Implementation of Pay for Performance Systems

Global Alliance
for Health
and Social Compact

CONSULTANCY ASSIGNMENT

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Objectives covered	Elaboration of pay for performance and its implementation plan
Implementation	Global Alliance for Health and Social Compact
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Content

Introduction

Summary: The first two sections of this document provides description and evaluation of the current status, while the following sections provide recommendations for implementation.

Pay-for-performance (P4P) is on of the modalities of result-based financing (RBF), which has been on top of the healthcare agenda for the past decade. In health sector it encompasses **monetary or non-monetary transfer of payments to a provider, manager or a consumer as an incentive to deliver or use priority healthcare services. Conditionality of the payment is the measurable actions that were undertaken.**

The idea behind result-based funding is to link existing funds closely to measurable indicators and eventually, influence budgetary allocations.

In terms of global engagement in RBF, the most well-know financing schemes that used this model of financing are GFARM and GAVI's HSS to which Georgia has been exposed.

The current report attempts to set ground for implementation of P4P schemes in Georgia, by looking at the following aspects of the scheme designs and providing recommendations for strategic adoption:

- General information on P4P (Section I), with the consideration that the country already made a decision on choosing P4P out of all the modalities of result-based financing, we only review potential strength and weaknesses associated P4P and "lessons learned" from international experience with P4P;

Further, Section II provides a review of performance gaps by levels of care that could be targeted by P4P measures **with a special focus to identify and provide recommendations about potential fields for P4P implementation.**

In terms of guidance for P4P initiation, the Section III of the report provides a review of Administrative and Normative Framework for P4P implementation, including institutional capabilities to implement P4P, where cons and pros for different institutional arrangement of P4P implementation are discussed.

Annex II also provides a sample (stylized) outline of P4P program.

Section IV provides Implementation Framework (through looking at ex-ante and post-ante

contracting considerations), in terms of "decision map" for:

- Implementation and monitoring
- Setting objectives and indicators

It should be noted, that this is starting point for P4P implementation. Decisions should be made about services and institutional arrangements. Those decisions should guide the development implementation plan specifically for a selected P4P pilot or a program.

Furthermore, as the following report was developed at a part of the MoLHSA and GASHC cooperation, the table below summarizes components of ToR and the corresponding sections:

	Conduct a situational assessment of the organizational (including Benefits Package) and expenses dimensions of the Universal Health Coverage System (including meetings with MoLHSA and SSA, etc. representatives);	Section II
	Assess the other state health programs revenue and expense mechanisms;	Section II
	Analyze the payment mechanisms in place by levels of health care provision;	Section II
	Design the methods and interventions for containment Universal Health care State Program expenses;	*See "Cost-containment report"; containing costs is not an objective of P4P*
	Design the methods and interventions for containment of other state health care programs' expenses;	
	Elaborate the normative and institutional framework for containment interventions for Universal Health care State Program other state health care programs' expenses;	Section III
	First Interventions for containment of programs' expenses Draft discussions;	*See "Cost-containment report"; containing costs is not an objective of P4P*
	Elaborate the final draft of the Interventions for containment of programs' expenses and the normative acts for approval and implementation;	
	Identify root causes of poor performance by health system levels	Section II
	Assess MoHLSA and Social Service Agency (SSA) readiness for implementing Pay for Performance mechanisms	Section III
	Design of the integrated set of financial and strategic health care objectives	Section IV
	Design the Pay for Performance mechanisms by levels of health care provision	Section IV
	Determine administrative processes and assign implementation roles and responsibilities	Section IV
	Develop institutional and normative framework for Pay for Performance Mechanisms and Implementation Plan	Section IC
	Elaborate the final draft of the Pay for Performance System and the normative acts for approval and implementation	This is not a part of the report, as at this stage the report aims to guide selection of P4P targets and interventions (e.g. which services should be transformed)

Section I: General Information on P4P

P4P is one of the models of result-based financing, which addresses demand-side of health service provision and diverts funds towards achievement of set results as measured by the performance: quantity and quality of services provided.

This section will briefly look at the "family of BRF" in order to distinguish P4P for other financing models and then, will define P4P – in its conceptual frame by looking at core ideas behind the model and in an international perspective, by looking at some of the country examples.

There are two main types of RBF models – one looking at incentives on a supply-side, while other at demand-side. Despite lack of strictly scientific evidence on both types of financing models, still supply-side models are considered to be less applicable for low- and middle-income countries, due to deficiencies at a supply side (e.g. lack of qualified medical personnel, infrastructure, etc.). Therefore, demand-side models have received more attention and as it can be seen from international experience summarized below, there have been more cases of successful implementation of such models.

P4P and performance-based financing (PBF) are the terms that are most often used interchangeably. However, performance-based contracting, as a sub-set of P4P should be treated secretly, as the process of contracting itself establishes different modalities in terms of transactional costs involved in the process. Despite the fact, whether Georgia engages in contracting or not, the required portion of the contract that stipulates terms of the payment, namely desired output and variables that decrease or increase payment based on the performance of the provider should be established somewhere.

P4P is one the commonly used output-based funding (result-based financing – RBF) models.

Overall, RBF offers funding models, such as:

- Pay-for-performance
- Output-based aid
- Conditional cash transfers
- Other demand-side schemes.

Strength and Weaknesses

P4P, or RbF in general are hard to study, therefore, there is no strong scientific evidence on its impact, which means that in any setting, the decision to implement P4P is

advisable/recommendatory, but this decision cannot be grounded into hard evidence. There have been no studies to provide such a strong evidence and potentially, there will not be any, since measurement of impact of P4P schemes will be cofounded by the number of complex factors. For example, as this stage, there is large, multi-country program going on with the support of the World Bank and hopefully, the results of this study will provide more evidence. One of the key factors that hinders development of such evidence is that fact that upon introduction of any incentive-based payment system, it is hard, close to impossible, to find fair comparator to measure the result.

Having said that, there is still a consensus and financial incentives change people's behavior and people do what they are paid for. This is not necessarily good and in healthcare setting will not necessarily lead to quality or performance improvement, however, if modeled appropriately and monitored closely and often changed (not to allow providers adopting and cheating the system), it can deliver desired results in short and medium perspectives.

However, incentive-based payment systems regulating demand-side of the healthcare have shown positive results in number of setting, e.g. Mexico or Rwanda as measured as higher immunization rates and improved child health status. Another example closer to the Georgian context is the Estonian experience, which is internationally rated as a successful implementation story, on the implementation of the P4P within the primary health care (Annex N°2).

Overall consensus is positive and international community considers incentive-based payment schemes as one the cornerstones to achieve better health outcomes and overcome intrinsic inefficiencies in healthcare provision and utilization.

Notably, the latter section discusses ex-ante and post-ante considerations of P4P implementation. That section highlights in details how decisions made at each step of implementation will generate positive and negative impact on the system and those should be kept in mind.

International Experience with P4P (country cases)

In **Haiti,** the government established P4P contracts with local NGOs to provide health and family planning services with support of USAID in 1999. The scheme covered 2.7 million individuals and targets – health and managerial, are established year. NGOs lose funding if they do not achieve the targets, while receive bonuses for exceeding the targets.

P4P was used in **Argentina** to provide basic health services to the poorest groups and in that case insurance companies where given incentives for enrolment targets. Furthermore, healthcare facilities were offered incentive schemes for 10 tracer conditions in maternal and child health. This ensured that not only individual received health insurance, but also providers rendered services.

Rwanda is one of the exemplary countries with RBF pilots for immunization prenatal care and assisted delivery. An Annex 1 gives a detailed example on Rwanda's case from WHO Guide on immunization financing

For more updated and ongoing RbF projects we would advise to regularly review the updates for ongoing World Bank supported multi-country projects at www.rbfhealth.org. Once again, not to be confused, P4P is within the family of RbF models. **Furthermore, since at this stage, the MoLHSA has not identified a field to pilot/implement P4P, and the aim of this report is to provide recommendations for this selection, as well as the process, results of "RbF Health" pilots can be interesting for the country.**

Conclusions:

As it can be seen from international experience:

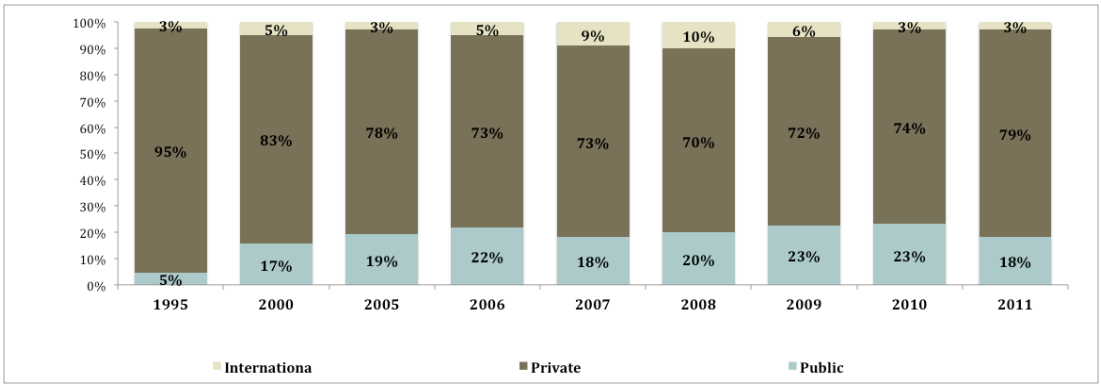
- Most of the countries have used outsourcing mechanism to ensure institutional functioning of P4P schemes – either through NGO, insurance company or a special committee. This is to gain flexibility in procurement and contracting facilities;
- Dedication: in all the cases, there is a dedicated effort to specific set of activities, e.g. family planning, immunization, etc. this makes a complex task of administering P4P scheme a higher priority;
- Further, indicators used for the scheme were rather simple to measure, e.g. enrolment, immunization coverage.

Section II: Performance Gaps in Georgia's Healthcare System

The following review is intended to formulate some of the areas in P4P can be applied and also foster the discussion about the ways of implementation of relatively complex payment scheme, such as P4P.

Health expenditures in Georgia are characterized by high private expenditures, where spending for pharmaceuticals tops the list. In 2011, Total Healthcare Expenditures amounted 2.292 million GEL, where share of public expenditures was just 18.3% (NHA, 2011). In 2013, country launched a "Universal Healthcare Program" and public expenditures nearly doubled. However, until now, we do not have information about level of private expenditures to estimate the change in term of shares.

Figure 1: Total Healthcare Expenditures in Georgia by Financing Agent



Source: NHA Georgia

Limited involvement of public sector and limited coverage of health insurance (as it is voluntary) had resulted in significant growth of catastrophic healthcare expenditures, where hospitalization and chronic use of medicines can be estimated as a major risk factor for impoverishment.

Brief Review of Georgia's Public Health Commitments

Georgia's health system had undergone series of dramatic transformation during the last two decades. As the scholarship around health systems suggest that there are no "Golden Standards" for health system, Georgia had tried various forms with relative success and failures. Overall, significant progress had been achieved by the country if measured against MDG targets, however, lack of coherent reform strategy had to formation of unique hybrid system in the country – with nearly purely private provision and large tax-based financing of healthcare.

Therefore, it is a challenge to regulate incentives that this model evokes in providers, users

and public administrators of the system.

Currently, public system commitments in Georgia are largely represented by so called Universal Healthcare Program and 24 Vertical Healthcare Programs.

Budget for state-funded health care programs in 2015 was 670 million GEL, 70% of which was dedicated to Universal Healthcare Program and the remaining to 24 vertical programs. Recently the budget was amended with the addition 96 million GEL to cover existing funding gap.

Notably, UHC was introduced in 2013 and since then public budget had been growing rapidly. Growth is also observed in vertical programs, although, vertical programs exhibit some level of cost containment.

The UHC program

The UHC program is regulated by Government Degree N36. The goal of the UHC program is to ensure through financing access to the medical services for the population of Georgia who do not have private health insurance. Other objectives of the program are:

- Increase geographical and financial access to the primary health care;
- Increase utilization of out-patient services in order to rationalize utilization of costly and high-tech hospital services; and
- Improve population health through better access to emergency and planned in- and out-patient services.

Beneficiaries of the UHP are all Georgian citizens, asylum seekers, internally displaced persons and persons with humanitarian status except prisoners. Those people who had private insurance scheme by July 1st, 2013 were not eligible to the UHC program. However, they are eligible to the basic benefit package if their private insurance contract is terminated.

However, enrolment in UHP varies from region to region, as shown in the table below. On one hand this could be an issue of a denominator, but on the other hand, considering that enrolment is measured by the number of beneficiaries registered with PHC service providers, it signifies the coverage gap of 16% (overall, if compared with international experience, coverage is high).

UHP coverage by regions, 2015

Region	Population covered with UHP	Population	% UHP coverage
Adjara	284 183	335 100	85%
Guria	91 313	113 300	81%

Imereti	505 762	536 300	94%
Kakheti	243 167	319 100	76%
Racha-Lechkhumi	15 137	32 000	47%
Kvemo Kartli	324 227	424 000	76%
Mtskheta-Mtianeti	61 350	94 400	65%
Samegrelo-Zemo Svaneti	254 245	331 500	77%
Samtkhe-Javaketi	112 157	160 400	70%
Sida Kartli	186 635	264 500	71%
Tbilisi	1 047 586	1 116 400	94%
Total	**3 125 762**	**3 727 000**	**84%**

Source: MOLHSA

Benefits under UHP include out-patient care and in-patient urgent and surgical care, also treatment of cancer and deliveries. Benefits have the element of targeting, which can serve a good basis of designing and implementing P4P schemes in the program.

Overall, to summarize, the program offers at least two venues to experiment with P4P:

1. Increase coverage with PHC services;
2. Improve targeted nature of the program.

Additional aspects for P4P can be grouped around quantity (e.g. preventive visits) and quality of care (e.g. survival rates for certain conditions).

Based on those assumptions, this reports formulates recommendations/sample P4P framework, provided in the Annex 2.

Vertical programs

As shown in the table below, vertical programs consume approximately 30% of state health budget.

Administratively, UHP and vertical programs are managed separately, which can lead to fragmentation of care. For example, in case of diabetes, vertical program provides insulin and some tests, but patients requiring pre-insulin therapy, are to be managed by PHC component for UHP, which offers significantly less benefits and pushes patient to use costlier (and unhealthier) option under the vertical program.

State funded vertical health care programs in million GEL, 2013-2015

Vertical health care program (in million GEL)	2013	2014	2015 (plan)
Early detection of diseases and screening	1,46	1,48	1,77
Immunization	5,97	4,43	10,39
Disease Surveillance	0,65	0,92	0,65
Safe Blood	0,82	1,07	1,40

Prevention of occupational diseases	0,27	0,27	0,27
Infectious Diseases management	1,26	7,38	9,89
TB diagnosis and treatment	8,65	8,43	11,63
HIV/AIDS prevention and treatment	3,14	4,10	6,33
Hepatitis C management	0,00	0,00	8,33
Maternal and Child health	4,91	6,05	6,20
Treatment of drug abuse	3,99	4,19	4,35
Health promotion	0,00	0,00	0,20
Mental health	14,57	15,09	15,65
Diabetes	4,86	5,75	7,66

Vertical health care program (in million GEL)	**2013**	**2014**	**2015 (plan)**
Pediatric Oncohematology	1,67	1,63	1,27
Dialysis and kidney transplantation	22,14	25,13	29,03
Palliative care of oncological patients	2,35	1,41	1,52
Rare diseases	3,82	4,21	5,96
Ambulance Medical Services	15,15	29,66	30,13
Rural doctor	11,29	20,38	25,33
Referral (individual care)	17,92	19,69	20,00
Medical screening for army recruits	1,15	0,90	1,00
Vertical Programs in Total	**126,06**	**162,08**	**198,95**
Share (%) of total public spending on health	**29%**	**29%**	**30%**

Source: MOLHSA

Overall, vertical programs offer wealth of opportunities for P4P that could address two key parameters of the care: quantity and quality of the care.

Utilization of most of the vertical programs is growing, without notable impact on underling health condition, e.g. Mental Health program every year serves more cases, however, there is not underlying result in terms of those services reaching all requiring the care and improving qualify of life of people with mental health issues.

Payment and Incentives by the Levels of Care

Primary healthcare

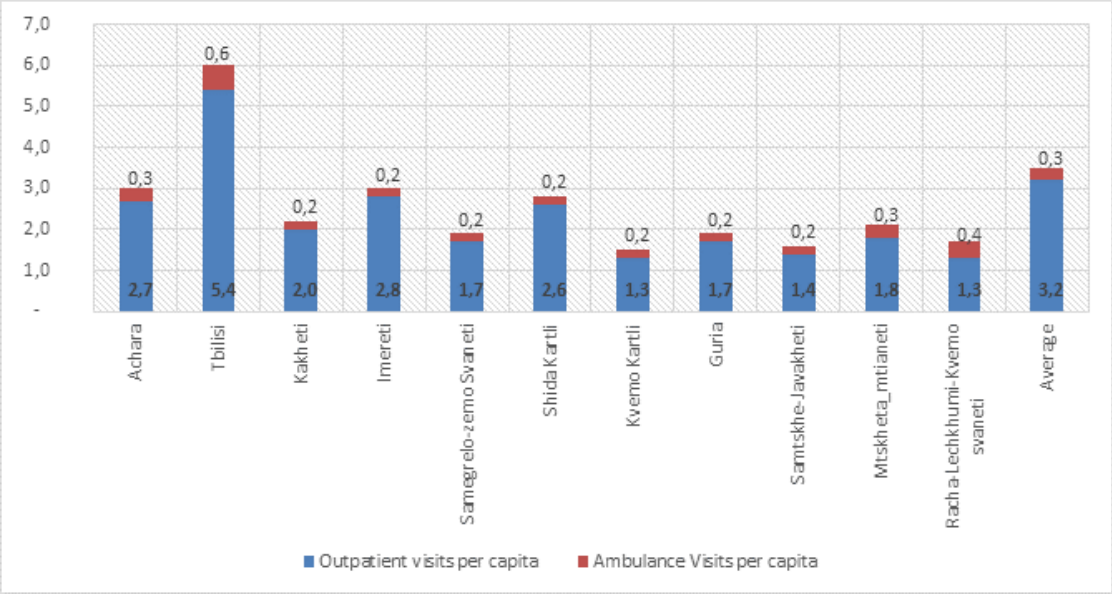
PHC provision has been private since 1997. In 2008, country introduced so called village doctor's program, which established family physician/nurse posts in most of the rural areas in Georgia. They also act as private, sole practitioners.

The Government's role in organizing primary health care network is weak and country does not have coherent primary system. PHC suffered from limited resources, lack of referral system, incongruent care and payment systems in rural and urban areas and overall, PHC utilization is low.

Increase utilization and quality of PHC services is an outmost objective of the country in order to rationalize high cost hospital care and enhance preventive functions of PHC.

In 2014, average out-patient visits per capita was 3.2 which less then a half of European regional average of 7.6. there is also a large geographic variations with Tbilisi being as high as 5.4, while per capita visits in some regions is as low as 1.3.

Data on regional variation of per capita out-patient visits is shown below and it signifies important health equalities in access.



Source: MOLHSA

Currently, capitation rates set under UHP do not differentiate based on the associated risk of the person, such as age or certain conditions. Furthermore, rural population is not covered by capitation for basic PHC services, which is probably one of the drivers of low utilization.

Hospitals

Almost of hospitals are privately owned in Georgia. Even if not privately owned, provider-purchaser split reforms introduced in the country in late 90'ies, cause those provider to behave on a market very much like private business.

There are number of aspects of hospital service utilization that suggest inefficiencies within this sector, based on the data from 2014, when most likely financial barriers should have been eliminated (we still should not ignore the fact that cost of hospital care is a barrier to necessary utilization of those services, as UHP requires copayment and also has strict positive lists to what is covered; furthermore, not the whole population is eligible for the services)

- Georgia has lower then European average utilization of hospital care – 114 per 1000

population, compared to 181 in European region).

- Average length of stay in Georgia is 5 days, compared to 9 days in average in European region.

Most importantly,

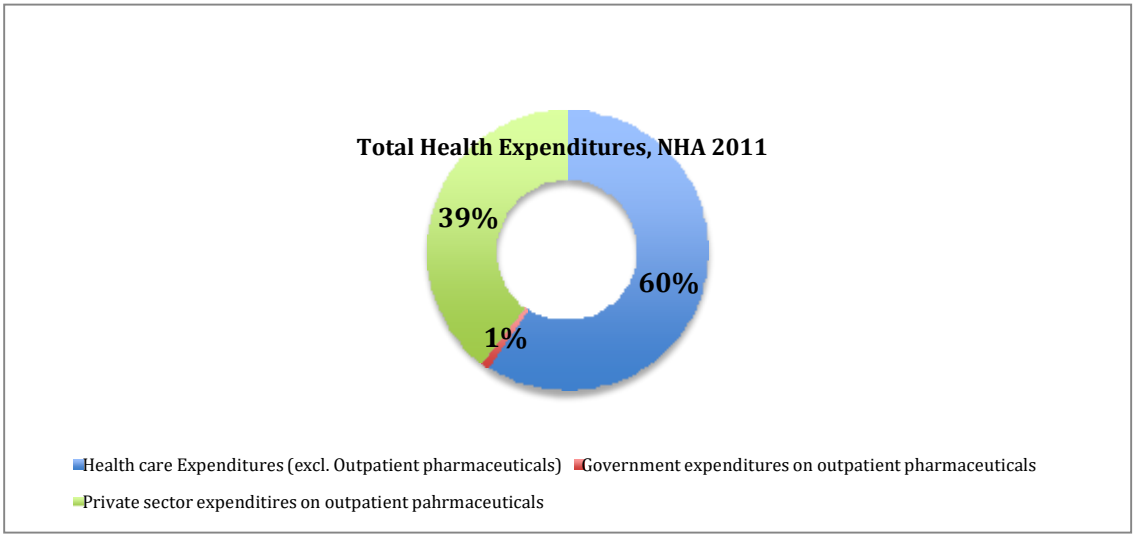
- Occupancy rate of hospital beds is as low as 52% compared with 80% in Europe.

In term of financing, UHP hospital components is largely centered around urgent medical care, and funding is the most generous for urgent surgical care. Notably, **from 2013 to 2014, number of urgent surgical care increase by 70%,** which is obviously the impact of funding priorities.

Pharmaceuticals

Pharmaceutical expenditures remain one of the core challenges to Georgia's healthcare system.

Georgia spends over 40% of Total Healthcare Expenditures (THE) on pharmaceuticals (NHA, 2011), which accounts for 4% of Georgia's GDP. Compared to most of the Euro (EURO25) countries, average spending as a share of THE is 19% and average share of GDP is 1.6% (OECD, Health at Glance 2011).



According to NHA 2011, private sector spent over 95% of total pharmaceutical expenditures

(39% of THE):

Survey data, such as Healthcare Utilization and Expenditure Survey (HUES) estimates that 60% of household health spending is directed to pharmaceuticals (HUES, 2010).

Currently, size estimation study of pharmaceutical market is not done for Georgia. According to GeoStat (State Department of Statistics), retail sale of pharmaceuticals in 2010 was 543,3 million GEL (notable, NHA 2010 reports 931,9 million, which is overestimation nearly by 70%). Average annual rate of pharmaceutical expenditure growth from 2001 to 2010 was 23%. If size of the market is estimate roughly as a function of Σ (import, local production) – export, is will yield a result of ≈ 481 million. With this diversified figures, it's strictly advisable to develop methodology and conduct an in-depth study (e.g. based on the current legislation pharmacies simultaneously have a right for retail and wholesale and there is no tracking system for re-sale).

As the brief review of pharmaceutical expenditures has demonstrated, private sector, namely out-of-pocket spending dominates pharmaceutical expenditures. By far, out-of-pocket expenditures are the most inefficient way to finance healthcare from a national perspective. Paired with upward push of pharmaceutical expenditures globally, this model of financing results in rapid and inefficient growth of expenditure portfolio.

Conceptually, imperfections of pharmaceutical market (e.g. failure of cost-containment) can be caused by supply and demand side factors. Demand side also suffers from different levels of imperfection – at a physician, pharmacist, patient and payer/procurer sides.

Before launching on the detailed discussion, the table below summarizes the findings of the cost-containment methods employed currently in Georgia.

Method	**Status**	**Notes**
Supply-Side Measures		
Positive/Negative Lists	Yes	Insufficient (70+ titles)
Reference Pricing or explicit price control or profit control	No	
Generic Substitution	Partial	Only for poor
Economic Evaluation	No	
Monitoring of Prescription Patterns	No	After Georgia implemented mandatory prescription requirement for Group II drugs, capability to monitor drug prescription has increased, however, there are limited number of guidelines which define prescription practices

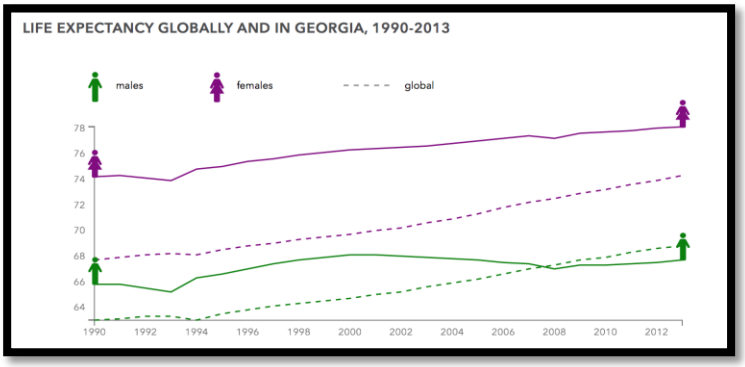
Demand-site Measures		
Copayments	Yes	For very limited list of drugs
Financial incentives for physicians	No	
Non-financial incentives for physicians	No	

Brief Outlook on Core Challenges of Georgia's Healthcare

Georgia had experienced significant improvement in health status, however, challenges remain.

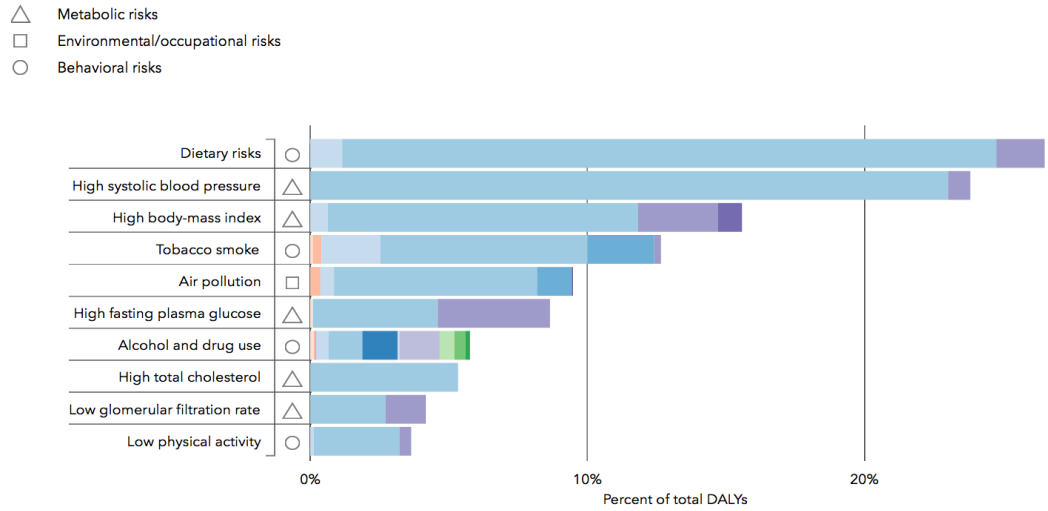
Health Status

Health status, simply measured by life expectancy, is higher in Georgia the average for the world, however, there is sill a significant gap compared with most of the developed countries.



Notably, most of the disease burden, as expressed in DALY's in the country is attributable to preventable causes that can be more appropriately handled in PHC setting rather then hospitals.

BURDEN OF DISEASE ATTRIBUTABLE TO LEADING RISK FACTORS, 2013



Therefore, it is suggested to that in order to meet overarching objectives of health systems:

- Increase access (financial and geographic)
- Increase equity, and
- Effectiveness,

System needs to concentrate on P4P schemes that target out-patient care.

Section III: Institutional and Normative Framework for P4P implementation

General Overview

Currently, large share public health programs are administered by Social Service Agency (SSA). Therefore, administrative capabilities and normative framework for purchasing and payment of SSA, are outmost issue with P4P implementation in the country.

Unfortunately, Georgia has little to no experience with incentive-based schemes and programs that provide payment based on the set targets are not common in health or any other sector. Therefore, it will be a challenge to establish such schemes and manage them effectively.

There are number of prerequisites need to successful development, implementation and monitoring of P4P schemes. Those are scattered around the following dimensions:

1. Financial and health management information systems;
2. Verification mechanisms;

3. Quality assurance;
4. Payment mechanisms;
5. Fund management capacity.
6. Contracting capacity;

Work Bank Framework of successful implementation of RbF schemes also suggest the following components:

- **Political commitment** is essential to good design, effective implementation, and sustainability of RBF elements.
- **Involvement of all relevant stakeholders** in the design of the RBF scheme helps to mitigate resistance and facilitate understanding of the mechanism.
- A **focused and gradual approach** appears useful for layering reforms and facilitating the institutional changes required to create the right environment for RBF implementation.
- **Adequate organizational structures and institutional capacity** are key for RBF mechanisms to work well.
- RBF projects need to **focus on improving quality** of services provided, in addition to increasing overall service provision and utilization.
- Selection of **performance indicators** is critical.
- **Independent validation of achievement of indicators** linked to performance-based contracts is necessary to mitigate 'gaming' and perverse incentives to over-report results.
- **Adequate and appropriate monitoring and evaluation frameworks** are critical for demonstrating results to stakeholders and for fostering sustainability.

Based on this framework, P4P implementation in Georgia is assumed under the scheme of SSA implementation.

Financial and Health Management Information System

SSA operates based on a web-base software package developed in the country with assistance of USAID. Overall, information collection system functions properly, however, nature of information collected does not directly enable P4P implementation:

- SSA does not have any experience in tracing and measuring outcomes;
- Current financing system does not provide any example/practical case of reward mechanisms.

Most likely, there will be need to establish a stand-alone functional vertical which will be

collecting data relevant to P4P targets, analyzing the data and transferring information to SSA for payment transaction purposes. This could be within or outside of the agency – internally established unit might be less costly to run, however, external unit can have better validation and less conflict of interest.

It is notable that normative framework of SSA operation in health does not assume any function of setting its own targets and measures. Therefore, design of P4P scheme should be also separated and most likely performed by the Healthcare Division of MoLHSA.

Many countries use non-governmental organizations (or this could be teaching hospital) to outsource P4P services. This can significantly lower administrative costs, if the country has willing and experienced NGOs to perform those tasks. Furthermore, those could be outsources to professional association and universities as well. This could result in significant cost-contribution from those institutions.

Verification Mechanism and Quality Assurance

Establishment of verification mechanism for P4P will require significant alteration of current normative framework of SSA operations. As noted above and discusses in details, there are number of aspects that should be measured and verified under the P4P schemes:

1. Quantity of services: it seems that currently SSA, jointly with State Medical Regulation Agency, is well set up to receive, process and verify quantitative information about services render. SSA is also capable to verify information about targeting, if targeting mechanisms are kept simple (see in details below).

   However, there is a significant time delay in verification process. Verification of documentation within facility is done by the Medical Activity Regulation Agency, which had 3-year long period to do so.

   Establishment of P4P mechanism will require more speeder verification mechanism in place, which will manage to complete verification process for the period "rewards" are paid.

   To understand importance of this issue, lets stipulate that P4P scheme is set up that any provider receives 50% of total payment and 50% is contingent upon performance against set targets. Inability to timely verify achievement of those targets will result in delay of payment that would essential for functioning of healthcare facility.
2. Quality of services: quality assurance of healthcare services would be a more challenging aspect for verification purposes. In general, this might require targeted studies, which are expensive to implement, and SSA does not any experience or

capabilities to ensure those aspects. In general, State Medical Regulation Agency is charged with this reasonability, however, in this process, the agency also mostly has reactive capabilities.

It might be more reasonable to outsource those services to institutions which are better set up for research and study functionability. On the other, hand if quality component is kept simple, it might be possible to measure it with some modification of existing capabilities.

3. Negative impacts of the scheme: as the last section of this report stipulates P4P schemes also have negative impact that can take number of different forms and will require continuous monitoring and validation to avoid adverse events.

   Current evaluative framework of state healthcare programs does not offer this capability.

Payment and Contracting Mechanisms and Fund Management Capacity

Once again, since SSA does not have any experience with P4P schemes, payment mechanisms need to be altered and changed. In addition, if "reward" is a mechanism reimburses annually, it need to be adequately recorded in the budgetary planning of the program.

Definitely, requirements on payment and contracting, as well as fund management capabilities will change depending on the agency which will be in charge of running P4P schemes, as large share of those functions could be outsourced.

Contracting mechanism is also a challenge and State Procurement Legislation should be applied in this process. This will require significant ex-ante work to stipulate terms of the procured goods/services and payment methods, however, it is feasible to perform this function within the framework of current legislation.

Fund management capacities do not apply to SSA, which does not perform this task at all. However, since exhaustion of funds allocated for P4P will be contingent upon performance of the contacted organization, this will increase budgetary fluctuation and can make budgeting process somewhat unpredictable.

Normative Framework

Number of aspects for P4P will need some normative base and regulatory framework for administration. Those issues are highlighted above. However, choice of the framework will also depend on the institutional arrangement of P4P scheme implementation. Therefore, at this stage, it is not feasible to provide "ready-made recipe" how P4P should be implemented.

Nevertheless, Georgia has a most suitable overall normative framework for P4P implementation. Since 2012 country uses Program Based Budgeting approach, which provides a good foundation principle to establish P4P schemes.

This report will not review in-depth aspects of program budgeting, as we assume that the recipient of the report are well aware of this framework of linking inputs to a specific sets of results that can be exhibited as quantitative or qualitative change in the current status, as well as effectiveness and efficiency improvements.

Section IV: Implementation Framework

Overarching objectives and Ex-ante considerations for P4P Schemes

As noted above, decision about establishing P4P scheme for specific healthcare services or level of care, from a purchaser's perspective will involve at least two activities, besides actually setting outputs:

1. Ex-ante considerations: Definition of the terms of the contract
2. Post-ante considerations: Definition of monitoring and evaluation framework.

The following framework is suggest for the both processes:

1. Targeting: Which groups does the program target? How do programs target these groups? Do programs succeed in reaching their target groups, especially the poor?
2. Incentives: What is the role of monetary and non-monetary incentives? Do they generate unintended effects?
3. Effectiveness: How successful is the program in achieving targeted outcomes?
4. Efficiency: Does/has the program improved efficiency – more output per given input?

The following sections provide details for each component. Notably, for each component case definition and mechanism is defined, as both are to be considered in the process of scheme design.

Targeting

Targeting involves **definition of beneficiaries** of the scheme. Suggestive criteria for Georgia to classify beneficiaries of the schemes, based on the review of existing programs, can be the following:

- Age: special attention to children and old age (pensioners) groups;
- Gender: targeting programs to women of reproductive age for improved maternal and child

health outcomes;

- Socioeconomic status: targeted interventions for poor;
- Health Status: targeted programs for groups with specific diagnosis (e.g. diabetes), or chronic conditions in general;
- Geographic location: targeted programs for individuals in high-mountainous regions, rural areas or conflict-affected regions. This can also include specific programs for ethnic and linguistic minorities, which currently do not exist in the country.

Notably, targets can also be combines, e.g. geographic location and socioeconomic status, or socioeconomic status and health status. This is currently a case in number of State Healthcare Programs (e.g. diabetes care contains out-patient care component that is has a different patient contribution scheme based on the socioeconomic status of the patients and similar approach can be seen in number of programs).

Although, targeting is an important component for any P4P scheme, it should be noted that targeting involved additional cost of operating targeted scheme (e.g. administrative costs).

It is important to have **targeting mechanism** defined for each group. This means exactly how beneficiaries will be identified. For example, if the target group is selected based on their socioeconomic status, how this status is defined? If target group is patients with diabetes, which test is used to confirm belonging of a person to this group?

Fortunately, since Georgia has long-term experience with targeted programs, those mechanisms are more or less established. Country has a means-tested poverty program that is used to identify low socioeconomic status. For disease-specific schemes diagnostic criteria might need to be established or existing criteria revised and re-defined.
Geographic targeting would be more complicated and would be more dilated, as large portion of population either do not have a registered address or reside in the place other then their registered address. Current system resolves this issue by directing fund to healthcare providers, instead of patients, which distorts the targeting nature of the funding. Therefore, if may country choose to develop P4P schemes that target geographic locations, schemes will either be largely distorted, or will involve significant ex-ante costs to establish list of beneficiaries.

Incentives

P4P uses incentives to motivate providers to provide services to the target group of defined **quality** and **quantity.** Those schemes will not function without incentives, as those are perquisite.

Notably, unlike targeting, there is little to no experience in incentive schemes in Georgia. The only resembling mechanism would be negative incentives – fines and deductions within state healthcare programs, but those are mostly targeting deficiencies of administrative processes rather then quality and quantity of the services.

Therefore, establishment of incentive schemes might require significant ex-ante costs, including technical work or reworking contracting and legislative frameworks to enable such payments.

Incentives can take form of monetary and non-monetary. As current evidence shows, any BRF schemes is indeed based on a monetary incentives, which is either transfer or withholding of funds in reward/punishment of certain behavior. However, non-monetary incentives, such as status, recognition of work, etc., also play an important role (e.g. certification of excellence, or any other form). At this stage, it will be advisable to establish non-monetary incentive schemes, however, it is highly unlikely that the schemes will function without monetary incentives in place. As noted above, Georgia only has an experience of providing negative incentives (withholding of funds, or fines), but the issue is that those are done for administrative purposes and do not target quality or quantity of services (to compare, the simple example would be to withhold certain portion of capitation payment from a provider, if certain proportion of population in the catchment area is not immunized, attend scheduled cancer screening programs, etc.).

It seems that negative incentives are also desirable for cost-containment purposes in a short-term period. However, it is strongly advised to establish reward/positive incentive schemes in order to maintain the system running in a medium and long-term perspective.

Incentive schemes are mandatory for P4P implementation, however, it should be noted that any incentive scheme, besides desired effect, also generates number of undesired effects that might eventually deteriorate service quality and quantity. Below is a theoretical list of such perverse outcomes, however, for each P4P schemes, this theoretical list need to adopted to existing circumstances and outlines in "risk section" of the plan and ideally, payer should work on mechanisms to mitigate those risks.

- Ignorance of unrewarded activities: e.g. if target is set as at least 95% immunization rate, this would divert attention from other services that are as necessary for child development as immunization. Not only providers will be motivated to show high achievement in this

target, but most likely system will not be collecting information of services unrelated to this target.

- Induced demand: would refer to providers inducing/generating demand for this selected services unnecessarily to achieve or supersede the targets.
- Low sustainability: it is highly unlikely that behavior that the scheme encourages will continue in a same was if incentive scheme is removed. Sustainability of services encouraged by P4P (or any other RBF) schemes are very low. There are numerous examples providing proof of this fact and Georgia also had few cases, mainly in primary care and funded by international donors, where project funding made a significant contribution on the quantity and quality of the services, cessation of the funding shortly resulted in loss of achieved results (it should be noted that even if the project did not include monetary incentive, attention and concentration of the project would be considered as non-monetary incentive). Linked phenomena is **dependency on financial incentives,** which would result in refusal of providing certain services at a later stage without financial reward, which would otherwise be considered a part of the standard care.
- Quality: quality of care might suffer, as provider will be motivated to render "profitable" services, rather then service and to the patients that will be considered less profitable under the scheme.
- Fraud: there is a high risk that providers will engage in fraudulent behavior to record the service, which are rewarded, e.g. artificially recording services. There are mechanisms to reduce fraudulent behavior, but elimination of fraud completely is by far unattainable.
- Cream-skimming: this will be especially problematic is the scheme rewards fixed price per patient. The scheme will incentivize providers to accept and treat patient that require less afford and generate more reward and will negatively effect equity.
- Detrimental ethics: medical providers should have a moral/ethical instinct to treat any patients. Reward mechanism will undermine intrinsic values of the providers.

Effectiveness and Efficiency

The main concept behind P4P is to link funding closer to the desired result and thus, increase effectiveness. There could be different measure of effectiveness, but most generally, questions to ask, when measuring effectiveness are whether the scheme had resulted in:

- Improvement of targeted healthcare supply (e.g. more services are provided);

- Increased coverage (e.g. there are more beneficiaries);
- Improved health outcomes (e.g. more children are immune to vaccine preventable diseases).

In general, effectiveness is a hard concept to measure as many factors influence those outcomes. Therefore, very often efficiency is used as proxy to effectiveness, as it more feasible to measure.

Without moving to conceptual differences between those two concept, it should be made clear that efficiency answers the question whether predefined target was reached using fewer resources. In this context, efficiency and cost-effectiveness are synonymous concepts.

In practice, cost-effectiveness of the scheme can be established either by compering two different schemes or comparing existing modality (status before introduction of the scheme), to results and costs of the scheme. In this cases, difference between Expenditure level 1 (before the scheme) and Expenditure level 2 (during the scheme) divided by the achieved results (e.g. how many more children were immunized after introduction of P4P for immunization) gives an incremental cost-effectiveness of the scheme.

The models can be designed in various ways, however, due to lack of experience in Georgia in applying cost-effectiveness measures in State Healthcare Programs, the simplest approach is advisable at an initial stage of the implementation (e.g. an example provided above).

Setting Objectives and Indicators

Definitely, things we desire to improve are numerous, however, before launching those ambitious goals, one should consider possibility to have data and measure those results.

Below is the summary of core groups of desired results and considerations about their measurability:

Clinical Outcomes: ultimate goal of any healthcare system is to improve health status. Therefore, improvement of clinical outcomes is something that is often a direct measure of desired outcome. This could be measured via:

- Mortality – long time is required to impact mortality
- Morbidity – ling time required
- Functional status: expensive
- Quality of life (e.g. QALY): expensive, complex and unavailable for Georgian context

- Avoidance of complication/exacerbation – possible only for certain conditions (e.g. number of hospitalization avoided).

Clinical process quality: Since clinical outcomes are difficult and often impossible to measure, clinical process quality can serve as a proxy measure, with the assumption that good clinical processes generate good health. **This is the most widespread method currently in use.** Sample measures in this domain include:

- Number of lipid test for patients with diabetes;
- Breast cancer screening for women of certain age.

Establishment of those measures requires clinical guidelines with established effectiveness of the intervention. Notably, in Georgian context this will also require some efforts to collect data accordingly.

Access and availability of care: can be measured by coverage (e.g. number of beneficiaries register with PCH provider) or by utilization

Service Quality: This should not be confused with clinical quality. This domain can include measures such as waiting time for doctor's appointment, etc.

Patient Satisfaction: satisfaction of patients/beneficiaries with the services. Most likely, will require stand-alone survey. Georgia already has some experience with satisfaction measurement for health programs.

Cost efficiency: we don't see possibility to measure cost efficiency in Georgia for nearest future (measures, such as cost per QALY, or similar need to be established).

Cost of care: Georgia can establish measures of cost of care, such as: rate of prescribing generic drugs by a physician; hospital days per 10 000 beneficiaries (this will require some risk adjustment), case mix–adjusted hospital average length of stay (will be possible if country introduces DGRs and DRGs will also offer wider variety of possible measures, then available under the current system); cost per episode of care, etc.

Other domains might include:

- Patient safety
- Productivity
- Reporting, etc.

Indicators

This report had identified number of frameworks, as well as indicators (or areas) for P4P implementation. However, the process of selecting indicators (or setting targets, benchmarks, etc.) is rather complex and specific. Overall, Georgia needs to start implementation with rather simple measures in order to allow the system to adjust to this new mode of reimbursement – contracting and administrative frameworks to evolve.

However, since many courtiers in the world have a wealth of experience with result-based reimbursement schemes, Georgia can learn (and at times borrow) from their experience.

Below is a brief summary of UK frameworks available that could/should be explored for guidance:

Quality and Outcomes Framework (QOF) under NHS, UK

Since this framework is designed for general practitioners, Georgia can indeed benefit from using this experience. Clinical areas covered include coronary heart disease, heart failure, stroke and transient ischemic attacks, hypertension, diabetes mellitus, CORP, chronic obstructive pulmonary disease, epilepsy, hypothyroidism, cancer, palliative care, mental health, asthma, dementia, depression, chronic kidney disease, atrial fibrillation, obesity, learning disabilities and smoking.

Notably, the framework is directly linked with clinical guidelines.

The sample measures are as follows (*this is an excerpt from "2015/16 General Medical Services (GMS) contract Quality and Outcomes Framework (QOF): Guidance for GMS contract 2015/16")*

Clinical domain: Hypertension (HYP)		
Indicator	**Points**	**Achievement thresholds**
The contractor establishes and maintains a register of patients with established hypertension	6	
The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less	20	45–80%

Annex 1: Case of P4P – Rwanda Experience

Case Study: Results-Based Financing in Rwanda

Rwanda is one of the pioneers of results-based financing. RBF was adopted as a national policy as part of the 2005–09 National Health Strategic Plan and subsequently incorporated into the National Finance Law. The Government also allowed bonus payments to staff at both public and NGO health facilities and district hospitals. Under the scheme, district steering committees negotiate 3 types of performance contracts: those between the Ministry of Health and the 30 administrative districts; performance contracts between district steering committees and the health center management committees; and motivation contracts between the health center committees and individual health workers.

Sources of health center revenue are derived from government funding of health workers, user fees, mutuelle membership fees, donor contributions, and payments from the RBF scheme. (See Brief 14: Risk-Pooling Mechanisms, for a discussion of the mutuelle approach.) In the scheme, facilities are reimbursed for the quantity of services provided according to a standardized fee structure for a list of 14 services (including immunization services), adjusted by a quality score. Health centers can raise revenues by increasing the quantity and quality of these services delivered. Bonus payments to health centers are calculated as follows:

RBF earnings per facility = (fees x quantity of target services delivered) x (% quality score)

Quality is assessed quarterly by the district hospital team examining 14 services and 185 variables. Scores of less than 100% discount the negotiated payment proportionately. Validation of facility reports of achievements is done through district committees and transfers are made directly into facility bank accounts. The staff in facilities makes decisions about the use of the funds: directed towards improving the facility or salary bonuses. In addition to provider-based incentives, the Rwandan Government provides free institutional deliveries to women who participate in regular antenatal clinics.

During the period of the scheme, contraceptive prevalence increased from 7% to 28%, and assisted deliveries increased from 29% to 52%. HIV prevalence and malaria incidence declined. Between 2005 and 2007, under-5 mortality declined from 198 to 103 per 1000 live births, and immunization (DTP3) coverage increased from 83% to nearly 100%. An impact evaluation showed that the RBF was associated with improved health outcomes, such as weight for age and child height.

http://www.who.int/immunization/programmes_systems/financing/analyses/Brief_19_Results_Based_Financing.pdf

Annex 2: Case of Estonia

General terms

The QBS (Quality Bonus System) program[1] was launched in 2006 to highlight the importance of family physicians in disease prevention and chronic diseases management. The QBS program was seen as a tool to signal the importance of the role in chronic disease prevention and management and that it was clearly valued (also monetarily) by system.

The objectives of the QBS were therefore defined as follows:

• To provide incentives to family physicians to focus on prevention to avoid high expenditures due to illness and incapacity to work in the future.

• To reduce morbidity from vaccine- preventable diseases and reduce hospitalization from chronic diseases.

• To improve the management of chronic diseases in PHC.

• To motivate FPs to widen the scope of provided services.

The initiative to develop the QBS was taken by the Society of Family Doctors, which started taking steps toward differentiated payment for providers based on performance already in 2001. In 2005 the Society of Family Doctors made a proposal to the EHIF (Estonia Health Insurance Fund) to develop the QBS in collaboration. The Society developed the QBS, but it was done in a close collaboration with EHIF. The QBS includes three domains: disease prevention, chronic diseases management, and additional activities. Each domain has several indicator groups with a total of 45 indicators and 600 possible points. There are different total points available for each domain and for each indicator. Family physicians earn points for reaching performance targets for each indicator. The points are awarded on an 'all or nothing' basis; that is, if the physician reaches the target she or he is awarded all of the points. If the physician fails to reach the target, no points are awarded.

Performance domains of the Estonia QBS Indicators include 3 bonus domains, each having been break down under different areas and indicators and then accordingly different N° of points. The

[1] http://www.euro.who.int/__data/assets/pdf_file/0020/271073/Paying-for-Performance-in-Health-Care.pdf?ua=1

domains are: Domain I: Disease prevention: Child vaccination (9 indicators), Children's preventive checkups (5 indicators), prevention (4 indicators), Domain II: Chronic disease management Diabetes, type II (6 indicators), Hypertension (14 indicators), Myocardial infarction (2 indicators), Hypothyreosis (1 indicator), Domain III: Additional activities* FP and nurse training (1 indicator), Maternity care (1 indicator), Gynecological activities (1 indicator), Surgical activities (1 indicator). There is a procedure for 'exception reporting', so providers are not penalized for patient behavior beyond their control.

Family physicians are eligible for bonus payments if they achieve at least 80 per cent of possible points.

The QBS bonus is paid directly to the family physician, who then decides whether and how the payment is shared among other staff such as nurses. If the family physician works in a group practice rather than as a solo practitioner, the bonus payment is still linked only to the individual physician's performance and not the practice as a whole.

Results of the program

The QBS system has been in place now for six years, and results are available for the first five years. Over that time, participation has increased and only 10 per cent of family physicians in 2010 did not participate in this voluntary system. About 25 per cent of family physicians received bonus payments at the maximum level for Domains I and II in 2010.

Overall conclusions and lessons learned

The most important impact of the QBS in Estonia has been raising awareness and understanding of the role of family physicians in providing the full scope of high quality services, particularly preventing and managing chronic diseases. The implementation of the QBS and the monitoring of performance results have highlighted the importance of clinical guidelines in performance monitoring at PHC level. The cost of the QBS is modest at only 1 per cent of the annual PHC budget. The most important factor in implementing the QBS system successfully has been the electronic billing data collection system that covers all family physicians in Estonia.

Annex 3: Sample outline of P4P program

In general, this report has identified number of level at which P4P "intervention" could yield significant results. In this section, we have selecting one option in order to provide sample outline of the program. The reader should keep in mind, that this outline is not intended to be

a full program and each component will require further elaboration jointly with all stakeholders involved. This is an essential part of P4P scheme design. Therefore, information provided is stylized.

Rational:

Georgia had experienced rapid growth of expenditures for health, without direct and immediate results in improvement of health of the population. Country currently does not have any method for value-setting for public health programs (e.g. cost threshold per QALY). Therefore, based on the international experience and evidence, one of the approach to increase immediate health impact of public health expenditures, is to **strengthen primary healthcare in the country.**

Objectives:

1. Increase coverage with and utilization of PHC services;
2. Improve targeted nature of PHC services;

Domain	Key Questions:	Objective 1	Objective 2
Targeting	Which groups does the program target? How do programs target these groups? Do programs succeed in reaching their target groups, especially the poor?	Increase coverage (registration rates) for PHC services Increase per capita visits	Increase registration rate for the poor Increase per capita visits for the poor
Incentives	What is the role of monetary and non-monetary incentives?	Positive: Annual increase by 10% generates increase in payment by 15% (Negative would be an alternate; Notably, any amount for an incentive should be "worth" working for, therefore, absolute values need to be agreed with stakeholders).	Positive: Annual increase by 10% for poor segment of the population generate increase in payment by 15%

	Do they generate unintended effects?	Providers start "producing" unnecessary visits Quality of care might suffer, as incentives are quantity-oriented
Effectiveness	How successful is the program in achieving targeted outcomes?	Ex-ante: reimbursement is directly linked to the quantitative result/outcomes. Variable would be the value of reimbursement and whether it will motivate change in the provider behavior; Post-ante (after and during the implementation) should be measured.
Efficiency	Does/has the program improved efficiency – more output per given input?	Had the program increase per capita expenditures? What was the marginal cost for extra beneficiary/visit to the program?

Institutional arrangements:

- Option 1: SSA
- Option 2: Outsourced.

Information system needs:

With the current healthcare information system, this will require zero investment. The only investment would be disaggregation of the data and calculation of the targets.

Normative and administrative needs:

Will depend on institutional arrangement choice.