

HiT profile in brief

Mongolia

Mongolia has a post-Semashko health care system with a mix of revenue sources, private sector service delivery and a plurality of actors. In the early 1990s, Mongolia embarked on the path of health care reforms, which has brought new policy initiatives and changes in priority areas allowing new actors and mechanisms in the health sector to emerge.

Introduction

Geographical, political and economic context

Mongolia is a landlocked central Asian country, bordered by the Russian Federation to the north and the People's Republic of China to the south. It has a stable democratic parliamentary system, which is currently headed by the National Unity Government (1). The current President is Nambaryn Enkhbayar, a former Prime Minister and a chairman of the Parliament, who won presidential elections as a candidate from the ruling Mongolian People's Revolutionary Party (MPRP) in 2005 (2). The MPRP and the Democratic Party share the majority of seats in the Parliament. The ruling party has been overturned three times since 1996 in free and fair elections, and these peaceful transfers of power are strong evidence of how far Mongolia has come in the process of democratization (1). The latest Prime Minister Miyegombo Enkhbold resigned in November 2007, and no replacement has been appointed thus far (3).

Following the early 1990s, when the Mongolian economy experienced deep crises and a high level of inflation, gross domestic product (GDP) growth has slowly recovered, peaking at 10.6% in 2004 (4). As a result of macroeconomic stabilization, privatization of state enterprises, legal changes and other public sector reforms, the private sector has developed rapidly. Despite these achievements, unemployment and poverty levels have not improved since the 1990s. 'Hidden' unemployment, not included in the number of officially registered unemployed, was reported to be over 20% in the 2000 census (5). The Gini coefficient of 0.3 in 2004 reflects high social and income inequality between rich and poor populations (4).

Health status

Mongolia has a relatively small population of about 2.5 million people (1). Due to internal migration trends, 59% of its citizens now live in urban areas (6), while the other 41% live in remote rural areas, mostly working as nomadic livestock herders (1). The vast size of the country combined with low population density and nomadic tradition pose particular problems in the provision of health care services and, for rural nomadic populations, accessing health care.

With the standardization of the health statistics database, the quality of Mongolian health data has become fairly compatible with international standards. Life expectancy at birth for males and females in 2004 was 61.6 and 67.8 years respectively (6). In 2005, the maternal mortality rate fell to its lowest level of 93.8 per 100 000 live births. Infant mortality has also decreased gradually and was 20.8 deaths per 1000 births in the same year (6). Mongolia is experiencing both a demographic transition as the birth rates fall and the population starts to age, and an epidemiological transition as the number of deaths from communicable diseases decreases and the number of deaths from non-communicable diseases increases. The three main causes of mortality in Mongolia are currently cardiovascular diseases, neoplasms and external causes (injuries and poisonings). However, viral hepatitis, tuberculosis (TB) and sexually transmitted infections remain the most common infectious diseases (1).

Organizational structure

Historical origins of the system

Before 1991, Mongolia had a Semashko-style centralized and hierarchical health system where the Government, administratively and financially supported by the Soviet Union, fully financed and delivered health care services. While the Semashko system aimed to ensure equity and broad access to health services, it also had a strong orientation towards curative services. However, in the late 1980s to early 1990s, with the collapse of the

Soviet Union and democratic changes in Mongolia, it became evident that free health care services with state financing alone were unsustainable in the new market economy. The introduction of informal user fees as a mechanism to supplement the underfunded health system led to access inequalities. To improve the system and find new ways of financing health care, in 1993 Mongolia started health care financing reform, which introduced social health insurance as part of a larger social security framework (1).

Organizational overview

The Ministry of Health (MoH) is the Government's central administrative body responsible for health policy formulation, planning and regulation. It also oversees the implementation of health-related policies and the meeting of standards by the appropriate institutions and agencies. Since the MoH continues to be heavily involved in the implementation of donor-funded projects and initiatives, it delegates some of its planning and policy-setting responsibilities to a number of agencies. Other ministries share responsibilities related to health care funding, provision of social and health insurance, and the improvement of professional training and health education. While international donor organizations play an important role in providing assistance and shaping health policies and programmes, the contribution from the growing nongovernmental organization community to strengthening health care system capacity remains relatively modest (1).

Decentralization and centralization

The health system is one statutory system organized according to administrative division: the capital city (Ulaanbaatar), and 21 regions (*aimags*), each of which is split into smaller districts (*soums*), which are further divided into three to four smaller units (*baghs*). Decentralization of the system occurred as part of a national development strategy in the mid-1990s and was a response to the reduction in government funding for health. Thus far, attempts to delegate to local governments planning, monitoring, financial and administrative functions within the health sector have not led to a meaningful increase in the level of primary stakeholder participation or to an improvement in the performance of health services. Health managers at both the central and local levels lack capacity, and there are no clear guidelines or procedures to implement decentralization systematically, even though the basic elements of the legal framework for decentralization and structural

reform are in place. Lack of professionally trained staff, capacity limits of existing personnel, budgetary constraints and inadequate information management system are among the major challenges that have hindered the success of decentralization efforts (1).

Health care financing

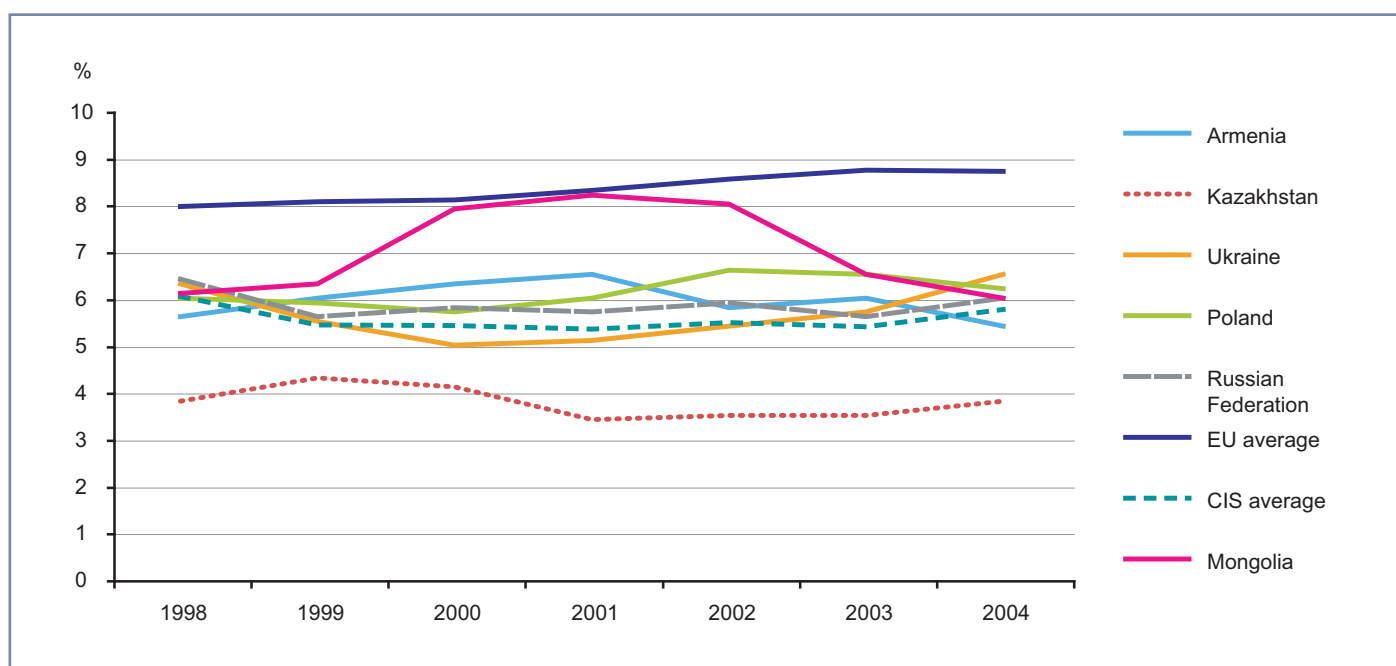
Health expenditure

Although health expenditure in monetary terms is increasing, government expenditure on health as a percentage of GDP dropped gradually from 8.2% in 2001 to 6.0% in 2004 (see Figure 1). The state health budget allocated through the MoH covers the fixed costs of the health facilities based on the historical allocations and clinical capacities of organizations (the number of hospital beds, doctors, clinics, etc.), while health insurance funds are used to cover health service provision costs (1).

Benefits and coverage

According to the Health Act of 1998 all citizens have the right to receive certain medical care free of charge. As part of the essential package of services, free medical assistance covered medical emergency and ambulance services; treatment for certain illnesses such as TB, cancer, mental illness and some other diseases which require long-term care; disinfection and outbreak management of infectious diseases; and medical services for pregnant women. Other care, such as inpatient services and outpatient services and medicines on the Essential Drugs List, were covered by the health insurance system. However, since then certain population groups, such as students and the self-employed (including traditional herders) have had to pay their own insurance premiums, and health insurance coverage declined from 95.3% of the population in 1998 to 77.6% in 2005 (9). To eliminate the potential effects of adverse selection in health insurance and to improve health care equality, the Health Act was amended in January 2006 so that primary health care (PHC) services could be provided to all citizens, regardless of their insurance status, and the essential services package is funded directly from the state budget. Today, the package of essential services includes public health components, adolescent health, social health programmes and health education, as well as family group practices (FGPs). Extending the benefits of the essential services package to include FGPs has been seen as a progressive policy step towards providing financial and legislative guarantees for all

Figure 1: Trends in health expenditure as a percentage of GDP, 1998–2004



Sources: (7), (8).

Notes:

CIS: Commonwealth of Independent States;

EU: European Union.

Mongolian citizens to receive basic health care services fairly and equitably (1).

Revenue

In 2002, 44% of total health expenditure were financed from the state budget, 25% from health insurance, 14% from the household budget (direct payments, excluding payments for health services sought abroad), 12% came from foreign loans and aid, and 5% came from other sources such as community financing, the social welfare fund, private enterprises and income generated by health providers themselves (10). The state budget, for which revenues are raised through general taxation, covers the fixed costs of health facilities, capital investment, maternal and child care costs, some services in the essential services package and the minimum health insurance contribution for low-income and vulnerable groups. Health insurance, managed by the Health Insurance Fund (HIF), finances the complementary package of services through the monthly contributions from income-earning groups. Official out-of-pocket payments include direct payments to private health care facilities, official co-payments and user fees in public

health facilities, and the direct costs of seeking medical services abroad. External sources of funds usually come from the international partners in the form of official development assistance grants (non-repayable development grants, technical assistance and other instruments) and as soft loans (repayable funds or assets) (1).

Pooling

Mongolia has two major pools of funds, the government health budget and the HIF, which together fund 70% of total health expenditure. Meanwhile, 84% of total health expenditure comes from prepaid sources pooled at the national level (10). The MoH acts as a third-party payer for health services funded from the central government budget. It allocates resources to city and regional governors, who are the purchasers of health services at the primary and secondary levels. The HIF, operated by the State Social Insurance General Office (SSIGO) under the Ministry of Social Welfare and Labour (MoSWL), is a single national fund with approximately 80% of the population insured (1). It uses its local branches to collect revenue and pay for insured care. Despite this high degree of pooling, a detailed study of

state cross-subsidy between poor and non-poor or sick and healthy within the pool has never been conducted. Since 2002, it is likely that the number of people seeking health services abroad has increased, and so has out-of-pocket expenditure, exposing more people to financial risk. Consequently, an up-to-date, detailed and rigorous study of out-of-pocket expenditure and informal payments is needed (1).

Payments

There are currently six main health provider payment mechanisms: line items in the state budget; provider-based case payment from the HIF; capitation funds through the FGPs; patient co-payments; official user charges; and unofficial payments such as gifts and compensations. In 2006, significant changes to the health financing were made. First, FGPs and *soum* hospitals, as providers of primary care, will be funded only from the government budget to ensure that every person, irrespective of ability to pay, receives primary care services. Second, there will no longer be a division between fixed and variable costs by sources of funding. The government budget and HIF will be responsible for the full cost of their respective health services, and the MoH alone will set a payment fee and payment method for health services (1).

The situation is still problematic with improving health service quality and efficiency. Despite the efforts to encourage output contracting, health service provision is still dominated by the public providers whose activities are controlled through a hierarchical management system. Purchasers do not practise selective contracting because insured patients are free to choose any selected private hospital for treatment and public hospitals are fully dependent on government funds. Because of the heavy reliance on line item budgeting, the output contracts fail to specify the cost, volume and quality indicators for each output. And despite a number of training schemes and capacity building efforts, the output costing process is still in its nascent stages (1).

Although health care personnel at public hospitals receive state-provided salaries and benefits, they are allowed to engage in private practise and charge fees for services provided out of working hours. Currently there are no regulations regarding private practice by public hospital-based doctors and no price regulation or guidelines in place to prevent perverse incentives. Similarly, there is no government regulation of how money should be allocated among doctors and nurses in FGPs, which

are considered private profit-making cooperatives. Low salaries of doctors in public hospitals are seen as one of the major factors in high levels of informal payments in Mongolia. To resolve this issue, a number of options have been discussed and proposed, including an increase in the payment rate to hospitals from the HIF, an increase in official out-of-pocket payments and the privatization of public facilities (1).

Planning and regulation

The MoH is responsible for health policy setting, budgeting and monitoring its realization at the central, regional and capital city levels. It also develops, approves and oversees the implementation of rules, procedures and standards on health protection and promotion. The Ministry of Finance decides the total budget allocations to the health sector based on historical expenditure, norms and standards in the sector, as well as government resolutions and national health programmes related to the priority areas identified. The MoSWL is mainly responsible for the policies and programmes related to social welfare, social insurance, poverty reduction, employment and coordination of the labour market, among others. The MoH and MoSWL are involved in the purchasing of and resource allocation in health care. However, there is little coordination of the service purchasing policies between the health insurance scheme and the MoH. At the level of the health system (MoH) and the health insurance implementing agency (SSIGO), there is no systematic monitoring of the health system performance or the impact of health insurance scheme on quality, outcomes, access, efficiency or effectiveness. Currently, regulation of private insurance companies, as they are only just developing, is lacking and it is not yet clear which agency will be responsible for the regulation of the potential private health insurance market (1).

The MoH at the national level and health departments at the local level are responsible for the regulation and governance of service providers. The Medical Licensing Board under the MoH has been managing the licensing system for health practitioners and the accreditation of health care organizations. However, the quality assurance system in the HIF is very basic and there is a need to build an assessment framework that would monitor and evaluate the effects of purchasing arrangements on services. Recently, both the MoH and SSIGO took a number of measures to check the quality of medical care and ensure its compliance with clinical guidelines. In

terms of purchasing processes, the MoH and the *Aimag* Health Departments had virtually no involvement in the development and allocation of public budgets until 2003, when the Public Sector Management and Financing Law (PSMFL) was introduced, giving the MoH the opportunity to take control over health expenditure and to allocate funding according to the priorities set. While much has been accomplished over the past years in implementing the law, such as shifting from input to output accounting, there is still a need to change focus from centralized health care management towards building capacity at various levels, including all aspects of the mandated planning and budgetary system. The PSMFL introduced a totally new concept in planning, budgeting and managing public resources, but it has yet to be accepted by health care professionals and implemented in a uniform fashion (1).

In Mongolia, neither health information systems nor new health technology assessment have been well managed or coordinated to meet the health needs of the population and the overall capacity of the health system. Standardization of existing and the introduction of new technologies including information technology have become one of the Government's priorities since 2002, when it started systematic collection of health status and health system's financial data. The role of health information has been recently expanding to become a tool for estimating the results of activities, rational planning and resource allocation. Currently, a number of projects on enhancing different aspects of the health information systems and data collection methods are being implemented to improve health sector performance and effectiveness (1). Many medical professionals are striving to become competent in English language and computer skills to enable access to online evidence-based information thus improving their clinical decision-making (11).

Physical and human resources

Physical resources

The amount of funds allocated for capital investment in Mongolia's health sector has been increasing and reached 2.6 billion Tugrik (approximately US\$ 2.3 million) in 2006 (1). Capital investment in the public health sector is mostly funded by the Government out of the national budget or supported by international grant or loan aid. From 1999 to 2003, a rather small percentage of the state health budget was used for the procurement and maintenance of medical and other related equip-

ment; of the 20.2 billion Tugrik (approximately US\$ 18.4 million) invested in medical and related equipment in this period, 96% came from international partner funds and only 4% from the state budget (12). To ensure the equitable distribution and gauge true levels of need for equipment at state-owned health facilities, the MoH has developed a list of essential medical equipment that sets the minimum and maximum numbers for medical equipment at each level in the health care delivery system (1).

As Mongolia still has a large number of hospital beds, 730 per 100 000 population in 2004 (see Table 1), the MoH has been implementing a policy to reduce them in health facilities. However, there has been little change because the payment for services in hospitals is based on the number of inpatient beds and their occupancy rate, rather than the services provided. Medical facilities, equipment and technology in Mongolia are often outdated and in a poor state of repair. The lack of a regular supply and maintenance system for medical equipment and laboratory technology weakens diagnostic capacity in the system, leading to failures in providing accurate diagnoses, which undermines patient trust in public health services. Because of the funding gaps, the construction of new health facilities and procurement of medical equipment are mostly financed by international partners (1).

Human resources

Under the Semashko system, government policies to improve access to health services centred on increasing the number of service providers. Although there has been a decline in the number of all health workers from 217.9 per 10 000 population in 1990 to 130.5 in 2003 (13), the current levels are still too high. As of 2004, there were some 33 478 professionals employed in the Mongolian health sector (1), with 2.7 doctors per 1000 population (6). However, the distribution of medical professionals across the country is not even. In Ulaanbaatar, there were 4.4 doctors per 1000 population, while there were on average only 1.7 doctors per 1000 population in the *aimags* (1). About 5.2% of the total of 323 *soum* and *intersoum* (serving populations of two or more *soums*) hospitals had no doctors as of 2005 (14). Financial incentives are currently insufficient to motivate enough doctors to move to rural hospitals. In order to increase the number of physicians working in the rural areas, amendments to the Health Act were made in 2006, requiring final-year undergraduates in medical schools to work under the supervision of *soum* and

Table 1: Selected health care resources (physicians, nurses, acute hospital beds) per 100 000 population in 2004, or latest available year (in parenthesis)

	Physicians (physical persons)	Nurses (physical persons)	Acute hospital beds
Mongolia	262	314	730
Armenia	327	406	388
Kazakhstan	365	633	618
Poland	224	645	466 (2002)
Russian Federation	422	799	822
Ukraine	301	777	711
CIS average	372	785	741
EU15 average	320	726	413

Sources: (4), (6), (8).

Notes:

CIS: Commonwealth of Independent States;

EU15: EU Member States before 1 May 2004.

intersoum doctors for at least two years prior to completing their formal medical training and obtaining their diplomas (1).

Mongolia is also experiencing a shortage of nurses. In 2004, there were 7915 nurses working in Mongolia. While the doctor-to-nurse ratio is 1.16, it has been estimated that 2.5 times as many nurses are needed (1). This imbalance in skill distribution negatively affected areas of health care that require high numbers of nurses, such as reproductive health services (15). Today, medical staff training and education are not linked to factors such as population growth, the current and projected epidemiological profile of the population and the reform agendas of privatization, rationalization and modernization of health services. The supply side of human resources, such as medical schools, was traditionally controlled and funded by the Ministry of Education, Culture and Science (MECS). Amendments to the Health Act were made in 2005 to transfer the state medical schools from the authority of MECS to the MoH. These trends support current human resource policies

which are aimed at improving quality and equal distribution of medical professionals across the country (1).

Provision of services

The health system in Mongolia still directs most of its financial resources to expensive hospital-based services, and preventive services remain underfunded unless supported by international aid. Despite official policy changes, it has proved difficult to reorient the health system away from curative to more cost-effective preventative services. Public hospital management is still a part of the bureaucratic hierarchy based on the Semashko model of centralized control. Hospital managers are not encouraged to produce budget savings and are not allowed to overspend. Meanwhile, services such as long-term care for elderly and disabled are still underdeveloped and rely on family care and support (1). Only recently palliative care has been officially integrated into the health care sector and medical education curricula (16). Despite the positive achievements in the development of palliative care, the government support

for community and home care, and its implementation at primary and secondary levels, the provision of palliative care services is still insufficient. Although this is by no means unique to Mongolia, it does reflect policy shortcomings, in that the necessary structural adjustments to the system were not made at the same time as the policy directions were adopted (1).

Public health

Similar to other post-Semashko systems, Mongolia's public health system is primarily based on a network of sanitary-epidemiological stations, carrying out traditional roles such as monitoring hygiene standards, environmental health and epidemiological monitoring. However, since the 1990s, the Government and the MoH have made public health and preventive medicine a primary focus of the health sector. National programmes on communicable and noncommunicable disease control have been developed and are currently implemented at the national and local levels. *Bagh feldshers* (medically trained PHC workers in more remote rural regions) as well as *soum* and family doctors play an important role in providing immunization services. Most national health programmes also include components on health education and promotion targeted at different population groups. Informational and educational activities have been incorporated into primary care services, building a continuous and sustainable environment for delivering health education to the population. Health education has also been included in the school curriculum at all levels. However, initiatives and activities to promote health outside the health sector are still weak. The social determinants of health have not yet been included in the health priorities of the government action plan (1).

Primary care

Primary health care services are delivered by FGPs, *soum* doctors and *bagh feldshers*, who are medically trained PHC workers in the smallest administrative units. In the Ulaanbaatar and the *aimag* centres there are district hospitals and FGPs. FGPs, which usually consist of three to six family doctors and one nurse per doctor, are required to deliver primary care for the listed population in their catchment area. On average, 6375 residents are registered with each FGP and one family doctor serves between 1200 and 1500 people (17). On a local level, *feldshers* report to *soum* hospitals through regular meetings and visits, and in case of emergencies refer patients to *soum* or *intersoum* (larger centres that

render health services to the population of two or more *soums*) hospitals. Most of the *soum* hospitals have between 15 and 30 beds and provide antenatal and post-natal care, minor surgery, normal deliveries, referral to an *aimag* hospital, and health education and prevention activities (1). As of 2005, there were 31 *intersoum* and 287 *soum* hospitals (17). As a result of geographical circumstances, there are big differences between the patient pathways in urban and rural areas: FGPs provide primary care services for the people who live in the capital city and the *aimag* centres, while *bagh feldshers* or *soum* doctors provide a wider range of primary care services to the rural population. Understaffing in rural facilities make the access to and quality of primary health care services inequitable between urban and rural areas (1).

Hospital care

Specialized care in Mongolia is delivered by *aimag* and urban district hospitals, which cover all major clinical specialties and have an approximate capacity of between 200 and 300 beds for delivering inpatient services (1). The next level of specialized care is provided through the state clinical hospitals and specialized health centres, located mainly in Ulaanbaatar, but also through the three Regional Diagnostic and Treatment Centres, which provide specialized tertiary-level referral, diagnostic and treatment services to the catchment population outside the capital. Specialized care services are delivered by both publicly and privately funded hospitals. While the Government of Mongolia has been trying to reduce the number of state-owned hospital beds, the bed numbers in private hospitals have been expanding. A cultural belief, which equates better services with more specialized care, makes it hard to change the current hospital structure and contributes to the overcapacity of hospital beds at the secondary and tertiary levels. Hospital services are not appropriate for the corresponding level of care, and are still a major challenge for the whole health system in Mongolia (1).

Mental health services

As impetus for reform in mental health care provision in Mongolia, the 2000 Law on Mental Health determined that community-based services and primary mental health care should be the main types of mental health services available in the country. Although mental health care has been included in the essential package of PHC services provided at FGPs and *soum* hospitals, the reorientation process is progressing slowly. In *aimag*

general hospitals, a total of 32 specialist doctors provide outpatient and inpatient mental health services (1). At the tertiary level of care, the Mental Health Hospital and the Centre for Mental Health and Narcology are responsible for specialist mental health services. However, most of the specialists lack the knowledge and skills necessary for implementing the community-based approach to mental health care provision. There is a need for a strong strategy to develop human resources in mental health in order to eliminate the shortage of specialists with the requisite knowledge (1).

Complementary/alternative medicine

Mongolian traditional medicine has a history of more than 2500 years, with its concepts and practices deeply embedded in the Mongolian people's perceptions of health and illness. Since the 1990s, there has been renewed interest in traditional medicine, which includes treatment with herbs and medicinal plants, acupuncture, massage therapy, moxibustion, cupping treatments and diet-related therapies. Mongolian traditional medicine has already been integrated into the health system in parallel with western biomedicine. Each *aimag* hospital has a department of traditional medicine and offers inpatient treatment, while most district- and national-level hospitals in Ulaanbaatar provide outpatient traditional medicine services. At present there are five traditional medical institutes in Mongolia that train traditional medical specialists. Although there seems to be a sufficient number of professionals trained in traditional medicine, not all end up practising it. It is not clear why so few opt to practise traditional medicine, but it might be connected to the limited nature of the undergraduate training curriculum (1).

Health care reforms

At the beginning of the 1990s, the abrupt end of assistance to the health sector from the Soviet Union brought about extreme difficulties in financing the health care system that was in place. Health sector reforms, introduced during this time, relied mainly on the strategy of mobilizing additional financial resources and reducing the government burden in order to tackle the sudden drastic decline in the health budget as a result of economic transition. The inherited Semashko system has evolved into a health system with a mix of revenue sources, private sector service delivery and a plurality of actors. Official user fees and social health insurance have been gradually introduced in order to plug the funding gap, along with significant contributions from

international donors for health care delivery. Meanwhile, problems with access and quality have been exacerbated by the deteriorating socioeconomic situation and public funding shortfall for the health sector (1).

In line with the Government's commitment to providing equitable and high-quality health services to all citizens, in the late 1990s the reform focus shifted towards systemic-level changes and promoting equity through institutional changes and improvements in quality and efficiency. From early 2000 onwards, the reform focus has brought in more programmatic and organizational changes promoting allocative and technical efficiency, equity and quality improvement based on the achievements and lessons learned from earlier reforms. However, appropriate responses to outstanding population health issues demand a stronger health system (1).

Assessment of health care system

The vast size of Mongolia combined with low population density and nomadic tradition poses particular problems in the provision of health care services. The problems of inequitable coverage and access are compounded by the poor quality of rural and remote health care facilities, which are inadequately staffed and equipped to address changing health needs of the populations they serve. User fees, informal payments and costs of medicines have become a major barrier in access and utilization of health care by poorer sections of the Mongolian society. High costs of health care lead to failure in following health care advice or delay in seeking care, and promote further impoverishment among socially and economically disadvantaged groups. Although public health services and PHC are highlighted as most important for improving the overall health of the population, the majority of resources still actually go to curative secondary and tertiary care services. The budgeting system based on input line items and not on output classifications reinforces existing patterns of resource allocation and provides little incentive to improve technical efficiency (1).

Mongolia has had notable success in reducing the infant and maternal mortality rates and vaccine-preventable diseases, although it is still challenged by the health disparities between various socioeconomic groups and the double burden of noncommunicable and communicable diseases. An appropriate response to these health issues demands a stronger health system focused on PHC and health promotion. Recent trends in long- and medium-term planning by the current Government demonstrate

a willingness to ensure sustainable human development through equitable and improved health provision. Moreover, the implementation of public health programmes, supported by international organizations, has led to better health education of the population, greater inter-sectoral collaboration and the participation of local authorities in their realization (1).

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