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Assessment of Systems for Paying Health Care Providers in Mongolia:

Implications for Equity, Efficiency and Universal Health Coverage

GOVERNMENT OF MONGOLIA
MINISTRY OF HEALTH AND SPORTS
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JOINT LEARNING NETWORK
For Universal Health Coverage
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Acknowledgements

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Introduction

Achieving access to basic health services for the entire population without risk of financial hardship or impoverishment from out-of-pocket expenditures ("universal health coverage" or UHC) is a challenge that continues to confront most low- and middle-income countries. As coverage expands in these countries, issues of financial sustainability, efficiency, and quality of care quickly rise to the surface. Strategic health purchasing is an important lever to efficiently manage funds for UHC through the definition of what is purchased (which services and benefits the covered population is entitled to receive), from whom services are purchase (which providers are contracted to deliver the covered services), and how and how much the providers are paid.

Health care provider payment systems—the way providers are paid to deliver the covered package of services—are an important part of strategic purchasing to balance system revenues and costs in a way that creates incentives for providers to improve quality and deliver services more efficiently. This ultimately makes it possible to expand coverage within limited funds (Langenbrunner, Cashin and O'Dougherty 2009). In practice, however, provider payment systems are often under-utilized as an effective tool to achieve UHC goals (Lagomarsino, et al. 2012).

In the early 1990s, after 70 years of a socialist system, Mongolia transitioned to a market economy and embarked on reform across all sectors, including health. Since that time, the health system has gradually moved from a centralized "Semashko-style" model to somewhat more decentralized financing and service delivery, with a growing role for private sector providers and private out-of-pocket financing. The main challenge to the system has been to maintain the universal coverage of the socialist period in the face of drastically reduced public funding, while introducing incentives for greater efficiency and improved quality of care.

Although population coverage of social health insurance has consistently been over 80 percent, financial protection has continued to erode. Social health insurance was introduced in 1993 to provide a supplemental funding stream to the declining budget. Nonetheless, out-of-pocket payments increased from 14.5 percent of total health expenditure in 1995 to 41.4 percent in 2010 (Tsolmongerel, Evlegsuren , Bulganchimeg, Ganbat, & Oyunbileg, 2013).

The Ministry of Health (MOH) has identified strategic purchasing as one of the most important levers to more effectively direct limited funds to priority services and populations. As part of plans to revise the Law on Health Insurance, the MOH commissioned an in-depth assessment of its current provider payment systems to inform a roadmap with steps to strengthen the health purchasing function under the new law.

The assessment was conducted to help inform the design and implementation of Mongolia's provider payment systems going forward. After providing a brief overview of Mongolia's health financing and service delivery system, this report describes the provider payment assessment and summarizes the main findings. It discusses the positive aspects and shortcomings of the current mix of payment systems and compares the design and

implementation with international good practices. The chapter concludes by providing a roadmap for refining and realigning Mongolia's provider payment system going forward.

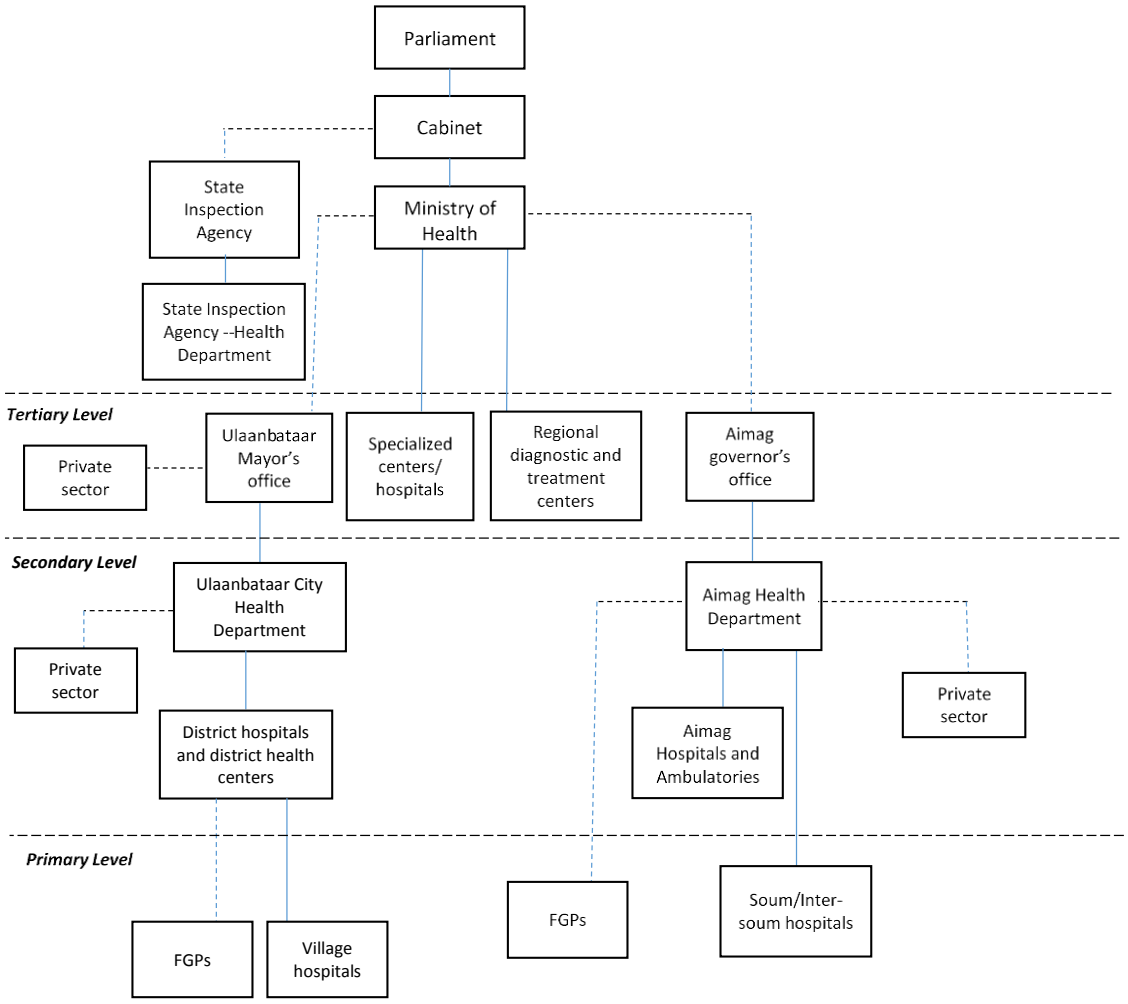
The Health Financing and Service Delivery System

Under the former centralized Semashko model, the health delivery system was publicly owned, hierarchically organized, and financed by general tax funds paid to health facilities using input-based line item budgets. The Semashko-based financing and delivery model is associated with a wide range of inefficiencies at all levels of the health system (Kutzin, Cashin and Jakab 2010). Input-based line item budgets, in particular, are known to create barriers to matching funding with service delivery priorities and can lead to excess capacity in the system.

Mongolia has taken a number of steps away from this financing and service delivery model. For example, family group practices and soum hospitals were restructured into family/soum health centers to focus more on public health intervention rather than mainly curative services. While soum health centers are public facilities, the family health centers are private and deliver government-funded health services through contracts with the government. Other private providers have been permitted to enter the system and can be contracted by the social health insurance agency, the Social Insurance General Office (SIGO).

Mongolia's health system is organized according to its administrative divisions, namely: *aimags* (provinces) and the capital city (Ulaan Bataar), *soums* (districts) and *bags* (villages). Mongolia has 21 *aimags*, with each consisting of between 15-27 *soums* and each *soum* divided further into 4–8 *bags*. The two-tier health system includes facilities that deliver primary care at the *bag* and *soum* level and those that deliver specialized care, including secondary and tertiary care at the *aimag* and city level (Figure 1).

Figure 1. Organization of the health and delivery system in Mongolia



Source: Adapted from (WHO, 2011)

The MOH continues to finance most public health facilities using historical line-item budgets, although family health centers and *soum* health centers are paid by capitation to deliver basic primary care. The SIGO purchases inpatient services using a case-based payment system with a set of 115 diagnosis-related groups (DRGs). Health facilities also can charge user fees for a limited set of services. Doctors, nurses and paramedics at government health facilities are civil servants and salaried according to the civil servants' salary schedule. Most non-medical staff such as cleaners and/or maintenance people are contract workers not on the civil servants' payroll. Health professionals are relatively underpaid. The government has made efforts to create incentive schemes for rural workers, primary health care providers, and for specific categories of medical professionals that are in short supply.

The Integrated Budget Law (IBL) has however modified many aspects of provider payments in the health sector. More specifically, changes have been introduced in budget planning, approval as well as budget execution rules for primary health care providers. As already

discussed in Chapter 1, the IBL has granted new decision space to sub-national officials in Mongolia. It increases decision space on budgeting and planning, especially at the aimag, Capital City, and soum levels and has also given facility directors significant control over human resources functions, especially hiring, firing, and granting of bonuses and incentives.

The IBL has resulted in changes to the budget allocation and formulation process, specifically for primary health care. As discussed in Chapter 1, primary health care is delegated to the sub-national governments and financed by earmarked transfers. Aimag and Capital City governors are responsible for primary health services and can provide additional financing to health facilities within their region. The Minister of Health must contract with the aimag and Capital City governors within 14 days of the state budget approval. The contract must include the purpose, standard, quantity, and quality of services to be provided, as well the reporting requirements. The Ministry of Health estimates the amount of earmarked transfers available within the budget constraint placed by the central government and sends the estimates to the Health Departments of the aimags and Capital City. At the local level, health facilities submit their budget proposals to the respective governors. The Assembly then discusses and approves the earmarked transfers as part of the local budget. Thus, the earmarked transfers are now part of the local budget allowing aimag and City governors to make adjustments to the health sector budgets under their control.

Although the MOH has identified strategic purchasing, and in particular provider payment as one of the most important levers to direct limited funds to priority services and populations more effectively, strategic health purchasing has been limited by the continued strict management of all public funds through the Budget Law. The Budget Law stipulates that all budget entities and entities that are partially or fully owned by the government and contracted with public funds are required to follow the law when planning, executing, and reporting on their budgets (Lkhagvadorj 2012). Therefore, even though some new output-oriented payment systems have been used, the Budget Law limits how the payment systems can effectively create new incentives for providers because all funds are planned, disbursed, and accounted for using input-based line item budgets..

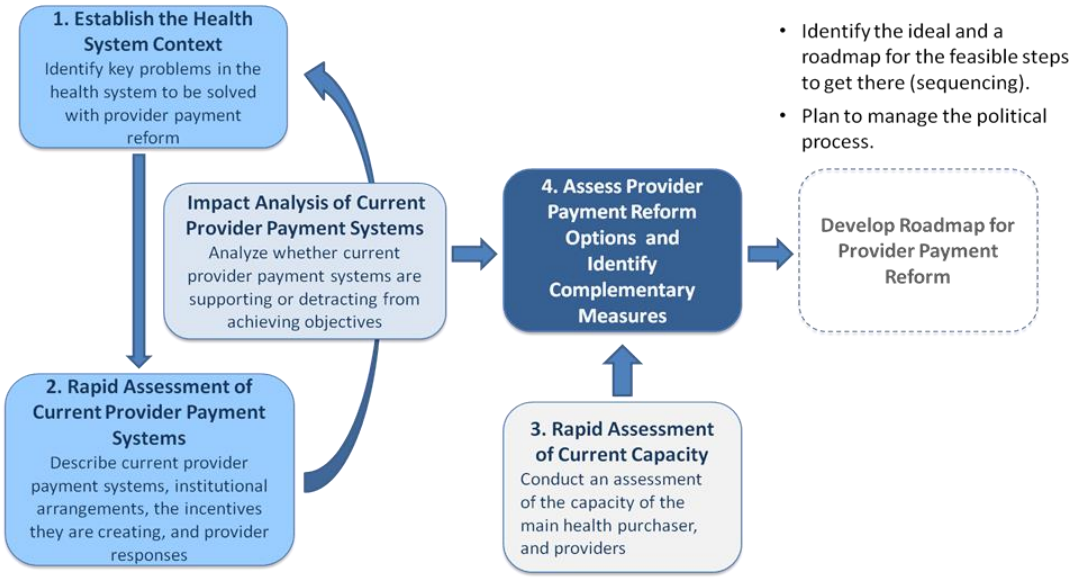
Provider Payment Assessment Method

This study was conducted using the JLN Provider Payment Diagnostic and Assessment Guide. The Guide was developed by the Joint Learning Network for Universal Health Coverage (JLN), together with the World Bank, World Health Organization (WHO), and other partners (JLN, 2012).[1] The assessment was a cross-sectional qualitative study with the main results based on stakeholder perceptions, supplemented by analysis of normative policy documents.

[1] This assessment was one of two country field tests of the JLN Provider Payment Diagnostic and Assessment Guide. The first field test was carried out in Vietnam during February – June 2013 (Nguyen, Tran, Hoang, Tran, & Cashin, 2015). Researchers from Vietnam provided some support to the Mongolia assessment team through video conferencing, and the Mongolian team referred to the Vietnam report to help structure and interpret the findings.

The JLN Guide is a process guide for systematically examining current provider payment systems in view of health system objectives and the current managerial capacity of health care providers and health purchasers. The strengths and weaknesses of the design and implementation arrangements for current payment systems and the incentives they are perceived to create are compared against internationally accepted guiding principles and benchmarks ("international good practices"). The output of the process is a roadmap for improving the country's provider payment systems developed through consensus among stakeholders on the interpretation of the assessment results (Figure 2).

Figure 2. JLN provider payment diagnostic and assessment process



Source: (JLN, 2012)

The JLN Guide is based on the premise that provider payment methods and their supporting systems (e.g., management information systems, accountability measures) create different incentives for providers, and the responses to those incentives can have profound effects on how health resources are allocated and services are delivered. Institutional relationships and contextual factors shape those incentives and provider responses. Ultimately, however, the effectiveness of provider payment systems and the incentives they create are largely driven by how providers understand, perceive, and respond to them (Langenbrunner, Cashin, & O'Dougherty, 2009).

The JLN Guide provides a structure for gathering qualitative information on the range of provider payment systems used for different health facility types ("provider payment method mapping"), standard aspects of payment system design and implementation arrangements, and the results of the payment systems. For example, stakeholders are asked to describe which services are paid by which payment methods, how payment rates are set, how funds are disbursed, and financial relationships with other providers. Stakeholders are asked open-ended questions about the strengths and weaknesses of each payment system, and closed-ended questions about whether or not each payment system contributes to any of 16 pre-

defined positive and negative health system results. Local researchers adapted the instrument to the specific context of Mongolia.

During the course of the assessment in Mongolia, a multi-stakeholder working group was convened to identify the objectives of the assessment, guide the design and implementation, and interpret the findings. The working group was convened at the beginning of the assessment, once for a mid-term review of preliminary findings, and for a final workshop to interpret the results and make recommendations for a roadmap to improve Mongolia's provider payment systems going forward.

The working group identified the key stakeholders to be interviewed to include the MOH, SIGO and public and private providers at all levels of the health system. The final sample included respondents from 35 health care providers, two departments in the MOH, the UB Health Department, SIGO, and the Ministry of Finance (Table 1).

Table 1. Sample of respondents

Facility Type	Number sampled
Central hospitals and specialized centers	3
District health complexes and maternity homes	4
Aimag general hospitals	3
Regional diagnostic and treatment centers	1
Soum and inter-***soum*** hospitals	2
Soum health centers	4
Family health centers	6
Sanitoria	2
Private hospitals	5
Private pharmacies	5
Ministry of Health Department of Policy and Planning	1
Ministry of Health Department of Finance and Economics	1
Ulan Bator Health Department	1
Social Insurance General Office	1
Ministry of Finance	1

Results

Overview of the Mix of Provider Payment Methods

Currently, three different payment methods are used by health purchasers in Mongolia: line item budgets, case-based hospital payment using DRGs, and fee for service for direct payments by clients (Table 2). The mix of payment systems received by an individual provider varies widely, even within one provider category. Line item budgets, for example, make up only 12 percent of total revenue for some tertiary providers but more than 80 percent for others. Overall, however, the line item budget payment system still accounts for at least half of all

revenue for most public providers. Revenue from DRG payments varies from less than 10 percent of revenue to more than 80 percent, but on average both public and private hospitals receive about 30 percent of their revenue from DRG payments. Family health centers and those *soum* health centers paid by capitation receive 100 percent of their revenue through capitation payments. Fee for service is a small share of total revenue for all public providers, reaching a maximum of 10 percent but more commonly less than five percent of total revenue for a single provider.

Table 2. Overview of provider payment systems used in Mongolia

Type of Provider	Purchaser/Payment Methods (% of revenue)		
	Ministry of Health	**Social Insurance (SIGO)**	**Clients**
Central hospitals and specialized centers	Line item budget (12-83%)	Case-based payment using DRGs (7-83%)	Fee for service (4-10%)
District health complexes and maternity homes	Line item budget (17-100%)	Case-based payment using DRGs (0-80%)	Fee for service (0-3%)
Aimag general hospitals	Line item budget (58-60%)	Case-based payment using DRGs (30-40%)	Fee for service (1-10%)
Regional diagnostic and treatment centers	Line item budget (60%)	Case-based payment using DRGs (34%)	Fee for service (6%)
Soum and inter-***soum*** hospitals	Line item budget (75-96%)	Case-based payment using DRGs (4-20%)	Fee for service (0-5%)
Soum health centers	Line item budget or Capitation (100%)	-	-
Family health centers	Capitation (100%)	-	-
Sanatoria	-	Case-based payment using DRGs (19-90%)	Fee for service (No response)
Private hospitals	-	Case-based payment using DRGs (10-30%)	Fee for service (70-90%)
Private pharmacies	-	Reference prices	Fee for service

Provider Revenue Caps

A notable feature of Mongolia's mix of payment methods is that each provider faces a global cap on all revenue sources. Revenue that is higher than expected from one source such as fee-for-service payments would be offset by a reduction in other sources, so total payments in one year from all revenue sources would not exceed the cap. Each health facility's revenue cap is estimated based on its projected budget requirements by line item. For soum health centers, the cap is on the basis of the previous year's expenditures and for family health centers on the basis of catchment population multiplied by the capitation rate. For a hospital receiving a line item budget, DRG revenue, and fee-for-service revenue, the share of the total projected revenue expected from DRG and fee-for-service revenue based on historical utilization is subtracted from the cap, and the remainder is paid to the provider as a line item budget. Caps

are also imposed on payment to private providers based on their historical billing to SIGO with incremental increases.

> *"The hospital estimates budget requirements and projects DRG and "own" income (fees, ancillary activities). The MOH reviews and sets the total budget (less than requested) and the MOH budget covers the shortfall between this number and DRG/own income. We must then live within this total budget." ~Central Hospital*

How health provider revenue caps are formed varies widely. Some health providers develop the budget proposals that inform their revenue caps based on the previous year's budget execution or historical utilization, while others consider input requirements such as bed capacity and staff. Some providers attempt to factor in the needs of the catchment population, including morbidity and mortality patterns.

> *"The budget proposal is estimated based on human resource norms, population, and morbidity. For example, we estimated that we will employ so many of new staff but neither hiring of new staff nor remunerations have increased." ~District Health Complex*

> *"The budget is based on previous year historic expenditure level and doctors view on medicines." ~Aimag General Hospital*

> *"In addition to prices, we look at various cost estimates such as volume of cases for this year and add 10% of it for the next year." ~Inter-Soum Hospital*

The final revenue caps appear to be somewhat arbitrary. None of the providers reported having a clear understanding about the basis for the final approved revenue cap.

> "We *assemble Departmental requests for hospital budget, justify it based on prior budgets, trends in volume, staff, bed utilization. The proposed budget is then heavily cut by MOH—cut in half." ~Aimag General Hospital*

> *"We make and send our budget. Our budget is not approved as it is. It is cut. We do not know why." ~Soum health center*

> *"The budget is mostly reviewed and allocated based on the previous year's performance and suggestions of relevant departments and the MOH. The human factor is great in decisionmaking." ~ Ministry of Finance*

The provider revenue cap is a hard cap. The respondents all reported that it is impossible to exceed the cap. This feature of provider payment policy has been effective for containing overall costs in Mongolia's system.

> *"It creates incentives for people to work within approved budget. Sometimes, instead of doing 1 thing we perform 2-3 works with the budget*

for 1. We try to be efficient as much as possible." ~Regional Diagnostic and Treatment Center

"It is not possible to over spend budget money. The budget is approved therefore we are told to work within the budget limit. We have not run with debts before." ~District Health Complex

Although overall costs are well-managed in the system through the hard caps, some individual providers do report deficits and incur debts to suppliers.

"We incurred debt in heating costs due to dzud in winter. So, we sent many letter to resolve this but nothing has been decided. We paid to the company out of the budget for this year and paying the debt off only today. We heat up 3 rooms with an electric heater and did not start the heating until December. In such a way, the savings were made from heating costs to pay off the debt." ~Inter-Soum Hospital

"The funds are never enough and in some cases we run into deficit." ~ Soum Health Center

Providers are not permitted to keep any surpluses generated from lower-than-expected volumes or efficiency gains.

"When there is a savings, it is accumulated and taken back by the MOF at the end of year. It is not possible to use it for operations. Revenue from paid services exceeds the plan every year, however it is taken back by the treasury. It is not possible to over-spend budget money. The budget is approved therefore we are told to work within the budget limit. We have not run with debts before." ~District Health Complex

According to the respondents, the most problematic aspect of the provider global revenue caps is that they are formed, executed, and accounted for using input-based line items with little flexibility to move across expenditure categories once they are approved. This is because all public funds flow through the treasury system and are subject to the restrictions of the Budget Law. Although a positive feature of the mix of payment systems is that all revenue sources are pooled, thus largely avoiding the conflicting incentives that are often created by different payment methods from multiple revenue sources, the potential benefits of the output-oriented payment systems are reduced significantly.

"The DRG payment gets mixed with line item payment and therefore the situation is similar to the previous payment system." ~District Health Complex

"The budget law is very tough. Health insurance is being restricted by the budget law therefore becomes barrier for its improvement." ~District Health Complex

"DRG payments are increased in order to fund quality of care and costs of services provided to the insured. But when the Ministry of Finance calculates the budget it affects this system and causes problems." ~SIGO

What has changed under the IBL?

Under the IBL, the responsibility for setting the revenue cap for primary health care providers has shifted away from Central Government and to the aimag/Capital City level. Previously, the Ministry of Health set the budget cap separately for family health centers and soum hospitals, based on capitation for the former and the previous year's spending for the latter. Now, the budget cap is allocated by the Department of Health (DOH) in each aimag which receives the aimag's global budget cap from the Ministry of Health (MoH). The method for setting the budget cap remains the same for the two types of hospitals. The only difference is that there is one budget cap set for both family health centers and soum hospitals.

Part of the responsibility for preparing and approving the budget has also shifted to the aimag/Capital City level. Based on the budget cap soum hospital formulate the budget proposal for the next year using a line item budgeting technique. Family health centers do not submit budget proposals to aimag DOH. Instead, they report on their catchment population which is counterchecked figures produced by local statistical office. The aimag DOH compiles the budget proposals from all providers funded by the state budget and health insurance fund (HIF) and submits them to MoH. Meanwhile, aimag/Capital City governors submit the budget proposal to the local citizens' representative Khural and the lump sum budget is approved for the implementation of special mandates of government such as primary health care delivery in each soum and district. The citizens' Khural has limited authority to make changes in the budget, however, due to the following restrictions in the IBL:

- transfers of special purpose subsidies for base expenditure of local budget and other sectors are not allowed;
- debts and receivables are not allowed;
- the standards, quantity and quality targets and accessibility of services must not be affected.

A key difference is that the budget for family health centers and soum hospitals are no longer approved separately. Prior to 2013 when the IBL became effective, budgets for family health centers and soum hospitals in each aimag were approved separately within portfolio of the Minister of Health. Since 2013, the budgets for the two types of primary health care providers are combined and approved as "the special purpose transfer for primary health care" for an aimag/capital city. Table 3 illustrates this difference in the case of Arkhangai Province

Table 3: Budget for Arkhangai aimag health care providers

Arkhangai aimag MoH funded health care providers	2012	2013
	10,178,501	10,527,044
Aimag general hospital	3,678,468	4,156,244
Soum health center	3,681,032	0.0

Intersoum hospital	655,344	759,912
Health center/Health department	1,780,070	865,187
Center for natural FOCI	179,915	212,849
Family health center	203,673	0
Special purpose transfer for primary health care	0.0	4,532,852

Unlike before, aimag / Capital City governments and local treasury offices now have a bigger role to play in the execution of family health center and soum hospital budgets. Once the budget is approved, MoH develops quarterly and monthly spending plans for family health centers and soum hospitals that sets overall limits, which are then approved by aimag / Capital City governors. The family health centers and soum hospital then go through two major steps to start spending their annual budgets. For each budget entity, the governors of aimags or central budget governors submit requests for "authorization for budget financing" and "authorization for budget spending" 1-2 times a month. Then the local treasury offices review authorizations for budget financing and issues the authorization for spending within 2 days.

The IBL has not resulted in changes to the way in which the budget for primary health care is disbursed. Budgets are disbursed according to each line item category for soum hospitals, but on a lump-sum basis for family health centers.

The IBL has improved the level of flexibility that soum hospitals have in budget execution, however. Soum hospitals no longer require prior endorsement or permission from MoH or MoF to make adjustments for amount lower than 10 million MNT. They can now approach soum governor and soum citizen's Khural for adjustment within quarterly and monthly recurrent budget plan.

In short, the provider payment cap has been retained, and continues to play an effective role in controlling costs before and after the IBL. The only major changes under the IBL are that the aimag / Capital City governors have a greater role to play in setting the provider payment cap for family health centers and soum hospitals, and in budget approval and execution. Soum hospitals have a little more flexibility in spending from their line item budgets. Family health centers, which were always paid on a lump-sum basis continue to enjoy the high level of flexibility in spending as before.

Payment system design and implementation arrangements

Provider payment systems include both technical design features and implementation arrangements. Technical design features include the parameters, bases, or calculations used to compute payment rates, the services paid through the method, and the cost items covered. Implementation arrangements refer to the rules for disbursing, using, and accounting for payments and the relationships between purchasers and providers, between different providers, and among other actors. Both design features and implementation arrangements affect the incentives payment systems create, the consequences for the system, and whether health system objectives are supported.

Key aspects of provider payment system design and implementation arrangements for the payment systems in Mongolia are presented in Table 4. In the following sections, the design features and implementation arrangements for Mongolia's provider payment systems are presented and compared with international benchmarks and good practices.[2]

[2] Langenbrunner, Cashin and O'Dougherty (2009) and Kutzin, Cashin and Jakab (2010) provide international benchmarks and good practices for the design and implementation arrangements for provider payment systems.

Table 4. Design and implementation arrangements for provider payment systems in Mongolia

Payment System	Design Features			Implementation Arrangements		
	Basis for Payment	Services	Cost Items	How payments are disbursed, used and accounted for	Caps	Surpluses and deficits
Line item budget	• Varies by provider • Historical budget, input norms, catchment population, cost estimates, morbidity/mortality burdens, etc. • Residual of provider revenue cap after DRG and fee for service revenue deducted • Final budgets approved by 38 line items	• Preventive services • Basic primary care • Outpatient specialty consultations • Diagnostic services • Inpatient stays • Medicines and blood products • Rehabilitation services • Traditional medicine • Transportation for referrals	• Salaries • Medicines • Supplies • Administrative costs • Minor repairs and equipment • Training	• Funds are disbursed, used and accounted for according to 38 input-based line items • Budget is paid monthly in equal instalments	• Hard budget cap; over-runs are not reimbursed	• Deficits are not allowed • Surpluses are returned to the Treasury
Case-based payment using DRGs	• 115 case groups based on initial study by external consultants • Payment rates set as tariffs for case groups rather than base rate x case group weight	• Outpatient specialty consultations • Diagnostic services • Inpatient stays • Medicines and blood products	• Salaries • Medicines • Supplies • Administrative costs • Minor repairs and equipment • Training	• Funds are disbursed based on claims made by providers for inpatient admissions in each DRG • Funds are used and accounted	• Hard budget cap; over-runs are not reimbursed	• Deficits are not allowed • Legally providers are permitted to retain up to 50% of surpluses, but in practice it is not allowed

Payment System	Design Features			Implementation Arrangements		
	Basis for Payment	Services	Cost Items	How payments are disbursed, used and accounted for	Caps	Surpluses and deficits
	• Tariffs set by MOH and approved by joint order of three ministers based on the survey of variable cost and economic conditions. • Private hospitals receive 50% of DRG tariff			for according to input-based line items • A percentage of high-cost DRGs is paid directly to the physician		• Surpluses are returned to the Treasury
Capitation	• Base rate is calculated by MOF primary care allocation formula • Payment is adjusted for age/sex groups (0-5; 5-16; 16-49; 49-60 and >60) and higher payments for ger population • Payment is made to providers based on the estimated registered population	• Preventive services • Basic primary care	• Salaries • Medicines • Supplies • Administrative costs • Minor repairs and equipment • Training	• Soum hospitals are paid according to line items • Family health centers are paid monthly by lump sum and can allocate expenditure across line items	• Capitation is a capped payment system by definition • Hard budget cap; over-runs are not reimbursed	• Soum health centers are able to retain surpluses by line items • If above 5 million MNT they must obtain permission from the MOF. If lower, permission can be granted by *aimag* health departments • Family health centers can retain surpluses and use flexibly, but they pay 10% tax

Payment System	Design Features			Implementation Arrangements		
	Basis for Payment	Services	Cost Items	How payments are disbursed, used and accounted for	Caps	Surpluses and deficits
Fee for service	• Fee schedule approved by Ministries of Health and Finance • Unclear how fees are calculated	• Preventive services • Basic primary care • Outpatient specialty consultations • Diagnostic services • Inpatient stays • Medicines and blood products	• Salaries • Medicines • Supplies • Administrative costs • Minor repairs and equipment • Training	• Fees are paid in cash and revenue can be allocated flexibly up to the line item limits in the provider's budget cap; expenditures are accounted for by budget line items	• Hard budget cap; over-runs are not reimbursed	• Excess fee revenue over the provider budget cap is returned to the treasury

Line Item Budgets

Line item budgets are paid to providers as the residual of their revenue cap after other revenue sources are deducted. As discussed above, all public providers in Mongolia start with an annual revenue cap that is based on a line item budget. Revenue from other sources is projected and deducted from the revenue cap, and the residual is paid to providers in equal monthly instalments according to approved line items. The basis for the budget and rules for disbursing, spending, and accounting for budget funds all have shortcomings compared to international benchmarks and good practices (Table 5)[3].

Table 5. Design and implementation arrangements for the budget payment system in Mongolia compared with international benchmarks

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
Basis for the budget	Budgets based on inputs least desirable	Budget based on 38 input-based line items
	Budgets based on projected volume, historical claims or some other cost/utilization data more desirable	
	Budgets based on population, poverty or other proxies for health need most desirable	
Budget execution	Budget disbursed by detailed line items least desirable	Budget disbursed strictly by 38 line items
	Budget disbursed by large groups of line items more desirable	
	Budget disbursed in lump sum most desirable	
	Expenditure controlled by detailed line items least desirable	Expenditure strictly controlled by 38 line items; heavy administrative burden to move between line items
	Expenditure controlled by large groups of line items more desirable	
	Expenditure flexibility (based on need) most desirable	
Caps, deficits and surpluses	No budget or payment cap least desirable	There is a hard budget cap, over-runs are not allowed
	Soft budget cap more desirable	
	Hard budget-cap or over-runs carefully managed and controlled most desirable	
	Any surpluses are taken back and leave the health sector least desirable	Providers do not retain any portion of surpluses
	Surpluses retained by health sector and reallocated to other priorities more desirable	

[3] The international benchmarks on provider payment system design and implementation were developed and ranked by least to most desirable characteristics by consensus of the multi-stakeholder working group. These benchmarks should not be considered international evidence and are not generalizable beyond the interpretation of Mongolia's provider payment assessment.

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
	Providers are allowed to keep at least some portion of surpluses, with some financial accountability most desirable	

A health facility budget is a prospectively agreed sum within which operating expenses of the facility must be contained (Dredge, 2004). The basis for the budget can be the inputs historically used by the facility (staff, building, and supplies), projected volume of services, or projected needs of the population (case-mix adjusted volume of services accounting for other factors such as poverty, geography, etc.). Budgets based on inputs, as in Mongolia, are considered to be the least desirable since they are the least closely linked to population health service needs, and budgets based on projected needs are considered to be the most desirable (Langenbrunner, Cashin, & O'Dougherty, 2009; Langenbrunner & Wiley, 2002).

International good practices suggest that budget payment systems with fewer line items and greater flexibility for expenditure are more desirable (Langenbrunner & Wiley, 2002; Langenbrunner, Cashin, & O'Dougherty, 2009; Kutzin, Cashin, & Jakab, 2010). In Mongolia, however, how budgets are disbursed, spent, and accounted for is strictly controlled by the Budget Law, with little flexibility to reallocate expenditures and no ability for providers to retain any surpluses from efficiency gains. . Movement between line items is reported to be difficult, with burdensome approval requirements. A number of providers reported having savings in one line item but not being able to move funds to cover deficits in others. In fact, the lack of flexibility to allocate spending was noted as a problem more frequently than the inadequate amount of the budget.

On the other hand, the hard budget cap is implemented effectively, and total expenditures in the system are well- controlled, as mentioned earlier.

Case-based Hospital Payment Using DRGs

In 2006, Mongolia introduced case-based payment using DRGs for inpatient services purchased through its social health insurance system. The payment system started with 22 case groups and was expanded to 115 groups in 2010. The payment system is effectively a flat-rate tariff for cases in each of the groups. Private hospitals get paid 50 percent of the DRG tariffs paid to public sector facilities. The design and implementation of the DRG-based payment system in Mongolia is compared with international good practices in Table 6.

Table 6. Design and implementation arrangements for the DRG-based payment system in Mongolia compared with international benchmarks

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
Basis for the case payment	Hospital-specific payment rates linked to historical budgets least desirable	Base payment rate estimated from costing studies (now outdated)
	Base rate calculated from cost historical claims or some other cost/utilization data more desirable	
	Single base rate derived from pool of funds available for hospital services applied to all hospitals with appropriate adjustments (e.g., geography, teaching hospitals) most desirable	
Case groups and weights	Unclear basis for case groups and weights least desirable	• 115 groups capture some variation in cost per case • Co-morbidities not captured • No outlier payment
	Case groups reflect some variation in cost per case (e.g. small number of groups; department based groups) more desirable	
	Case groups that capture significant variation in cost/case with cost weights based on relative costs across case groups with adjustments for co-morbidities and outlier cases most desirable	
Payment execution	Payment disbursed by detailed line items least desirable	Budget disbursed by strict line items
	Payment disbursed by large groups of line items with some activity-based component more desirable	
	Payment disbursed according to activity most desirable	
	Expenditure controlled by detailed line items least desirable	Expenditure controlled by strict line items; heavy administrative burden to move between line items
	Expenditure controlled by large groups of line items more desirable	
	Expenditure flexibility (based on need) most desirable	
Caps, deficits and surpluses	No budget or payment cap least desirable	There is a hard budget cap, over-runs are not allowed
	Soft budget cap more desirable	
	Hard budget-cap or over-runs carefully managed and controlled most desirable	
	Any surpluses are taken back and leave the health sector least desirable	Providers do not retain any portion of surpluses
	Surpluses retained by health sector and reallocated to other priorities more desirable	
	Providers are allowed to keep at least some portion of surpluses, with some financial accountability	

Compared with international benchmarks and best practices, the DRG-based payment system is a step in the right direction. In terms of the design of the payment system, the 115 case groups appear to be appropriate for Mongolia's health service delivery system and the current capacity of the purchaser and provider. The case groups are widely perceived to be appropriate to capture much of the cost variation across the types of cases common in Mongolia.

> *"It is beneficial because there are variations by diagnostic groups. It is not possible to pay for all cases at same rates." ~Regional Diagnostic and Treatment Center*

> *"Every disease is financed differently which is good and fits reality." ~Soum Hospital*

> *"It is good that we get paid differently for different diseases. It is flexible and precise." ~Soum Hospital*

> *"[The DRG payment system] is similar to numbers and costs of diseases prevalent in Mongolia." ~Private Hospital*

However, the system does have some shortcomings. The main shortcoming providers raised about the design of the DRG-based payment system is that it does not account for co-morbidities, so cases within a DRG are paid the same regardless of whether the patient has complications or any additional diagnoses. There is also no mechanism to pay for outliers (particularly high-cost cases in a DRG).

> *"Only one DRG is allowed, and some patients have two or more diseases. There is no surcharge for complex cases, or higher DRG for multiple diagnoses." ~Central Hospital*

> *[The DRG-based payment system] does not compensate for very high cost patients." ~Provincial General Hospital*

> *"It is weakness that there is little variance in the level of payment rates between diagnostic groups. We get paid same regardless of case complications." ~District Health Complex*

Several providers specifically noted that while maternal care is paid for through the budget, they do not receive DRG-based payments for services related to complications and co-morbidities of pregnant women.

> *"We do not get reimbursed for treatment of co-morbidity of pregnant mothers. It is said that the care for pregnant women is funded by the government budget. However, they have many co-morbidities and we treat their conditions. Say that one mother has three different illnesses and she was seen by three doctors, but health insurance pays for the first diagnosis*

only. This is a big shortfall of the payment method." ~Province General Hospital

"A pregnant woman might have chronic illness, and in this situation it should be possible to give additional payment with another cost weight or coefficient." ~District Health Complex

As noted above, payment rates to private hospitals are set at 50 percent the rate paid to public hospitals for each case group. The basis for this payment differentiation is not clear.

"Every hospital should be reimbursed same within the health insurance payment system. Private hospitals get paid 50% of the payment rate of the government hospitals. We don't agree to this payment arrangement. Health services are provided at same level and quality regardless of ownership, public or private." ~Private hospital

DRG payments in Mongolia are fixed tariffs and are not made up of case groups, relative cost weights, and base rate. Although this type of DRG payment calculation is used by a number of OECD countries such as England, France, and the Netherlands (Cots, Chiarello, Salvador, Castells, & Quentin, 2011), it is more desirable according to international good practices to have a formula-based system made up of separate payment system components. Having a separate base rate and relative cost weights gives the purchaser two levers to establish appropriate relative prices for different types of hospital cases while remaining budget neutral by adjusting the base rate upward or downward depending on available resources and actual volumes of cases (Langenbrunner, Cashin, & O'Dougherty, 2009).

In terms of implementation arrangements, the DRG payments are subject to the same Budget Law restrictions as the line item budget. It therefore has the same strengths (hard budget cap) but also the same weaknesses (lack of flexibility to re-allocate DRG revenue across line items and no possibility for providers to retain any surplus).

"It is not possible to shift between line items. Also if we focus on prevention and have fewer admissions we get paid less from insurance." ~Provincial General Hospital

Capitation

In 2000, Mongolia restructured its urban primary care sector into a model of family group practices, now called family health centers. *Soum* hospitals were restructured into *soum* health centers. The MOH pays family health centers and some *soum* health centers through a per capita payment system (capitation). Mongolia's capitation system is consistent with international benchmarks and good practices, although some shortcomings make it difficult to capture all of the potential benefits of the payment system. The design and implementation of the capitation payment system in Mongolia is compared with international good practices in Table 7.

Table 7. Design and implementation arrangements for the capitation payment system in Mongolia compared with international benchmarks

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
Base Rate	Provider-specific payment rates linked to historical budgets least desirable	Base payment rate determined by an allocation formula of Ministry of Finance; same for all providers; adjustments for age/sex and ger population
	Single base rate calculated from historical claims or some other cost and utilization data more desirable	
	Single base rate derived from pool of funds available for primary care applied to all providers with appropriate adjustments (e.g., age/sex, geography) most desirable	
Population Registration	No free choice of provider and population assignments made based on inaccurate and/or non-transparent data least desirable	• No free choice of provider • Population assignment based on outdated population registers • No mechanism to account for mobile population
	Population assignment based on accurate population registers more desirable	
	Free choice of provider with up-to-date enrollment database to capture births, deaths and migrations and mobile populations most desirable	
Payment execution	Payment disbursed by detailed line items least desirable	Capitation budget disbursed lump sum according to base rate and enrolled population
	Payment disbursed by large groups of line items with some activity-based component more desirable	
	Payment disbursed according to activity most desirable	
	Expenditure controlled by detailed line items least desirable	Expenditure is flexible across line items (for family health centers, which are non-budget organizations)
	Expenditure controlled by large groups of line items more desirable	
	Expenditure flexibility (based on need) most desirable	
Caps, deficits and surpluses	No budget or payment cap least desirable	There is a hard budget cap, and over-runs are not allowed; family health centers retain surpluses
	Soft budget cap more desirable	
	Hard budget-cap or over-runs carefully managed and controlled most desirable	
	Any surpluses are taken back and leave the health sector least desirable	
	Surpluses retained by health sector and reallocated to other priorities more desirable	

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
	Providers are allowed to keep at least some portion of surpluses, with some financial accountability	

Although the calculation of the base rate in Mongolia follows international good practices, providers complain that the rate is too low. Each family health center and *soum* health center is paid a fixed amount for each registered person to provide all necessary primary care. There are adjustments for six age/sex groups, and providers serving populations in *ger* districts are paid a higher rate. The base per capita rate is set through an allocation formula of the Ministry of Finance, and there are persistent complaints that the rate is too low and not updated annually for inflation.

> *"Payment rates are not adjusted annually. They are not adjusted to the annual inflation." ~Family Health Center*

> *"Rates are fixed, they do not fit reality. Prices are rising. But rates are fixed. It was the same for the last 5 years." ~Family Health Center*

The main shortcoming in Mongolia's capitation payment system is the way the population served by each primary care provider is estimated. Currently, the population does not actively choose the family health center or *soum* health center to which they are assigned. The population reports of the National Statistics Office are used to estimate the number of people served by the family health centers and *soum* health centers. Those reports are up to two years outdated and do not account for mobile populations, which are significant in Mongolia with large seasonal variations.

> *"The financing is done based on registered population. In such case expenses for people who have come without official notification in registry about movement from soums are not reflected." ~Family Health Center*

> *"In 2012 the population number is 8,009, however we got paid for 7,800 persons then there were 9,200 we served in real life." ~Family Health Center*

> *"Mongolia has low populations in rural areas, but the places with more population and migrants risk depleted financing. Because there is no information system or database, there is no basis for transferring funds between facilities based on population movement." ~Ministry of Financer*

The implementation arrangements for capitation are much closer to international benchmarks and good practices than the other payment systems for family health centers, because they are not budget institutions and are therefore granted more flexibility. Capitation payments are made as a monthly lump sum to family health centers, and the providers can allocate their funds across line items as needed. They also are permitted to retain any surpluses, although surpluses are subject to 10 percent tax. Most providers report that payment rates are so low

that they never generate a surplus. *Soum* health centers are budget institutions, and their capitation payments are subject to the Budget Law, although the *soum* health center in the assessment sample reported having flexibility to allocate funds across line items.

> *"We shift between expenses. For example, if we save on food then we use the saving for fuel." ~Soum health center*
>
> *"We have a right use the funds for any cost item." ~Family Health Center*
>
> *"If we generate a surplus, we can keep it and pay 10% in tax. We can use the rest as we see fit---buy furniture, etc. Same facilities in ger districts have had problems with higher heating, staffing bills and have had to cut back on staff." ~Family Health Center*
>
> *"If it works out that there is a surplus, it will be our profit. However, we do not make a profit rather incur insufficient funding often. Under the current capitation payment rates it is not possible to make profit." ~Family Health Center*

Fee for Service

Secondary and tertiary hospitals in Mongolia can charge patients directly for some diagnostic services and tests outside of the guaranteed package of services according to an approved fee schedule. The regulations on fee for service were approved by the joint order of the Ministers of Health and Finance in 2006. Private providers have more flexibility in setting their fees than public providers. The design and implementation of the fee for service payment system in Mongolia is compared with international best practices in Table 8.

Table 8. Design and implementation arrangements for the fee for service payment system in Mongolia compared with international benchmarks

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
Basis for Fees	Fees calculated with no cost basis (or outdated cost basis) and no policy considerations are least desirable	Basis for calculating fees is unclear; fees are differentiated between secondary and tertiary hospitals
	Fees calculated with some cost basis more desirable	
	Fees calculated based on good average cost estimates and adjusted for policy considerations are most desirable	
Bundling of Services	Highly itemized fee schedules (unbundled) least desirable	No bundling of services

Payment System Design and Implementation	International Benchmarks	Mongolian Situation
	Fee schedules with some bundling of services (not too many items and not too few) most desirable	
Payment execution	Payment disbursed by detailed line items least desirable	Payment made in cash from patient to provider according to services delivered
	Payment disbursed by large groups of line items with some activity-based component more desirable	
	Payment disbursed according to activity most desirable	
	Expenditure controlled by detailed line items least desirable	Expenditure controlled by strict line items; heavy administrative burden to move between line items
	Expenditure controlled by large groups of line items more desirable	
	Expenditure flexibility (based on need) most desirable	
Caps, deficits and surpluses	No payment cap least desirable	Fee for service revenue is limited by incorporating it into hard budget cap
	Soft payment cap more desirable	
	Hard budget-cap or over-runs carefully managed and controlled most desirable	
	Any surpluses are taken back and leave the health sector least desirable	Providers do not retain any portion of surpluses
	Surpluses retained by health sector and reallocated to other priorities more desirable	
	Providers are allowed to keep at least some portion of surpluses, with some financial accountability	

Whereas private hospitals rely on fee-for-service payments for more than 70 percent of their revenue, fee for service is kept to a very small share of public hospital revenue. As described earlier, the projected fee-for-service payments are incorporated into the hospital's annual budget cap.

> *"Effectively, [fee for service] revenue is capped because SHI payments are reduced if total revenue exceeds expectation due to increase fee revenue." ~Central Hospital*

Public providers also report that fee-for-service revenue is low due to the socioeconomic situation, particularly in rural Mongolia.

"It is difficult to provide services to people living below minimum living standards. About 80-90% of patients have hard lives and are poor. Many have debt." ~Province General Hospital

"If we set high price, no citizens will be able to pay. We try to set prices as suitable as possible to all parties." ~Regional Diagnostic and Treatment Center

Public providers are not permitted to retain any surplus if their budgeted fee for service revenue is higher than expected. However, the provincial hospital claimed that some of the surplus is carried over to the next year.

"Revenue exceeded by 47 million MNT for 2013. Exceeded revenue becomes the surplus for us and taken back to the MoF. There is no such thing as bonus." ~Regional Diagnostic and Treatment Center

"At the end of the year MOF or treasury takes back [any surplus]. However, 20% of total surplus is paid back next year." ~Province General Hospital

In terms of design, the fee schedule is for itemized (unbundled) services with no clear basis for setting the fees, so there are no incentives to deliver the services efficiently. Secondary hospitals complain that their fees are set lower than for tertiary hospitals, although they deliver comparable quality.

"Tariffs are very different for secondary and tertiary care providers. Tertiary care providers charge higher fees than secondary care providers for the same quality of services." ~District Health Complex

"There are difficulties because there are no uniform instructions, regulations or tariffs." ~Ministry of Finance

Positive and Negative Consequences of the Current Payment Systems

During the interviews, stakeholders were asked to identify the main strengths and weaknesses of each payment system. They were then asked specific questions about whether in their view the payment systems contributed positively or negatively to four sets of consequences: (1) equity and access to services, (2) efficiency, (3) quality, and (4) financial sustainability. All responses throughout the interviews were coded and compiled into those four categories and related sub-categories (Table 9). The responses were categorized as positive or negative consequences in each category. For example, if a respondent stated that a payment system does not contribute to fair and equitable distribution of resources across the population, the response was coded as a negative consequence of the payment system on equity. In the

sections below, each figure shows the number of times each type of positive and negative consequence was noted by the respondents.

Table 9: Positive and Negative Consequences of Provider Payment Systems

Equity in access to services	**Population**	Does the payment system contribute to fair and equitable distribution of resources across the population?
	Geographic	Does the payment system contribute to fair and equitable distribution of resources across geographic areas?
	Provider	Does the payment system contribute to fair and equitable distribution of resources across providers?
	Case Mix	Does the payment system contribute to fair and equitable distribution of resources across different types of cases?
Efficiency	**Efficiency**	Does the payment system help health facilities manage resources more efficiently?
	Over-use	Does the payment system make it beneficial or more profitable for health facilities to deliver too many services? deliver services in a costly way? Increase unnecessary referrals?
	Payment Delays	Does the payment system contribute to payment delays to providers?
	Administrative Burden	Is the payment system administratively burdensome?
Quality	**Quality**	Does the payment system make it beneficial or more profitable for health facilities to provider higher quality of care?
	Primary Care	Does the payment system make it beneficial or more profitable for basic care to be delivered at the primary level?
	Prevention	Does the payment system make it beneficial or more profitable for health facilities to focus on health promotion, prevention and chronic disease management?
	Responsiveness	Does the payment system make it beneficial to be responsive to patients?
Financial Sustainability	**Provider Viability**	Does the payment system help health facilities stay financially viable and avoid deficits?
	Provider Autonomy	Does the payment system help increase the autonomy of health facilities?
	Cost Containment	Does the payment system help total expenditures stay within available resources?

Line Item Budget

The line item budget is generally seen as an important source of guaranteed, stable income that is important for provider financial viability. The compiled responses related to perceived positive consequences of the line item budget are presented in Figure 3. For some providers, the budget drives efficiency and limits over-use of services—but this is largely due to the hard constraint and limited funds. Very few provider responses indicated any positive consequences of the budget for equity or quality.

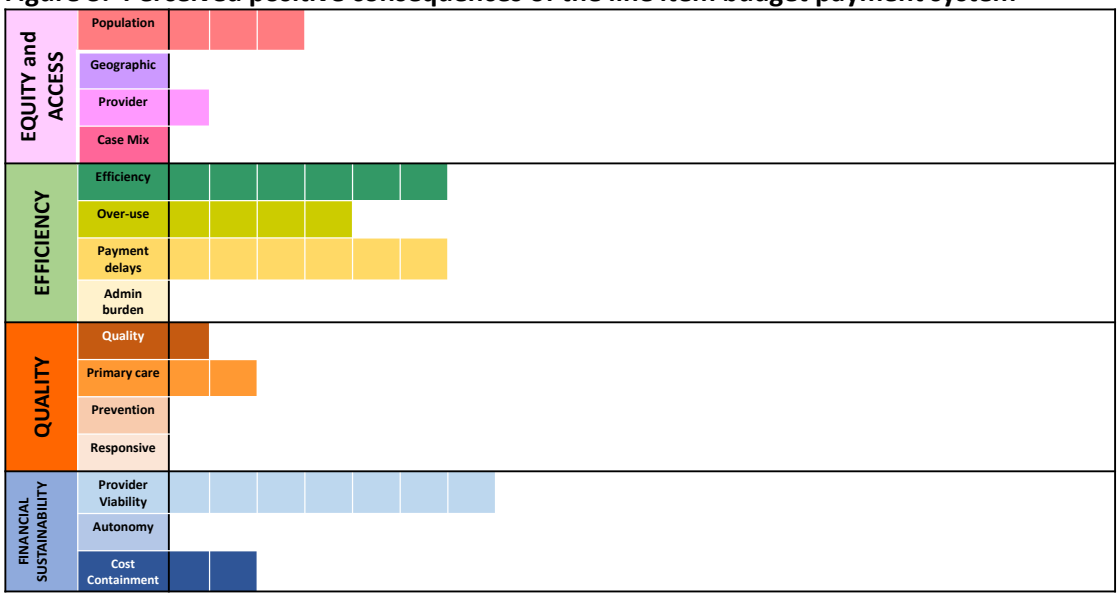
"The idea is correct. Payment based on monthly schedule reduces risks. However, the budget is not sufficient or in short." ~National Specialty Hospital

"The budget gives assurance for uninterrupted and continuity of operations and no risks to sustainability." ~District Health Complex

"Since we don't get enough money we must economize." ~Province General Hospital

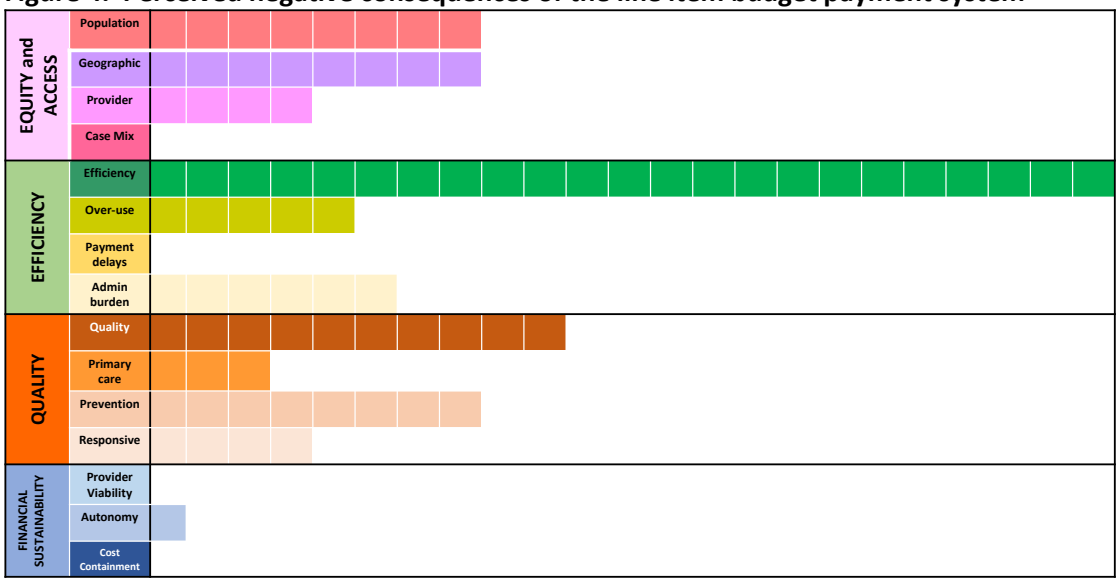
"We try to avoid or reduce hospitalization, and try to pay more attention to public health. We have an understanding that by reducing hospitalization we can save some money." ~Soum Health Center

Figure 3. Perceived positive consequences of the line item budget payment system



In spite of some positive consequences noted by stakeholders, the line item budget was associated with significantly more negative responses than any of the other payment systems (Figure 4). The rigidity of the budget and inability to keep surpluses is widely viewed as the main barrier to efficiency and quality.

Figure 4. Perceived negative consequences of the line item budget payment system



Nearly all providers noted that the line item budget has negative consequences for efficiency due to the lack of flexibility to shift expenditures across line items as needed.

> *"There is no incentive or bonuses for efficient operations. We save on electricity and water fairly sufficient, however the saving is taken back to the treasury." ~National Specialty Hospital*

> *"We do not see any advantages. Saved expenses are not shifted to expenses that are in short. Thus, this payment method is not very useful. If you save on food it is not possible to use for medicines. It is restricting efficient resource use." ~National Specialty Hospital*

> *"Quality will not improve if we do not have an approved budget that meets our needs. The strict line item budget makes it difficult to manage variable costs such as medicine, which can vary substantially depending on the conditions we treat." ~Regional Diagnostic and Treatment Center*

> *"Very limited capacity to improve efficiency. For only a few line items resources can be spent effectively." ~District Health Complex*

> *"It is difficult to purchase assets since there is no such line item." ~Soum Hospital*

> *"[The budget] is not flexible. It is impossible to initiate anything. It suffocates aspirations and provides no opportunity for development and expansion." ~Soum Hospital*

The line item budget is also perceived to have negative consequences for equity. In terms of population, geography and distance are not taken into account. For equity across providers, the budget does not reflect the complexity of cases that different providers manage.

> *"Not equitable across providers because payment is not proportional to burden of the services they provide." ~Central Hospital*

> *"Districts that have a smaller population than ours receive the same budget. This means that the budget is allocated regardless of the size of the population and geographical condition." District Health Complex*

> *"Does not consider distance, which is a weakness. Examining patient at longer distance takes more money. But the cost is calculated as the same." ~Soum Hospital*

Case-based Hospital Payment Using DRGs

The DRG-based payment system is well understood by providers and largely viewed positively. Respondents noted many positive consequences of the DRG-based payment system (Figure 5). It is the only payment system that is perceived by providers to promote equity, efficiency, and quality. In particular, they perceive it as fair since it pays providers for activity.

> *"We do not get paid for the total operations of the hospital but for providing services for particular patients. It is more flexible and directs the payment to services or operations. In general, we would like to get paid by each case. It would be good if government funded share is same as by the insurance system." ~National Specialty Hospital*

> *"The advantage is that payment is made based on service provision." ~District Health Complex*

Several providers also noted that the case-based payment system creates incentives to be more efficient in treating individual cases and reduce unnecessary services.

> *"It does prevent doctors from ordering unnecessary tests or procedures." ~Central Hospital*

> *"[The DRG-based] payment system makes us provide services within resources." District Health Complex*

At the same time, there do not appear to be serious negative consequences for quality. Having clinical guidelines in place may be an important factor in protecting quality with the stronger efficiency incentives of case-based payment.

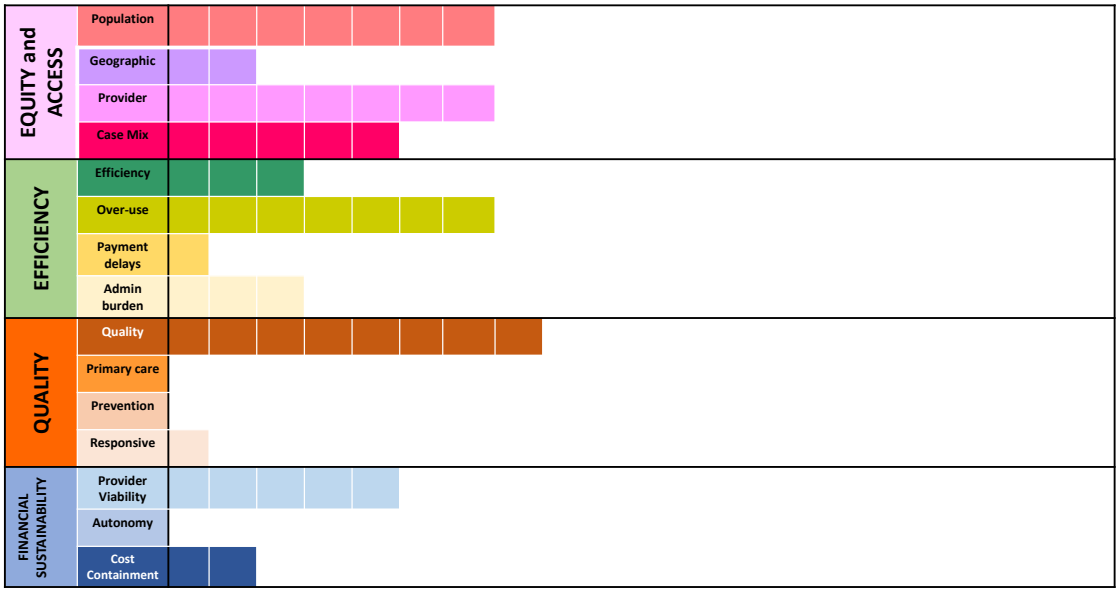
> *"[The DRG-based payment system] enhances quality because payment is related to need." ~Province General Hospital*

"We have been able to introduce new technology." ~Province General Hospital

"As for quality, we provide full treatment according to our conditions. After surgery a patient will stay for 4 or 5 days. I think it is OK for the DRGs provided." ~Soum Hospital

"We try to follow standards. There is no incentive for skimping on care." ~Soum Hospital

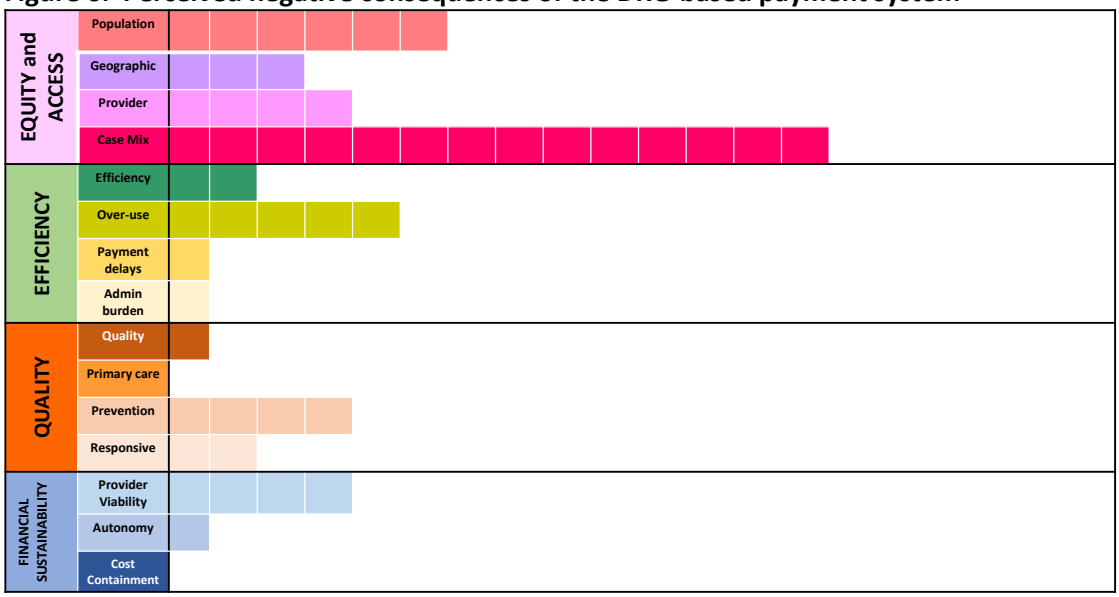
Figure 5. Perceived positive consequences of the DRG-based payment system



The main perceived negative consequence of the DRG-based payment system is that it does not promote fairness and equity. As discussed earlier, current case groups do not account for complications and co-morbidities (Figure 6). A number of stakeholders also noted that the DRG-based payment system does not promote equity because there is no adjustment for different geographic areas.

"[The payment rate] is the same for all areas and that is not fair." ~Sanitorium
"[The DRG-based payment system] does not contribute to geographic equity because no difference." ~Soum Hospital
"[The payment rate] is exactly the same. It does not reflect specific characteristics of geography." ~Soum Hospital

Figure 6. Perceived negative consequences of the DRG-based payment system



Although perceived negative consequences of the DRG-based payment system are not widespread, several providers noted that the system could possibly lead to unnecessary hospital admissions. However, this may have more to do with the way benefits are structured under the health insurance system and the focus on inpatient benefits. One provider also noted that there may be an incentive to avoid more complicated patients.

> *"Even if a person is not interested to get hospitalized, for the hospital it is the only way to get paid. This creates an incentive to go after money and poor quality service." ~Province General Hospital*

> *"Prevention is not funded by social insurance, hence if we have fewer admission we get paid less from insurance." ~Province General Hospital*

> *"This payment system might result in unnecessary readmissions, but not here." ~Province General Hospital*

> *"There is an incentive to avoid sicker patients because we are cautious about resulting accountability to them." ~Province General Hospital*

> *"[The DRG-based payment system] does not give incentives for health promotion because payment is only made if the patient is sick. There is no funding for prevention and chronic diseases." ~Soum Hospital*

Capitation

The capitation payment system is widely perceived to have positive consequences related to efficiency, equity, and access to services for the population (Figure 7). It allows funds to be

used for outreach, and providers have the flexibility to allocate funds across line items according to their needs.

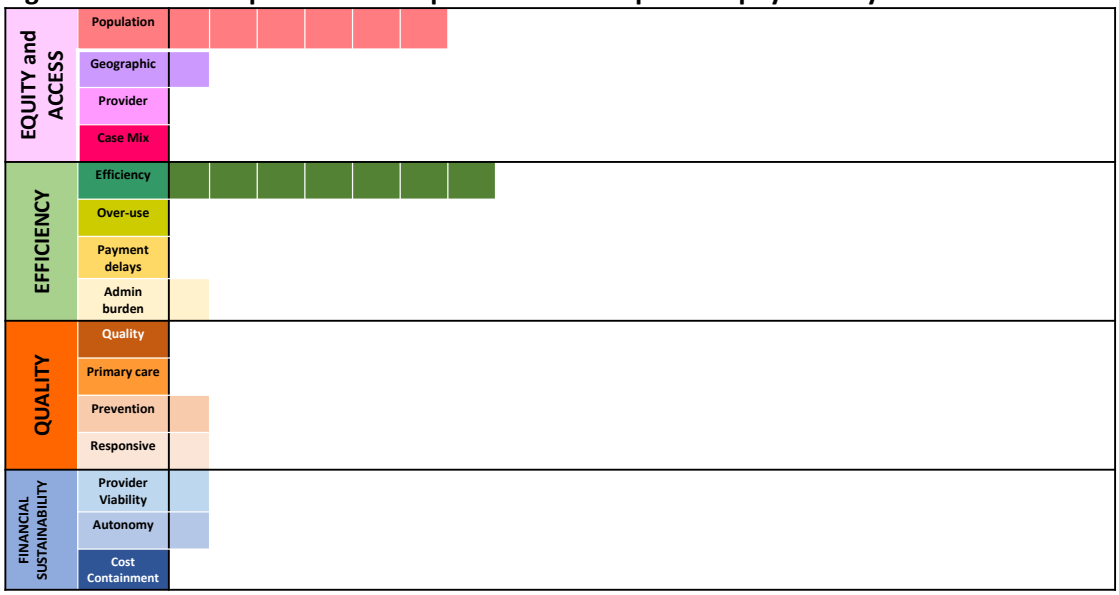
> *"We get a lump sum and can decide how to use it most effectively, which encourages smart planning." ~Family Health Center*

> *"We can use funds very flexibly to address the particular needs of the population." ~Family Health Center*

> *"Payments are based on population and meeting patient needs." ~Family Health Center*

> *"Capitation is an easy method to provide primary care in a fair and equitable way. It has an important role." ~MOH Department of Finance and Economics*

Figure 7. Perceived positive consequences of the capitation payment system



Capitation is the only payment system that is perceived to encourage health promotion and prevention.

> *"It enables us to reach out to the population and provide services to every person." ~Soum Health Center*

> *"It enables us to focus on public health and prevention, because we do not have to rely on service revenue." ~Family Health Center*

> *"Since payment is based on population, we can reach out, even to those who do not seek services." ~Family Health Center*

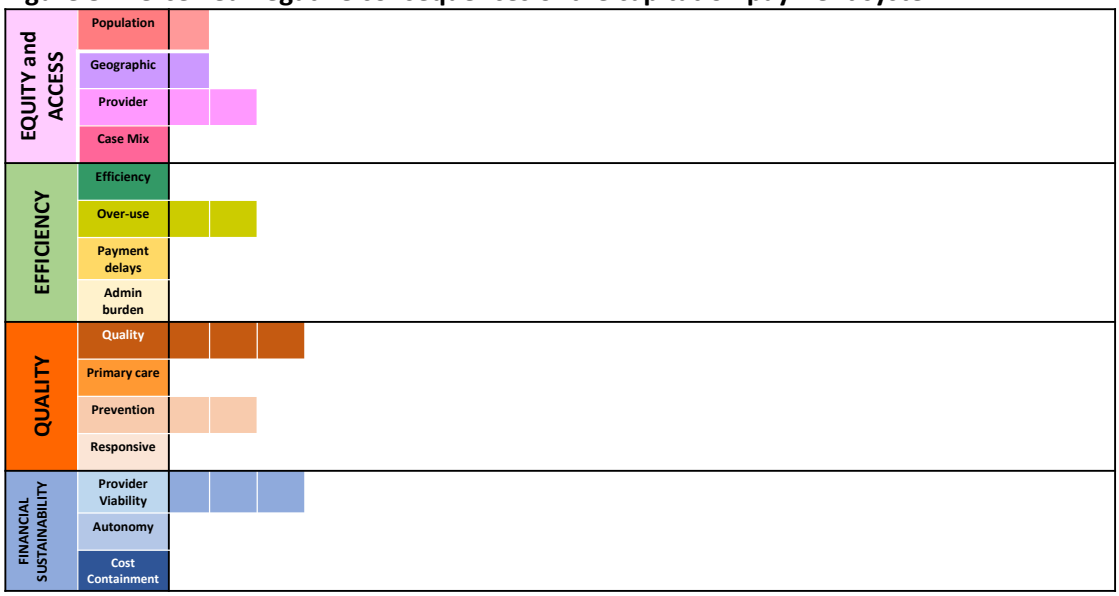
Capitation is perceived to have some negative consequences. For example, as it is currently implemented in Mongolia, capitation does not create any specific incentives to improve quality of care or limit excess referrals (Figure 8).

> *"[Capitation] tends to create incentives for referral and it is impossible to control quality of care." ~ MOH Department of Policy and Planning*
> *"It is easy to calculate funding of the health facility, but [capitation] does not provide good incentives based on results." ~MOH Department of Finance and Economics*

Respondents also noted some negative consequences related to the low capitation payment rates and the inadequate attention given to mobile populations when calculating the rate (Figure 8). One provider also noted that the capitation payment system has negative consequences for equity because there is no discrimination across geographic areas.

> *"If rates were higher they could do more outreach, and perhaps reduce admissions." ~Family Health Center*

Figure 8. Perceived negative consequences of the capitation payment system



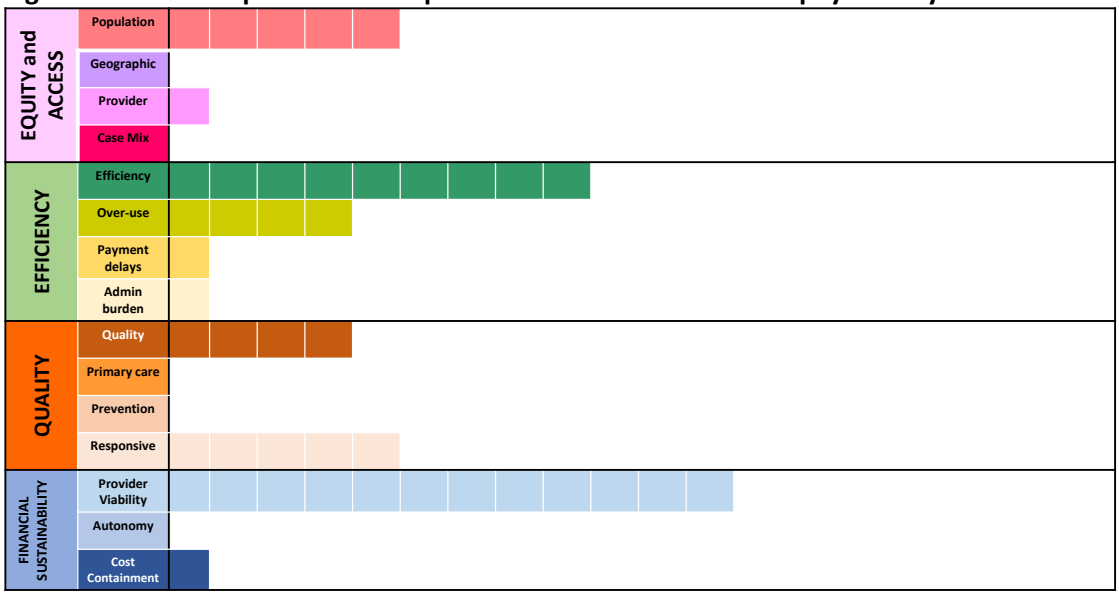
Fee for Service

The fee-for-service payment system is perceived as bringing several positive consequences without the negative consequences typically associated with fee for service payment systems, especially cost escalation and over-use of high-cost services (Figure 9). This is because Mongolia tightly controls the fee-for-service payments and limits them to services outside of the benefits package with revenue included within the providers' overall revenue caps. Also, the socioeconomic situation in the country limits capacity for out-of-pocket spending among users of the public system, but this is something that could change as Mongolia's economy continues to develop and demand for more and higher-tech health services increases.

"There are efficiency gains from extra motivation without over-use of high-cost services."~Soum Hospital

"Does not promote high-cost services because it is difficult for Mongolian condition. People have varying capacity to pay." ~Private Hospital

Figure 9: Perceived positive consequences of the fee- for- service payment system



The cash income from fees, although small for public providers, is perceived as being helpful for financial viability and is used by most providers to improve the quality of their services.

"Fee payments help with financial viability because this is our own revenue and prevents from shortages." ~Soum Hospital

"Helps with quality because we have cash." ~Soum Hospital

"Direct cash payment is made to the health facility. Drug suppliers prefer to be paid by cash. Therefore, it enables us to buy drugs and supplies needed for patient services." ~Private hospital

"We use it to upgrade the hospital, buy and upgrade equipment." ~Private Hospital

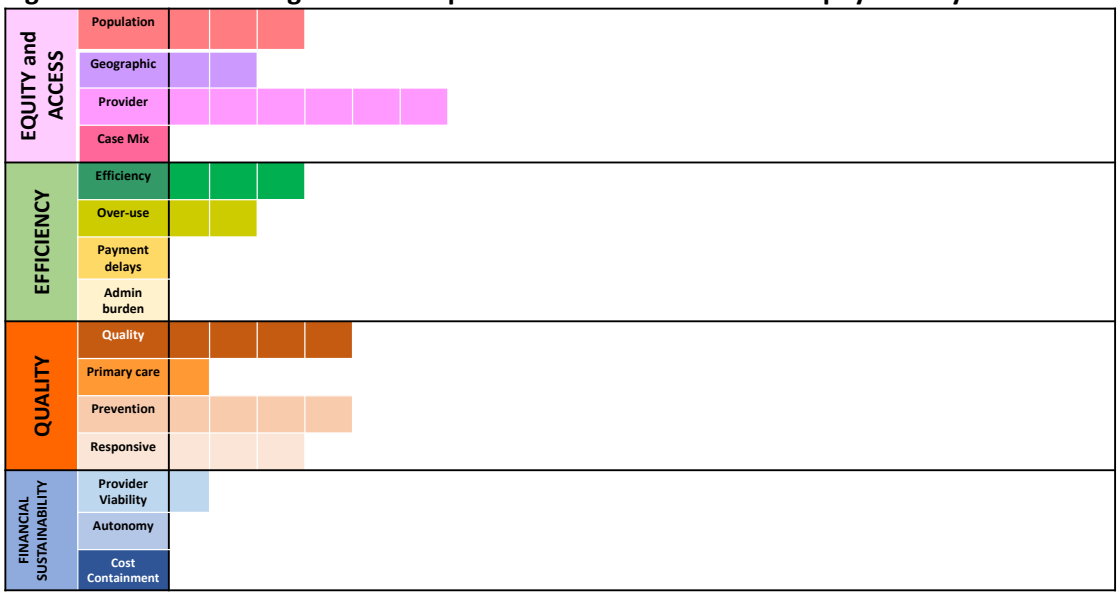
"We provide small bonus to staff and help out with their social problems." ~National Specialty Hospital

In spite of these positive consequences, there are some perceived negative consequences of the fee-for-service payment system (Figure 10). The negative consequences relate mainly to poor understanding of the fees by the population.

> *"Lots of complaints from patients because they do not understand why social insurance is not paying in full, and they have to pay fees." ~Private Hospital*

> *"There is poor understanding of regulations by patients so we face difficulties and resistances sometimes." ~District Hospital*

Figure 10: Perceived negative consequences of the fee- for- service payment system



Challenges and Limitations of the Assessment

Implementation of the provider payment system encountered a number of challenges, which were also found in the field test in Vietnam (Nguyen, Tran, Hoang, Tran, & Cashin, 2015). In general, provider payment literacy is weak among stakeholders in many low- and middle-income countries, which was a challenge also encountered in the Mongolia assessment. Variable understanding of specific terminology may have impacted the results. The terminology used to describe provider payment results also was found to be too abstract for some respondents, so responses sometimes provided less in-depth discussion than expected. In addition, although the structure and content of the assessment guide was adapted for the Mongolian context, it is possible that key issues were missed because there were not specific questions to capture them.

The assessment only yielded information about the perceptions of stakeholders regarding the design, implementation, and results of the provider payment systems currently in use.

Provider understanding and perceptions of the design, implementation, and incentives created by payment systems are a key factor in the effectiveness of payment systems in supporting health system objectives. While the assessment cannot provide a quantitative estimate of this effectiveness, it can shed light on the root causes of the failure of higher levels of health spending to generate significant progress toward key objectives and provide guidance on key bottlenecks that need to be addressed.

Policy Implications and Roadmap

At the end of the assessment, the results were discussed to reach consensus on the interpretation, conclusions, and implications for the roadmap to improve Mongolia's provider payment systems under the upcoming revision of the Health Insurance Law.

Supporting Health System Objectives

The provider payment systems as currently designed and implemented in Mongolia are only moderately supporting priority health system objectives agreed in the first stakeholder planning meeting for the assessment (Figure 11). The objective of achieving universal coverage is supported by the overall provider budget cap, which is enabling effective cost containment. This financial discipline is more likely to make it possible to use additional resources to expand effective coverage. However, efficiency objectives are not supported by the payment system implementation arrangements, particularly the line item budget restrictions. Other objectives include stimulating competition, promoting primary care, improving child health care, and increasing accessibility of medicines.

Figure 11. Effect of Current Provider Payment Systems on Health System Objectives

Objective	Effectiveness of Current Provider Payment Systems	
Achieve universal coverage	+	• Providers perceive greater access among the population • Copayment policy and capitation adjustments may be enhancing equity • Cost containment may make it possible to deepen coverage
Cost efficiency at the macro and micro level	+/-	• Effective budget cap helps macro efficiency • Capitation is promoting micro level efficiency • DRG is unclear • Line item budget constraint limits micro level efficiency
Right incentives for different stakeholders	-	• Little incentive for health promotion, prevention or shifting to primary care • Some incentives for skimping on care (budget) and excess admissions (DRG) • But no obvious incentives for high-cost services, over-referral
Stimulate competition in the health sector	?	No clear relationship between provider payment systems in place and competition
Promote primary care	-	Little incentive for health promotion, prevention or shifting to primary care
Improve child health care	-	Little incentive for health promotion, prevention or shifting to primary care
Increase accessibility of medicines	?	Pharmacies perceive that access to medicines has increased for people but when caps are reached the burden is shifted to the patient.

Summary of Strengths and Weaknesses of Current Payment Systems

Overall, the results of the provider payment assessment show that the payment systems complement each other and that all bring some positive features. For example, providers appreciate the guaranteed, stable portion of revenue that comes from the budget. They also understand the activity-based payment through DRGs and think it is fair. They rely on the small amount of fee-for-service revenue to supplement their total revenue and provide some staff motivation.

The overall budget cap at the provider level is effective at containing costs and forcing some efficient behavior. Providers are generally accepting of the cap and report that they adjust their service delivery decisions to manage within the cap and avoid deficits. Some providers complain about the cap, but in most cases, it is more an issue of how the cap is set rather than the cap itself.

Following the IBL, part of the responsibility for setting the budget cap for primary health care (family health centers and soum hospitals) has shifted away from CG and to Aimag/Capital City government. The budget cap continues to operate as before, and serves as an effective mechanism for containing costs and improving efficiencies. The main difference is that the budget cap as well as the budget spending plans prepared by the health facilities are approved by lawmakers at the aimag/Capital City level. In principle, this implies there is scope for ensuring that local level priorities are reflected in the budget cap and spending plans. However, it is too early to see these effects in practice.

There is little evidence of the adverse consequences often associated with the different payment systems. The potential negative consequences of several of the payment systems—such as increased admissions with DRG payment, skimping on care with budget payment and capitation—are effectively kept in check with the global budget cap and widespread awareness of and respect for clinical guidelines. Fee for service has not driven over-use of costly services and general cost escalation, as it does in many health systems. This is largely because fee-for-service payment is used in a targeted way and subject to the overall provider cap. Fee-for-service revenue is also limited by the socioeconomic context in Mongolia.

Several provider responses indicated a strong influence of professional ethics and a lack of desire to treat health services as a market good that can generate a profit. This perspective could face pressure, however, as national and household incomes grow and demand for more and higher technology services grows. Mongolia will have to continue to manage the pressure of increasing fee for service revenue for providers.

In spite of these positive aspects, there are serious limitations in the current design and implementation arrangements of the provider payment system that affect incentives to improve efficiency and shift resources and service delivery to primary care and prevention activities. Universally, stakeholders view the line item budget as the major constraint to using resources effectively and meeting the needs of the populations served. Most providers also responded that being able to keep at least some surplus when they keep their volume of services below their cap would not only serve as a motivation to use resources more efficiently,

but it would also make it possible to invest in service delivery improvements to better meet population needs.

The constraints associated with line item budgets have been alleviated only marginally under the IBL. To begin with, the IBL only affects the budget processes of family health centers and soum hospitals. Secondary and tertiary care providers are not affected by the IBL. Family health centers' budgets are set on a capitation basis, and the budgets allocated on a lump-sum basis. This has not changed under the IBL, and family health centers continue to enjoy a high degree of flexibility in how they spend the budget. Soum hospitals' budgets are set on a line-item basis now, as before. However, the IBL has resulted in greater flexibility in spending across categories for soum hospitals.

Most providers noted that payment rates do not include adequate adjustments for geographic differences in the cost of delivering care. In the Mongolian context, low population density, the remoteness of many villages, and severe weather conditions create enormously variable challenges and resource requirements for providing basic services. Most stakeholders consider adequate geographic adjustment to payment rates to be one of the most critical issues for improving the allocation of resources across providers and the population.

Last, but not the least, good management information systems are vital for strengthening provider payment mechanisms and strategic purchasing capacity. Since 2005, the health sector has been making efforts to implement a health management information system strategy. The Ministry of Health uses Health-info software for collecting, integrating and processing the routine health statistics. Most tertiary and secondary hospitals use Hospital information systems, however hospitals have to keep paper records as the legal framework for electronic record keeping has not been fully instituted and regulated effectively. For example, linkage to social health insurance is still quite basic, as there is no electronic exchange of information between health care providers and health insurance. Use of IT at the primary care level is limited to basic word-processing and the use of spreadsheets. Information on ICT in private sector is limited though newly established private health care providers use the latest developments of hospital information system. A more integrated information system, preferably electronic would help improve performance monitoring and therefore, efficiency and quality of service delivery.

Roadmap

The assessment does not suggest that the general structure and mix of payment systems in Mongolia need to change. It is important to continue to prevent potential adverse consequences of the different payment systems, which is easier than reversing them in the future. For example, it is recommended that Mongolia continue to implement the cap on all revenue sources for providers, limit fee-for-service, and strengthen clinical guidelines and the referral system.

Based on the stakeholder consultation meeting, it was agreed that the roadmap should focus should on three key areas. These areas are:

- The public financial management rules (line item rigidities and retaining a portion of surpluses),
- Improving the technical design of the payment systems to better link payment rates to appropriate volume projections and case mix, and
- Refine geographic adjustments.

Based on the urgency and feasibility of different recommended steps as well as the timing of the revision of the Health Insurance Law, the draft roadmap (summarized in Figure 12 below) is partitioned into three main phases:

I. *Urgent adjustments*: the next 6 months
II. *Fundamental revisions*: the next 18 months
III. *Realignment of payment systems*: 3-5 years

The urgent revisions focus on putting in motion a dialogue to better exploit the flexibility that currently exists in the Budget Law, immediately refining the basis for estimating population for capitation, and beginning analysis for future phases. For example, analysis should begin immediately to develop the parameters for moving toward budget caps based on volume and other estimates of population health need and to refine the case groups for the DRG payment system to better capture variation in the severity and cost of different categories of admissions and to include adjustments for co-morbidity. Options for payment for outpatient specialty services also need to be explored. A top priority is to develop a technical basis for geographic adjustment for payments under all of the different payment systems. Targeted cost analysis may be needed to accurately estimate the impact of geography, population density, and climate conditions on the cost of delivering health services.

The vision for the roadmap is to lead toward a mix of payment systems that builds on and enhances the current mix: guaranteed global budget (replacing the line item budget); refined DRG-based payment for inpatient services; appropriate payment for outpatient specialty services (to be determined); and expanded primary care capitation with incentives for quality of care and health promotion. The provider cap will continue but should be developed based on parameters that reflect population health need, such as case mix-adjusted volume. The constraints of the Budget Law will be eased by gradually exploiting existing flexibility, including consolidating line items to only three (personnel, recurrent costs, and capital) and retaining surpluses at the sector or provider level to reinvest in the health delivery system.

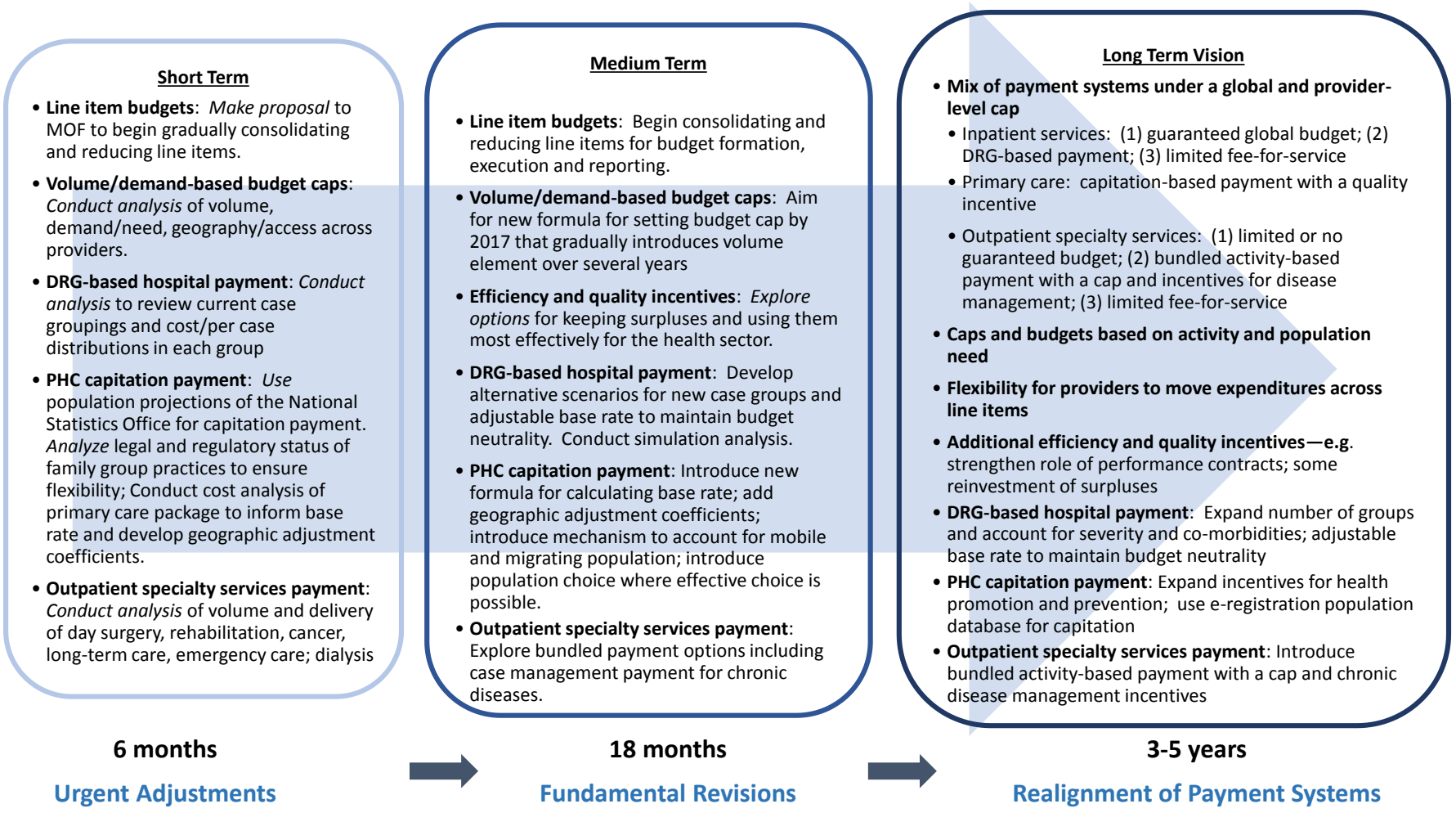
Conclusions

The provider payment assessment revealed that overall, the general direction of provider payment policy is effective. Many of the pitfalls observed in other lower middle-income countries have largely been avoided. Overall provider revenue is capped, there is a mix of payment methods that are in general complementary, and the role of fee-for-service payment is targeted and limited.

The main conclusion for the way forward is that a major overhaul of the payment systems does not seem to be necessary. The most significant obstacle to better leveraging provider payment

lies in the restrictions of the current Budget Law. Mongolia can make substantial progress with a shift in the basis for the payment cap and budget payment from inputs to parameters that reflect population health need and with some technical refinements to the design of the DRG-based payment system and capitation. A top priority is to begin to develop appropriate geographic coefficients to adjust payments for the varying cost of delivery services related to Mongolia's challenging physical environment and population density. All stakeholders agree that there is some flexibility in the current Budget Law that has not been exploited, and steps should begin immediately to reduce the number of line items and maximize the opportunity to retain any surpluses for the health sector that are generated from underspending due to lower-than-expected volume.

Figure 12. Roadmap for Refining and Realigning Provider Payment Systems in Mongolia



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