



MYANMAR STRATEGIC PURCHASING BRIEF SERIES – No. 4

Introducing Performance-Based Incentives

January 2018

INTRODUCTION – THE STRATEGIC PURCHASING BRIEF SERIES

This is the fourth in a series of briefs examining practical considerations in the design and implementation of a strategic purchasing pilot project among private general practitioners (GPs) in Myanmar. This pilot aims to start developing the important functions of, and provide valuable lessons around, contracting of health providers and purchasing that will contribute to the broader health financing agenda. More specifically, it is introducing a blended payment system that mixes capitation payments and performance-based incentives to reduce households' out-of-pocket spending and incentivize providers to deliver an essential package of primary care services.

CONTEXT

Many people in Myanmar access most of their health care through the formal and informal private sector and payment for this care comes mostly out of the patient's pocket. This can cause a significant financial burden to poor and vulnerable populations and lead to a chronic under-use of basic health services.

In response to this challenge, and in support of the Government of Myanmar's long term universal health coverage goal, Population Services International (PSI)/Myanmar has established a pilot project to demonstrate the capacity of private GPs in its Sun Quality Health (SQH) network to offer a basic package of primary care services to poor and vulnerable households. In this pilot, PSI is "simulating" the role of a purchaser, but expects this role to be taken over at some point by a national purchaser, as outlined in the National Health Plan (2017-2021). In the long run, the role of PSI is likely to evolve into that of an intermediary.¹ This intermediary role could include supporting the formation of networks of providers that are easier to integrate into health financing programs, and helping these providers meet minimum requirements through quality improvement and development of management capacity. Eventually, the package of services to be purchased from GPs, even if limited, will need to be streamlined with the basic Essential Package of Health Services that is currently being developed at the national level.

¹ See Results for Development Institute (2016). [Intermediaries: The Missing Link in Improving Mixed Market Health Systems?](#) Washington, DC: R4D.



The Three Millennium Development Goal Fund



Under the pilot, 2,506 low income households in two townships² in Yangon region, Shwepyithar and Darbein, have been registered, screened and issued with health cards which entitle them to a defined benefit package provided by five selected members of the SQH network. The pilot specifically aims to demonstrate an increase in the range of services offered by private providers, a decrease in out-of-pocket payment by the registered households, and a decrease in the time to seek treatment from the onset of health symptoms.

OBJECTIVE

This brief aims to describe the process that the pilot went through to define a set of performance-based incentives for participating GPs meant to complement the capitation payment (see [Issue Brief #2](#)) and to offset potential perverse incentives associated with it. The brief discusses how the project identified and prioritized the areas where additional incentives are needed, how it defined and weighed relevant performance indicators, and how it decided how and how often selected indicators would be measured, reported and verified. The brief also highlights the known strengths and limitations of this initial performance-based incentives system. This initial system is expected to evolve over time. As more information becomes available on the providers' actual behavior and on how this behavior changes in response to the mix of capitation and performance-based payments, incentives will likely need to be adjusted. The constant search for a combination of provider payment mechanisms that elicits the desired provider behavior is a critical component of the strategic purchasing approach.

What is strategic purchasing?

Strategic purchasing aims to increase health system performance through the effective allocation of financial resources to providers. This process involves three sets of explicit decisions:

- Which interventions should be purchased in response to population needs and wishes, taking into account national health priorities and evidence on cost-effectiveness
- How they should be purchased, including contractual mechanisms and payment systems
- From whom they ought to be purchased in light of providers' relative levels of quality and efficiency

Strategic purchasing can be seen in contrast to more passive purchasing approaches – for example when a predetermined budget is followed, or bills are simply reimbursed retrospectively.

STEPS INVOLVED IN THE DESIGN OF THE PERFORMANCE-BASED INCENTIVES SYSTEM

The process that the project followed to design the performance-based incentives system consisted of the following seven steps:

- Step 1 – Identify and prioritize potentially problematic areas pertaining to the incentives of the provider
- Step 2 – Assess whether performance-based payments can help better align incentives
- Step 3 – Assess the feasibility of performance-based payments
- Step 4 – Define “performance”
- Step 5 – Define the payment associated with the performance
- Step 6 – Decide how verification will be carried out
- Step 7 – Build a feedback loop

Each of these steps is described below.

Step 1 - Identify and prioritize potentially problematic areas pertaining to the incentives of the provider

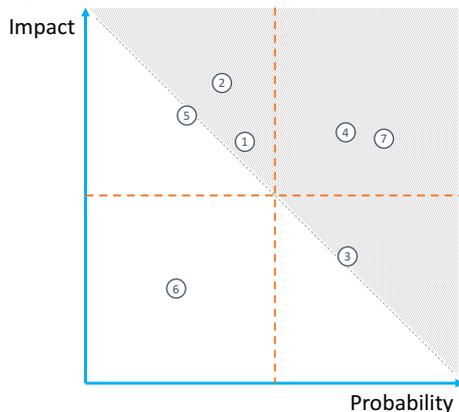
The first step involved a brainstorming session aimed at identifying and prioritizing potentially problematic areas, including (i) areas where the capitation payment by itself may not be introducing (sufficient) incentives to motivate desired provider behaviors, and (ii) areas where capitation payments alone may be introducing perverse incentives.

² Townships in Myanmar are somewhat comparable to what many other countries call districts. On average, a Township has a population of around 150,000.

The brainstorming session resulted in a list of 34 risks including, for example, the following:

- Poor quality treatment for cardholders, relative to customers who pay out of pocket
- Providers constrain access to services for cardholders (e.g. restricting visit times)

Figure 1 – Prioritization of risks



In order to prioritize the risks, each of them was assessed in terms of its probability and the importance of its impact. This was done by positioning each risk in a two-dimensional space, as illustrated in Figure 1. Risks in the shaded triangle should be given higher priority.

Step 2 – Assess whether performance-based payments can help better align incentives

The second step consisted in assessing, for each problematic area identified in step 1 and starting with the most important one, whether performance-based payments, either to the provider or to the client, could potentially be part of the solution. Assuming for now that introducing performance-based payments is feasible (see step 3

below), to what extent could such payments potentially help better align the incentives and change behaviors in the desired way? This question raises a series of other questions, which were answered for each of the potential problems or risks identified:

- Is a change in behavior necessary to address the problem? If so, whose behavior: the provider's, the client's or both (or someone else's)?
- Could a financial incentive or disincentive potentially motivate (at least partially) the desired change in behavior?
- Are there non-financial incentives or disincentives that could potentially achieve the same or better results (such as, for example: education, training, public recognition or "shaming", access to certain product, etc.)?

The risks identified in this process concerned the behavior of providers, cardholders or patients (for example, the risk that cardholders share cards with non-eligible neighbors, or that patients find that even the small co-payment creates a barrier to access). However, given the original objective of this exercise – i.e., to develop a performance-based incentives system to complement capitation payments and improve on quality of services delivered to the registered clients – the project decided to focus only on incentives that would address risks associated with the behavior of providers.

Step 3 – Assess the feasibility of performance-based payments

Starting with the main problematic areas (step 1), and focusing on those for which performance-based payment could potentially be part of the solution (step 2), the third step involved an assessment of the feasibility of performance-based payments that consisted of answering the following questions:

- Is there an indicator that could measure the extent to which the desired change in behavior occurs?
- Can a meaningful change in that indicator be expected within 3 months, 6 months and/or 12 months?
- Can that indicator be objectively measured?
- Would there be any perverse incentive associated with rewarding that indicator?³
- Would it be feasible to have a baseline for that indicator prior to when the first capitation payments are paid?

³ For example, if an increase in the proportion of cases of a certain condition that are being treated correctly is being rewarded, there may be an incentive to treat fewer cases so as to bring down the denominator.

- What would it take to collect the data needed to calculate that indicator? Where would the data come from? In what format would data need to be reported? How would it flow? How would it be compiled/analyzed?
- How often could the indicator be measured (e.g. every month, every quarter, twice a year, once a year)?
- Can that indicator be verified, and if so, what would it take to do so? How often could the indicator be verified?
- Can the performance on that indicator be verified periodically for all providers, or only for a random sample of providers?

Based on this assessment, the design team was able to compile the list of risks that could potentially be mitigated through performance-based payment. For the final selection, two additional factors were considered:

- The total number of indicators for which improvements are being rewarded matters. Selecting too many indicators makes verification difficult. Too many indicators may also make it more difficult for participating GPs to grasp the basis upon which their performance is being assessed. At the same time, the number should be large enough to cover the areas that were identified as potentially most problematic. There is no right or wrong number, but a total of three indicators measured over any three-month period seemed to strike the right balance.
- Rewarding better performance on some services or activities may lead to the provider’s neglect of other services or activities for which better performance is not being rewarded. To the extent possible, the monitoring system should also track performance on the latter group of services or activities.

Step 4 – Define “performance”

The next step was to clearly define how “performance” should be understood. In other words, what improvement in selected indicator could be realistically expected, and within which timeframe? Or, for

Table 1 – Example of target-setting rules

If baseline is:	Rewarded improvement:
Below x_1	+30 percentage points
Between x_1 and x_2	+15 percentage points
Between x_2 and x_3	+5 percentage points
Etc...	

indicators that do not have a baseline, whether an absolute minimum standard was required. For each selected indicator, a challenging yet achievable target needs to be pre-defined. A target should be set separately for each provider, considering the provider’s own baseline.⁴ One way to do that is to define

target-setting “rules” – preferably as a joint exercise with the providers – rather than actual targets. An example of such rules is displayed in Table 1.

Step 5 – Define the payment associated with the performance

When determining the payment associated with the performance, a first question is whether a positive incentive (such as a bonus paid if the target is met), a negative incentive (such as a penalty, e.g. taken from the next capitation payment, if the target is not met), or a combination of both is likely to be most effective in inducing the desired change in behavior. Next comes the question of how much? This is not an easy question to answer. Yet, it is an important one. In the case of a financial reward, for example, too little will not motivate the actor to change his/her behavior, while too much is inefficient given that the same effect could have been achieved with less. At least two important factors need to be considered when establishing the “right” payment amount. One is the total envelope for performance-based payments, i.e. what the provider would earn should he/she meet all the per-set targets. The other is the “cost”, to the provider, associated with the change in behavior. Depending on the problematic area being addressed, this “cost” may take various forms, including the following (which may come in all kinds of combinations):

⁴ For example, improvements in the indicator may be easier to achieve if the baseline is low.

- A revenue loss (e.g. when reducing the prescription of unnecessary medicines that the provider sells to the patient, or when prioritizing card-holders, as opposed to fee-paying non-card-holders)
- Additional expenditures (e.g. expenses associated with the establishment of a better information system or with modifications to the clinic setup to better guard confidentiality)
- Extra time and effort (e.g. to record additional information about each patient visit, or to get cardholders to improve their health seeking behavior)

In addition to the amount of the incentive, whether a bonus or a penalty, equally important is the frequency. A trade-off needs to be made between rewarding performance after a long period of time (e.g. once a year) and rewarding it frequently (e.g. once a month). In the former case, the financial incentive may not result in immediate action, while in the latter case, administrative costs to implement the payment scheme may become excessive.

Another question to consider is what happens if the target is not fully achieved. Will it be *all or nothing*, or can partial rewards be earned for partial achievements?

The project team chose to implement a quarterly rewards scheme, as this was seen as setting the right balance between frequency and efficiency, and kept the proposed breakdown of rewards to the providers in the proportions set out in [Issue Brief #2](#) (Calculating a Capitation Payment), which works out approximately as described in Table 2.

Table 2 – Example of target-setting rules

Type of payment	Expected proportion of total provider earning
Capitation fees	78%
Performance Based Incentives	8%
Out-of-pocket co-payment to provider by patient	14%

Step 6 – Decide how verification will be carried out

The topic of verification was already briefly touched upon in step 3, in the context of the feasibility of performance-based payments. This step is about determining *how* best to verify the veracity of reported performance, and about what the verification procedure should be?

- What information will need to be collected?
- Where does it need to be collected?
- How and how often does it need to be collected?
- Who will be responsible for the collection of that information?

It may be worthwhile to consider having the verification done by an external, contracted entity: this may improve the perception of objectivity and it may avoid delicate situations that could damage the relationship between purchaser and provider. If this option is pursued, putting in place a counter-verification system with random checks may be required.

An alternative, and less expensive method would be for providers to self-report data, for example through the electronic medical records system, though once again putting in place a counter-verification system with random checks would be required, with strong penalties (such as being removed from the program) if any provider is caught gaming the system.

Once the verification process has been defined, it is important to clearly stipulate what is to happen if the results of the verification exercise show disparities between reported and verified performance? How much disparity is deemed acceptable? What happens if there is suspicion of fraud? What happens if further investigation reveals intentional misreporting? Will the provider be penalized, and if so, how?

Step 7 – Build a feedback loop

Implementation research should help monitor the effects of the performance-based payments. Are the expected changes in behavior being observed? If not, why? Do the payments trigger any unintentional change? How could that be prevented? This is the topic of Issue Brief #5.

Based on this feedback loop, a mechanism to periodically adjust the payment system (e.g. the indicators, the targets, the payment amount or periodicity, the verification process...) should be developed.

HOW THIS WORKED IN PRACTICE

The project team narrowed down a wide range of potential indicators into 11 priorities (see Table 3), and of these, three were chosen for the first round of PBI as being of most immediate relevance (see Table 4). Since there was no baseline available for those indicators given that this was the first time they were being measured, the indicators were presented as minimum standards to be met by each provider, rather than as increases from a baseline.

Table 3 – Potential performance indicators and targets

Indicator	Target	Potential Means of verification
1. Providers deliver friendly services to beneficiaries	80% of clients reported that the provider is friendly during service utilization	Phone follow-up
2. Providers deliver equitable services to beneficiaries	80% of clients reported that there is no disparity in waiting time, duration of consultation and engagement during consultation between registered and unregistered clients	Phone follow-up
3. Providers are aware of the rules for co-payment and do not overcharge	90% of clients reported that providers followed the co-payment rules	Phone follow-up
4. Providers submit utilization report regularly and correctly	95% of reported data is in line with service category and complete	Data quality assessment
5. Providers report service utilization data accurately	<1% of utilization data in error	Phone follow-up
6. Providers encourage and verify the completion of immunization schedule	90% of registered children under 2 years fully immunized	Management information system
7. Providers are able to control uncomplicated hypertension and diabetes	70% of known hypertension and diabetes cases on treatment	Phone follow-up
8. Providers promote comprehensive antenatal care	80% of pregnant mothers received 4+ antenatal care visits	Management information system
9. Providers promote institutional delivery	80% of pregnancy delivered at the health facility	Management information system
10. Providers promote early newborn care	80% of newborns received early care within 48 hours	Phone follow-up
11. Providers meet service delivery standards of the benefit package	70% of Service Delivery Standards for each service category met	Quality Assurance report

The initial intention around the choice of means of verification for the different indicators was to identify low cost and scalable methods of measurement that could be applied to individual clinics in the future. However, in this round of measurement, the data for indicator number 1 was already planned to be collected in a household survey, so on this occasion the household survey data was used instead.

The total value of the performance-based incentives was proposed at 10% of the value of the total capitation payment and was broken down between the three indicators in the proportions shown in Table 4. The performance was measured at the end of December 2017, i.e., three months from the date on which the providers were informed about which indicators would be included in the incentive scheme. Table 4 also records the achievements by the providers against selected indicators.

Table 4 – Selected indicators and findings of the performance assessment – Round 1

Indicator number	Target	Final Means of verification	Incentive proportion	Outcome	
1	80% of clients reported that the provider is friendly during service utilization	Client household survey	25%	✓	All providers exceeded the target
6	90% of registered children under 2 years fully immunized	Management information system	25%	✗	No provider achieved the target
11	70% of Service Delivery Standards for each service category met	QA report	50%	✓	All providers exceeded the target

DISCUSSION ON THE IMPACT OF EACH INDICATOR

Monitoring provider behavior – reported friendliness: the quantitative household survey used a series of questions to construct a composite score around client satisfaction that covered a wide range of areas such as provider friendliness, waiting times and provider bias against card holding beneficiaries. While qualitative research findings suggested dissatisfaction among some beneficiaries, the responses from the quantitative household survey indicated almost unanimous satisfaction. One possible explanation for these contradictory findings is that culturally, respondents may find it difficult to express critical views in an interview of this nature.

For the next round of incentives, the design team will need to revisit the way this indicator is being measured. Alternatively, the team may replace this indicator with another one from the initial list, which it feels can be measured more objectively, namely that 80% of clients report that there is no disparity in waiting time, duration of consultation and engagement during consultation between cardholders and non-cardholders.

Generating Health impact by expanding child immunization: a child under the age of two is considered fully immunized if he/she has received all vaccinations recommended in the national schedule. Immunization is considered to be one of the most cost-effective child health interventions. The indicator proved challenging to measure, however, for a number of reasons: mothers do not always have their child’s vaccination card; different vaccinations are provided at different times, meaning that some children may not have received all vaccinations because they are still too young; private GPs are not authorized to provide vaccinations, but must refer the children to a public-sector clinic. As a result, only two of the participating providers were able to collect the information that is necessary to measure this indicator, and these providers were only able to show that between 71% and 76% of children were fully vaccinated.

At the same time, the design team remains committed to keeping this indicator, and recommends it be used for all new providers joining the strategic purchasing program. Two factors may strengthen the use of this indicator in the future: first, the introduction of the electronic medical record system, which is currently being field tested, will allow to track each vaccination by child and by age; second, a provider will be given more time (i.e. six months rather than three) to achieve the 90% target.

Monitoring Clinical Effectiveness - achievement of service delivery standards: The SQH network has a comprehensive set of service delivery standards that are used to measure quality of service delivery at each clinic. These are arranged around headings such as service practices; rights and needs of the patient; safety and quality improvement; practice management; and physical infrastructure. These standards are measured by a dedicated team within PSI’s *Sun Business Unit* using a detailed checklist. Table 5 shows two of the 15 standards with their respective indicators to illustrate how standards are measured.

Table 5 – Example of PSI Myanmar’s Service Delivery Standards (SDS) for facility assessment

Section	Standard	Criterion	Indicator
Practice Services (Equity/Timeliness)	Standard 1 - Access to care The SQH provider provides timely care and advice to clients.	Criterion 1.1 - Scheduling care in opening hours The SQH clinic has a flexible system that enables provider to accommodate clients’ clinical needs.	A. The clinic has a flexible system for determining the order in which clients are seen, to accommodate their needs (for urgent care, non-urgent care, complex care, planned chronic disease management, preventive health care and longer consultations.) B. The clinic has a system to identify, prioritise and respond to life threatening and urgent medical matters (triage).
Practice Services (Safety and effectiveness)	Standard 4 - Diagnosis and management of health problems In consultation with clients, SQH practice provides care that is relevant and in broad agreement with best available evidence.	Criterion 4.1 - Consistent evidence-based practice Provider has a consistent approach for the diagnosis and management of conditions affecting clients in accordance with best available evidence.	A. Provider uses current clinical guidelines relevant to general practice to assist in the diagnosis and management of clients. B. Provider can describe how he/she ensures consistency of diagnosis and management of clients by recording in client health records.

The fact that the providers in this pilot were all assessed as significantly exceeding the standard of 70% that was set for the indicator did not come as a surprise. Each of the providers has been assessed regularly by PSI over the past number of years as part of PSI’s own routine quality improvement program, and one of the initial inclusion criteria for the project was that the provider should meet high quality standards. However due to the central importance of quality in a program of this nature, the design team felt strongly that this indicator be maintained as a minimum standard even though it did not challenge this first batch of providers to make improvements. As the project expands and as it moves to sites that are more rural and remote, providers may find it more challenging to reach these standards. The standards that are being rewarded will also evolve over time. From their current focus on elements of quality primarily related to availability of inputs and structures, they will increasingly emphasize processes and outcomes, thereby incentivizing providers to move to the next level of quality service provision.

IMPLICATIONS FOR PROJECT PLANNING AND IMPLEMENTATION

Strategic purchasing sets out to determine the right combination of provider payment mechanisms that elicits a set of desired provider behaviors, and it is critical that incentives are continuously monitored and adjusted to ensure they are achieving this goal without negative unintended consequences. At a minimum these incentives need to be simple, clear, achievable and announced well enough in advance for actions to be taken.

Although the steps described in this brief were comprehensive, they still required significant judgement to be applied. Despite the somewhat mixed outcomes after the first round, the design team feels that the performance-based incentives represent a positive start. With continued support from the Three Millennium Development Goals fund, the pilot project is extended for another year till December 2018. The project will apply these lessons and extend the scheme to cover an entire year (or longer) worth of incentives so providers get clear signals about what is expected of them, using a wider range of the prioritized indicators set out in this brief.

For a more in-depth discussion about lessons learned around performance-based incentives and other aspects of the program implementation generated by the implementation research approach, see Issue Brief #5.

Myanmar Strategic Purchasing Brief Series:

The project has the support of donors including UNFPA, VSO, and the 3MDG Fund, and is being implemented in collaboration with the USAID-funded Health Finance and Governance project.

This document was prepared by Alex Ergo, HFG, Daniel Crapper, Deputy Country Director, PSI/Myanmar and Dr. Han Win Htat, National Director for the Sun Quality Health Network, PSI/Myanmar.

The authors appreciate Dr. Thant Sin Htoo, Director of National Health Plan Implementation Monitoring Unit, Ministry of Health and Sports for his overall guidance on the project implementation.

For further information, please contact Dr. Han Win Htat: hwhtat@psimyanmar.org