Zeszyty Naukowe
Wyższej Szkoły Bankowej w Poznaniu
Nr 42/2012

Maria Węgrzyn
Wroclaw University of Economics

Conversion of public healthcare entities and creating their value

Abstract. *The Act on healthcare activity[1] introduced the prospect of converting public healthcare centres into companies. Hence, the need arose to look at the healthcare units operating on the market, including the entities subordinate to the local government units, from a different angle. Due to the public interest as well as a weak organisation and financial position of public medical centres, it is absolutely necessary to analyse the most significant factors influencing the value of healthcare centres. Therefore, the most important value drivers in HCs are assessed as well as conclusions and indispensable orientations for actions are discussed in this paper. The financial restrictions of the healthcare area constitute the basis for the analysis.*

Keywords: *conversion in healthcare, companies, value drivers of healthcare centres (HCs), establishing body*

1. Introduction

Since 1999 the Polish healthcare system has been undergoing multiple significant changes, the scope and direction of which depend on the political, social and economic situations. The changes whose effects are most significant include introducing health insurance and assigning public healthcare centres to relevant local government levels, which – as establishing bodies – have been faced with new objectives to be executed. One of them, that is supervising whether the ac-

[1] Act of 15 April 2011 on medical activity, Dz.U. No. 112, item 654.

tivities, including financial management, are pursued properly, turned out to be particularly difficult. The basic principle of covering expenses with revenues was often impossible to follow. Therefore, the need to be held liable for the effects of the arising financial imbalance started to be emphasised. Much place in the discussions was devoted to the assessment of private ownership, mainly in the context of its advantages.

Hence, imitating the changes occurring in the enterprise sector, the work of non-public centres providing medical services started to be observed more carefully. The diversity and effectiveness of the different approach to the management issues as well as the criteria and methods of assessing effectiveness were noticed. This resulted in the discussions on converting public centres into non-public ones. One of the important components of the conversion process is appropriate assessment of the value of medical centres.

2. Determinants of the conversion process

Serious discussions on changing the legal form of pursuing medical activities began on the day when the Act on medical activity came into force. This Act permits the establishing entity, that is among others a local government unit (LGU), a formal choice whether to convert hospitals into companies or not. The hospital may still be run in the same form, that is an independent public healthcare centre (IPHC). However, if the subordinate entity achieves a negative financial result for the financial year (after adding depreciation costs), the LGU needs to be prepared for covering the loss. In the majority of cases, covering the loss incurred by an IPHC means a worse result, for the financing of which LGUs should find funds. As a consequence, this will probably lead to contracting new debts and increasing the indebtedness. In extreme cases, the statutory debt limits may be exceeded and even the necessity to introduce administration order may arise. If, in turn, the negative financial result is not covered, the IPHC has to be converted into a company or be liquidated. However, it is significant that even the conversion of the IPHC into a commercial law company does not result in the establishing entity's evading the liability from its financial position. This is because the legislator imposed the obligation to determine, during the conversion process, the debt ratio as a relation of the total (long- and short-term) debt amount reduced by short-term investments to the total revenues of healthcare entities. Exceeding the value of this ratio by more than 0.5 results in the obligatory transfer of the liabilities to the establishing entity. Thus the problem is extremely serious because the amount of certain hospitals' debt is sometimes even greater than the annual revenues of the budget of the local government unit. Bearing in mind the statutory indebtedness

limits, the level of threats for LGUs brought by the implementation of the Act on healthcare entities is assuming clear shapes. The threat occurs primarily in the situation where the LGUs' indebtedness amount, without the debt of the subordinate hospitals, is close to the statutory limit.

Therefore, the question about the assumed aim of the conversion emerges. This is because the conversion into a commercial law company alone will not improve the financial position of hospitals. The presumption of a better and more responsible management is based on the research conducted by the Ministry of Health[2], but has not been thoroughly reviewed due to its short period. The research carried out by the Gdańsk Institute for Market Economies[3] in 2008, in turn, explicitly states the lack of correlation between the introduction of a different, new, legal form in the medical activities and the improvement of the effects of management and the pursued objectives. It is not the organisational and legal form but the reasonability and efficiency of action that directly contributes to improving work effectiveness. It is only to be hoped that the changing economic and political considerations will positively affect the introduced conversion-related changes and their consequences.

It is a fact that the conversion will make the centre obtain the capacity to go bankrupt. Acquiring this right, as a consequence of the hospitals' accruing further liabilities, will result in the necessity to increase the share capital of companies by their owners (that is LGU, as a local government company) in order to avoid bankruptcy. Being afraid of the materialisation of the indicated projection, local governments will probably strive for selling shares, that is to the actual privatisation of hospitals. There is no social acceptance for such a process at present. However, the process of conversion into companies, as a result of the Act's application, will begin shortly. Determining the value of the entity subject to conversion is a significant element of these proceedings.

3. Assessing the value of medical centres

The enterprise value[4] is considered the basic economic parameter describing a business entity. It reflects the economic position of the entity synthetically, and

---

[2] *Informacja o przekształceniach własnościowych w sektorze ochrony zdrowia przeprowadzonych decyzją jednostek samorządu terytorialnego w latach 1999-2010*, Ministry of Health, Warsaw 2011, www.mz.gov.pl [30.06.2012].

[3] E. Malinowska-Misiąg, W. Misiąg, M. Tomalak, *Zarządzanie środkami publicznymi w polskich szpitalach*, IBnGR, Warsaw 2008, p. 121.

[4] In accordance with the Act on healthcare activity of 2010, it was adopted that the entities pursuing healthcare activities have the status of an entrepreneur, see also M. Durbajło-Mrowiec,

its orientation on the future enables presenting the unit's development prospects with the business risk taken into account.

S.P. Pratt, R.F. Reilly and R.P. Schwaichs[5] specified five standards of the enterprise value:

a) market value, as a reflection of the price at which the enterprise could be sold and purchased, with the parties of the transaction behaving reasonably, having appropriate information, without any obligation;

b) reliable (actual) market value, where their differentiation depends on two factors: the market value is determined for hypothetical average investors on a given market and the calculation of the actual value accounts for the current economic and capital market considerations;

c) investment value, which is a subjective value for a particular investor, which reflects the investor's capacity to increase the profitability of the purchased enterprise;

d) fundamental (internal) value, which is independent of the current situation on the market, it also disregards who is the present or future owner of the entity. The internal characteristics of the enterprise, which determine the entity's capacity to generate income, are the source of the internal value;

e) fair value, which is a category of the American law, where it is the value of shares before taking strategic decisions, which, according to the shareholders holding the minority interest, result in the enterprise losing its value.

In the economic practice, the value of a company is most frequently calculated for the purpose of management by value[6] of the investment processes, as well as of the conversion processes. Its correct identification permits reasonable and conscious decision-making.

Healthcare centres, like enterprises from other sectors, are characterised at least by internal and investment value[7]. Hence, orienting strategic goals of HCs on the centre's value seems to be fully justified. This is because achieving the economic goal is the condition for achieving the social goal (providing health services). Budgetary entities and enterprises, which normally strive for the social goal regardless of the economic results, are an exception. HCs or their parts are currently being estimated for the purpose of:

Wyznaczniki wartości zakładu opieki zdrowotnej, Wrocław University of Economics, Wrocław 2009, p. 7.

[5] S.P. Pratt, R.F. Reilly, R.P. Schwaichs, *Valuing a Business. The Analysis and Appraisal of Closely Held Companies*, Irwin Professional Publishing, Chicago 1996, pp. 23-28.

[6] Where the enterprise value maximisation is perceived as the superior aim of the activity, which is discussed e.g. by T. Dudycz, *Zarządzanie wartością przedsiębiorstwa*, PWE, Warsaw 2005.

[7] M. Durbajło-Mrowiec, op.cit., p. 17.

– the issue of the companies which established non-public centres and obtain the capital for developing the centre from shareholders,

– the privatisation of independent public HCs, which are usually excessively indebted.

In both cases the investment value should reflect the vision of the current owner.

Table 1. Value drivers in HCs

No.	Driver	
1.	Turnover growth	– growth of contracted services from NFZ, – improvement of accessibility, – growth of commercial services, – growth of services with respect to occupational medicine, – growth of incidence in the population, – degree of bed occupancy.
2.	Rate of return (EBIT)	– level of prices for the services contracted by NFZ, – level and structure of employing doctors, – prices of medicines and medical equipment, – changes of the staff remuneration system.
3.	Working capital	– stock rotation cycle, – debt collection cycle, – current liabilities repayment cycle, – level of liabilities unacknowledged by NFZ.
4.	Capital expenditures	– service life of medical equipment, – expenditures for exchanging, maintaining medical equipment, purchasing new equipment, maintaining facilities, depreciation.
5.	Cost of capital	– indebtedness level, – debt cost.
6.	Growth period	– NFZ financial strategy, – increasing competition, – HCs privatisation, – changes of the HCs operation principles.
7.	Economic and financial condition of the company and achieved profitability	

Source: M. Durbajło-Mrowiec, *Wyznaczniki wartości zakładu opieki zdrowotnej*, Wrocław University of Economics, Wrocław 2009, pp. 36-37.

The basic source of the market value of a company is its capital, together with its multi-faceted nature. Taking into consideration the broadest approach thereto, the following need to be distinguished[8]:

1. Real capital, that is the balance sheet components of the enterprise potential, including the property (assets) and financial capital (liabilities)[9].

2. Intellectual capital, constituting a non-financial resource, which is particularly important in medical centres; it comprises the following[10]:

– human capital (skills, qualifications, cooperation…),

– organisational capital (innovation and development capital, internal structure of the operation…),

– social capital (interpersonal relations, cognitive capital and structural capital). Social capital arises from the so-called social functions of the enterprise.

Despite the significance of intellectual capital in medical centres (primarily knowledge and experience of the medical staff), the lack of real capital may constitute the basis for the necessity to cease the pursuit of business activity. Therefore, the bodies establishing public health centres focus their attention mainly on maintaining appropriate proportions in real capital. Taking care of its level, they assess various components, although not always all of them, which causes imbalance.

The set of the value drivers in HCs which ought to be the object of constant assessment by establishing bodies is presented in Table 1.

Among the enumerated drivers, the cost of capital, including the indebtedness level, is particularly significant for the public owner.

4. Financial position of public healthcare centres

Problems with debts of public medical centres had been recorded as early as before the reform of the system in 1999, when a new health insurance system was introduced[11]. Currently, the liabilities level has still been high despite the continual attempts to reduce it.

---

[8] A. Jaki, *Wycena i kształtowanie wartości przedsiębiorstwa*, Oficyna Wolters Kluwer business, Kraków 2008, p. 19.

[9] J. Lichtarski, *Kilka uwag o rozpoznawaniu pozabilansowych elementów potencjału przedsiębiorstwa*, in: *Przedsiębiorstwo na rynku kapitałowym*, ed. J. Duraj, University of Łódź, Łódź 1999, pp. 35-38.

[10] See also: A. Ujwary-Gil, *Kapitał intelektualny a wartość rynkowa przedsiębiorstwa*, C.H. Beck, Warsaw 2009.

[11] The first debt reduction programmes in healthcare were introduced in the late 1990s, in the period of converting HCs from budget entities into independent public healthcare centres for the purpose of preparing them to operate independently in the health service market.

Table 2. Changes in the indebtedness value of independent public HCs in 2004-2011

Years	Total value of liabilities (in M PLN)	Value of payable liabilities (in M PLN)	Total growth dynamics of liabilities
2004	9,450.1	5,872.3	126.96
2005	10,273.6	4,933.6	108.71
2006	10,384.2	3,723.8	101.07
2007	9,563.3	2,666.2	92.09
2008	9,979.7	2,357.9	104.35
2009	9,627.6	2,241.8	96.47
2010	9,961.1	2,139.9	103.46
2011	10,383.9	2,316.6	104.2

Source: own work based on the data published by the Ministry of Health.

The considerable decrease in the value of liabilities in 2005-2009 resulted from the introduction of another debt reduction programme covering the entire public healthcare sector[12]. The distribution of indebtedness and the changes of its volumes by voivodeships are presented in Table 3.

Table 3. Changes in the indebtedness value by voivodeships in 2004-2010 in M PLN

Voivodeships	2004	2005	2006	2007	2008	2009	2010
Lower Silesian	**1,421.5**	**1488.7**	**1,416.9**	**1,160.9**	**1,023.5**	**904.2**	**831.1**
Kuyavian-Pomeranian	427.2	464.0	517.9	444.9	454.4	428.3	501.0
Lublin	532.1	531.7	562.4	510.5	636.6	699.1	766.2
Lubusz	535.8	599.0	649.9	571.2	491.9	456.6	387.7
Łódź	877.4	978.8	1,001.8	918.7	1,029.2	770.1	674.3
Lesser Poland	606.6	673.3	669.5	643.1	676.8	666.7	692.7
Masovian	1,037.4	1,217.0	1,204.2	1,292.1	1,484.5	1,505.6	1,637.6
Opole	169.2	165.8	120.6	107.0	129.8	116.9	114.1
Podkarpackie	301.3	340.7	340.2	318.4	361.0	374.3	432.3
Podlaskie	269.3	279.5	256.5	238.0	258.0	292.4	331.2
Pomeranian	688.2	836.7	955.2	860.8	827.2	709.5	668.1
Silesian	947.0	993.7	1,056.1	997.7	1,064.0	1,087.0	1,200.2
Świętokrzyskie	366.8	374.9	337.4	308.0	288.0	286.0	327.4
Warmian-Masurian	226.0	220.6	194.6	178.4	182.2	187.7	182.0
Greater Poland	333.6	376.4	391.1	371.8	447.4	514.3	563.9
West Pomeranian	202.8	318.1	323.6	284.9	236.9	244.1	264.5

Source: own work based on the data published by the Ministry of Health, www.mz.gov.pl [30.06.2012].

[12] The Act of 15 April 2005 on public aid and restructuring public healthcare centres, Dz.U. No. 78, item 684.

In the majority of the voivodeships, the indebtedness volume of IPHCs in 2010 was higher than in 2004 despite the aforementioned intensive debt reduction actions. This mainly proves the weak effectiveness of the introduced solutions.

Much anxiety is caused by the extremely high level of mature liabilities. In spite of numerous actions, the decrease of these volumes is definitely too small. This may result from the unrealistic restructuring programmes prepared and introduced for implementation by centres. Positive results, in turn, were achieved, apart from systemic actions, owing to the very active works by establishing bodies and their financial commitment, which was also presented in the Tables. For instance, the financial support from the budget of the Lower Silesian local government (LSLG) in the process of restructuring liabilities of IPHCs amounted to as much as PLN 348.7 M in total in the Lower Silesian voivodeship.

Table 4. LSLG financial aid granted to the subordinate healthcare centres in the process of financial restructuring (in T PLN)

Direct aid of LSLG	348,700
2005	7,700
2006	140,700
2007	102,700
2008	88,300
2009	9,600
Other forms of support:	
Borrowings	24,000
Sureties by initial amounts	100,200
Establishing a mortgage	23,100

Source: own work based on the data of the Health Department of the Lower Silesian Marshal Office.

This commitment as well as the intensity and correctness of the supervision over the work of medical centres resulted in achieving increasingly better economic results by these entities. However, despite the efforts, the situation rapidly deteriorated in 2011-2012, according to forecasts, will be even more difficult.

It is worth noticing that the satisfactory results achieved until 2010 were a consequence of profound changes occurring also in the organisation structure of subordinate centres, their internal consolidation and partial liquidation. It is noteworthy that in spite of the multiple changes introduced, the number of medical services did not decrease.

The actions of the Lower Silesian local government, which were taken in accordance with the plan and which were systematic, led to decreasing the number of centres providing medical services by as many as 39. They also contributed to improving the effectiveness of their work through continuous supervision and

Table 5. Changes in the results on the activities of the IPHCs for which the LSLG is the establishing body (T PLN)

Year	Name	Number of healthcare entities	Total revenues	Total costs	Net financial result	Cash Flow (net financial result + depreciation)
2009	Total Lower silesian voivodeship	30	1,263,048	1,226,543	47,208	113,126
2010		27	1,300,048	1,294,456	26,728	98,694
2011		26	1,262,263	1,274,593	–13,603	57,550
2011/ 2010	Dynamics (%)		97.09	98.47	–50.90	58.31
2011/ 2009	Dynamics (%)		99.94	103.92	–28.82	50.87
2011/ 2010	Changes in absolute values		–37,785	–19,863	–40,331	–41,144
2011/ 2009	Changes in absolute values		–785	48,049	–60,811	–55,576

Source: own work based on the data of the Health Department of the Lower Silesian Marshal Office.

Table 6. Number and structure of the IPHCs subordinate to the Lower Silesian government in 1999-2011

Group of centres	1999	2009	2010	2011
Multi-speciality hospitals	24	8	7	7
Psychiatric and detoxication hospitals	8	7	6	6
Single-speciality hospitals	6	6	5	4
Sanatories and health resorts	6	1	1	1
Multi-speciality centres	11	3	3	3
Medical rescue stations	4	4	4	4
Other service providers	6	1	1	1
Total	65	30	27	26

Source: own work based on the data of the Health Department of the Lower Silesian Marshal Office.

control, which is observable in the achieved economic results. However, the centres subordinate to LSLG again incurred losses in 2011. Hence, the cause of this situation must lie somewhere much deeper, in systemic solutions.

5. Value of healthcare entities from the perspective of LGU

The financial results of Polish public healthcare centres presented in the Tables above show that generally IPHCs cannot influence the values of revenues and

costs in accordance with their needs or capacities. For example, they are not able to reduce the costs of the activity proportionately to the revenue decrease. One of the causes of this state of affairs is certainly the lack of well-prepared analyses of medical entities' activities, including the lack of the economic analysis of the acquired fixed assets (depreciation costs). This is a very significant component because the contract concluded with the public payer does not provide for amending its terms in relation with e.g. improving the quality of medical equipment used for providing services. From this viewpoint, the investment process should not be the object of interest on the part of the establishing entity, although it is this entity that is competent for additional supplies for the subordinate centres. A poorly equipped, underinvested, old healthcare entity, in turn, stops to be competitive on the medical service market in the process of competing for funds from the public payer. No contract means no impact on health security of residents, which is LGU's objective.

Responsibility for the actions taken and their results is a separate problem. The manager of a public healthcare entity is accountable for the effects of its work before the establishing body and the Board of Trustees of the entity. In practice, however, no direct relation between the decisions and their effects is used, taking into account the so-called social interest. Providing a medical service despite the lack of prospects for covering its cost is a social interest here. Increasing the accountability of the management staff will certainly contribute to the growth of economic effectiveness but will result in restricting accessibility to such services. This is probably why so strict provisions have not been introduced thus far.

Another, equally important, component for maintaining HC value is its staff. The better educated it is, the greater experience and trust of patients it has, the more expensive it is. The fewer specialists from a particular field are in a given region, the more difficult it is to employ them. As a consequence, some specialist doctors receive considerably higher remuneration for working in poor regions of Poland than in rich cities. If the constant pressure for remuneration is added to this, an extremely complex view of the situation emerges. In 2010, remuneration costs in the centres subordinate to local governments exceeded PLN 11.8 B, which constituted c. 44.2% of all costs. However, there are centres where this share exceeds as much as 80%[13]. In order to sign a contract with a public payer, the objective of which is to cover the costs of the medical services provided to patients, the healthcare entity needs to possess a necessary number of staff and appropriate work schedules for them. Otherwise the contract is not signed and the public medical centre becomes pointless. A patient who is not able to get a medi-

[13] M. Rapkiewicz, *Ochrona zdrowia a jednostki samorządu terytorialnego. Efektywność, planowanie, rozwój – jednostki samorządu terytorialnego wobec kluczowych wyzwań strukturalnych*, Sobieski Institute, www.sobieski.org.pl [30.06.2012].

cal service free of charge chooses a different service provider. It is not certain, however, that the service providers based in a given area will want to provide all medical services within the scope applicable thus far (including the unprofitable ones, e.g. geriatrics at present)[14]. In such a situation, there is a realistic threat that the objective imposed on LGU, which arises from art. 68 of the Constitution of the Republic of Poland, that is ensuring accessibility of healthcare services financed from public funds to the citizens, will not be duly performed. Certain scopes will simply become hardly accessible.

The next significant issue is preparing LGUs for implementing the Act on healthcare activity in the aspect of achieving poor economic results and the necessity to convert centres. Disregarding the fact that the actions related to converting IPHCs and their privatisation are unpopular solutions, increasing the value of the centre prior to its sale should be an obvious action for LGU, unless the centre is converted into a local government company. The value of the healthcare entity should not be maximised then. This does not change the fact that the entities participating in the tendering procedure for public funds compete with each other as to the quality of the equipment held and qualifications of the staff, but in the reality of very limited funds. As a result, the situation of the lack of the capacity to cover the actual costs of the provided services with public funds arises. In such conditions the idea of making no additional payments for services is rather a utopia. Therefore, the additional costs are incurred by public medical entities, by disclosing losses, or private entities, by levying an extra charge on patients. However, it needs to be remembered that the current private expenses incurred by Poles[15] in relation to the total expenses on healthcare are among the highest among OECD countries. Therefore, none of these actions is satisfactory.

6. Conclusion

In the face of the so volatile realities in which the medical activity is pursued in Poland, it is worth giving attention to the actions which may directly point to the areas that are poorly managed and that require the greatest effort in the context of maintaining or increasing the value of a healthcare centre. It is necessary to determine responsibility and consequences for wrong decisions and actions. Complete economic analyses, due to which it is possible to acquire the

[14] As was proved by the research conducted by the Medical University of Gdańsk, there are numerous scopes of services in the contracting of which non-public service providers are not interested, www.medicamo.pl./ [30.06.2012].

[15] In 2009, the private expenses of Poles exceeded 22% of the total expenses for health service – source: www.stats.oecd.org [30.06.2012]; M. Rapkiewicz, op.cit.

real image of the centres' work, are also needed in public healthcare centres. The possibilities to compare entities, evaluate the applied management, organisation or medical solutions in centres are still too rarely used in practice. Therefore, benchmarking[16] for medical entities seems to be particularly beneficial since it allows objective evaluations and recommendations for further work. Owing to benchmarking, it will also be possible to indicate systemic gaps and shortcomings. Only such comprehensive actions will provide a chance for the future existence of medical entities, which obviously have specific social goals to achieve.

References

Act of 15 April 2005 on public aid and restructuring public healthcare centres, Dz.U. No. 78, item 684.

Act of 15 April 2011 on medical activity, Dz.U. No. 112, item 654.

Dudycz T., *Zarządzanie wartością przedsiębiorstwa*, PWE, Warsaw 2005.

Durbajło-Mrowiec M., *Wyznaczniki wartości zakładu opieki zdrowotnej*, Wrocław University of Economics, Wrocław 2009.

Informacja o przekształceniach własnościowych w sektorze ochrony zdrowia przeprowadzonych decyzją jednostek samorządu terytorialnego w latach 1999-2010, Ministry of Health, Warsaw 2011, www.mz.gov.pl [30.06.2012].

Jaki A., *Wycena i kształtowanie wartości przedsiębiorstwa*, Oficyna Wolters Kluwer business, Kraków 2008.

Lichtarski J., *Kilka uwag o rozpoznawaniu pozabilansowych elementów potencjału przedsiębiorstwa*, in: *Przedsiębiorstwo na rynku kapitałowym*, ed. J. Duraj, University of Łódź, Łódź 1999.

Malinowska-Misiąg E., Misiąg W., Tomalak M., *Zarządzanie środkami publicznymi w polskich szpitalach*, IBnGR, Warsaw 2008.

Pratt S.P., Reilly R.F., Schwaichs R.P., *Valuing a Business. The Analysis and Appraisal of Closely Held Companies*, Irwin Professional Publishing, Chicago 1996.

Rapkiewicz M., *Ochrona zdrowia a jednostki samorządu terytorialnego. Efektywność, planowanie, rozwój – jednostki samorządu terytorialnego wobec kluczowych wyzwań strukturalnych*, Sobieski Institute, www.sobieski.org.pl [30.06.2012].

Ujwary-Gil A., *Kapitał intelektualny a wartość rynkowa przedsiębiorstwa*, C.H. Beck, Warsaw 2009.

[16] The Wrocław University of Economics prepared and commenced the implementation of the project financed from the European Union funds and the state budget in 2012, titled *Portrety szpitali, mapy możliwości*.., the major aim of which is developing an instrument allowing the comparison of medical entities in 13 areas of its activities (apart from the medical area). The Author of this paper is the major initiator and co-author of the project.