

## **Spatial competitiveness of public and non-public health care (hospitals) in Poland's space**

JUSTYNA WELTROWSKA-JĘCH  
*Adam Mickiewicz University*  
Poznań, Poland

### **Introduction**

The health-care reform in Poland was introduced rather late - only in 1999. The insurance system in force until then had been budget-based. In 1999 health insurance started to be implemented through health insurance institutions called Sick Funds. Because of its defective operation, but primarily for political reasons, this system was replaced by a National Health Fund, which turned out to be inconsistent in many points with the Constitution. That is why in 2004 it was modified to rectify those deficiencies. The basic characteristics of the health-care system currently in force will be presented below. At this point, however, it should be emphasised that the reforms instituted between 1999 and 2004 initiated competition between public and non-public (private) health care.

The chief aim of the paper is to characterise the competitiveness of public and non-public health care (hospitals) in Poland in a spatial aspect. Another goal is a brief presentation of the current system and sources of its financing.

### **1. The present health-care system in Poland**

The Polish health-care system amended in 2004 by the new Health Care Provision from Public Means Act has achieved the following:

1. it has removed the former Act's inconsistency with the Constitution;
2. it has taken full account of the consequences of Poland's accession to the European Union and made it possible for those insured to use the European Health Insurance Card in any EU member state and in the European Economic Area as defined by the European Free Trade Association (EFTA);
3. it has simplified the system of planning health-care needs at the level of the voivodeship (NUTS 2) and the country (NUTS 1);
4. it has defined 'own tasks' of local authorities at the levels of communes, poviats and voivodeships and of the Ministry of Health in the field of ensuring equal access to health care;
5. it has made it possible for a patient to seek treatment in any public or private health-care facility also beyond the boundaries of a voivodeship (NUTS 2) if it has signed a contract with the National Health Fund. In an emergency, medical services can also be provided by those facilities that have no such contracts; and
6. it has introduced a new form of access to specialised medical services through compiling public lists of people waiting for those services (cf. Fig. 3).

The organisation of the current health-care system in Poland is presented in Fig. 1.

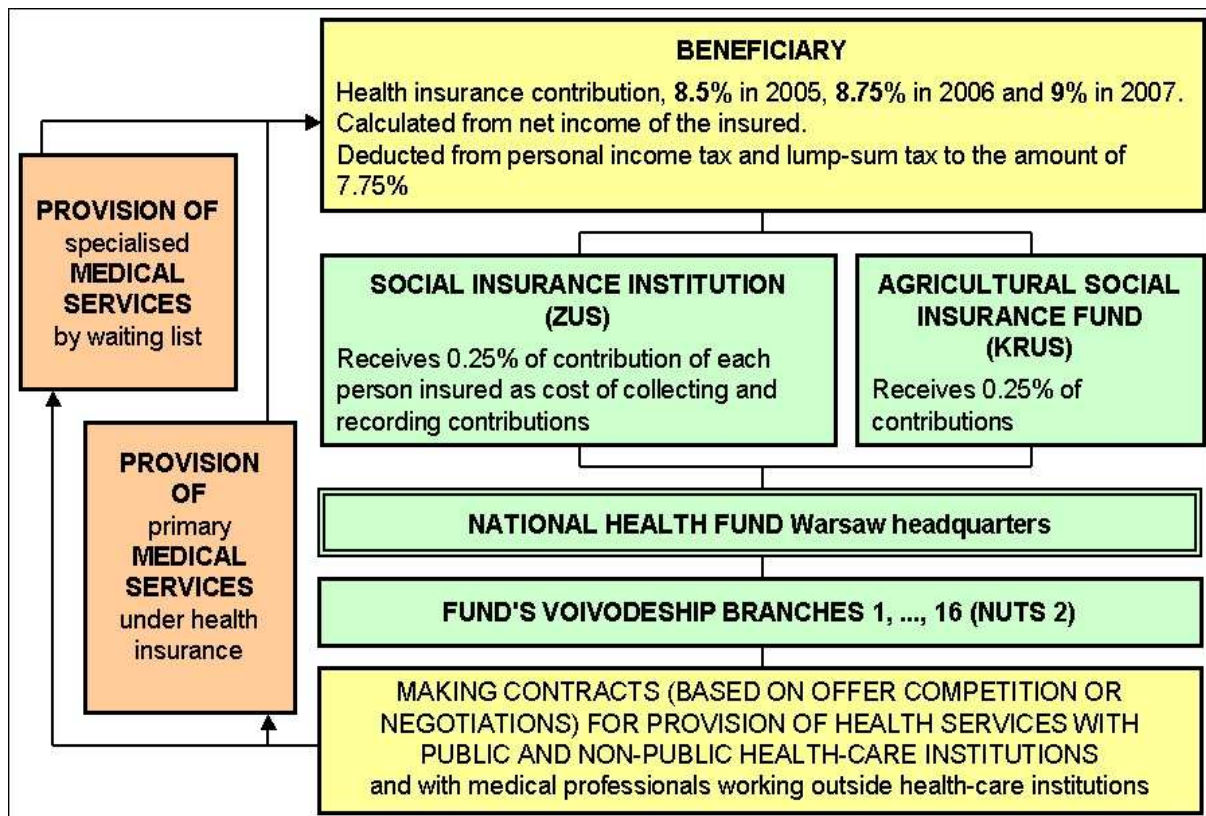


Fig. 1. Medical services in Poland since 2004, financed from health insurance contributions after the introduction of the Health Care Provision from Public Means Act of 27 August 2004.

Source: own compilation.

Although it has removed the flaws of its predecessor, the new Act has not solved many problems that are perceived as the main defects in the operation of health care in Poland.

1. It has not introduced the so-called portfolio of health-care services: (a) guaranteed (with the financial responsibility resting on the public payer), (b) recommended (with private means as the principal source of their financing and public means only as auxiliary), and (c) above-standard (with the financial responsibility resting exclusively on the private payer) (Golinowska 2006).
2. The GDP-related means earmarked for health care are still too low.
3. There are no clear rules of health-care financing by the local authorities despite the decentralisation of powers and their taking over of the responsibility for health care at the local and regional levels (Surówka 2004).
4. Failure to introduce the principle of co-payment for health services, which would help to rationalise their use.
5. Public health-care facilities have not been restructured through commercialisation and privatisation to increase the inflow of investment capital and rationalise costs.

After the parliamentary election of 2005 and the assumption of power by right-wing parties, a new debate on health-care reform started in Poland. After the old Act was amended five times in 2005, a new bill is currently being prepared.

## 2. Health care financing in Poland

The financing of the present health care system in Poland relies on funds coming from various sources, both public and private (Fig. 2). In 2005 the funds allocated to health care were around 55 billion zlotys (13.8 billion euro), i.e. 6% of the GDP.

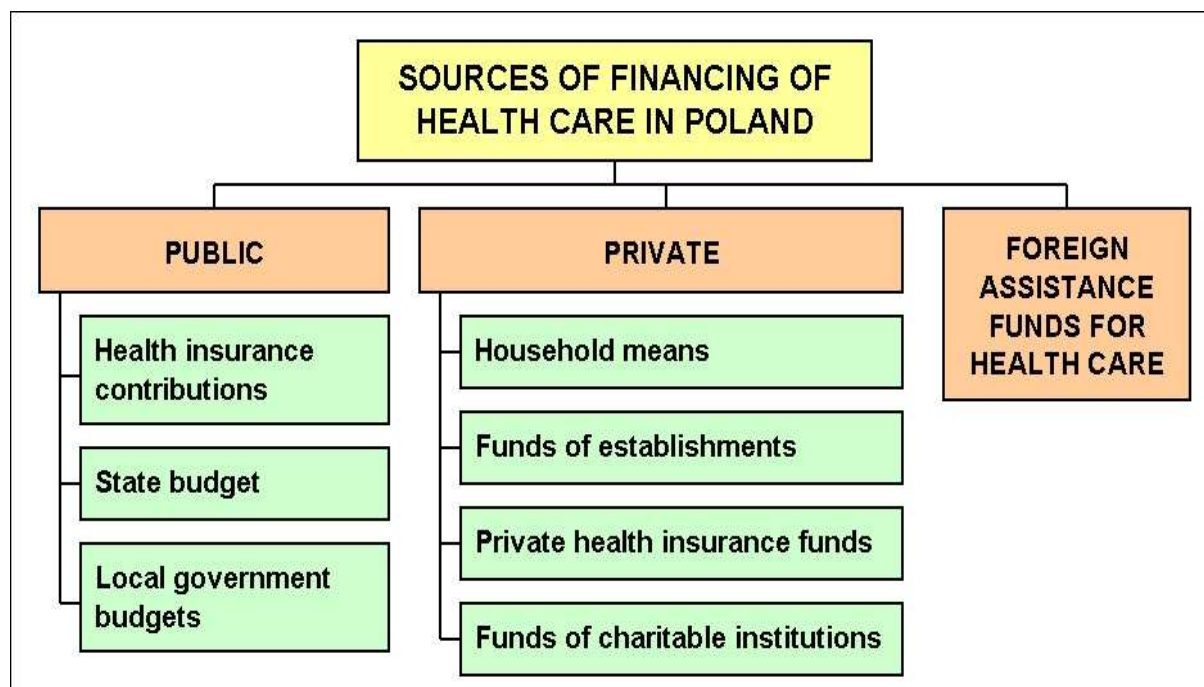


Fig. 2. Sources of financing of health care in Poland.

Source: own compilation.

In the opinion of both experts and citizens, the expenditure on the health care system is insufficient. A comparison with other countries supports this opinion. To give an example, Poland's total per capita expenditure in 2001 was one-eighth of that in the US. Other standard parameters used to evaluate the state's efforts to ensure adequate health care also demonstrate the unfavourable situation of Polish citizens. This is due to the financial imbalance in the Polish health-care system, which shows an income of 3 billion zlotys against expenditure of 6 billion (0.8 and 1.5 billion euro respectively). And this without allowing for the expected rises in salaries of the medical staff.

The factors accounting for the financial imbalance include (Golinowska 2006):

### 1. System faults:

- Chief among them is the discrepancy between the principle (applied) of full access to health services in life- or health-threatening situations and quota limits on these services contracted with health-care providers. Once a provider exceeds the quota, the services are not refunded. This is a side effect of the nonexistence of a basket of guaranteed services.
- Polish legislation has not yet introduced instruments relevant to public entities and private persons' interactions common in health-care systems, even though about 20% of private services in Poland are covered by public funds.

### 2. Management faults:

- In the Polish health-care system, service recipients are deprived of information about service costs, rates and price ranges in public health-care facilities. Neither do they have any influence on decisions concerning a particular health-care provider as an institution in which they

are treated. There is no legal procedure they can use, which is a result of the National Health Fund's taking over the control of citizens' obligatory public health insurance contributions. Equally ineffectual is the management of human resources in the health-care system. This is partly due to alarmingly low salaries of medical staff.

Thus, according to the Ministry of Health (2004), in 2002 monthly wages of full-time employees in all the sectors of the economy amounted to 2,232 zlotys (ca. 526 euro) as against 1,724 zlotys (ca. 435 euro) in health care. This is 77% of the all-sectors figure. Besides, wages differed significantly from occupational group to occupational group within the health service itself, being always markedly lower than the national average. For instance, in 2002 physicians received 2,959 zlotys (747 euro) and so did pharmacists - 2,951 zlotys (745 euro), while dentists only got 1,820 zlotys (459 euro) and nurses a mere 1,568 zlotys (396 euro).

At the scale of the country, in 2002 the cost of wages in health care was 12 billion zlotys (3.12 billion euro), but expectations were much higher. Health-care trade unions demanded an increase in salaries to 2 or 3 times the national average. This would boost them to a total of 23-26 billion zlotys (5.8-6.6 billion euro). Despite social differences and the approval of the expectations of the health service, this level of wages has never yet been reached in Poland.

The low wages in the Polish health-care system give rise to a serious problem: they tend to generate corruption, which some sources even estimate at a total of 5 billion zlotys (1.25 billion euro) (Ministry of Health 2004: 205).

In this situation of permanent underfunding, new ways of obtaining additional financial means for health care are being sought by both, beneficiaries and service providers (Sowada 2004).

1. Conceptions concerning beneficiaries:

- *Co-payment.* This conception recommends the participation of service recipients in the costs of treatment, e.g. through an additional payment for a visit to a general practitioner or a specialist.

- *Additional private insurance.* Increasing the participation of service recipients in the costs of treatment through additional private insurance seems to be a solution for the future, i.e. for the time of greater wealth of the entire society, and not only some of its more privileged groups.

2. Conceptions concerning service providers. New ways of payment for the provision of health services should be sought. Given the lack of competition among health-care establishments, the methods employed at present are not rational. The new methods should allow the introduction of uniform treatment standards (the portfolio of guaranteed services) and a pattern for the calculation of the sums of money indispensable for the treatment of concrete diseases.

### 3. Social perception of access to medical services

Accessibility of medical care is a notion with many aspects (institutional, organisational, spatial, and so on; see e.g. Penchansky and Thomas 1981). In this paper it is understood as a possibility of making use of the health-care system, or as a continuing and organised supply of essential health services available to all people with no unreasonable geographical or financial barriers.

The patient's access to basic and specialised care under the system in force (after the 2004 reform) is presented in Fig. 3. Its characteristic feature is the existence of two levels: first the patient is examined by the doctor of first contact and then, if necessary, referred to a specialist. In this way long waiting lists are created - an exasperation of people in need of medical help.

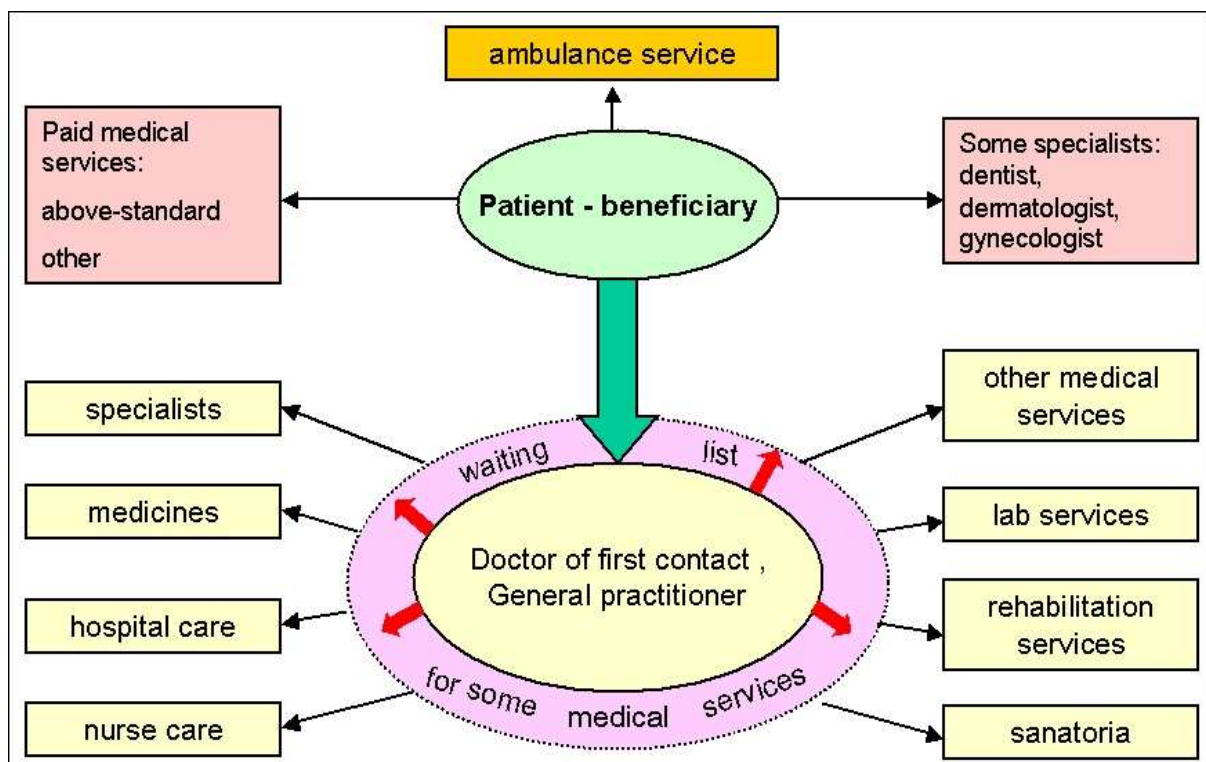


Fig. 3. Access of the beneficiary (patient) to health services in the health-care system after the 2004 reform.

*Source: own compilation.*

To establish the effects of the 2004 reform, the Centre of the Health Care Information System (CSIOZ) carried out a survey research on access to medical services and the perception of inequality in it. Selected results are presented in a graphic form in Figs 4, 5 and 6. They show, respectively, assessment of accessibility to doctor of first contact, accessibility to specialists, and the percentage of people who had to wait more than a month to obtain a specialist's advice.

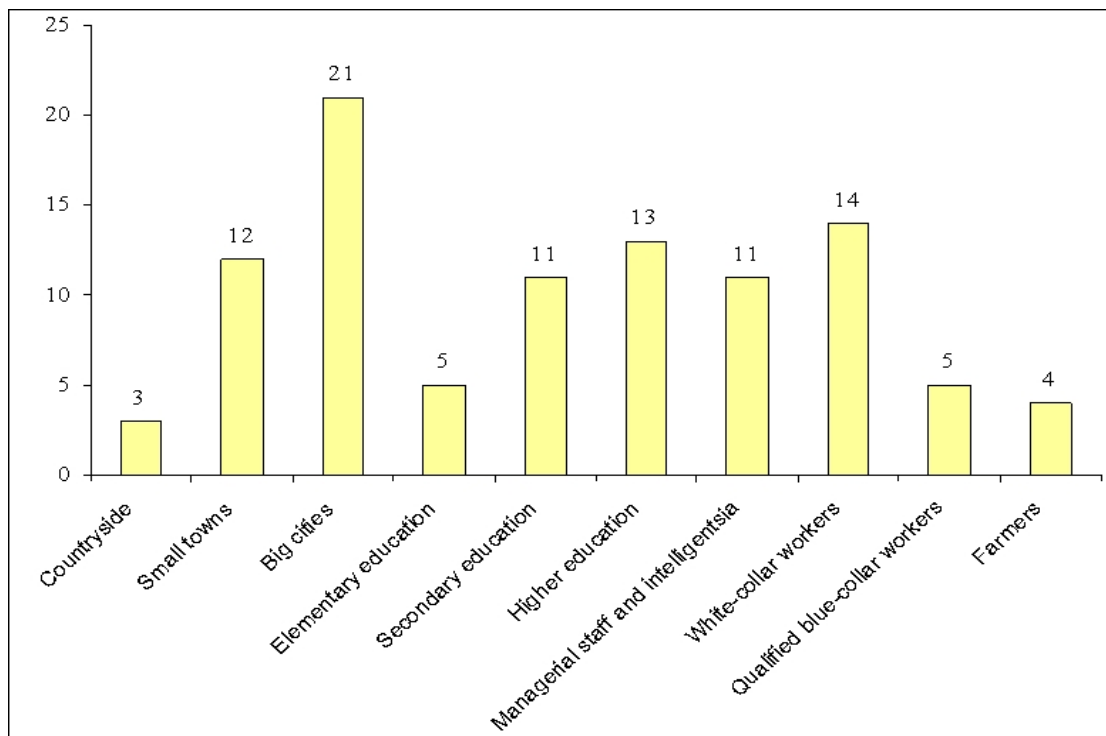


Fig. 4. Assessment of accessibility to doctor of first contact. Respondents giving negative opinions about possibility of arranging visit in health centre on day of application - differences by place of residence, education, and type of work (%)

Source: Selected aspects of the assessment of access to health care.

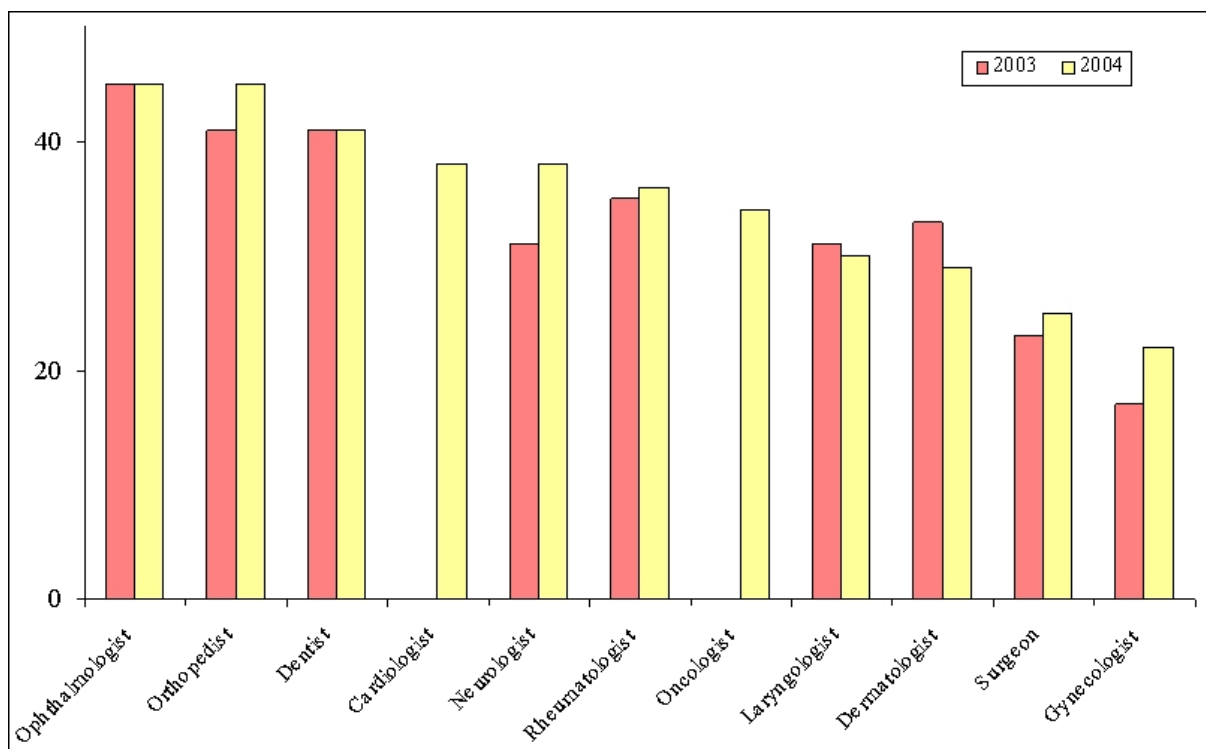


Fig. 5. Accessibility to specialists.

Negative opinions about accessibility to specialist advice (%)

Source: Selected aspects of the assessment of access to health care.

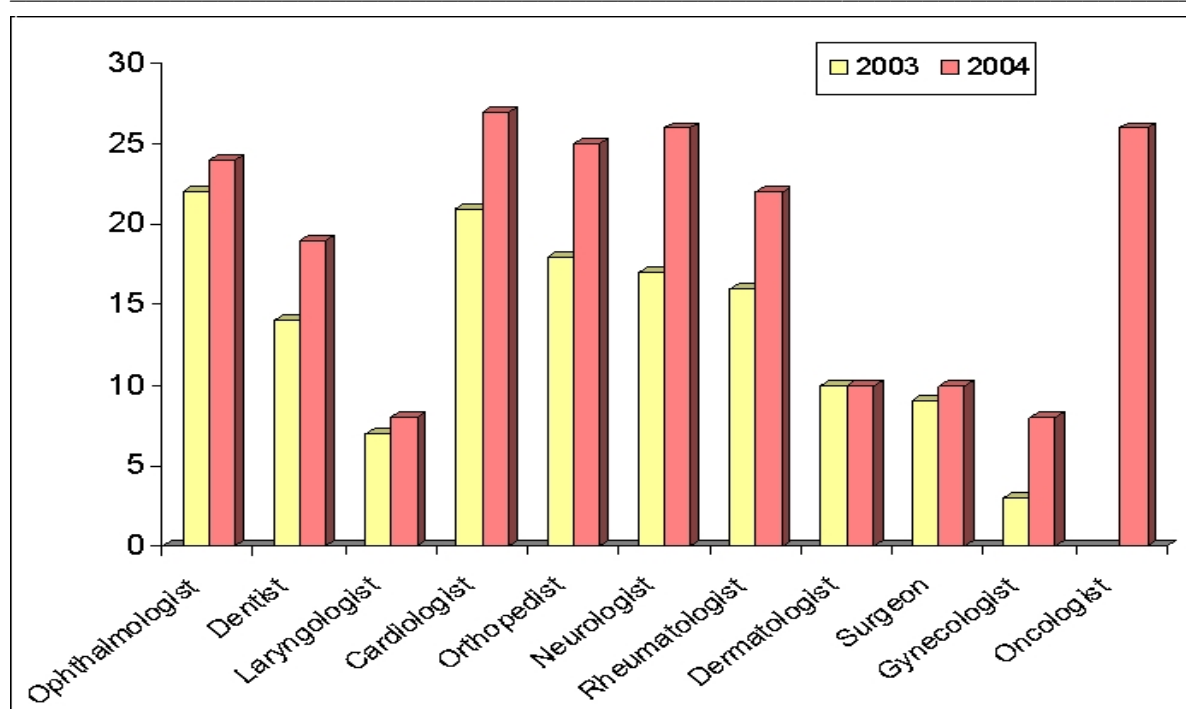


Fig. 6. Percentage of patients who had to wait more than a month to obtain a specialist's advice

Source: *Selected aspects of the assessment of access to health care.*

The results of studies made in the years 2004-2005 justify a generalising statement that the second health-care reform failed to produce the effects that the reformers had expected. It was found that:

- The assessment of access to medical services in 2004 (the first year of the operation of the National Health Fund) did not differ significantly from the 2003 result, whether in terms of access to the doctor of first contact or to specialists.
- The principal factors obstructing access to the doctor of first contact and specialists were the waiting time in the queue to the reception, the queue to the doctor's office, and for a home visit.
- Over the period under study there was no significant change in access to hospital treatment, which was assessed highly (80% in 2003 and 72% in 2004).
- The factors differentiating the responses, opinions and patterns of health-oriented behaviour to the largest extent were education, occupational position, and material situation.

#### 4. Spatial accessibility to hospital care and primary health care

Access to health services has also a spatial aspect besides legal, financial, organisational, and social ones. The measure of spatial accessibility employed in this presentation was the geographical potential model, because potential can be considered to be the expected value of accessibility to a specified point in space (Ratajczak 1999: 237). This notion was used to construct maps of accessibility to joint (consolidated) public and non-public hospital care, public hospital care, non-public hospital care, and primary health care in the entire country (NUTS 1).

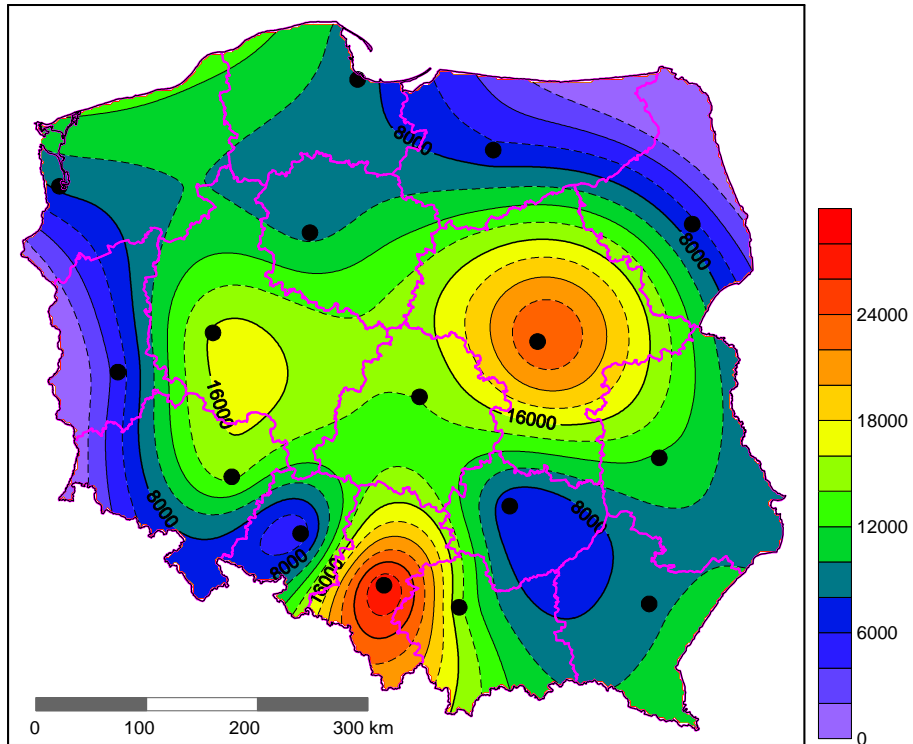


Fig. 7. Spatial accessibility to public hospital care in 2006 calculated on the basis of the number of hospital beds and the potential model  
*Source: own compilation*

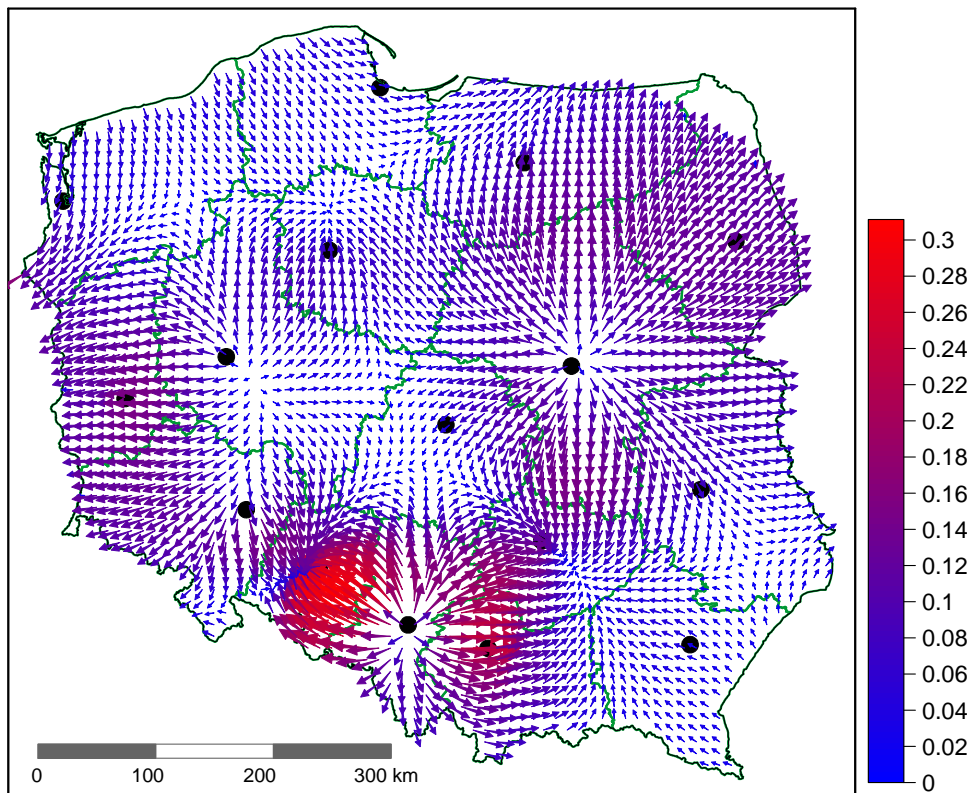


Fig. 8. Distribution of gradients of spatial accessibility to public hospital care in 2006 (number of hospital beds)  
*Source: own compilation*



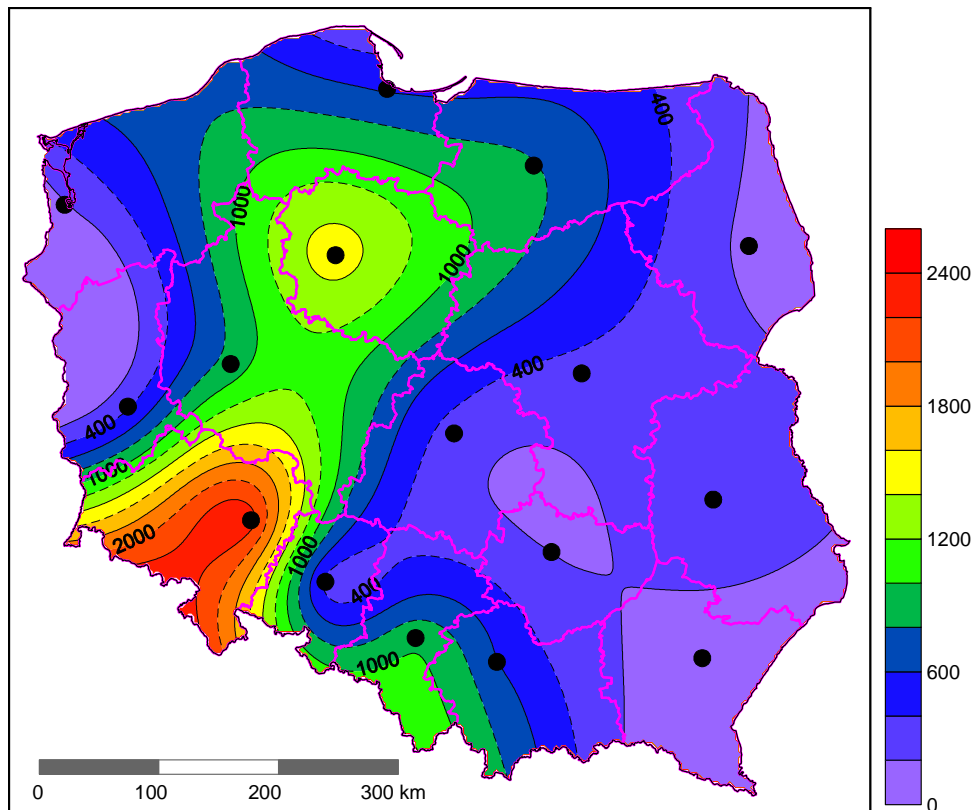


Fig. 9. Spatial accessibility to non-public hospital care in 2006 calculated on the basis of the number of hospital beds and the potential model

Source: own compilation

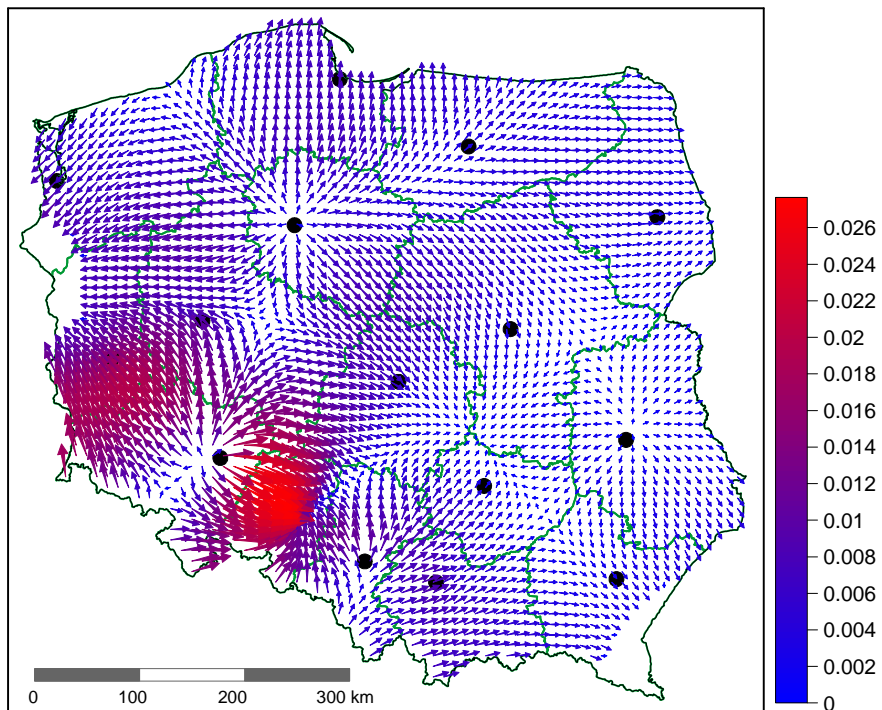


Fig. 10. Distribution of gradients of spatial accessibility to non-public hospital care in 2006 (number of hospital beds)

Source: own compilation

The maps presented in Figs 7-10 illustrate spatial variations in accessibility to public and non-public care, both hospital and primary. In particular, the maps of accessibility gradients make it possible to identify areas with a very sharp drop in spatial access to health care. For example, with reference to public hospital care (Fig. 8), there is a rapid drop in accessibility in the voivodeships (NUTS 2 units) of Opole and Ma\_opolska in the south, Lubuska Land in the west, Warmia-Mazuria in the north-east, and Lublin in the east. This means that in the neighbouring voivodeships accessibility to public hospital care is significantly better. In the case of non-public hospital care, in turn, accessibility slumps most markedly in Opole and Lublin voivodeships (Fig. 10).

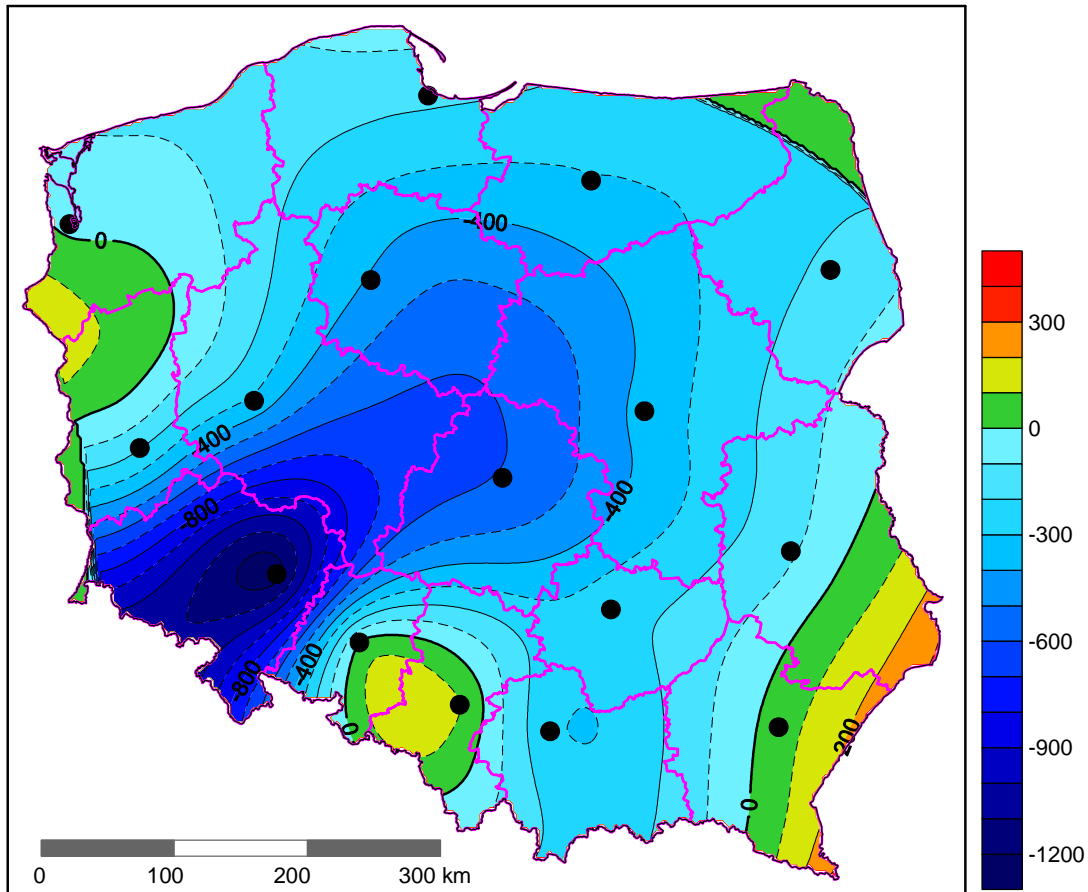


Fig.11. The surface of differences between values of spatial accessibility to public hospital care calculated on the basis of hospital beds and potencial model for 2006 and 2005 respectively.

Source: own compilation.

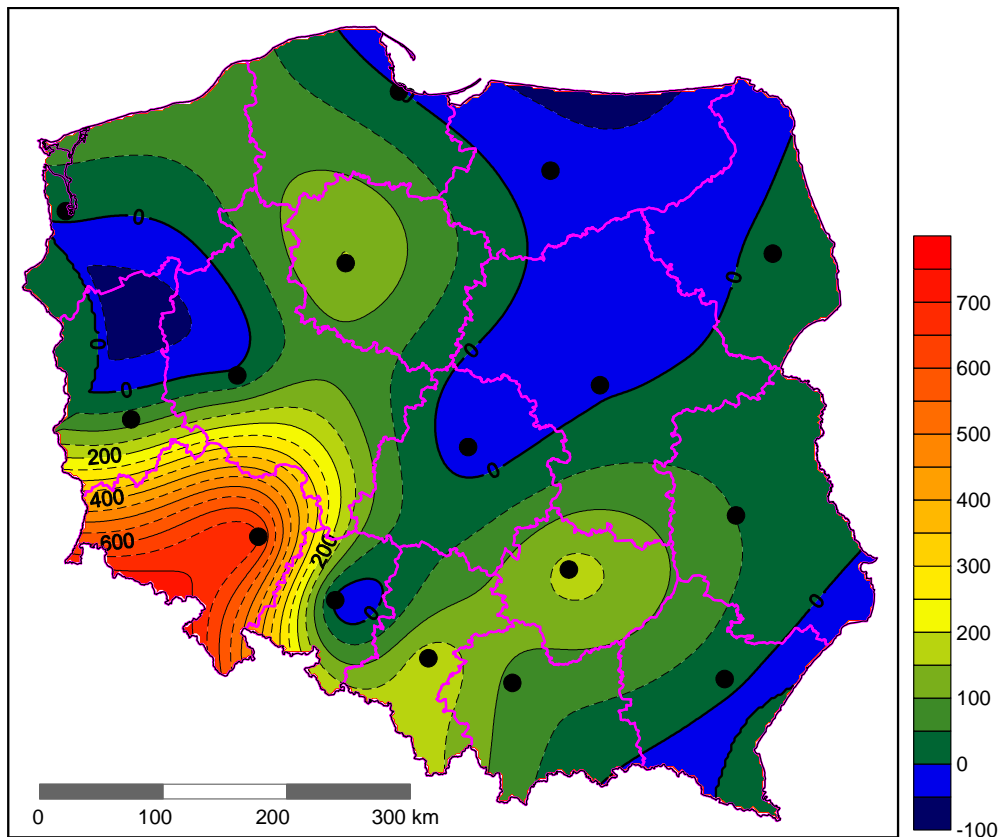


Fig.12. The surface of differences between values of spatial accessibility to non-public hospital care calculated on the basis of hospital beds and potential model for 2006 and 2005 respectively.

*Source: own compilation.*

The maps of accessibility to hospital care confirm the thesis about the great differences in it at the scale of the country as a whole. A detailed analysis revealed the following:

- The area of the highest accessibility to public and non-public hospital care considered jointly is roughly a triangle whose vertices are the big cities of Warsaw, Katowice and Poznań. This is also an area of the highest population density.
- The greatest slumps in accessibility, or the highest gradient values, occur in Opole and Kielce voivodeships (NUTS 2).
- The spatial distribution of accessibility to public hospital care is an almost identical image of that of joint public and non-public hospital care. This is not surprising in view of the fact that the proportion of non-public hospitals is low: 4.5% (8,060 beds) as against 95.5% (171,355 beds).
- The distribution of accessibility to non-public hospital care differs from that of public hospital care. In the former case, the highest accessibility values are recorded west of the line joining Olsztyn in the north-east and Wrocław in the south-west. This confirms that the organisation of non-public hospitals is much more vigorous in the north-western part of Poland. Hence the population of the voivodeships of Warmia-Mazuria, Kujawy-Pomerania, Pomerania, Lower Silesia, Wielkopolska, and Opole enjoys better, though more costly, access to hospital care.

## 5. Privatisation of health care on the strength of a decision by local government units

Privatisation of health care in Poland can be carried out by local government units, i.e. voivodeship, powiat and commune authorities. Ownership changes have predominated in towns. Between 1999 (the first year of the reform) and 2006, on the strength of a decision by local government units, privatisation embraced 45 public hospitals (6.3% of all hospitals in Poland), 31 hospital wards, and 95 ambulatory-patient facilities. Most decisions were taken by the local authorities of towns and poviats. They privatised a total of 119 public health care establishments, of which 37 hospitals, 22 hospital wards, and 60 ambulatory-patient facilities. Other local-government units also made such decisions, but at a smaller scale (cf. Fig. 13).

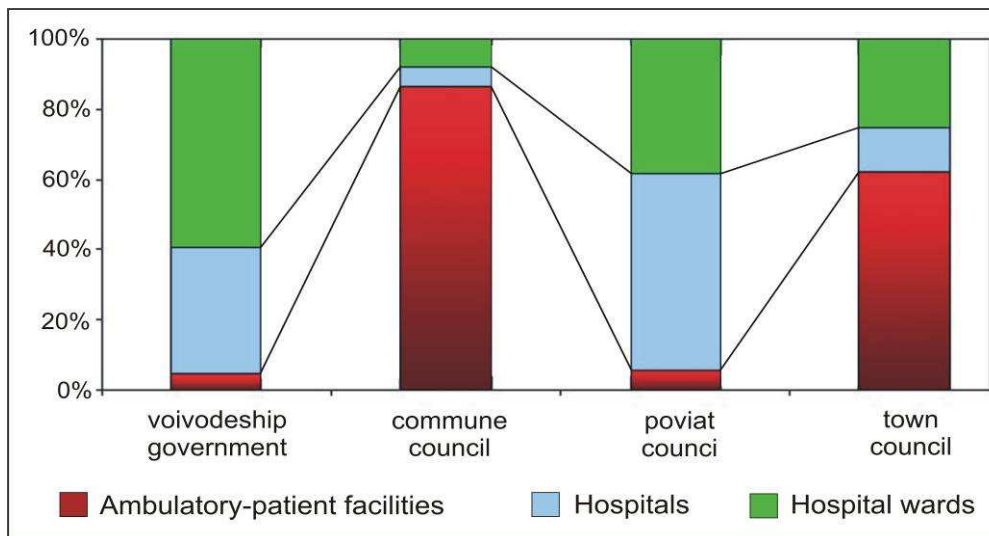


Fig.13. Structure of units transformed into non-public health care establishments, 1999-2006

Source: Ministry of Health, 2007.

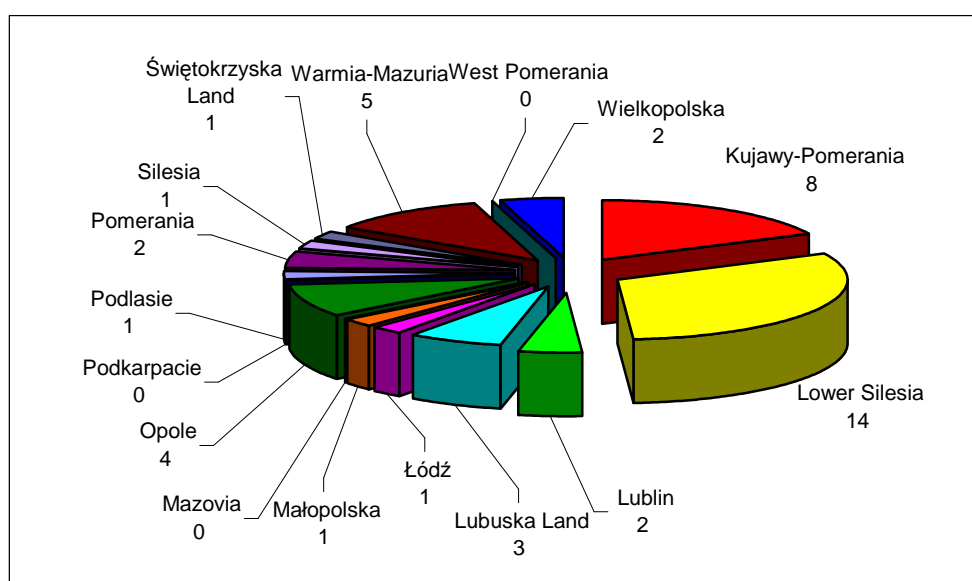


Fig.14. Privatisation of 45 hospitals since 1999 by voivodeship

Source: Ministry of Health, 2007.

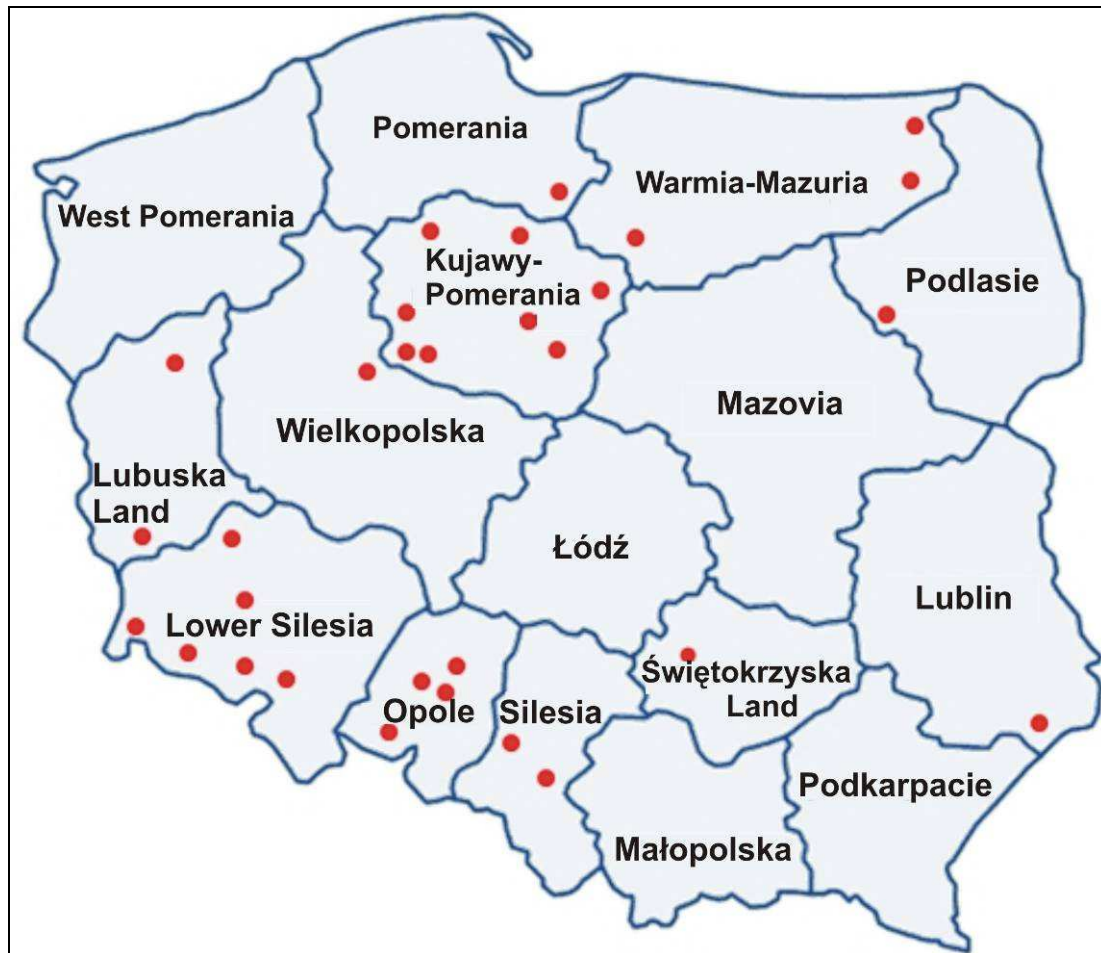


Fig.15. Spatial distribution of non-public local government hospitals in Poland, 2007  
Source: Ministry of Health, 2007.

The privatisation of self-supporting public health care establishments is a process whose effects may be advantageous to both, patients and hospitals (Sikora 2007). From the point of view of the patients, the main benefits of privatisation would include: the possibility of free treatment for the health insurance contribution paid, the possibility of official part-payment for other medical services, liquidation of the 'grey zone', higher standards of services, etc. For hospitals, privatisation would mean a reduction in their operation costs by about 30%, the necessity to introduce efficient financial management, stiffer competition, etc.

Today, there are 700 public hospitals in Poland as against a mere 170 private facilities and about 50 non-public, local government-financed ones. Therefore privatisation should be made more dynamic, but a major consideration in this process should be the differences in the material status of the Polish society.

## Conclusions

- The chief weakness of the Polish health-care system is its permanent underfunding. Annual per head public expenditure on health care is the lowest among the OECD countries and roughly one-fifth of that in Norway, the leader in this field. This is accompanied by an increasing proportion of the population's private means in the costs of treatment, 35% at present. These, however, are not always means spent judiciously.
- The means for health care, both public and non-public, could be put to better use if there were a portfolio of guaranteed health-care services. However, given the well-known difficulties that the establishment of its coverage meets, not only in Poland, it still remains in a conceptual sphere.
- Privatisation in Poland has included hospitals, hospital wards, ambulatory-patient facilities, as well as other institutions and organisational units of public health care establishments. This process varied in space and time. Since the start of the health care reform in 1999, the process was the most dynamic in 2005. The greatest number of privatised hospitals can be found in Lower Silesia, Kujawy-Pomerania, Małopolska and Silesia. The privatisation of hospitals on the strength of a decision by local government units has been most frequent in Kujawy-Pomerania (18%).
- Only a small proportion of hospital services have undergone privatisation. At the national scale, non-public hospitals can compete with public ones in a way felt by the society only in Lower Silesia and Kujawy-Pomerania. Some symptoms of competition can also be observed in Silesia and Świętokrzyska Land.
- Further reforms of the Polish health-care system are necessary, but on the assumption that reform is not a one-time act but an evolutionary process that produces increasingly better variants on the way to a perfect model, which is not likely to be ever achieved.

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