European Observatory on Health Care Systems

Health Care Systems in Transition

Poland



The European Observatory on Health Care Systems is a partnership between the World Health Organization Regional Office for Europe, the Government of Norway, the Government of Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine

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By the year 2005, all Member States should have health research, information and communication systems that better support the acquisition, effective utilization, and dissemination of knowledge to support health for all.
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Foreword

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 Care Systems.

The Observatory is a unique undertaking that brings together WHO Regional Office for Europe, the Governments of Norway and Spain, the European Investment Bank, 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 the dynamics of health care systems in Europe.

The aim of the HiT initiative is to provide relevant comparative information to support policy-makers and analysts in the development of health care systems and reforms in the countries of Europe and beyond. The HiT profiles are building blocks that can be used to:

- learn in detail about different approaches to the financing, organization and delivery of health care services;
- describe accurately the process and content of health care reform programmes and their implementation;
- highlight common challenges and areas that require more in-depth analysis;
- provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policy-makers and analysts in the different countries of the European Region.

The HiT profiles are produced by country experts in collaboration with the research directors and staff of the European Observatory on Health Care Systems. In order to maximize comparability between countries, a standard template and questionnaire have been used. These provide detailed guidelines and specific questions, definitions and examples to assist in the process of

developing a HiT. Quantitative data on health services are based on a number of different sources in particular the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) health data and the World Bank.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health care system and the impact of reforms. Most of the information in the HiTs is based on material submitted by individual experts in the respective countries, which is externally review by experts in the field. Nonetheless, some statements and judgements may be coloured by personal interpretation. In addition, the absence of a single agreed terminology to cover the wide diversity of systems in the European Region means that variations in understanding and interpretation may occur. A set of common definitions has been developed in an attempt to overcome this, but some discrepancies may persist. These problems are inherent in any attempt to study health care systems on a comparative basis.

The HiT profiles provide a source of descriptive, up-to-date and comparative information on health care systems, which it is hoped will enable policy-makers to learn from key experiences relevant to their own national situation. They also constitute a comprehensive information source on which to base more in-depth comparative analysis of reforms. This series is an ongoing initiative. It is being extended to cover all the countries of Europe and material will be updated at regular intervals, allowing reforms to be monitored in the longer term. HiTs are also available on the Observatory's website at http://www.observatory.dk.

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The current series of the Health Care Systems in Transition profiles has been prepared by the research directors and staff of the European Observatory on Health Care Systems.

The European Observatory on Health Care Systems is a partnership between the WHO Regional Office for Europe, the Government of Norway, the Government of Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine.

The Observatory team is led by Josep Figueras, head of the secretariat and the research directors Martin McKee, Elias Mossialos and Richard Saltman. Technical coordination is by Suszy Lessof. The series editors are Anna Dixon, Judith Healy, Elizabeth Kerr and Suszy Lessof.

The research director for the Poland HiT was Martin McKee.

Administrative support, design and production of the HiTs has been undertaken by a team led by Phyllis Dahl and comprising Myriam Andersen, Sue Gammerman and Anna Maresso. Special thanks are extended to WHO Regional Office for Europe health for all database from which data on health services were extracted; to the OECD for the data on health services in western Europe, and to the World Bank for the data on health expenditure in central and eastern European (CEE) countries. Thanks are also due to national statistical offices that have provided national data.

Introduction and historical background

Introductory overview

The Republic of Poland is the largest country in Eastern Europe in population and in area. Covering 312 685 square kilometres, the country to the east is bordered by Belarus and the Ukraine, to the south by Slovakia and the Czech Republic, to the west by the Federal Republic of Germany and to the north by the Baltic Sea, the Kalingrad enclave of the Russian Federation and Lithuania (Fig. 1).

The area of Poland was settled by Slavic groups in the sixth and seventh centuries, with the Polish state being founded in 966. Poland has a turbulent history of repeated invasions. Powerful and prosperous from the fourteenth to seventeenth centuries, it declined in the eighteenth century being divided between Russia, Austria and Prussia. Between the first and second World Wars, Poland was an independent country, but in 1939 was invaded by Germany and later the Soviet Union and from 1945 came under the Soviet sphere of influence. The country was devastated during the war, with one fifth of the population killed, including virtually all its Jewish population. In the Warsaw uprising of 1944, the capital was largely reduced to rubble. Following the second World War, a communist government ruled the country, until the re-emergence of democratic government in 1989.

The total population of the country in 1997 was 38.6 million, of whom nearly two thirds live in urban areas. Warsaw, the capital, has a population of 1.8 million. The population is growing slowly with the birth rate, although decreasing, still slightly higher than the death rate (Table 1). The number of people over the age of 65, currently 11% of the population, is projected to increase.

Poles make up 97.5% of the population, with Byelorussian, German, Lithuanian and Ukrainian minorities accounting for the remainder. Ninety-five per cent of the population is Roman Catholic. In terms of ethnicity, language and religion, Poland is more homogeneous than most countries in the region.

Fig. 1. Map of Poland[1]

Source: Central Intelligence Agency, The World Factbook, 1997.

Life expectancy in Poland is somewhat less than in western Europe. In particular, the mortality rate among middle-aged men rose during the 1970s and 1980s, as in most countries in the region (*6*), although Poland has improved since 1993 perhaps due to a better diet (*19*). In 1996, life expectancy at birth was 68.1 years for males and 76.6 for females (Table 1). Infant mortality has improved in recent years, with 12.2 deaths per 1000 live births in 1996, but remains higher than in western Europe. Diseases of the circulatory system are the major cause of death in both men and women, followed by cancer, while external causes such as injury and poisoning account for over 7% of all deaths.

[1] The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

Table 1. Demographic and health indicators

Indicators	1991	1992	1993	1994	1995	1996	1997
Population (millions)	38.2	38.4	38.5	38.5	38.6	38.6	38.6
% over 65 years	10.2	10.4	10.6	10.8	11.1	11.3	-
Crude birth rate (per 1000 population)	14.4	13.5	12.9	12.6	11.3	11.2	-
Crude death rate (per 1000 population)	10.6	10.3	10.2	10.0	10.0	10.0	-
Total fertility rate	2.0	1.9	1.8	1.8	1.6	1.6	-
Female life expectancy at birth	75.3	75.7	76.0	76.1	76.4	76.6	-
Male life expectancy at birth	66.1	66.7	67.4	67.5	67.6	68.1	-
Mortality rate per 1000 males aged 40–59 years	12.4	11.8	10.8	10.5	10.6	10.0	-
Infant mortality (per 1000 live births)	18.2	17.3	16.1	15.1	13.6	12.2	-

Source: UNICEF TransMONEE database 3.0; WHO Regional Office for Europe health for all database.

The Polish economy is based on industry and agriculture. After a severe downturn in the late 1980s and early 1990s, the economy showed signs of recovery, and on most measures has grown steadily since the mid 1990s (Table 2). The Polish stabilization programme implemented in 1990 entailed unexpectedly heavy social costs including rising poverty levels. The annual rate of inflation was still high at nearly 20% in 1996 but has dropped substantially since the early 1990s. GDP decline gave way to growth from 1992 with 6% growth in 1996. GDP per capita now is higher now than it was in 1989. In 1996, GDP per capita was US $7441 (adjusted for purchasing power parity), although this was lower than the Czech Republic at $10 948 and Hungary at $8942. The annual registered unemployment rate (an underestimate of true unemployment) peaked at 16.4% in 1993 but in 1996 had fallen to 13.6%. GDP grew by 6.9% in 1997 and inflation dropped back to 14.8% (World Bank country profiles). In view of its strengthening economy and progress with structural readjustment, Poland is one of five countries in the first wave of 'pre-accession' to the European Union (EU). Poland further improved its ranking on the human development index in 1997 but remained low compared to OECD countries and some transition economies (*14*).

Table 2. Macro-economic indicators

Indicators	1990	1991	1992	1993	1994	1995	1996
GDP growth rate (% change)	–11.6	–7.0	2.6	3.8	5.2	7.0	6.0
Annual inflation rate	585	70.3	43.0	35.3	32.2	27.8	19.9
GDP per capita PPP US$	4 237	4 500	4 830	4 702	5 002	5 442	7 441
Annual index of real wages (1989 base=100)	75.6	75.4	73.3	71.2	71.6	73.7	77.9
Registered unemployment	6.1	11.8	13.6	16.4	16.0	14.9	13.6

Source: UNICEF TransMONEE database 3.0; WHO Regional Office for Europe health for all database 1998.

Economic problems through the 1980s led to the rise of a strong independent trade union, Solidarnosc, which forced elections in 1989. Poland was the first eastern European state to break with the USSR and to re-establish democratic government. Lech Walesa was elected President in 1990 and the first full parliamentary election was held in October 1991. Parliamentary elections in 1993 saw a swing back to the left to the post-communist Democratic Left Alliance (SLD). Aleksander Kwasniewski (from the SLD) was elected President in November 1995 for five years. In September 1997 a new Parliament was elected. The new government was created by a coalition between the parties *Akcja Wyborcza Solidarnosc* (AWS – Solidarity Electoral Action) and *Unia Wolnoœci* (UW – Liberty Union). The new Prime Minister is Jerzy Buzek. The SLD (Democratic Left Alliance) and PSL (Polish Farmers Party) are now in opposition. The new political system has been characterized by political volatility with eight changes in government between 1989 and 1998.

Parliament has upper and lower houses (the *Sejm* and the *Senat*). The head of state is a directly elected president, while the prime minister comes from the majority or coalition parties. Both the upper and lower houses are elected every four years and the president is elected every five years. The country was divided into 49 provincial administrative units called *voivodships*, which will be replaced by 16 units from 1999. The administrator of each voivodship, the *voivod*, is appointed by central government.

A third level of public administration, the local government councils, were set up as independent legal entities in 1990. A *gmina* (commune) is an elected council representing the district population. There are 2121 gminas which cover, on average, a population of 2400, but their size varies considerably. For example, the central Warsaw gmina has a population of 700 000. A fourth level, the *powiat*, was added in elections in October 1998. This was a return to the traditional district system of government that had been abolished in 1975 (at that time the voivodships were increased from 17 to 49). Each of the approximately 373 powiats will cover several gminas.

Historical background

During the period of Polish independence between 1918 and 1939, health services were expanded, and some extra finances were tapped through a limited Bismarckian health insurance system which covered about 7% of the population.

Under communist rule after the second World War, a Ministry of Health was created in 1945 and health care was declared a public responsibility. Administration of the health care system was strongly centralized as was the

administration of the economy generally. Poland developed an extensive health care system over the next few decades which, however, resisted some aspects of the Soviet model. For example, private practice was never formally abolished and private medical cooperatives and dental services remained, although much diminished, under communism. There have been three major sets of health sector reforms.

The first set of reforms aimed to develop free and universal public health care. Health care services were offered to all state employees, and in the 1950s occupational health clinics were set up at workplaces. Only limited free health care was available in rural areas, but this improved after 1972 when coverage was extended to include agricultural workers.

The second set of reforms aimed to bring together comprehensive health and social services in each district. In 1960, the Ministry of Health became the Ministry of Health and Social Welfare. In 1972, the integrated health care management units, the ZOZ (*Zespol Opieki Zdrowotnej*) were established, which managed hospitals, outpatient clinics, specialist and primary health care, as well as some social services.

The third set of reforms aimed to decentralize public administration. Health sector reforms in the 1980s were linked to efforts to decentralize the administrative structure of the country by strengthening the position of voivodships and later the gmina. In 1983, the powers of the Ministry of Health and Social Welfare were reduced and the voivodships and the ZOZ were given greater policy and administrative powers.

A variety of proposals for restructuring the health care system have been debated since 1989. The major reforms of the 1990s are discussed in the next sections including further decentralization, the strengthening of primary care, and the plan for compulsory health insurance. New arrangements linked to the establishment of health insurance funds are due to take effect from January 1999.

Organizational structure and management

Organizational structure of the health care system

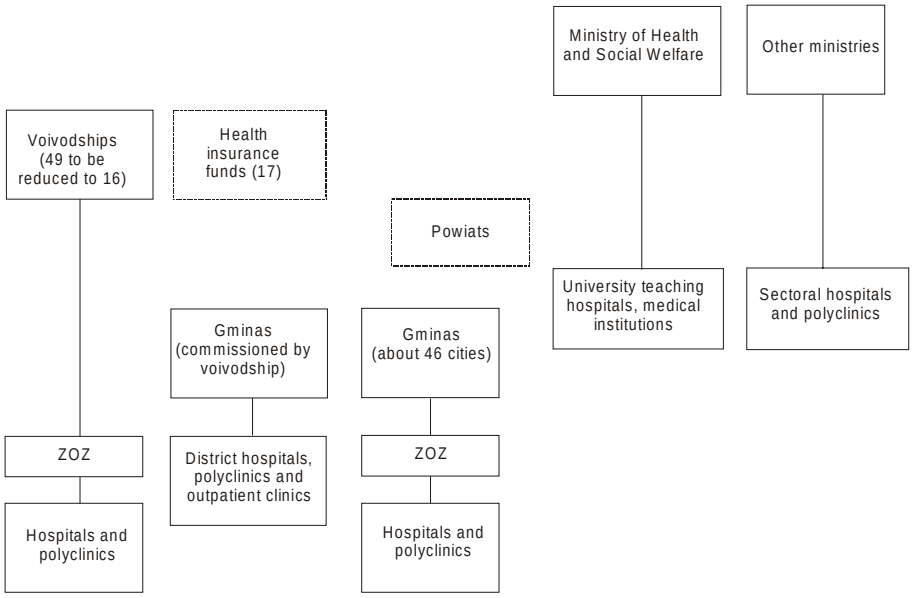
The health care system in Poland is on the brink of major structural changes to take it beyond the year 2000. This report describes the current workings of the health care sector and signals the changes that are due to take effect from January 1999 onwards, although some of these are as yet unclear. This report, therefore, serves as a benchmark study of health care reform in Poland throughout the 1990s, describes how the system looked by 1998, and signals the changes that are proposed from 1999 onwards.

The health care system remained predominantly funded by the state throughout the 1990s. Poland proceeded with gradual public sector devolution, including reorganizing the previously hierarchical health care system in the early 1990s. The first step away from a centralized model increased the power of the provincial administration (the voivodships). The administration of most health services was transferred in 1991 from the national Ministry of Health and Social Welfare to the provinces (voivodships) and to a lesser extent to the locality (gmina) authorities.

The second step from 1993 onwards was to devolve ownership of most public sector health facilities to the provinces and to local government. The gminas previously had little involvement in health care services. Further, the old level of the powiats was re-established in 1998.

The third major structural change will be the establishment of 16 regional health insurance funds and also a separate fund for uniformed public employees such as the army and railroad workers. The health insurance legislation enacted in February 1997 and amended by the new government in August 1998, is due to take effect from 1 January 1999. These insurance funds will have considerable impact upon the funding and organization of the health care sector.

Fig. 2. Organizational chart of health care system



The Ministry of Health and Social Welfare

The role of the Ministry of Health and Social Welfare is evolving from health care funder and provider to policy-maker and regulator. This Ministry is responsible, in general, for national health policy, for major capital investments and for specialist health services. It has administrative responsibility only for those health care institutions that it directly finances. These include the national postgraduate education centre and national centres for child health, maternal health, plastic surgery and cardiology. Medical academies, university hospitals and research institutes are semi-autonomous but are ultimately accountable to the Ministry of Health and Social Welfare. The Ministry also is responsible for implementing health programmes, for training health care personnel, for funding medical equipment and for setting and monitoring health care standards.

The Ministry of Finance

The funding of health care was taken over in 1992 by the Ministry of Finance. It allocates health care budgets to the voivoda, to Ministry of Health and Social

Welfare institutions and to health care institutions under other ministries. These are tied grants for the broad purpose of health care.

Other Ministries

The system of parallel health services still remains. The ministries that provide their own health care services include the Ministry of Defence, the Ministry of Transport and Marine Economy (including railways), the Ministry of Justice (prisons) and the Ministry of Internal Affairs (police). These separate services cover about 10% of the workforce. As from 1999, most funding for these services will come from the national-level branch health insurance fund.

Health insurance funds

Several health insurance options have been debated since 1989 but reaching a decision has been contentious and was delayed until the economy stabilized. The Health Insurance Act was passed on 6 February 1997, was amended on 18 August 1998, ratified by the President in 24 August 1998, and takes effect from 1 January 1999. The amended Act calls for 16 statutory regional funds and a seventeenth branch fund to cover parallel health services. These funds will be autonomous. The intention is that government funding will be scaled back as insurance cover expands, and government administration will be phased out as service providers contract directly with the insurance funds. Some specialized services (such as organ transplants) and also public health programmes (such as the National Health Programme, National Heart Protection Programme and the Cancer Control Programme) will remain financed from the state budget.

Voivodships

The country was divided into 49 voivodships (reduced to 16 from January 1999). Under the previous régime, these regional voivodships were the administrative arms of central government. Since 1992, their health budgets have come directly from the Ministry of Finance. The voivodships plan health services, organize the structure of health institutions and allocate funds. They run the regional (provincial) hospitals that offer secondary care and also run some specialized tertiary care hospitals. Each voivodship also administers a number of ZOZs. The policy and fiscal autonomy of the voivodships potentially allowed considerable diversity in health and social services across the country. The voivodships were encouraged during the 1990s to develop integrated health services in their areas.

Powiats

This traditional district form of government, abolished in 1975, was re-established prior to elections in mid 1998. The powiats are an intermediate level between the large voivodships and the small gminas. Powiats will become the owners of some health care organizations within their territory. These include the district hospitals (with the specialties of internal medicine, paediatrics, surgery, obstetrics & gynaecology, anaesthesiology unit and an intensive care unit).

Gminas

The 2121 local government authorities, the gminas, with their elected councils, receive grants from central government and also raise their own taxes. The gminas were new entrants into the health care field under the impetus of decentralization policies from 1991 onwards. Some gminas now manage primary health care and some secondary health care services with grants directly allocated by the Ministry of Finance or by the voivodships.

Since the 1995 enabling legislation nearly fifty gminas, mostly in the cities, have taken over health care services previously run by voivodships. Also, some have been commissioned by their voivodships to take over some health care services previously run by a ZOZ. In total, over 1700 health care institutions, mostly primary care providers such as general practice centres, are managed by gminas. It is unclear as yet whether these will increasingly replace the ZOZ or whether the powiats will take over some services from the ZOZ and the gminas.

ZOZ

The ZOZ health care management units (*Zespol Opieki Zdrowotnej*) were the main bases for primary and secondary health care at the beginning of the 1990s. ZOZ is an acronym for integrated health and social services unit. ZOZ have been much criticized and the system is in the midst of change. Recent legislation, although so far not used, allows for a ZOZ to be dissolved, since some saw these as a symbol of centralized power.

Each of the over 500 ZOZ provided primary and secondary care for their catchment population by offering a range of services. These included at least one hospital, community-based facilities such as polyclinics staffed by generalist and some specialist health professionals, small outpatient centres staffed by primary care physicians and nurses, specialized services such as school and enterprise-based health facilities, and social services to a more limited extent. A unified management group ran these health and social services from the

same budget. The ZOZ receive their funds from the voivodship to which they belong and each covers a varying size population of, on average, about 100 000 persons.

Health care institutions

The 1991 *Health Care Institutions Act* allowed for different types of ownership of health care organizations including central, provincial and local authorities, the voluntary (nongovernment, non-profit sector) and also private 'for profit' ownership. It established the legal basis for publicly-owned health facilities to become substantially autonomous. In May 1995, the Minister of Health issued a regulation on the conditions of transfer of budgetary resources to self-managing institutions. This gave health care institutions the ability to contract with insurance funds for health services and to become responsible for managing their budgets. Health care provider institutions in Poland, therefore, are increasingly moving towards autonomous legal status. This is likely to have a profound impact upon the management and delivery of health care services.

Planning, regulation and management

No one central health sector body has full power over planning, regulation and administration. In the transition to a new political system, the aim was to dismantle much of the legacy of 'bureaucratic socialism'. The Ministry of Health and Social Welfare had undertaken the previous 'command and control' role in relation to the health sector. During the 1990s, the Ministry has found it difficult to steer through policy proposals and to implement and monitor reforms, given frequent changes in government, changes in senior health officials and ongoing structural reorganizations of the health sector.

The 1990 National Health Programme set out a framework for health sector reform by identifying the directions for change and by specifying the range and number of health services to be provided. The current National Health Programme is intended to run from 1996–2005. In practice, however, the implementation of new policies and the achievement of intersector coordination has proved difficult.

Health services owners now have more autonomy in planning, regulating and managing health services in their areas. These owners include the voivodships, the gminas, other ministries, and also the powiats. Health care provider institutions also have more control in managing their own budgets and making staff and services decisions under the 1995 regulations. These

new owners and managers have had to develop expertise in management on the basis of little previous experience.

Considerable power over financing and services will shift to the regional health insurance organizations.

Professional associations, statutory bodies and professional colleges or academies are developing, and they increasingly influence planning and regulation. Professional associations and trade unions now play an active role in the formulation of health policy. They have become more militant and are prepared to take industrial action including strikes. The Chamber of Physicians established in 1989 has statutory responsibility for the registration of doctors and plays an increasing role in health policy and in medical education. The Chamber of Nurses and the Chamber of Midwives serve similar functions for their respective professions. A variety of professional associations have been established to look after the interests of their members, such as the Polish Association of General and Community Medicine.

The *1991 Health Care Institutions Act* also guaranteed the rights of patients in relation to informed consent, access to records and privacy. This requires a major cultural shift since such issues were previously left to the discretion of health care providers. Consumer rights organizations, however, have been slow to develop.

Decentralization of the health care system

Poland has moved from a highly centralized system towards the devolution of responsibility for health care. The role of the voivodships in the administration of health care was increased, and these in turn passed management responsibility to the ZOZ, which amounts to deconcentration within a devolved framework.

During the 1990s, health care was substantially decentralized. Gminas became increasingly responsible for primary health care, and some large city gminas now also manage secondary health care services previously administered by the ZOZ.

The recently re-established and elected district level powiats may also come to play an increasing role in funding the capital costs of health care services, such as renovating hospital premises.

Health care institutions are becoming autonomous registered organizations or 'independent units' that will be responsible for their own budgets and service decisions. They will be subject to civil law and be able to contract for services. These self-managing institutions will obtain income from various sources: health insurance funds, Ministry of Health and Social Welfare, their government sponsor (if relevant), and private organizations and private persons.

Privatization has been proceeding with pharmacies, dental practices and private medical practices. These professionals work only as private practitioners or in addition to their public sector employment. The number of professionals working privately, many in addition to their public sector jobs, is estimated at about 16 000 dentists (nearly 90% of all dentists), about 60 000 doctors (66% of all doctors) and about 6000 pharmacists. Hospitals have remained in the public sector and there are only a few nongovernment hospitals mainly run by voluntary organizations.

The implementation from 1999 of the 1997 General Health Insurance Act will transfer recurrent health sector financing and administration to the regional funds. It may also facilitate an expansion of nongovernment health services.

Health care finance and expenditure

Main system of finance and coverage

Polish health care in the 1990s has been largely financed by government sources through budget allocations made by the Ministry of Finance with the funds then spent by the major health care providers: the central ministries, the voivodships and to a lesser extent the gminas**.**

Expenditure on health care as a percentage of GDP and as a percentage of the State budget declined slightly during the 1990s from an already low level. The restructuring of health care finances remained stalled, since the state could not finance reforms and the population was unable to afford adequate insurance contributions. The decline in budget allocations placed considerable strain on the health system. The aims of the new insurance scheme are to tap new sources of revenue, formalize health sector financing, further decentralize the administration of health care services and introduce market practices in order to increase efficiency.

The official statistics, however, underestimate the level of total health care financing (*1*). First, the data refers only to government expenditure and does not cover other sector activities. Second, the National Health Accounts do not yet take account of the changed financing of health care. Third, out-of-pocket payments by households are not necessarily included, such as informal payments and even co-payments for some health services. Fourth, budget figures before 1990 are not necessarily comparable since socialist countries did not include 'non material' products such as health and education in their national accounts. Chawla et al (*1*) argue, based on a random national survey of households in 1994, that out-of-pocket payments have increased substantially. The expectation is that insurance contributions by individuals in future should mainly replace informal payments (including 'envelope payments').

The 1997 General Health Insurance Act, introduced from January 1999, will change the system of financing. Funds would then come from two main sources. First, the insurance funds will finance the direct costs of health services

to patients through contracts with service providers. Second, government budgets (state, voivodships or gminas) will continue to finance public health services, the capital costs of all health services, and specialist tertiary care services (such as organ transplants) and very expensive drugs (such as immunosuppressive drugs).

Health care benefits and rationing

The Polish state since the 1950s had provided universal access to health services. Health sector reforms in the 1990s have sought to maintain this commitment. The *1991 Health Care Institutions Act* and subsequent regulations set out a range of basic services which must be provided. Only a few health services were excluded, such as alternative therapy and cosmetic surgery. It also excluded some services in health resorts (spas), but those who are entitled to health care can still obtain free dental care and balneotherapy at these spas.

There have been a number of controversial changes to the entitlement of women to abortions. A policy of relatively open access in communist times was changed to almost complete prohibition with the advent of multi-party democracy. The *1993 Abortion Law* now permits abortion in certain circumstances, including the health of the mother being at risk.

The *1997 General Health Insurance Act* and later amendments propose universal coverage of the population and full entitlement irrespective of risk, as discussed later. Certain treatments are excluded, as before, including cosmetic surgery and non-disease related treatments in health resorts.

Sources of finance

The national government budget has historically been the main source of health care financing. The Ministry of Finance now funds the health care system from the central budget, although other sources of finance began to be more significant after 1990. Local government (gminas) also contribute a small percentage to the country's total health revenue from their own budgets. As a percentage of a gmina budget, however, this can be substantial. For example, Krakow spent 20% of its budget on health care in 1996. Gminas could increase local taxes after a ballot of their citizens (but have not done so) and have no constitutional responsibility to finance health services. The government proportion of total health care finances has dropped throughout the 1990s as private sources have risen. However, as explained earlier, the figures in Table 3 can only be estimates given the lack of information on private payments for health care.

Table 3. Percentage of main sources of finance in Poland

Source of Finance	1985	1990	1994	1996	1997
Public	100%	94%			
• Government budget			70%	76%	73%
• Statutory insurance	–	–	–	–	–
Private					
• Out-of-pocket *(1)*	–	6%	30%	24%	27%
• Private insurance	–	–	–	–	–
Other					
• External sources	–	–	–	–	–

Source: Ministry of Finances, Annual Statistics
Notes: *(1)* Estimates only

Out-of-pocket payments

Out-of-pocket payments for health care increased to around 30% of revenue in the mid 1990s (Table 3). An analysis of a national household survey argues that such payments accounted for more like 38% of total health care expenditure in 1994 (*1*). Although the scope of this estimate is controversial, it is clear that out-of-pocket payments are larger than previously thought. The main out-of-pocket cost was for non-hospital goods and services (90% of payments by households) which consisted of payments to physicians and co-payments for pharmaceuticals. In addition, private medical and dental practice had increased, which patients paid for privately. The survey also showed that most patients made a financial contribution to their stay in hospital such as for food and other accommodation costs, drugs and medical materials, and as 'envelope payments' to hospital staff.

Another type of out-of-pocket payment by health care users is a payment to the institution in the form of 'share bricks' as a donation towards capital costs.

Patients pay substantial informal gratuities to physicians and other health care professionals. Such payments, although illegal, were said to be widespread by the end of the 1980s. Public opinion surveys conducted on the topic of informal out-of-pocket payments between 1992 and 1995 found the percentage of the population reporting such payments increased from 16% to 29%. The national household survey in 1994 reported widespread payments by patients (*18*). For example, most inpatients contributed towards hospital care and nearly half of those costs were 'envelope payments' to physicians and other hospital staff. The practice of 'envelope payments' dates from the end of the 1970s when health care services began to deteriorate and people wished to obtain scarce services or ensure quicker or better services (*1*). These payments were well entrenched by the late 1980s. The payments reported by households in the 1994 survey would more than double the average gross salary of physicians,

and more than double that of senior physicians who are paid even larger amounts by patients.

The increase in informal payments is shown in the following series of statistics. Health care expenditure by households (in 1990 fixed prices) grew by 388% between 1990 and 1997 with the largest annual increases in the early 1990s (Table 4). This has been difficult for households since at the same time real wages declined, as the government has held wages down as part of economic stabilization. Wages in 1997 were only 78% of the 1989 level (UNICEF TransMONEE database).

Table 4. Health care expenses of households in Poland, 1990–1997

Expenses	1990	1991	1992	1993	1994	1995	1996	1997
Household expenses, fixed 1990 prices (million PZl)	201.2	320.0	419.7	640.3	812.4	804.4	877.3	983.4
Annual increase of household expenses (%)	–	59.1	31.2	52.6	26.9	–1.0	9.1	12.1

Source: Ministry of Finance, Annual statistics.

Voluntary health insurance

There are no voluntary sector health insurance funds in Poland, although the new legislation provides for the possibility of private health insurance schemes from 2002.

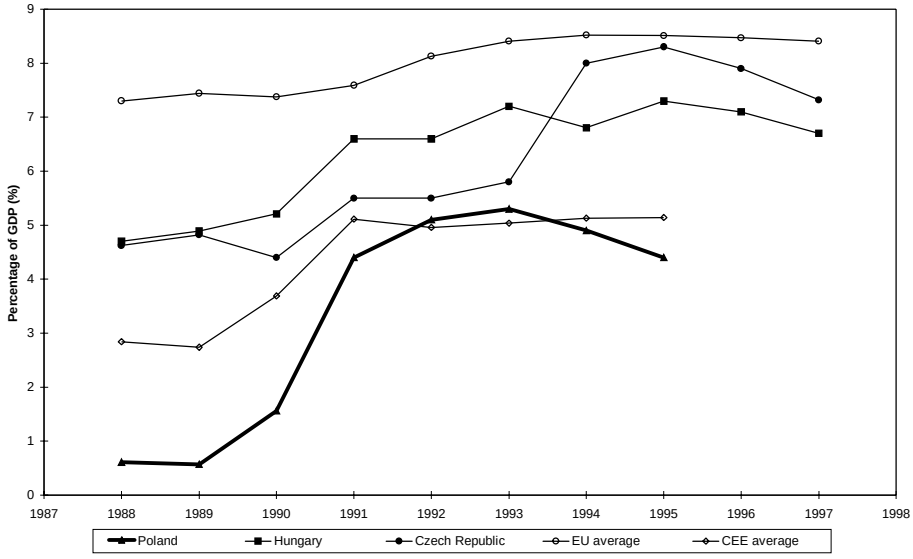
External sources of funding

Contributions from charitable associations and foreign assistance represent a small but unknown proportion of funds. Charitable associations such as the Catholic Church 'Caritas' funds and the Red Cross make some donations or pay for medical equipment. Foreign assistance is usually on a programme or project basis (such as PHARE – Poland Hungary Assistance for Restructuring the Economy) for primary health care and management training (*11*). Health care institutions are not at present permitted to market their services to earn additional revenue. In theory, autonomous hospitals could borrow money from banks, although this has not happened, since the central government prefers to regulate the extent of public sector borrowing. Banks are a potential new source of funds such as offering credit lines to private GPs.

Health care expenditure

Poland spent 4.6% of GDP on health in 1994 (Table 5), which was below the CEE average of 5.9% and the western European average of 7.8% (Fig. 4). The real 1994 GDP figure for Poland on the share of health care expenditure is estimated at 6.7% if private expenditures were taken into account (*1*). The lower proportion of GDP spent on health in central and eastern European countries has to be seen in the context of lower GDP and lower income levels. After steady growth through the 1970s and 1980s, western European countries are seeking to contain health expenditure in the 1990s (Fig. 3).

Fig. 3. Trends in health care expenditure as a share of GDP (%) in Poland and selected countries



Source: WHO Regional Office for Europe health for all database.

Government health expenditure in current prices grew during the 1990s from a low base (Table 5). The large increase between 1994 and 1995 was in part due to the increased cost of pharmaceuticals. Health expenditure as a share of GDP, as a share of the state budget, and as per capita expenditure in fixed

prices, has declined during the 1990s with the lowest points in 1993 and 1994. The population may have offset this decline to some extent through informal payments.

Table 5. Trends in government health care expenditure in Poland, 1985–1997

Total Expenditure on Health Care	1985	1990	1991	1992	1993	1994	1995	1996	1997
Value in current prices (million PZl)	44	2 710	3 885	5 673	7 132	9 517	13 133	14 992	18 731
Share of GDP (%)	3.96	4.58	4.71	4.96	4.58	4.58	4.59	4.61	4.24
Share of state budget (%)			16	14.8	14.2	13.8	14.4	15.4	n/a
State health care expenditure, 1995 prices, per capita (PZl)	–	–	456.6	464.2	431.1	434.4	468.8	498.1	448.8
Total health expenditure PPP US$ per capita	–	–	$216	$234	$229	$219	–	$371	–

Source: National Centre for Health System Management, Warsaw; WHO Regional Office for Europe health for all database; OECD 1998 health database.
Note: This table does not include all out-of-pocket payments by households.

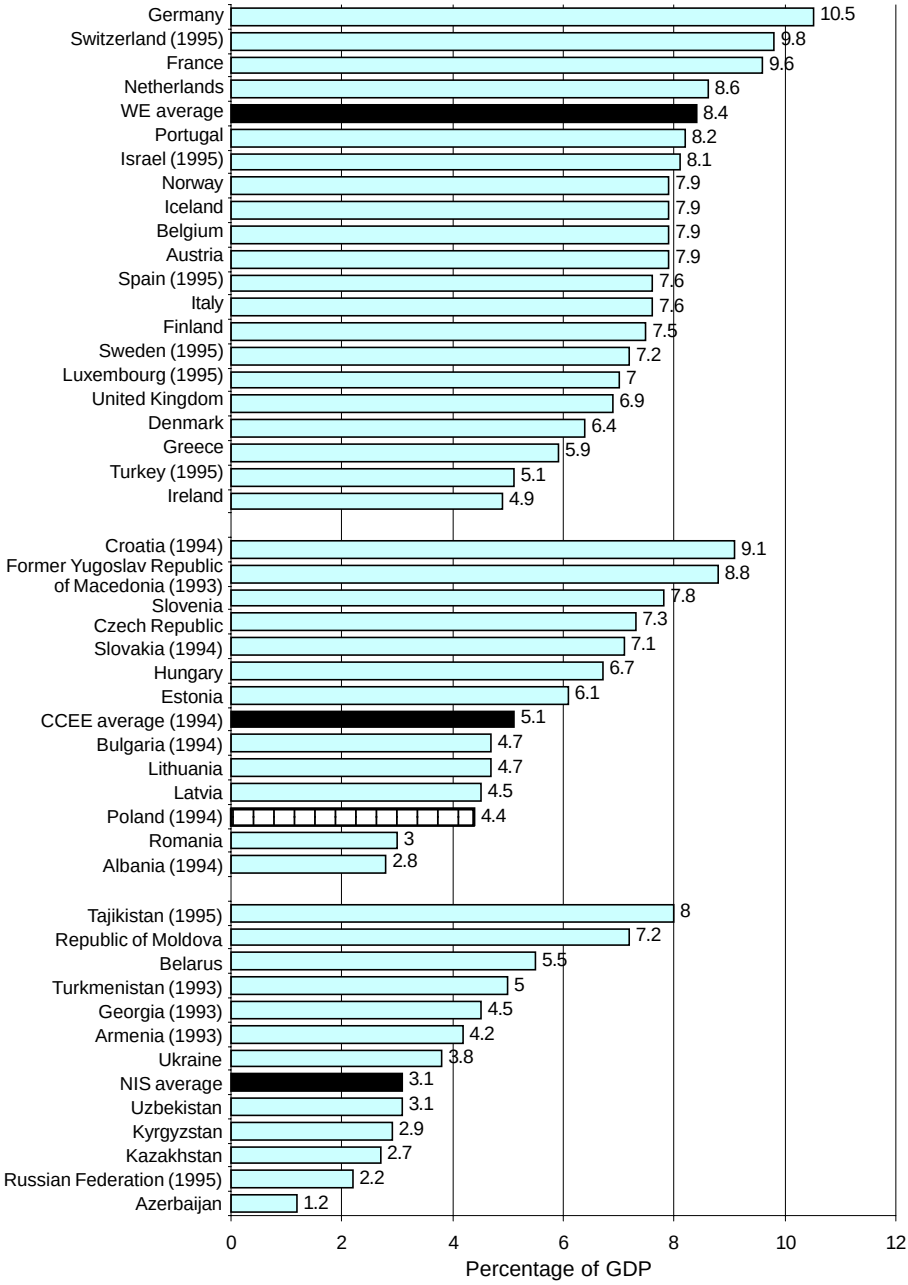
Total health expenditure in US $ per capita (adjusted for purchasing power parity) in Poland in 1996 was much lower than in neighbouring countries at US $371 compared to US $904 in the Czech Republic and us $602 in Hungary (WHO Regional Office for Europe health for all database). (Also see Fig. 6).

Structure of health care expenditures

Health care expenditure in Poland in the early 1990s remained primarily in the public sector, as was the case in most countries in the central and eastern European region (Fig. 5).

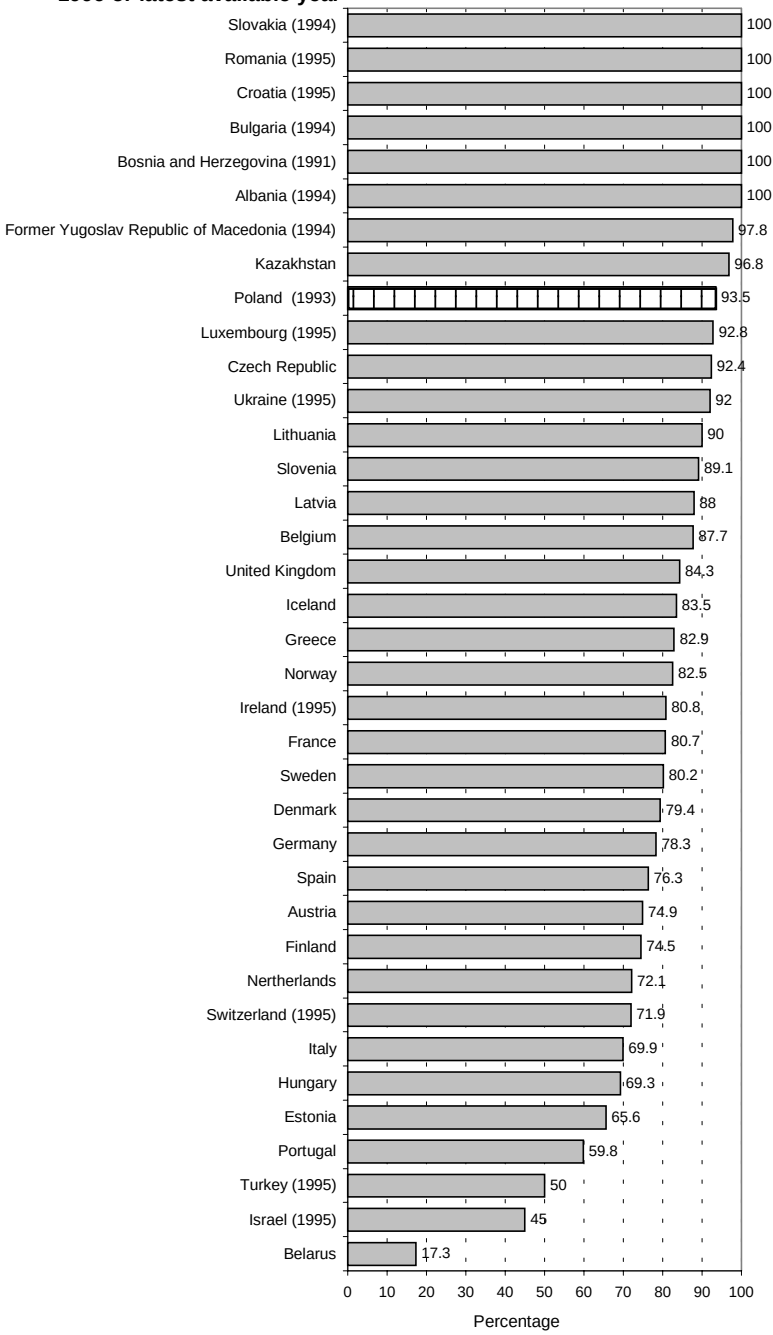
Of health care expenditure for 1997, most went to the voivodships and gminas (56%), 12% to the Ministry of Health and Social Welfare, 5% to other ministries, while 26% was spent by households (*20*). The parallel system of health services remains substantial. The 1997 government recurrent health budget showed the Ministry of Health and Welfare with 16%, Ministry of Defence 3%, Ministry of Transport & Marine Economy 2.8%, and the Ministry of Internal Affairs & Administration with 1.8% (*20*).

Fig. 4. Total expenditure on health as a percentage of GDP in the WHO European Region, 1996 or latest available year



Source: OECD health data, 1996; World Bank; WHO Regional Office for Europe health for all database.

Fig. 5. Public health expenditure as a percentage of total health expenditure in Europe, 1996 or latest available year



Source: OECD health data, 1996; World Bank; WHO Regional Office for Europe health for all database.

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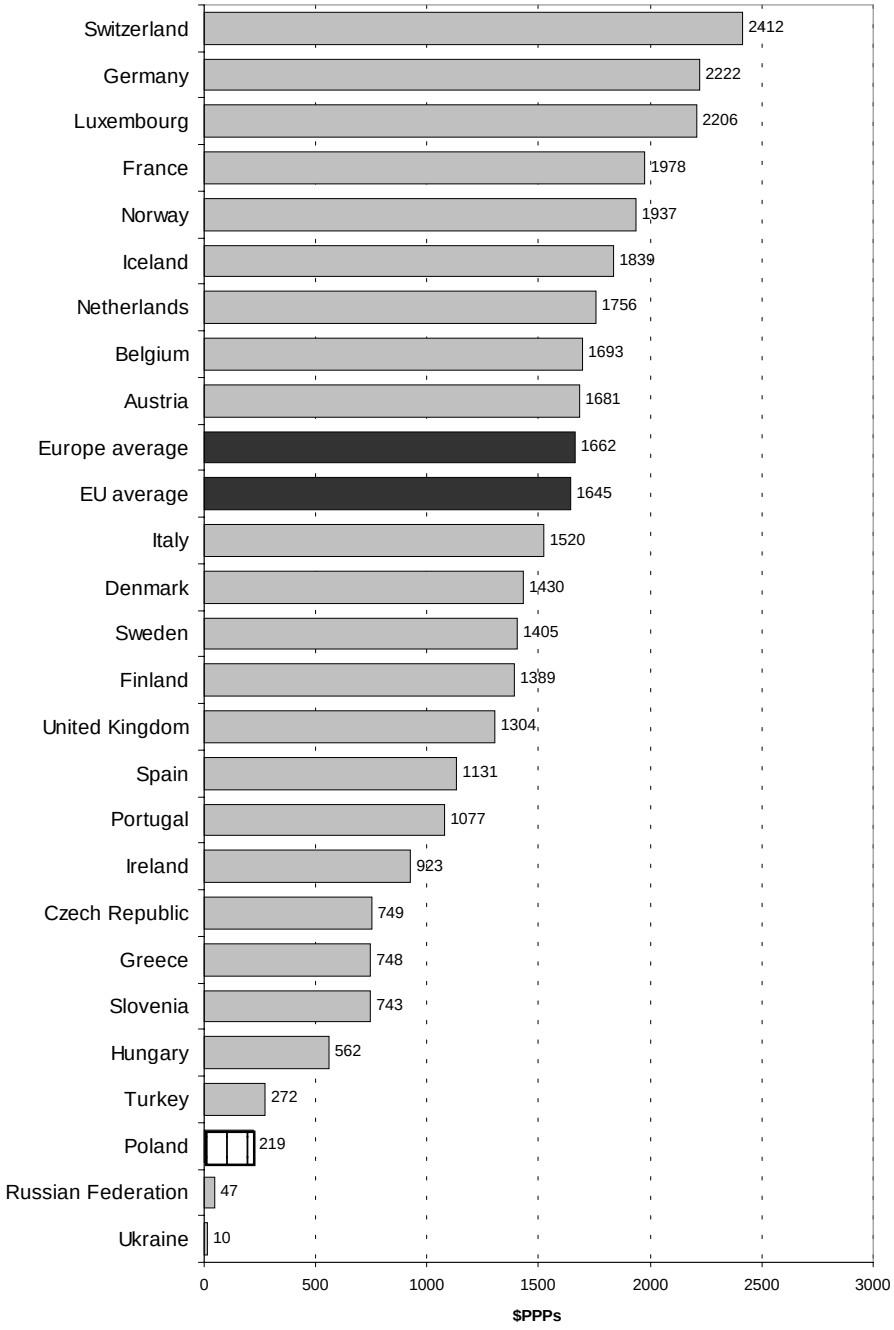
Fig. 6. Health care expenditures in US $PPP per capita in Europe, 1996 or latest available year



Source: WHO Regional Office for Europe health for all database.

The percentage of total expenditure on inpatient care remained fairly stable throughout the 1990s, apart from a drop in 1994, and accounted for 47% of health care expenditure in 1996 (Table 6). (Budget categories changed after 1990 so that time series before then are not comparable.) This inpatient proportion is in the low range of western European countries with 45–75% of total health care expenditure (*12*). The low expenditure in Poland reflects the low population proportion of hospital beds, and perhaps also lower salaries and less use of expensive technology.

Table 6. Health care expenditure by category, (%) of total expenditure, 1990–1996

Total expenditure on: as share of total expenditure on health care	1990	1991	1992	1993	1994	1995	1996	1997
Public (%)	100	94	94	94	94	93	93	93
Inpatient Care (%)	44.8	46.5	45.7	47.2	39.3	46.9	47.2	–
Psychiatric care (%)	2.6	2.7	2.7	2.9	1.7	2.7	2.6	–
Pharmaceuticals (%)	12.6	13.4	11.8	10.6	17.8	15.6	8.9	–
Ambulatory care (%)	17.7	18.2	19.2	19.8	27.1	17.7	13.3	–
Investment (%)	8.9	7.3	5.5	7.6	6.1	7.0	8.6	–

Source: National Centre for Health System Management, Warsaw; WHO Regional Office for Europe health for all database.

The proportion spent on community-based (ambulatory care) is correspondingly greater than in western Europe and increased from 18% in 1991 to 27% in 1994 in line with the policy aim to strengthen primary care. Government expenditure on ambulatory care has fallen since then but this shortfall may have been partly offset by private payments by patients.

The proportion of health budget expenditure on pharmaceuticals in Poland rose from 13% to nearly 18% between 1990 and 1994 but dropped to below 9% by 1996. Pharmaceutical prices have increased substantially from 1989. The proportion of the health care budget spent on pharmaceuticals during the 1990s is within the range spent in western European countries; for example, Germany spends 18.5% and the Netherlands 10.9% (*12*). Poland spends a substantial proportion, but less than Hungary which spent 28.5% of its health budget on pharmaceuticals in 1996 (WHO Regional Office for Europe health for all database).

Poland's health care facilities already suffered from longstanding and serious under-investment by the early 1990s with dilapidated buildings and obsolete equipment (*15*). The proportion of the already low budget allocated to investment has continued to lag.

Health care delivery system

Health care was mainly delivered through a three tier regional system in 1998. The Ministry of Health and Social Welfare administered tertiary hospital care and also ran clinics for higher rank public servants.

In the second tier, voivodships were mainly responsible for primary and secondary care. The integrated health care management units (ZOZs), which were administrative sub-units of the voivodships, still provided the majority of primary care, most specialist outpatient services and most hospital care. In rural areas the ZOZ were responsible for most services. In larger urban areas, ZOZ may specialize, for example, in paediatric care or in maternal and child health.

In the third tier, local government, some larger gminas provided primary and secondary care. Smaller gminas provided primary care facilities staffed by doctors and nurses.

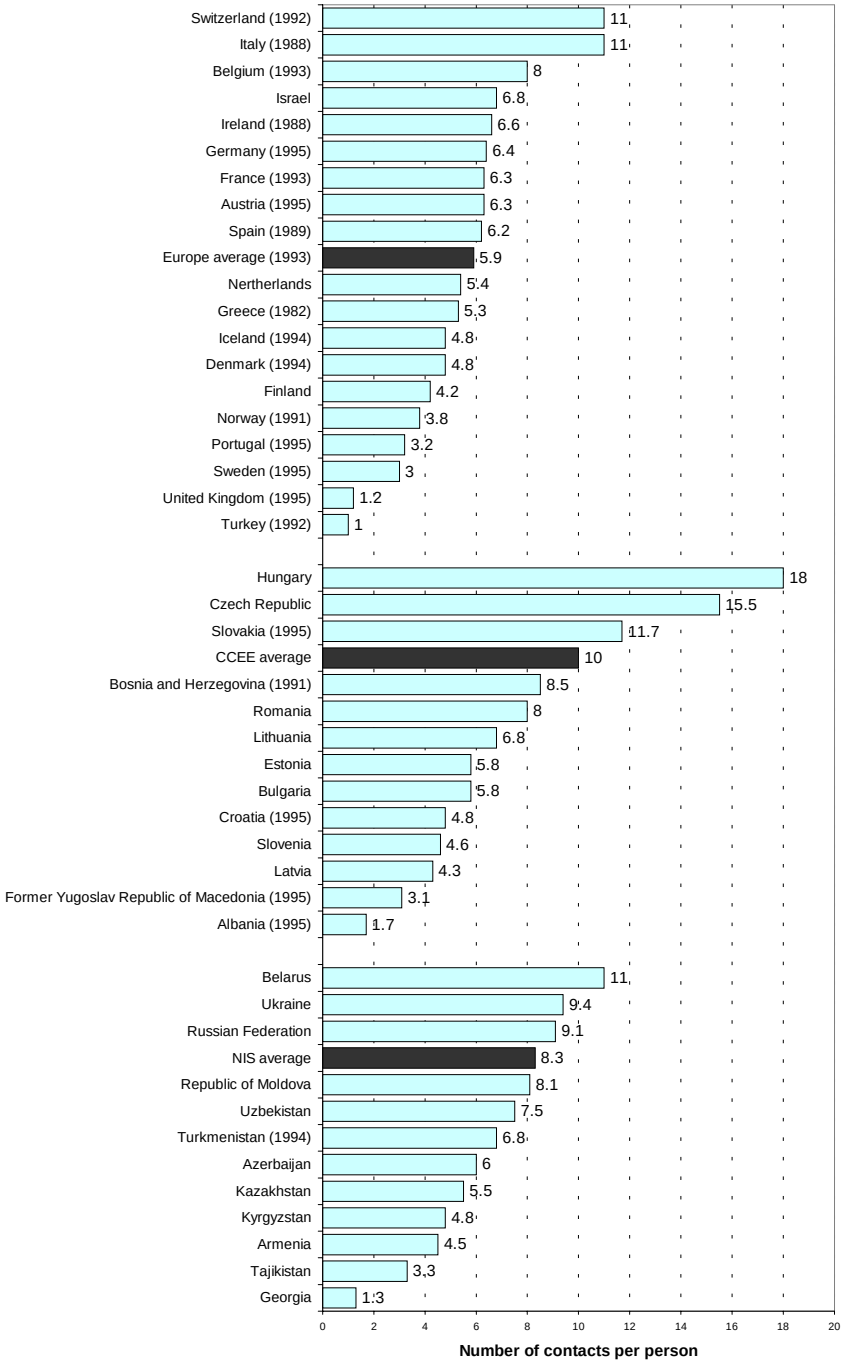
Primary health care and public health

The primary care system that has operated in Poland for the past 40 years is based on a network of health service units located where people live, work or study. Of the 3300 primary health care centres in the country in 1998, over half were administered by the provincial voivodships, while at least one third (an increasing proportion) had been transferred to the local government gminas. These latter primary care facilities had a management board and were accountable to the department of health of the local gmina.

People in Poland had an average of five outpatient contacts annually in 1988 (*15*). Physicians' contacts per person are generally much higher in central European countries than in western Europe (Fig. 7). More recent statistics for Poland, however, are not available.

Until recently, there was no concept of a family physician or general practitioner. Primary care physicians were mainly specialists in internal medicine, obstetrics–gynaecology or paediatrics.

Fig. 7. Physician contacts per person, in the WHO European Region, 1996 or latest year



Source: WHO Regional Office for Europe health for all database.

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Primary care doctors are the first point of contact with health services and are meant to act as gatekeepers to the rest of the system. In rural areas, primary care is provided through small polyclinics or outpatient centres staffed by an internal medicine specialist, an obstetrician–gynaecologist, a paediatrician, a dentist, a midwife, nursing and ancillary staff. In the smaller villages, the primary care health centre may consist of one doctor and a nurse. In urban areas, primary care services are provided in large polyclinics, which also house some specialist services and diagnostic facilities. Emergency care is provided by district ambulance services and in emergency care units.

Primary health care is organized on a geographic basis, with each internal medicine specialist covering a population of between 1200 and 2500 patients. Each primary care paediatrician is responsible for about 800 to 1000 children. In some areas, primary health care is now provided by group practices or by family practitioners on contract with the voivodship or gmina. Also, family practices are being set up within or in separate locations to the polyclinics.

Primary care has historically been undervalued. Narrow specialties have dominated the system and undergraduate medical education does not hold primary care in high regard. Primary care physicians referred patients on to specialists for conditions which in western Europe would have been treated by a general practitioner. People also bypassed the primary health care level and went straight to specialists who usually had access to better medical resources. Primary care physicians were poorly trained and their clinics lacked diagnostic equipment. As a result, the work lacked status among the medical profession and to some extent among patients. The current strategy is to improve the status and quality of primary care.

Several reforms were proposed in Ministry of Health and Social Affairs 1994 policy document, *Transforming Primary Health Care in Poland*. The main structural reform, which has been implemented, was for primary care to become the responsibility of independent local government authorities (the gminas) who would manage the funds, and plan, organize and supervise the primary care units. The local community should then have more say in health services through their elected representatives.

A family medicine model is being organized around individual or group physician practices. The College of Family Physicians was set up in Warsaw in 1992 to support this new model. Specialist training in family practice has begun. Family doctors are contracted on a capitation basis by the voivodship (or gmina) and are responsible for the population within a given territory. A number of pilot schemes across the country have worked well, standards have been set, and facilities are now better equipped. Many of the new practices, however, still lack modern diagnostic equipment.

The 1997 General Health Insurance Act allows physicians to contract directly with the insurance funds, which should provide physicians with an incentive to improve their range and quality of services and give them greater autonomy.

The Minister of Health in the new government reaffirmed support for family medicine in 1998 and appointed a national specialist adviser.

Public health services

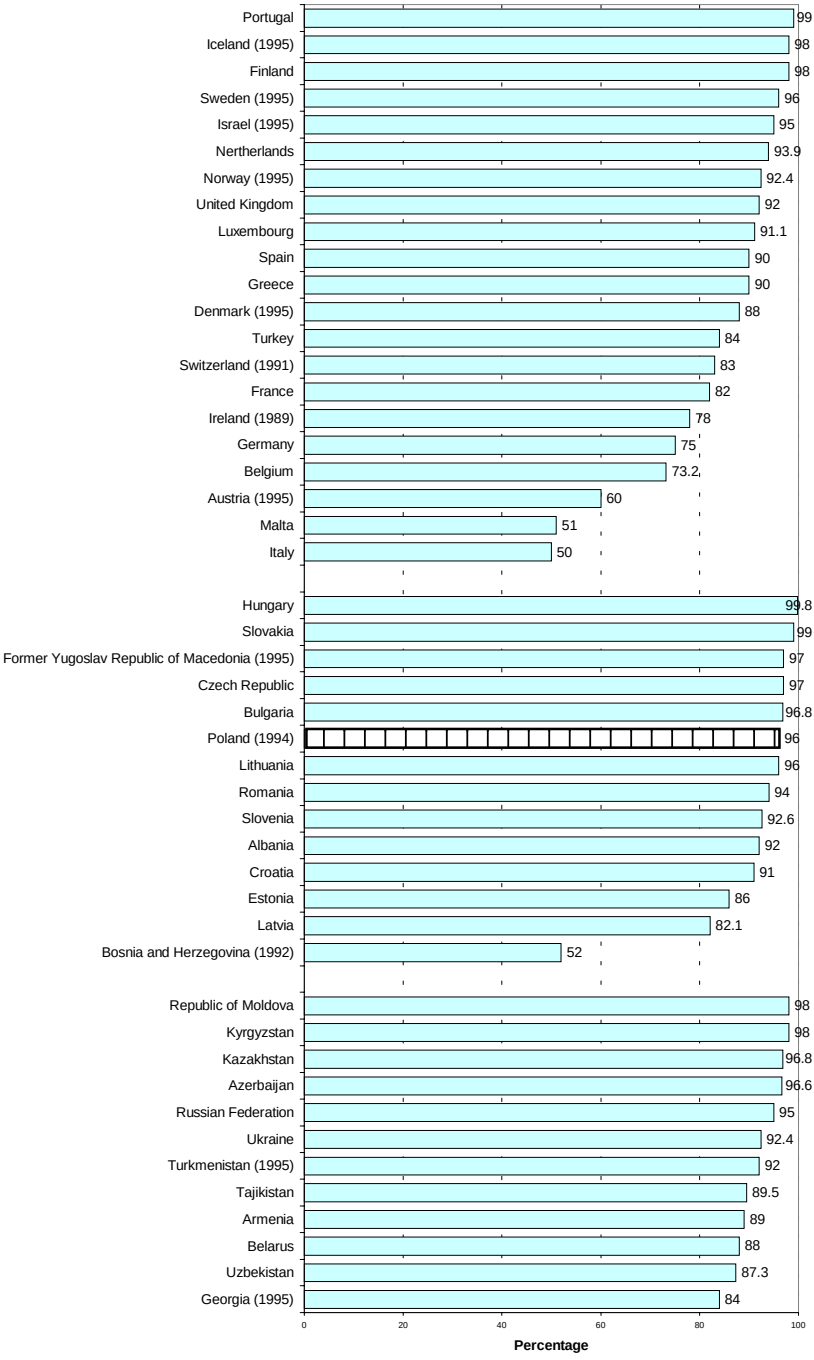
The system developed in the 1950s and 1960s, with considerable success for the control of infectious disease, was still in place in 1998. Each voivodship has sanitary inspectors and inspection stations with their own laboratory facilities. These inspectors are ultimately accountable to the Chief Sanitary Inspector in the Ministry of Health. In addition, the National Institute of Hygiene has responsibilities in the area of illness prevention.

Immunization and screening of children involves the institutes of maternal and child health, the ZOZ paediatric departments, as well as the sanitary inspection stations. Poland has a high level of immunization against measles, as do most CEE countries compared to western European countries (Fig. 8). Voivodships and ZOZs are also responsible for screening adults. There are institutes of environmental and occupational health in Lodz and Upper Silesia and for rural medicine in Lublin.

Poland is arguably now the most active of the central European countries in the field of health promotion. The National Health Programme calls for more national-level health education and health promotion. Previously these activities were not seen as part of a public health policy and had been left to individual health professionals and to voivodship sanitary and hygiene institutions. Health promotion has begun to develop at the national level in Poland with the creation of a health promotion department in the National Centre for Health System Management. Recent initiatives include the healthy cities network (covering 6 million people in 29 cities), the healthy schools and healthy workplaces networks, and an interdisciplinary healthy housing project. The first books in Polish on health promotion were recently published. There are now health promotion units attached to central medical research institutes such as the Institute of Cardiology, the Institute of Occupational Health, the Institute of Oncology and the Institute of Food and Nutrition.

The Minister of Health in 1998 announced that a national HIV-AIDS programme was being planned.

Fig. 8. Levels of immunization against measles in WHO European Region, 1996



Source: WHO Regional Office for Europe health for all database.

Public health activities previously run by the Ministry of Health and Social Welfare are now also funded and organized by voivodas and local government. The National Health Programme envisages the creation of a national centre for the prevention of accidents and injury, and a national centre for health promotion and health education.

Secondary and tertiary care

The first level of outpatient secondary care is provided by the polyclinics run by the ZOZ, the voivodships, and the large gminas. Second, there are 424 district hospitals that provide outpatient care and ambulance services in addition to inpatient care. Third, specialized secondary care is provided in 188 voivodship hospitals, each serving a population of about 800 000. Fourth, tertiary care is organized at regional and national level in national institutes, which also train specialists, carry out research, and disseminate information on specialist care. In addition, there are many sanitoria and spas, some of which provide secondary care. In 1997, there were 679 hospitals in total (*21*).

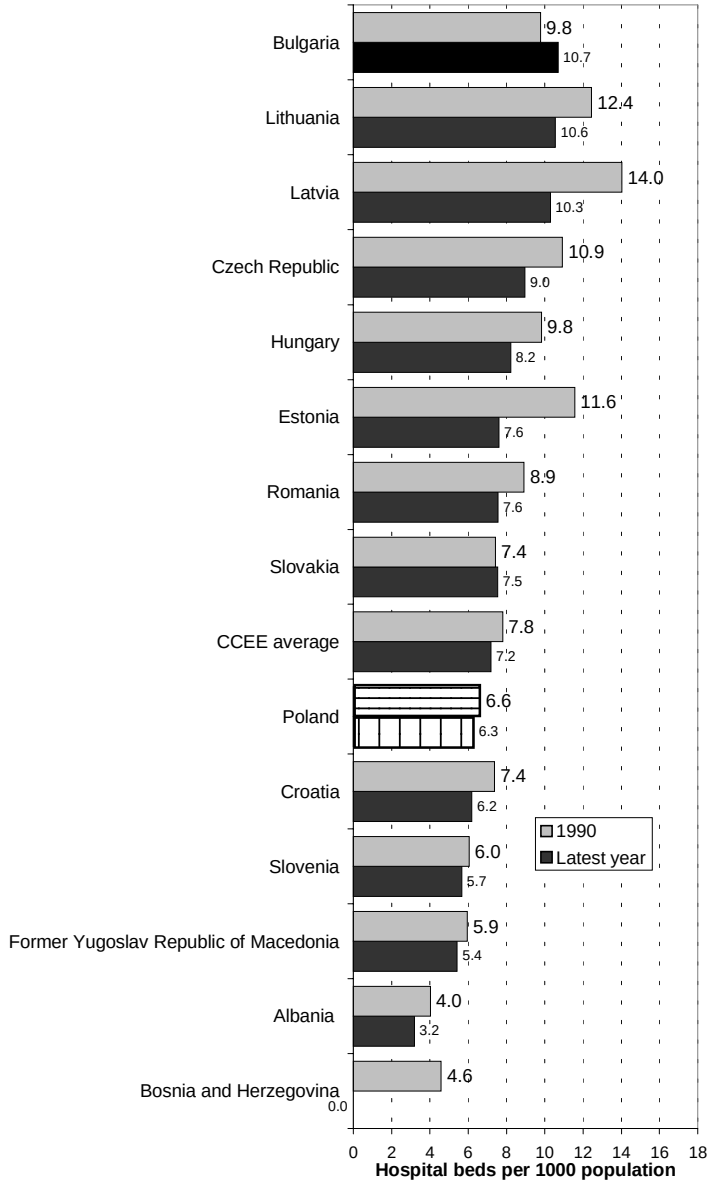
Hospitals are managed by a hospital director (either a physician or a manager) who is accountable to the hospital executive board. The executive board has representatives of the gmina, the staff and also the trade unions. The internal management structure of the hospital varies, but typically the management board consists of the heads of hospital departments. Specialist outpatient facilities are managed by either a director or by the director of the ZOZ.

Modernization and maintenance of hospitals is the responsibility of the voivodships, but major capital investments are financed from central funds. Investment in the infrastructure of health services including hospitals has dropped over the last decade (below 10% of total health care expenditure) so that many facilities require repairs and lack modern equipment.

A number of hospitals have been restored to their original owners, either private organizations or the church, although there is no deliberate programme of hospital privatization The private hospital sector is small with only 9 such hospitals in 1994, 12 in 1996 and more than 40 in 1998. These are small hospitals since only two have between 200–400 beds.

The population ratio of hospital beds has dropped steadily in western European countries (Figs. 9 and 10), and has dropped slightly over the last decade in Poland to 6.2 beds per 1000 population in 1996 (Table 7). The number of hospital beds per 1000 population in Poland is closer to the western European average than to the NIS countries with their legacy of the ‘Semashko’ model of hospital-based care (Table 8). Hospital facilities in Poland were not being used

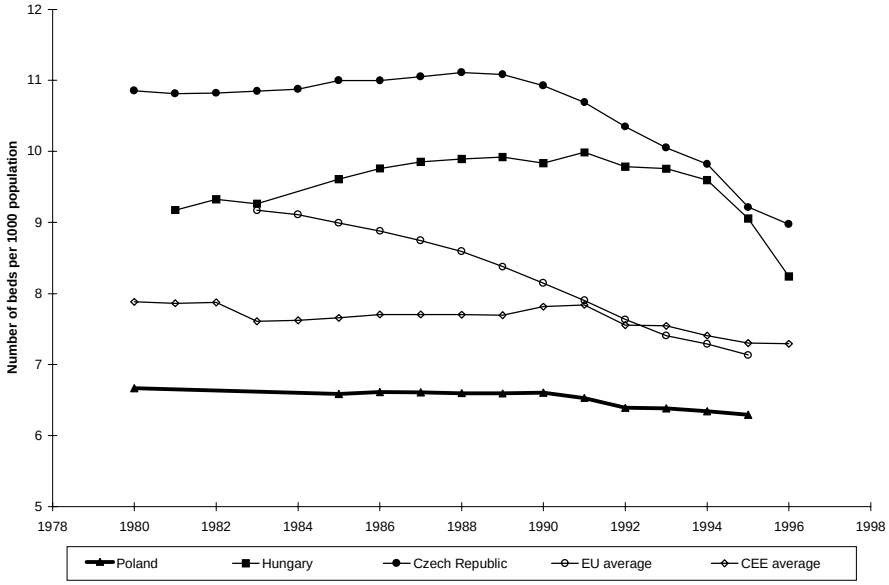
Fig. 9. Hospital beds per 1000 population in the WHO European Region, 1990 and the latest available year.



Source: WHO Regional Office for Europe health for all database.

to their full capacity with an occupancy rate below 72% in 1996, along with shorter hospital stays although the number of admissions had increased (Table 7). Poland had a low number of hospitals with 1.9 per 100 000 population

Fig. 10. Hospital beds per 1000 population in Poland and selected countries, 1980–1996



Source: WHO Regional Office for Europe health for all database.

in 1996 compared to the CEE average of 2.2, the EU average of 3.8 and the NIS average of 7.5 (WHO Regional Office for Europe health for all database).

Substitution policies are intended to produce a more cost-effective use of resources. The aim is to shift long-term care out of hospitals, establish more day hospitals and one-day admission wards, and treat more people as outpatients rather than inpatients.

Hospitals in Poland are being re-classified for acute care, long-term care, as day hospitals, nursing homes or palliative care centres, depending upon suitability and local need, with defined catchment area populations. They must now meet accreditation criteria. The Ministry of Health and Social Welfare commissioned the Association of Hospitals and the Chamber of Physicians to define appropriate standards, which will be implemented by the national hospital accreditation committee, assisted by the Health Services Quality Assessment Centre in Krakow and the National Centre for Health System Management.

The new accreditation and registration system is expected to result in the closure of some small hospitals and at least a 10% bed reduction. Paediatrics and infectious diseases beds, which have the lowest occupancy rates, will be closed first, and other acute beds will be transferred to psychiatric units, paediatric surgery and specialist oncology units. Other beds will be transferred

Table 7. Inpatient utilization and performance, Poland 1980–1996

Inpatient	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Number of hospitals per 100 000 population	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Hospital beds per 1000 population	6.67	6.59	6.60	6.53	6.39	6.38	6.34	6.29	6.22	–
Admissions per 100 population	10.12	10.64	10.57	10.61	10.75	11.19	11.43	11.06	–	–
Average length of stay in days	14.0	13.1	12.5	12.3	11.8	11.4	11.0	10.8	10.6	10.4
Occupancy rate (%)	84.3	78.5	73.1	72.5	71.1	71.9	71.8	71.6	71.8	–

Source: WHO Regional Office for Europe health for all database; National Centre for Health System Management, Poland.

to rehabilitation, the care of chronic diseases, long-term care for dependent people, and palliative care and hospices.

Social care

Social care was poorly developed under the 'Semashko' model and much non-medical care took place in hospitals. Social care includes the non-medical care of dependent people, such as the very elderly or the disabled, which can instead be provided in nursing or residential homes, in community day centres and other venues, or as domiciliary care in a person's own home. Health sector policy generally aims to shift non-acute health care previously provided in hospitals to community-based care. The policy intention, as in western European countries, is to substitute the medical care model with a social care model where appropriate.

The voluntary or nongovernment sector has grown substantially during the 1990s (*13*). These nongovernment organizations are playing a larger role as providers of nursing homes, hospices and rehabilitation services, and as providers of long-term residential care and care in the community.

There are insufficient beds in nursing homes and hospices at present to cater for dependent people, despite a growth to 938 homes for dependent elderly people by 1997. Some existing health care institutions are to be converted to meet these needs.

Since community services and residential care are not well developed, many patients are cared for in hospitals. Patients may be waiting for a place in a nursing home, or discharge may be delayed because of poor housing conditions

Table 8. Inpatient utilization and performance in the WHO European Region, 1996 or latest available year

Country	Hospital beds per 1000 population	Admissions per 100 population	Average length of stay in days	Occupancy rate (%)
Western Europe				
Austria	9.3[b]	24.7[b]	10.9[b]	75.9[b]
Belgium	8.3[b]	19.6[b]	11.4[b]	81.4[b]
Denmark	5.0[c]	21.6[c]	7.5[b]	81.7[c]
Finland	8.7[b]	26.8	11.6	74.0[b]
France	10.6[b]	22.7[b]	11.2[b]	75.4[b]
Germany	9.7[b]	21.5[b]	14.2[b]	81.3[b]
Greece	5.8	13.5[d]	8.2[b]	–
Iceland	10.8[e]	28.0[c]	16.8[e]	–
Ireland	3.7	15.1	7.5	82.3
Israel	6.0	18.6	10.1	94.0
Italy	5.9[b]	16.6[b]	10.5[b]	75.7[b]
Luxembourg	11.0[c]	19.4[c]	15.3[b]	–
Malta*	5.8	16.0[a]	4.56[a]	72.2[a]
Netherlands	5.3	10.2	13.9	73.2
Norway	13.5[c]	15.0[b]	10.0[b]	79.4[b]
Portugal	4.1[b]	11.3[b]	9.8[b]	72.6[b]
Spain	4.3	10.7[c]	11.0[b]	73.9[c]
Sweden	6.1[b]	18.5[b]	7.8[b]	75.9[b]
Switzerland	8.7[f]	15.0[c]	–	78.4[d]
Turkey	2.5[b]	6.3[b]	6.4[b]	55.6[b]
United Kingdom	4.5[b]	15.9[b]	9.9[b]	–
CCEE				
Albania	3.2[b]	9.0[b]	8.2[b]	–
Bosnia and Herzegovina	4.5[f]	8.9[f]	13.3[f]	70.9[f]
Bulgaria	10.7	17.5	13.2	64.1
Croatia	6.2	14.8	13.3	89.6
Czech Republic	9.0	20.4	12.5	74.3
Estonia	7.6	17.9	12.7	71.9
Hungary	8.2	24.2	10.3	74.4
Latvia	10.3	20.9	14.2	–
Lithuania	10.6	20.8	14.0	–
Poland	6.3[b]	–	10.8[b]	–
Romania	7.6	21.5	10.0	–
Slovakia	7.5[b]	18.3[b]	11.7[b]	79.2[b]
Slovenia	5.7	15.5	10.5	77.6
Former Yugoslav Republic of Macedonia	5.4[b]	9.7[b]	15.0	59.9
NIS				
Armenia	7.1	7.5	14.5	40.4
Azerbaijan	9.5[a]	5.7[a]	17.5[a]	–
Belarus	11.6	24.9	15.2	88.7[c]
Georgia	4.7	4.6	10.6	26.8[c]
Kazakhstan	8.4[a]	15.1[a]	16.5[a]	80.8[a]
Kyrgyzstan	8.4	16.4	14.9	80.5
Republic of Moldova	12.1	18.9	18.1	80.8
Russian Federation	11.6	20.5	16.9	87.7
Tajikistan	7.2	10.7	15.0	59.9
Turkmenistan	11.5[c]	17.0[c]	15.1[c]	63.6[c]
Ukraine	10.8	20.2	16.8	81.9
Uzbekistan	7.9	16.2	13.9	–

Source: OEC Health Data File, 1996; WHO Regional Office for Europe health for all database.
Note: [a] 1997, [b] 1995, [c] 1994, [d] 1993, [e] 1992, [f] 1991; *Data for Malta was obtained from the Department of Health Information in Malta, this is based upon data for acute general hospital care.

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or by the lack of community services. In practice, their families look after most elderly people in need of care. Community care services have been the responsibility of the voivodships and the ZOZ, which offer district nursing and other services to support people in their own homes. Voluntary organizations and domiciliary nursing agencies have begun to develop community services such as home nursing and home help, but these services are still very scarce.

The care of children with learning disabilities is the responsibility of the Ministry of Education.

The long-term mentally ill are cared for in regional psychiatric hospitals supervised by the Institute of Psychiatry and Neurology. The present policy is that acute psychiatric care should be transferred to new psychiatric wards in voivodship hospitals, rather than the past practice of admitting patients to regional psychiatric hospitals often far from where they lived. The intention is also to increase the provision of community-based long-term psychiatric and social care, which remains the responsibility of the voivodship.

Human resources and training

The number of doctors, nurses and other health care staff per capita in Poland is similar to that in western European countries. Poland had 2.4 doctors per 1000 population in 1996 which is closer to western Europe (although these countries vary considerably) than the other CEE countries, and certainly the NIS countries (Figs.11 and 12). Poland is regarded as having too many specialists, however, with more than three specialists for every primary care doctor.

The number of doctors per 1000 population has risen slowly since 1970, as has the supply of pharmacists, qualified nurses, midwives and dentists (Tables 9 and 10). The supply of health care personnel is generally regarded as adequate, despite shortages among some occupational groups and urgent retraining needs.

Pay levels, working conditions and morale remain problematic among health care personnel in Poland. The 1992 government budget crisis caused job losses among health personnel, but employment has stabilized since then. Wages for health sector workers in the former socialist states historically were lower than the workforce average and this has remained the case in Poland. In order to control inflation, the government has held down public sector wages throughout the 1990s.

For example, in 1993, the average monthly salary in the health care sector was about 86% of the average salary. The drop in the real value of salaries is part of a general workforce fall as the index of real wages (taking 1989 as the base year of 100) fell to a low of 71.2 in 1993 but rose to 77.9 by 1996 (UNICEF

TransMONEE database). However, as discussed earlier, the increase in informal 'envelope' payments may have offset the salary drop for some doctors. Doctors, in particular, now aspire to salary levels closer to their western European counterparts.

Health sector reforms aimed at strengthening primary health care are also intended to produce a better geographic distribution of health care professionals. Health care professionals, as in many countries, tend to be concentrated in urban areas.

Although less than two thirds of the Polish population live in urban areas, nearly three-quarters of health care professionals in ambulatory care were employed in urban areas in 1996, and nearly three-quarters of all doctors (Table 11). Health sector reforms therefore must consider inducements for health professionals to work in primary care in rural areas.

Table 9. Health care personnel, number of persons, Poland, 1970–1996

	1970	1980	1990	1993	1994	1995	1996	1997
Physicians	46 466	63 577	81 641	85 363	87 612	89 421	90 818	91 121
Dentists	12 966	16 834	18 205	16 946	17 490	17 805	17 869	17 624
Pharmacists	11 775	15 400	15 110	17 576	18 716	19 447	20 139	20 652
Medical analysts (a)	–	–	1 589	2 085	2 445	2 505	2 799	3 008
Nurses (b)	98 569	156 975	207 767	203 855	208 875	211 603	215 295	214 136
Midwives (b)	11 553	16 092	24 016	23 753	24 287	24 440	24 344	24 828

Source: National Center for Health System Management, Warsaw.
Notes: (a) Medical analysts were not distinguished as a separate category until 1987; (b) nurse credentials have changed over this period.

Table 10. Health care personnel, population proportion, Poland, 1970–1997

Per 1000 population											
	1970	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Physicians	1.42	1.78	1.96	2.14	2.16	2.18	2.22	2.27	2.32	2.35	-
Dentists	0.4	0.47	0.47	0.48	0.46	0.43	0.44	0.45	0.46	0.46	-
Pharmacists	0.36	0.43	0.43	0.40	0.42	0.43	0.46	0.49	0.50	0.52	-
Qualified nurses	3.02	4.39	4.81	5.44	5.43	5.40	5.30	5.41	5.48	5.57	-
Midwives	0.35	0.45	0.53	0.63	0.62	0.62	0.62	0.63	0.63	0.64	-

Source: WHO Regional Office for Europe health for all database. Whole persons not full time equivalents.

Table 11. Health care professionals, graduates, Poland, 1980–1997

Graduates	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997
Physicians graduating, per 100 000 population	9.49	9.71	8.34	8.98	9.69	9.72	9.29	9.92	8.76	–
Nurses graduating, per 100 000 population	–	35.8	36.2	36.1	41.1	33.8	37.5	35.6	28.0	–

Source: WHO Regional Office for Europe health for all database. Whole persons not full time equivalents.

Doctors

Poland has eleven Medical Schools. Undergraduate medical training lasts six years, followed by a compulsory one-year internship, training in a specialty takes another two or three years, and secondary level specialization a further three to seven years. The numbers graduating from medical schools rose slightly throughout the 1990s. In 1996, 3392 graduated, a slight drop from the previous year, corresponding to 8.76 graduating doctors per 100 000 population (Table 9). This population rate of medical graduates is similar to mid-range European rates (Table 13).

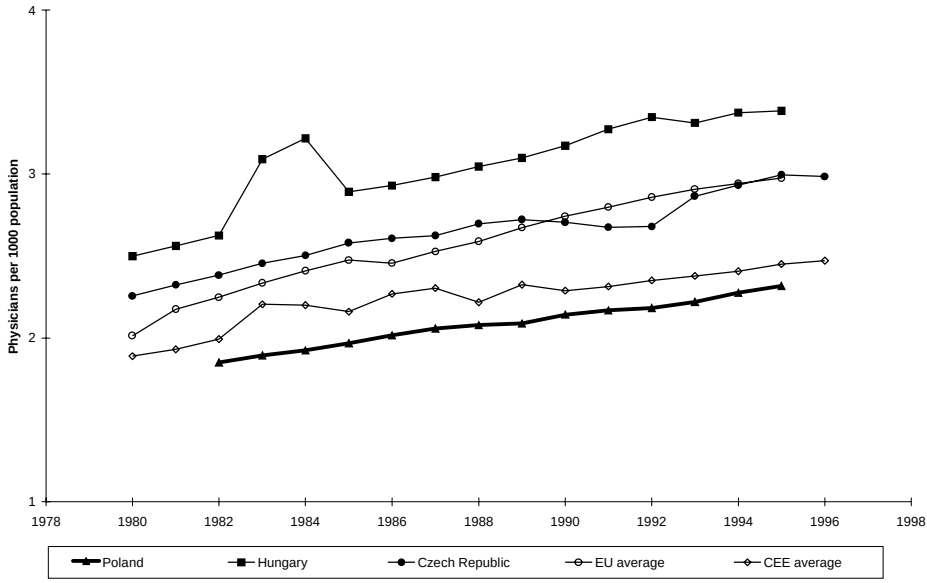
Licence to practice is granted after qualifying but doctors are also obliged to register with the regional Doctor's Chamber before practising.

Postgraduate education is organized by the Medical Centre for Postgraduate Education in its own hospitals and clinics, in medical academy hospitals, and in other authorized hospitals. There are plans to replace the present two level training of medical specialists with a single level followed by an optional period for the acquisition of additional skills. The Chamber of Physicians is increasing its influence over training and accreditation.

A family medicine training programme developed by the Ministry of Health and Social Welfare is being offered through the regional offices of the Medical Centre for Postgraduate Education. Specialist training in family medicine takes two years, with a shorter course for physicians who are already internal medicine specialists. The first 300 family doctors completed training in 1994. Training programmes will address the needs of new medical graduates as well as those already engaged in medical practice.

Physician basic salaries remain low – below the national average salary in 1994 (*1*). Consequently, many doctors supplement their income by private work, sometimes using public health service facilities, while 'envelope payments' from patients are estimated to double their salaries. Physician incomes should rise with the advent of the insurance funds but, on the other hand, patients may be less willing to pay such gratuities.

Figure 11. Physicians per 1000 population in Poland and selected countries, 1980–1996



Source: WHO Regional Office for Europe health for all database.

Table 12. Employment in ambulatory services institutions, Poland, 1996

Professions	urban areas numbers	urban areas % total staff category	rural areas	Total
Physicians	15 910	73	5 816	21 726
Dentists	6 185	69	2 797	8 982
Nurses	27 464	71	11 314	38 778
Midwives	4 463	74	1 587	6 050
Therapists	13 307	79	3 630	16 937
Laboratory technicians	2 305	89	293	2 598
Other medical personnel	3 640	88	512	4 152
TOTAL	73 274	74	25 949	99 223

Source: National Center for Health System Management, Warsaw.

Table 13. Health care personnel entering the work force in western Europe per 100 000 population, latest available year

This includes midwives, pharmacists; physicians and nurses graduating per 100 000 population.

	Physicians	Dentists	Pharmacists	Nurses	Midwives
Austria	16.11	0.02[f]	0.3[h]	33.43	–
Belgium	–	0.04[h]	–	–	–
Denmark	9.62[b]	2.18[d]	2.54[b]	37.15[b]	0.54
Finland	10.39	2.16	6.43	62.75	4.72
France	9.38	1.88	3.83	21.56	1.05
Germany	13.68[b]	2.66[b]	2.51[b]	–	–
Greece	13.3[b]	3.89[b]	2.49[b]	19.09[b]	1.56[b]
Iceland	11.49	3.06	3.06	23.75	2.68
Italy	15.33	1.16	3.7	45.64[a]	n/a
Luxembourg	–	–	–	24.91[e]	0.27[e]
Netherlands	8.86[b]	0.59[b]	0.97[b]	51.6[b]	0.43[c]
Norway	6.59	1.94	0.7[g]	47.71	–
Portugal	5.87[d]	0.73[e]	2.39[e]	10.41[d]	0.84[d]
Spain	18.17[g]	–	5.81[g]	12.86[g]	–
Sweden	9.94[b]	1.96[b]	0.71[d]	39.17[b]	3.03[b]
Switzerland	10.06	1.61	2.84	44.67	1.28
United Kingdom	6.34	1.27	1.25	48.69[d]	–

[a]1993, [b]1991, [c]1990, [d]1989, [e]1988, [f]1987, [g]1986, [h]1985
Source: WHO Regional Office for Europe health for all database.

Nurses

Nurses used to be trained in a five-year vocational secondary school course. In 1991, nursing training was upgraded to a 2.5-year programme (later 3 years) for students who had completed secondary education. Midwifery and nursing are taught in separate courses in over 200 schools of nursing and about 60 schools of midwifery. Nursing faculties have opened in five university schools of medicine, and additional postgraduate training is available in midwifery, paediatric nursing, and psychiatric nursing and other specialties. Qualified nurses can go on to obtain university nursing degrees and masters level credentials and a doctoral degree in nursing.

The Polish Nursing Association originally formed in 1925, and abolished under the communist state, was re-formed in the late 1980s. Nursing is now a registered and regulated profession. The 1991 Nurses and Midwives Self-Government Act established a national statutory council with provincial branches. Membership of the Council is compulsory. Nurses must register for a licence to practice with the voivodship (province level) nurses and midwives

chamber. According to a law on nursing (passed in 1935 and still in force) only qualified persons have the right to use the title and to practice as nurses.

The development of their own professional and educational structures has made nurses more autonomous in some respects although they mostly remain subordinate to doctors in the practice of their work. Nurses in Poland carry less responsibility than nurses in most western European health systems, however, and undertake tasks that in cost-effective terms should be performed by support staff.

There were 5.4 nurses per 1000 population in Poland in 1994, which was slightly higher than the CEE average but lower than in many western European countries. (Intercountry comparisons are problematic, however, given the different definitions of a qualified nurse.) In 1996, there were 5.6 nurses per 1000 population and 0.64 midwives (Table 10). The number of nurses compared to doctors in Poland remains low compared to many western European countries (Fig. 12).

There are shortages in some specialties (such as psychiatric nursing) and in some regions. There is also a problem with the lack of a standard against which to define nurse staffing levels. Rising education and skill levels will increase the pressure to make more cost-effective use of nurses. Nurse salaries remain low leading to a loss of nurses to better paid occupations.

Managers and public health specialists

There is a shortage of trained managers in health care institutions. Training courses have been set up in three schools of public health (Warsaw, Kraków and Lódz) while others train abroad.

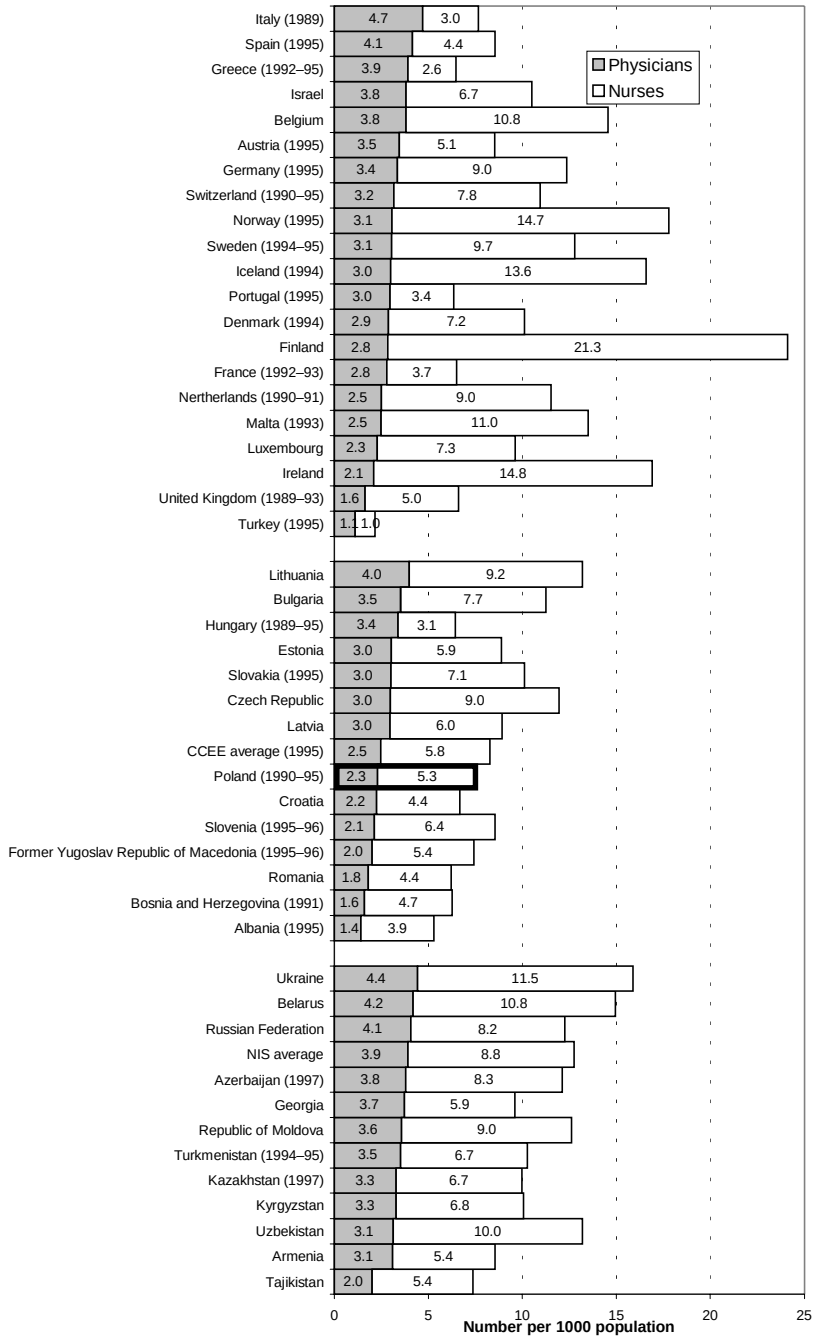
Pharmaceuticals and health care technology assessment

Pharmaceuticals are potentially profitable for the Polish economy but have also substantially increased costs to the health sector. Poland has no significant shortages of pharmaceutical supplies.

The pharmaceutical industry

The pharmaceutical industry is one of the most modern branches of the economy, although profitability declined between 1990 and 1993 following the removal of restrictions on foreign drugs. The Polish pharmaceutical industry consists

Fig. 12. Number of physicians and nurses per 1000 population in Europe, 1996 or latest available year



Source: WHO Regional Office for Europe health for all database.

of seventeen POLFA and ten HERBAPOL state-owned enterprises, fourteen chemical–pharmaceutical cooperatives, factories manufacturing sera and vaccines and dressings, and about a dozen private pharmaceuticals and dressings manufacturers. POLFA manufactures about 2000 products, covering most domestic therapeutic needs.

Tax incentives have been offered to attract investment into the pharmaceutical industry and to bring it up to GMP (Good Manufacturing Practice) standards. Cooperation is being sought between academic centres and industry to encourage new product development. The Ministry of Trade and Industry is considering further privatization of the pharmaceutical industry.

Pharmaceuticals accounted for 18% of total health care expenditure in 1994, which was higher than western Europe countries but lower than central and eastern European countries (WHO Regional Office for Europe health for all database 1998). This had fallen to below 10% of health expenditure in 1996 (see Table 6). However, this does not include the substantial out-of-pocket drug payments made by individuals, which are not counted in the National Health Accounts.

Prices of domestically produced drugs remain lower than those of equivalent imported drugs, which have kept down health budget costs. However, the import of foreign drugs has risen and more drugs are being prescribed. The 1991 Act on Payment for Drugs and Medical Materials limited the cost increase by reducing the numbers of people entitled to state reimbursement.

Drug registration

Drug registration policy is intended to ensure access to safe, effective drugs. The decision to register a drug is based primarily on its effectiveness, but also on quality, safety, price and whether similar drugs are available. Since 1989, there has been a rapid increase in the number of applications for registration to about 3000 per year. The Pharmaceuticals and Medical Materials Registration Office was established to assist the registration committee in speeding up the process. Many applications for registration of new drugs are for herbal medications, vitamins and galenic drugs, which is of concern since these drugs are expensive but have little discernible therapeutic effect.

Pharmaceutical supervision has been under the direct control of the Ministry of Health and Social Welfare since 1992 through ten quality control laboratories.

Reimbursement

Reimbursement from the Ministry of Health and Social Welfare depends upon the type of drug (on the basic and supplementary list) and the type of patient

(patients with chronic disorders and war injuries, and war veterans are fully or partly reimbursed). Drugs on the basic list are available at a flat fee equivalent to 0.05% of the minimum wage; patients pay a proportion (usually 30–50%) of the cost of drugs on the supplementary list.

The state has tried various demand and supply cost containment strategies. Pharmacists are obliged to issue the cheapest drug, and the state only reimburses the cost of the cheapest drug, leaving patients to pay the difference. Committees of medical and pharmaceutical experts issue guidelines on cost-effective prescribing, which the Chamber of Physicians publishes in regular bulletins along with the reimbursement regulations.

These strategies appear to have had some effect with a drop in expenditure in 1996 (see Table 6), although this does not take into account the increased private payments. The Ministry of Health and Social Welfare also plans to influence prescriber behaviour by establishing a computerized database on practitioner prescribing habits and associated costs. This information will be fed back to doctors to enable them to compare their own prescribing and costs to the average and to the guidelines. This system would also allow voivodships to negotiate prescription budgets for family doctors and specialists. It is also planned to introduce drug therapy training into the undergraduate medical curriculum. A Guide to Pharmacotherapy, based on the British guide, is also planned, along with drug information centres for professionals and greater public education about medications.

Medical equipment

Medical technology has long been under-funded and under the previous system there was no method for evaluating, deciding upon and distributing the appropriate mix of equipment across health facilities (*15*). The Centre for Medical Technology now is responsible for the evaluation of medical technology. Efforts are being made to harmonize procedures in this area with those in the European Union.

Financial resource allocation

Third-party budget setting and resource allocation

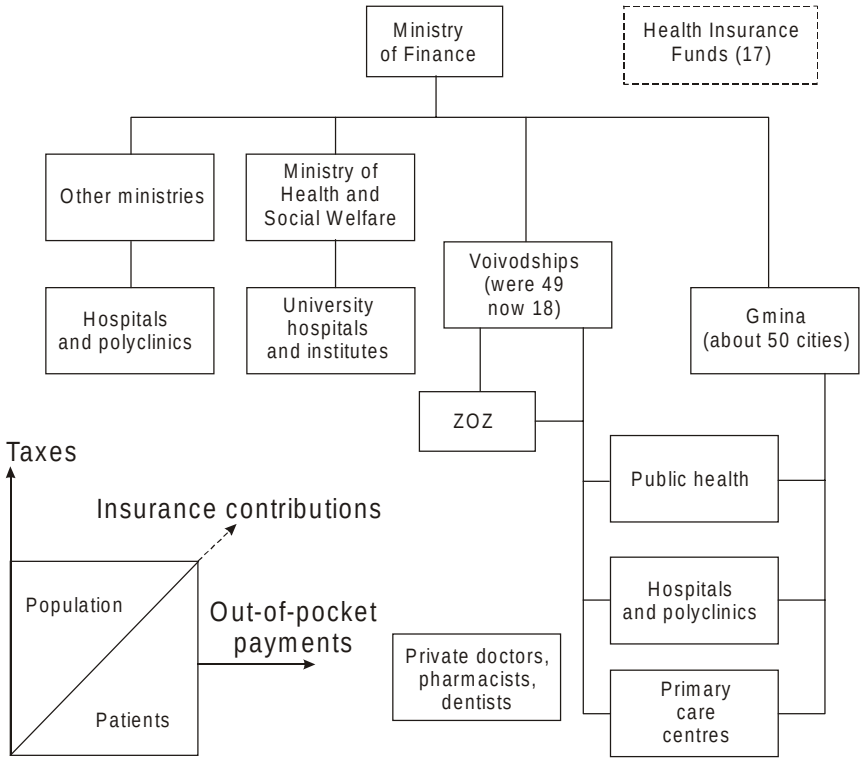
The principles and methods used in allocating the health budget will change from 1999. Under the arrangements in force in 1998, the Ministry of Finance allocated the funds collected through taxation to the major providers who then decided how to spend their health budgets (Fig. 13). The distribution of resources between the voivodships had been done mainly on historical budgets, but since 1995 a new formula for resource allocation between voivodships has been implemented based on demographic and mortality indicators. Also, the voivodships have agreed upon some rationalization of their health care expenditures with the Ministry of Finance. The independent gminas receive an earmarked health budget from the Ministry of Finance and the others from their voivodships.

The health insurance legislation envisage two sources of funding for health care from 1 January 1999. The first source is compulsory health insurance contributions from citizens to regional health insurance funds. The second is the continuation of revenue from state, voivodship and local government budgets. This will cover some tertiary care services, as well as investment, major capital equipment, medical training, research, implementation of the National Health Programme and other health policy priorities.

Payment of hospitals

Most hospitals in 1998 were allocated their budget from the voivodship or gmina. The budget allocation generally was based on the previous year's costs, broken down according to salary and non-salary (pay and non-pay) components, or according to the number of beds, staff and services. Some hospitals have moved towards prospective global budgets that make managers more responsible

Fig. 13. Financing flow chart



for managing within their budget. The voivodships vary in how they fund hospitals and have experimented with different methods.

Many hospitals accumulated substantial debts early in the political transition. These were cleared several times (in 1994, 1996 and 1997) by a special allocation of funds to voivodships from the Ministry of Health and Social Welfare.

In May 1995, the Minister of Health issued a regulation on the conditions for the transfer of budgetary resources to self-managing institutions. Health care institutions that meet these conditions could opt to become responsible for managing their own finances. This opened the way for a new future system of financing with a purchaser–provider split, and contracts between health services providers and insurance funds. Those health care institutions registered as autonomous units can, in theory, make profits or go bankrupt if they incur losses.

The 1997 General Health Insurance Act will introduce a system whereby patient service costs are met by hospital and health facilities through negotiated contracts between the insurance funds or with other purchasers based on competitive costing of services. The capital and maintenance costs of the hospital budget will continue to come from national and local governments. Service contracting will require unit cost information, and some funds from PHARE and the World Bank have been used to develop such information systems. The intention is that contracts between health facilities and insurance funds from 1999 will be based upon a 'points' system with different points assigned to different service procedures (such as ultrasound examinations and electrocardiographs), as well as preventive and health promotion activities where relevant. There may also be an element of payment for diagnosis-related groups of patients. The details are to be negotiated between the funds and the hospitals.

Payment of physicians

Most health care personnel still are salaried employees. Public sector hospital doctors are paid a standard salary, but also a top-up salary, which consists of bonus payments, overtime and on-call duty payments which effectively doubles their base salary. In addition, they are likely to receive informal payments from patients that do not necessarily appear as formal taxable income.

Different doctors working in the same institution may have different employers such as a gmina or a voivodship.

An August 1993 ordinance under the 1991 Health Care Institutions Act allowed health care institutions to offer contracts to physicians based upon other methods of payment apart from a salary. Some voivodships have experimented with various methods of paying general practitioners: patient capitation, fees-per-visit, fees-per-procedure (including a 'points' based payment system), fees-per-day and a mixture of methods (*2*).

Primary care family doctors now generally are paid on a capitation basis for their registered patients, while some receive age weightings with extra payments for infants and for those over 65 years, and for those with chronic illnesses. The details of the payment system for GPs are being worked out, and will be decided by the various insurance funds in their contracts from 1999 onwards.

Health care reforms

The political and economic changes of the early 1990s did not affect health care as much as other sectors. The impetus to reform the health care system has built up more slowly and health services have remained primarily in the public sector.

The first major piece of health sector legislation after full independence, the *1991 Health Care Institutions Act*, laid down the foundations for reform. It provided for diversity in the organization and ownership of health care institutions by various sectors: private, voluntary sector, cooperatives, local government, voivodships and central government bodies. It also affirmed the right to good quality services, the right to informed consent, the right to patient information, the right to confidentiality and the right to dignity in death.

The Ministry of Health and Social Welfare became responsible for health care policy development, the National Health Programme (and other nationwide preventive programmes), manpower training and research and highly specialized diagnostic and therapeutic facilities. Regions became responsible for organizing and financing tertiary care (supported by the medical academies) and individual voivodships for secondary care in voivodship hospitals. Primary care was transferred to the gminas and the district hospitals to associations of gminas.

In the next phase, the health care system will be financed increasingly through health insurance funds. Substantial structural changes to the health care sector are under way. Health care institutions increasingly are to become 'independent units' responsible for managing their own budgets and services.

The 1997 General Health Insurance Act and the 1998 amendments took effect from 1 January 1999. The insurance scheme will be based on the following principles. First, universal participation means that the entire population will be covered by insurance under the same conditions and no population group will be excluded. Second, the mandatory principle means that everyone will be required to pay income tax-based insurance. Third, social solidarity means

that the costs of health insurance are borne by all insured persons; there will be equal access for insured persons; insured people will be covered despite the extent of their risk; and contributions will be re-distributive. Fourth, the scheme will be autonomous and self-governing. Finally, the state will guarantee the security of the insurance scheme.

Content of legislation

Many laws and regulations have been passed since the transition to a new political system that have affected the health care system. The main ones are listed below in chronological order.

1989	Act on the Establishment of a Medical Chamber
1990	Local Government Act
1991	Health Care Institutions Act
1991	Nurses and Midwives Self Government Act
1991	Act on Payment for Drugs and Medical Materials
1993	Law on Abortion
1994	Law on Nurse and Midwives Professions
1995	Regulations on transfer of budgets to self-managing institutions
1997	Law on Physicians Profession
1997	Law on Universal Health Insurance
1998	Law on Universal Health Insurance – Amendments

Determinants and objectives

The main stated objectives of the health reform policy documents are as follows: to improve the health status of the population; to ensure universal access to a full range of high quality health care services; to increase the effectiveness and quality of health care; to ensure stable funding of health care; and to control expenditure. Some key areas of reform have been difficult to implement as follows.

The National Health Programme (aimed at health promotion and illness prevention) has suffered from poor or slow implementation in the programmes aimed at preventing cardiovascular disease, cancers, trauma, and at improving maternal and child health.

Second, health care services need reorganization in order to make better use of health care facilities. Facilities should be categorized into acute hospitals,

chronic care hospitals, nursing homes and hospices. New forms of hospital care such as day care and home care should be developed. Hospitals should be accredited as meeting staffing and infrastructure standards before being allowed to carry out specialized procedures; district hospitals should meet standards for common diagnostic and therapeutic procedures.

Third, the financial management of hospitals and other health care institutions must be rationalized. To improve financial management, the Ministry of Health and Social Welfare has approved regulations that allow funding to follow patients.

Fourth, new sources of funds must be tapped through the health insurance funds. The implementation of this new system of financing will be a major challenge over the next few years.

Content of proposed reforms

Introduction of mixed insurance and government budgets

The 1997 Health Insurance Act calls for regional insurance funds, each to cover a population of between 1.5 and 4.5 million, in order to fund primary, secondary and tertiary health care services. The existing 49 voivodships have been reduced in number to 16 to produce a cost-effective sized region each with an insurance fund. In addition, a seventeenth national fund for uniformed public servants will cover the ministries with their separate health services, principally army, railway and police employees. The act was amended to this effect by Parliament and signed by the President in July 1998.

The regional insurance funds will be legally constituted bodies with management boards elected by voivodship *sejmiks*. They are not answerable to government or directly to Parliament. The Ministry of Health does not appoint the members of these boards and has no power to dictate policy.

The regional insurance funds will set and collect contributions that will mainly stay within their region. A small proportion will be transferred among insurance funds to equalize regional inequities. This will also finance the administrative function of the National Union of Funds that will unite all funds and represent them to Parliament and to the government.

The health insurance contribution will be 7.5% from the same income base determined for social insurance contributions (such as a salary, pension or a special arrangement for farmers). This will be deducted monthly by the employer in the same way as income tax but paid directly to the insurance fund. The

social insurance contribution is generally around 45% of salary. People aged 50 years and under have some flexibility in the division of their health and social security contributions between the different schemes.

Contributions from most individuals will be paid through an earmarked payroll tax collected from employers. This will be based on income. Entitlement to health care will be based on registration with a health insurance fund. Non-earner groups such as the unemployed and the retired will have their contributions covered by the state. The insured will be entitled to free basic health care irrespective of risk and equal access to care will be maintained.

Provider payment methods have not been specified in detail and are to be negotiated between the funds and the service providers. Service providers will contract with the health insurance funds so that most funding will become service-based. It is not yet known whether the insurance funds will adopt the accounting system being introduced in some hospitals such as a 'points' system for patient service procedures. It also remains to be seen whether they will adopt the payment system being introduced in primary care based on patient capitation plus a points system for particular service procedures.

Government budgetary finance for health care organizations will be phased out gradually in favour of contracts between the insurance funds and service providers. An information system will have to be developed to support contracting, planning, evaluation and management. Offices will be established at voivodship level to evaluate services, prepare contracts, analyse costs and monitor drug prescriptions. Both purchasers and providers will need an accounting system in order to negotiate, bill and monitor service contracts.

Health for all policy

The National Health Programme 1996–2005, among other measures, contains eighteen targets based on WHO health for all strategies. This plan has not been debated in Parliament, however, and no extra funds have been assigned to meet these objectives.

Lifestyle objectives include increasing physical activity, decreasing the use of tobacco, alcohol and drugs, promoting mental health, improving nutrition, and improving the effectiveness of health promotion and health education.

Objectives on exposure to risk factors include improving sanitary conditions across the country, reducing exposure to hazards at work or home, and reducing the road accident rate.

Objectives for the health sector include improving emergency care and primary care, reducing premature births, better detection of those at risk of

heart disease, and early diagnosis of breast and cervical cancer. Other objectives are improvements in dental health, the prevention of communicable diseases, and increasing the opportunities for disabled people to return to an active life.

Achieving these objectives depends on more funds and on cooperation between sectors of government, as well as participation by the population. The Minister of Health and Social Welfare was made responsible in 1995 for intersectoral coordination.

Conclusions

Poland concentrated on public sector reforms in the early 1990s, which laid a foundation for changes to the health system. The prescription for health care was for incremental change rather than 'shock therapy'. The health care system has been gradually decentralized and administrative responsibility and ownership shifted downwards to regional and local government levels and to health care provider 'independent units'. As far as equity is concerned, universal access was maintained, but the extent of informal payments pointed to a widening gulf between free public care and services available to those able and willing to pay. The growth of out-of-pocket payments, amounting to perhaps one third of total health care expenditure, contributed to the pressure to move to insurance funding.

The low level of public expenditure upon health care has been a major constraint upon health sector reform and has put considerable strain upon health services. Government health expenditure has not kept pace with GDP growth. The state is seeking a more secure source of health financing principally through the introduction of health insurance.

Although spending on pharmaceuticals accounts for a relatively high proportion of health spending by western European standards, Poland has avoided the dramatic cost escalation that has affected other central and eastern European countries.

A systematic rationalization of inpatient care is under way through hospital registration and regulation, and also through planned reductions in hospital capacity.

Primary health care is moving towards a family doctor model aimed at improving the training, skills and facilities of family physicians. This model is intended to improve the quality of care and to establish family doctors as gatekeepers to secondary and tertiary health care. Contracts with health insurance funds and patient capitation funding are intended to expand the range of primary care services and to increase the autonomy and incomes of family doctors.

Health care provider institutions now have more autonomy and are more accountable to their management boards and to regional and local government owners. The persistence of line budgets limits the information and decisions available to managers but a fee for service 'points' funding system is being introduced in insurance fund contracts. Resources still follow facilities and equalization mechanisms have not been developed to redistribute resources across geographic areas and across social groups.

Emergent professional bodies are playing an increasing role in policy-making, education and accreditation. The Chamber of Physicians has been quite influential. Among health care personnel themselves, however, the incentives and opportunities to improve service quality and health gain are still limited.

The National Health Programme, with its focus on achievable targets and health gain, is an important development but progress with implementation has been slow.

The health care system was on the brink of further reforms at the time this report was written. The legislation setting up a health insurance system took effect from 1 January 1999. Public regional insurance funds will take over the funding of service delivery with provider institutions reimbursed on the basis of contracts. The intended advantages of such a system are increased incentives for health sector productivity and quality. The potential difficulties are considerable. The national government, although the guarantor for the funds and currently the major funder of the health care sector, will have little power over insurance fund policies and practices. The management capacity and information available to run such a system are in a very early stage of development. The transaction costs incurred in an internal market are substantial. The fragmentation of the financing system may lead to geographical inequity. Further, the funding of the health care system will be split between the Ministry of Finance and the health insurance funds. It remains to be seen whether further changes can maintain universal access to a wide range of services while leading to real improvements in the quality of health services, consumer choice and health gains.

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