the main reason for discrepancies identified during counter-verification activities.

DESIGN AND IMPLEMENTATION

Stakeholder engagement: One of the unique features about Burundi's verification approach is the structure of the Provincial Verification and Validation Committee. This group contains a mix between civil servants and contracted individuals. Their performance has been satisfactory, based on the external counter-verification. The structure arose from the historical approach to piloting PBI in Burundi. In 2006, the PBI scheme was launched in 2 provinces, managed by international NGOs (HealthNet, Swiss Cooperation, etc.). By 2010, PBI pilot schemes existed in two-thirds of the country and were still managed by these NGOs. At that time, the government decided to begin the national scale-up. The Provincial Verification and Validation Committees were then established to provide some continuity in the transition from the NGO-led PBI scheme to one integrated in the local health system. Maintaining involvement of the original NGOs in local verification also allowed for the opportunity to provide technical assistance during the scale-up. Verification procedures also foster partnerships between health facility leadership and the verification team. At the end of the verification visit, the verification report has to be signed by both the verification team leader and the facility in-charge. This act emphasizes that verification is an effort to strengthen partnership and that the results of the verification are accepted.

Community engagement through household-level verification has been a part of the PBI scheme since its pilot, which has since been scaled up. The criteria defined by the MOH for the selection of the community-based organizations are fairly specific. Only local small-scale organizations, that are recognized by the government, that have an active bank account, that have literate members and that are able to demonstrate a local presence are eligible. Interestingly, most of the organizations that end up being selected are women associations with no strong link to the health sector, especially to the facility

to which they are attached. The last provision serves to anticipate and minimize any conflict of interest and potential collusion, which might arise in the course of PBI implementation. Currently these local organizations are remunerated for each of the patient surveys they complete.

Data use: Burundi provides a good example of a PBI scheme that is consistently revised based on the findings that emerge from past experience and from the analysis of the data collected, including the data relating to verification. The analysis of data on the magnitude of and reasons for discrepancies, for example, led to changes in the acceptable margin of error and in the consequences associated with unacceptable discrepancies. The focus on iterative redesign did not stop after the pilot phase or after the first year of implementation. For example, an evaluation by the independent verification firm in charge of counter-verification found that, even after a year and a half of implementation, problems remained with poorly completed registers, the clarity of PBI objectives and indicator definitions for health centers, and the misallocation of patients to incorrect categories and indicators for both hospitals and health centers. In response to these findings, efforts were devised to clarify indicator definitions and develop the capacity of health facilities to measure and record them.

However, local actors do not always maximize the use of verified data for decision-making. Verification teams proactively engage with health providers and advise on how to improve the quality and management of data available at facilities, as well as on how to use this data. However, district verification teams currently do not have sufficient capacity to undertake data analysis of verified performance data. While data analysis was happening frequently when the systems were newly established, the momentum for this might be lost over time, signaling that the analytical capacity at all levels needs further development.

The data that is collected at the household level is not always fed back into the system. For example, it is unclear how the data on patient satisfaction, waiting time, and cost of care – collected at the household level – is communicated back to the health facilities where the service was received or how it is used for monitoring and improving the system.

Capacity building: The capacity building activities implemented as part of the PBI scheme are not well documented, but likely include efforts from both CORDAID and HealthNet TPO through their initial pilots and as part of subsequent support to the national scale-up. Based on counter-verification results, it appears that the local capacity of both verification actors and those verified is becoming more developed over time. For example, the last counter-verification found quality of care to have ameliorated in all but one of the provinces. The counter-verification also did not encounter fraud during the period examined. Based on their reports, further capacity building needs to focus on clarifying the PBI indicator definitions, as well as on strengthening the capacity of actors in charge of verification (e.g. Provincial verification teams).

INTERMEDIATE AND LONG-TERM AIMS

Buy-in: Burundi benefits from high levels of buy-in from development partners and local health sector actors. Buy-in from providers, however, was an initial issue. PBI changes provider behavior in several ways, one of which being the gradual development of a culture of accountability. However, in the initial phases of PBI implementation, providers were not accustomed to having their performance verified or to being remunerated based on their performance. In the very early phases of PBI implementation, providers tended to omit filling out the registers after having provided the services or to inflate their performance. The latter was the case for facilities that were not able to deliver the complete package of services and that might want to avoid showing zero results in an area for which they are held accountable. Over time, this issue was eliminated because verification teams worked together with health facilities to strengthen their capacity to deliver all services. The business plan prepared by each

health facility specifies targets, which are meant to hold the facility accountable to making progress towards offering the complete package of services.

The initial lack of buy-in from some of the health facilities had also another reason, which relates to the merging of PBI and Burundi's efforts to remove user fees for selected services targeted to pregnant women and children under five. With the removal of these user fees, health facilities could bill the MOH for the services provided to patients free of charge. At that time, no verification procedures were in place, which lead many facilities to falsify their claims. When the MOH decided to merge PBI and the user fee removal program, the PBI verification mechanism also applied to services for which user fees had been removed. This transition led to significantly fewer opportunities for facilities to submit false claims. As an unintended consequence, some facilities actually experienced a decrease in their revenues, in spite of PBI. Therefore, while the MOH demonstrated high levels of buy-in to the PBI scheme, there was little or no buy-in from facilities that were unhappy with the sudden drop in revenues.

Cost of verification: The estimated operational cost for verification implementation is around 10% of the total budget. During the pilot phase, however, it was around 25-30%, mostly because of greater involvement of international NGOs, which, over time, have been gradually replaced by local organizations. None of the key informants interviewed cited this higher cost during the initial phase as a concern.

Funding: The government of Burundi currently contributes to 52% of total project costs, and this number is expected to grow to up to 60-70% in the future.

Sustainability: The fact that Burundi's PBI scheme receives significant funding from the government and that the current share of government funding is projected to further increase in the future, signals that the MOH and PBI implementers have long-term financial sustainability in mind. The scheme also benefits from high levels of buy-in from development partners, who will likely continue to fill the financial gap until the government can take over. As mentioned before, the cost of verification was not necessarily an issue for those designing verification, as the emphasis was placed on developing a system that is credible and rigorous, and at the same time developing local capacity to carry out verification functions.

Burundi's verification scheme demonstrates progress towards institutional sustainability through the way in which it was scaled up nationally, and increasingly integrated with the HMIS and existing government entities.

ANNEX 4: VERIFICATION IN THE LIBERIA PBI SCHEME

In late 2008, the USAID-funded Rebuilding Basic Health Services (RBHS) project launched a performance-based contracting scheme, which contracts five NGOs to manage and support Ministry of Health and Social Welfare (MOHSW) health facilities and to help build the capacity of County Health Teams (CHT) (counties being the equivalent of districts). The five NGOs include four international partners (Africare, EQUIP, International Rescue Committee, and Medical Teams International) and one local partner (Medical Emergency Relief Cooperation International). These NGOs were working in seven out of Liberia's 15 counties, targeting over 120 health facilities (mostly rural health clinics and health centers, and two hospitals), which cover 75% of Liberia's total population. The RBHS program serves as fund-holder and regulator, while the NGOs are implementers as well as responsible for data management. The project is currently in transition as it expects, by July 2012, to transfer all performance-based contracts to the MOHSW. These transition efforts are already underway. For example, the accreditation procedures which have been implemented in MOHSW facilities since 2011 will serve as one of the performance indicators according to which facilities participating in the PBI scheme will be assessed.

Performance-based contracts are focused around 18 indicators. Of these, six are administration and management indicators (e.g. # facilities submitting a timely, accurate, and complete HMIS report during a particular quarter), by which NGO performance is measured and rewarded. The remaining 12 indicators are service delivery ones by which health facility performance is measured and rewarded. Additionally, the quality assessment score, accreditation, and stock-out of essential medicines are used as quality indicators in both RBHS and MOHSW facilities.[5]

OVERVIEW OF VERIFICATION

The Liberia PBI scheme's verification has two principal components. The first is the verification conducted by each of the NGO partners and is not a mandatory element in their performance-based contracts. The NGO partners receive quarterly reports from facilities, which reflect progress towards annual targets that have been broken down by quarter. During the first year of implementation, performance bonuses were awarded yearly. As of the second year of implementation, performance bonuses are awarded quarterly.

Before data is submitted for payment to RBHS, partners have a month to prepare and verify (i.e. re-count) data. The reports contain, for the most part, data on volume of services. The verification of the data is not mandatory, but partners are responsible for checking facility data and ensuring that it is

[5] Implementing partners also report on 74 other indicators not directly linked to incentives, most of which are routinely collected through the HMIS. They are reported to monitor progress of the health services which are considered for NGOs contract extension and allow RBHS to monitor for any potential perverse effects by incentivizing some indicators over others. For more on how indicators were selected see: Petra Vergeer, Deirdre Rogers, Richard Brennan, Shiril Sarcar, "Identifying Indicators for Performance-Based Contracting (PBC) is Key: The Case of Liberia," World Bank, June 2010.

correct. Afterward, RBHS M&E unit and county coordinators, jointly with NGO partner managers and M&E staff, and county health team conduct a counter-verification also referred to as validation of randomly selected health facilities they oversee and check whether the reported data accurately reflects the data in the registers.

The second component is the counter-verification, which is conducted by the RBHS program. Within 10 days after receiving the quarterly reports from the implementing partners, RBHS selects 3 facilities at random for each of the NGO partners and makes an unannounced visit in order to recount a selected group of PBI indicators from the registers. The counter-verification team is comprised of RBHS county coordinators as well as MOHSW county staff. County coordinators, with the help of the health facility officer in-charge then collect the selected data elements from the NGO partners' report and source documents at the health facility.

Quality of care in this project is measured and verified through an accreditation survey, which has been piloted in 2011, as well as a quality assessment survey. A facility's result in the national accreditation survey, conducted by the MOH, is considered as one of the PBI performance indicators (i.e. % of priority facilities reaching one-star level in accreditation survey). In order to be accredited, health facilities must undergo an accreditation process, by which quality of care is measured through observation, interviews, and using standardized tools to calculate a quality score. The quality assessments are conducted as part of counter-verification. In the first two years, these assessments were completed by the RBHS program on an annual basis, but since the third year, this has changed to a quarterly system. The assessment is comprised of 10 clinical modules/areas, which used to be completed in one day when verification was once a year. Under the quarterly quality assessments, a few clinical areas are covered each quarter, so that the entire set is covered in one year. During the counter-verification visits, the team measures additional features, which are indicative of quality of care. For example, in the case of poly-pharmacy, county staff sample 20 patients at random from registries and if their prescription includes 3 or more drugs, they are flagged.

In Liberia's PBI scheme, penalties are linked directly to performance on the administrative or monitoring indicators. If partners fail on one or more of the administrative indicators, they incur a penalty of up to 5% of their service contract each quarter. Earlier iteration of the PBI scheme did not link payment to administrative indicators. In the early phases, NGO performance on administrative indicators was only accounted for during their contract extension reviews. On the other hand, bonuses are linked to the achievement of service delivery. If all service delivery indicators are met, partners' health facilities can earn an annual bonus of up to 6% of their original budget.

Table 4 summarizes the main verification actors and actions in Liberia's PBI scheme.

Table 4. Liberia: Key Actors in the Verification and Counter-Verification Process

Verification actors	Description	Verification of quantity	Verification of quality		Household-level verification	Counter-verification
			Health center	Hospital		
NGO partners	Data auditors sent by each NGO partner – not a mandatory element	X		N/A	N/A	
RBHS verification team	USAID-funded project team in charge of managing the performance-based contracts - specifically, the county coordinator,		X	N/A	N/A	X

Verification actors	Description	Verification of quantity	Verification of quality		Household-level verification	Counter-verification
			Health center	Hospital		
	as well as MOH county staff.					

EVOLUTION OF THE DESIGN, IMPLEMENTATION, AND UNIQUE FEATURES

SYSTEM FEATURES

Independence: One of the principal challenges relates to the need for independent validation, done by authorities that have no stake in rewards or penalties. In the current PBI scheme, the verification is not mandatory for NGO partners and, when they choose to conduct it, they do not have to hire external parties. The counter-verification is conducted by RBHS, who plays the role of both fund-holder and verifier, and is therefore at risk for some conflict of interest. If NGO partners demonstrate that they can conduct high quality verification, then this could potentially be added as an element by which their performance is evaluated in the PBI contract. The conflict of interest created by such a potential move could be mitigated through counter-verification procedures. If more funding is available in the future, verification would ideally be conducted by an actor with less at stake in the verification process than the contracted NGOs

Rigor: The main focus of the PBI scheme in Liberia has been to improve the data coming out of facilities. This was accomplished by encouraging NGO partners to work with their facilities to ensure the production of high quality data. Interestingly, NGO partners are not mandated to do verification. Also, the veracity of the data is not verified, as Liberia decided not to implement household-level verification, stating the high cost of carrying out household surveys in the community as the main reason. Another aspect of rigor is the sample of facilities for which data is counter-verified. In Liberia, a random sample of 3 facilities for each NGO partner is selected for counter-verification. While this does not involve a large number of facilities, the fact that they are selected at random is an important strength.

Consequences: While verification is not mandated through the existing performance-based contracts with NGO partners, if counter-verification identifies discrepancies in the data, the NGO partners might be required to recount all the data before receiving payment. This risk creates an incentive for NGO partners to carry out verification on a regular basis.

Transparency: In the first part of the project, there was little trust between health facilities and the county staff tasked with verification, because they were perceived as police. The data from the first two rounds of verification also raised tensions between county staff and the partners, because several data inconsistencies were identified. Some conflicts arose with partners claiming that the counter-verification procedures involved different methods than what NGOs used. In order to build trust in the system and make the verification more transparent, verification teams started to include facilities, CHT, and partners in the re-count, at the same time showing the errors and reasons behind the errors in the system. Over time, facility staff learned how the system worked and became more positive towards the process. To date, an easy way to access verification procedures or verified performance data does not exist, nor do the NGO partners make their data available publicly.

Integration: Because PBI is being implemented in a post-conflict setting, it was difficult to integrate verification procedures with existing tools, procedures, and entities. Nevertheless, the MOH and county health team staff play an increasing role in the PBI scheme and its verification, even though it is

still managed by external actors. One example of integration – and a strength of the scheme – is the consultative process built into the verification approach. Verification is carried out by teams comprised of facility staff, county health teams, and partner organization representatives. This will undoubtedly facilitate the transition of responsibilities to local entities in the future.

DESIGN AND IMPLEMENTATION

Stakeholder engagement: From the initial launch of the PBI scheme, the MOHSW has been closely involved in design discussions, especially given plans to transfer the monitoring and oversight of performance-based contracts from RBHS to the MOHSW. RBHS also facilitates a series of opportunities for stakeholder engagement. These include: monthly all-partner meetings; quarterly data reviews for all partners, including the MOHSW; quarterly partner feedback; annual stakeholders' meeting; and others (such as County Coordinator reports; ad hoc meetings; and field visits).

Capacity development: One of the key aspects contributing to increased trust among the different actors was the gradual development of local capacity to understand and engage in the verification and counter-verification processes. Through the involvement of partner staff, the county health team, and MOH staff, as well as through increasing the accessibility of verification results the capacity of actors and their ownership of the process were enhanced. Once local actors understood how to use the PBI tools properly, as well as how errors can occur, they learned to value the utility of the verification process.

INTERMEDIATE AND LONG-TERM AIMS

Cost: It is unknown how much each partner spends on verification procedures. The cost of counter-verification is roughly the equivalent of one week of salary time for the staff of NGO partners – about $700 per county per quarter or about $3000 for the entire scheme, which is a relatively small share of total costs. Cost of verification and counter-verification was also considered when selecting indicators for performance. PBI scheme designers decided to begin with a limited number of indicators, which would be feasible to collect and verify. These indicators would evolve as local capacity to carry out all PBI functions, including verification, increases over time.

Credibility: The PBI scheme cultivates a culture of accountability in an indirect fashion since NGO partners are not mandated contractually to do verification. The absence of household-level verification may raise questions as to the credibility of the current verification procedures and results.

Sustainability: Because of the post-conflict setting in which the PBI scheme is implemented, it might be too soon to have a final assessment of financial and institutional sustainability. While the MOH and county health team staff play an increasing role in the PBI scheme and its verification, the overall sustainability of the PBI project is, by design, compromised, given that it is managed by international NGOs (with the exception of one of the NGO partners, which is local). The major strength of the verification process lies in its increasingly consultative process, with a focus on local capacity development. This approach will serve as a foundation for strengthening Liberian institutions for the future. Furthermore, the role of the MOH is growing; the MOH will soon begin to manage performance-based service delivery contracts with partners, building on the models previously tried in the RBHS program. Given that Liberia is a country in transition, it is too early to consider financial sustainability of verification. However, it is clear that the RBHS team and their NGO partners are giving financial sustainability considerable thought by evaluating which verification components are affordable and which are not (e.g. household-level verification was not seen as affordable in the current iteration of verification; a small set of performance indicators was preferred for early PBI implementation).

ANNEX 5: VERIFICATION IN THE KENYA PBI SCHEME

The Kenya Output-Based Aid (OBA) Voucher Program was launched in June 2006 and currently covers a population of approximately 3-4 million in rural and peri-urban districts (Kisumu, Kiambu, Kitui, Kilifi and two informal settlements in Nairobi). The Kenyan case study provides an example of how verification is carried out within the context of a voucher scheme, which has both demand and supply side PBI components. The first phase of the program was implemented between 2006 and 2008, the second phase was implemented between 2009 and 2011 and the third phase began in 2012.

The output-based aid voucher program offers three main types of vouchers:

- Safe Motherhood voucher - subsidizes ANC, labor and delivery (includes option for C-section), and post-natal care for both the mother and the newborn;
- Family planning voucher - subsidizes long-acting and permanent methods; and
- Gender Violence voucher, which is free to men and women of all ages who require gender-based violence recovery services.

The Safe Motherhood and family planning vouchers are sold in the community, whereas the Gender Violence one is available at no cost for clients only at facilities where these services are offered. The description of the verification procedures will pertain mostly to the Safe Motherhood and Reproductive Health vouchers, particularly the community-based distribution of vouchers.

The Kenya pilot was initially housed in the National Coordinating Agency for Planning and Development, which is a semi-autonomous organization part of the Ministry of Planning. In 2010, it moved to the Ministry of Public Health and Sanitation (MOPHS). The implementation of the voucher program is overseen by the Program Management Unit, which is housed in an Annex of the MOH. The Program Management Unit Team is comprised of individuals with competencies in Reproductive Health, Monitoring and Evaluation, Quality of Care, and Financing. A Voucher Management Agency (VMA) was selected through a competitive process in 2006 for a three-year period. It has since been re-bid. In both instances, PricewaterhouseCoopers (PwC), a private sector firm, won the bid for the VMA. PwC works under the stewardship of the Program Management Unit.

The nature of voucher schemes varies slightly from that of the more traditional supply-side PBI schemes described in the other case studies.[6] The voucher scheme is best described by outlining the various steps of the cycle as the voucher enters and exits the system. The first step is the actual production of the voucher, which contributes to fraud prevention by ensuring that vouchers are not easily reproducible. The actors engaged in this step are the VMA and institutions that are accredited to ensure the availability of security printers and minimizing fraud. In Kenya, vouchers are printed only by security printers within institutions accredited by the Kenya Bank Association. After printing, all vouchers are entered in the Voucher Management System, which gives each voucher a unique identification number.

[6] See Musgrove (2011) for further details - Musgrove, P. (2011). Financial and other rewards for good performance or results: a guided tour of concepts and terms and a short glossary. Washington, DC, World Bank.

These numbers are also linked to the regions in which the vouchers will be distributed, in order to ensure that each voucher is easily tracked as it moves through the system.

The second step is the distribution of vouchers to eligible individuals by voucher distributors who are competitively selected by the VMA. The distributor's eligibility depends on several criteria, including the completion of secondary education, location within the community, and ability to conduct outreach. Distributors create demand for vouchers through a variety of activities, which include: sensitizing the community on the voucher program through churches and other religious organizations; liaising with provincial administration when they hold monthly meetings; participating in local market days, which provide key access to stakeholders particularly in rural areas; and distributing postcards and handbills, which explain and promote the voucher program in their designated area. Distributors are then responsible for identifying the poor amongst those clients who seek to purchase the vouchers at distribution points. However, because clients often do not understand the services that are covered by the voucher, the distributor often also ends up educating clients about them- although this is not a task that was initially part of his/her scope.

The third step is the actual use of the voucher in exchange for specific services, during which one must ensure that these clients go to eligible service providers, and that a quality service is delivered in return for the voucher. This step represents the culmination of the voucher process - and occurs when the target population interacts with service providers, who accept the voucher in return to a pre-defined package of services.

The final step in a voucher scheme focuses around ensuring that eligible providers claim and receive payment only for the services that they actually delivered to the target population in exchange of the vouchers. Claims in the Kenya Output-Based Aid scheme are managed through the VMA.

OVERVIEW OF VERIFICATION

Verification is tied closely to the vouchers' movement through the system, with the aims of minimizing fraud and ensuring that the target population is reached with appropriate and quality services. Some verification elements, such as the physical identification features of a valid voucher can be checked automatically, before distribution and as the vouchers moves through the system. However, ensuring that the vouchers are distributed to the target population, that individuals receive adequate and quality services in return for the voucher, and that providers claim vouchers only for services that they delivered require separate verification procedures, which are somewhat comparable to those applied in typical supply-side PBI schemes.

Verification in Kenya's output-based aid voucher scheme has two layers. The first is claims management. After provision of services, the provider completes a claim form. This claim form is then submitted for payment. However, before payment is issued for each voucher claim, the VMA checks to ensure that the voucher is valid, the claim form appropriately filled out, and that clinical elements are plausible for the condition covered by the vouchers.

Quality of the care provided through Kenya's output-based aid voucher scheme is ensured through accreditation, which health facilities must attain for initial program participation and must maintain during their engagement with the voucher scheme. Accreditation is currently conducted by a committee composed of various members of the MOH, using tools specific to the types of services relevant for the voucher scheme - particularly reproductive health. The accreditation process is currently evolving, with new accreditation procedures being developed and external agencies being considered for applying them. Quality of care is also verified through the claims management procedures, during which the VMA verifies whether the clinical elements that were recorded – e.g. the number and types of medicines prescribed - are plausible.

In the second layer, the verification of quantity and quality come together through post-service verification, which is conducted by voucher distributors after a service has been rendered to the target population. For each voucher implementation area, one of the distributors acts as liaison officer, whose role is to hold exit interviews with clients. At this time, the poverty-grading tool is administered again and a number of questions related to patient satisfaction and user fees are asked. The findings from these exit interviews are fed back to facilities' own improvement processes. These exit interviews are not conducted systematically, however, but rather in response to perceived problems at a facility. Additionally, once per year, the liaison officer administers a client satisfaction survey to a sample of about 10% of all voucher recipients. This is another opportunity to verify the poverty status of voucher clients and to ask some questions about perceived quality of care (i.e. attitude of health workers etc).

The Kenya scheme currently does not have counter-verification procedures in place. Performance of the VMA is assessed through a mid-term consultant review. as well audits at the end of each phase of the project. The voucher program steering committee also conducts quarterly internal reviews of the program. Additionally, the Bill and Melinda Gates Foundation is currently funding the Population Council to conduct an evaluation of the program, which will also reflect on verification and the performance of the agents engaged in verification procedures.

Table 5 summarizes the key actors engaged in the verification process.

Table 5. Kenya: Key Actors in the Verification and Counter-Verification Process

Verification actors	Description	Verification of quantity	Verification of quality	Household-level verification	Counter-verification
Voucher Management Agency	PricewaterhouseCoopers - a competitively selected agency to manage the voucher program conducts claims processing and random client exit surveys to monitor fraud and service quality	X	X (based on recorded clinical elements and their plausibility)		N/A
Accreditation agency	Currently a MOH committee; will soon be bid out to an independent agency, to accredit potential facilities prior to contracting.		X		N/A
Voucher distributors	Agents hired by the VMA to identify and verify poverty status of potential voucher clients		X		N/A
Auditors and consultants	Independent actors conducting project audits and mid-term reviews			X	N/A

EVOLUTION OF THE DESIGN, IMPLEMENTATION, AND UNIQUE FEATURES

SYSTEM FEATURES

Independence: Verification procedures for the Kenya voucher scheme are not conducted through an independent party. Because of the potential conflict of interest that might arise, the voucher scheme has created several checks in the system, intended to minimize fraud opportunities. For example, before submitting vouchers for payment to the VMA, both the provider and the patient must sign the claim form. Independence is also maintained through the fact that health facilities cannot be engaged in selling vouchers. The distributors, however, could compromise independence if they recruit voucher recipients from facilities. One approach that the program is currently considering to limit this risk is adding questions in the poverty-grading tool about a client's past use of the formal health sector (i.e. delivered in a facility).

Health facility accreditation represents one of the areas where an independent third party will soon be engaged. The independent agency will be in charge of facility accreditation procedures, both for initial program participation and for assuring maintenance of necessary standards. The other area through which some level of independence is preserved is found in the verification of a voucher recipient's poverty status, which is assessed through a poverty-grading tool both before voucher distribution, and finally, for a select group of patients during post-verification. Conflict of interest is minimized in post-verification by having a different agent than the distributor (a liaison officer for a certain area) administer the tool.

Rigor: As mentioned in the previous section, the physical voucher itself has several features built-in to minimize fraud and to facilitate verification. The voucher is designed and branded by the VMA, aiming to differentiate it from any other voucher present in the community. The voucher number allows the VMA to trace each voucher through the system. It makes it possible for the VMA to identify distributor, location of distribution and individual client. This is extremely useful when investigating malpractice claims.

Another area where rigor is key in verification is targeting. Voucher schemes typically target a specific segment of the population – usually the poor – with the aim to increase utilization of a particular subsidized service. In Kenya, a poverty-grading tool is used to determine the eligibility of the target population. Pregnant women or women interested in reproductive health services come to the voucher distributor, who administers the poverty-grading tool. After the completion of the poverty-grading tool, the client is shortlisted and only approved after receiving a home visit from the distributor, in order to ensure that the information provided in the poverty-grading tool is accurate. The home visit is done for every client, in order to ensure accuracy in targeting of vouchers to the very poor. The home visit is also used to collect key identification information, which is then linked to a specific voucher number and entered in the Voucher Management Information System (VMIS) (i.e. name, identification document, address). After the client purchases the voucher, the distributor shares with her the list of accredited facilities in the area – empowering the client to choose her own provider, presumably partly based on perceived quality of care. Distributors are not supposed to guide clients to any particular facility. The poverty status of clients is verified at several additional points in the process. For example, a client needs to present a copy of her ID together with the voucher at the point of service, allowing the provider to ensure that the numbers on the ID and the voucher match. The poverty-grading tool is also administered during post-verification, which represents an opportunity to follow-up with patients after a service has been received. Both the poverty identification and the claims processing procedures are very rigorous. However, challenges remain, for example, when the name on the voucher cannot be

verified at the point of service for minors and adults who lack a national ID. Furthermore, the voucher management system oversees a large number of health facilities, including public, private and faith-based organizations. Moving forward, these facilities will soon be accredited using a more rigorous system, which includes a medical audit. The previous accreditation system focused on administrative quality, but not on clinical quality. The new approach will examine medical records and patient satisfaction and provide for a more in-depth analysis of medical care.

Transparency: Transparency in the Kenyan voucher scheme is ensured through the Voucher Management Information System. At the point of service, the voucher serves as proof that patients received treatment – and, as mentioned above, before services are rendered, a patient's ID number is checked to ensure that it matches the number on the voucher . However, access to the VMIS is limited and the levels of information sharing were perceived to be low by those contacted for this study. The actual payment and the reason for not receiving payment for all the vouchers is communicated to facilities by the VMA both in writing and in person, to ensure open communication and to minimize misunderstandings.

Consequences: The payment for the voucher is honored if the claim is plausible and the voucher number corresponds. Whenever there are discrepancies, the VMA team contacts the health facility to discuss these discrepancies and any adjustments that are made to individual claims. Payment for claims sometimes need to be adjusted, usually because of issues related to data entry or other clerical errors. However, instances have occurred where payment was not issued because the claims included services that are not covered by the voucher. Payment for claims may also be adjusted following the verification of the quality of services associated with the voucher program, especially if errors are discovered. However, such adjustments apply to individual claims and facility-level analyses are not conducted.

Currently, the process of adjusting claims is not systematic and a margin of error for correct completion of claims does not exist. Facilities are not paid for incomplete claims. A challenge in this process is that there is no way to verify the quality of the clinical care given or what types of fees a patient paid in addition to the voucher.

Fraud involving services delivered to ghost patients is most difficult to verify under the current verification procedures, where follow-up with clients occurs only for about 10% of the client population. In case ghost patients are identified, facilities will not receive payment for those claims and further actions are determined based on consultations between the VMA and the Program Management Unit. The use of biometric tools are considered in discussions about the future of the OBA scheme. High costs of implementation, however, make this element uncertain.

In the beginning, several cases of fraud were identified among the distributors. Given that distributors were initially paid per voucher distributed, they were motivated to sell the vouchers to clients who were not eligible for the program. Since the 2007 midterm review, this problem has been reduced by changing the way distributors are paid – instead of being paid for each voucher distributed, they are now paid a monthly salary.

Integration: The current levels of integration are low in the voucher pilot. The MOH is engaged in coordination, but due to lack of capacity most implementation functions are carried out by the VMA. Accreditation was at first conducted through the National Health Insurance Fund. However, after challenges with the frequency, and rigor of accreditation, an external agent will be contracted for this function. Furthermore, none of the actors engaged in the implementation and verification of the voucher scheme is part of the national health system. The Voucher Management Information System is also implemented in parallel to the HMIS and information is entered here through separate claims forms for vouchers.

DESIGN AND IMPLEMENTATION

Stakeholder engagement: Stakeholder engagement was a high priority in the initial design of the accreditation scheme. In the first few years of the program, the accreditation was conducted through the National Health Insurance Fund system. The quality of care was assessed for facilities periodically, once or twice per year. However, the assessments were not systematic and the tools were not specific to the service delivery areas covered by the vouchers. More recently, accreditation was conducted by a committee composed of different members of the MOH and the tools were revised to be more specific to the types of services accredited. One advantage of using the committee is that it was comprised of MOH staff that was also involved in setting the policies and guidelines guiding the implementation of the voucher scheme. However, because the committee was not dedicated full time to this activity, the visits were intermittent and it was difficult to keep up with the scale-up. Furthermore, information feedback loops were weak, reporting was incomplete, and the standards to which the accreditation adhered to were unclear. Because of these issues, the scheme is opting for less stakeholder engagement in favor of independence, as accreditation will soon be conducted by a competitively selected independent agency. Stakeholder engagement in other areas of implementation was minimal or non-existent, based on the available information.

Capacity development: Because implementation capacity for the voucher pilot was perceived to be low, the public-private partnership between the VMA and the MOH is seen as a key feature. This is particularly important as MOH members of the Voucher Scheme Steering Committee are not able to dedicate full-time work to design and implementation of the voucher scheme. Capacity building of various actors is led by the VMA. In the first phase of the voucher program implementation, the distribution of vouchers and the administration of the poverty-grading tool were both implemented by community-based organizations, which had subcontracts with the VMA. However, not all community-based organizations had the capacity to oversee the activities of all their distributors and accountability for ensuring adequate targeting and minimizing fraud was compromised. Since 2009, the distributors are now hired directly by the VMA. They sign individual contracts, which enhances the accountability linkages. One of the challenges associated with low local capacity is that distributors often end up providing health education to patients without having been trained to perform such duties. Upcoming revisions to how the voucher scheme is implemented will consider raising the profile of distributors and providing adequate health education training in order to ensure that they are able to educate clients about the various RH services offered through the voucher scheme. Additionally, there are discussions underway considering linking the OBA pilot with the national "Community Strategy" which focuses around community health workers. The VMA itself also contributes to developing the local capacity in the long-term, by hiring only local Kenyan staff.

INTERMEDIATE AND LONG-TERM AIMS

Cost of verification: The costs of verification are roughly estimated at 20% of program management costs, which are roughly 20% of the total project budget. During the first year of the program, however, these verification costs were much higher. The poverty identification conducted as part of the voucher system is very rigorous, time consuming and costly and the individuals who were consulted for this case study posited that it would be very difficult to maintain such a system should the pilot ever be extended to a national scale. The claims processing is also complex as it aims to identify fraud at the point of distribution and the point of service . Discussions are underway about the implementation of biometric tools, but these also come with additional costs.

Buy-in: An important strength of the Kenya voucher program is that it currently benefits from political buy-in, as the government understands the benefit of this voucher scheme in the absence of a health insurance program to reach the poor and has included the voucher program as a component of its

Vision 2030 strategy for growth. However, in spite of this political buy-in, the scheme is perceived to suffer from insufficient public relations and information sharing – the sense that there is not sufficient energy dedicated to holding conferences, events to create demand among other donors, and raise the profile of the voucher scheme. A contract for a public relations/marketing firm is currently being drafted, the objective of which would be to create an image for OBA as well as a marketing strategy. Given the ongoing evaluation by the Population Council, the program could do more without additional cost by prioritizing and coordinating communications objectives, and essentially using the Council evaluation as a platform to extend awareness of the program impact.

Sustainability: The voucher pilot benefits from partial financial sustainability, as the Government of Kenya has a budgetary line item to procure voucher services. Year-on-year, government contributions are increasing; however, the program still relies on some donor contribution to keep it running. More broadly, there is the concern that in its current iteration, it would not be possible to scale up the pilot on the national level due to financial constraints and implementation inefficiencies– although OBA was intended as an interim measure while introducing social health insurance in Kenya. Institutional sustainability is also a challenge, particularly in light of the discussion above, mentioning some of the severe local capacity gaps and the limited integration. Greater integration with the Community Strategy for voucher distribution, designing interoperable VMIS and HMIS, setting standard reimbursement policies for health services or diagnosis-related groups (DRG) consistent across Government of Kenya service procurement initiatives, and establishing independent verification and quality assurance mechanisms would help to mainstream the output-based approach in the Kenya health sector.

ANNEX 6: VERIFICATION IN THE RWANDA PBI SCHEME

Rwanda's supply-side PBI program was motivated by low utilization of essential health services. Three PBI pilots were launched in the early 2000's, by Cordaid in Cyangugu (2001), HealthNet International in Butare (2002), and the Belgian Technical Cooperation in Kigali-Ngali, Kabagayi, and Kigali Ville (2005). Based on the pilot experiences, the Rwandan government developed a national health facility PBI model, which led to PBI scale-up between 2006 and 2009, and an official launch in April 2010. The health center PBI model was inspired by the Cordaid and HealthNet pilots, while the district hospital model was adapted from the Belgian Technical Cooperation's pilot. The number and nature of rewarded services and related indicators change each year, after revisions based on lessons learned. For the most recent implementation period (July 2010 to June 2012), the PBI scheme rewarded the delivery of 24 health center services (14 from the basic package of health services and 10 HIV services). Quality of care is also monitored and the quality score obtained from regular assessment visits serves as a deflator to the overall PBI bonus. The PBI scheme rewards hospitals for delivering certain HIV services and for assuring quality of care.

OVERVIEW OF VERIFICATION

Under the national program, the principal aim of verification is ensuring that results are accurate prior to the release of incentive payments to health facilities (ex ante verification). It also aims to enhance transparency and accountability at all levels.

The verification of delivery of services includes the verification of both quantity and quality of services. The verification of the quantity of services delivered by health centers occurs monthly, according to a schedule set by the District PBI Steering Committee, in collaboration with its verification teams. Each verification team is comprised of at least two persons carefully selected by the District PBI Steering Committee. Monthly verification visits are scheduled to all public and faith-based health centers by the PBI Steering Committee in collaboration with the verification team - the schedule of visits is communicated to all facilities. During these visits the verification team works with the health facility in-charge. The visit concludes through reaching agreement on findings and obtaining signatures from all parties involved, and a discussion of strengths and weaknesses to consider for next time. Health centre verification visits focus on twelve services (measured by 24 corresponding indicators) which are part of the basic package of health services and 10 HIV indicators assessed which are reported monthly by health facilities.

The verification of the quality of services in health centers is part of the district hospitals' mandate to monitor and supervise primary care in health centers. The verification of quality is made through quarterly surprise visits by supervisors from district hospitals to health centers and includes both direct observation and an assessment of clinical quality using a quality checklist specific for health center services. The quality checklist contains around 185 variables through which it facilitates the measurement of quality across fourteen services. The verification teams work with the health worker responsible of a particular service to be observed, or with the health facility in-charge.

In hospitals, the verification focuses on evaluating administration, quality assurance, and clinical activities - all of which are components of a national district hospital quality checklist. For the evaluation of

clinical activities, a sample of 15 patient files are drawn per visit. The sample is selected by applying a systematic random sampling method to patient registers. Initially, the verification of this component was carried out quarterly by hospital peers - i.e. a group of two or three hospitals. Peer review teams were comprised of hospital directors, administrators and the chief nurse from each hospital, or their deputies, as well as technical assistants from partner agencies and representatives from the MOH. Because of issues related to peer review (e.g. collusion of peer hospitals), hospital verification is now carried out through two types of assessments. The first is a central level assessment by a team consisting of members of the PBI support Unit, the Ministry of Health, and PBI partners. These assessments are carried out through surprise visits twice per year. The second assessment is a peer evaluation which is carried out by a team of peer medical professionals from other Rwandan hospitals, twice per year, alternating with the central level assessment. The verification data is entered electronically, using a protected Excel file. This tool provides specific scores for each of the two assessments. The overall score is calculated later, once the two assessments for the same hospital have been completed.

Household-level verification is not an element in the nation-wide PBI scheme. It is currently being implemented by HDP in only 2 districts in Rwanda's Western province. In these districts, HDP contracts a local organization from a health facility's catchment area to follow up quarterly with a sample of about less than 100 service users per facility to verify that services reported in the registers have actually been delivered. For each client interviewed and completed questionnaire the organization receives $2. To date, the overall level of misreporting has been low: less than 5 percent of clients visited each quarter cannot be traced to the community.

Counter-verification was introduced after the scale-up of the PBI scheme in 2006 and has been effective since about 2009. Counter-verification of the quantity of services delivered is implemented by an external, independent organization - in this case a Rwandan NGO called HDP, which verifies facility data in a sub-set of facilities twice per year. During each counter-verification visit, between 8 and 10 facilities per district are selected out of the 400 total health centers. This sample is selected by taking 1 facility from 2 random districts in each of Rwanda's five provinces. During patient checks associated with these visits to the community, HDP verifies a patient's identification and whether the reported service was actually delivered. In addition to this random facility selection, a second approach to selecting facilities is purposeful. Purposeful sampling helps to identify facilities that may have reported a much higher number of RBF cases than expected. Corrective actions, such as firing the health centre In-Charge in the case of misreporting, have been taken.

Table 6 summarizes the key actors engaged in the verification and counter-verification process.

Table 6. Rwanda: Key Actors in the Verification and Counter-Verification Process

Verification actors	Description	Verification of quantity	Verification of quality		Household-level verification	Counter-verification
			Health center	Hospital		
District verification teams	Teams of at least two persons who are associated with the District PBI Steering Committee	X				
District hospital supervision team	Evaluators from among the district hospital supervisors; they are validated by the steering committee.		X			

Verification actors	Description	Verification of quantity	Verification of quality		Household-level verification	Counter-verification
			Health center	Hospital		
Hospital quality assessment teams (peer review and central assessment team)	Hospital peers from two or three hospitals, as well as technical assistants from partner agencies and MOH representatives			X		
Community based organizations	CBOs are organizations contracted by the fund-holder to conduct patient tracking (Only in Western province)				X	
HDP	Rwandan NGO contracted as independent third party verifiers					X

EVOLUTION OF THE DESIGN, IMPLEMENTATION, AND UNIQUE FEATURES

SYSTEM FEATURES

Independence: Minimizing conflict of interest in the Rwanda PBI scheme was very important, particularly as the pilots were scaled-up to national scale. The main challenge was to embed verification procedures in the regular duties of local actors while maintaining a sufficient level of independence, given that external agents were in charge of verification during the pilot phase. For the verification of reported quantity of services at health facilities, the teams are from the district health level, and therefore maintain independence. For the verification of quality, both in health centers and in district hospitals, mixed teams are used, including both local and external actors, and with mixed expertise from clinical to administrative. Mixed teams are believed to minimize the conflict of interest, which might otherwise occur with peer review in district hospitals. Additionally, upon national scale-up, counter-verification procedures conducted by an external agency were added with the explicit intent to ensure independence.

Rigor: Before the national scale-up of the verification scheme, not all the pilots included regular verification of the volume of services. For example, under the HealthNet TPO pilot, health facility data transmitted through monthly and quarterly reports were trusted. In this pilot, most emphasis was given on counter-verification of patients and cases declared by the health facilities – a counter-verification implemented by CBOs. The Cordaid pilot was most rigorous in terms of the different layers of verification - quantity, quality, and household-level verification. As the scheme expanded to national scale, a balance had to be reached between sample size and how many verification layers. It was decided that not all 22 indicators would be assessed in every verification visit. Instead, half of the indicators are randomly selected, along with any service for which a large increase was observed based on the routine data analysis. Household-level verification was not immediately integrated in the national PBI scheme. It is currently only conducted in two districts in the Western province, with extensive support from HDP,

the counter-verification agent. When and whether this would be expanded to other provinces remains to be seen based on this initial experience.

Consequences: The consequences of identifying discrepancies in verification data are not specifically explained and penalties for such instances have not been identified in any of the project documents. When household-level verification was piloted, there were also no clear financial consequences to the identification of ghost patients - which detracted from the usefulness of this verification component as a way to detract fraud or change behaviors, particularly in light of the cost of such verification.

Transparency: Although Rwanda's PBI scheme is perceived to be transparent, it is difficult to easily obtain verification data and to draw clear linkages between the verification process and payment. This is partly due to the fact that different levels of user authority have been defined in order to maintain security in the data which is used to calculate payment. For example, some can input the data in the database after validation and approvals. However, others can only view the data and cannot change or input data. Rwanda's PBI scheme has always had a web-portal, which has been recently updated (see http://www.pbfrwanda.org.rw). However, this updated web-portal contains little documentation on the PBI scheme and verification procedures. It is unclear whether this information is available to users who have login privileges. Although information might be difficult to access by external agents, it appears that the PBI scheme is fairly transparent for internal agents. This might be hinted at by the fact that copies of verification reports are maintained in various locations - including health facilities. Furthermore, the fact that those being verified must co-sign the final verification reports prepared by the verification teams demonstrates that there are attempts to ensure that the methods and findings from verification visits are communicated well and transparent within facilities.

Integration: To integrate the verification function within the local, decentralized system in Rwanda was a top priority as the scheme moved from pilot phase to national scale-up and a major reason behind how the national scale-up was conducted. During the pilot phase, most verification functions were carried out by the NGOs leading the pilots. During scale-up, these functions have been mostly delegated to the district health teams - specifically the District PBI Steering Committees, which are in charge of organizing and carrying out verification. The PBI scheme is highly integrated within the HMIS system, in regards to ensuring consistency of definitions and using the same forms and registries to complete the data. The HIV/AIDS indicators are collected through a separate program called TRAC, in which the PBI indicators are also integrated. This facilitates the collection of data as well as the verification procedures.

DESIGN AND IMPLEMENTATION

Stakeholder engagement: Because of the multitude of actors involved in the design of the three pilots, as well as in the decision to scale-up, stakeholder engagement has been evident throughout the evolution of Rwanda's PBI scheme. The national PBI scheme was designed through a series of workshops and consultations with various stakeholders - including national and local government, the NGO community, civil society, and donors. Stakeholder engagement is maintained in the current verification system. The use of mixed verification teams ensures the participation of all the key stakeholders in routine verification visits. The counter-verification component, however, which is led by an independent third party organization, has been devised in balance of any conflict of interest that extensive stakeholder engagement might produce.

Data use: The Rwandan PBI scheme places a lot of emphasis on the analysis of data collected through routine reporting and also through verification. Before PBI payments are processed, a team of analysts at the district level examines any discrepancies between reported and verified data, as well as any issues that are out of common. At the national level, staff from the MOH examines the evolution of

indicators, identifying areas where performance is higher or lower than expected, and where fraud might be suspected.

Capacity development: In spite of Rwanda's ambitious national scale up, the actors involved recognize that initial capacity to implement and scale up verification - and, in general, other PBI functions, was low. Due to this, the period between 2006 and 2008 marked a transition period in which significant emphasis was placed on providing technical assistance to all PBI actors to be able to complete the required reports - for both quantity and quality - and to be able to conduct the periodic activities related to verification. This period was challenging because it was perceived that local actors did not place a lot of initial value on data - which is something critical to develop in order to ensure credibility in reported and verified data. Therefore, the two-year transition period was less about verifying PBI data, and more about strengthening the capacity of local PBI actors to engage in verification activities and to understand how they are being evaluated. Verification, in the full sense of the activity, was started around 2009. The lack of local capacity is also a major reason, along with costs, why household-level verification has not yet been scaled up. Household-level verification pilots raised concerns that community-based organizations may lack sufficient understanding of PBI and the necessary capacity to implement verification activities.

INTERMEDIATE AND LONG-TERM AIMS

Cost: The cost of verification is unknown, but was cited as a concern, particularly when referring to household-level verification. The key issue for household-level verification was the sample size - which was usually small because of cost issues. Because it would significantly raise costs to increase the sample size to one that would render the findings more meaningful, household-level verification did not get selected for scale-up. Counter-verification is also expensive. Rwanda mitigated this challenge by selecting a national NGO (HDP), which maintains independence and is external to the PBI scheme, yet is more affordable than an international firm would be.

Buy-in: Ensuring buy-in in Rwanda's national PBI scheme was achieved through the stakeholder engagement opportunities mentioned above, by maintaining high levels of rigor in the verification procedures, and by engaging an external agent to conduct counter-verification.

Ownership: Rwanda scaled-up its national PBI scheme very rapidly, and, as mentioned above, the actors which would be contracted often lacked both the capacity to implement PBI, as well as the culture of data use and accountability that is critical for successful PBI schemes. Ownership of PBI verification was achieved through dedicating time to strengthening the capacity of PBI actors during the transition period, as well as through the extensive consultations, which occurred in preparation of scale-up, and the periodic reviews organized to check-in on progress. Political support for PBI and facilitating the linkages between PBI and national policies (including outside of health) also contributed to strengthening local ownership of verification procedures and of PBI in general.

Sustainability: The PBI pilot in Rwanda benefits from a lot of political support - both national and external. The verification procedures are key to maintaining this support, as they bring legitimacy and credibility to the scheme. While the specific cost of verification was not available, the Rwandan government funds almost 60% of the total costs of the PBI program - a fact which serves as an indication of the government's commitment to achieving financial sustainability. The institutional sustainability is high, particularly as on-going technical assistance is further helping to embed verification procedures in routine health facility activities. Institutional sustainability is further supported by the efforts to ensure that the PBI scheme relies on existing structures and procedures.

ANNEX 7: VERIFICATION IN THE TANZANIA PBI SCHEME

In early 2011, a new PBI pilot began in the Coast Region of Tanzania. The Pwani Region P4P Pilot aims "to design and test the feasibility of a results-based funding approach in health in order to draw experiences for the national P4P program, to increase the generation and use of health information for decision making that leads to improved health outcomes, to improve the efficiency and effectiveness of the health system through motivating health care workers to provide quality services, and to effectively manage, monitor and evaluate the Pwani region P4P Pilot". The scheme provides financial incentives to all health facilities (government, faith-based and private), including seven hospitals, nineteen health centers and 183 dispensaries that perform reproductive and child health services and submit timely and complete HMIS reports. The scheme also provides incentive payments to council and regional health management teams.

Participating health facilities are rewarded based on their performance on a pre-defined set of indicators – 9 for health centers and dispensaries, 10 for health centers, 9 for hospitals, 5 for Council Health management Teams (CHMTs), and 3 for Regional Health management Teams (RHMTs). Payment is linked to reporting and achievement of population coverage targets that are determined relative to each facility's and the CHMT's baseline performance level. Payments are transferred by the National Health Insurance Fund once approved by the National Verification Committee. The pilot is overseen by a PBI Pilot Advisory Committee, with implementation managed by the Clinton Health Access Initiative (CHAI). The pilot is slated to run through 2012 and will be evaluated by the Ifakara Health Institute (responsible for monitoring, estimating service coverage, and conducting quality assessments and costing studies). One of the unique features of this pilot is that it is implemented at the same time as the pilot of a new Health Information Management System (HMIS), referred to as the District Health Information System 2 (DHIS2). Whereas the old HMIS collected data quarterly, the new DHIS2 features monthly data collection. Other new features include expanded registers, tally sheets and summary forms.

OVERVIEW OF VERIFICATION

Health facilities (both health centers and hospitals) submit monthly summary forms which are developed using tally sheets that help to keep track of patients receiving services linked to the PBI scheme indicators. Health facilities retain both the tally sheets and copies of the monthly summary forms. CHMTs are responsible for verifying both the routine HMIS summary forms and PBI tally sheets for correctness, completeness, and consistency on a monthly basis in health centers and council-based hospitals. They are responsible for conducting quarterly supervision visits, which ensure that report forms match registers. The CHMT collects the monthly summary forms by the 7th of the month and transmits them to the HMIS focal person, which enters them in a computerized database by the 15th of the month. The HMIS focal person needs to ensure that data is completely collected, roughly consistent, and that it gets entered in the software with minimal errors.

A mixed team composed of members of the RHMT, a regional auditor and outside stakeholders, and chaired by the administrative head of the whole region, performs similar checks for regional hospitals. Additionally, RHMTs in conjunction with CHMTs review quarterly achievements of all hospitals through

the DHIS2 and prepare an achievement report for the previous cycle. Both health centers and hospitals receive random checks by an independent verifier throughout the year.

For both health centers and hospitals, in addition to inconsistencies in numbers, verifiers also assess the data for outliers, unrealistic figures and possible falsification. Issues with the accuracy or quality of the data are dealt with by the CHMT and the RHMT, who work with the Project Management Team (at the central level) to recommend a course of action.

Household-level verification and counter-verification are not systematic components of verification. However, if CHMTs identify inconsistent or unrealistic data, then they have to check the health records with the community by speaking to someone at the village health committee. Spot checks can be ordered by all the actors engaged in the verification procedures: CHMTs and RHMTs, but also the National Verification Committee and the National Health Insurance Fund, which serves as the fund-holder. The Pilot Management Team (PMT), in charge of day-to-day PBI pilot management and providing support to all verification actors, monitors the data in real time, on a monthly basis, and also looks for unrealistic, problem data before communicating these to the National Verification Committee and organizing spot-checks. The spot-checks are contracted out to a local consultancy firm with experience in household surveys for household-level verification– i.e. surveys and interviews with a small sample of patients, such as mothers who lost babies - in order to determine their perceptions of service. Because this pilot is so new, the connection between the findings and procedures related to counter-verification and other verification procedures are still to be determined. One possibility could be to use the independent verifier's report more as part of the project's final evaluation. A routine household-level verification component is unlikely to become part of the Pwani pilot in the future, but is seen as a potential evaluation activity.

Payment is not disbursed to any health facility until all hospitals and health center, and 80% of the dispensaries[7], have had their PBI data verified.

Table 7 summarizes the key actors engaged in the verification and counter-verification process.

Table 7. Tanzania: Key Actors in the Verification and Counter-Verification Process

Verification actors	Description	Verification of quantity		Verification of quality	Household-level verification	Counter-verification
		Health center	Hospital			
Council Health Management Teams	Council level health teams in charge for overseeing service delivery	X	X	N/A	N/A	
Mixed Regional Verification Teams	Regional level health teams in charge for overseeing service delivery. (i.e. members of the RHMT, regional auditor, outside stakeholders; chaired by the administrative head of the whole		X	N/A	N/A	

[7] Only 80% of dispensaries because some of them are very remote and therefore more difficult to verify in a timely fashion

Verification actors	Description	Verification of quantity		Verification of quality	Household-level verification	Counter-verification
		Health center	Hospital			
	region)					
Independent verifier	Independent agency to be responsible for random spot checks across all PBI pilot layers	X	X		N/A	
National Verification Committee	National-level team that oversees verification and coordinates random spot-checks either within facilities or with the patient population					X
Pilot Management Team	Team responsible for the day-to-day management of the PBI Pilot; including supporting all of the other verification actors to carry out verification activities	X	X			X

EVOLUTION OF THE DESIGN, IMPLEMENTATION, AND UNIQUE FEATURES

SYSTEM FEATURES

Independence: Independence of verification procedures is ensured through mixed verification teams and minimizing conflict of interest in the release of funds. For example, those who have to sign the release of PBI funds to facilities do not receive PBI bonuses. Additionally, independence is ensured through the engagement of an independent verifier.

Rigor: Rigor of verification procedures was a top priority for pilot designers, especially in light of past experience with PBI in Tanzania (Morgan and Eichler 2009). Although the Pwani pilot does not use extensive quality verification and does not contain a systematic way to validate services in the community, one of the unique ways in which it ensures rigor in its verification process is through the use of its computerized HMIS system, using an open-source software called the District Health Information Software 2 (DHIS2). This software is funded through a Global Fund and a President's Emergency Plan for AIDS Relief (PEPFAR) grant and it is managed by the University of Dar Es Salaam's Computer Science Department on behalf of MOH. The advantage of using this software is that it is designed to automate certain aspects of data validation – such as certain definitional inconsistencies, which can signal data entry errors. This approach produced a high quality data set and allows for payments to be in response to actual performance in that quarter.

Consequences: Any suspected misuse of PBI funds or inappropriate manipulation of health data will be referred to regional and then national authorities. Two aspects will be considered: (1) the accuracy and quality of data and (2) potential falsification. If issues with the accuracy or quality of data are spotted, the RHMT and CHMTs will be notified and the PMT will recommend appropriate action. If falsification is

spotted, regional and district administrative authorities will be notified and administrative actions or sanctions will be taken. If no action is taken or the facility does not comply, then the PMT will recommend to the Advisory Committee to involve the responsible national authorities. Intentional cases of falsification will entail ineligibility for the PBI program. Additional actions or sanctions will be determined by the applicable Tanzanian laws for fraud and falsification of medical records.

Integration: Embedding the verification process within Tanzania's routine management and information procedures was a key priority for the Pwani Pilot. It is evidenced through the fact that all verification functions are implemented through existing structures. Furthermore, the pilot is fully integrated into the new HMIS that is also being piloted at this time, and hopes are that if both pilots are successful, they can be scaled-up together.

DESIGN AND IMPLEMENTATION

Stakeholder engagement: Local stakeholders are fully engaged in all parts of the verification process and there is even reluctance to authorize payments until every level in government has signed off on it. The culture in Tanzania is that corruption is very much pursued and penalties enforced. Health information is turned into account audit information – which means that the National Auditing Office and other regional auditing structures are involved. The media also plays an important role by highlighting cases of fraud.

Capacity development: The underlying assumption of the verification design was that deliberate misreporting would not be the main problem. Instead, errors were expected to be more likely the result of recipients' lack of time to complete forms and lack of understanding of data management and analysis methods. This is why the Pwani pilot had, from the beginning, a strong capacity development focus.

Rigorous verification procedures are contributing to the development of local capacity and how health facilities perceive data. Previously, facilities did not feel any connection to the HMIS reports and perceived their completion as a bureaucratic activity. Because of the clear connection between data and payment in a PBI context, and thanks to the facilities' increased capacity to understand and use the data, the facilities are now better equipped to take initiative, follow up and adjust when verification reports come in and show discrepancies that they did not expect.

One of the key challenges in developing local capacity is ensuring regular routine supportive supervision visits – during which verification and validation is supposed to occur. This issue has causes that are outside the scope of the PBI pilot. For example, there are issues with the budgets being released on time for districts to be able to plan and carry out supportive supervision visits. Additionally, a system does not currently exist to track whether supportive supervision visits are happening. As a solution, there are proposals to pilot a tracking form as part of routine HMIS to ensure that it is clear who received the visits and when. It is a challenge to evaluate supportive supervision visits. The proposed pilot tracking sheet will not contain an extensive checklist, instead just a simple summary of person visiting, their qualification, reason for the visit, summary of findings. This record is to be counter-signed by the facility in-charge.

INTERMEDIATE AND LONG-TERM AIMS

Buy-in: Ensuring buy-in for the pilot was very important for the Pwani implementation team, especially given that one of the main challenges in past PBI experiences had been precisely the lack of buy-in. A significant focus on rigorous verification procedures, as well as intensive development of local capacity are approaches used by the Pwani pilot to ensure both local and external buy-in, not only for the pilot itself, but also for how the pilot might subsequently inform revisions in the national PBI scheme.

Cost: Affordability has been an important consideration from the very beginning. The entire pilot project is estimated to cost about 33 cents per capita - including both incentive payments and management. This amount is significantly lower than other PBI schemes, where costs can be up to $3 per capita. The independent verifier is being selected through a competitive tender for around $19,000 per verification cycle for the entire region. The competitive bid is open to both national and international organizations. The designers are open to having multiple independent verifiers, each looking after one district.

Sustainability: One of the principal objectives underlying the design of this project was keeping as much as possible of the pilot within the current health system and avoiding the development of parallel programs and systems. This goal contributes to ensuring both financial and institutional sustainability in the long-term. The rigor of verification procedures, as well as stakeholders' engagement maintain institutional support for PBI. Keeping operation costs low facilitates the potential future transition from donor to country funding.