Introduction

Government and recent political history

Ukraine declared independence from the Soviet Union in August 1991. The head of state is the president, elected by secret ballot to a five-year term. The president appoints, with the approval of the unicameral parliament (Verkhovna Rada), the prime minister, the cabinet of ministers and the regional governors. Administratively, the country is divided into 24 regions (oblasts) and two municipalities with oblast status, and also comprises the Autonomous Republic of Crimea (ARC), with its own constitution and government.

Population

Since independence, the population has fallen by 3.6 million, to 48.4 million in 2001; the birth rate has fallen by almost 40%. Ukraine has been challenged by a deep economic crisis that included the worst hyper-inflation in the region, registering growth of GDP only in 2000. The economic crisis has had a serious and long-term impact on the well-being of the population and a considerable proportion still faces substantial economic difficulties.

Average life expectancy

Ukraine experienced a severe mortality crisis, with male life expectancy at birth falling by 4.4 years between 1990 and 1995 (women: ~2.4 years). Death rates rose again after 1998, coinciding with the 1998 Russian economic crisis, with little subsequent indication of reversal. By 2002, male life expectancy had fallen to 62.2 years, about 2.5 years lower than it had been in 1980. For women, life expectancy was, at 73.7 years, also somewhat lower than in 1980 (74 years).

Leading causes of death

The fluctuations in life expectancy were largely driven by changes in mortality from...
cardiovascular diseases and external causes of death, affecting mainly young and middle-aged men. Smoking accounts for a considerable part of the burden of disease, particularly among men. Another important factor is hazardous alcohol consumption. Infant mortality (10.3 per 1000 live births in 2002) fell continuously since 1993 and maternal mortality, though falling since 1992, remains high, at 24.7 per 100 000 live births in 2000, about five times the EU average.

Recent history of the health care system
During the Soviet period, the health care system was organized to the Semashko model, with centralized planning and administration. The economic downturn after independence impacted significantly on the resources available for health care at a time when the costs of running the system have increased substantially. In this context, maintaining the complex, inefficient health system, with its unbalanced structure of health services, has resulted in a highly inequitable health care system of poor quality.

Reform trends
Since gaining independence, the government has been engaged in reforming the health care sector. Key objectives were (1) to retain the health system and contain costs through mobilizing additional, mainly private, resources of health care financing; limiting the scope of health care provided free-of-charge; and reducing overcapacity in the hospital sector; (2) to improve structural efficiency and the quality of care through developing primary health care; restructuring inpatient care; standardizing medical technologies and establishing a system of accreditation of health facilities; and (3) to decentralize management through delegation of administrative functions to regional and local levels.

Health expenditure and GDP
According to WHO data, in 2003, public health care spending was 3.2%. Estimates from the Ukrainian statistical office suggest a lower level, at currently 2.8% of GDP. Neither figure includes private payments (formal and informal), which have risen considerably in recent years.

Overview
The basic principles of the health system have changed little since independence. It maintains financial and economic mechanisms that stimulate further expansion of capacity while creating new problems through the substantial mismatch between state guarantees of universal, unlimited access to free health care and the actual availability of health care funding. This has been further complicated by failure to apply effective means of cost-containment or to increase efficiency, except for measures to reduce oversupply of hospital beds and health care staff. This complex interplay of factors along with the difficult economic situation has resulted in a drastic reduction in the quality of, and accessibility to, health care, with unofficial payments and other forms of health service charging having become widespread. In a recent move, the parliament has committed itself to introducing necessary legislative changes to implement reform, with reasonable expectation of success despite the numerous obstacles.

Organizational structure and management
The formal health care system is supervised by the state. The Ministry of Health has responsibility for health policy. Most health care is delivered in facilities owned and managed at regional and district level, and funded by the respective tiers of government from allocations provided by the Ministry of Finance or raised locally. Thus, the scope of the national Ministry of Health is confined to issuing guidance and norms and to
matters of national health policy.

Important players also include the parliament, relevant for health care financing and delivery; the Ministry of Finance, for drafting the State Budget and assigning local budgets; the Ministry of Labour and Social Policy, responsible for providing health care in nursing homes and monitoring the mandatory national social insurance funds; and the Red Cross Society, for providing home nursing services and health care in selected facilities. There is also a system of parallel health services which oversees about 2% of health facilities.

The majority of health care services are provided by publicly-owned health facilities. The private sector has yet to develop to a significant extent, with the exception of the areas of pharmaceutical supplies and dentistry. There are now also private clinics for sexually transmitted infections (STIs), and alcohol and drug dependency treatment centres or services.

Planning, regulation and management

At the national level, the Ministry of Health has the main responsibilities for planning and management in health care. At the regional, district and community level, these functions are dealt with by the relevant oblast health administrations, district state administrations and local councils and executive bodies, respectively.

Approaches to capacity planning in the Ukrainian health care sector have remained almost unchanged since Soviet times. Current mechanisms do not reflect the health care needs of the population or account for regional characteristics. There is also little incentive for rational use of resources or cost control over health facilities. Thus, staffing levels for free-standing ambulatory and polyclinic facilities and outpatient units are determined according to norms approved by the Ministry of Health. Overall, the current system lacks a coherent approach to ensuring appropriate levels of health care workers.

Decentralization of the health care system

A highly centralized model of decision-making has gradually been replaced by a system in which authority has been delegated to local administrations and self-governing bodies. As a consequence, many recent innovative activities in the health care sector were initiated at the regional and local levels. Today, the health care system is a complex multilayered system where responsibilities in the health care sector are fragmented among central government, 27 regional administrations, numerous administrative bodies at municipal, district, township and village levels, as well as other ministries.

Health care financing and expenditure

Main sources of financing

Unlike many other areas of the economy, health care financing has essentially retained the Soviet tax-based approach, providing universal and theoretically free coverage. Government budgets remain the major official source for health care finance, with some 80% based on local budgets and the remaining 20% on the state budget, respectively supervised by the regional authorities and the Ministry of Health, and derived from general taxation and local taxes. With the Budget Code of 2001, a system of inter-budget transfers was introduced to even out differences between regions and to provide subsidies for social protection programmes.

Due to shortage of government funding, there is increasing reliance on health financing from private sources. Until 1996, before the introduction of official user charges, the public share of health care financing was about 80%,
but it fell to 66% in 2000. Taking account of informal payments, the overall share of direct health expenditure by the population is estimated at currently 50%.

A law on social health insurance has been on the Parliament’s agenda for several years, but was finally rejected in September 2003; a fourth reading originally considered for May 2004 has now also been withdrawn.

**Complementary sources of financing**

Out-of-pocket payments now constitute a major source of revenue for the health care system. Official payments by the population, excluding voluntary health insurance, are estimated to amount to 43% of the total health budget and are increasing. Much of this is spent on pharmaceuticals and dressing materials; payments for services and voluntary donations account for a smaller part of personal expenditure. The Ministry of Health estimates that in 1998, 4.5% of resources available to health facilities were derived from extra-budgetary sources; by 2000, this proportion had risen to 7.5%.

Voluntary health insurance (VHI) was legalized in 1996. However, the VHI sector accounts for less than 1% of total health care spending and, in 2000, covered about 1.5% of the population. A network of nongovernmental organizations (NGOs), such as credit unions and sickness funds has developed as an alternative means to mobilize additional resources for the health care system. However, sickness funds cover only a small proportion of the population and their impact on overall health care spending is limited.

Ukraine receives external funding for health care from a variety of sources, including international organizations and individual countries. However, overall donor activity in health care contributes only little to the overall financing of the health care sector, with recent figures estimating the proportion at less than 1%.

**Health care benefits and rationing**

According to the 1996 Constitution, the provision of services in public health facilities is free of charge. However, limited financial resources have resulted in successive extensions of the scope of non-explicit charging for services, beginning with the introduction of official user charges in 1996. In addition, health facilities were allowed to ask patients for voluntary compensation for services. Thus, in effect, with the exception of children, health care services provided in public health facilities were no longer free to the user.

In May 2002 the Constitutional Court ruled the introduction of user charges for services provided in public health facilities to be unconstitutional, while at the same time stipulating that they could charge for non-essential services. Thus, in 2001 the government determined a list of services that may not be financed from the budget. Access to these services in state facilities is possible if the patient or a third party pays for them. Certain vulnerable groups are exempt from user charges, including patients with AIDS, who, in theory, do not have to pay for outpatient drugs; however, the quantity of available drugs is very limited.

**Health care expenditure**

The exact level of total health expenditure is difficult to determine, mainly because of inconsistencies between statistical data from different sources and scarcity of data on health care spending in the informal sector. According to data from WHO, health care expenditure during the 1990s has fluctuated between 3% and 4% of GDP. These figures only include governmental expenditure but not (formal and informal) payments. According to the statistical office of Ukraine, governmental health care spending is lower, at currently 2.8% of GDP, one of the lowest proportions in the WHO European Region.
Health care delivery system

Primary health care
The primary health care (PHC) structure is essentially that inherited from the Soviet era, with a large network of PHC units, comprising polyclinics, polyclinic units in hospitals and Medsanchasts (workplace-related clinics), women’s consultation clinics, rural physicians’ ambulatories and outpatient departments in rural hospitals. Primary care is provided according to catchment areas (uchastok). In rural areas, each physician’s uchastok encompasses, on average, four to five feldsher and midwife aid posts (FMAPs), providing simple curative services, first aid, prescription of drugs, antenatal and postnatal care and basic preventive activities (e.g. immunization). Almost one third of rural areas have no nearby health facility.

There is no strict distinction between primary and secondary care. Patients may seek care by a specialist without formal referral by their uchastok physician. This opportunity is widely used and further encouraged by uchastok physicians, who have little incentive to compete for patients, and their very low level of skills and equipment leads to patients bypassing the primary care level altogether. Fewer than 40% of patients of district polyclinics are seen by their assigned physician.

Formal steps towards a PHC reform were only introduced in 2000 and the Ministry of Health has now developed a strategy of gradual transition to family medicine. Family ambulatories have been established, primarily in rural areas. However, converting all existing PHC units according to the family medicine principle and setting up a network of general/family practices in urban and rural areas will require substantial efforts.

Public health services
Public health remains based on the traditional functions of the state Sanitary and Epidemiological Service, whose main objectives are the control of communicable diseases and environmental protection. Its structure and functions have changed little since Ukraine’s independence.

New public health functions are now being developed, especially in response to newly emerging health threats such as HIV/AIDS, with Ukraine being among the worst affected countries in Europe. HIV/AIDS has been identified as a priority area for development assistance by the United Nations. The 2001 national strategy emphasized intersectoral cooperation and preventive interventions; its implementation was supported by technical and financial assistance from the United Nations, international donors and NGOs.

Family planning and reproductive health services have been strengthened through the successive implementation of two national programmes with the assistance of international donors, enabling the creation of a comprehensive family planning service. The service is headed by the Ukrainian State Family Planning Centre, followed by regional family planning centres and contraception consulting rooms and, at the primary care level, rural health posts.

There is strong government support for the WHO “Health for all” (HFA) strategy. An important step was the adoption in 2002 of the Health of the Nation for 2002–2011 programme that incorporates the promotion of healthy lifestyles as an essential activity to advance population health and envisages a package of multisectoral activities, but there is so far no clear means for implementing this ambitious programme.

Secondary and tertiary care
The inpatient system is organized into three levels: (1) rural catchment hospitals, with very basic inpatient facilities (3.5% of all hospital beds); (2) municipal and central district hospitals, comprising about 70% of all hospital beds, with a capacity of around 200 beds and a range of specialties. In addition, municipal dispensaries provide inpatient care for some specific diseases such as tuberculosis and sexually transmitted diseases (STDs); (3) regional and supra-regional
specialization provided by oblast hospitals and dispensaries, and specialized clinical and diagnostic centres of national research institutes (25% of all hospital beds). Originally designed to provide highly specialized medical care, the boundaries between secondary and tertiary inpatient care have become blurred recently.

In an attempt to reform the hospital sector, the government has focused on reducing the number of hospital beds, which was among the highest in Europe in the early 1990s, along with streamlining services by, for example, substituting other forms of care for inpatient care, such as day care, hospital-at-home care and day surgery. The impact of substitution on utilization has, however, been low, mainly because of a lack of incentives for hospitals to reduce the number of admissions, as financing is still based on bed capacity. In contrast, the reduction of hospital beds by more than one third since independence has led to a fall in hospital admissions by 20% to 19.6 per 100 in 2003. The average length of hospital stay has also been declining though remaining substantially higher than in most European countries (12.1 days in 2003).

**Social care**

There is no clear division between social and medical care, and community services are poorly developed. Social care is the responsibility of the Ministry of Labour and Social Policy, with nursing homes being the main residential facility for those needing assistance with daily living. Demand for nursing-home beds, however, far exceeds capacity. Residential care is poorly developed and day-care facilities are very few. The main burden of medico-social care tends to fall on inpatient facilities. Attempts to reallocate beds or to create nursing care units in hospitals are constrained by the existing system of hospital finance.

Psychiatric care is mainly provided in an inpatient setting and the number of beds is...
falling while there is parallel expansion of outpatient services or day care. The quality of services is extremely low. There are no community psychiatric services; however a civil movement for the protection of people with mental disabilities is beginning to develop and the government is planning to reform social care. Successful implementation of current proposals will, however, depend to a large degree on structural reorganization of the health sector in general.

Human resources and training

Ukraine had a large health care workforce, which fell substantially in 1995. This was because of a change in reporting in line with the WHO definition of health personnel. Using the previous definition, the number of qualified physicians remained rather stable at around 4.6 per 1000 population whereas the supply of nurses appears to be in continuous decline, due to low pay and lack of career prospects. Also, replacement becomes increasingly difficult due to falling numbers of nurses graduating.

A key feature is the overprovision of specialists relative to physicians in primary care, constituting only 27% of the total number of active physicians in 2000. Remuneration levels are low for both doctors and other health care staff; the average salary in the health sector is less than half the average wage in industry. At the same time there is a shortage of doctors especially in primary care and tuberculosis services and in rural areas.

Reform of higher medical education was initiated soon after independence and work is now underway to align training programmes with European standards. Training is provided in 18 state university-level medical schools and faculties. There are also three medical faculties within multi-speciality universities and six nongovernmental institutes, five of which having now lost their licence for training because of low quality training.

Medical training lasts 6 years (dentistry: 5 years), with the main specialization in currently one of 52 specialities achieved through internship. The length of internship has been reduced due to lack of resources and varies between one and two years. General practitioners (GPs)/family doctors are trained through a two-year internship and a six-month retraining course of active physicians. This is hampered by a shortage of trained teachers and lack of facilities for practical training. A large-scale training programme was initiated in 1998 and until 2000, 1938 GPs were trained. However, almost 40% are not working as GPs, mainly because of low pay.

Training of nurses was reorganized as a graded education, including junior specialist and bachelor degrees, with a master’s degree in development. However, qualified nurses still largely work in positions similar to junior
specialist nurses and their degree does not impact on their salary. There are plans to continue restructuring nurse training to establish nursing as a separate profession.

There are also initiatives to strengthen capacity in health services management and public health, with, for example, the Department of Health Care Management established at Kharkov Medical Academy in 2001, and plans to establish the first Ukrainian School of Public Health in Kyiv.

Pharmaceuticals
The pharmaceutical sector has undergone substantial changes, with the privatization of manufacturing and retailing. There are currently 180 domestic drug manufacturers (90% private enterprises), and the market share of domestic drugs is currently about 50%. The majority of pharmacies have been privatized and their number has almost tripled since 1991 to 39 facilities per 10 000 population (less than one third in public ownership). However, prices have risen sharply, leading to unaffordability of high-quality, safe drugs and medical devices; up to one third of households were unable to obtain necessary health care in 2000, largely because of the high costs of drugs.

Since 2000, public health facilities are required to purchase pharmaceuticals through tender procedures. There are also certain centralized procedures in which the Ministry of Health purchases pharmaceuticals primarily for patients with specific conditions. A national list of essential pharmaceuticals and medical devices was approved in 2001, forming a basis for a basic medical entitlement package.

The main direct mechanism of state price regulation consists of establishing maximum retail surcharges for pharmaceuticals and medical devices, which was delegated to the regional administrative bodies in 1996. The decentralized regulation has, however, resulted in substantial regional differences in retail prices for
pharmaceuticals, ranging between 10% and 50% of cost. 2001 saw the reintroduction of maximum retail surcharges at the national level and regional variability in retail prices fell. Currently, state regulation covers 16% of the pharmaceuticals registered in Ukraine.

The scope for influencing prescribing patterns is limited, and further hampered by the liberalization of the pharmacy dispensing procedures. Over-prescribing among physicians is common. The only exceptions are patients who are exempted from co-payments and where doctors prescribe generic drugs, which the patient then obtains from the residential community pharmacy. However, this route is frequently blocked, as less than 10% of the need is met.

**Financial resource allocation**

Ministry of Health, local health authorities and local administrations draft the annual budget request, taking account of the requirements of subordinated health facilities, which is then submitted to the corresponding financial authority. Health facilities will then receive quotas according to which they develop their individual budget request.

Allocation of budgetary (state and local) funds is based on a list of permitted line items, with norms set by the Ministry of Health. All procurement by health facilities of medical and office equipment, pharmaceuticals, supplies, etc., is to be done through tender procedures. Allocation of resources for maintaining health facilities is operated through the state treasury. Capital investments are financed at both central and local levels, again through tender procedures. However, available funds offer only limited opportunities to meet actual requirements. Also, lack of transparency often allows for the misuse of public funds regarding the acquisition of medical technology and equipment. Thus, centralized planning and purchase of complex medical equipment was adopted in 2000.

Measures to strengthen control over the use of budgetary resources included the adoption of the Budget Code, the involvement of the financial authorities in developing the budget and the introduction of tender procedures for the procurement of goods and services with public funds. However, there have been no substantial changes regarding the actual allocation of resources within the health care sector.

**Payment of health care facilities**

The budget allocation to hospitals and polyclinics remains largely based on their capacity. Budgets are strictly itemized, including payroll and additional payments to staff, goods and maintenance costs. The volume of resources set aside for each budgetary item is strictly regulated.

Given the chronic underfinancing of the health sector, the resources available are hardly sufficient to meet needs and are, therefore, mainly allocated to cover the expenditures in protected categories, usually comprising payroll, expenses for pharmaceuticals and food, and basic maintenance costs. In 2000, 43.8% of local budgets was spent on salaries, 10.6% on pharmaceuticals, 5.4% on food and 13.3% on maintenance. However, itemized budget figures obscure the real costs. Also, various medical supplies such as syringes, needles and gloves are paid for by patients, and inpatients are often also required to pay for food and bedding. Low salaries of health staff are compensated by under-the-table payments.

The current system of payment to hospitals and polyclinics offers little incentive to operate efficiently. In contrast, the system encourages facilities to increase numbers of consultations and admissions and thus contributes to inefficient spending of public and human resources.

**Payment of health care professionals**

Ukraine has also largely retained the Soviet practice of remunerating public sector health
care professionals by fixed salaries according to a national pay scale set by the Ministry of Health. Salaries in the health care sector are now below the country’s minimum subsistence level and only recently has the government increased the minimum salary level for middle-level health care professionals. However, the erosion of salaries has facilitated the expansion of informal payments for certain services, reducing access to health care for an increasing number of patients on low incomes.

Another feature of health professionals’ salaries in the public sector is the so-called “wage-levelling”, i.e. the salary does not depend upon the quality, quantity or type of service provided. Thus, there is no financial incentive for physicians to provide cost-effective treatment. Only recently has the government begun a process of developing more sophisticated methods of payment. There are plans to raise official salaries for health professionals holding certain qualifications. A system of performance-related increments has also been determined. However, there is still considerable uncertainty in terms of linking the payment to actual performance of health staff.

Health care reforms

Reforming the health care sector was placed on the national agenda almost immediately after independence, beginning with the 1992 Act “Principles of Legislation on Health Care in Ukraine” that regulates all aspects of national health policy. Yet, until the end of 2000, reform activity lacked clearly defined formal aims and priorities, slowing down the pace of reform and leading to inconsistent and often contradictory policies.

Reform activities have so far involved strategic interventions, aiming at structural reorganization, such as in primary care. Progress is impeded by the lack of economic incentives for reform; however, several local initiatives are now introducing new forms of organization and reimbursement. Further strategic interventions included reforming the inpatient sector through substitution; the creation of a legal framework enabling contractual relationships between health care funders and providers (2000); and attempts to replace the tax-based system of health care financing by mandatory social health insurance.

The necessity to mobilize additional income has prompted the introduction of user fees in 1996 and has also stimulated the development of several local initiatives such as sickness funds from the mid-1990s onwards. Parallel attempts to cost containment have impacted substantially on the hospital sector with the introduction of area-specific maximum norms for hospital beds in 1997 accelerating the reduction of beds. The government also engaged in gradually reducing the number of health professionals trained on state funds, with little effect on the supply of health professionals though.

A third set of reform activities was initiated by the general process of transition, democratization of society and the development of market economy. This included the development of local self-government, increasing the responsibilities of local authorities; the development of a non-governmental sector, with a slowly expanding network of private health care facilities and practices; and privatization in the pharmaceutical sector. However, numerous problems remain, such as delegating power to local authorities greatly weakening the ability of the Ministry of Health to implement reforms, or the lack of appropriate state regulation to control the pharmaceutical sector.

Conclusions

Since independence, Ukraine has succeeded in creating a legal framework characterized by fragmentation and complexity, with overlapping and often ambiguous lines of accountability, against a background of inadequate resources
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to meet its stated goals. Despite these many problems, some limited reform does seem possible. However, the transformations that have taken place so far are not sustainable in a way that would create structural changes in the system and major improvements to the way it operates.

There is an understanding that improving the financial basis of health care will require overall economic growth in the country. However, it has also become clear that acute problems in the health care system are also due to its inefficiency in financing, planning and regulation. Efficient use of methods of cost-containment and optimization is a decisive factor for improving the health care system, regardless of the type of funding chosen for the future. Given the limitations in mobilizing resources, the importance of measures that ensure highly efficient use of those resources which are available is growing considerably. In view of recent developments, it is now anticipated that in the foreseeable future the major strategy for restructuring the health care system will consist of improving the management of the existing system.

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The Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of each health care system and of reform initiatives in progress or under development. The HiTs are a key element that underpins the work of the European Observatory on Health Systems and Policies.

The Observatory is a unique undertaking that brings together the WHO Regional Office for Europe, the governments of Belgium, Finland, Greece, Norway, Spain and Sweden, the Veneto Region of Italy, the European Investment Bank, the Open Society Institute, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. This partnership supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of health care systems in Europe.