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HiT profile in brief Armenia

Introduction

Geographical, economic and political context

Armenia is located in the South Caucasus and was a part of the Soviet Union from 1920 to 1991. It is a presidential republic with separate branches of legislative, executive and judicial power. The President at the time of writing is Robert Kocharian and the current Government is formed by a three-party coalition and led by Prime Minister Andranik Markaryan *(1)*.

The boundaries, reach and regional importance of Armenia have ebbed and flowed over the centuries, but the current borders were drawn by Soviet cartographers and have never been fully accepted. The most significant example of the difficulties caused by the given borders is the conflict with neighbouring Azerbaijan over the territory of Nagorny Karabakh. As a consequence of the Nagorny Karabakh conflict, 360 000 refugees fled from Azerbaijan to Armenia between the late 1980s and the early 1990s, with an additional 70 000 people living in bordering regions becoming internally displaced *(1)*. This added to the devastating impact of the 1988 Spitak earthquake that was estimated to have left 25 000 people dead and 400 000 homeless. According to the United Nations High Commission for Refugees (UNHCR) estimates, by the end of the 1990s there were approximately 280 000 ethnic Armenians registered as refugees; however, 60 000 of them, mostly men, are believed to have left the country *(2)*.

Following the collapse of the Soviet Union, Armenia followed a programme of "shock therapy" in order to restructure the economy and consequently suffered a dramatic fall in economic output. Gross domestic product (GDP) levels have since recovered, but some groups suffered more than others in the economic downturn of the early 1990s. Relatively high levels of social inequality in Armenia are shown by its Gini coefficient of 0.44 in 2003, and while official unemployment rates remain low, this is mainly due to high levels of hidden unemployment *(1)*.

Health status

The number of internally displaced persons, combined with high levels of out-migration, mean that it is hard to give precise figures for the population of Armenia, but the census of October 2001 found the population size to be 3.2 million, with about 64% of the population living in urban areas and approximately one third, or 1.3 million, living in the capital city of Yerevan *(1)*. Problems with data quality mean that estimating life expectancy and other population health status indicators is challenging, but the best available estimates put life expectancy at birth in Armenia in 2003 at about 65 years for men and 72 years for women *(3)*. Armenia's epidemiological profile is similar to that of its neighbours in that there is a "double" burden of disease. As in Western countries, the leading causes of premature death are diseases of the circulatory system (heart disease, stroke, etc.) and cancers. However, there has been a resurgence of communicable diseases, but particularly tuberculosis (TB) and

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sexually transmitted infections (STIs). Disease surveillance and control systems have been seriously weakened through underfunding, which was illustrated by an outbreak of malaria in the mid-1990s *(1)*.

Organizational structure

Historical origins of the system

Armenia has a decentralized post-Semashko health care system, to which the population theoretically has universal access and which is funded through general taxation, but in reality most patients have to pay for care directly, which severely constrains access to services. The Semashko model guaranteed free medical assistance and access to a comprehensive range of secondary and tertiary care to the entire population, although primary care was less well developed. Universal coverage of the population served the main policy goal to protect and improve the health of people regardless of their nationality, race and faith. While declarative, this principle ensured equity and access to health services *(1)*. However, the downturn in the post-Soviet Armenian economy meant that the Government was simply no longer in a position to continue funding a complex and inefficient system with an unbalanced structure of services. These financial pressures were therefore the main impetus for reform.

Organizational overview

Previously, the Ministry of Health was responsible for all planning, regulation, financing and operation of health services. However, it has gradually reduced some of these functions and activities in order to assume a wider coordinating role and increase its role in developing national health policy in line with country priorities, defining strategies to achieve objectives, defining and applying national health standards and norms, ensuring quality control and developing and overseeing state-funded programmes. Policy objectives are achieved through shared responsibilities with regional and local governance bodies and health institutions. The overarching objectives are to increase the efficiency and effectiveness of the health care system and to protect and improve the health of the population *(1)*.

Decentralization and centralization

The health care system is divided into three administrative layers: national (republican), regional (marz) and municipal/community. Following the decentralization and reconfiguration of public services after independence, the operation and ownership of primary health care services (polyclinics) have been devolved to municipal governments while hospitals have been devolved to regional governments. Only some tertiary care hospitals and the state sanitary and epidemiological services remain under the control of the national Government *(1)*.

Hospitals and polyclinics are now responsible for managing their own financial resources, setting prices for services not included in the state-funded health care package, deciding on staffing mix and setting terms and conditions of service. They are also permitted to retain any profits generated and to invest surplus income as they see fit. They contract with both local and central government to provide the care included in the Basic Benefits Package (BBP) (see below) although they have no authority in deciding on the price or volume of services paid for by the statutory system. They also have the right to negotiate and sign contracts with insurance funds or enterprises wishing to purchase health care, although this has yet to happen in practice *(1)*.

Health care financing

Health expenditure

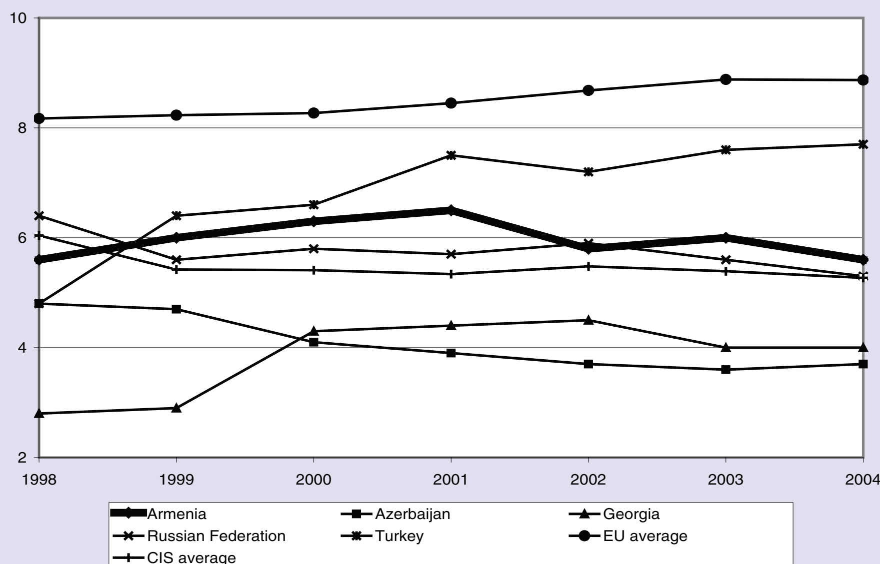
The exact level of total health expenditure in Armenia is difficult to determine. Legislation does not require the systematic collection of

comparable information and existing systems for data collection and analysis are fragmented. Thus, current estimates of health care expenditure in Armenia vary by source through the application of different definitions and standards on informal payments, formal user charges and co-payments, and humanitarian and international donations and grants. In absolute terms, total per-capita expenditure on health in Armenia in 2002 was estimated at US$ 45 (US$ 10 public per-capita expenditure on health).

Taxes and mandatory social insurance contributions have considerably increased since 1992. Between 1995 and 2000, the share of tax revenue and state duties rose from 11% to 15% of GDP. Despite this progress, however, the level of taxation, at 14% of GDP at the time of writing, is still relatively low compared to other transition economies and the Government continues to encounter difficulties in meeting its budgetary obligations to the health sector *(1)*. Total health expenditure as a percentage of GDP is shown in Figure 1.

In response to the falling public resources available for health, Armenia introduced a state-funded BBP to reduce the State's commitments to the provision of health care. The BBP is both a package of specified services that are theoretically free of charge for the entire population and a list of the population groups that are entitled to receive all health care services for free. The first BBP was introduced in 1997 and included nine types of outpatient services, as well as the treatment of "socially important diseases" (such as STIs or TB); urgent medical care for more than 200 diagnoses; emergency care; and sanitary and epidemiological services. The services and groups covered under the BBP are reviewed annually in response to budgetary and political constraints. As a consequence, the range of services included has changed from year to year; often, however, with little objective rationale, thus creating confusion and uncertainty among both patients and service providers. In practice, vulnerable groups are unaware of their entitlement to free or subsidized health care

Fig. 1 **Trends in total expenditure on health as a percentage of GDP in Armenia and selected countries, 1998–2004, WHO estimates**



Source: WHO Regional Office for Europe. European Health for All database, June 2006.

services and while this persists, it is unlikely that access to care will improve *(1)*.

Revenue

Out-of-pocket payments constitute the major source of revenue for the health care system in Armenia, at an estimated 65% of all health care expenditure *(4)*. These payments fall into three categories: official (formal) co-payments charged for services that are only partly funded from the state budget; official (formal) direct user charges for the provision of services outside the BBP, and unofficial or informal payments, including gratuities provided on a voluntary basis or demanded by providers for services over and above the official state payments and user fees. Informal payments have now developed into an almost formalized system of fees, including barter goods and services in rural areas, for health care providers, auxiliary personnel and administrators *(1)*. It is estimated that of the 65% of health care expenditure attributed to out-of-pocket payments, approximately 93% are informal payments *(4)*.

The state budget remains the main formal source of financing, but state health expenditure is not sufficient to support the core system and to meet the health needs of the population. Current state financing is estimated to be at just over one fifth of total health expenditure in the country. State funds are derived from general tax revenue, including customs fees, value-added tax, excise tax, income tax, property tax and ecological fees. There is no tax that is specifically earmarked for the health care sector *(1)*. Official external health financing sources include humanitarian aid (donations of medical supplies and equipment) as well as credit and grant programmes with, or in coordination with, the Ministry of Health. Following the devastating 1988 Spitak earthquake, Armenia received considerable international humanitarian assistance, which continued through the early phase of independence. However, the volume of humanitarian aid has declined as donors have shifted towards development efforts or have left Armenia *(1)*.

Pooling and resource allocation

The State Health Agency (SHA) was established in 1998 as a semi-autonomous institution under the Prime Minister's office, and is outside the Ministry of Health, in order to perform the role of a third-party payer that pools and allocates public funds. The introduction of a separate purchasing organization allowed for some equalization and defragmentation of financial allocations from the state budget and the implementation of a purchaser–provider contracting system. The SHA acts as a single purchaser of health care: it allocates more than 80% of the public health care resources. The remainder is allocated by the Ministry of Health, largely for the centralized procurement of drugs and medical equipment. In theory, this single public allocation system provides opportunities for better financial planning and coordination of funds allocation *(1)*. However, the SHA was incorporated into the Ministry of Health in 2002 and while this made the SHA subject to external governance (something previously lacking), it meant that it does not have the authority and means to evolve into an effective purchaser organization *(1)*.

Payments

Contracts between the SHA and provider organizations are not based on or related to performance; the SHA cannot perform selective purchasing but has to contract with every licensed health facility, regardless. There is no formal negotiating procedure for agreeing contractual terms and the negotiating power of both purchaser and provider is weak. In addition, the reimbursements offered for services covered by the BBP are usually lower than the real costs of service production, while health provider organizations have to agree any terms as they cannot maintain themselves without public funding. The SHA also has to agree payment rates with the Ministry of Finance and Economy and thus cannot implement its own reimbursement policy. If the SHA wants to reallocate funds between agreed programmes, for example to improve efficiency or for strategic reasons, it

has to apply to the Government to be able to do so. Also, as most funding for health care comes from out-of-pocket payments, this hinders the development of an effective pooling system and offers the population only limited protection from the financial risks of illness.

The payment of physicians working in primary care is calculated on a per-capita basis and depends on the number of patients assigned. In order to maintain access and quality, physicians are penalized for having either too few or too many patients on their books. However, these capitation-based salaries do not differentiate for quality or performance of the services provided, so provide little incentive for quality improvement. The unreliability of basic population data also makes it difficult to implement fairly. The payment of physicians outside primary care is less regulated and they are less protected. For example, some specialists are only paid the guaranteed minimum wage (approximately US$ 25 per month). This represents gross underpayment of specialists and implies that, according to some "unwritten rule", those affected will charge patients "under the table", so as to compensate for their lower earnings *(1)*.

Planning and regulation

Approaches to planning in the Armenian health care system have evolved from a centralized model characteristic of the Semashko system into a segmented vertical system of planning that essentially extends from the Parliament through to republican Government and Ministry of Health down to regional departments of health and social protection to facility and, ultimately, community level. This structure has yet to develop the requisite horizontal linkages and structures to enable efficient and decentralized coordination *(1)*. Communication with and involvement of stakeholders in other sectors such as education, finance, labour, parliamentary committees, local governments and, particularly, civil society and professional associations has also been limited and poorly coordinated. This is likely to have limited the overall potential to form coalitions capable of influencing the national policy agenda *(1)*.

Planning and health information management

Thus far, there has been no national health policy strategy and there is a need for evidence-based policy analysis and development capacity within the Ministry of Health. In the absence of a formal national health policy, existing policy documents serve as the basis for the development of the new draft health law and concept papers *(1)*. The management of health facilities is generally characterized by a strong vertical hierarchical structure, headed by the director. Most hospitals lack a governing body such as a board and therefore remain the de facto personal fiefdoms of the director. The planning of hospital activities is based on annual assessments and reports but with little strategic planning. Also, approaches to performance management are virtually absent from all but the most progressively managed hospitals. This has been attributed to the legacy of the centrally planned economy under the Soviet system, in which managers had no training or experience in strategic planning. The approach of most managers and planners, although naïve and well intentioned, has been to direct scarce financial resources towards sustaining a defunct system rather than making the radical changes needed to provide high quality and safer medical care *(1)*.

Health care managers have little or no training in the organization of the process of care or in the principles and practices of quality assurance and quality improvement. Also, few health care providers have access to, and much less the capacity to utilize, Internet-based and other electronic resources effectively, in order to support decision-making. There is no reporting system to assist health care providers in preventing and reducing possible adverse events and medical errors *(1)*.

Public accountability is largely understood as exposing health care organizations to external scrutiny through the publication of (individual) performance information, rather than a means of creating a feeling of community ownership of the health care organization and its strategies and goals. Broadcasting and examination of provider-specific information through the local media and other public avenues is generally declarative and not informative, and does not stimulate health care providers to address and improve the quality or the efficiency of care. While there has been some progress in terms of improving the quality of care in the Armenian health care system, similar achievements regarding safety, both in service delivery and the general environment, are lacking. Mechanisms to improve patient safety and the quality of care, such as standardization of care in routine clinical practice, are generally nonexistent *(1)*.

Physical and human resources

Physical resources

As noted above, Armenia inherited a complex and inefficient system with an unbalanced structure of services, and much of the reform effort has revolved around reducing capacity and therefore costs. Hospital capacity in terms of the number of facilities and beds in Armenia has fallen considerably since independence, particularly since the late 1990s; this was achieved, mainly, through administrative measures with centrally set hospital optimization targets for regional governments to meet *(5)*. Optimization efforts so far have led to a 30% reduction in hospital capacity and a 15% reduction in nonmedical staff, resulting in estimated cost savings of about 12%. Selected health care resource levels are shown in Table 1 *(5)*. However, it is important to note that the reductions were almost exclusively limited to hospitals outside the capital and the estimated savings were largely achieved through closure of small rural hospitals and reduction of bed numbers in regional and urban hospitals *(5)*.

Despite these recent efforts in reducing the number of beds, the system of hospital care in Armenia is still characterized by excess capacity while a substantial number of patients would be more appropriately and cost-effectively treated in day care or outpatient settings. However, even with inappropriate admissions, the occupancy rate is less than would be expected based on historical figures of reported average occupancy rates of around 85% in the 1980s *(6)*. At the time

Table 1 Selected health care resources (nurses, physicians, acute hospital beds) per 100 000 population, 2004 (or 2003 in parentheses)

	Physicians per 100 000	Nurses per 100 000	Acute care hospital beds per 100 000
Armenia	327	406	388
Azerbaijan	361 (2003)	723 (2003)	762 (2003)
Georgia	489	343	366
Russian Federation	422	799	822
EU average	348 (2003)	719	415
EU Member States before 1 May 2004	362 (2003)	723 (2003)	400 (2003)
EU Member States joining EU on 1 May 2004	278	618	515
CIS average	372	785	742

Source: WHO Regional Office for Europe, European Health for All database, June 2006.

Notes: CIS: Commonwealth of Independent States; EU: European Union.

of writing, bed occupancy rates are fluctuating between 30% and 40%, and are even below 20% in some facilities *(1)*. Hospitals are largely autonomous and their resources remain tied up in equipment, buildings and unsustainable administrative costs. Without external demands for gains in efficiency and quality of care and with only limited public accountability, there are few incentives in the present system to reorient hospital management practices *(1)*.

Human resources

Until the mid-1990s, the health care sector in Armenia was characterized by a large workforce, with particularly high numbers of physicians and with the state medical university producing between 500 to 800 graduates each year. This only changed recently, with the annual number of students entering medical school being reduced to about 400 since the mid-1990s. The Ministry of Education is responsible for undergraduate education and training of most health personnel. Basic university-level medical education lasts six years. Undergraduate medical training is provided at the Yerevan State Medical University (SMU), the only accredited medical school in Armenia. There are also four private medical schools which were established after independence. However, the Government does not recognize these schools and students are not entitled to take state medical exams. Under current regulations, graduates from the private medical schools are not granted a licence to practise *(7)*.

There is no formal system of registration for qualified practitioners, except for an annual registration of the number of graduates from medical schools. The mandatory five-year re-licensing term for all medical specialists was suspended for several years and was only recently reinstated. The final details of the revised system are still being discussed; it is envisaged that it will regulate the type, quantity, and content of training that would qualify for continuing education credits. Armenia's training programmes in health care do not conform to European Union (EU) standards, thus making it difficult to support mutual recognition of training *(1)*.

Nurses, midwives, dental nurses and physiotherapists are trained at nursing schools and colleges, and their education lasts between three and four years. Training is provided at seven state nursing colleges and there are an additional 10 private nursing colleges, but the private colleges are also not recognized by the Government. Specialist postgraduate training in nursing disciplines is not systematically developed and is generally provided through individual short-term programmes and projects delivered, locally or abroad, by various international organizations *(1)*.

In 1990, Armenia had 3.9 physicians per 1000 population; by 2004 this number had fallen to about 3.3 per 1000 *(6)*. There is also an overprovision of specialists relative to primary care physicians. In the past, residency slots were effectively based on student interest and not on actual need, and this has caused unemployment among specialists in certain fields, while there is a shortage of physicians in rural areas. The number of nurses has fallen considerably over recent years, from 7.3 per 1000 population in 1990, to 4.0 per 1000 in 2004 *(6)*. Not only is the number of nurses low in international comparison, their skills are also considered inadequate for independent work *(8)*. Anecdotal evidence suggests that because of low salaries, many health professionals have moved from the public to the private sector; although there are no reliable data on the extent of this movement *(1)*.

To complement the Government's efforts to coordinate the workforce through optimization strategies and the merging and downsizing of hospitals and other provider institutions, the SMU provides retraining programmes for specialists looking to become primary care physicians while also gradually reducing the number of entry-level medical students. The residency retraining is significantly shorter than the residency for recent graduates, providing a faster supply of specialists needed and providing employment opportunities

for skilled but un- or underemployed physicians. Other recent innovations include a baccalaureate programme in nursing and expanded postgraduate opportunities in public health and health management *(1)*.

Provision of services

As a legacy of the Soviet model of health care delivery, the Armenian health care system relies extensively on hospital-based physicians and has a strong focus on curative services as a means of reducing morbidity and mortality, while health promotion activities and the creation of healthy living conditions are less of a priority *(1)*. A recent assessment of the delivery system in Armenia concluded that current services "are still characterized by antiquated and costly facilities, and a vertical, highly specialized, non-integrated approach to care" *(9)*. The system continues to feature an excess capacity of providers, underutilized facilities and an inappropriate skill mix. At the same time, there is considerable inequity in the level of services provided in rural and urban areas. Ad hoc restructuring has often consolidated facilities in a way that decreases access to care, especially for rural populations, while increasing administrative costs and disrupting established referral systems. It has also led to excessive vertical segmentation, further complicating the ability to monitor use of health resources at lower levels of the health system *(1)*. Additionally, long-term and palliative care services are lacking, with few dedicated facilities and no systematic approach or national policy for their development.

Public health

Public health services are based on the old Soviet Sanitary Epidemiological System. In 2002 this was reorganized as the State Hygiene and Anti-Epidemic (SHAE) Inspection under the Ministry of Health. However, the new SHAE Inspection continues to fulfil the same functions of disease outbreak monitoring; defining sanitary-epidemiological safety standards, rules and norms; inspecting and monitoring facilities; and coordinating prevention activities for communicable and noncommunicable diseases. Immunization programmes are delivered in primary care settings by nurses. Effective and accessible health education in Armenia requires further development. The Ministry of Health has recently launched a series of national awareness and information campaigns on specific health problems, such as tobacco, alcohol, drugs, HIV/AIDS and work-related illnesses. It has also come to an agreement with the Ministry of Education to include health education programmes in the school curricula. However, there are also many other agencies involved in the delivery of health education at different levels of government and in the nongovernmental sector *(1)*.

Primary care

Primary health care is typically provided by a network of first-contact outpatient facilities involving urban polyclinics, health centres, rural ambulatory facilities and Feldsher/Midwife Health Posts (FAPs) according to the size of the population in a particular community. In 2002, there were over 400 ambulatories and polyclinics (including 73 in the city of Yerevan) and over 600 FAPs in Armenia. FAPs are located in small villages and are run by nurses, midwives, and/or feldshers who are supervised by staff from nearby polyclinics and ambulatory facilities. Officially, the role of FAP staff has been limited to very basic interventions, and more complex cases are dealt with in the ambulatory facilities and polyclinics staffed by physicians, nurses and midwives *(10)*. Since the mid-1990s, the development and strengthening of primary health care has been identified as a key priority for Armenia's health system reform programme. The country, with the support of international donors, has since been experimenting with a series of small-scale and pilot projects as a way of further developing primary care services.

Utilization of health services in Armenia has declined more for primary care than for hospital care. This can be partially explained by the perceived poor quality of primary care services and many patients avoid seeking care because of the costs involved, delaying treatment until a more specialist level of care is needed *(8)*. Overall, quality of care appears to lag significantly behind international standards since, despite significant international investment, primary health care facilities remain in poor condition, are poorly equipped and inappropriately staffed. Facilities lack cost-effective diagnostic equipment as well as basic information and record-keeping technology. There is a general lack of applying standardized laboratory practice to support appropriate diagnostics and evidence-based clinical decision-making *(1)*.

Hospital care

Secondary health care is traditionally provided in a range of institutions, including:

- freestanding municipal and regional multi-use hospitals
- integrated multi-use hospitals (networks) with ambulatory care provision
- health centres with beds for inpatient care
- maternity homes with and without consultation units
- specialized clinics for inpatient and outpatient care

Tertiary care is usually provided through specialized single-purpose facilities with a major focus on complex technologies; these facilities are mainly concentrated in Yerevan. Specialized services in Armenia are generally organized vertically, which has led to a concentration of resources on a limited range of health problems *(1)*. Hospital care continues to dominate the national health system in Armenia, absorbing over 50% of the annual budget allocation in 2004, with only 35% being allocated to primary health care *(1)*. This balance is expected to change, but the future role of hospitals and other inpatient facilities and how they fit in with the vision of a primary care-led system is still uncertain.

Mental health services

Mental health services in Armenia are sorely lacking, and what is available is poorly integrated into the primary care system. The current system focuses on inpatient care, and a lack of appropriately trained social workers and other mental health providers further limits the potential for providing services at ambulatory and community level. Stigmatization of patients with mental health problems remains a challenge for both families and society. Psychiatric care is almost exclusively provided in specialized mental health institutions including hospitals and social psychoneurological centres. There is an overcapacity of beds and staff in psychiatric hospitals, which has led to the unnecessary admissions of chronic patients who would be more appropriately treated in an outpatient, community setting. However, there is no systematic approach to community mental health services except for some small-scale pilots, usually supported by international organizations *(1)*.

Dental care

Dental care in Armenia, even under the Semashko system, was largely run in an entrepreneurial manner; so it has been least affected by the social and economic transition. At least 80% of dental care clinics are now operating on a private for-profit basis. There are, however, a number of departments of dental care that remain public, when located within the structure of municipal or rural polyclinics or ambulatory facilities, usually delivering dental care as specialist services for the local population. While previous efforts to develop a national dental care strategy have not been successful, there is, however, a state-coordinated and funded programme of annual school-based preventive dental visits for children 6–12 years old. Prices for dental health services provided in private dental clinics are largely regulated by the market, with the Government

having little influence on pricing policy. Patients usually choose providers on the basis of perceived quality, affordability and access, with few formal, institutional safeguards. There is no explicit system of quality assurance for dental care services *(1)*.

Health care reforms

Since 1997, structural and regulatory reforms in health care have focused on three main areas: decentralization (involving devolution and privatization); the implementation of new approaches to health care financing; and improving health system effectiveness. Decentralization involved both devolution of responsibility for service provision (primary and secondary care) from central level to regional/local health authorities and of financial responsibility from governmental to facility level, as well as the privatization of hospitals and health care facilities in the pharmaceutical and dental care sectors. Privatization aimed to create an environment that would facilitate individual and organizational investments into the health care system. However, the Government did not set any requirements for private investments but continued to provide funding to privatized institutions. Indeed, instead of providing an instrument to optimize the system, reducing excess capacity and informal payments, and improving management, efficiency and quality of services, privatization accelerated expanding capacity even further, without any of the anticipated improvements. The Government has reviewed this process and recently put a halt to further privatization in the health care sector so as to evaluate the results, review the strategy and develop new models and approaches towards privatization *(1)*.

The improvement of financial mechanisms is seen as key to reforming the health care system in Armenia. Health financing reforms focused on diversifying revenues for the health care sector and linking health care financing to the quality and volume of care provided. In view of the limited resources available, financial reforms also aimed to advance financial management and to increase the financial sustainability and accountability of institutions in the health sector. The Ministry of Health is currently experimenting with different models for increasing efficiency, financial management, accountability and financial sustainability of health care facilities. Current efforts to develop a system of National Health Accounts go some way towards improving the transparency of health sector financing and informing decision-making. There is, however, a need to explore financing mechanisms such as prepaid schemes, user charges, risk pooling and the like, as well as a more fundamental discussion of social values and the mobilization of civil society. Reforms envisaged for the future include strengthening primary care and institutionalizing family medicine. A district health system model is also under discussion *(1)*.

Thus far, health financing reforms have been unsuccessful in improving access to health services as the level of informal out-of-pocket payments remains so high. Overall, the decentralization process, while increasing autonomy and shared responsibility, also brought considerable challenges as a result of the functional disintegration of the system. In particular, relations between health care institutions and health professionals are being undermined, the referral system has become dysfunctional and both internal and external quality control mechanisms are lacking. At the same time, the regulatory capacity of the Ministry of Health has fallen, negatively impacting health system performance. The administrative autonomy granted to health care facilities also failed to provide sufficient stimuli to increase the cost–effectiveness and quality of services *(1)*.

Assessment of the health care system

Since independence, the health care system in Armenia has undergone numerous changes that have effectively transformed a centrally run state system into a fragmented health care system that is largely financed from out-of-pocket payments. The population, especially those with the least means, such as the elderly, unemployed and mothers and children, meet with limited access to basic and specialized health care services. This often leads members of the most vulnerable groups to postpone access to health services and therefore to late referrals to health care providers *(1)*. Inequalities in health service utilization remain strong, with recent data estimating that in 2001 the poorest 20% of the population consumed 16% of primary health care resources and 13% of hospital care resources, compared to 28% and 43% respectively being consumed by the wealthiest 20% *(8)*. Those services which are available are often of questionable quality, as health care standards and quality assurance systems are absent, which reinforces the tendency to postpone accessing the system. Drugs on the essential drug list are generally not affordable to those in need. Many health facilities, especially in rural areas, lack modern medical technology and equipment and what is available is not distributed efficiently. The existing "state order" provision of free health care remains more declarative than factual, as informal payments are still required in many cases. International and humanitarian assistance programmes and initiatives aimed at improving the health care system are often poorly coordinated due to the absence of a clear government policy and strategic framework, combined with donor restrictions and expectations. Despite significant investments in primary care, a disproportionate share of resources continues to flow into secondary and tertiary care.

The reform process initiated in the mid-1990s has resulted in both successes and failures. Approaches have not been consistent or comprehensive, with little involvement of key actors, negatively impacting on health care providers and the health care system as a whole. Yet, despite the difficulties relating to the nature of the system, with its Soviet legacies, and to the considerable challenges posed by socioeconomic and political disruption, Armenia's health care system has maintained a certain constructive potential and has been protected from radical changes *(1)*. Armenia is increasingly reforming the health system from one that emphasizes the treatment of disease and responds to epidemics to one which emphasizes prevention, family care and community participation. The shift towards a primary care orientation and community approach is noticeable, with gradually increased roles for health workers in influencing the determinants of health *(1)*.

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