

## **Den Sooluk National Health Reform Program in the Kyrgyz Republic for 2012-2016**

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## **Introduction**

The National Health Reform Program in the Kyrgyz Republic for 2012-2016, called “Den Sooluk” (hereinafter referred to as the Den Sooluk Program) is a logical continuation of the preceding National Health Reform Programs—Manas (1996-2005) and Manas Taalimi (2006-2011) of the Kyrgyz Republic.

During the implementation of the above programs, a new legislative base has been created for the new health system of the Kyrgyz Republic. There were adopted the Laws of the Kyrgyz Republic "On Single Payer System in the Health Care Financing of the Kyrgyz Republic", "On Health Care Organizations in the Kyrgyz Republic", "On Public Health Protection in the Kyrgyz Republic", "On Public Health", and made amendments into the Laws of the Kyrgyz Republic "On the Fundamental Principles of Budgetary Code in the Kyrgyz Republic", "On Health Insurance in the Kyrgyz Republic".

Annually since 2001 the Government of the Kyrgyz Republic has been approving the State Guaranteed Benefit Package through the Resolutions, which envisages the provision of free, preferential or paid (official co-payment) health care services depending on the social and insurance status of citizens.

Since 2006, health system reform has been implemented under a Sector Wide Approach (hereinafter - SWAp). Under the SWAp, the Ministry of Health of the Kyrgyz Republic (hereinafter - the MOH) has been driving the implementation of the Manas Taalimi National Program, Development Partners have channeled their support to program priorities, and joint processes and instruments have been developed to monitor progress. The MOH organized annual joint sector reviews twice a year with in-depth assessment of progress and shortcomings and planning future activities.

These new ways of working under the SWAp have brought important benefits, namely:

- increased leadership role of the MOH in developing, implementing and monitoring reforms;
  - improved alignment of donor funds with the priorities of the Manas Taalimi National Program, better coordination of all health sector activities;
  - greater use of evidence in policy development and monitoring.
- Considering the significant benefits of this approach, the Kyrgyz Government remains committed to the SWAp principles in the development and implementation of Den Sooluk.

The Manas and Manas Taalimi programs have introduced an internationally recognized model of health financing. Despite economic difficulties, the level of health care financing has increased over the past 5 years, including through donor funding and structural changes. The improved model of health financing and increased funding have resulted in some progress in improving financial protection of population, access to health care and its efficiency. These achievements are considered significant, especially in terms of socio-political instability which remained in the country during the last 5-6

years, and given limited resources due to the current economic situation.

Despite a number of achievements, however, significant shortcomings remain. Contrary to expectations, there was no significant improvement in health indicators for cardiovascular diseases, maternal and child health; the situation with the increase in cases of drug-resistant forms of tuberculosis raises concerns. Further change in population health behavior and improvement of the health care services quality is imperative in order to achieve better population health for all Kyrgyz citizens. Den Sooluk Program is designed to address these problems. Based on the achievements of the Manas and Manas Taalimi programs as well as guided by the basic principles of the World Health Organization (hereinafter - the WHO), Den Sooluk is aimed at ensuring universal (general) coverage of population with high quality health, sanitation prevention services regardless of social status, gender differences and insurance status of the population.

Den Sooluk was developed in 2010-2011 through a participatory and collaborative effort under the leadership of the MOH with the support of WHO and other Development Partners active in the SWAp. Technical working groups coordinated by an expert team were involved in the development of the Program. The Program was discussed with politicians, health care professionals, representatives of civil society and development partners whose contributions have shaped the final version of the Den Sooluk National Health Reform Program in the Kyrgyz Republic for 2012-2016.

## **I. Key achievements and lessons learned from implementing the Manas Taalimi National Health Care Reform Program for 2006-2010**

In May 2011 the MOH published a Report “Evaluation of the implementation of the Manas Taalimi National Health Care Reform Program in the Kyrgyz Republic” which contained the results of an in-depth assessment of the implementation of this Program. The evaluation report is based on the results of joint monitoring agreed and used under the SWAp and on the studies and evaluation reports prepared by the Health Policy Analysis Centre (hereinafter - HPAC), which are available on the website: [www.hpac.kg](http://www.hpac.kg). The conclusions cited in this section are based on the above report containing detailed information and supporting data. This section assesses the achievements of previous reform programs, identifies the unfinished agenda that can be implemented in the framework of Den Sooluk.

### **1. Overview of Manas Taalimi**

The main objective of Manas Taalimi was to improve population health through creating a more responsive, efficient, comprehensive, integrated service delivery system, including individual and public health services, increasing personal responsibility of every citizen, every family, community, state and management authorities for the health of any individual and the society as a

whole. This was to achieve through a wide range of measures aimed at strengthening the health system organized in the following components:

- community involvement;
- health care system financing;
- provision of individual health services;
- provision of public health services;
- promotion of evidence-based medicine, development of priority programs, development of human resource and stewardship.

Manas Taalimi was strategically focused on completion and institutionalization of the reforms initiated during Manas Program, particularly in health system financing and its restructuring, as well as the beginning of new generation reforms in public health and medical education.

Despite the political and economic difficulties faced by the country, the activities of Manas Taalimi Program were implemented. The most significant reforms during the program included the following:

- government allocations for the health sector went from 10% to 13% of the overall government budget indicating increased government priority to the health sector; this allowed better funding of health services, particularly of medicines and supplies, and reduced patient financial burden;

- pooling of funds was transferred from oblast to national level, which allowed gradual alignment of financial standards across regions and elimination of historical inequities in resource allocation for both the State Guaranteed Benefit Package (hereinafter – the SGBP) and the ADB;

- health promotion through Village Health Committees (hereinafter - the VHCs) in rural areas was scaled up significantly with over 1200 active VHCs; institutionalization and sustainability of VHC support progressed with clearly defined roles for the Republican Health Promotion Center (hereinafter – the RHPC) and Health Promotion Cabinets (hereinafter – the HPCs) in Family Medicine Centers (hereinafter - FMCs);

- primary health care system was further strengthened through investments in Feldsher Accoucher Points (hereinafter – the FAPs) and increasing the share of funds to PHC from the SGBP, from 23% - in 2006 to 39% - in 2010.

- public health reform was initiated through adoption of a number of legislative acts and institutional revisions that aimed at creating a modern public health service adequately responding to the burden of diseases prevalent in the country;

- The MOH became a driving force in implementing Manas Taalimi Program and largely increased the level of management; monitoring and evaluation of Manas Taalimi became more routine in nature and integrated into the SWAp Joint Annual Reviews.

## **2. Assessment of Manas Taalimi**

The impact of the Manas Taalimi reforms on the key goals has been of mixed character. On the one hand, good progress has been demonstrated in financial protection, access and efficiency of health services. On the other hand, progress in improving the quality of health care and achieving solid health gain has been less impressive. Therefore, improving the quality of health care and accelerating health gain remain important goals for Den Sooluk while maintaining hard-fought gains in financial protection, access and efficiency of health services should not be neglected.

**Health outcomes.** There has been progress on some health outcomes but not on others. Thus, infant and child mortality rates have begun to decrease, TB incidence and mortality have been on the decline, and cardiovascular mortality among adults has stabilized. In contrast, there has not been improvement in maternal mortality, HIV incidence continues to rise, and the emergence and growing incidence of MDR TB is a worrying sign. Therefore, an important objective of the Den Sooluk is to accelerate progress towards improving these key indicators.

**Financial protection and access to health services.** During 2003-2009, the financial burden for the poorest 40% of the population has declined significantly, and geographic and financial barriers that impede access to health services have reduced. The decrease was due to the introduction of the single payer system, first at the oblast level, with subsequent accumulation of funds at the national level, achieved the efficiency gains from restructuring and expanding the scope of the SGBP . In the period from 2006 to 2009, no further reduction in the financial burden was observed. Thus, these issues should be addressed within the framework of Den Sooluk, with a focus on the fast growing out-of-pocket payments for outpatient medical services and informal payments for hospital care in large urban areas where restructuring has not taken place.

**Efficient use of resources.** Efficiency of resource allocation within the SGBP has undoubtedly improved based on two agreed indicators:

a) the share of health expenditures in the SGBP allocated to more cost-effective primary health care has increased from 29% in 2005 to 38% in 2009;

b) direct patient expenditures (drugs, supplies and food) have increased from 20% in 2005 to 30% in 2009 as a result of optimizing the infrastructure of health care organizations. However, squeezing further efficiency gains remains on the agenda for Den Sooluk in light of the persistent funding gap in the SGBP and the remaining irrational distribution and management of infrastructure in large urban areas.

**Transparency of the health care system.** Prior to 2006, unofficial payments for medicines and supplies decreased significantly which was a direct result of the efficiency gains noted above. As a result, it led to the increased spending of public funds directly on patients rather than on infrastructure.



However, informal payments to medical personnel continued to rise, which was associated with very low wages, as well as the growing gap between the salaries of health workers and the level of inflation. Given the recent increase in wage of health care workers, the continued monitoring of informal payments will remain critical.

### **3. Lessons learnt and the unfinished agenda for Den Sooluk**

The reforms undertaken over the past 15 years in the field of health care, in particular, the implementation of Manas and Manas Taalimi programs allowed to learn a number of important lessons that had influenced the content of Den Sooluk. In addition, there are a number of challenges that neither the Manas nor the Manas Taalimi reforms have addressed that constitute the unfinished agenda for Den Sooluk.

Lesson 1. Stronger focus on and greater investment are needed to change population health behavior and clinical practice in order to improve the efficiency of key health interventions. Unfortunately, it is necessary to note that the results of 15 years of reform in the health sector have been lower than expected. This can be explained by objective factors, such as a slow change in health indicators in general and the limited funding that prevents the achievement of visible progress. Another reason is the lack of attention to the key determinants of health and issues of clinical practice by medical professionals. In fact, the difficulty of changing clinical practice in order to improve the quality of medical care has been clearly underestimated. As a result, population coverage is still appears very low with those evidence-based health services that produce the greatest health gains for key health conditions (e.g., hypertension, diabetes, prenatal care, early detection of TB cases, etc.). This requires the strengthening of mechanisms to improve the quality of medical services at the level of health care organizations, which in turn causes the need to enhance their accountability for performance and full autonomy in management. Improving the quality of core health services will become the strategic direction of Den Sooluk, which is associated with improvement in the efficiency of measures to protect public health.

Lesson 2. Political instability and frequent changes in leadership have undermined the consistent implementation of reforms. The unstable political situation in the country had a negative impact on the targeted reforms in the health care system. Frequent change of top management led to inconsistencies in determining the direction of reform and created difficulties in accumulating sufficient knowledge and skills necessary for effective management. Frequent changes in leadership was exacerbated by an inadequate communication strategy of the MOH, which could have implemented reforms and made the restructuring process more transparent and open for the public.

Lesson 3. The inability to address the outflow of human resources has adversely affected both the access to health care and its quality, especially for

vulnerable populations in remote rural areas. In recent years, there has been a critical situation with the staffing of personnel in health care system of the Kyrgyz Republic. Excessive concentration of medical personnel is observed in the cities of Bishkek and Osh, while in the oblasts there is a shortage of personnel, especially practicing physicians. Thus, the problem is not the insufficient number of health workers, but their uneven distribution. Low levels of social life in rural areas has become a serious factor which discouraging young physicians from staying and working in rural areas. Special measures taken for the involvement of local governments in creating incentives for young specialists to work in the regions turned out to be insufficient. An important motivating factor for the retention of health workers in the field, especially in rural areas, could be the increase in wages, which was launched by the Government of the country in May 2011. This issue is also one of the fundamental problems for Den Sooluk.

Lesson 4. Incomplete definition of roles and responsibilities and limited management autonomy of health care providers have generated a governance challenge. An important step in the process of reforming the health care system of the republic should be a clear division of responsibility in accordance with the health system functions, such as the provision of health services, health sector financing and system management. In general, the responsibilities of the MOH remained the same, except for the delegation of some functions related to financing to the Mandatory Health Insurance Fund (hereinafter - the MHIF). This increased volume of work for the MOH, including determination of policy, provision of health services, responsibility for sector financing, as well as solution of current problems. Such overburden has led to decrease of the efficiency and quality of performance of the basic functions by the MOH on strategic planning and management. A number of other institutional changes have remained unfinished requiring further attention during the Den Sooluk implementation:

- separation of the MHIF from the structure of the MOH had a negative impact on the operational capacity to address health care issues through joint efforts;
- service providers are not provided with full autonomy in the management of health care organizations;
- health care coordination councils under the oblast state administrations and institution of oblast health care coordinators did not provide effective health care coordination at oblast level;
- there was low commitment of local self-government bodies and local state administrations (hereinafter - the LSGs and the LSAs) in addressing health issues.

These institutional issues have created serious obstacles to the effective functioning of many public health programs. Den Sooluk will strengthen the functions of strategic leadership at the expense of a more precise definition of roles and relationships between key institutions in the health system.

Lesson 5. Adequate funding is critical for maximizing population coverage with cost-effective health care services. An important achievement during the Manas Taalimi Program was the consistent annual increase in health expenditures from 10% to 13% of total government expenditures. This positive trend was preceded by a situation persisted over 10 years, where the proportion of funding was reduced, which led to the collapse of service delivery and growth of informal payments. As a result of increased government funding of the health system, the co-payment for deliveries, children under 5 years and elderly was abolished, provision of health facilities with drugs was improved, informal payments for drugs were reduced. However, the increased government funding combined with donor funds was not sufficient to cover the growing number of hospitalization (560,000 in 2006 and 950,000 in 2010), the increase in population groups eligible for benefits (27 groups in 2001 and 72 in 2010), with the continued inefficiency in service delivery structure (overcapacity in the cities of Bishkek and Osh), and clinical practice (unjustified hospitalization and polypharmacy). The resulting gap in funding, which, according to various estimates, amounts to 27-39% of total expenditures, is filled through informal payments. This not only creates a financial burden for the population, but also undermines the confidence of citizens in the reform process. Den Sooluk will address this gap in health services financing in conjunction with a study of the main reasons and a search for measures aimed at maintaining or increasing public funds, improving the efficiency of the structure and clinical practice, as well as further regulating of eligibility.

Lesson 6. It is very difficult to change clinical practice and ensure the conditions under which the evidence-based practice becomes the standard at all levels of care in both the public and the private sector. There are significant deviations of the care provided from evidence-based practice despite the new financial incentives at the level of service providers, significant investments in the development and implementation of clinical guidelines focused on evidence-based medicine, as well as training of medical personnel. It is due to the absence of mechanisms to improve the quality of health services, lack of autonomy of health care organizations and weak mechanisms of their accountability as well as outdated methods of medical education. These questions will be the determinants in implementing the four priorities of Den Sooluk.

Lesson 7. Despite the restructuring of health care delivery system, an optimal network of medical institutions with a clear interaction between public health organizations of primary, secondary and tertiary levels is still not established. The problem related to provision of access to narrow-specialists for outpatient patients is not fully resolved. Emergency health care is not well developed yet. Many tertiary level institutions have not developed to the level of organizations that provide high-tech medical services. Disadvantages associated with the regulatory mechanisms of private health care organizations have led to their uncontrolled functioning. The Concept for development of private medicine was elaborated in 2009, however, the policy for development of



private medicine in the Kyrgyz Republic in general has not undergone major changes.

Lesson 8. Made insufficient investment to create a modern public health service, the structure and the level of which would meet the existing disease burden in the country, modern approaches to health promotion and prevention. The current regulatory legal framework governing public health in the Kyrgyz Republic does not contribute to the increased interaction between public health service and the individual care provision system. The current regulatory legal framework governing public health in the Kyrgyz Republic does not contribute to the increased interaction between provision of individual services in primary care organizations and hospitals in the country. This leads to a decrease in the effectiveness of some of the priority areas (for example, relating to brucellosis, tuberculosis, cardiovascular diseases, hepatitis, etc.). On the other hand, there is insufficient inter-sectoral collaboration in the prevention of infectious and noninfectious diseases, as well as maintaining a healthy hygienic environment.

The solution to these long-standing problems requires not only technical competence but also political commitment (see Section 6 on political commitments and framework conditions).

**II. Mission, principles, strategic approach and political commitments of Den Sooluk Program**

**4. Mission and principles**

The mission of Den Sooluk Program is to establish conditions for the protection and improvement of population health in whole and for each individual, irrespective of social status and gender differences.

The Program is built on the basis of continuity with the achievements of previous reforms, as well as with a view to the current social and political situation in the country, and is based on the principles presented in Table 1.

Table 1

**Principles of Den Sooluk Program**

<b>Principles</b>	<b>Description</b>
People in the center	Den Sooluk is focused on people and their health needs and will strengthen the delivery of health services in health promotion, disease prevention, and the delivery of therapeutic and diagnostic services in a responsive and people-centered manner

Results orientation	All activities and events of Den Sooluk are designed to achieve concrete results in promoting health and are based on the principles of evidence and international best practice standards
Removing systemic barriers to better health	Definition and implementation of consistent actions aimed at overcoming the systemic and persistent barriers that have undermined implementation of reforms and improvement of health outcomes for years
Democracy in implementation	Transparency in decision making, involvement of medical professionals and population in the development and implementation of Den Sooluk Program, provision of timely and accessible reporting on its implementation
Principles of SWAp in the process of implementation of Den Sooluk	Implementation of the Program under the leadership of the MOH, the use of donor funds (funds allocated for budget support and various projects financing) in accordance with the priorities of the Program; partnership with donors, the effect of a single national sector program; formal sector monitoring and coordination mechanisms acting through joint annual reviews

## 5. Strategic approach

The strategic approach of Den Sooluk focuses on creating a strong link between program activities and their impact on health outcomes and is based on three basic principles related to each other and based on the foundations laid during the past reforms:

- a) expected improvement in health outcomes;
- b) core services needed to achieve the expected improvement in health outcomes;
- c) identification and removal of barriers in the health care system that prevent coverage with core services, thus hindering the achievement of expected improvement in health outcomes (Figure 1).

### § 1. Expected improvement in health outcomes

The starting point of Den Sooluk is to encourage all program activities and actions through specific and expected improvements in health outcomes. Four program areas have been selected for which determined the expected outcomes. Achieving these outcomes will be important over the next five years (Section III), which are essential to achieve better overall health outcomes. Improving health outcomes will be in the following areas:

- cardiovascular diseases;
- maternal and child health;

- tuberculosis;
- HIV infection.

## § 2. Core services

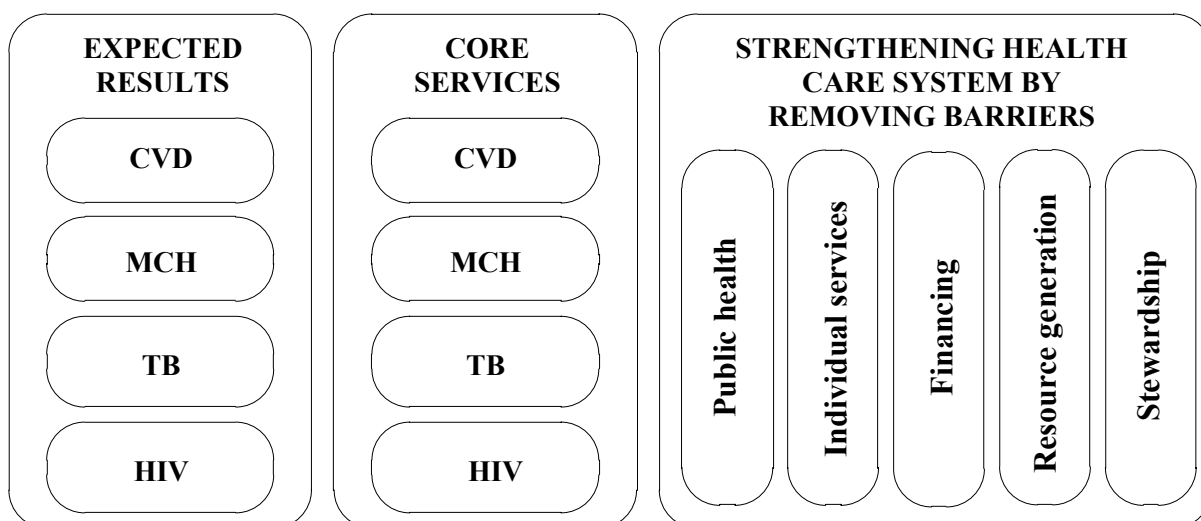
Core services have been identified for each of the program areas, on full delivery of which and coverage of the needy population depends the achievement of expected outcomes of Den Sooluk and the improvement of health indicators. Core services include services at the population level, individual evidence-based health services and appropriate institutional arrangements necessary for their implementation.

## § 3. Identification and removal of barriers in the health system

Health system strengthening in Den Sooluk is planned through identification and removal of the barriers that have prevented for many years the coverage with core health services needed to achieve the improvement of health outcomes. For each of the four program areas there have been identified systemic barriers that are presented in each section and are grouped around the main functions of the health system: service delivery, financing, resource generation and management. The main barriers of the health care system were identical for all programs, while some of them were program-specific.

Figure 1

### Strategic approach of Den Sooluk



Despite the fact that Den Sooluk is built on the achievements of the Manas and Manas Taalimi programs, its fundamental principle is different. First, all program activities is determined by the agreed expected outcomes in the

improvement of health indicators. This made it possible to determine the priority programs and services that have the greatest impact on the expected improvement in health. Thus, the new approach laid the foundation for a more focused program and strengthened the link to health indicators. Secondly, the improvement of basic health services (individual and public health) is the foundation of this Program. During the implementation of Den Sooluk, the Ministry of Health will ensure the growth of population coverage with services based on the evidence, the determination of funding priorities based on the needs for core services, at the same time, the level of coverage with core health services will be determined by the results of monitoring on a regular basis. Focusing on providing coverage with core health services makes it possible to put the health of people and their need for health care services as a priority. Third, the health system strengthening will not be based on a general approach, but will be focused on eliminating the barriers that hindered the process of providing essential services in four specific program areas. For example, the financial gap in the SGBP is a major barrier to the health care system, which adversely affects the activity of several programs. The reduction of this financial gap will benefit not only the program focused on these priorities, but also all health services provided under the SGBP. In addition, there is a connection that defines all the activities of the Den Sooluk from the expected outcomes in the improvement of health to the health system strengthening through the removal of barriers related to the provision of basic services in four priority areas.

## **6. Political commitments and structural (framework) conditions**

For further reforming of the health care system of the republic and for successful implementation of the goals and objectives, a number of political commitments and structural (framework) conditions have been agreed which formed the basis for Den Sooluk and implementation of its activities:

- principles of solidarity in health care financing will be maintained and improved through strengthening of existing mechanisms for accumulation of health care funds and procurement procedure of the MHIF/Single Payer System for SGBP;
- MHIF will maintain its independent legal status with the full financial and administrative autonomy while extending the responsibility for its functions;
- there will be a further improvement in the procurement of health services to improve their quality and to reduce the financial burden for the population;
- efforts will be made to reduce the financial gap in the SGBP;
- the health system will undergo further optimization aimed at the forced integration of vertical programs into the general system of health services delivery, as well as at needed restructuring of health care organizations in the cities of Bishkek and Osh;
- autonomy of health care providers will be expanded, which will give an

opportunity to introduce the best practices of quality management, the responsibility for the quality of services provided will be intensified, efficiency in resource use will be increased;

- health infrastructure will be improved through the identification and planning of the budget of funds for capital investments and operating costs.

### **III. Expected outcomes and core services for priority areas of Den Sooluk**

The Den Sooluk is built taking into account established priorities and is focused on them. Thus, it is not aimed at addressing simultaneously all determinants of health system, scaling up the delivery of all core services and removing all barriers that exist in the health care system of the country. Priorities have been carefully selected through dialogue and on the basis of past experience to make sure that commitments can be fully implemented.

Based on the structure of the disease burden and commitments of the Kyrgyz Republic to achieve the Millennium Development Goals (hereinafter - the MDGs), four priority areas to improve health indicators have been selected for the Den Sooluk: cardiovascular diseases, maternal and child health, tuberculosis and HIV infection.

The expected outcomes have been described for each of these priority areas, the core health services needed to achieve these outcomes as well as the main barriers that exist in the health care system and interfere with the proper delivery of core services have been identified.

Expected outcomes are specified at two levels. First, the expected changes in health indicators are determined, and then more specific expected outcomes for Den Sooluk are identified (3-5 for each program area) that have the greatest impact on improving health indicators. Coverage with services and implementation of all activities will be determined using the monitoring results, and at this the expected outcomes serve as a dashboard: if there is no positive dynamics in them, the achievement of expected changes in health indicators is unlikely.

Core services are available in three important dimensions:

a) key activities at the community level: a change of behavioral, social and environmental factors that will impact on health indicators;

b) key individual health services based on the principles of evidence-based medicine to be provided to the population in the required quantity and quality;

c) the role and interaction of health care organizations to ensure continued health surveillance of the population.

Barriers to health care system preventing the proper delivery of core services have been identified and grouped by the main health system functions:

a) public health services delivery;



- b) individual services delivery;
- c) financing of the health care system;
- d) generation of resources (personnel, medicines, information systems);
- e) stewardship.

There is a difference between the core services described above and the services delivery (public health and individual services). Core services focus on the content of services, while the components in the section for overcoming barriers to the delivery of services in the health care system focus on structural and organizational issues.

## **7. Cardiovascular diseases**

Cardiovascular diseases claim the lives of young people of working age, creating thus an enormous economic and social burden. Kyrgyzstan ranks the 6<sup>th</sup> place among the countries of the Eurasian region for standardized mortality rate from coronary heart disease, and ranks the 1<sup>st</sup> place for mortality rate from cerebral stroke (WHO, 2004). Acute myocardial infarction and hypertension (more than 90%) are the main causes of mortality from cardiovascular diseases in the Kyrgyz Republic.

Over the past years the mortality from cardiovascular diseases among the age group of 30-39 years increased by 31.2%, and among the age group of 40-49 years by 47.8%. The activities of the health care system for diagnosis and treatment of cardiovascular diseases is ineffective, as evidenced by the results of studies conducted over the past 5 years. One of the reasons for this situation is the behavior of our population, which is characterized by the use of tobacco products, alcohol abuse, unhealthy diet, and low awareness of risk factors and treatment options. On the other hand, this situation is due to inadequate detection, registration and counseling of patients with hypertension at the primary health care level (hereinafter - PHC), poor detection and counseling of patients with risk factors for cardiovascular diseases (smoking, diabetes, etc.). Also, there is a lack of practice of mandatory use of aspirin in patients with acute coronary syndrome, lack of transport in rural areas for the timely hospitalization for urgent conditions, inadequate use of effective services in myocardial infarction (aspirin, beta-blockers, thrombolytics), lack of specialized treatment for patients with stroke and lack of effective measures for secondary prevention (rehabilitation) at all levels of the health system.

To achieve these outcomes it is necessary to pay attention to improving the quality of health services at primary health care level, completeness of medical services and use of efficient technologies at the level of hospital care and emergency first aid. It is also necessary to adopt measures for the primary and secondary prevention of hypertension and acute coronary syndrome.

**Expected health gain and expected outcomes of Den Sooluk for cardiovascular diseases**

<b>Expected outcomes of the Program</b>	<b>Expected health gain</b>
<ol style="list-style-type: none"> <li>1. Increase in the number of detected cases of hypertension at primary health care level by 10% in 2016.</li> <li>2. Increase in the efficiency of the health care system for the control of hypertension by 50% in 2016.</li> <li>3. Increase in the share of patients hospitalized with acute myocardial infarction who received a standard package of services: thrombolytics, aspirin, heparin, beta-blocker</li> </ol>	1.0% annual decrease in mortality rate from cardiovascular diseases

### **§ 1. Key population interventions**

Measures will be undertaken to transform the behavior of the population with respect to CVD risk factors with an emphasis on smoking, alcohol consumption and unhealthy diet. It is also necessary to improve population awareness of own cardiovascular risk, treatment modalities, and the importance of compliance. Core population interventions to be scaled in the framework of Den Sooluk include:

1. Improving awareness of the population about cardiovascular and in particular about cardiovascular risk factors and treatment options, symptoms that require urgent medical evaluation for possible heart attack or stroke, importance of strict adherence to the prescribed treatment and availability of free medications.

2. Inter-sectoral approach to activities directed against the consumption of tobacco products, using evidence-based methods, such as a significant tax increase on tobacco products, the mandatory provision of smoke-free zones, a ban on smoking in public places, placing pictorial warnings on tobacco packaging, as well as anti-smoking information campaigns through mass media and village health committees.

3. Development of inter-sectoral cooperation to reduce the abuse of alcohol (price adjustment, restrictions on advertising, time and place of sale, etc.) as well as changes in behavior with respect to unhealthy diet (reduced intake of food with high content of salt and saturated fat).

## **§ 2. Core individual services - improving the quality of health services in health care organizations**

Measures to improve the quality of services at the level of health care organizations will ensure effective and accessible services at all levels for all who need them.

1. Improving prevention and management of cardiovascular diseases at the primary health care level through the introduction of evidence-based diagnostic and treatment methods includes:

a) detection of patients who use tobacco products and providing them with advice on smoking cessation and withdrawal;

b) proper detection, registration and management of patients with hypertension and acute coronary syndrome at the level of primary health care;

c) detection and treatment of diabetes at the level of primary health care as one of the risk factors for cardiovascular diseases;

d) prescription of an effective pharmacotherapy for patients with high risk of hypertension and acute coronary syndrome;

e) adoption of measures to improve adherence in patients with hypertension and patients with acute coronary syndrome to the prescribed therapy.

2. Adequacy of hospital care will be enhanced by improving and implementing standards of care, expanding access to diagnosis and treatment, including:

a) provision of effective services, use of effective drugs that reduce the risk of mortality from myocardial infarction and prevent repeat incidents;

b) provision of access to thrombolytic therapy for patients with myocardial infarction;

c) ensuring the provision of quality monitoring and laboratory procedures for patients with cardiovascular diseases at the level of territorial and oblast hospitals;

d) appropriate management and early rehabilitation of patients with myocardial infarction and acute cerebrovascular accident at the level of oblast hospitals.

3. Scope of emergency services will be improved by increasing the efficiency of emergency medical teams at the rayon level to provide care to patients with acute coronary syndrome and acute cerebrovascular accident, based on the definition of the list of necessary equipment and medicines for these patients and equipping ambulance vehicles with necessary equipment (purchase of equipment).

## **§ 3. Continuity and new models of service**

There is no need to make significant changes to the system of organizing care for patients with cardiovascular diseases. But measures are needed to

optimize these services to ensure continuity between the levels. More efficient location of cardiologists from FMCs and outpatient diagnostic departments of the territorial hospitals should be studied as a new model of service delivery by testing a new model in the pilot areas.

1. The interaction between village health committees and primary care organizations (FAPs/FGPs/FMCs). To improve the system for informing primary care workers and their managers of patients with hypertension identified during screening studies conducted by the village health committees.

2. The interaction between hospitals and primary health care. Measures are needed that will improve the interaction of hospitals with primary health care to continue further treatment (improvement of referral and re-referral systems, information exchange, specialized care for patients at high risk).

3. Optimizing the system of specialized services delivery in an outpatient setting for patients at high risk of hypertension.

#### § 4. Barriers

The main health system barriers that prevent the delivery of core services and achievement of the expected outcomes of the Program for the control of cardiovascular diseases, are grouped by all functions of the health system and are presented in Table 3.

Table 3

#### Barriers in the field of cardiovascular diseases control

Health system functions	Barriers
Public health	<ol style="list-style-type: none"> <li>1. Poor interaction mechanisms and lack of leadership in the work which requires inter-sectoral approach to issues related to major risk factors for cardiovascular diseases (smoking, obesity, alcohol).</li> <li>2. Lack of a uniform national policy on non-infectious diseases, focused on the social determinants of health.</li> <li>3. Low adherence of the population to healthy lifestyle.</li> <li>4. Lack of interaction system between VHCs and primary health care for the control of hypertension</li> </ol>
Provision of individual services	<ol style="list-style-type: none"> <li>1. Imperfect mechanisms for the implementation of clinical protocols at the level of primary care and hospitals.</li> <li>2. Low access to emergency and specialized medical care.</li> <li>3. Lack of access to functional and laboratory diagnosis of cardiovascular diseases.</li> <li>4. Health care specialists are not trained in aspects of</li> </ol>

	<p>gender differences in diagnosis and treatment of cardiovascular diseases.</p> <p>5. External quality control has a punishing character, which reduces the actual number of cases of hypertension compared with registered cases</p>
Health care financing	<p>1. Financial gap in the SGBP does not allow to include all evidence-based services (methods of laboratory and functional diagnosis) for patients with cardiovascular diseases.</p> <p>2. Lack of economic incentive mechanisms for providers to improve the quality of services.</p> <p>3. Poor mechanisms for the formation and execution of medical education budget</p>
Formation of resources	<p>1. Shortage of cardiologists at regional level.</p> <p>2. The current system of continued medical education is imperfect.</p> <p>3. Clinical protocols are not integrated into the education system.</p> <p>4. Statins are not included into AODB MHIF and the market prices are higher than the standard international prices for generic drugs</p>
Stewardship	<p>1. Lack of leadership, poor coordination at the national and oblast levels.</p> <p>2. The unresolved issues of autonomy of suppliers reduce the commitment of leaders to improve the quality of services and performance outcomes.</p> <p>3. Imperfect monitoring system on the organization of care for patients</p>

## 8. Maternal and newborn health

In recent years, Kyrgyzstan has managed to reduce infant mortality rate and retains a tendency to further reduce it. The maternal mortality rate is still high. To date, the structure of maternal mortality is represented by postpartum haemorrhage (44.2%), hypertensive disorders (23.1%), septic complications (3.8%), i.e. those conditions that are dependent on the proper care and monitoring of women during pregnancy, childbirth and postpartum period.

An analysis of infant mortality showed that most deaths occur within 24 hours after birth, i.e. when the child is under the supervision of health workers. Therefore, to reduce infant and maternal mortality, attention must be focused on improving the quality of medical services provided in health care organizations at all levels of care and active involvement of the public and other sectors of the state in matters of maternal and newborn health.

This section presents the expected outcomes and core services for



maternal and newborn health, and the next section presents core services for child health, while the health system barriers on these two programs partially overlap and are presented together.

Table 4

**Expected health gain and expected outcomes of Den Sooluk for maternal and newborn health**

<b>Expected outcomes of the Program</b>	<b>Expected health gain</b>
1. Reduction of the number of parturients with anemia by 4% in 2014 and by 12% in 2016. 2. Reduction of cases of eclampsia by 10% in 2016. 3. Reduction of cases of postpartum purulent-septic complications with the use of surgical procedures by 10% in 2016	1. Reduction of maternal mortality.
4. Reduction of cases of postpartum haemorrhage with the use of surgical procedures by 10% in 2016. 5. Increased coverage of women of childbearing age who use modern family planning methods by 10% in 2016	2. Reduction of perinatal mortality among children weighing 2500 grams and more by 10% in 2016

**§ 1. Key population interventions**

Key events at population level should be aimed at improving women's awareness on safe motherhood and family planning. Strengthening of inter-sectoral interaction in advancing the issues of safe motherhood and family planning is also of great importance.

1. Improving the awareness of women and their families about the prevention of anemia, maternal nutrition, danger signs during pregnancy, the need for timely visit to the health care organizations for guaranteed services. The involvement of civil society (nonprofit organizations) and the media should be the key mechanisms for achieving this objective.

**§ 2. Core individual services - measures to improve the quality of services in health care organizations**

Efficient and affordable services for safe motherhood, family planning are well known. The difficulty lies in the fact that not all women in need of such services receive them in full.

1. Core services for primary health care organizations. Timely detection and management of danger signs for women during pregnancy and the postpartum period at the level of primary health care organizations through the widespread implementation of proven methods of diagnosis and treatment includes:

a) antenatal care for timely diagnosis of anemia and prescription of iron-containing drugs and folic acid, diagnosis of bacteriuria and prescription of antibiotics, early detection of hypertensive disorders and timely referral to the delivery, proper monitoring of the fetus, detection and treatment of sexually transmitted infections, prevention of HIV transmission from mother to child;

b) family planning services through the use of modern methods of contraception and counseling, counseling on preparing women for childbirth and dangerous signs of pregnancy.

2. Core services in maternity facilities include:

a) measures to reduce the risk of maternal and infant mortality in maternity facilities by providing routine and proper filling of partogram, fetal assessment, maintenance of warm chain to prevent neonatal hypothermia, ensuring competency of maternity wards staff in newborn resuscitation skills, provision of postpartum family planning counseling, advice on breastfeeding and newborn danger signs;

b) reducing cases of postpartum haemorrhage by introducing active management of the third stage of labor, monitoring of women, improving the skills and knowledge in postpartum haemorrhage, and using effective drugs to stop haemorrhage;

c) improving outcomes for women with severe preeclampsia and eclampsia by providing high quality emergency obstetric care;

d) reducing cases of postpartum septic complications by introducing perioperative antibiotic prophylaxis, reducing unnecessary examinations during labor, adequate antibiotic therapy, improving the registration of all cases of postpartum septic complications.

3. The quality of emergency care should be improved by upgrading the existing system, equipping with necessary equipment and drugs for emergency conditions in pregnant women (haemorrhage, hypertensive disorders) at the level of emergency medical care.

### **§ 3. Continuity and new models of services**

Measures to ensure continuous monitoring of women during pregnancy, childbirth and postpartum period are necessary. New models in the organization of service delivery should be tested in the pilot organizations, and their further implementation should be discussed.

1. Continuity between the organizations of primary and secondary level must be improved to ensure that women are given counseling in maternity facility and proper observation in the postpartum period at the level of primary care.

- 2. Improving interaction between the maternity facilities of regions, oblasts and organizations of tertiary level.
- 3. A new model of assessment and the certification of obstetricians and gynecologists in management of emergency conditions; the model of employees selection on a competitive basis for in organizations of tertiary level;
- 4. The model of outpatient services delivery at the level of rayons for pregnant women at high risk;
- 5. The model of transportation and counseling system to provide medical care for women and newborns.

**9. Child health**

Taking measures for reducing child mortality is an urgent issue and a priority for the government as the country should make every effort to achieve the MDGs on reducing child mortality (Goal 4). In recent years, the percentage of the main causes of death in children under 5 accounts for respiratory diseases and acute intestinal infection. The high prevalence of anemia among children has an adverse effect on the occurrence and course of disease in children. In this regard, the health care system has taken measures to reduce these rates. There are programs to enrich food products, the medicines needed to treat major diseases in children under 5 years are included into the list of essential medicines, immunization coverage is 96%.

All these achievements are important, but it is necessary to continue actions to improve the quality of health care for children: to implement proven methods of diagnosis and treatment at all levels of care, improve access to emergency care. Thus, the expected outcomes on the child health have been identified, and their achievement will be a key factor in the framework of Den Sooluk up to 2016.

Table 5

**Expected health gain and expected outcomes of Den Sooluk for child health**

<b>Expected outcomes of the Program</b>	<b>Expected health gain</b>
1. Reduction of anemia among children under 5 years by 10-15% in 2016.	1. Reduction of mortality from respiratory diseases in children under 5 years by 7% in 2016.

<p>2. Increase to 75% of children under 5 years receiving oral rehydration therapy and zinc for diarrhea.</p> <p>3. Increase to 75% of children under 5 years receiving antibiotics for pneumonia.</p> <p>4. Coverage of at least 96% of children under 2 years with vaccination complex</p>	<p>2. Reduction of mortality from diarrhea among children under 5 years by 7% in 2016</p>
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## **§ 1. Core population interventions**

Core services for the population should be aimed at informing the public about the health of children under 5 years (exclusive breastfeeding, immunization, child nutrition, danger signs and symptoms of diseases in children under 5 years in which to address the health care provider, etc.).

1. The involvement of civil society (NGOs, VHCs) and population (volunteers and other organizations) to improve public awareness of the standard package of recommended preventive services for children under 5 years, which includes an assessment of development, immunization, routine micronutrient fortification of food (mixture "Gulazyk"), diagnosis and treatment of anemia, counseling parents on the grounds of dangerous diseases in children.

2. Information support and maintenance of social mobilization for routine immunization and supplementary immunization campaigns, and conducting a week of breastfeeding.

## **§ 2. Core individual services - measures to improve the quality of services in health care organizations**

Improving the quality of services at the level of health care organizations consists in the provision of care for healthy and sick children, assessment of danger signs of disease and timely referral to the hospital, quality management of a sick child in accordance with approved clinical protocols.

1. Improving the quality of services at the level of primary care through the provision of care and monitoring healthy children and treatment of children with diseases includes:

a) ensuring the delivery of a standard package of recommended preventive services to all children, including assessment of development using the card of the child's development, immunization according to the National calendar, routine micronutrient fortification of foods (to prevent anemia and other diseases associated with micronutrient deficiency), diagnosis and treatment of anemia, counseling of parents on important preventive measures;

b) provision of necessary services and medical care for diseases in children (oral rehydration therapy and zinc for diarrhea, antibiotics for pneumonia), assessment of the condition, reasonable and timely referral to hospital.

2. Core services in hospitals based on WHO recommendations (pocket

reference book "Provision of inpatient care for children") on the management of childhood diseases include:

a) introduction of a proper division of children admitted to hospital with diarrhea and respiratory diseases (based on an assessment of urgent and priority signs of disease in an outpatient or counseling-diagnostic units), and provision of timely medical care based on proven methods and approaches;

b) provision of quality monitoring of sick children based on WHO recommendations (pocket reference book "Provision of inpatient care for children").

3. Prehospital first and emergency medical care for children at the level of primary care and emergency teams will be improved by increasing the skills of workers and providing the necessary equipment (Ambu bag, oxygen concentrator, pulse oximeter, nebulizer) and the list of drugs (epinephrine, corticosteroids, antibiotics, etc. ) to provide first and emergency medical care for children.

### **§ 3. Continuity and new models of services**

Measures are needed to improve the continuity between primary care organizations and hospitals to provide reasonable and timely hospitalization of children in need of hospital treatment on the basis of clear criteria for referrals to the hospital and the mechanisms of the re-referral of children to primary care organizations for further observation. It is necessary to study the effectiveness of new models in the organization of medical care for children under 5 years.

1. Improving the interaction of primary care organizations and hospitals.

2. Studying the possibility to create a surveillance system for congenital malformations.

3. Improving the system of medical and rehabilitation care provision for children with disabilities.

4. Developing medical and genetic service (birth defects, hereditary diseases).

### **§ 4. Barriers**

Barriers to adequate delivery of core services and to achievement of outcomes in reducing maternal and infant mortality are presented in Table 6.

Table 6

#### **Barriers to the maternal and child health**

<b>Health system functions</b>	<b>Barriers</b>
Public health	1. Poor involvement of other sectors in the maternal and child health.



	<p>2. Low awareness and responsibility of population regarding maternal and child health</p>
Provision of individual services	<p>1. Insufficient knowledge and skills of primary care specialists in the diagnosis of pregnancy danger signs, danger signs of diseases in children.</p> <p>2. Low levels of accessibility to the emergency care reduces the quality and timeliness of emergency care.</p> <p>3. Infrastructure of hospitals does not comply with the provision of quality services (water, heat, sewage, etc.).</p> <p>4. Low efficiency and quality of laboratory services</p>
Health care financing	<p>1. Absence of mechanisms for differentiated payment for services focused on quality.</p> <p>2. Imperfect system of drug provision for uninsured pregnant women.</p> <p>3. Lack of sustainable policies for financing capital investments to improve infrastructure.</p> <p>4. Lack of state financing to procure contraceptives</p>
Formation of resources	<p>1. Imbalance of specialists in the regions and cities (neonatologists, obstetricians-gynecologists).</p> <p>2. Insufficient knowledge and skills of specialists in efficient technologies.</p> <p>3. Low level of professional competence among the staff of tertiary care organizations.</p> <p>4. Ineffective personnel policies for the development of managerial staff at all levels</p>
Stewardship	<p>1. Lack of autonomy of health care organizations reduces the interest to improve intra-facility management, to conduct internal quality control, monitoring and to improve laboratory services and etc.</p> <p>2. Poor system of monitoring activities on maternal and child health.</p> <p>3. Imperfect system of quality control for measures on the organization of care for pregnant women and children</p>

## 10. Tuberculosis

Political commitment of the State to implement measures aimed at reducing morbidity and mortality from tuberculosis has been achieved in the Kyrgyz Republic; there have been adopted national programs "Tuberculosis-1, 2 and 3" based on the principles of the WHO Stop TB Strategy. Despite the stabilization of the morbidity and mortality rates, the epidemiological situation of tuberculosis in Kyrgyzstan remains unfavorable. The growth of primary and secondary resistance is the evidence of serious problems at all stages of treatment. The TB problems are associated with: the incompetence of the primary health care and laboratory services; overdiagnosis of TB among patients with a negative smear result, including children and adults; unacceptably high rates of treatment interruption, poor organization of directly observed treatment at the PHC level, as well as the lack of effective social support for patients to improve adherence to treatment. Virtually, there are no effective systems of infection control, both at the hospital level and at the level of primary health care. This, combined with the unnecessary hospitalization of patients with negative results of sputum and prolonged hospitalization of patients with a positive smear result, contributes to the nosocomial spread of tuberculosis (including multidrug-resistance TB) among adults and children.

Table 7

### Expected health gain and expected outcomes of Den Sooluk for TB

Expected outcomes of the Program	Expected health gain
<ol style="list-style-type: none"> <li>1. Improvement in detection of new cases of bacillary TB bacilli up to 70% in 2016.</li> <li>2. Improvement in new bacillary TB cases successful treatment rate up to 85% in 2016.</li> <li>3. Coverage with treatment for patients with drug-resistant TB up to 85% in 2016</li> </ol>	<ol style="list-style-type: none"> <li>1. Decreased TB mortality rate below 8 cases per 100000 population in 2016.</li> <li>2. Decreased incidence below 92 cases per 100000 population in 2016</li> </ol>

#### § 1. Core population interventions

Core services for the population will be performed in areas of primary and secondary prevention of tuberculosis, patient education, stigma reduction among the population and in the community, targeted and intensive social support for patients to improve adherence to treatment and services for vulnerable groups of patients with tuberculosis. Priority areas of Den Sooluk in the work with population are as follows:

1. Active involvement of civil society, media and other organizations to assist in identifying TB, treatment success rate, prevention of stigma and discrimination among the population, with a focus on particularly vulnerable groups (migrants, drug addicts, former prisoners and others) includes:

a) provision of social support to TB patients, including patients with drug-resistant forms, organization of supervised treatment on an outpatient basis with the involvement of local communities (VHCs, etc.);

b) comprehensive campaign to raise awareness on the rights to free services for the diagnosis and treatment of tuberculosis in primary care and in hospital, and on a new model of treatment of TB patients in outpatient settings.

2. Improvement of the mechanisms of epidemiological surveillance for early detection of defects in the quality that could increase the incidence of drug-resistant TB.

## **§ 2. Core personal services - measures to improve the quality of services in health care organizations**

It is necessary to review existing clinical protocols for tuberculosis in accordance with international recommendations, taking into account the new diagnostic possibilities and proposed models of care. Internal and external quality control mechanisms that will eliminate barriers to quality health care are required in order to introduce the updated standards for diagnosis and treatment of tuberculosis, including drug-resistant forms, into the activities of health care organizations and health professionals. Creating multi-disciplinary teams with TB specialists, laboratory technicians, staff members of primary care, as well as representatives of local self-government can be an effective approach to solving problems with the quality of services at the level of health care organizations. It is essential to develop policies and implement WHO-recommended infection control measures at the primary care level. Also infection control measures to minimize nosocomial spread of multidrug-resistant tuberculosis should be prioritized in the restructuring of services for the treatment of tuberculosis.

1. Provision of core services for tuberculosis at the primary care organizations includes:

a) detection of TB cases through compliance with the standard of conducting smear microscopy in all patients with cough for more than 2 weeks; improved selection of patients with cough and sputum collection by nurses and fieldshers; a reliable laboratory interpretation of smear, measures for internal and external quality control and implementation of standard operating procedures;

b) improved diagnosis of tuberculosis in children through compliance with the techniques of conducting and interpreting the tuberculin skin test, improved diagnosis and management of children with positive tuberculin skin test and control of children from the contact group;

c) improved approaches to the organization of directly observed treatment of tuberculosis at the primary health care organizations;

d) effective infection control measures in primary care organizations: separation of the flow of patients, adherence to cough ethics, assessment and isolation of potentially infectious patients;

e) introduction of new rapid diagnostic methods (GeneXpert) with all the necessary conditions for training, maintenance, and quality assurance measures.

2. Delivery of core services provided in TB hospitals, including medical facilities of the penal system includes:

a) application of standardized schemes of controlled chemotherapy for the treatment of newly diagnosed TB patients;

b) full coverage with second-line drugs treatment of patients with drug-resistant TB;

c) provision of nosocomial infection control by separating patients with drug-resistant forms, as well as patients with positive sputum from patients with negative sputum;

d) introduction of a new methodology for determining the sensitivity to anti-tuberculosis drugs in hospitals and improvement of the quality of TB diagnosis;

e) improved diagnosis and treatment of tuberculosis in health care facilities of the penal system.

### **§ 3. Continuity and new models of services**

It is necessary to make changes to the system for organizing and delivering medical care to TB patients and to improve the referral system between organizations at different levels. Delivery of individual services will be developed from the treatment in the hospital to the treatment on an outpatient basis. These changes should be implemented step-by-step, with the study of favorable factors and the elimination of negative aspects. The practice of the transition to outpatient treatment of TB patients should be expanded gradually, starting with patients with a negative smear, then patients with positive sputum smears. The changes promoted by the reform of the financing of TB service will help to strengthen the integration at the primary level, increase in resources allocated to each individual case, for hospital patients with TB.

1. Development of a system of continuity between the penal system and the health system for the completion of treatment of patients (former prisoners).

2. Introduction of a new model of complete outpatient treatment of TB patients in the pilot areas.

### **§ 4. Barriers**

Despite the fact that the consolidated data on mortality and morbidity rates show a slight improvement since 2004, the emergence of MDR TB is a sign that the Program does not work. This is not only due to factors beyond the control of the program, such as poverty, living and working conditions of illegal migrants, but also due to the lack of stewardship and poor general personnel

management, infection control, system for the maintenance of equipment, transport and communication. There are several barriers to health care system to the effective containment of the epidemic of tuberculosis, which are presented in Table 8.

Table 8

**Barriers to tuberculosis control**

<b>Health system functions</b>	<b>Barriers</b>
Public health	<ol style="list-style-type: none"> <li>1. Public health activities are not coordinated with TB activities.</li> <li>2. Imperfect mechanism for the state surveillance and control of tuberculosis</li> </ol>
Provision of individual services	<ol style="list-style-type: none"> <li>1. Imperfect system of individual health services delivery at all levels of care.</li> <li>2. Lack of autonomy of providers (financial, managerial) affects the quality of services (infection control).</li> <li>3. Clinical protocols for tuberculosis are not updated.</li> <li>4. Mechanisms to implement infection control measures are not developed.</li> </ol>
Health care financing	<ol style="list-style-type: none"> <li>1. Financing of TB hospitals does not have a stimulating effect on the quality of services.</li> <li>2. Financial gap in the SGBP will lead to an increase in informal payments and the financial burden on the population and will limit access to diagnosis and treatment of tuberculosis</li> </ol>
Formation of resources	<ol style="list-style-type: none"> <li>1. Shortage of nursing personnel and TB specialists.</li> <li>2. Insufficient knowledge and skills of medical personnel of primary care</li> </ol>
Stewardship	<ol style="list-style-type: none"> <li>1. Lack of inter-sectoral interaction and coordination of TB control activities.</li> <li>2. Poor interaction with public authorities on implementation of the Law of the Kyrgyz Republic "On protection of population from tuberculosis".</li> <li>3. Poor interaction with the AIDS service to prevent tuberculosis in HIV-infected</li> </ol>



## 11. HIV infection

Control of HIV infection spread is a priority for the Government of the Kyrgyz Republic in the field of public health. According to sentinel surveillance, the country is at the concentrated stage of HIV infection and the prevalence of HIV infection among injecting drug users was 13.6%. On the other hand, in recent years the number of women living with HIV and infants born to HIV-infected mothers has increased, which indicates the transition of HIV infection from the drug injectors' environment to the general population. One possible reason for the growth and increase in the prevalence of HIV infection is the limited coverage with preventive interventions of vulnerable groups, also a low awareness of the population of measures for the primary prevention of HIV infection is of great importance. In the past few years, a parenteral route of HIV transmission has become especially important for the health system of our country, which indicates a problem with the safety of medical procedures. Thus, the expected outcomes on the control of HIV infection have been defined in the framework of Den Sooluk, the achievement of which will be key in stabilizing the incidence of HIV infection at a concentrated stage.

Table 9

### Expected health gain and expected outcomes of Den Sooluk for HIV infection

Expected outcomes of the Program	Expected health gain
<ol style="list-style-type: none"><li>1. The share of the key population tested for HIV and knowing the results - 80% by 2016.</li><li>2. Reduction of vertical transmission of HIV to 3% by 2016 in born children.</li><li>3. Increase in the share of people living with HIV infection continuing antiretroviral therapy after 12 months since its commencement</li></ol>	Retention of HIV infection spread at concentrated stage

#### § 1. Core population interventions

The main purpose of the activities is to increase population and community awareness about prevention measures, transmission routes and spread of HIV infection. It is necessary to enhance communication, information, health education activities (campaigns, speeches, outreach, etc.). In the

framework of Den Sooluk, the population will be provided with the following core services:

1. Efforts to reduce risky behavior among key population, young people.
2. Preventive work with population through the VHCs, schools, work with local keneshes, aiyl okmotu etc.
3. Interaction with non-profit organizations and communities on prevention, adherence to treatment, care and support.
4. Work with families of people living with HIV, provision of assistance to family members on the issues of care and support, prevention of "burning", adherence to treatment, prevention of HIV transmission from mother to child, etc.

## **§ 2. Core individual services - measures to improve the quality of services in health care organizations**

Major efforts should be aimed at providing a basic package of services for the diagnosis of HIV infection among key populations, providing antiretroviral drugs and the safety of medical procedures for the prevention of HIV infection.

1. Core services at the level of primary care organizations include:
  - a) full coverage with counseling and referral of key population groups for HIV testing;
  - b) people living with HIV infection receive antiretroviral therapy and are registered in accordance with clinical protocols;
  - c) examination of pregnant women for HIV infection in primary care organizations;
  - d) diagnosis and prevention of HIV in TB patients, prevention and treatment of TB in people living with HIV.
2. Core services at the hospital level:
  - a) conduct of a rapid test for pregnant women unexamined for HIV in childbirth, prevention and treatment with antiretroviral drugs in maternity facilities for early detection and prevention of HIV infection;
  - b) ensuring the safety of medical procedures for medical personnel (personal protective equipment, training of medical staff, post-exposure prophylaxis);
  - c) external and internal quality control of laboratory studies for HIV, control of nosocomial infections;
  - d) treatment of opportunistic infections in hospitals in the profile of these diseases (infectious units, dermatovenerological, neurological, narcological, somatic, etc.);
  - e) provision of maternity facilities with antiretroviral drugs and rapid tests for early detection of HIV-infected pregnant women.

### § 3. Barriers

Despite these efforts, the HIV epidemic continues to grow. Lack of continuity in providing care to released prisoners, nosocomial infection, inadequate overall prevention and control of infections pose a threat to public safety. Inadequate funding, low cost-effectiveness of interventions, inadequate capacity to provide services and geographical distribution, inadequate monitoring and evaluation system - all these prevent the stabilization of the epidemic. The existing stigma and discrimination against vulnerable groups and people living with HIV infection by society in general and health care workers in particular are a barrier to timely counseling, treatment and care. These issues should be recognized as basic problems that require political support and deserve attention in the implementation phase of the new reform program (Table 10).

Table 10

#### Barriers to HIV infection control

Health system functions	Barriers
Public health	<ol style="list-style-type: none"> <li>1. Lack of awareness of preventive measures, HIV transmission and spread among key population groups.</li> <li>2. Duplication and poor coordination of the communication strategy for vertical programs.</li> <li>3. Imperfection of the epidemiological surveillance.</li> <li>4. High levels of risky behavior among young people</li> </ol>
Provision of individual services	<ol style="list-style-type: none"> <li>1. Limited access to quality health care for diagnosis and treatment of sexually transmitted infections and HIV infection.</li> <li>2. Limited access to counseling and testing for HIV.</li> <li>3. Poor material provision of health care organizations for the activities of infection control and disposal of medical waste (personal protection equipment, instruments, etc.).</li> <li>4. Lack of internal and external quality control of laboratory studies for HIV.</li> <li>5. High levels of stigma and discrimination against people living with HIV infection, including health care organizations</li> </ol>
Health care financing	Lack of financial sustainability of programs in the field of HIV infection

Formation of resources	<ol style="list-style-type: none"> <li>1. Poor coordination of issues for medical personnel training.</li> <li>2. Poor quality of training at the undergraduate level, and poor adherence to HIV infection in the educational process.</li> <li>3. Imperfect mechanisms for implementing clinical protocols and clinical guidelines, quality of education</li> </ol>
Stewardship	<ol style="list-style-type: none"> <li>1. Lack of intrasectoral mechanisms for coordinating the interaction on HIV infection.</li> <li>2. Risk of decrease in political commitment during change in top management of the health sector.</li> <li>3. Lack of coordination of inter-sectoral and interagency cooperation in matters of HIV infection.</li> <li>4. Imperfect monitoring and evaluation system</li> </ol>

To eliminate barriers to the delivery of necessary core services, to the implementation of programs and activities for the achievement of expected outcomes in order to improve health indicators, Den Sooluk will offer ways to address them, which ultimately will strengthen the core functions of public health.

#### **IV. Overcoming systemic barriers to core services coverage through strengthening all health system functions**

As discussed in previous sections, a number of barriers to health system impede the provision of core services to the population in the priority areas. Den Sooluk takes a focused approach to strengthening health system, focusing on the elimination of those barriers to health care system that have been identified earlier. Many of the barriers identified in the previous section, were similar across all four priority areas, they were defined as the systemic barriers and were divided by different health system functions:

- public health;
- delivery of individual services;
- health care financing;
- resource generation;
- stewardship.

#### **12. Public health**

In the implementation of the objectives of public health service to achieve the expected outcomes of Den Sooluk there are a number of barriers associated with:

- a) lack of inter-sectoral approach in the development of healthy lifestyles and prevention of noncommunicable diseases in the context of social determinants of health;

b) insufficient involvement of the population to protect and strengthen their health, as well as poor communication strategy;

c) mechanisms of the service that are not adapted to the demands of the modern concept of public health.

Given these barriers, the activities of public health system in the framework of Den Sooluk will be reoriented to strengthen inter-sectoral collaboration for promoting a culture of health, to change behavior of the population, increase knowledge about the basic aspects of health and direct efforts to eradicate the social, behavioral and other factors adversely affecting health, as well as to expand health promotion services and optimization of public health services.

## **§ 1. Strengthening inter-sectoral approach to public health**

Addressing the problems associated with the health protection and promotion requires the active involvement of all sectors of society. In this regard, it is necessary to have a platform for inter-sectoral and multi-disciplinary collaboration on the issues of health protection and promotion oriented at socio-economic determinants of health, where the contribution of each sector will be determined. In addition, it is necessary to develop mechanisms for regular and continuous coordination at the highest level of government for effective inter-sectoral work. Public health services will focus on introducing new approaches to solving problems related to social determinants of health (alcohol, drugs, smoking, quality of life, nutrition, traumatism, stress, infections, etc.), creating new kinds of partnership in the protection and strengthening health that provide for the active involvement of the community, increasing the readiness of the state to the new threats and emergencies, etc.

Such an approach would need to further revise and modernize the legal framework of public health for effective inter-sectoral work (for example, attracting and increasing the responsibility of business entities, civil society for the preservation and promotion of health of the population), taking into account the new health system functions.

The main activities include:

1. Creation of Inter-sectoral Coordination Council on Public Health.
2. Development and implementation of the Strategy for the prevention and control of noncommunicable diseases in the Kyrgyz Republic, taking into account the social determinants of health.
3. Implementation of the strategy to promote the principles of a healthy lifestyle, with the active involvement of the education sector (programs "Healthy schools", "Healthy lyceums", etc.).
4. Further development of inter-sectoral cooperation in matters of micronutrient enrichment of food products (flour fortification, iodized salt, etc.).
5. Development and improvement of legislation in the field of public health (drafting the laws of the Kyrgyz Republic «On social advertising in the

Kyrgyz Republic", "On biological safety," the development and adoption of technical regulations, making amendments and additions to the Law of the Kyrgyz Republic "On Public Health" and etc.).

## **§ 2. Extension of health promotion services**

Separation of health promotion as an individual service with subsequent integration with primary health care, would contribute to the development of a comprehensive approach to addressing issues of health promotion, creation of conditions of public participation in prevention activities. Strengthening health promotion will be conducted by extending the work with the community, identifying effective approaches to working with the population in cities and major regional centers, expanding activities for health promotion and healthy lifestyle and coordinating health promotion activities in priority areas of Den Sooluk. The "Community Action for Health" will receive legal status and will be distributed in all regions of the country. Health promotion activities will include the active involvement and strengthening the role of the media, improvement of inter-sectoral cooperation, development of political commitment to a healthy way of living, social advertising, and more active involvement of the population.

The main activities include:

1. Extension of the work with communities, introduction and institutionalization of the "Community Action for Health" in all regions.
2. Development and implementation of a mechanism to involve the urban population in the programs of health promotion and disease prevention (program "Healthy Cities", etc.).
3. Coordination of information and educational programs within the priorities of Den Sooluk.
4. Enhancing the role of media in promotion of health.

## **§ 3. Optimization of the public health system**

Provision of sanitary and epidemiological welfare of the population still remains one of the main objectives of the health system in protecting and promoting public health. For more effective provision of this function, it is necessary to take actions directed at structural and financial reforms of the institutions of the State Sanitary and Epidemiological Surveillance, to ensure adequate funding of public health services, to introduce new systems of state epidemiological surveillance over priority communicable and noncommunicable diseases, to carry out the accreditation of laboratories in public health centers, to provide regular evaluation of public health services. The main activities include:

1. Further implementation of structural and functional changes, provision of adequate funding, strengthening the material-technical base of institutions of the State Sanitary and Epidemiological Surveillance.



2. Technical assistance for accreditation of laboratory in the centers of the State Sanitary and Epidemiological Surveillance institutions.
3. Strengthening human resource capacity of public health system.
4. Further development and implementation of new surveillance systems for diseases and increased government regulation.
5. Increased efforts to ensure the safety of medical procedures and disposal of medical waste.
6. Provision of regular internal and external evaluation of public health services on the basis of an agreed methodology for assessing indicators.

### **13. Provision of individual health services**

The existence of barriers to individual services that prevent the proper delivery of core services adversely affects not only the priorities but also all health services provided under the SGBP. Activities related to this component aims to strengthen health services delivery system and to remove the barriers to the provision of core services in the health care system that undermine the achievement of outcomes in the four priority program areas. The main barriers to be overcome in this section of the Program are as follows:

a) inefficient system of providing individual services for the population, resulting in reduced attendance of PCH, a growing number of hospitalizations including a large number of unnecessary hospitalizations and polypragmasy;

b) lack of full autonomy status in the management of health care organizations, which affect the quality of services provided (inefficient intra-organizational management, laboratory service, etc.);

c) low potential of the individual services delivery system in the management and continuous quality improvement.

Overcoming these barriers will be implemented through further optimization of individual health services delivery at various levels of health system, implementation of full autonomy for providers of medical services, strengthening of management system and improvement of the quality of medical services.

#### **§ 1. Further optimization of individual health services delivery to population at various levels of health care**

The issues of optimization of medical care and laboratory services at all levels, increasing their availability to the public are considered as major objectives in order to achieve sustainable improvement in health care. The political decision that the organizations of primary care will not be merged with hospitals and general hospitals will not be separated is the cornerstone in the future organization of individual health services delivery.

Despite the progress in the restructuring of regional and oblast hospitals, the problem of reorganization of hospitals in the cities of Bishkek and Osh remained unsolved. Lack of separation of functions of the organizations of secondary and tertiary levels and system of patients' referral and re-referral has led to duplication of their activities, inefficient use of material and financial resources. Lack of qualified outpatient-diagnostic specialized care at hospitals does not allow regulating the flow of patients and providing a profile and reasonable hospitalization.

Another important area of delivering individual health services is to provide emergency medical care to population. It is necessary to solve problems related to understaffing of ambulance teams with qualified personnel, imperfect mechanisms for their funding.

It is also necessary to ensure adequate development of specialized and high technology services (cardiac surgery, transplantation, oncology, palliative care, radiology) and to improve accessibility to the entire population. Specialized care (psychiatry, oncology, tuberculosis, etc.) requires improving the quality of services, improving their interaction with general health care organizations. To solve these problems, the following activities have been defined:

1. Improvement of the provision of primary health care to the population, which includes:

a) strengthening the role of medical personnel in FAPs in the provision of health and prevention services for priority medical and sanitary problems of health care on the basis of determining the minimum list of services for FAPs and the mechanisms of financial incentives;

b) improvement of the interaction of FGPs, FMCs and territorial hospitals in the organization and provision of assistance and strengthening their capacity to monitor and support the activities of FAPs;

c) optimization of the activities of FMCs in providing primary health care to the population with the solution of issues related to narrow specialists of FMCs, functioning of emergency medical care, dental service development and improvement of interaction with hospitals;

d) review of activities of the general practice centers to enhance the provision of primary health care to the population;

e) development of the system for hospital-substituting technologies with the solution of the issue of their financial security.

2. Optimization of the provision of inpatient services at various stages of care requires:

a) to structure the system for providing inpatient services (mapping the network of hospitals, list of equipment, guidelines, system of phased continuous care, amounts and types of services, referral and re-referral system, laboratory and diagnostic services);

b) to strengthen the role of oblast hospitals to deliver highly specialized medical services and to provide advisory and methodological assistance to regional hospitals;

c) to reorganize the system for delivery of outpatient specialized care in hospitals (regulatory acts, financing, referral and re-referral system, recording and reporting form).

3. The development of urgent and emergency health care includes:

a) creation of structural and functional model based on the mapping of the system for the provision of urgent and emergency care with rational dislocation, regulatory acts;

b) improvement of the quality of emergency care by increasing the capacity of staff;

c) ensuring responsiveness of health care organizations to work in emergency situations on the basis of necessary regulatory acts and organizational preparation for the operation;

d) ensuring responsiveness of all the hospitals in the republic to provide emergency and urgent medical care.

4. The development of specialized and high-technology medical care requires:

a) streamlining the activities of health care organizations of tertiary level based on clear criteria, types and amounts of services;

b) development of the concept to improve specialized medical care (psychiatry, oncology, tuberculosis, palliative care, etc.), and implementation of mechanisms to ensure the availability of these services to the population;

c) completion of the restructuring of the system for the provision of individual medical services in the cities of Bishkek and Osh;

d) transition of specialized medical care (psychiatry, oncology, etc.) to the Single Payer System.

## **§ 2. Implementation of new institutional relationships in the provision of individual services (autonomy of providers, new management mechanisms)**

Autonomy of service providers, introduction of mechanisms for their accountability will be crucial for the adoption of quality management practices at the institutional level. Full autonomy of providers - new institutional relationships between providers, the Ministry of Health and MHIF - necessitates a clear definition of additional structural and functional changes.

One of the reasons for the unrealized mechanisms for autonomy of providers was the lack of clear regulation of this approach. Effective mechanisms and management tools are required to enhance autonomy and decentralize management. The levers must have both an external (interaction with the MOH and MHIF, etc.) and internal orientation (intra-organizational management). This will streamline the management on the assumption of the

allocation of sufficient resources and managerial capabilities, which subsequently will have a positive impact on the efficiency and capacity of service providers. The improvement of the normative basis and regulatory framework to enhance the autonomy of health care organizations is required for the solution of these problems:

a) to harmonize the normative framework for regulation of health care organizations' activities, their interaction with local authorities, the Ministry of Health and the payer;

b) to improve the mechanisms and levers of management for effective inter-sectoral interaction of providers with the Ministry of Health (contracts for the provision of basic services plus the opportunity to develop new services), with the MHIF (contracts for payment of the mandatory services) and other health organizations (for additional services on a contract basis, etc.);

c) to implement mechanisms for development of the capacity of management service providers under autonomy for effective planning and achievement of set goals;

d) to expand the economic independence of health care organizations through increased responsibility for economic performance, based on a single criteria system.

### **§ 3. Strengthening the management system and improving the quality of medical services**

An effective quality management system includes planning the quality of services, its monitoring and system of continuous quality improvement. Unfortunately, many activities to improve the quality are being implemented without proper involvement of service providers - health care organizations. Created structures (committees of quality) are not trained in quality improvement tools, the mechanisms for implementing clinical protocols and guidelines into the activities of health workers are not worked out, the existing mechanisms of stimulation through labor force participation rate are not based on indicators of quality. It is therefore necessary to create all necessary conditions to ensure that the service providers themselves can manage their activities and improve the quality of services.

Quality management includes several aspects (internal monitoring and quality assessment, planning and continuous quality improvement), and the success of interventions will depend on their complexity and permanence. For the effective implementation of clinical protocols and guidelines, it is necessary to implement the tools and approaches for the medical personnel. Ability to use existing information system to identify problems and track change is an important part in improving the quality of medical services. The practice of studying patient satisfaction will help make arrangements for quality improvement more efficient. For this purpose, the following is required:

1. Introduction of quality management system in health care organizations provides for:

a) optimization of the quality management system in health care organizations;

b) increase in the capacity of health care organizations on quality management;

c) introduction of incentive mechanisms for stimulation of motivation of health care organizations and health professionals to provide quality services;

d) strengthening the activities of health care organizations in the sphere of nosocomial infection control.

2. Improving the mechanisms for the introduction of clinical protocols and guidelines in practical health care, which requires:

a) introduction of the system for continuous quality improvement of medical services in the activities of health care organizations for the continuous introduction of clinical protocols and guidelines based on evidence-based medicine in practical health care.

b) introduction of the system for internal monitoring in health care organizations.

#### **14. Health care financing**

The component "Health Care Financing" in accordance with the overall strategy of Den Sooluk also focuses on improving the quality of health services and improving health outcomes. To achieve these goals, the systemic barriers should be eliminated, such as:

- lack of balance in the budget funding of the sector regarding government obligations and the need for health services;

- imperfect system of payment for medical services, resulting in constant growth of quantitative indicators of services provided, but not improving qualitative indicators;

- low efficiency of the management of financial resources for health care.

To overcome these barriers to the component "Health Care Financing", the efforts will be focused on strengthening the three basic functions of financing (collecting, pooling resources and purchasing), introducing mechanisms for economic stimulation of quality with focus on the priorities of Den Sooluk: cardiovascular diseases, maternal and child health, tuberculosis and HIV infection, as well as improving the efficiency of sector's financial resources management.

##### **§ 1. Inadequate budget funding of health care sector regarding government obligations in the provision of health services**

Inadequate financing of health care sector regarding government obligations and the needs of the population for health services has led to a

financial gap that primarily affects the provision of drugs and quality of material and technical equipping of health care organizations, and makes it impossible to include all necessary services into the SGBP.

The low level of funding for construction and repair of medical institutions for over 20 years led to a serious deterioration in the sector infrastructure, including water supply and heating systems. Outdated infrastructure of hospitals makes it impossible to maintain the necessary measures to comply with infection control precautions and safety of medical procedures (personal protection equipment, instruments).

Thus, the solution to this problem lies in improving the mechanisms for the collection, storage and distribution of resources, determining the appropriate balance between public and private financing of health system, increasing capital investment to improve infrastructure of health care organizations. It is also important to clearly distribute the functions and responsibilities of all structures of the sector. The following activities have been defined to achieve the objectives.

1. Increasing the stability of public funding of health care with the preservation of principles of unity and solidarity includes:

a) improvement of the process for planning the proceeds and expenses of the health system in accordance with the nationwide development strategy and the targets of the state budget;

b) establishment of foundations for public-private partnership in health care system through private sector involvement in the implementation of health programs;

c) formation and implementation of effective investment policy to attract funds from international donors into the health sector, regulation of activities of international organizations on the territory of the Kyrgyz Republic in the sphere of health care;

d) development and implementation of the program of capital investment in health care to upgrade infrastructure and medical equipment.

2. Strengthening the Single Payer System by increasing funding for the SGBP includes:

a) strengthening of mechanisms existing in the MHIF to raise funds for the implementation of the SGBP;

b) transition of the current budget and insurance financing system of the SGBP from infrastructure to health insurance;

c) comprehensive review of co-payment policy in the implementation of the SGBP and benefits to meet the needs of the poor, including co-payment for childbirth.

3. Determination and distribution of functions and responsibilities of the MOH, MHIF and health organizations in the management of financial resources of the health sector provides for:

a) definition and delimitation of functions, powers and responsibilities: MOH - management and generation of resources; MHIF – financing the sector



activities; health organizations - providing medical, sanitary, pharmaceutical, preventive and other services;

b) improvement of legislation regulating the relationship between the MOH, MHIF and the Ministry of Finance of the Kyrgyz Republic (hereinafter - the MOF) on the formation of public policy of budget financing for the sector, coordination of joint activities for the implementation of health programs;

c) formation of the budget, including on a program basis: development of regulations that determine the procedure and the rules for public health programs; definition of powers and responsibilities of implementing agencies; division of health care organizations and financial flows by programs (Table 11).

Table 11

**Funding for various programs  
of health care system**

<b>Health care programs</b>	<b>Implementing agencies</b>	
State guaranteed benefit package program for the provision of health care services to citizens of the Kyrgyz Republic		MHIF
Public health	MOH	
High-technology care fund	MOH	
Educational programs	MOH	
Medical and social rehabilitation	MOH	
Administration	MOH	
Additional Outpatient Drug Benefit of Mandatory Health Insurance for the provision of drugs to insured citizens on an outpatient basis		MHIF

**§ 2. Imperfect system of payment for medical services**

Financing of the health care system without taking into account quality indicators of service delivery system does not have an effective influence on improvement of human health and the health care system as a whole. In the framework of Den Sooluk, there will be improved the methods of payment for hospitals that will take into account the quality of health care organizations, include strengthening of strategic planning, procurement and review of the role of agreements between the MHIF and health organizations.

1. Improving mechanisms for the purchase/payment for medical services in the Single Payer System involves:

a) introduction of economic incentives for improving quality of care in the Single Payer System, based on existing funding mechanisms;

b) improvement of the existing payment system for hospital care to enhance the motivation of service providers to optimize the structure of hospital services, rejection of unnecessary hospitalizations, development of hospital-replacement technologies;

c) development and implementation of performance indicators of health care organizations reflecting the quality indicators and a system of their monitoring and evaluation by the priority areas of Den Sooluk;

d) further optimization of the procurement of services of primary health care, financial support for preventive activities in primary health care;

e) improvement of legislation and development of regulatory standards on the accumulation of all resources of the health care system at the national level;

f) integration of vertical systems for specialized medical services delivery (psychiatry, tuberculosis, oncology, hematology) into the SGBP and results-based financing within the Single Payer System.

2. Improvement of programs for drug benefit provision of citizens on an outpatient basis includes:

a) improvement of mechanisms for procurement of services according to ADP MHIF "Drug Benefit Provision Program for Insured Citizens at Primary Level" based on the prioritization of drug provision for vulnerable categories of patients (chronic patients, children, pregnant women);

b) improvement of mechanisms of drug provision services for people on an outpatient basis under the SGBP;

c) improvement of the contractual relations between providers of pharmaceutical services and customers with a focus on equality of partners and reducing financial risks for providers.

3. Improvement of the system of payment for services by the MOH provides for:

a) improvement of public health financing, development of criteria and mechanisms for the economic impact of funding on the activities of public health;

b) improvement of mechanisms for procurement of services and resources of high-technology care fund;

c) further reforming of the funding mechanisms for other programs administered by the MOH with a focus on funding for educational programs.

### **§ 3. Low efficiency of the management of health care financial resources**

Without well-functioning system of financing the health sector it is impossible to achieve universal coverage of population with health services, to maintain and strengthen the position of the health care in achievements of the previous reforms to ensure financial protection and access to medical services. It is important to focus efforts on improving the capacity of managers and financial employees of the sector and creating conditions and incentives for

providers of health services to improve knowledge on financial management, internal control and management accounting. Fiduciary aspects, as reflected in the implementation of Manas Taalimi, have continued in Den Sooluk as inextricably linked to enhancing the capacity of the sector and effective management of financial resources of the system. It is necessary to develop activities to enhance the capacity and effectiveness of the management of financial resources of the sector, as well as to reduce the fiduciary risks that impede the successful implementation of goals and objectives of Den Sooluk.

1. Fiduciary aspects to improve efficiency of management of health resources include:

a) improvement of the capacity of professionals of the MOH, MHIF, managers and financial workers, formation of the system of financial management in health care;

b) continuation and completion of processes to automate accounting and reporting;

c) integration of information systems of the MHIF and the MOH, creation of a unified medical and financial information resource;

d) improvement and institutionalization of the process of data collection and compilation of National Health Accounts;

e) improvement of procurement mechanisms, increasing the capacity of professionals to develop and evaluate technical specifications at the level of the MOH and in health care organizations;

f) strengthening of internal audit and internal control, development of regulations to establish a system of internal control for health organizations, strengthening of management within health care organizations;

g) financial and operational audit according to international standards on an annual basis.

2. Increasing the financial autonomy of health care organizations includes:

a) increasing the autonomy of health care organizations to use the funds of the state budget, mandatory medical insurance and co-payment;

b) improvement of legislation in the management of internal resources of providers (financial, material, personnel, etc.), increasing the efficiency and effectiveness of their use and preservation;

c) introduction of contract system between service providers and managing agencies to clearly identify and distinguish the roles and responsibilities, as well as increasing autonomy and accountability of providers.

## **15. Formation of resources for health care system**

Policy of resources formation for the health care system is an important part of Den Sooluk, which consists in the provision of the necessary resources for effective functioning of the health care system. The process of formation and mobilization of resources begins with the fact that based on an existing resource

potential of the health sector, it is necessary to further increase it in line with the ongoing strategy.

Development of resource formation policy is carried out in the following areas: investing in human resources; drug policy; health care information systems.

## **§ 1. Investing in human resources**

Prospects for development of health care depend on the quality of medical and pharmaceutical staff. To date, the main requirement of the labor market of public and private health sectors of the Kyrgyz Republic is the preparation of competitive professionals whose level and quality would meet the needs of society as a whole. The set objectives should be provided by the system of medical education, the main elements of which are the level of the teaching staff, availability of instructional literature, presence of a clinical site, the state educational standards of higher and secondary vocational education, as well as the system of postgraduate and additional professional education.

Lack of health care human resources in rural and remote areas of the Kyrgyz Republic continues to deteriorate. The problem is not in the absolute number of trained personnel, but in the number of professionals needed for rural areas (eg., doctors in family medicine), lack of social and economic conditions to attract young professionals, poor involvement of representatives of LSGs and LSAs to address staffing issues in the field. To date, two main conditions determine the selection of workplace by professionals – these are the availability of housing (social benefits, the degree of development of social infrastructure) and the wage.

Therefore, the actions of the Ministry of Health for human resources policy should be aimed at addressing the following barriers: irrational distribution of medical staff resulting in a critical situation with medical specialists in the country, especially in remote and inaccessible areas; there is incompliance of the system for professional training with the needs of practical health care and modern international standards.

1. Irrational distribution of medical staff resulting in a critical situation with human resources in the country, especially in remote and inaccessible areas, requires:

a) improvement of mechanisms to attract young specialists in rural and remote areas, providing for contracts between the young specialist and the administration of LSGs, LSAs for the provision of certain social guarantees;

b) improvement of the system of compulsory state distribution of specialists who have received education at the expense of the state budget, and increasing the responsibility for refusing mandatory two-year working-off;

c) development of mechanisms for prospective planning and staffing of medical personnel on the basis of the formation of target demands of the local

executive bodies, including through agreements by attracting private investment and resources from sponsors;

d) involvement of medical educational organizations to address the issues of planning and monitoring of human resources for establishing connection with practical health care;

e) development of mechanisms to optimize the regular number of medical staff in Bishkek and Osh;

f) further formation of motivational and socio-economic factors in order to create attractive jobs for family doctors (general practitioners);

g) raising the profile of nursing in the provision of medical services, development of new organizational forms and techniques of nursing care to the population;

h) improvement of the management culture of managers through the creation and implementation of master's program "Management in Health Care" focusing on the implementation of administrative and financial autonomy in health care organizations;

i) improvement of information support in human resources management of the health system.

2. Incompliance of the personnel training system with the needs of practical health care and modern international standards requires:

a) improvement of the system for medical and pharmaceutical education in accordance with international standards through the development and implementation of state educational standards for higher medical, pharmaceutical and postgraduate education based on evidence-based medicine;

b) preparation for and accreditation of medical education institutions in accordance with recognized international standards of medical education;

c) professional development of teachers of medical educational institutions through further training and implementation of evidence-based medicine in the curriculum;

d) increasing the capacity of regional medical education institutions that are training medical personnel at primary care level;

e) optimization of the system of continuous training for family doctors and nurses in rural and remote areas of the country;

f) development by medical educational institutions and health care organizations of a mechanism for students to undergo practical training at all levels in regional clinical sites, which can have a positive impact on attracting and hiring them to work in the regions;

g) creation of educational programs on the basics of public health system in accordance with international standards;

h) formation of the state assignment for medical science within the priority areas of Den Sooluk.

## **§ 2. Drug policy**

More effective legal regulation and adherence to the principles of transparency and accountability in the handling of drugs on the market is required for the provision of the population with quality and safe medicines. In Kyrgyzstan, there is a potential risk of substandard or counterfeit trafficking in drugs. The country does not separate a pharmaceutical activity from other types of commercial activity and does not specify its special status as part of the health care system, which requires the conduct of special professional inspections.

In order to achieve these objectives during the implementation of Den Sooluk, it is necessary to address issues related to quality and safety of medicines, as well as the rational use of medicines and adequate medication management. Therefore, the barriers on which will be focused the main activities of this component are: imperfect system of state regulation of the drug circulation; weak mechanisms for quality assurance of medicines.

1. Imperfect system of state regulation of the drug circulation requires:

a) measures to achieve effective legislation, ensuring the conduct of public examination (participation) in the formation and monitoring of national drug policy;

b) development of a new National Drug Policy of the Kyrgyz Republic, including the implementation plan and evaluation indicators;

c) development of information system of the Department of Drug Supply and Medical Technology and ensuring the accessibility of information about the quality and safety of medicines; improvement of instruments for monitoring procurement in health care organizations, the supply of antidiabetic, antitumor, psychotropic and other essential drugs.

2. Weak mechanisms for quality assurance of medicines require:

a) definition of a strategy and action plan to prevent trafficking in the pharmaceutical market of substandard and counterfeit medicines;

b) strengthening of the pharmaceutical inspection, including the improvement of legislation to ensure the necessary powers of pharmaceutical inspection, to ensure public availability of information on the results of inspections conducted;

c) changes and additions to the Law of the Kyrgyz Republic "On Medicines" in the part of the transition from a system of conformity to a system of state control of medicines and provision of the necessary powers of pharmaceutical inspection.

## **§ 3. Information systems of the health care sector**

Since 2003, the country is working on integration and translation of all programs to a single platform in order to ensure data integrity, reliability of health statistics. Currently, the elements of information and communication infrastructure have been created in the country, the application and



dissemination of advanced information technologies in health care has been started. But at the same time the work on creating the Unified Health Information System has not been completed. Therefore, the main barriers to this subcomponent are as follows: lack of unified, standardized health information systems in practical health care; weak implementation of modern information technology in medical education system.

1. The lack of unified, standardized health information systems in practical health care requires:

a) introduction of a single system of standards and adjustment of all the information resources in line with it to ensure compatibility of specialized software and databases;

b) establishment of a sustainable system for monitoring health activities related to the achievement of outcomes, implementation of methodology of analysis, monitoring and use of data at all levels, including the MOH, MHIF, Republican Medical Information Center (hereinafter - RMIC), healthcare organizations;

c) establishment of a unified health information center: unification of the information system of the MHIF and the MOH with the transfer of the information center of the Republican Center for Health Development and Information Technology to the RMIC;

d) further development of individualized databases to create personified accounting system and improve the quality of medical services for the population;

e) establishment of a secure multi-service departmental (corporate) network of health care, ensuring the reliability of databases, information systems (RMIC, MHIF, National Statistics Committee).

2. Weak implementation of modern technologies in education and telecommunication system brings a need for:

a) development, adaptation and implementation of software using international medical information standards, including DICOM standard;

b) creation of a telemedicine network, Internet sites and resources in the field of telemedicine, training and subsequent certification of specialists in the field of telemedicine.

## **16. Stewardship**

Strong leadership and effective management at all levels of the health care system are essential for the successful promotion of the reforms. A clear system of accountability based on agreed indicators of activities implementation and evaluation of progress in achieving the expected outcomes is required for effective management, definition of the long-range objectives and strategic ways to achieve them. The main barriers to effective stewardship are:

- incompleteness of the distribution of functions regarding management, health services delivery, health care financing;

- insufficient involvement of public authorities in addressing the protection and promotion of public health.

### **§ 1. Incompleteness of the distribution of functions regarding management, health services delivery, health care financing**

An important step in reforming the health care sector is the differentiation of functions regarding management, financing and delivery of services, with clearly defined duties, responsibilities and accountability of the various structures of the health care sector: the MOH, MHIF and health care organizations. Separation of the MHIF from the structure of the Ministry of Health requires a clear definition of the principles of mutual relations of the Ministry of Health and the MHIF, it is important to integrate and coordinate the efforts of both agencies to achieve the best results in terms of health protection of citizens. Management system at all levels of the sector must ensure the achievement of the expected results in selected priority areas of Den Sooluk: cardiovascular diseases, maternal and child health, tuberculosis, HIV infection. Managers need to provide tools to improve the performance of health care organizations and to develop a system for their encouragement. The process of selecting managers should be conducted on a competitive basis, taking into account their knowledge and professional experience and the determination of tenure of the post.

1. Formation of an integrated management system based on the evidence requires:

a) improvement of management at the level of the MOH through provision of transparency in making political decisions, sustainable capacity building of staff, enhancing clarity of the work and delegating certain powers instead of the vertical management;

b) inventory of the legal framework of the health care sector;

c) improvement of the system for quality management of medical services, improvement of the interaction between agencies involved in quality management (MOH, MHIF, Medical Accreditation Commission, health care organizations);

d) further use of the instrument for monitoring the health care sector to trace the progress in implementing the Program and discussion with development partners at the annual reviews, strengthening control of all operational processes for the implementation of health programs, increasing the capacity of professionals at all levels for monitoring and analyzing performance indicators and skills to use information for making management decisions

e) optimization of the activities of the Republican Center for Health Development and Information Technology;

f) improvement of the issues of state regulation of private health care organizations, development of mechanisms for public-private partnership;

g) improvement of the coordination of the health care system at the regional level through improved activities of coordination committees on health care system management in oblasts and increasing the responsibility of the oblast coordinators.

2. Improvement of the interaction between the MOH and the MHIF in determining political trends of the development in the area of financing the health sector, implementation of the SGBP requires:

a) improvement of legal documents regulating the rules and procedures of interaction between the MOH and the MHIF;

b) strengthening the role and status of the Supervisory Board on Health Care Reform and the Mandatory Health Insurance as a single supervisory body that regulates the interaction between the MOH and the MHIF.

3. Increasing autonomy for health care providers and the correct selection of managers of health care requires:

a) improvement of the regulatory framework for regulation of health care organizations;

b) introduction of modern HR technologies, including training, selection, hiring, evaluation, placement of managers of health care organizations.

## **§ 2. Insufficient involvement of public authorities in addressing the protection and promotion of public health**

Socio-economic factors, political measures and actions undertaken by public authorities outside the health sector are of great importance along with the activities of the health care sector in the protection and promotion of public health. The health care sector has no opportunities to change the policy on unemployment, regulation of migration from rural areas, raising taxes on alcohol, introduction of technical standards for motor vehicles, although all these and many other measures can help improve the health of the population. The MOH should play a crucial role in establishing inter-sectoral and interagency cooperation in addressing the socio-economic factors that impact on health. Insufficient coverage of important events in the ongoing reforms, the low awareness of the achievements and problems in the health care sector often lead to misunderstanding and lack of support for reforms from both the Government, Parliament of the Kyrgyz Republic and the population.

1. Strengthening the involvement of public authorities in addressing health care issues, improving accountability and transparency of health care reforms suggest:

a) regular informing the Government and Parliament of the Kyrgyz Republic and the public about the events conducted in the framework of ongoing reforms and their outcomes by providing information, reports;

b) active involvement of professional associations, public unions, nongovernmental organizations, the Public Supervisory Council under the MOH, civil society to promote reforms;

c) improvement of interaction with the LSGs and LSAs to jointly address health issues in the regions.

## **V. Implementation Strategy for Den Sooluk**

A clear understanding of the necessary activities and conditions for the implementation of Den Sooluk is required at all levels of the health care system. For this purpose the Ministry of Health will develop a five-year detailed work plan to implement Den Sooluk. The total cost of the Program will reflect the resources (funding) of the Government of the Kyrgyz Republic and international development partners, including donor funds to support the budget of the SGBP and investment costs.

The effective implementation of Den Sooluk includes:

- identification and promotion of health sector policy;
- efficient budget management;
- ensuring good system management and control over the implementation of the Program;
- coordination of the activities of all partners involved in the implementation of the Program.

### **17. Identification and promotion of health sector policy**

The Ministry of Health as the agency responsible for the formation of public policy for the protection and promotion of health, definition of strategic directions for further development, will remain the key agency responsible for the development and implementation of Den Sooluk. It is necessary to preserve the integrity of existing Single Payer System, and the MHIF activity, mechanisms for the collection of resources, accumulation and financing of the SGBP. By integrating the specialized medical services in the SGBP, the Single Payer System will be strengthened and expanded.

Improvement of the interaction between the MOH and the MHIF through strengthening the role and functions of the Supervisory Board on health sector reform and mandatory health insurance will increase its significance for the coordination of joint activities aimed at implementing the powers of the parties in the area of protecting the health of the KR citizens.

The activities of the Board of Health Policy under the MOH will also focus on overall coordination of the implementation of Den Sooluk, control over the execution of the activity plan, making decisions in the development of and subsequent adjustment of the annual activity plans and procurement, discussion and approval of the annual reports of heads of structural divisions responsible for the execution of the component or the priority area of the Program.

## 18. Efficient budget management

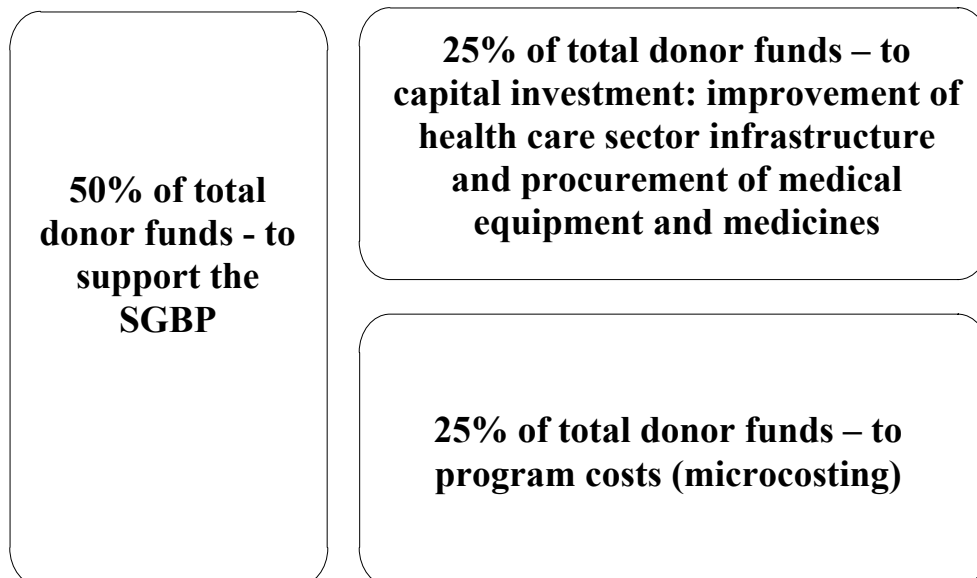
Implementation of Den Sooluk Program will be continued on the principles of SWAp, which has demonstrated its effectiveness and efficiency in the implementation of Manas Taalimi. Development partners provide financial support to the national budget, while maintaining the parallel financing of health programs. Both of these financial sources are essential and complementary contributions to the funding of Den Sooluk/SWAp, necessary for the success of the Program.

Den Sooluk still has two funding streams: the MOH and the MHIF.

The funds of the development partners are directed to the implementation of the SGBP, improvement of the infrastructure, procurement of equipment, medicines and consumables, purchase of computer equipment, payment for consulting and information services, capacity building of health workers, as well as other activities that contribute to the implementation of Den Sooluk and achievement of the outcomes to improve health care quality and health of the general population (Figure 2).

Figure 2

### Procedure for the allocation of funds for joint financing of Den Sooluk



The funds of the development partners (donors) involved in co-financing of Den Sooluk, as before come to the National Bank of the Kyrgyz Republic, are transferred to the MOF to finance health care programs. These funds shall be

recorded in the national budget and used according to the rules of the Treasury. It is expected that 70% of the annual amount of funds for co-financing earmarked for budget support to finance the SGBP will be allocated during the first half year to equalize the amounts of quarterly financing.

The funds allocated for the investment costs to improve infrastructure and logistics of the health sector shall be used in accordance with the List of construction and repair work and purchased medical equipment, including medicines, developed by the MOH and agreed with development partners. Funds for co-financing allocated to cover the program costs shall be distributed in accordance with the plan of action.

## **19. Ensuring good system management and control over the implementation of the Program**

The proposed strategy for implementing the Den Sooluk suggests the further institutional development of the health sector, based on the broad involvement of all organizational structures, both internal and external, in the process of implementing health care reforms through the decentralization of administrative functions rather than vertical management, which is an important measure, and will effectively impact on the results of the Program. Implementation of the strategy begins with a thorough analysis of what each sector structure should make for a successful implementation of an overall strategic plan. The main aims and objectives of Den Sooluk Program pass through all levels of management and should be taken into account by each individual service or organization of health care.

To ensure the successful implementation of Den Sooluk and achieve the results, four levels of management with an appropriate system of accountability have been defined.

The first level. The Parliament and the Government of the Kyrgyz Republic shall provide general control over the process of implementing Den Sooluk. Through the activities of the Supervisory Board on health care reform and mandatory health insurance, the Kyrgyz Government will use the Program and Action Plan of Den Sooluk to improve policy, planning and implementation of reforms and improvements in health care.

The second level. The Ministry of Health, the Ministry of Finance, MHIF shall provide stewardship and bear responsibility for the outcomes of the Program and removal of barriers. Implementation of Den Sooluk will be included in the routine work of the MOH and all health care organizations at all administrative levels of the country.

The third level. The Ministry of Health, National Center for Cardiology and Therapy, National Center for Maternal and Child Health, National TB Center, Republican AIDS Center shall provide technical coordination of the various structures, monitoring and reporting on the results of the activities.



The fourth level. Implementing institutions (oblast coordinators) shall provide the implementation of detailed annual action plans for all implementing agencies, coordination of all the activities of regional implementing structures of the health care system.

A distinctive feature of Den Sooluk implementation is the involvement of health care organizations and strengthening the leadership and coordination role of tertiary institutions in the respective areas, for this responsible agencies of the third and fourth levels are identified.

## **§ 1. Concentration of efforts to remove barriers**

Focus on outcomes shifts the focus from the management of existing resources and activities to the stewardship and chooses the most appropriate mechanisms and tools for its implementation.

Once the key processes, reforms and changes in the health care system are determined, it is necessary to identify the potential barriers to implementing Den Sooluk and to achieving the expected outcomes, as well as to develop mechanisms to overcome these obstacles with the development of a clear consistent plan of action. Thus, the focus on removing barriers has been approved by the Ministry of Health as a strategic direction and innovation of the Program.

Since the objectives to overcome the major systemic barriers are identified as key indicators of the implementation of Den Sooluk, the Ministry of Health defines from the total 5-year work plan the activities that directly affect their solution and removal and marks them with «£» symbol – of primary importance. Further a more detailed action plan is developed on their basis, with breakdown by years (quarters) and indication of responsible agencies at the central level.

## **§ 2. Organization of work and achievement of the expected outcomes**

In order to successfully coordinate the implementation of Den Sooluk, it is planned to introduce the positions of technical coordinators for each priority area and component of the Program, who will carry out their functions under the supervision of the head of the department for the corresponding component of the Program or the head of the republican institution, depending on priority and will be accountable to the Ministry of Health.

Technical coordinators are the link between priorities and components of Den Sooluk. The functions of a technical coordinator include ensuring the interaction of different health care structures and coordinating joint activities, providing technical support to implementing agencies in the organization and conduct of activities to implement the Program, collecting and processing of reporting data, as well as assisting in monitoring and analysis of the results.

Departments of the MOH and the heads of national institutions engaged in coordinating and monitoring the implementation of Den Sooluk, supported by technical coordinators shall ensure the implementation of action plans, work on coordination and interaction of processes, and develop aggregate annual work plans with the implementing agencies, as well as monitor and report the results obtained to higher management.

During the process of implementing Den Sooluk, the role of the oblast health coordinators (including the cities of Bishkek and Osh) will be strengthened as a key part of the implementation of Den Sooluk at the regional level. They will be entrusted with the functions to coordinate and monitor the implementation of activities planned for this year. Oblast health coordinators develop a regional plan for implementing Den Sooluk, define the role and place of each organization in the health care system, the ways and mechanisms to achieve the expected results, participate directly in the development of work plans of each organization in the region.

The role of health care organizations is to develop and implement annual work plans, submit the budget and procurement plan, participate in the coordination of processes and preparation of reporting against the established indicators. Each region will hold annual general meetings to assess progress in implementation of Den Sooluk, with the participation of all organizations involved in its implementation, by components and priorities. Also, the coordinators will submit reports at the meetings of the Council on Health Policy. The principles of management and coordination of the process of implementing Den Sooluk will be reflected in the "Operational Guidelines of Den Sooluk Program".

## **20.Coordination of activities of partners involved in the implementation of Den Sooluk Program**

One of the main advantages of SWAp is the alignment of donor funds with the priorities of the government and the coordination of all activities in the health sector. Over the previous period, effective mechanisms and tools have been created for joint interaction and process monitoring. In the framework of Den Sooluk it is planned to increase the interaction of the MOH with international organizations. Closer linkage and coordination of activities within the donor community and the MOH will increase the interest of all parties in the successful implementation of Den Sooluk.

The process of health reform will be discussed in joint reviews and Health Summits with the participation of development partners, two times a year, during which in-depth evaluation of achievements and shortcomings is conducted, activities are planned for the future. Mechanisms and procedures for conducting annual joint reviews will be developed at the initial stage of the Program implementation.

More detailed description of the mechanisms for managing the implementation of the Program, financial procedures, including procurement, will be given in the "Operational Guidelines of Den Sooluk Program".

Managing the implementation of Den Sooluk will include mechanisms for coordinating the activities of all agencies involved in the process, both within the sector and outside, covering issues of inter-sectoral interaction, measures to ensure the monitoring and evaluation of the Program, as well as a system of reporting and accountability at different levels of health care.

The handbook on financial procedures and procurement of Den Sooluk will include policies and procedures for financing the sector, mechanisms and tools to enhance the efficient use of health care resources. To ensure transparency in the use of funds and ongoing procurement it is expected to develop a system of financial reporting of the MOH to the development partners, which will be submitted on a quarterly basis.

## **VI. Monitoring and evaluation of the National Den Sooluk Program for 2012-2016**

### **21. Achievements in monitoring and evaluation during Manas Taalimi**

Kyrgyzstan became a pioneer in strengthening the the issues of monitoring and evaluation (hereinafter - the M&E) in the health care sector. The health care system monitoring instrument was first developed in 2002 and continually revised to meet the new programs in the health sector. The annual preparation of M&E instrument has been institutionalized in the department of coordination and implementation of reforms under the MOH, which is responsible for its preparation and presentation at the joint annual reviews. In addition, the health care system is being studied for various issues, the results of which help to make decisions in the process of developing health policy. The annual research plan is developed by the Ministry of Health and the studies are conducted by the Health Policy Analysis Centre (HPAC) - a non-profit organization, presented by researchers trained in conducting applied analysis of policy, statistics, surveys, questionnaires, and qualitative research methodologies. During the period of implementation of Manas Taalimi (2006-2010) there was prepared more than 30 research papers (available on the website [www.hpac.kg](http://www.hpac.kg)). The results of the research, monitoring and evaluation of the health sector have been used in the process of policy development, as well as in building dialogue and coordination, mainly through joint annual reviews.

### **22. Monitoring and evaluation strategy for Den Sooluk**

M&E strategy for Den Sooluk has been built on the previous achievements of M&E system, and at the same time reflects the structural

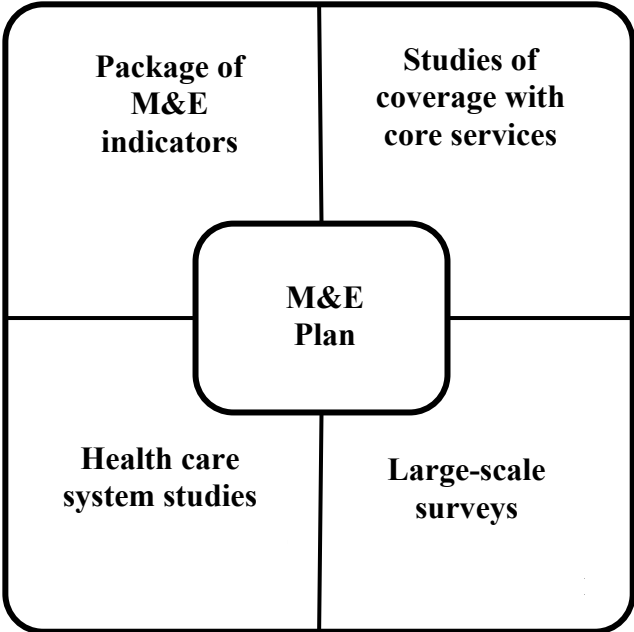
features of the new Program. Improving the health of the population in four priority areas (cardiovascular diseases, maternal and child health, tuberculosis and HIV infection) by providing a broad scale of the core services is the driving force of Den Sooluk. However, in the health care sector there were identified barriers in the field of public health, provision of individual services, financing, human resources, providing medicines and stewardship. Den Sooluk is based on the health sector reforms, which aim at removing these barriers in order to further expand core services and achieve the expected results in health.

In line with this approach, the M&E strategy of Den Sooluk consists of four components, which together will represent a complete picture of the implementation of the Program (Figure 3). The main components of M&E include:

- package of M&E indicators based on routine (planned) and annually monitored data;
  - regular studies of the coverage with health services, evaluating the expansion of core services;
  - health care sector studies through the request of the MOH/MHIF to assess the factors preventing the elimination of key barriers to the health sector;
  - large-scale household surveys and interviews with discharged patients.
- Each of these basic blocks is described in detail below.

Figure 3

**M&E structure for Den Sooluk**



## § 1. Package of M&E indicators for Den Sooluk

The annual package of indicators is the cornerstone of the M&E strategy and is developed in full accordance with the structure of Den Sooluk. The package of indicators consists of two sections, the first of which is designed to track progress in improving health indicators in priority areas of the Program, and the second section - to track progress in improving the health sector strengthening outcomes by the components of the Program (Table 13).

Table 13

### The structure of the package of indicators

<p><b>Section 1</b></p> <p>The expected improvement in public health indicators in priority areas of the Program:</p> <ul style="list-style-type: none"><li>- cardiovascular diseases;</li><li>- maternal and newborn health;</li><li>- health of children under 5 years;</li><li>- tuberculosis;</li><li>- HIV infection</li></ul>
<p><b>Section 2</b></p> <p>The expected improvement in outcomes of health care system strengthening by the components of the Program:</p> <ul style="list-style-type: none"><li>- public health;</li><li>- individual services;</li><li>- financing;</li><li>- generation of resources;</li><li>- stewardship</li></ul>

Packages of indicators of the oblast level will be developed on the basis of the National Package of Indicators for Den Sooluk", through which the oblast coordination may be strengthened. A significant building and strengthening of capacity in M&O at the oblast level and at the level of health care organizations is planned to ensure the successful implementation of Den Sooluk.

Also further capacity building on monitoring is provided for in the key organizations at the tertiary level, so that the specialists at this level can work with the package of indicators for priority programs. The rationality of this approach lies in the fact that the packages of indicators for priority programs focus primarily on indicators of clinical practice and behavior related to health, in connection with which tertiary institutions have a key role. In addition, the role of the RMIC and its oblast structures will be strengthened. It is essential to ensure a clear interaction between all organizations involved in M&E to obtain a complete picture of the Program implementation.

## **§ 2. Studies of coverage with core services**

The studies of coverage with core services will be a new aspect in the M&E strategy for Den Sooluk in accordance with the new structure of the Program itself. In the Program, the core services for population play an important role in strengthening the health sector, on the one hand, and in improving the health outcomes - on the other hand. However, there is no data on core services coverage in routine information system. To fill this gap, every two years during the implementation of the Program there will be conducted coverage studies (in 2012 - as the initial assessment, in 2014 - for mid-term review and in 2016 – for assessment at the end of the Program), separately for each of the four priority areas. These studies will document the coverage of population with core services, and also reflect the situation with the barriers available at the level of service providers and preventing further expansion of coverage.

Studies of coverage will be conducted under the leadership of the MOH by leading tertiary institutions in four priority areas, with the assistance of the HPAC.

## **§ 3. Studies of the health care system focusing on removal of barriers**

Evaluation studies conducted since 2000 on various aspects of the health sector remain the most important. The process of assigning to conduct this type of studies has been developed for several years through trial and error, and is now well established and provides the MOH with valuable information for decision making. During the implementation of Den Sooluk it is envisaged to assess the health sector with a focus on systemic barriers, already identified in the Program, or arising in the course of its implementation. The process of identifying topics for studies will take place on an annual basis to ensure flexibility and maximum compliance with policy priorities and activities of the MOH.

The studies will be conducted under the leadership of the MOH by representatives of the HPAC and other organizations with research capabilities.

## **§ 4. Large-scale surveys**

Kyrgyzstan is the only country in Central Asia, among the countries of Eastern Europe and the former Soviet Union, conducting household surveys and interviews with discharged patients at regular intervals. Household survey provides key information on financial protection and access to services that can not be obtained from routine sources. The interviews with discharged patients are the primary source of information on informal payments, which is a key indicator of the volume or size of the financial gap in the SGBP. Conducting these types of studies will continue, as they are of particular importance for the

success of Den Sooluk. The conduct of household survey is planned for 2013 and 2016, and interviews with patients discharged from hospitals are proposed for 2012 and 2016.

Large-scale studies will be conducted under the leadership of the MOH together with representatives of the HPAC, National Statistics Committee of the Kyrgyz Republic, MHIF and other organizations.