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Transformation of the ownership structure in Polish Healthcare and its effects

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Abstract: Poland, like other countries with previously dominant state healthcare systems, has introduced ownership transformation in the healthcare structure. These changes, however, are being accomplished without a clearly defined state policy in this area. The aim of the present study was to assess the course and effects of ownership transformation in outpatient healthcare and hospitals. Data were collected from publications of the Central Statistical Office, which provided information on the numbers of outpatient healthcare institutions, medical practices, general hospitals, and services they provided. The healthcare ownership transformation has divided the medical services market into public and non-public providers. In addition, privatization of outpatient healthcare facilities precedes privatization of hospitals, outpatient institutions providing primary healthcare were privatized first; the subsequent stage included those providing specialized services, at first privatization of ambulatory medical infrastructure preceded privatization of services in urban areas, whereas in rural areas, privatization of services preceded structural privatization, privatization provides favorable conditions to improve territorial availability of outpatient healthcare in urban areas, medical practices, although numerous, are of little importance in providing services, the hospital ownership transformation is at its initial stage, and structural ownership transformation in the Polish healthcare system is subject to market rules.

Keywords: healthcare, ownership transformation, privatization

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1 Introduction

In postwar Poland (1945-), the dominant healthcare system consisted of state healthcare institutions financed by the state budget. Potential restitution of non-public healthcare facilities was initiated in 1991, when the Healthcare Facilities Act of August 30, 1991 came into force [1]. Among many possible founders, the Act included private persons, corporations, and churches. However, it was possible to set up non-public entities six years later, when the Law on the General Security in the National Health Fund came was instituted [2]. The aim of this study was to assess the course and effects of the ownership transformation, defined also as privatization, in the outpatient healthcare system and hospitals.

It should be pointed out that in this paper *privatization* is interpreted in a different way than in the Act of Commercialization and Privatization, of August 30, 1996 [3]. In the Act, *privatization* is defined as "an action leading to privatization of ownership of enterprises belonging to the State Treasury". In this paper, *privatization* describes "a result of various processes because of which non-public benefit providers enter the market regardless of privatization mechanisms". Typical mechanisms leading to transformation of ownership structure in healthcare institutions are those that may change the existing public entities into non-public ones and may give rise to new non-public facilities.

Ownership transformation may also be perceived in terms of the objective of a particular process. The goals may include the following:

- a rational use of public financial resources,
- an improved availability and quality of medical services,
- promotion of pro-health attitudes in the society,
- an increased spectrum of services offered, and
- reduced operation costs for healthcare providers.

An ownership structure exerting its influence upon the functioning of the markets for medical services and medical insurance should be an important consideration in an economic analysis of the healthcare system [4].

2 Statistical methods and Experimental Procedures

We used reference sources published by the Central Statistical Office, namely, national [5] and regional statistical yearbooks [6] for 1990−2005, which includes the number of healthcare institutions and the medical services provided. The data on non-public healthcare institutions were published for the first time in the Statistical Yearbook of the Republic of Poland in 2000 [7, 8] .

The assessment of the ownership transformation in outpatient healthcare included the following statistical data: (1) the number of public and non-public outpatient healthcare institutions (facilities and independent clinics) in urban areas and health centers in rural areas; (2) the number of individual medical practices[¶] in cities and villages; (3) the

[¶] Medical practices are run by private entities rendering healthcare services for the general population.

number of outpatient consultations in outpatient institutions in cities, medical practices in cities, health centres in villages, and medical practices in villages; (4) the number of public and non-public outpatient institutions in 2005, according to the number of consultations provided by primary healthcare institutions and specialist care centers. With respect to inpatient healthcare institutions the following were included: (1) the number of general public and non-public hospitals; (2) the number of beds in general public and non-public hospitals; (3) the number of patients treated in public and non-public hospitals.

Due to a lack of data on other inpatient facilities, emergency medical care and rescue services, we confined our analysis of the ownership transformation and its effects to outpatient healthcare and hospitals.

3 Results

3.1 Outpatient healthcare

In 1990, the first year of our study, all the outpatient institutions in urban areas (6584) and healthcare centers in rural areas (3320) were state or public healthcare facilities. Until 2005, the number of outpatient institutions in cities increased to 9090, whereas in villages it decreased to 3133. Quantitative changes were accompanied by significantly dynamic changes in the ownership structure (Table 1). In 2000, the number of non-public healthcare institutions in cities was higher than that of public institutions; in 2005, it was 3.7 times higher. A similar process was noted in villages three years later (in 2003). Finally, in 2005, the number of non-public healthcare institutions in villages exceeded the number of public healthcare institutions by 29%.

Table 1 Outpatient health care institutions and medical practices in Poland.

Outpatient institutions and medical practices	Year								
	1999	1995	1999	2000	2001	2002	2003	2004	2005
Public – urban areas	6,584	6,473	3,378	2,699	2,173	1,762	2,131	2,03	1,939
Non-public – urban areas	0	0	2,047	2,986	3,293	3,895	6,794	7,006	7,151
Public – rural areas	3,328	3,312	2,601	2,018	1,578	1,368	1,444	1,339	1,319
Non-public – rural areas	0	0	201	485	967	802	1,609	1,726	1,864
Medical practices – urban areas	0	0	2,076	4,211	5,136	5,642	6,337	6,503	6,044
Medical practices – rural areas	0	0	433	869	1,283	1,362	1,51	1,472	1,543

In 1999, statistical figures on the number of medical practices financed by public funds were officially recorded for the first time (Table I). By 2005, there had been an almost 3-fold rise in the number of the practices in cities, and a 3.6-fold increase in villages. In the study period, the number of practices per 100,000 population increased from 8.7 to 25.8 in cities and from 2.9 to 10.5 in villages. The relatively large differences in the number of outpatient institutions between cities and villages (in 2005, nearly 2.9 to 1)

After the registration of a medical practice, the doctor may treat patients on the basis of public and non-public funds.

and in the number of practices (3.9 to 1) were smaller when considered relative to the population (1.8 for institutions and 2.5 for practices).

The data on the quantitative transformation in healthcare structures do not reflect the effects of ownership transformation, understood as participation of ownership forms in the medical services market and, therefore, the role of public and non-public institutions in satisfying healthcare needs. It is, however, possible to carry out such an assessment from the number of medical consultations offered (Figs. 1 and 2). In urban areas, the majority of medical services were taken over by non-public institutions in 2002, which is two years after they had gained a quantitative domination. In rural areas, in 2002, most medical services were also taken over by non-public institutions; in this case, however, domination in the market of medical services preceded privatization of structures.

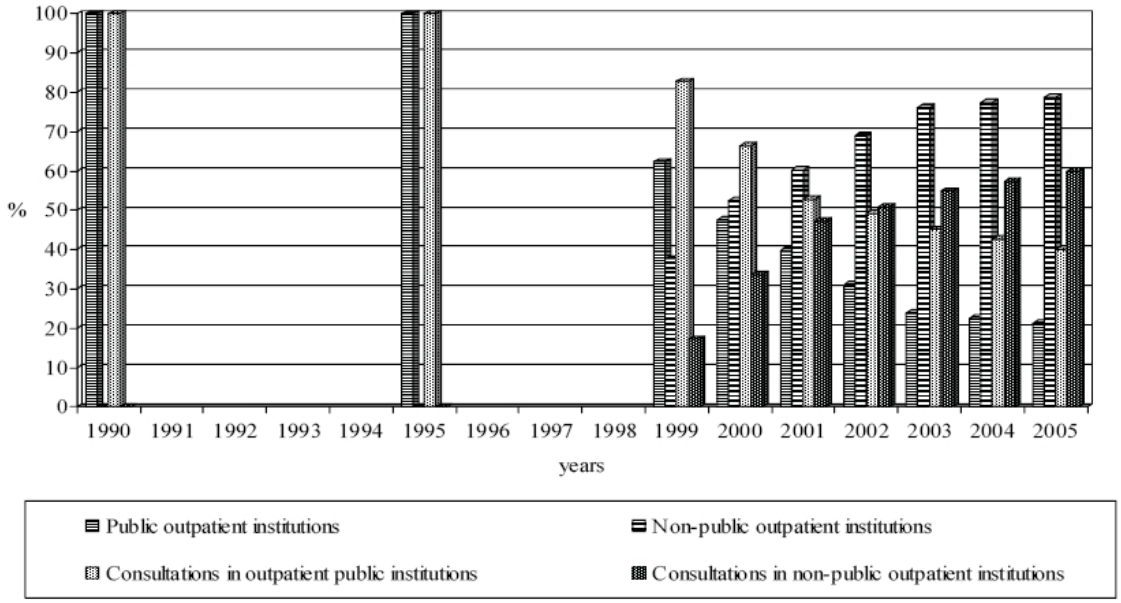

Fig. 1 Effects of the ownership transformation of outpatient institutions in urban areas.

The available data also help evaluate the market share in terms of primary and specialist healthcare services between public and non-public institutions (Fig. 3). In 1999, over 80% of medical services were provided by public outpatient institutions. In 2005, over two thirds of primary healthcare consultations were provided by the non-public sector and the remaining one third by public healthcare institutions. As far as specialist medical services are concerned, the public sector prevailed over the non-public one until 2005 (51.4% of the total number of medical services).

The average annual of medical consultations in particular types of institutions and practices gives an idea about their actual capabilities. In 2005, public institutions in urban areas offered approximately 38,500 medical consultations and in rural areas, approximately 11,400, whereas non-public institutions offered 15,500 and 10,700 consultations, respectively. Of these, general practices supported by public funds accounted for 2000 of these consultations in urban areas and 2200 of those in rural areas.

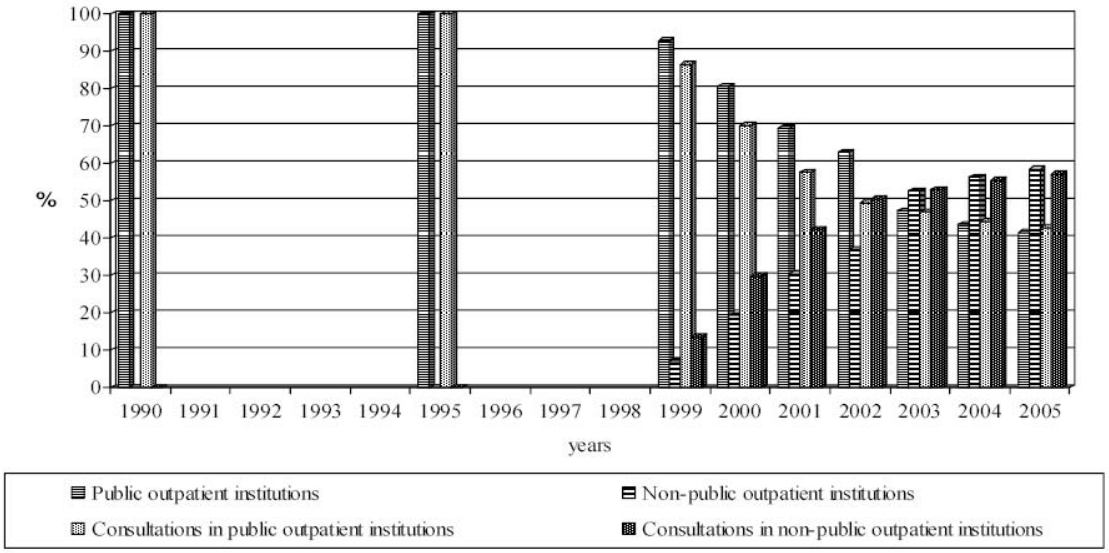

Fig. 2 Effects of the ownership transformation of outpatient institutions in rural areas.

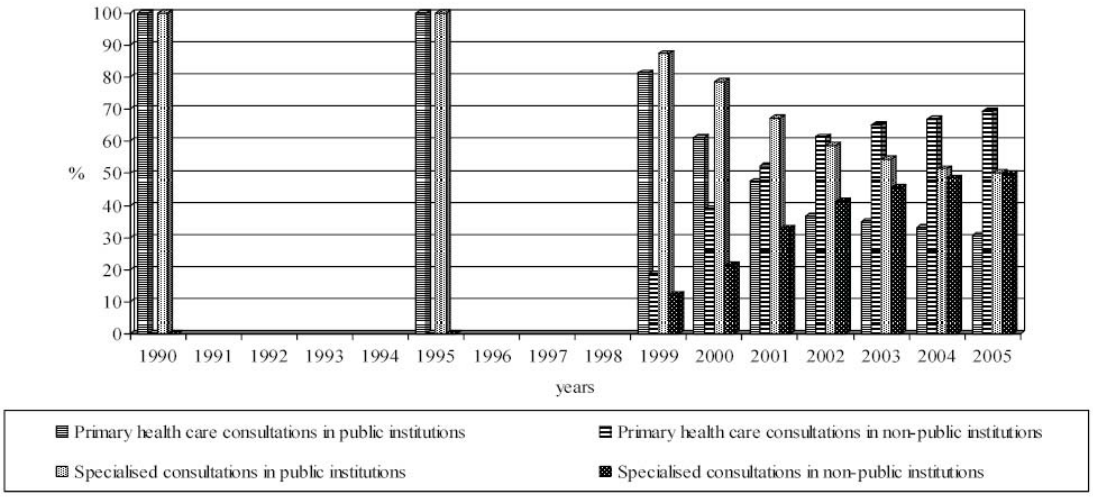

Fig. 3 Privatisation of primary health care and specialised services.

In 2005, privatized specialist medical services accounted for approximately 50% of all medical services. The highest level of privatization was noted in pediatrics (82.3%), dentistry (77.5%), and gynecology (56.62%); the least privatized services included phthisiology and pulmonology (32.2%), surgery (33.7%), and psychiatry (43.6%).

The level of privatization in outpatient healthcare was different in the various regions of Poland. In 2005, non-public institutions accounted for more than 80% of the total in the regions of Lubuskie, Silesia, Warmia and Mazury, Wielkopolska, and Pomorze Zachodnie. The lowest levels of privatization were found in the regions of Świętokrzyskie (49.4%), Kujawy and Pomorze, and Podkarpacie (59.5%).

3.2 Inpatient healthcare

At the beginning of our study, all the general hospitals in Poland (677 hospitals holding 218,560 beds) were state healthcare facilities. 1995 was the first year of ownership transformation of inpatient healthcare; nine non-public hospitals (143 beds) were reported for the first time, constituting barely 0.07% of the total hospital number and 0.012% of the total beds. The ownership transformation in hospitals was a dynamic process in 2003 and 2004; the number of non-public hospitals increased from 72 to 147 and the number of beds from 5155 to 7649. The results of transformation of ownership structure in hospitals are shown in Fig. 4. In the final year of our study, the percentage of beds in non-public hospitals accounted for 4.80% of the total in Polish hospitals, and participation in treatment accounted for 5.07% of hospital admissions.

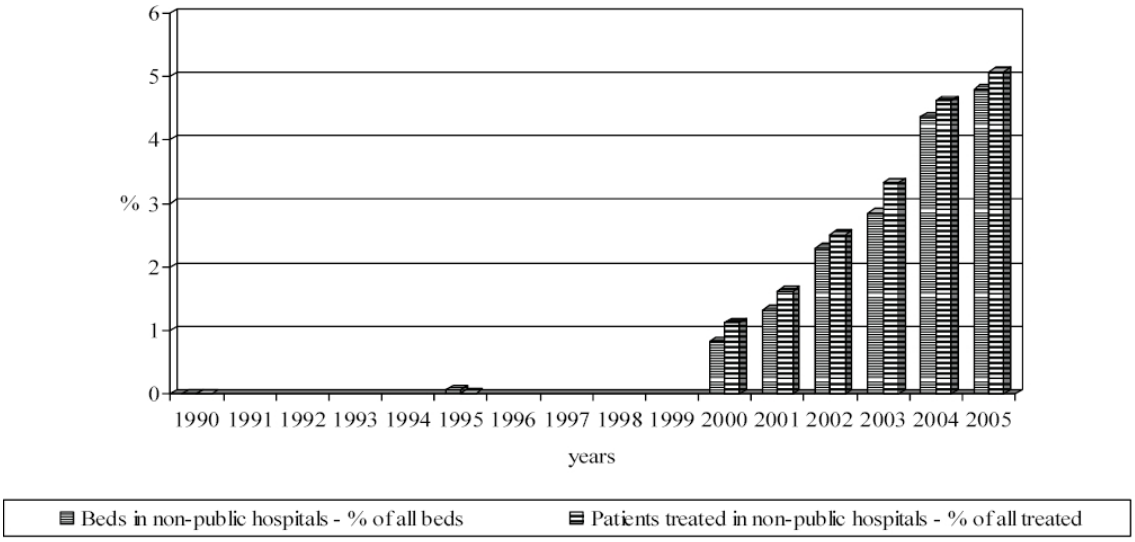

Fig. 4 Effects of the general hospitals' transformation.

There are no available data showing the extent of ownership transformation of other inpatient institutions such as detoxification centers, addiction centers, chronic medical care homes, nursing homes, or hospices, where, undoubtedly, the process has also begun.

4 Discussion

In Poland, the term privatization formally applies only to state enterprises, referring to ownership tenacious transformation attempts, so that no clear strategy has been developed yet. The main obstacle to developing a reasonable healthcare system in Poland is that individuals try to find their own ways of solving this problem [9]. However, it should be noted that ownership transformation formalized by state structures might actually hinder the process. Some degree of freedom in choosing the pathways of ownership transformation may result in a faster and more effective process. However, the long-term effects and influence on the healthcare system as well as on patients may be unpredictable.

It seems crucial to establish suitable supervision over the entities to ensure their proper performance.

Professor Leszek Balcerowicz, a well-known Polish economist, also advocated reforming the supply structure for medical services. He recommended eliminating the public monopoly, with a special emphasis on establishing a suitable formula of the ownership transformation, but that was not precisely defined [10]. Professor Tadeusz Tołłoczko, the former Rector of the Medical University of Warsaw, points out the importance of benefits to be gained by doctors and patients due to ownership transformation [11]. However, A. Ostrowska, a sociologist that has analyzed the ramifications of the healthcare reforms in Poland, warns against treating decentralization and privatization as the solution to all healthcare problems [12]. Regardless, other authors point out that many of the expectations of 'marketization' of healthcare services have not been satisfied [13]. The lack of a privatization policy cannot disturb the analysis of the process and effects of spontaneous ownership transformation.

Due to the ownership transformation, many entities developing different strategies for medical services may enter the market, including public healthcare institutions. This may result in operation according to the rules of supply and demand, which in turn, stimulates competition. With a variety of entities providing healthcare services, it is the state's duty to protect the citizens' rights to receive medical services and to create a friendly environment to perform them.

Ownership transformation assessment may be carried out in relation to particular structures, such as the number of outpatient clinics, healthcare centers, medical practices, hospitals, as well as the transformation effect, namely, performance in the market segment of medical services. In Poland, the ownership transformation involved primarily outpatient healthcare institutions. The extent of the process is determined by domination of non-public structures and their share in the medical services market financed from the public funds.

In the case of outpatient healthcare, there are significant differences between urban and rural areas. In the former, the number of non-public outpatient healthcare institutions was higher than the number of public institutions in 2000; however, in the latter, this proportion was achieved three years later, in 2003. The number of medical services provided by non-public institutions exceeded the number of medical services in public institutions in 2002, both in cities and villages. In cities, privatization of structures preceded privatization of medical services, while in villages, privatization of medical services preceded privatization of structures at the initial period.

The most noticeable disproportions in the ownership transformation of structures and medical services may be seen in medical practices. In 2005, over 6000 practices in cities provided approximately 6% of medical consultations for city dwellers, while over 1543 practices in villages offered 9% of outpatient medical consultations for their clients.

On the basis of the differences in the process of ownership transformation in cities and villages, it appears that the process in cities is composed of two elements: ownership transformation of existing public structures and creation of new non-public entities, such

as healthcare facilities and medical practices. Both mechanisms resulted in a considerable rise in the number of benefit providers in cities. In villages, transformation of the ownership structure was not accompanied by an increase in the number of institutions, which means that, in this case, transformation of existing structures was dominant, whereas creation of new structures was limited to medical practices.

It is interesting that privatization of non-specialist medical services, identified with primary healthcare medical services, precedes privatization of specialist medical services. This is due to various requirements in terms of medical services contracts, a huge demand, and, consequently, supply, and a various range of material and financial expenditures at the initial stage of activity.

Ownership transformation in outpatient healthcare may also be seen in terms of the availability of medical services. A considerable increase in the number of benefit providers (i.e., institutions and practices) in cities could essentially improve the territorial availability in urban areas. In contrast, the ownership transformation did not affect the availability in rural areas. In the study period, the number of health centers decreased by 145, and the number of new practices reached 10.5 per 100,000 dispersed population. This suggests that in villages, demand for medical services corresponded to their supply. Moreover, medical services in villages are less diversified than in cities.

The slower pace of ownership transformation in hospitals was related to a wider range of indispensable financial contributions and more complex transformation procedures. A detailed analysis of the period from 2000 to 2005 points, however, to an upward trend in the scope of financial contributions and transformation procedures, although indicators of transformation of the ownership structure and participation in medical services are very close. There are a number of institutions interested in investing in hospital privatization, for example, Medicover, a well-known company in Poland [14]. The positive aspect of transformation in hospitals is establishing such structures as the Polish National Association of Non-public Hospitals, which mediates the exchange of experience, formulates demands, and integrates all parties interested in this process. It is also said that private owners can effectively reduce costs by having more efficient management, which helps achieve profits, even for a contract with the National Health Fund [14].

The observed regularities patterns can be explained in terms of market mechanisms, given the lack of a definite privatization policy. As discussed above, the process of ownership transformation was primarily directed at outpatient medical services and primary healthcare, followed by specialist medical care. These had the highest demand and required relatively little capital expenditure.

Similar phenomena have been reported for the ownership transformation in healthcare in other countries where state healthcare services were previously dominant [15–17]. The healthcare system reform that has occurred in Hungary is considered to be the most coherent; they have directed their organization at prevention and primary healthcare. The Hungarian reform also highly efficient: 92% of general practitioners are self-employed, and their income has doubled. In addition, the length of patient hospital stays has decreased by 20%, and the number of long-stay beds has increased [18].

It is worth noting that statistical yearbooks issued in countries other than Poland including new members of the European Union do not provide any data that can allow a detailed analysis of healthcare system privatization. Only the statistical yearbook of the Slovak Republic has included figures related to medical professionals, showing their employment in public and nonpublic sectors. In this case, the percentage of those employed in the non-public sector increased from 42% in 2000 to 66% in 2004 [19].

Looking ahead, it seems, on the basis of the data available, that the process of transformation in outpatient healthcare will slow and a state of balance with existing, well-managed public institutions will be found. The situation seems to be stable for dominant institutions such as outpatient healthcare units in Warsaw (according to data on NHF contracts).

In the analysis of the ownership transformation in healthcare, it is important to consider the factors that favor the transformation as well as those limiting the range. The former includes having well-educated medical personnel that are eager to work in Poland under better conditions than in public institutions. A good example is the Cardiology Center in Anin; as a non-public institution it employs doctors and personnel of the public Cardiology Institute in Anin [20]. A gradual increase in citizens' income and a stable financial and economical state policy observed over the last 15 years, can stand for the other factors, favourable to transformation [21]. A decrease in inflation, stabilization of the financial system, and the possibility of partial co-financing of investments by structures of the European Union in Poland may also encourage the owners to take financial risks and invest in new projects. A gradually increasing demand for medical services in hospitals as evidenced by an increase in the number of hospital admissions over the last six years is also essential [22]. Barriers to ownership transformation include many factors such as indebtedness of entities, excessive population, low effectiveness, high labor costs, and managing barriers [23, 24].

The institutions that can benefit from healthcare ownership transformation include chronic medical care homes, nursing homes, and hospices. The process of ownership transformation occurs in these institutions, but there are no available data to assess the process.

At present, ownership transformation may rely heavily on the value of contracts with the NHF. In the future, how medical services are paid for may significantly affect the scale and direction of ownership transformation of healthcare in Poland.

In conclusions the following conclusions can be made about ownership transformation of the healthcare structure in Poland:

- Transformation of the ownership structure in healthcare is subject to market rules.
- Privatization of outpatient healthcare institutions precedes privatization of hospitals.
- Primary healthcare services were privatized first, followed later the specialist healthcare services.
- In urban areas, privatization of healthcare structures preceded privatization of medical services, whereas in rural areas, initially, privatization of services preceded that of structures.

- Privatization provides favorable conditions for the improvement of territorial availability of outpatient healthcare in urban areas.
- Medical practices, although numerous, are of little importance in providing services.
- Ownership transformation of hospitals is at an initial stage.

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